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SUMMARY:—

New York Employers organizing to resist Mischief-making Labor Leaders.—Public opinion setting against the Labor Unions.—Death of M. Achille Hermant, Architect.—The Winner of the Rotch Travelling Scholarship.—Bygone Archaeological Frauds: Shapira's Moabite Finds; the MS. Copy of the Bible.—The Effect of Trade-unionism on the London Workingman's Rent.—The Irrigation System of the Valley of the Tigris.—Possibility of restoring these Works to their former Usefulness. 65

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NOTES AND CLIPPINGS. 71

THE "champions of labor" in New York are not having things all their own way just now. At last, the builders have mustered up courage to say that they will no longer submit to union dictation, or trust in union agreements, and have formed an organization to resist with their united strength the attacks which the union leaders, by concentrating their forces upon individuals, have hitherto carried through with almost invariable success. The new organization numbers among its most active members such men as Warren A. Conover, Charles T. Wills, C. L. Eidlitz and others, whose names are synonyms for integrity and energy; and, with such people at the head of it, there is no doubt that something will be accomplished. Meanwhile, the fraternal fight between the two brotherhoods of carpenters is raging as bitterly as ever. The original aggressor, the Brotherhood, is losing about a hundred men a day to the Amalgamated Society; and, if the process continues much longer, none of the Brothers will be left except the walking-delegates. We remember that, in our school-boy days, a favorite device, when a member of some juvenile club proved to be of an uncongenial spirit, was to hold a meeting of the club, declare it dissolved by a majority vote, and form a new club, composed of the members of the old one, with the uncongenial one left out; and a similar process would have an excellent effect on many unions.

BESIDES the internal dissensions of the unions, and the organized resistance of employers to their unreasonable tyranny, an unwonted public feeling has shown itself in opposition to them. Even the newspapers, which have hitherto been almost ludicrously careful not to offend the "labor element," print almost daily jokes at the expense of labor unions and walking-delegates, and describe, apparently with approval, the exploits of volunteers in taking the place of strikers on railways and steamboats. There can be no doubt that this attitude of the press, contrasting so refreshingly with the abject timidity which has prevailed for so many years, will do much to encourage the independent workman who has so long found all the world against him, and, indirectly, to improve industrial conditions. It is only a few days since the *Boston Journal* had the courage to say that its reporters, who had been sent to talk with the striking mill-operatives at Lowell, found, after questioning hundreds of them, that they were practically unanimous in favor of going back to work on the old terms, but were held back by fear of the Textile Council. Not long ago, no Boston newspaper, at least, would have dared to make such an investigation, much less to publish the results of it. On the contrary, the course would have been to apply, bowing and scraping, to the walking-delegates, who would have furnished, with a superior smile, such "interviews" as they wished to have published. The *Journal* reporters, not content with

describing the misery of the starving operatives and the kindness of their real friends, including a patrolman named Dennett, who deserves to have his name immortalized for feeding with soup hundreds of hungry little children, were so audacious as to inquire what had become of the "strike pay" which, according to the walking-delegates, was being contributed in large quantities, and distributed among the operatives, and they discovered that the money, or at least a portion of it, reached the hands of a certain "disbursing agent," who, perhaps by way of assuring the contributors that he had received it, was seen about the streets, almost constantly drunk.

M. ACHILLE HERMANT, for many years one of the most distinguished and public-spirited of French architects, died a few days ago, at the age of eighty. Although not a Prize of Rome man, M. Hermant was a distinguished pupil of the Paris School of Fine-Arts, a medallist in the first class, and medallist also at the Salon of 1876, and at the Expositions of 1878 and 1889; and, later, winner of many important competitions. Always active in promoting the interests of the profession, he had long held the highest honors in the French professional societies, and was an honorary member of the Royal Institute of British Architects, and of various other foreign societies. Besides his numerous works of architecture, public and private, the latter of which earned for him, in 1886, the Grand Medal for Private Architecture, he wrote many books and pamphlets on artistic and professional matters, several of which were "couronnés" by the French Academy. It was, however, perhaps as the wise and untiring defender of professional interests that he most endeared himself to his associates. He was one of the founders of the Caisse de Défense Mutuelle des Architectes; the editor in chief, for the Société Centrale, of its "*Manuel des Lois du Bâtiment*," and the author of several valuable essays on professional responsibility, followed by a book, "*L'Architecte Moderne devant le Code Civil*." In addition to these services, he was always active in promoting the success of professional conferences and conventions, both local and international. It seems, to our ideas, a little singular that, among those who, as is the French custom, delivered orations at his grave, one was M. Carrier-Belleuse, a well-known Parisian builder, as representative of the contractors most frequently employed by him; but the relation between architects and contractors is, perhaps, more intimate in France than with us.

THE Rotch Travelling Scholarship for the current year has been awarded to Mr. Edward T. Foulkes, now of New York. Mr. Foulkes had already been once a competitor for the scholarship, and won the gold medal in a recent Beaux-Arts Society competition. In addition to his talent as a designer, he is rather unusually well equipped for the scholarship, being a graduate of the Massachusetts Institute of Technology, as well as a former student of Leland Stanford University, in California. The second rank in the contest was awarded to Mr. Harry J. Pitts, of Boston.

THE discussion in regard to the tiara of Saitapharnes has brought out some interesting facts in regard to other archaeological impostures. Thirty years ago, as the writers to the French newspapers say, the world was more credulous than it is now, and a great industry in the manufacture of spurious antiquities grew up, particularly in the Holy Land, where sentimental tourists seem to think it necessary to lay aside their common-sense. One of the first of the more ambitious frauds was a terra-cotta, alleged to have been found at Madeba, and containing, in cuneiform characters, an inscription, which, when translated, proved to be an account of a victory of Moses and his Israelites over the Moabites. The terra-cotta, after its inscription had been translated, was offered to an English tourist, who bought it with joy, and described his prize at great length in the *Times*. For some time this treasure, which was even surmised to have been prepared by order of Moses himself, was exhibited to the public; but, its spuriousness having been subsequently demonstrated beyond a doubt, it was quietly withdrawn, and is now practically forgotten.

AT nearly the same time a well-known dealer, named Shapira, brought to Berlin a collection of pottery, which he had picked up in the course of various excursions from Jerusalem into the desert of Moab, in company with an intelligent grocer of Jerusalem, and a theological student. The objects in the collection were of various singular shapes, and most of them had inscriptions in the almost unknown Moabite language. The respectability of the party of tourists was obvious, and the inscriptions, being submitted to the most learned Orientalists, were pronounced to be really in the Moabite language, and, when translated, to confirm M. Shapira's account of them; so the Berlin Museum purchased of Shapira the whole collection, paying for it fifteen thousand dollars. Some years afterwards M. Clermont-Ganneau, the same who has been studying as expert the Scythian tiara, and who was familiar with the antiquities of Palestine, went to Berlin to see the Shapira collection. What comments he may have made upon it privately it would hardly be possible to say; but, shortly after his visit, the whole collection was quietly withdrawn from view, and has never since been shown to the public. Still later, an announcement, which most of our readers will remember, was made in the English papers of the discovery in Egypt of a manuscript copy of the Bible, by far the oldest known. This treasure, called, we believe, the Fayoum manuscript, was exhibited in a prominent position in one of the most important rooms in the British Museum; its text was copied and criticised, and various theological discussions based upon it. Unfortunately, M. Clermont-Ganneau became interested in it, and, after a discussion in regard to it with certain English scholars, representations seem to have been made to the Museum authorities, for it was quietly withdrawn, and the case prepared for it is, or was, empty.

WE cannot say that we regret these disappointments much, except as the waste of public money on swindlers is to be deplored. So far as art is concerned, there is a good deal to be said in favor of the idea that the best thing that could happen would be to have all the museums swept at once off the face of the earth. We should, no doubt, regret the loss of the incomparable pictures of the Italian Cinquecento, and the statues of antiquity, but neither the antique sculptors nor the Italian Cinquecento painters had any museums to study in. In fact, we know that the Greek sculptors found their models in the young men and girls whom they saw every day around them; and the Italian painters were unwearied sketchers from life. That they were able, from their own mental power, to spiritualize and refine the figures and faces that they drew is unquestionable; but it is at least conceivable that such refinement is more readily applied to studies from life than to studies from other pictures. However that may be, the painters who have had the least to do with museums seem to have been hitherto the most successful as artists; and it is rather curious that even Flaxman, who passes as the most classical of the sculptors of the last century, really paid very little attention to such classical art as was within his reach, but, instead, devoted himself almost furiously to sketching from life, making figure sketches on his thumb-nail, as he walked about the streets of London, if nothing better happened to be available.

A RECENT discussion of workingmen's dwellings in London throws a curious indirect light on the effect of trades-unionism on the condition of working people themselves. The rents of tenements in London, contrary to the general opinion in this country, are high. A journeyman mechanic pays nearly as much for a two-room tenement in London as he would in New York, while his wages are much lower, so that the question of rent is a far more oppressive one to the average workingman in England than in this country. As every one knows, numberless attempts have been made in London to relieve the poor by building blocks of tenements which could be rented at the lowest rate possible, consistently with a modest return on the capital invested. Some of the more recent buildings pay only two and one-half per cent on the investment; but, even then, the rents are so high as to constitute a distressing burden to the tenants, principally for the reason, as we are told in an official report, that the cost of union labor has risen so enormously within a few years, while its efficiency has so much diminished, that the expense of building has more than doubled within less than a decade. It is only a few years since an average English bricklayer was expected to lay a thousand

bricks a day, and, as the engineers of the Westinghouse Company found, they could easily lay from eighteen hundred to three thousand, if they had an inducement to do so. Now, in London, which is bound hand and foot by organized labor, three hundred and thirty bricks is the standard day's work for a union bricklayer, and the bricklayer himself, his wife and children, his brothers and cousins and brothers-in-law, have to pay, in consequence, three times the rent that they would have had to pay before labor was organized in the interest of the skulkers and politicians, or camp in the street. It is too late for England, or, at least, for London, to reform, but it is not too late for this country to profit by the frightful increase of pauperism in England, and to ask itself whether workingmen are really finding in shiftlessness, dishonesty, laziness and tyranny the path to Paradise.

A REMARKABLE work of what might be called applied archaeology has been performed by Sir William Willcocks, late Director-General of Reservoirs for Egypt, who has studied the ancient irrigation system of the valley of the Tigris, with a view to the possible restoration of the Chaldean desert to its former fertility. As our readers know, the Germans are busy with railroad building in Asia Minor, and their main line, for which they hold concessions, is to extend from Constantinople, or, rather, from the ferry-landing opposite Constantinople, down the Euphrates Valley, and across Mesopotamia, to Bagdad, on the Tigris. This line is in course of rapid construction, and it is natural that those interested in it should reflect upon the days when the country through which it passes, instead of being a desert, as it is at present, was the richest region of the world. The population of the ancient city of Babylon, now a mere mound in the midst of a desert, is estimated by various authorities at from twelve to twenty-four millions; and the Greek historians are never tired of describing its wealth and splendor. All this vast population, and all this wealth and splendor, were nourished by the irrigated fields of Mesopotamia, and there seems to be no reason why the irrigation canals should not be reconstituted, and the land restored to its ancient prosperity. Even now, the soil of the Tigris Valley is said to resemble that of our own "desert," being a rich loam, only needing water to make it fertile. Both the Tigris and the Euphrates rise among the snow mountains of the Caucasus group; and, as in India and Egypt, the hotter and dryer the weather is in the valley, the more copious is the supply of snow-water from the mountains, so that the Tigris sometimes overflows its banks for a distance of five hundred miles from its mouth, while the country about it is parched and barren. Many centuries ago stupendous irrigation-works were in use, the remains of which are still visible. According to Sir William Willcocks, who gives maps and sketches of the ruins, the system was arranged with extraordinary skill, the water of the Tigris being shifted from one main canal to another, as circumstances might require, and from each main canal to its smaller branches, by means of gates, fixed between piers of masonry so solid that they remain to this day, although they have been soaked in the water of the Tigris for perhaps two thousand years. The magnitude of the works is indicated by the fact that one of the principal irrigation-canals is nearly four hundred feet wide, and more than thirty feet deep.

THE present appearance of the ground indicates that the transformation of the country from a fertile and populous agricultural region, dotted with great cities, to a barren waste, instead of being the work of centuries, was accomplished in a few hours, by an overwhelming inundation of the Tigris, which swept away cities and villages, destroyed the canals, and changed the course of the river itself, so that it has never since been available for irrigation through the old conduits. Now, as Sir William Willcocks thinks, the time has come to restore the ancient system, strengthening it where necessary, so as to bring back the fertility of what was once the most populous region of the globe. By the time the railway reaches the Tigris, a fertile and populous territory should be prepared to receive it, and it is probably only a question whether English or German enterprise shall be first in the development of the country. The delta of the Tigris and Euphrates rivers, which for a considerable distance run so near together that their waters unite in inundations, is as large as Egypt; and a fraction of the money which has been spent, or rather squandered, in Egypt would make it, perhaps, as fertile.

ATHENS AND ROME.

IT is somewhat remarkable that two such excellent books on the monuments and history of ancient Athens, one by an English, the other by an American author should appear simultaneously. The coincidence points clearly to the fact that such a volume was needed. Harrison and Verrall's "*Mythology and Monuments of Ancient Athens*," covers indeed much of the same ground, but from a special point-of-view, following the itinerary of Pausanias, while Prof. Walter Miller's admirable history of the Acropolis which appeared in the *American Journal of Archaeology* for October to December, 1893, has not been republished as we wish it might have been, and it treats solely of the history of the Acropolis itself. These volumes, therefore, treating of the historic development of Athenian art are most welcome and fill a distinct gap among books in English on the subject of Greek art. A much more remarkable want among English books on Classic art is, in part, supplied by Anderson and Spier's "*Architecture of Greece and Rome*." It is, indeed, astounding that until the appearance of this volume there was in English no work on the history of Classic architecture that could make any claim to completeness.

The two books on Athens which lie before us, though treating in general of the same subject, do not by any means coincide in treatment or altogether compete in subject-matter—indeed, to some extent, they may be said to supplement one another. Professor Gardner's book¹ is concerned mainly with the aspect of the city in its successive periods and with the monuments and works of art. Historical events are referred to only incidentally. The chapter headings give a general idea of the plan of treatment: Situation and Natural Features; The Walls of the Acropolis and the Town; The Acropolis before the Persian Wars; The Town before the Persian Wars; Early Attic Art; The Acropolis in the Fifth Century; The Parthenon; The Erechtheum and the Temple of Victory; The City in the Fifth and Fourth Centuries; The Theseum; The Asclepeium and the Theatre; The Ceramicus; Athens in Hellenistic and Roman Times; Pausanias in Athens; The Piræus. To those who know Professor Gardner's "*Handbook of Greek Sculpture*" it need not be said that he writes clearly and straightforwardly, in a style at once simple and attractive. Each subject is very fully treated, and doubtful points receive careful discussion and elucidation. The treatment of topographical questions is full and very clear. Although in the preface readers "who wish to follow up matters of controversy at greater length" are referred to the previous literature of the subject, "which has made it permissible to summarize results rather than to enumerate details of evidence," yet the reader, in all important cases, has the elements of the controversy put before him; and though the author clearly expresses his own views, the argument is always temperate and the evidence on both sides is presented impartially and with sufficient fulness, to some extent putting the reader into a position to form his own judgment. A case in point is the treatment of the Enneacrunus question. Professor Gardner inclines to differ with Dr. Dörpfeld's identification of the fountain, discovered by him at the foot of the Pnyx Hill with the Enneacrunus fountain, but he does so with full recognition of the difficulties of a different interpretation and states fully in a long note the main points in support of the various views of this subject. Mr. Butler, on the other hand, passes over such doubtful points as these and presents his own conclusions without argument. He cuts the Gordian knot in question by connecting Callirrhoe (the Enneacrunus in the bed of the Ilissus) with Dörpfeld's Enneacrunus by an aqueduct. "The most recent research," he says, "seems to have cleared up all doubt. . . . The line of the aqueduct has been traced from the bed of the Ilissus almost to the Agora." He overlooks the fact, however, that the line of the aqueduct does not run from a point near Callirrhoe, but from far above it. Professor Gardner, besides numerous more incidental references, gives five pages in the body of the book and about five pages additional of more closely printed note to this subject, which Mr. Butler summarily disposes of in less than a page. The briefer treatment is, no doubt, proper to the kind of book he has undertaken to write, for Mr. Butler's is distinctly a book of popular type, while Professor Gardner's, though appealing to the general reader, is more scholarly.

We are gratified to note that Professor Gardner follows Mr. Frazer in opposing the theory of Dörpfeld, which has so generally been accepted, to the effect that the cella of the old Parthenon still stood after the destruction by the Persians and was repaired and used until a late period. A theory which supposes that the Greeks built the caryatid portico of the Erechtheum within a few feet of the wall of the old temple has always seemed to us an absurd assumption. Less justified seems the attribution, following Furtwängler, of the original substructures of the Parthenon to Themistocles rather than to Cimon. In strong opposition to this stands Mr. Butler's statement, as if of undoubted historic fact, that Themistocles, after the repulse of the Persians, had charge of all work in the lower city and Cimon of the work on the Acropolis. But he does not cite any evidence of any such amicable division of responsibility.

In several cases Professor Gardner seems lacking in real appreciation of the significance of the forms of the Doric order. He not only takes it for granted that the Doric column is a reproduction of a wooden original, but seems to assume that its perfection would lie in following closely that original in a material of such different nature.

On page 277 he says, speaking of the Doric capital, "From the point of view of historical evolution it may seem a solecism to make these three members (necking, echinus and abacus) out of a single block; they must, of course, represent different portions of the original wooden structure," and he thinks the reason is to be found in "the difficulty of exact adjustment and the risk of shifting if they were made of separate pieces." We are far from subscribing to the widely accepted theory of the wooden origin of the Doric column; but even assuming that origin, the form of the Doric column of stone as finally developed would, in so far as it was suited to that material, necessarily differ most widely from its assumed wooden prototype. The beauty of the Doric column lies largely in the perfect harmony between its form and its material. In every detail of their shape and structure the columns of the Parthenon are essentially supports of stone. To think otherwise is to miss some of the essential elements of their beauty. A similar lack of appreciation is shown in his failure to grasp the æsthetic value of the incision between capital and shaft.

Professor Gardner's book is illustrated by several fine photographs and by a series of excellent half-tones from photographs unusually well chosen and giving many points-of-view of great interest not elsewhere illustrated. We learn from the preface that these are amateur photographs, many of them taken by the author's nephew, Mr. Arthur Gardner. Especially helpful and ingenious are the maps of the Acropolis and of the city. Two successive conditions of the site are in each case shown by a map on transparent paper fitting over a second one printed on heavier paper. In this way the remains on the Acropolis before the Persian wars are shown in comparison with its condition in Roman times, and the modern city of Athens, with contour lines shown, is similarly overlaid with a map showing the ancient remains, which indicates also the route of Pausanias and clearly shows by numbers the monuments to which he refers, in cases of doubt giving the different locations that have been suggested. But while in general the illustrations are excellent, the American edition, at any rate, suffers from two annoying mistakes evidently to be indirectly ascribed to the operations of our narrow and defective copyright-law, which obliges books to be printed in this country in order to receive the protection of American copyright. Some incompetent person evidently was charged with the duty of seeing the book through the press in this country. As a result, on page 233 a rather coarse cut of an Asiatic Ionic Order, resembling that of the temple of Athena at Priene, does duty for the "Ionic capitals of Propylæa and Erechtheum," a title which, placed under a drawing showing but one capital, carries with it the further false implication that the Ionic capitals of these two buildings are similar! On page 261 over the heading, "The Parthenon in Turkish Times, from Stuart's '*Antiquities of Athens*,'" is placed an illustration from the same work showing the Erechtheum. The wrong plate has been carelessly chosen for reproduction. It was with a prophetic doubt that Professor Gardner wrote at the end of his preface, "Finally, I must ask the indulgence of the reader towards a book printed in America while I am myself in London and under circumstances which have precluded as complete a revision as I could have wished, both of the text and of the illustrations."

Mr. Butler's "*The Story of Athens*"² is accurately described by its title. It gives a picturesque account of the history of the city, uniting with a consideration of the principal events in its political history a more detailed account of the development of its architecture and its sculpture. The task was by no means an easy one and it has been carried out in an interesting and attractive manner. The story is vividly and dramatically told and with no little feeling for the poetry of Greek art. At times, however, the author's evident desire to do justice to the poetic possibilities of his theme has betrayed him into a straining after dramatic effect, as when Miltiades at the battle of Marathon is pictured as "pausing to wipe the sweat from his brow," and to a somewhat over-flowery diction, of which we quote a single instance (page 193): "The sun had set upon the Marathonian Age, to rise upon the Golden Age of Athenian greatness. A mighty constellation of stars of the first magnitude—Themistocles, Cimon, Æschylus, Pindar—had sunk behind the horizon as the golden orb of Pericles ascended to its zenith, and a second constellation that counted such names as Thucydides, Socrates, Sophocles, Euripides and Phidias rose in the east."

On the other hand, we find (page 185), speaking of the adornments of the Acropolis, the somewhat inelegant phrase, "among other works in this line," while even the recent talk of Anglo-Saxon brotherhood hardly prepares one for a reference (page 290) to "the Anglo-Saxon Shakespeare." The illustrations are sufficiently abundant and are well chosen; but the somewhat weak outline-drawings of architecture and scenery are distinctly less pleasing than the half-tones of Professor Gardner's volume, while the otherwise excellent half-tone reproductions of photographs of sculpture are marred by the engraver's unpleasant attempts at picturesqueness in the cloudy backgrounds.

Anderson and Spier's "*Architecture of Greece and Rome*"³ is a somewhat large and stout, handsomely printed octavo of 274 pages,

¹ "*Ancient Athens*" by Ernest Arthur Gardner. New York: The Macmillan Co. London: Macmillan & Co.

² "*The Story of Athens*," a Record of the Life and Art of the City of the Violet Crown read in its Ruins and in the Lives of Great Athenians, by Howard Crosby Butler, etc. New York: The Century Co.

³ "*The Architecture of Greece and Rome*," a Sketch of its Historic Development, by the late Wm. J. Anderson and E. Phené Spiers. London: B. T. Batsford. New York: Charles Scribner's Sons. Price \$7.50 net.

with 179 illustrations admirably chosen. A large number of these are full-page heliogravures from photographs, others half-tones from photographs inserted in the text, besides plans, elevations and details from a variety of sources to which credit is not always given. The book gives a clear and readable account of Greek and Roman architecture in their several phases, and it should be especially useful in colleges, and schools of art and architecture, since it is, so far as we know, the only reasonably complete account of Classic architecture in English. We have had short handbooks, like Smith and Slater's "Classic Architecture" and monographs in plenty, but a good history of Classic architecture has been lacking. It cannot be said that this lack is entirely supplied by the book before us. It is rather an account of Greek and Roman buildings in successive periods than a history of the development of Greek and Roman architecture. The successive phases of work are described, but their historic development is not as clearly brought out as could have been wished. This is especially true of the transitional periods. The importance of the Hellenistic period in making clear the connection between late Greek and Roman art is by no means sufficiently emphasized. A brief chapter is devoted to "The Alexandrine Period," but it consists chiefly of descriptions of buildings without any consideration of salient characteristics. The important architecture of Pergamum is dismissed in a single short paragraph. There is little or no attempt to point out the broad differences between Greek and Roman architecture. The reader is left, in the main, to gather these differences from the descriptions that are given. We look in vain for any such brilliant and masterly characterization as is to be found, for instance, in the fourth of Viollet-le-Duc's "Discourses." With regard to Roman architecture there is no attempt to discriminate between the successive periods of Roman work after the earliest, nor to point out the differences that may be observed in different provinces. Even Pompeii receives only incidental consideration.

It is perhaps not worth while to enter into the discussion of controversial opinions. It will be enough to state that the authors repeatedly give as determined fact many things which are still, and perhaps always must remain, in the region of conjecture. Thus the wooden origin of the Doric column is regarded as "proved." The so-called "Basilica" and "Temple of Ceres" at Paestum are definitely stated to be later than the "Temple of Poseidon" (page 27). The Temple of Corinth, in spite of recent investigation and conjectures, is still ascribed to the seventh century; the cella at Segesta is stated (page 28) as "apparently never built," and from this (page 61) it may be gathered that "the peristyle of the temple was the first part erected" — an extraordinary technical proceeding!

Misprints are few, but we have noted the following: "Girgenti" twice appears (pages 20 and 30) as "Girghenti"; page 57, "Braconia" for "Brauronia"; page 104, "from Hadrian's work" for "in Hadrian's work"; page 163, "capitol" for "capital" (referring to Rome), and perhaps the statement (page 173) that in Roman temples "when the peristyle was carried on both sides of the cella it stopped at the rear wall," instead of "sometimes stopped at the rear wall," may also be regarded as a misprint. On page 285 we have "Griecher" for "Griechen" in the title of Professor Durm's book. Miss Jane Harrison's "Mythology and Monuments of Ancient Athens," with Mrs. Verrall's translation of a portion of the "Attica" of Pausanias, appears very strangely as "Margaret de Verrall — 'Mythology and Monuments of Ancient Athens.' Translated by Jane E. Harrison."

The book is, on the whole, pleasantly written, though such examples of what might be called "specification English" as "actual remains of the walls of same" (page 212), "varying the colors of same" (page 272), are certainly distasteful. Among the "List of Selected Books" Koldewey and Puchstein's authoritative "Die Griechischen Tempel in Süd-Italien und Sicilien" is absent and seems not to have been known to the authors, for Dr. Koldewey's probably correct restoration of the "Temple of the Giants" at Agrigentum is not referred to.

ROMAN AND ROMANESQUE FRANCE.¹ — IX.

NICE AND MONACO.

THE traveller journeying along by railway from Antibes to Nice must have noticed that between these two towns there is a long stretch of shingle, mainly formed by the River Var, which in rainy weather brings down huge masses of stone and sand. It was upon this marshy ground skirting the beach, called in the language of the county "*crau*," that the famous meeting took place between the opposing armies of Otho and Vitellius, A. D. 69.

The river has always shifted its bed and been more or less unmanageable, and man has added to the difficulty of keeping it within bounds by felling forests at its source, and all along its course to the sea; but in spite of its being "so mad and so ill-conditioned," as Vauban said, "that one could never hope to get back a hundredth part of the cost which any attempts to improve it would occasion," the modern engineers have solved the problem, by raising parallel dykes upon each side of the river — a fine piece of engineering. Long before the advent of the Romans, the Ligurian people built *castellaras* up the summits of most of the hills between Grasse and Monaco, the massive ruins of which remain. The Romans also found an old road connecting Nice with Venice, a road of several

layers of material, lined with tombs, which they repaired, for these two towns were of great importance, and, with Cimiez, are mentioned among the *civitates* of the Maritime Alps. Cimiez is now but a heap of ruins and modern villas; but it formerly connected the great military port of Fréjus with Turbia, now equally ruined, by the *Via Julia Augusta*, a road which was abandoned upon the increased importance of Nice and Antibes for the more convenient and shorter *Via Aurelia* between Italy and Gaul. The *Via Julia Augusta* was Aristotle's "Heraclian Way," and is evidence of the Phœnicians' occupation of Venice, Cimiez, and the neighboring coasts, which they shared with the Celto-Ligurian tribes of ancient Provence (Leuthérie).

Some authors fix the foundation of Nice by the Ionian Greeks at 350 B. C.; others put it as contemporary with Marseilles. The rock upon which the château of the Middle Ages was built was probably the seat of the ancient town and acropolis, but there are no remains of this period, except a few fragments of inscriptions and coins.

The Roman town was on the table-land of Cimiez, and while Antibes became a Latin town and military arsenal, Nice retained some sort of independence, and remained a trading-town, the metropolis of the district being Cimiez. Here, of late, a great deal of excavating has taken place, and a number of coins, lamps, mosaics, statues, medals, tools, etc., have been found and preserved, besides the foundations and pavements of the Roman baths. The amphitheatre, compared with those of Nîmes, Arles and Verona, is small, but measured by its seating accommodation for 3,000 or 4,000 persons it enables us to estimate the population of the town at 10,000 or 15,000 people.

The trophy raised by Augustus at Turbia was of polygonal form and of huge proportions, somewhat resembling the Tour Magne at Nîmes, but much larger. The inscription, as given by Pliny, consisted of seventy-eight words, thirty-three of which are taken up by the official dedication of the divine Augustus and his dignities, and forty-five with the names of the conquered people. M. E. Desjardins



The Tower of Augustus, Turbia.

("Gaulle romaine," T. II, ch. ii, 6) gives a restoration of the inscription; but of other parts of it little remains but a large fragment of a frieze adorned with draperies, and a portion of an antique head (now at Copenhagen). A description of the trophy may be found in a history of Nice by the Franciscan Antoine Boyer, 1564, for it was then uninjured. It consisted of an exterior arcading, friezes and mouldings, and a colossal statue of Augustus, 18 feet high, at the summit. Although the barbarians began defacing it in the sixth century, its final destruction is due to the builders of the succeeding ten centuries, who stole its stone for building purposes. The inscription was found built into the ramparts, and the whole modern village exhibits fragments of Roman work. The eleventh-century church of Monaco also used up many of the trophy's massive hewn stones. In the twelfth century marbles were carried off by Genoese noblemen for the decoration of their palaces; and later on the high altar of the old cathedral at Nice profited by further robberies; but it was destroyed with part of the church in the siege of the town by Catinat in 1691, and thrown away as rubbish! And now, though its ruins crown the mountain which overhangs the vulgarities of Monte Carlo, most people are ignorant of the fact that they represent one of the grandest of Roman monuments.

The beautiful rock of Monaco was probably the seat of an ancient temple of Astarte or Aphrodite, and sacred woods may have been placed all about the coasts: it is now a mass of sub-tropical vegetation, as beautiful as man can behold. The houses are quite Italian in construction, and the people, like the poor of Nice, are equally Italian in type and costume. M. Leuthérie writes of it thus: —

"The contact of Greeks with Phœnicians is especially evident on the coast of Monaco. . . . The very name . . . Monico, recalls the Tyrian Melkarth, the 'only god,' 'the god, strong, and with no rival,' who, says M. Renan, suffers neither rivals nor neighbors (Monôicos, 'alone in the house'), and whose exclusive worship was not associated in his temple with that of any other divinity." Whether this can be said of little Monaco now, there is no doubt that Monte

¹ Continued from No. 1423, page 45.

Carlo is a veritable "Melkarth." Its architecture is more hideous than anything we have ever seen (a white *bonbonnière*), and its contents equal its exterior. But its government has solved the social problem which defeats philanthropists, the clergy and other respectable people; and the proceeds of the gaming-house have made Monaco the cleanest, tidiest, and most spic-and-span little town that I have ever seen. Not a spot upon the pavements, not a dead twig in its lovely gardens. Its children even seem to have some means of keeping their faces clean in spite of sucking sweets and oranges, and the whiteness and general newness of the gloves and uniforms of the Princelet's police are a thing for inhabitants of Paris and London to note. Is it all a mere *couleur de rose* varnish, or do the gaming profits put the rest of us, as philanthropists, to shame? Would a huge State "hell" enable us to rebuild, rewash and reclothe the slums and the poor of London, Paris and New York? And are State gambling-houses, regulated and taxed, worse, morally, than private "hells" of high or low estate where cheating may flourish with impunity? However, the fact remains that Monaco flourishes upon ill-gotten gains and gives nature in all its beauty in payment.

"Son Monaco sopra un scoglio,
Non semino e non raccoglio,
E pur mangiar voglio."

("I am Monaco on a rock by the shore; I neither sow nor reap, but I mean to eat.") It is a land without taxes, direct or indirect; it thrives and flourishes and its population is happy. But it sometimes seems to have too much to spend, as, for instance, when its Prince builds a huge rough-hewn stone museum on the terrace of the public garden, an eyesore for miles, where formerly some little Renaissance turrets stood. Having built a large church, what more was there to do? Notwithstanding its modernity the church is a fine Romanesque building, with nave, aisles, transepts, apse and apsidal chapels. All the decoration is in mosaic. The stone and marbles are gray, not too sombre for a sunny land—and one may add that few cities can show as fine a specimen of modern church architecture. I regret I could not obtain a photograph of the interior. S. BEALE.

ANDREA PALLADIO.¹—II.

PALLADIO introduces the subject of country-houses with a few preliminary remarks on situation and the various compartments, in these words: "As certainly 'tis highly creditable and convenient for a gentleman to have a house in the city where he is obliged sometimes to reside; so perhaps he may receive no less pleasure and advantage from a house in the country, where he passes the rest of his time in seeing and improving his own possessions, in augmenting his substance by industry and agriculture where, by exercising himself either in walking or on horseback, which are only proper for the country, he preserves his body strong and healthy, and where, in a word, the mind, being over-labored by the fatigue of the city, will be singularly recruited and recreated." The open position and extended space available are then dwelt on in comparison with town sites, and the necessity for finding "commodious and healthy places" is referred to at some length.

The Italian sixteenth-century country-house had very different requirements from one in modern England. In all of our master's draughts a central *corps de logis* is provided for the master and his family, and this has generally a frontispiece of columns, either flush with the front wall or in advance, and crowned with entablature and pediment. On either side are the wings containing the steward's apartments, the stables, the stores and granaries. Such dependencies in England are generally placed at some distance from the house, and often do not form part of the group. Palladio's types of country-houses may be divided as follows in regard to plan: Type 1. Block type (as the Villa Capra) without wings. Type 2. Central block (or *corps de logis*) with quadrangle. Type 3. Central block, with straight wings. Type 4. Central block, with quadrant wings. Type 5. Central block, with returned wings. The kitchen and offices were invariably placed in a basement or lower story, and an upper story is often provided and used for granaries. Only a few typical houses can be referred to.

The Villa Capra, also known as the "Rotonda," was originally designed for Signor Paolo Armerico. He appears to have been of a cultured disposition, for "after having travelled a long time to improve himself, and being come to settle at last in his own country after the death of all his friends, chose his abode at a country-house he had on a hill." It is situated at the eastern base of Monte Berico, about one and one-half miles from the town of Vicenza.

Palladio seems to have been much impressed by the beauty of the site, for he goes on to describe how it is surrounded by several hills "that seem to form a great theatre." This is probably the best known of all Palladio's works, and owes much to its open position and to the excellent views on all sides. It has a central hall, 40 feet in diameter, carried the whole height of the building, which was to receive its light by means of circular windows in the dome. Four angular staircases bring the central portion to a square, around which are placed the living-apartments. On each of its four façades is an Ionic colonnade projecting about 14 feet and having an internal width of about 34 feet. These appear to have been placed because

of the excellent views to be obtained on all sides. The basement, containing the kitchen, etc., extends under the whole of the house, "for the use and convenience of the family," as Palladio quaintly puts it. The ground-floor is raised about 11 feet 6 inches by means of wide flights of steps, giving access to each portico. For a sunny climate the Rotonda is undoubtedly a very excellent and suitable design, the central hall forming a convenient retreat from the heat of the summer sun, while the projecting porticos are so placed as to catch every available ray of sunshine at different periods of the day, meanwhile protecting the interior of the house by means of their deep shadow. The hall has a projecting gallery at the first-floor level, giving communication to the first-floor rooms. The bedrooms, however suitable for the period and country, would undoubtedly be dark and inappropriate in England, as also the passages leading from the central hall to each portico.

Inigo Jones's references to this house are not of great interest. He remarks that it "stands very solid and firm," and that "a great sum of money must have been spent in the building of this house and especially for the terraces," and also that in his time "the lanthorn at the top of the cupola is not set on, but a net to cover the top hole to keep out the flies"; also that "the tiling does not look well, considering the richness of the statues and the beauty of the building."

The exterior view shows the somewhat dilapidated condition of this building, and also that the windows in the dome are not executed, the light being obtained from a very small lantern at the top of it.

In spite of these drawbacks this design has exercised an extraordinary fascination for European architects, who have imitated it again and again. The first imitation in England appears to have been Mereworth Castle in Kent, by Colin Campbell, the architect. It was also copied by Lord Burlington in 1729 in his villa at Chiswick (now used as an asylum), and which belongs to the Duke of Devonshire, and on a larger scale for the Earl of Westmorland at Foot's Cray Place, Kent (now occupied by Mr. S. J. Waring), and also at Nuthall, Notts. On the Continent it served as a model also for the original Château de Bagatelle, near Paris, also for the Château de Marly-le Roi (since destroyed), a building which was erected for Louis XIV by the architect J. H. Mansart, in 1676.

The sculptor Canova also built a house at Inverigo in Italy after the same design. It was still unfinished when Palladio died, and it was left to Scamozzi to finish his master's work.

The house at Maser has a central advancing block of two stories in height, with straight arcaded wings, returned backwards on each side, and connecting the centre with the stable and kitchen wings. The whole forms an extent of about 280 English feet in length. The courtyard at the back is level with the first floor of the main building. It has a semicircular recess ornamented with Ionic pilasters, statues, sculptured cornices and festoons, and a small basin through which running water passes into a lake. The front view gives a very good idea of the setting of many of our master's country designs, and also shows one of the weak points of Italian country-architecture, viz, the poor and ineffective treatment of the chimneys, which in this as in many cases appear merely as circular flue pipes without any attempt at grouping or harmonizing with the architecture. In most of Palladio's own drawings no chimney-stacks are shown. This view also shows the Ionic colonnade of the front, with an unusual arrangement of broken cornice and central window.

The house at Meledo for the Conti Francesco and Ludovico de Trissini has a plan of an unusual and ambitious kind, being a combination of types 1, 4 and 5. The central block resembles the Rotonda, near Vicenza, and has quadrant wings. In front of these are other returned wings. The main block was to be about 90' x 120', and to have a central circular hall about 40 feet in diameter surrounded by various rooms and staircases. A columned portico of the Corinthian order is on each face, placed there because "every front of the house has a very fine prospect." Palladio describes its situation "as very fine, being on a hill that is washed by a little river in the midst of a spacious plain, and on a well-frequented road." The house proper is set well away from the lower porticos containing the farm offices by means of the quadrant galleries, a great improvement on some of the smaller plans, in which the granaries and farm offices are in immediate proximity thereto. The cupola crowning the whole was intended to contain windows to light the central circular hall, and forms a fine terminal to the group, but in execution these windows have been omitted. The kitchens, as usually seen in smaller plans, were in the basement and the granaries in the roof.

Churches.—Palladio refers in his writings to the ancient temples in Rome and elsewhere in Italy, and he dwells on the importance of buildings raised for devotional purposes. He then speaks strongly in favor of the circular shape, because it is "alone among all figures simple, uniform, equal, strong and most capacious . . . the extreme in every part being equally distant from the centre; it is therefore the most proper figure to show the unity, infinite essence, uniformity and justice of God."

The cruciform plan is referred to as commendable by Palladio, who says, "In this form I built myself the church of S. Giorgio Maggiore in Venice."

Il Redentore, Venice, situated on the island of La Giudecca, and consecrated to the Redeemer, for the deliverance of the city from the plague which ravaged the town in 1576, was intended to express the devotional idea. The plan is in the form of a Latin cross, in the long arm of which are three chapels formed in the aisles on each

¹A paper by Mr. Banister F. Fletcher, read before the Architectural Association, April 5. Continued from No. 1430, page 62.

side of the nave, which is twice its width in length. A dome crowns the crossing, having its base brought to a circle by pendentives.

The sanctuary at the south end of the building has a semicircular screen of Corinthian columns, and contains the principal altar, while the transepts are also of semicircular form. Behind the screen is placed the choir, severely plain, agreeing in treatment with Capuchin ideas.

The walls of the interior are ornamented by an order of Corinthian half-columns, coupled, between the chapels, and have two niches between them. The arches to the side-chapels are semicircular, and rest upon impost mouldings supported by Corinthian pilasters. Each chapel is crowned with an internal semicircular vault, corresponding with the arch to the nave. The height of the nave vault, which is of brickwork, and rises from the main entablature, is about 65 feet, and in this semi-elliptical vault are semicircular windows lighting the nave.

The façade has a main order of the Composite type, expressing the interior nave. This order is formed as half-columns, the angles being formed as piers, and they support an entablature and pediment. The pilasters throughout are diminished, and have an entasis in the same manner as the columns. This order is raised upon a stylobate, in the height of which is managed the principal flight of steps, which is as wide as the nave on plan. On either side of the central space the side-chapels are designed as wings, ornamented with Corinthian pilasters starting from the same level as the principal order. Half-columns of this same order flank the central door of the church and support entablature and pediment, and are also carried round the lateral façades. On either side of the central doorway are niches for statues, flanked by pilasters supporting entablature and pediment. Above the walls separating the side-chapels are taken masses of masonry, forming buttresses to resist the pressure of the nave vault.

S. Giorgio Maggiore differs principally in the aisles, these taking the place of the side-chapels of Il Redentore. The church is dated 1556, but the façade was added by Scamozzi in 1610. The plan is cruciform, consisting of a nave 40 feet in width and aisles about half that width. The length of the nave up to the crossing is about twice its width. The transepts have semicircular ends, and over the crossing is a dome constructed internally of brick and externally of timber and lead. One bay beyond the crossing is planned similarly to the nave, and at this point the aisles are stopped and the sanctuary and chapter-house are continued without aisles. In the interior a Composite order of columns and pilasters placed on pedestals a quarter of the column in height ornament the walls. Between the nave columns are semicircular arches resting on the entablature of the smaller coupled Corinthian pilasters without pedestals. The soffit of these arches, which extends over the width of two pilasters, is of considerable depth, and has a much bolder and better appearance than the thin arch in Il Redentore. The nave vault is 70 feet high.

The external façade is of a very similar type to that of Il Redentore, but a better proportion is obtained by raising the principal order on a pedestal and designing the minor order without one. The main order is Composite, resting on pedestals which in their turn are placed upon a plinth about 3 feet in height. The seven steps at the entrance to the church are formed in the depth of this plinth. This church owes its picturesqueness to its position on an island of its own name, facing the eastern end of the Grand Canal, opposite the Piazza of St. Mark, from which a splendid view of it is obtained.

The little church at Maser is isolated in position at the end of a long road. The plan differs from those of the larger churches already described at Venice. It is circular, having an internal diameter of 40 feet, and is of the type Palladio admires and describes in his fourth book. A wide flight of steps leads to a projecting portico of the Corinthian order, with two lateral arches and a central doorway leading into the church. The length of this portico is nearly two-thirds of the diameter of the church, and Palladio has followed the same proportions as in the Pantheon at Rome, which, of course, had been measured by him. A dome crowns the whole, light being admitted through a somewhat high lantern. The festoons suspended between the capitals are a feature condemned by many. The two small bell-turrets on either side crown the small staircase.

The façade of S. Francesca della Vigna, erected in 1562, bears a remarkable resemblance to that of S. Giorgio Maggiore, to which it may be compared, but to which it is inferior, especially as it repeats the defect of interrupting the stylobate by the principal doorway, a much better treatment being adopted at Il Redentore. Another fault is in the management of the orders, for too great a contrast is obtained by starting both the principal and subsidiary order from the same base, the treatment at S. Giorgio being preferable.

Palladio prepared five designs for the façade of the Church of S. Petronio at Bologna. This church was commenced in 1390, in emulation of the cathedral at Florence; and some idea of its size can be imagined when we find that its area, if completed, would have rivalled St. Peter's at Rome. The façade has remained uncompleted. The difficulty Palladio was contending with was the application of a Classic façade to a Gothic structure, and it is interesting to see how he endeavored to overcome these difficulties. Time, however, will not permit their discussion here, but I am able to show you his fourth design.

The convent of La Carità at Venice (now the Accademia delle

Belle Arti) was partly executed during his lifetime, but a fire afterwards destroyed a large portion. The plan published by Bertotti shows an outer atrium, 60 feet long by 45 feet 6 inches wide, of Composite columns, two stories in height, from which is reached the cloister court, 70' x 86'. This court is surrounded by three stories of arcades ornamented with the Doric, Ionic and Corinthian orders. As in so many of Palladio's buildings, brick is the chief material employed. It is covered with stucco, the bases, capitals of columns and upper parts of cornices being in stone.

Of the atrium of Corinthian columns forming part of this building Sir Henry Wotton says: "Mine eye hath never beheld any columns more stately, of stone or marble, for the bricks, having been first formed in a circular mould and then cut, before their burning, into four quarters or more, the sides afterwards join so closely, and the joints concentrate so exactly that the pillars appear one entire piece, showing how, in truth, we want art than stuff to satisfy our greatest fancy."

The centre of the north front of Houghton Hall, Bedfordshire, by Inigo Jones (dismantled 1794), is held to have been similar to the courtyard of Palladio's building, the principal feature being a recessed portico, about 12' x 22', with four Doric three-quarter columns; above are the remains of an open Ionic loggia, a feature then new to England, but a favorite treatment of Inigo Jones's and used also at the Queen's House, Greenwich, and elsewhere.

Influence.—Perhaps few men, with the exception of Vitruvius, have exercised more influence in matters architectural than Palladio. This was chiefly effected by means of his great literary effort, published in four books in 1570, of which countless editions have been published and which have been translated into almost every European language. The most interesting to English students is the third edition, published in 1742, as it contains the notes by Inigo Jones taken from his manuscript in Worcester College, Oxford. Mention should also be made of the valuable Burlington-Devonshire Collection now in the R. I. B. A. Library. These drawings of ancient buildings and of his own designs are believed to be by Palladio himself. They show his careful study of ancient buildings in Rome and elsewhere, and from a perusal of them we may agree with Sir Joshua Reynolds that "the greatest natural genius cannot subsist on its own stock; he who has laid up no materials can produce no combinations. The more extensive his acquaintance is with the works of those who have excelled, the more extensive will be his power of invention."

Inigo Jones (1572-1652) was the pioneer of Palladian architecture in England, and it must be confessed that no student so thoroughly studied his master's works as he did. He, however, had his transition period, in which the expiring Elizabethan and Jacobean style contributed the detail, as seen in the beautiful façade of St. John's College, Oxford, and in the north and south sides of the quadrangle in the same college. His journeys in Italy, and the notes on his own copy of Palladio's book, show that he went about his task in no half-hearted way, but carefully examined each building. Inigo Jones became, in short, saturated with Palladianism, which he naturalized in England, and through him Palladio became the great master of the English fully developed Classic Renaissance, or, as it is sometimes called, Anglo-Classic style.

The change introduced in architectural style by Inigo Jones's use of the Classical orders of architecture was extraordinary in its results and far-reaching in its effect.

The Banqueting House (afterwards the Chapel Royal and now the Museum of the United Service Institution) in Whitehall was the only part of his magnificent scheme which was carried out. This masterpiece shows the skill with which Inigo Jones, although working on the lines of his Italian master, gave to his designs that English character for which they are distinguished. The extraordinary amount of variety which he has obtained in this façade is remarkable, for no two adjacent columns are alike except the two central ones; the others, either by coupling or by making them three-quarter or half columns, are all different on each side of the central axis of the building. There is a sobriety and dignity about the building which well expresses Palladio's methods of design.

It was in the arrangement and design of the "Court Masques" of the Stuarts that the genius of Inigo Jones first found a field for the display of his Palladian principles, and it was in the interior decoration of his best works that he showed his extraordinary knowledge of architectural detail. Palladio's buildings were mostly shells in which the ornament was lavished on the exterior. Jones, however, carried the details of the style throughout the interior fittings, and excelled in such features as doors, windows and chimney-pieces. His deeply coffered ceilings in compartments it is said were introduced from France, but they accord perfectly with the bold style of his architecture.

Among others of Inigo Jones's works which show Palladian influence may be mentioned the river façade of Greenwich Hospital, executed by Webb, one of his pupils. In this building the two stories are included under one huge Corinthian order. York Water-gate, London; St. Paul's, Covent Garden; houses in Lincoln's Inn Fields; Chevening House; portions of Wilton House, including the Palladian bridge, may be mentioned as other typical examples.

Stoke Park, erected in 1630-34, shows very direct Palladian influence, especially in the plan. The central block, or *corps de logis*, has semicircular wings as colonnades, with a library and chapel at

either end. This type of plan is one of many erected or designed by Palladio in the neighborhood of Vicenza, several of which must have been seen by Jones during his visit to Italy.

The enthusiasm of Lord Burlington (1695-1753) for Inigo Jones is well known, and it is recorded how a design for a gateway by the latter was given to Lord Burlington by Sir Hans Sloane, who had it removed from Beaufort House, Chelsea, to Chiswick House, where it may still be seen. Lord Burlington paid many visits to Italy, and his life there among the artists of the day seems to have given him an extraordinary liking for and interest in the works of Palladio and his school. His collection of drawings by Palladio, already mentioned, and of works by other artists of the period, must have helped very much to have popularized the art of Palladio. Giacomo Leoni was brought over to England by Lord Burlington in 1715, especially, it would appear, to help in the translation of Palladio published in that year. Remaining in England, he executed a number of important buildings, such as Latham Hall, Moor Park, and others, which must have influenced contemporary architecture.

The fully developed English Renaissance architecture was, therefore, given its first great impulse at the commencement of the seventeenth century by Inigo Jones, who founded his style on that of his great master, Palladio, whose works he had studied so thoroughly in Vicenza and elsewhere. Jones, however, gave to them an English character, attempting to make them, in his own words, "solid, proportional, according to rules, masculine and unaffected." This tradition was continued without interruption to the close of the eighteenth century by a body of English architects who were in a general way influenced thereby. To trace this progress step by step would take us beyond the limits at our disposal, but a glance at a few of the principal architects and their works will help us to understand the development.

John Webb (pupil and nephew of Jones) was responsible for Amesbury House, Wiltshire, in the Palladian manner, and Dr. Henry Aldrich erected the Peckwater Quadrangle of Christ Church, and the church and campanile of All Saints, Oxford.

Sir Christopher Wren was born in 1632, or twenty years before the death of Inigo Jones in 1652. The amount of work executed by him, and the influence on him of Palladio and Inigo Jones, caused him to leave a number of buildings which have acted as models for succeeding generations of architects. Besides St. Paul's, London, Wren was responsible for the building of some fifty-three churches in the city of London between the years 1670-1711. In most of these there is discernible the influence of the Palladian ideals, and Classical columns and their entablatures are used in many novel ways. Wren carried out the Sheldonian Theatre, Oxford, the Inner Court and library of Trinity College, Cambridge, a portion of Greenwich Hospital, Chelsea Hospital, a portion of Hampton Court Palace, Morden College, Blackheath and Temple Bar, London (now removed to Theobald's Park, Herts), all of which are examples of his extraordinary facilities in applying Palladian principles to various types of buildings.

In the eighteenth century a great number of country-houses were erected in England in which the traditional plans of Palladio, imitated and improved upon by Inigo Jones and others, were erected. The pages of the "*Vitruvius Britannicus*," by Colin Campbell, furnish plans and views of many of the most important houses erected during the century, and form an eloquent tribute to Palladian influence.

Rainham Hall, in Norfolk, and Castle Howard, by Sir John Vanbrugh, are important examples, as are also Kedleston and Stowe House, by Robert Adam. In some cases, as at Kedleston and Holkham Hall, by W. Kent (1730), there are four quadrant wings. Similar types of plan are shown in Palladio, and must have influenced English architecture, as at Stoke Park, already mentioned. The peculiar Italian method of treating the ground-floor as a basement story for the kitchens and offices, and placing the principal apartments on the *piano nobile*, or upper floor, is carried out in most of these buildings. In fact, the peculiarities of the Palladian style, and its inappropriateness when unaltered to suit the English climate, were referred to in strong terms by the satirists of the day.

Symmetry and grandeur were the qualities which predominated in eighteenth-century architecture, due in a large measure to the disciples of the Palladian school.

Nicholas Hawksmoor (1666-1733), Colin Campbell (died 1734), Sir John Vanbrugh (1666-1726), James Gibbs (1683-1754), Thomas Archer (died 1743), William Talman (died 1715), the Earl of Burlington (1695-1753), Kent (1684-1748), Robert Adam (1728-92) and Sir William Chambers (1726-96), stand out preëminently as the followers of Palladio and Inigo Jones and as the developers of the truly national elements of the English Renaissance.

Sir William Chambers, by his writings, and especially his "Treatise on the Decorative Part of Civil Architecture," carried on the traditions of the Anglo-Palladian school, and objected to the Greek revival of architecture, which was then beginning to be felt.

Thus, till within a century ago, the school of Palladio and his English followers was bound up with the traditions of English architecture. In the nineteenth century, tradition being broken up, the age of revivals commenced.

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VIEW OF MONACO.

NOTES AND CLIPPINGS

SCULPTURE AT THE ST. LOUIS FAIR.—Of the thousand pieces of sculpture to be seen at the St. Louis Exposition next year, eight hundred will be originals. A vast court just within the chief entrance, to be known as Monument Court, will contain the most important statuary. Its chief feature is expected to be a colossal composition, designed by Charles H. Niehaus, called "The Apotheosis of St. Louis." Part of this group will consist of an equestrian statue of Louis IX of France, for whom the city was named; beneath this will be an ideal figure typifying the city of St. Louis welcoming the world. In the same court will be two other equestrian monuments facing each other, one representing Louis Joliet, by Phimister Proctor, and the other Ferdinand De Soto, by E. C. Potter. From an elevation at one end of Monument Court the waters of a series of cascades will fall into a grand basin, at the head of which will be the Louisiana Purchase Monument designed by Carl Bitter, the chief feature of which will be a shaft 100 feet high, surmounted by a figure of Peace standing on a globe supported by four figures symbolizing the North, South, East and West. At the edge of the basin will be four groups depicting events in the history of the Mississippi Valley, by Solon H. Borglum, and some bears and sea-lions by F. G. Roth. The steps at either side of the cascades will be flanked by portrait-statues of the men who figured in the development of the Louisiana Territory—Madison, Jackson, Monroe, Wayne, Daniel Boone, and others. Near the Festival Hall will be Hermann MacNeil's huge "Fountain of Liberty" and Isidore Konti's great figures emblematic of the Atlantic and Pacific oceans. Grouped in front of Festival Hall will be figures of Apollo and the Muses. At the entrance of the Fine-Arts Building will be the colossal seated marble statue of "Sculpture," by Daniel C. French, and that of "Painting," by Louis St. Gaudens. The building itself will be surmounted by a colossal composition in bronze by Andrew O'Connor entitled "Inspiration." Other plastic decorations of this building, which is to be permanent, will be furnished by Messrs. Elwell, Brewster, Jaegers, Tefft, Hamann and Piccirilli. For the Mining Building, F. W. Ruckstuhl is preparing statues symbolizing gold, silver, iron and copper. A frieze in relief will ornament the façade. The huge Liberal Arts Building is to have groups by Henry Linder, George E. Bissell, Martini and Tholnaar. Mr. Lukeman is modelling four sitting figures typifying heat, light, power and speed for the Electricity Building.—*N. Y. Evening Post*.

THE HAVANA CUSTOM-HOUSE.—The old Custom house Building at Havana, formerly the Cathedral of S. Francisco, built four hundred years ago, appears about to collapse, and all possible efforts are being made by the municipal and Church authorities to save the old landmark. The building is still used as a custom-house, but some days ago long cracks were observed all over two sides, while the top was bulging outward. The street at this point is only about 20 feet wide, and during business hours is crowded, but the danger was recognized as great, and though there is hardly a more used street, it was immediately roped off and passage forbidden. By braces and cement-work

the authorities are in hopes of being able to save the building. Just why the cracks should have appeared in the old cathedral is a mystery, for, despite its great age, it has the appearance of solidity, and no seismic shocks have been felt here; but, as there are some other stone buildings in the city which were discovered in the same condition at the same time, it is thought probable that a slight earthquake has occurred. — *N. Y. Tribune*.

A LONG WOODEN LUMBER-FLUME. — After two years spent in construction, the greatest flume in the world has recently been opened at Madera, Cal., in the heart of the redwood forests, about 185 miles from San Francisco. Practically the thing is nothing but a V-shaped wooden trough, the remarkable fact being that it is fifty-three and three-eighths miles long, or, including the numerous "feeders" which branch off at intervals, seventy-one miles. The trough is of wood, double 2-inch planking, and is 46 inches across the top. This trough is carried on scaffolding over gorges and valleys, and passes through rock-cuts in the mountains, keeping as closely as possible to a regular even descent like that of an aqueduct. Water from the mountain-streams is collected at the upper end of the flume and furnishes the steady current on which logs 2 feet in diameter are to be carried down in endless procession. The capacity of the flume is 400,000 feet of lumber daily. The logs are delivered at the railroad, while the water is diverted into the Madera Canal to be used for irrigating purposes. When the mills above are busiest, the great logs are launched into the flume so close together that the ends almost touch, and the great chain winds along at the rate of three and one-half miles an hour. At the entrance to each feeder which is in operation, a skilful man must be at hand to keep the logs from jamming as the side-stream joins the main current. One feature of the great work, aside from its economic aspects, must appeal to lovers of adventure: it appears that several men have gone the length of the flume in canoes, choosing days, presumably, when it was not in use for transporting lumber. Starting in the depths of the forest, the canoeist passes out over the foot-hills and down long mountain-slopes to the level of orchards and farms, to disembark suddenly at the railroad siding. The lumbermen frequently have seen fish in the flume, and the voyager on its surface could perhaps provide his own meals by the way. — *N. Y. Evening Post*.

THE LELONG SALE, PARIS. — A number of well-known Americans put in an appearance during the week at the sale of the art and furniture collection of the late Mme. Lelong, the quaint, miserly little woman who passed her life travelling about in third-class railway carriages in quest of rare pictures, bric-à-brac and furniture, which she gathered together in her beautiful house on the Quai de Bethune, in the heart of Paris, on the island of Saint Louis. The third sale was completed yesterday, the objects fetching \$420,000, which makes a total so far of \$1,500,000. The carved woodwork and porcelain collections are to be sold at the end of the month. The sale has been on the whole highly successful, and at least one-third of the works of art, old furniture, pictures and clocks will go to New York, Chicago and Boston. Among the furniture, a sofa and eight chairs in tapestry of Louis XV style brought \$23,000. A graceful little pale-green porcelain clock, with a chiselled bronze figure of a woman, Louis XV style, brought \$8,000. — *N. Y. Tribune*.

JADE DISCOVERED IN NORTHERN CALIFORNIA. — A mineral discovery of considerable importance is reported to have been made on Indian Creek, near the Grant's Pass-Crescent City stage-road and just south of the Oregon-California line. The discovery consists in the uncovering of a 6-foot ledge of jade, the sacred stone of the Chinese. A quantity of specimens of the mineral were brought into Grant's Pass recently from the scene of the strike and are announced by mineralogists to be first-rate in quality. This is the first time jade has been discovered *in situ* on the North American continent. For a number of years past fragments of float jade have been picked up in the Indian Creek and Althouse districts, on the Oregon-California line, but the peculiar green-colored stone was unfamiliar to the miners of the district. The float fragments were later examined by a mineralogist and the discovery made that they were jade. A search resulted in a ledge of the mineral being found on Indian Creek. A number of claims have been located and a considerable rush has been created to the district through the discovery of the rare stone. Jade is one of the first discovered minerals. It was much used in prehistoric times for weapons and utensils, and was highly prized, especially in the Orient, for ornamental carvings, rings, bracelets, vases, etc. It is a tough, compact stone, varying in color from a pure white to a dark or pale green. Its extreme toughness makes it difficult to secure drills of sufficient hardness to work the stone. The best drills are blunted on jade in a short time. — *N. Y. Evening Post*.

THE RESERVOIR FOR THE COOLGARDIE GOLD-FIELDS. — At a cost of \$15,000,000 the Government of Western Australia has just completed a reservoir seven miles long in the Green Mount Range. Three hundred and twenty-eight miles of 30-inch pipe take the water (5,000,000 gallons a day) to the Coolgardie and Kalgoorlie gold-fields, which are said to be the richest in the world. — *Exchange*.

CELEBRATING THE FOUNDATION OF ST. PETERSBURG. — An interesting anniversary this year is the bicentenary of the foundation of St. Petersburg. The building of the city was begun by Peter the Great on May 27, 1703, soon after his defeat by the Swedes at Narva. The cathedral foundations were laid on June 29 of the same year. — *Exchange*.

THE STATUE OF "ALMA MATER" FOR COLUMBIA. — Work has begun at Columbia University to place the large bronze statue "Alma Mater" on the granite ledge in front of the library, where the steps descend in terraces to the street. The statue was presented to the University two years ago by Mrs. Robert Goellet in memory of her husband. It has been executed in bronze by Daniel C. French at a cost of \$10,000. It represents the University holding out the book of wisdom, while her children cling to the folds of her garments, eager to grasp the book. A number of changes are to be made in the stone-work in front of the library, so that the figure may stand out to the best advantage. The formal unveiling takes place Commencement Week. — *Boston Transcript*.

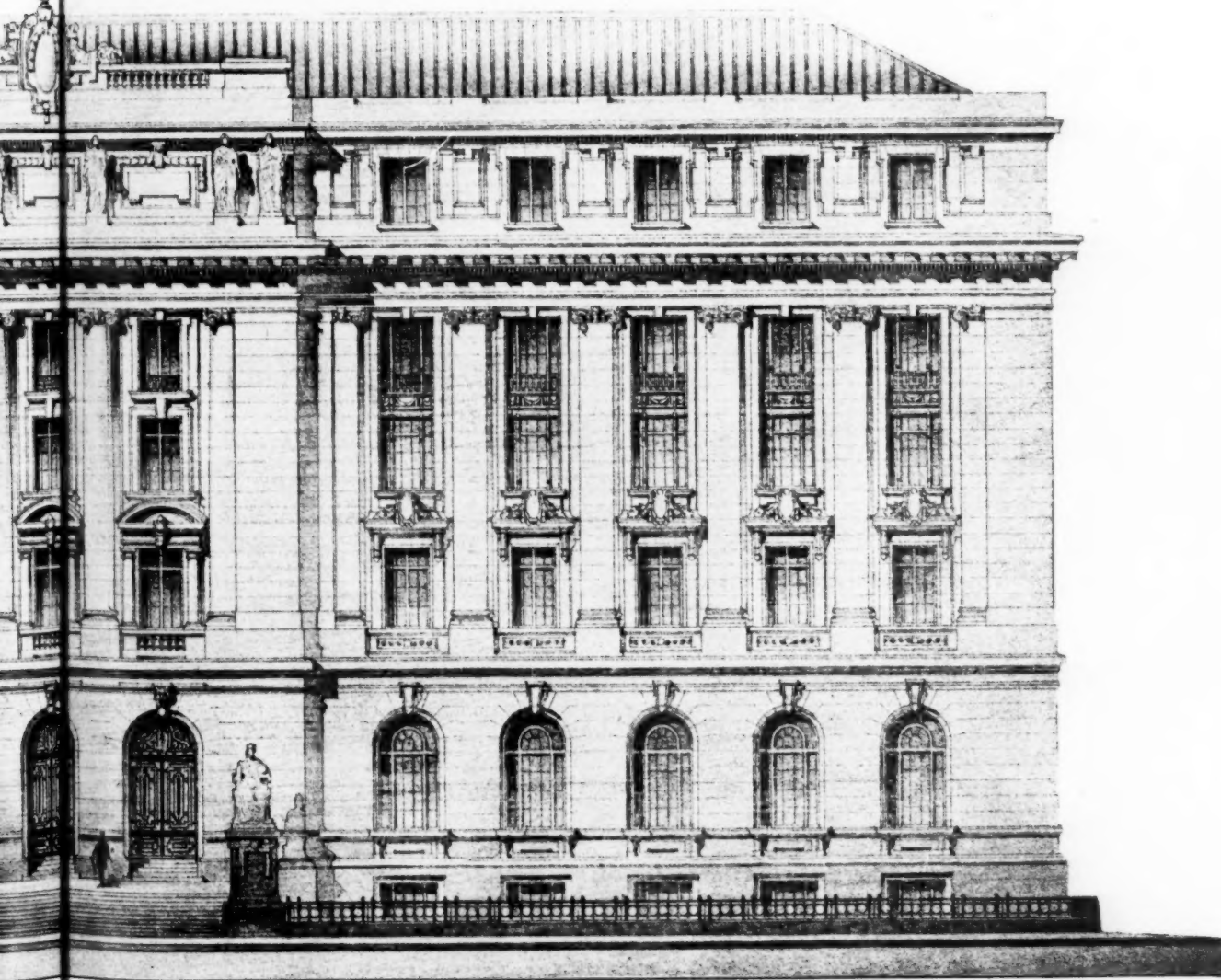
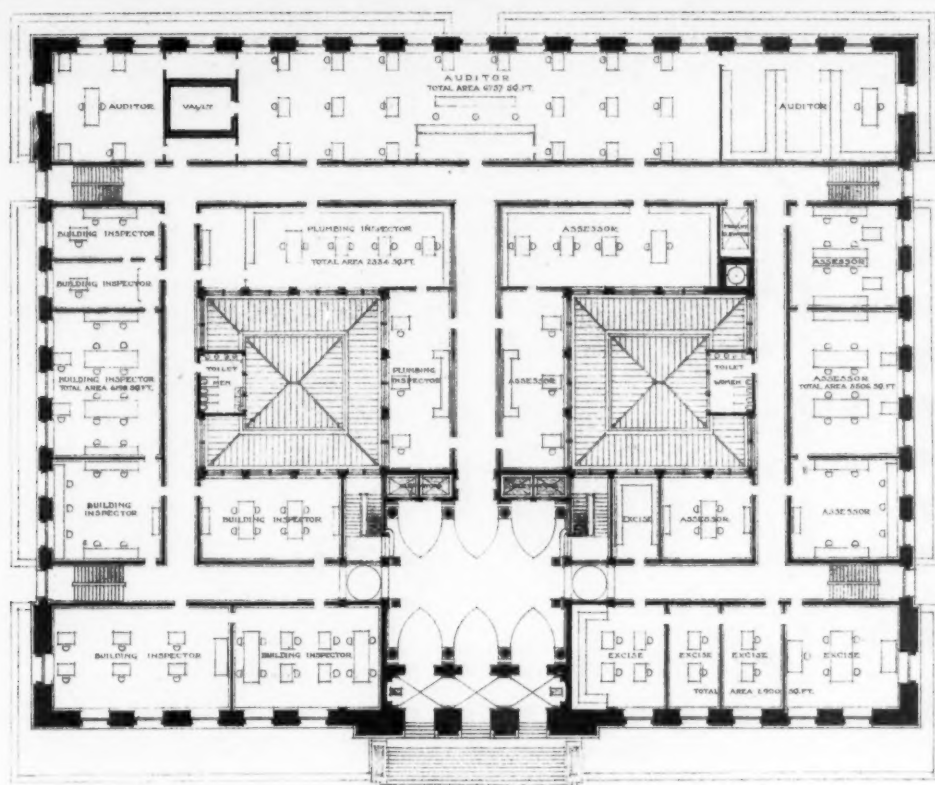
NEWSPAPERS VS. LUMBER. — The *Boston Herald* computes that, during the last twenty years, the product of 37,000 acres of spruce-timber land has been consumed in the manufacture of the paper used by the *New York World*.

STEEPLE-CLIMBING HORSES. — Some of the feats of horsemanship on record are so marvellous as to be almost incredible were they not supported by the unimpeachable evidence of so many who actually witnessed them. It is not many years since a reckless Dane made a wager that he would ride his horse to the summit of the spire of St. Saviour's Church, in Copenhagen, and, impossible as the feat may appear, he actually won his wager and descended to the earth in safety. The contemporary accounts of this mad performance are in the highest degree thrilling, with their picture of the blanched, breathless crowd looking up with straining eyes at the horseman, growing smaller and smaller as he wound his way round and round the dizzy, narrowing steeple, expecting every moment to see horse and rider dashed to pieces at their feet; until at last he stood silhouetted against the sky on the topmost pinnacle, and waved his hand triumphantly to the crowd so far beneath him. To understand this feat at all it is necessary to say that the spire was climbed by a steep and narrow staircase, which winds around it; but think of the daring, the courage and coolness necessary to accomplish such a climb, when the most trifling slip or loss of balance would have meant a swift and terrible death. A similar feat was performed by that adventurous monarch Ferdinand VII, when he rode his favorite horse to the top of the tower of Seville Cathedral. This, however, was a less hazardous performance than that of the Dane, for there is a fairly wide inclined pathway which climbs the tower, although to the spectators it seemed impossible that the king could ever emerge from the venture alive. There is an account of a feat of horsemanship which seems more wonderful than either of those described. It is stated in the records that in the year 1600 a man rode to the top of St. Paul's on his horse Morocco, to the amazement of thousands of onlookers. If this feat ever had any existence outside the imagination of its chronicler, it is probable that the ascent was made by a staircase which may have been a feature of old St. Paul's. Almost equally wonderful are the feats recorded of a pair of thoroughbred Arabian horses, the property of Professor Holloway, of Wyoming. These horses have been trained by their owner to make dives of 70 feet and more into a lake. "At a signal one of them starts up an incline at a quick walk until he reaches a platform 75 feet above the lake below. The Professor is standing on the shore, and as the horse looks down from the platform he calls, 'All right!' At the sound of his voice the horse, without a second's hesitation, leaps from his pinnacle and, flashing through the air, disappears in a cloud of spray, from which he quickly emerges and swims briskly ashore." It is doubtful whether any horseman, however daring and expert, can excel the skill of some Cossacks. When riding at full gallop they will pick up a child from the ground, toss it high in the air, and catch it repeatedly like a ball. They will, also at a gallop, leap off their horses, pick up any small object, and without checking the horse's speed, leap in a standing position on his back. They will ride their horses down precipitous cliffs, on which there scarcely seems footing for an agile mountaineer, or leap them 30 feet down into a river; while a common feat is for a Cossack, galloping at full speed, to snatch a needle and thread from one of his fellows, and thread the needle in less time than would seem possible in an armchair. Few of these performances, however, are more astonishing than that credited to Mr. John Leach Manning, who rode his horse into an upstairs dining-room at the White Hart Hotel, Aylesbury, and jumped him over the dining-table. In describing the feat, he says: "Nothing was removed from the table; in fact, the dinner was actually going on. I jumped the horse barebacked, without bridle. The horse performed before more than forty gentlemen who were dining after the steeplechases." Some of the records of long-distance rides are well worthy of note, as when Mr. Osbaldeston, the famous squire sportsman of seventy years ago, rode 200 miles at Newmarket, in eight hours, forty-two minutes, in November, 1831, using twenty-eight horses for the journey. In October, 1791, Wilde covered 127 miles on horseback at the Curragh in six hours and twenty-one minutes, and twenty-six years ago, Leon, the Mexican rider, rode 100 miles at Alexandra Park in three minutes under five hours, an average speed of more than twenty miles an hour. In the following year Leon covered 505 miles in less than fifty hours, a wonderful feat of endurance. But, as a test of staying-power of both men and horses, it would be difficult to rival the recent performance of five French lieutenants of the Twelfth Hussars. Leaving Gray at three o'clock in the morning, the officers rode seventy-two miles to Belpport, arriving at four o'clock in the afternoon. They then dismounted, walked back to Belpport, saddled their horses, and rode back to Gray, which they reached the following afternoon at three o'clock. Thus, within thirty-six hours, these five men completed a journey of 192 miles, of which 144 were on horseback and forty-eight on foot. — *Tid Bits*.



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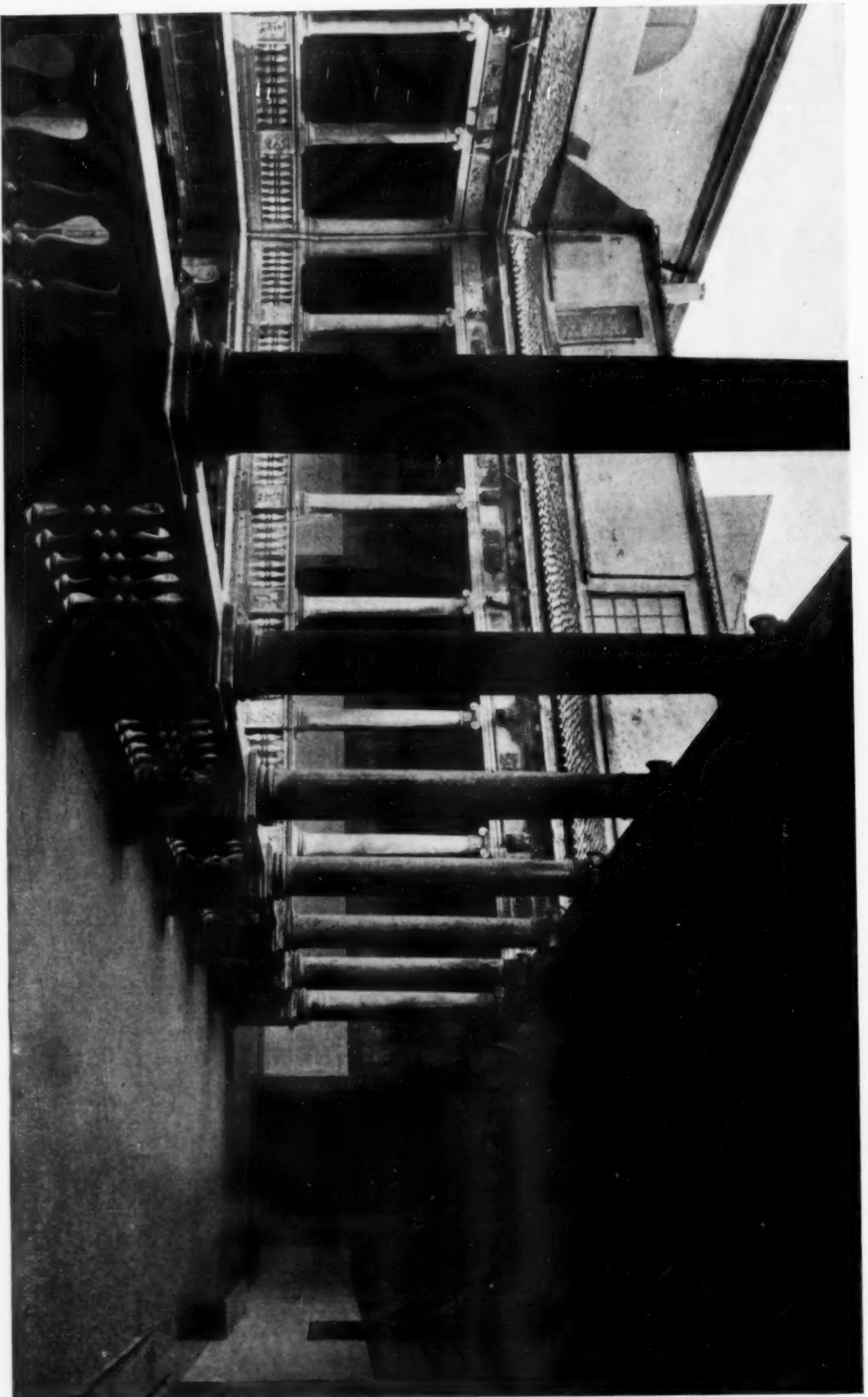
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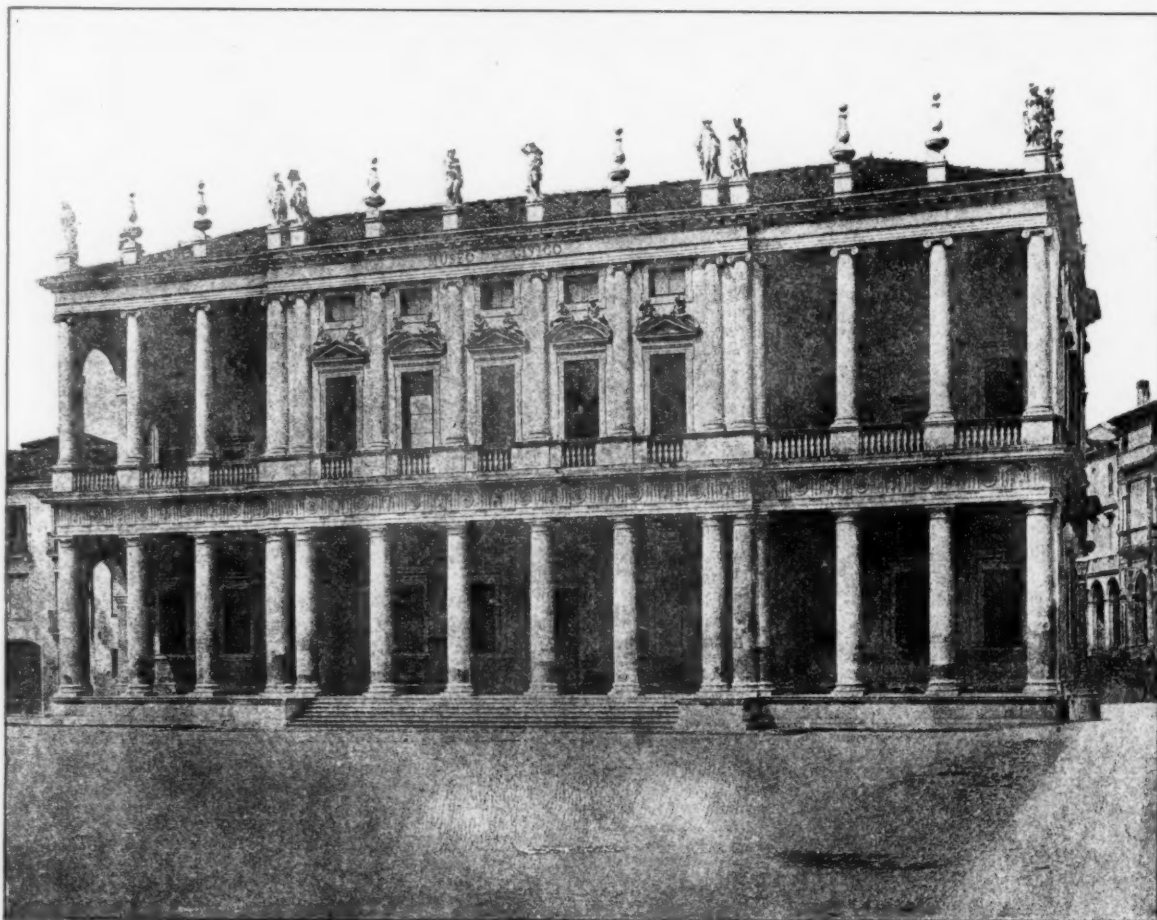
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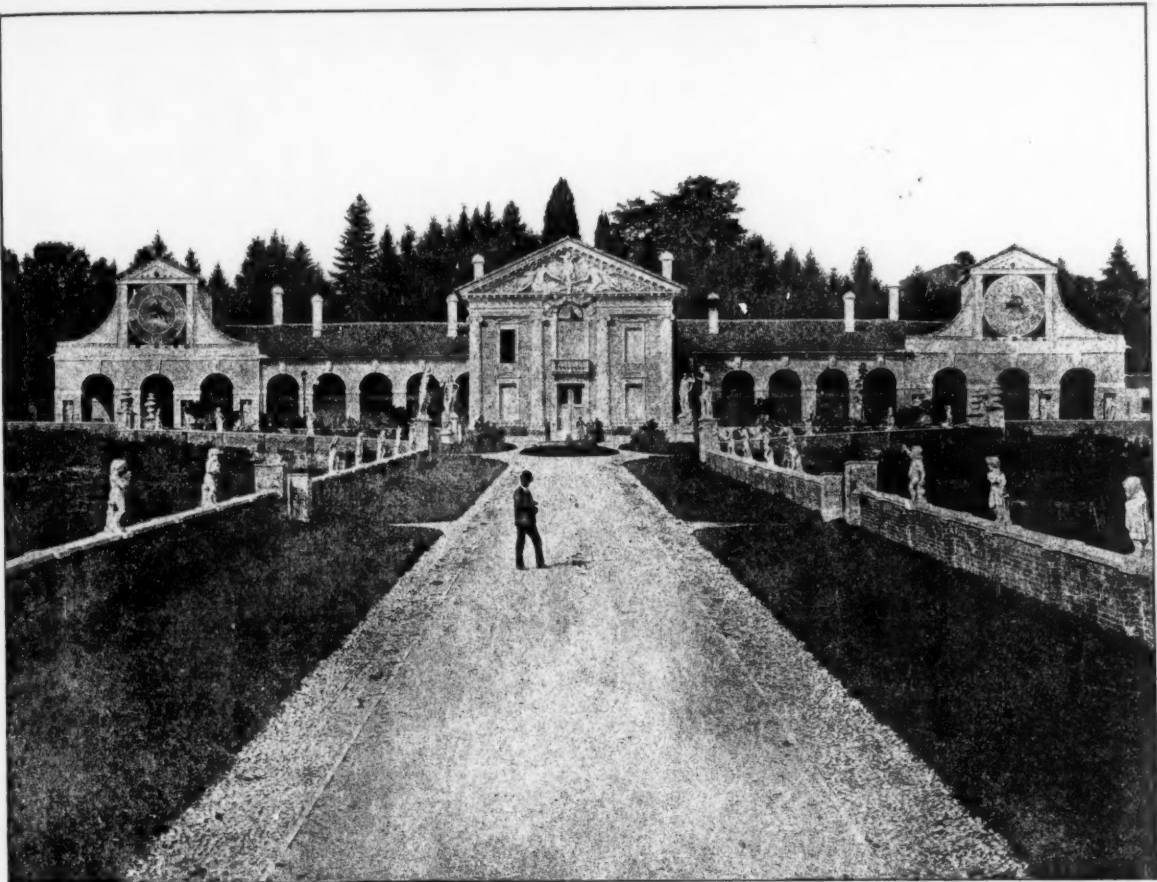
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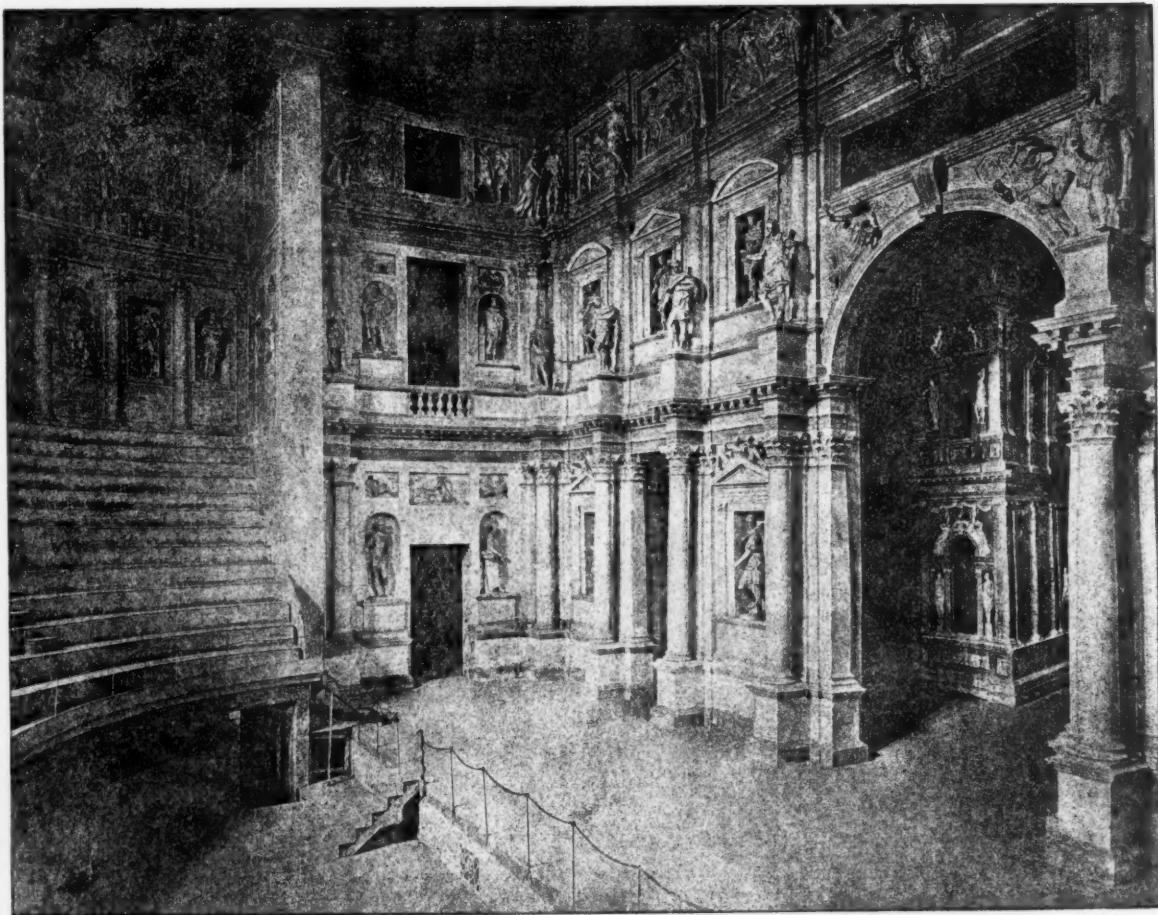
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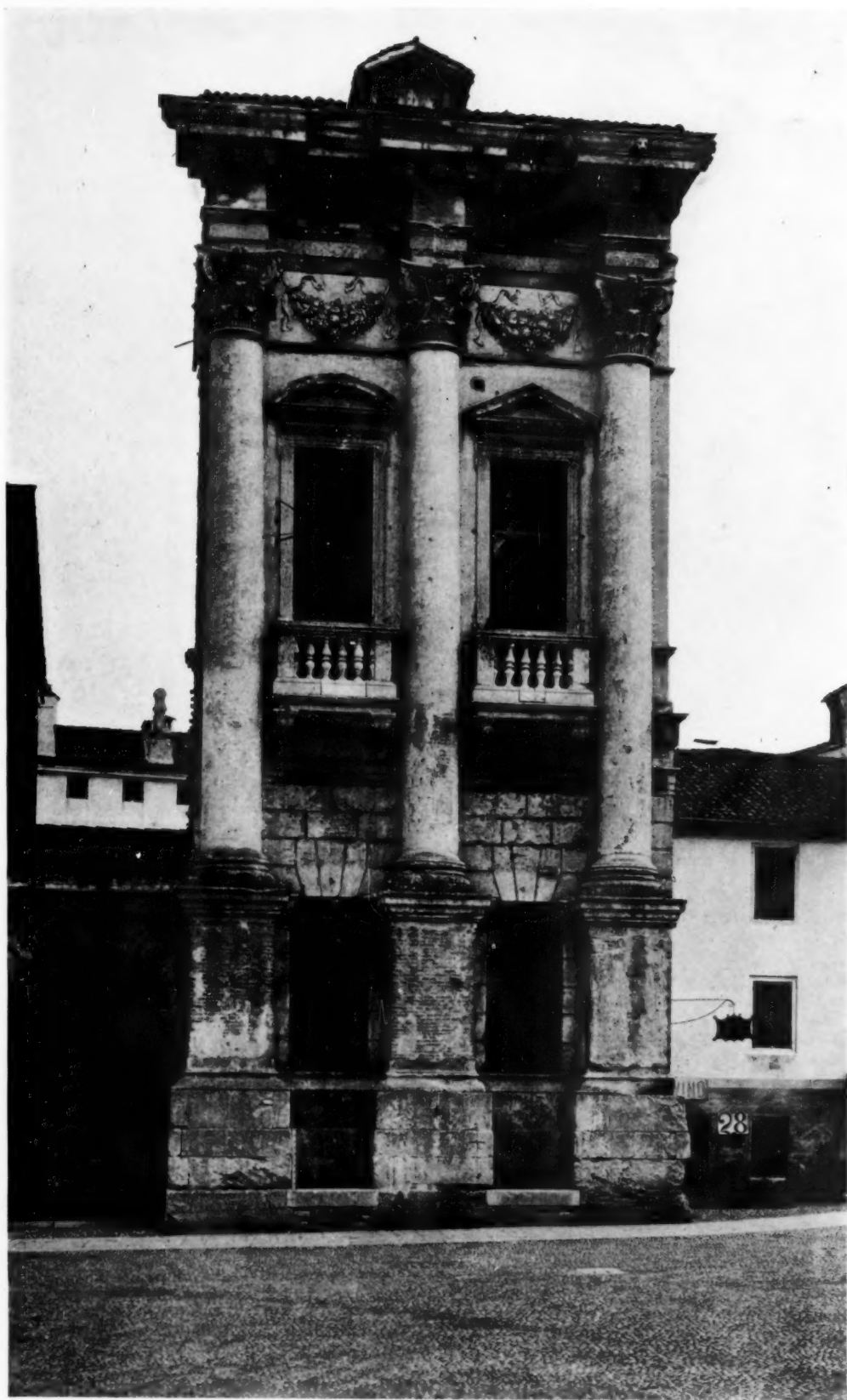
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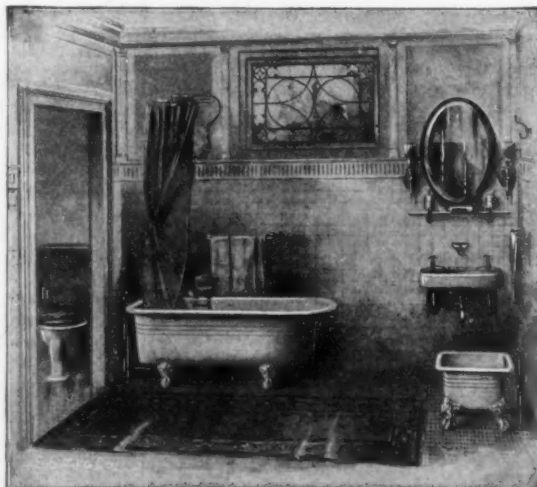
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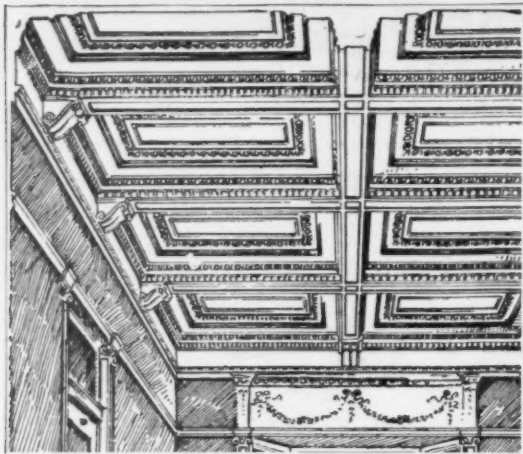
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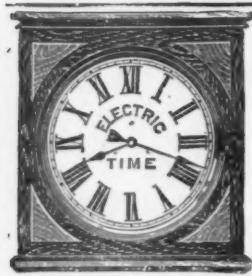


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CODE OF PRACTICE FOR SUB-ESTIMATING AND SUB- CONTRACTING

Adopted by the Master Builders' Association of the City of Boston, Aug. 2, 1894.

ARTICLE I.

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 offered 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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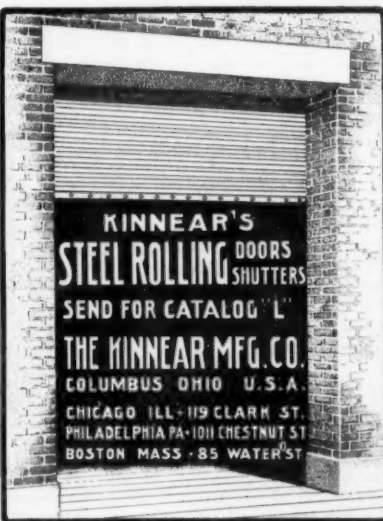
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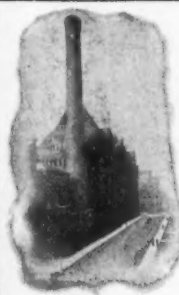


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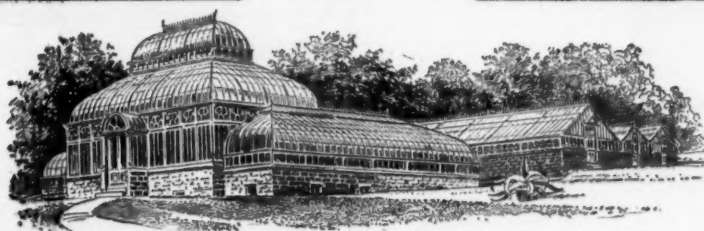
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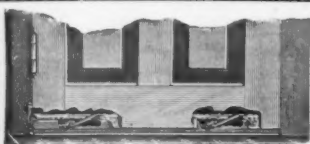
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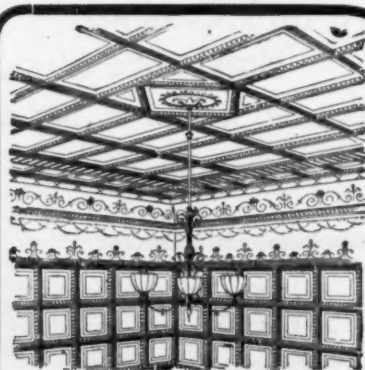


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THE KEASBEY & MATTISON CO., the owners of the patents for magnesia covering, have commenced a suit in the United States Circuit Court for the Southern District of New York against the Philip Carey Mfg. Co., George D. Crabbs, J. E. Breese, Schoellkopf, 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.

☞ All persons are respectfully requested to refrain from purchasing covering infringing these patents, as such purchasing must of necessity lead to suit. ☞

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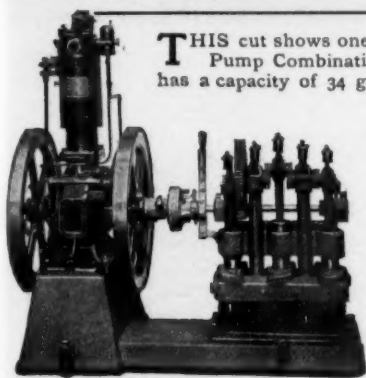
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S. D. Kimbark will erect a twelve-story building at 151 Wabash Ave.; cost, \$300,000.

Clinton, N. Y.—The Governor has signed the bill providing an appropriation of \$49,000 for an addition to the hospital at Clinton Prison.

Connersville, Ind.—The Connersville Sanatorium Co. will erect a building to cost \$25,000. Directors, C. J. Chambers and W. J. Porter.

Cranston, R. I.—The School Com. will purchase a site at Park and Pontiac Aves. for the erection of a \$50,000 school.

Des Moines, Ia.—W. W. Witmer is having plans prepared for a three-story armory, to cost \$20,000. Benson & Marxer have secured the contract for the new Chamberlain Hotel; cost, \$200,000.

Detroit, Mich.—Rogers & McFarlane are preparing plans for a five-story building for the Whitney estate to be located on the west side of Farmer St., near Gratiot Ave.; cost, about \$70,000.

Donaldson & Meier have prepared plans for a laboratory building for Parke, Davis & Co. Cram, Goodhue & Ferguson, of Boston, are preparing plans for enlarging and improving Christ Church, Jefferson Ave.

N. Wardrop has prepared plans for a four-story factory building for the Pioneer Woolen Mills; cost, \$25,000.

Etherville, Ia.—The Methodist Society will erect a \$40,000 church.

Fairbury, Neb.—It is stated that the Harbison Bank Co. will erect an office-building to cost \$25,000.

Flint, Mich.—The plans of Clark & Munger, of Bay City, have been accepted for the Genesee County Court-house; estimated cost, \$100,000.

Florence, Ala.—Plans have been prepared for a Methodist Church to cost \$20,000. Rev. S. E. Wasson, pastor.

Frenchlick, Ind.—Plans have been drawn for an addition to the Frenchlick Hotel; estimated cost, \$110,000.

Galveston, Tex.—The congregation of the Sacred Heart will erect a \$50,000 edifice.

Gloversville, N. Y.—The Governor has signed a bill providing for an appropriation of \$50,000 for a State armory.

Grand Forks, N. D.—Report states that Dinne Bros. and M. F. Murphy will erect a \$30,000, three-story building, 50' x 100'.

Greensboro, N. C.—It is reported that Miles & Brant, Atlanta, Ga., will construct the post-office here for \$42,500.

Indianapolis, Ind.—It is reported that J. L. Johnson, of Los Angeles, Cal., has given \$65,000 to the Indiana Physico-Medical Assoc. for the erection of a college in this city.

La Crosse, Wis.—Wm. Doerflinger and others will

BUILDING INTELLIGENCE.

(Advance Rumors Continued.)

erect a department store building to cost \$100,000, after plans by Schick & Roth. Will be three or four story, fireproof.

Bids will be opened first week in June for a hotel to be erected at a cost of \$170,000. Plans by Handy & Cady, 172 Washington St., Chicago, Ill.

Lexington, Mass.—Thirty acres of land, three-quarters of a mile from Lexington Green, lying between the State Road and Massachusetts Ave., with 1,700 feet frontage on School St., has been purchased by F. H. Deering & Co. and W. M. Robbins. Included in same sale on opposite side of School St. is a school-house and lot of 10,000 feet. The school-house will be remodelled at once into an 8-room cottage with piazza and bay windows, and the other land will be used for building purposes.

Lincoln, Ill.—Valentine, Jobst & Son, of Peoria, have received the contract for erecting the court-house here, for \$131,000.

Marshall, Mich.—The plans of Haug & Schurman, of Saginaw, have been accepted for the \$25,000 court-house to be erected here.

Melrose, Mass.—The plans of J. W. Beal, of Boston, have been accepted for the erection of a brick edifice for the Methodist Episcopal Society, on the site of the building recently destroyed by fire; estimated cost, \$60,000.

Memphis, Tenn.—The contract for erecting the extension to post-office here for \$197,400, has been given to Geo. Moore & Son, of Nashville.

Milwaukee, Wis.—It is reported that there is a plan on foot to build a large cold-storage house in the city to cost \$150,000.

New Haven, Conn.—It is stated that the contract will soon be let for the erection of a four-story brick addition to the Tool House on Winthrop Ave. for the Home for the Aged; probable cost, \$60,000. Brown & Von Beren, architects, Exchange Bldg.

Newport, R. I.—A press report states that the State has deeded to William Richards, the artist, the small archipelago near Fort Wetherell, off the Jamestown shore, where he will build a \$100,000 house on the largest of the group.

New York, N. Y.—Messrs. Ludlow & Valentine, 100 Broadway, have drawn plans for alterations to the West End Presbyterian Church.

Norwich, Conn.—The construction of the U. S. post-office has been awarded to the Buckley Construction Co., Plattsburg, N. Y., at \$75,567.

Omaha, Neb.—It is reported that bonds have been voted for a \$30,000 fire-station to be erected at 11th and Jackson Sts.; a \$15,000 station at 27th and St. Mary's Ave.

Philadelphia, Pa.—Plans have just been completed for the new engineering building, which will be located opposite Dental Hall, and will be completed in September, 1904, at a total cost of \$300,000. The building is to be 300 feet long and 175 feet deep, with an exterior of dark brick and sandstone trimmings. On the first floor will be located the geo-

BUILDING INTELLIGENCE.

(Advance Rumors Continued.)

detic, hydraulic and physical testing, and a special room for surveying instruments. Shops, forges and machinery of various kinds will be on the second floor, and on the third will be class-rooms, a reference library of 25,000 volumes, and an engineering museum. The total capacity of the building will be 500 students.

Pittsburgh, Pa.—The Methodist Episcopal Society will erect a \$40,000 church on the lot on which its present edifice stands.

Architects Mueller & East are preparing plans for a \$45,000 school-building to be erected on 5th Ave.

Plans for an eight-story brick and steel store and office building for McCargo & Miller, 6017 Penn Ave., have been prepared by Architect John T. Comes, Stevenson Building. It will have tile roof, combination lighting, steam heat, etc. Cost, \$800,000.

Providence, R. I.—The Ostry and Barton Co. will erect an addition to its manufactory at the corner of Richmond and Clifford Sts. very soon. The main building will be of brick, five stories high, and will contain a ground area of 32' x 130'. There are to be two eels, one 27' x 44' in size, and the other 22' x 27'. Hartwell, Richardson & Driver are the architects, and Maguire & Penniman the builders.

The Hope Club has purchased the house and lot at 29 George St. This is the property on which the club had an option and which a report stated was to be improved by the club and used for lodging purposes. No definite plans have been made for the improvement of the property as yet, although there is some probability that extensive changes will be made in it in the near future.

Quincy, Mass.—John O. Hall, former mayor of this town, has purchased a large tract of land on Chubbuck St. It is his intention to erect, from time to time, 50 houses, principally for the accommodation of the employees of the Fore River Ship & Engine Co. The buildings will be constructed in blocks of five, and work will begin on the first lot at once. The considerable enlargement of the Fore River Works, made recently, has necessitated the employment of about 700 extra hands within a short time. Difficulty has been experienced in securing tenements for the new workmen. The statement which is made that 300 new houses are needed here ought to stimulate building in that section.

Rangeley, Me.—This town is to build a modern school-house. It will serve the purpose of a high and grammar school and will be provided with all the modern equipments of such buildings. The building was designed by Messrs. F. H. and E. F. Fassett.

Richmond, Ind.—It is reported that Daniel G. Reid, of New York, has given \$50,000 toward establishing a public hospital in this, his native city. The terms are that \$50,000 more shall be raised as an endowment fund, and the offer has been accepted. Mr. Reid will also erect a \$75,000 church for the United Presbyterians.

Salem, Ind.—Steps are being taken to build an immense cement factory in this city. Plans are being made. Address Walter H. Crim.

San Francisco, Cal.—The quartermaster of the Marine Corps has under consideration the preliminary plans and specifications of the proposed marine barracks to be erected at the naval training station prepared by Messrs. Reid Bros., Claus Spreckles Building. The architects are now at work on the working plans and specifications, which will be ready to issue to bidders in about 30 days.

Albert Sutton, Safe Deposit Building, has made plans for a four-story apartment-house to be erected at Olive Ave. and Franklin St. for Miss E. D. Buckingham, at a cost of \$80,000.

Saratoga Springs, N. Y.—The plans have been drawn for a \$2,000,000 hotel sanitarium, which is projected for the site of the Clarendon Hotel. The furnishings alone for this new hotel will cost \$200,000.

Sonyes, N. Y.—A bill is stated to have been signed by the Governor, providing an appropriation of \$59,600 for improvements at the Craig Colony for Epileptics.

Spokane, Wash.—The Sisters of Charity propose to erect a hospital to cost, complete, \$150,000. Work is to be started next spring.

Spring Valley, Minn.—A \$25,000 hotel building will be erected at this place by John Leuthold, H. T. Cummings and others.

Steubenville, O.—The La Belle Co. will erect an additional blast furnace at this place, to cost \$600,000.

St. Louis, Mo.—It is reported that an appropriation of \$200,000 will be made for the completion of the city-hall building.

Plans prepared by Architect T. McLaren, Bank Building, Colorado Springs, have been accepted for the Colorado Building for the Louisiana Purchase Exposition. Cost, \$25,000.

Gustav P. Wuest, 105 N. 7th St., has prepared plans for a brick and stone hotel building for the McFarland estate. Cost, \$30,000.

The Woman's Club has been organized, with Mrs. James L. Blair as president. It will have a home of its own in the vicinity of the University Club, and will vie with the finest of the men's clubs in the elegance of its appointments.

Andrew Carnegie's gift of \$1,000,000 for the erection of a \$500,000 central library and \$500,000 for branch libraries is stated to have been accepted by the Council.

Stoneham, Mass.—The people of this place, after a long and heated discussion in town meeting, have voted to accept Mr. Carnegie's offer of \$15,000 for a free public library building.

St. Paul, Minn.—The Northern Pacific Railroad is to build a freight and railroad warehouse here. It will be a two-story building, 40' x 1,000'.

The Elks have not yet decided upon the location for their new building, but are considering the site opposite Rice Park. It is understood the building will cost \$50,000.

Tacoma, Wash.—The F. H. Goes Construction Co. has the contract for the Snell Block. The building will be three-story, costing about \$65,000. Russell & Heath are the architects.

Taunton, Mass.—An appropriation of \$60,000 is asked for the erection of a police station. Address Mayor R. E. Warner.

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BUILDING INTELLIGENCE.

(Advance Rumors Continued.)

Topeka, Kan.—The Board of Education will erect a new \$120,000 school-building.

Wabash, Ind.—The Odd Fellows of this city will soon let the contract for an opera-house and lodge hall to cost \$40,000.

Washington, D. C.—The American Security and Trust Co. contemplate the erection of a fireproof addition to their present building to cost \$150,000.

It is stated that sub-bids are being received by F. S. Oarmody for the construction of three flat buildings on 3d St. northwest.

Plans have been completed by Wood, Dunn & Deming for the construction of a masonic temple near 13th and New York Aves., to cost \$30,000.

The contract for the construction of 7 residences on 6th St., between F and G Sts., has been awarded to S. H. Madden, 2927 K St., northwest.

Bids are wanted for the construction of a \$50,000 residence at the southeast corner of Massachusetts Ave. and 17th St. Wood, Dunn & Deming are the architects.

Bids are being received for making certain alterations and additions to the building at 713 Eleventh St., northwest. B. Stanley Simmons is the arch't.

York & Sawyer, 156 Fifth Ave., New York, N. Y., will prepare plans for a bank building for the American Security and Trust Co. at 15th St. and New York Ave.; probable cost, \$150,000.

West Superior, Wis.—The government has accepted a site here for a post-office and will proceed to erect a \$300,000 building.

Yonkers, N. Y.—The Governor has signed a bill authorizing the issue of \$250,000 bonds for a city-hall.



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BUILDING INTELLIGENCE.

CHURCHES.

New York, N. Y.—*Rivington St.*, Nos. 58-60, two-st'y bk. synagogue, 42' 1" x 74'; \$50,000; o., Congregation Ordas Jeshurun Yassan; a., Stein, Cohen & Roth.

Pittsfield, Me.—*Fr. chapel*, 39' x 70', pitch roof, furnace heat; \$10,000; o., Rev. J. E. Kealy; a., W. H. McGinty, Boston; not let.

EDUCATIONAL.

New York, N. Y.—*Tenth Ave.*, bet. 58th & 59th Sts., 51-st'y bk., limest., granite & terra-cotta high school building; \$600,000; o., City; a., C. B. J. Snyder, Park Ave. & 59th St.

HOUSES.

St. Paul, Minn.—*Dayton St.*, nr. Grotto St., two-st'y fr. dwell., 34' x 40', furnace; \$6,500; o., S. Wiess; c., St. Paul Contracting Co.

Winifred St., nr. Greenwood St., two-st'y fr. dwell., 36' x 44', furnace; \$4,000; o., Hugo Schroekenstein; c., John Christensen.

Dayton St., nr. Grotto St., two-st'y fr. dwell., 36' x 40', steam; \$7,000; o., E. Randall.

Lincoln St., bet. Aron & Victoria Sts., two-st'y & attic fr. dwell., 28' x 45', combination heat; \$6,500; o., G. W. Hancock; a., Louis Lockwood.

OFFICE-BUILDINGS.

Chicago, Ill.—*Fifty-fifth and Washington Sts.*, three-st'y bk. & st. office-building, 90' x 92', steam; \$25,000; o., Peck Estate; a., M. L. Beers, 218 La Salle St.

TENEMENT-HOUSES.

New York, N. Y.—*Cherry and Rutgers Sts.*, six-st'y bk. tenement with stores, 20' 3" x 87' 2"; \$40,000; o., A. Goodman; a., Bernstein & Bernstein.

WAREHOUSES.

New York, N. Y.—*Elm St.*, Nos. 138-140, six-st'y bk. & st. loft building, 50' x 95'; \$75,000; o., B. G. Hughes; a., B. Graham.

COMPETITIONS.

HIGH SCHOOL.

[At Plainfield, N. J.]

The Board of Education of the City of Plainfield, N. J., will send the conditions governing a competition for the purpose of selecting an architect for the above building to any architect requesting the same before June 10th, 1903. Address F. B. CLARK, Clerk of the Board of Education, Plainfield, N. J. 1432

PROPOSALS.

BUILDING.

[At Charleston, S. C.]

Sealed proposals will be received at the Bureau of Yards and Docks, Navy Department, Washington, until June 6, 1903, for constructing a two-story brick and steel building for equipment at the Navy Yard, Charleston, S. C. Limit of cost, \$68,000. Plans and specifications can be seen at the bureau, or will be furnished by the commandant of the navy yard named upon deposit of \$10 to secure their return. MORDECAI T. ENDICOTT, chief of bureau. 1431

SEWER.

[At Pine Bluff, Ark.]

Proposals for the construction of the sewer of sewer district No. 2 will be received by the board of commissioners until June 10. S. C. ALEXANDER, JR., secretary. 1431

OFFICERS' QUARTERS.

[At Sitka, Alaska.]

Headquarters United States Marine Corps, Quartermaster's Office, Washington, D. C. Sealed proposals will be received in this office until June 8, 1903, for furnishing all necessary materials and labor for the construction of one set of officers' quarters at marine barracks, Sitka, Alaska. Copies of plans and specifications may be obtained from the commanding officer, marine barracks, Sitka, Alaska, or the commanding officer, marine barracks, Bremerton, Wash. F. L. DENNY, colonel, quartermaster, U. S. Marine Corps. 1431

ROAD WORK.

[At Fort McKinley, Me.]

Office of the Constructing Quartermaster, 185 Middle St., Portland, Me. Sealed proposals, subject to the usual conditions, for the above mentioned work at Fort McKinley, Me., will be received at this office until June 6, 1903. Information, specifications, plans and blanks on application. CAPT. A. W. YATES, quartermaster, U. S. A. 1431

GYMNASIUM.

[At Fort Ethan Allen, Vt.]

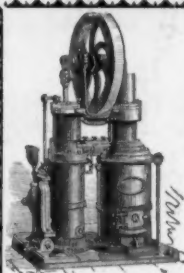
Office Constructing Q. M., Burlington, Vt. Sealed proposals will be received until June 8, 1903, for constructing, heating, plumbing, gas-piping, wiring for electric lighting and gymnastic apparatus of a post exchange and gymnasium at Fort Ethan Allen, Vt. Information furnished on application. CAPT. T. B. LAMOREUX, Q. M. 1431

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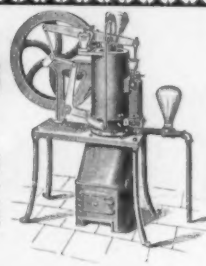
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PROPOSALS.

HIGHWAY IMPROVEMENT. [In New York State.]
The State engineer and supervisor, Albany, N. Y., will receive proposals until June 8 for the improvement of public highways throughout the State. 1431

ADDITION TO SCHOOL. [At Hankinson, S. D.]
The board of education of Brightwood independent school district No. 1 will receive proposals until June 10 for the erection of a brick addition to the high school. 1431

SEWER WORK. [At Quincy and Roxbury, Mass.]
Commonwealth of Massachusetts. Metropolitan Sewerage Works. Sealed proposals will be received at the office of the Metropolitan Water and Sewerage Board, 1 Ashburton Pl., Boston, Mass., until June 4, 1903, for constructing parts of Section 44, Section 46, and force mains and sewer in connection with Ward Street pumping station, being Section 76 of the high-level sewer, located respectively on Nut Island and Nut Island Bar, in Quincy, Hough's Neck, in Quincy, and in Roxbury, in accordance with the forms of contract and specifications to be furnished by the Board. Plans can be seen and specifications and forms of contract can be obtained at the above office, or at the office of the Engineering Department, Pemberton Building, Boston, Mass. Henry H. Sprague, Henry P. Walcott and James A. Bailey, Jr., Metropolitan Water and Sewerage Board. William M. Brown, Engineer Sewerage Works. WILLIAM N. DAVENPORT, Secretary. 1431

LAUNDRY. [At Albuquerque, N. M.]
Bids will be received June 11 by the Comrs. of Indian Affairs, Dept. of Interior, Washington, D. C., for furnishing material for constructing a brick laundry, including plumbing, at the Albuquerque Indian School. For further information apply to A. O. WRIGHT, Superv. in Charge. 1431

BOILER-HOUSE. [At Brooklyn, N. Y.]
Bids will be received June 9 by the Dept. Bd. of Health for furnishing material for erecting a boiler-house and disinfecting plant at the Kingston Ave. hospital. ERNEST J. LEDERLE, Pres. 1431

SHEET IRON, STEEL, ETC. [At Rock Island, Ill.]
Bids are wanted June 11 for furnishing sheet iron and steel, material for heating and lighting, etc., for the Rock Island Arsenal. MAJ. S. E. BLUNT, Commanding. 1431

REMODELLING DORMITORIES. [At Columbus, O.]
Bids will be received June 9 by Richards, McCarty & Bulford, architects, for remodelling 2 dormitories for the Denison Univ.; probable cost, \$20,000. 1431

ROADS. [At Fort Caswell, N. C.]
Sealed proposals will be received here until June 16, 1903, for constructing roads. Fort Caswell, N. C. Information furnished on application. PHILIP YOST, A. A. Q. M. 1432

FIREPROOFING. [At Augusta, Me.]
Bids are wanted June 12 for fireproofing and refinishing the 31 and 4th floors of south wing of State Capitol, Augusta. COL. E. C. STEVENS, Supt. Pub. Bldgs. 1432

HOSPITAL. [At Los Angeles, Cal.]
Bids are wanted by the Bd. of Superv. June 16 for erecting the brick and stone county hospital buildings. Wm. Moser, archt. 1432

Treasury Department, Office of the Supervising Architect, Washington, D. C., May 23, 1903. Sealed proposals will be received at this office until 2 o'clock P. M. on the 15th day of June, 1903, and then opened for the installation and maintenance of an electrical burglar alarm device on certain vaults and safes in the U. S. Treasury building, Washington, D. C., which device must be connected with a central station in this city. A copy of the general information regarding the service required, etc., may be obtained upon application to this office. JAMES KNOX TAYLOR, Supervising Architect. 1432

PROPOSALS.

PIER WORK. [At Saugatuck, Mich.]
U. S. Engineer Office, Grand Rapids, Mich. Sealed proposals for pier construction at Saugatuck, Mich., will be received here until June 17, 1903. Information furnished on application. M. B. ADAMS, lieut. col., engrs. 1432

SCHOOL. [At Scotch Ridge, O.]
The board of education will receive proposals until June 15 for the erection of a school-building in district No. 9. 1432

SEA WALL. [At Annapolis, Md.]
Proposals will be received at the Bureau of Navigation, Navy Department, Washington, D. C., until June 17, 1903, for a sea wall at the U. S. Naval Academy, Annapolis, Md. Blank forms of proposal specifications, and plans will be furnished on application to the bureau of navigation, Navy Department, Washington, D. C., or at the U. S. Naval Academy, Annapolis, Md. H. C. TAYLOR, chief of bureau. 1432

PAVING. [At Bridgeport, Conn.]
Sealed proposals will be received by the Street Committee of the Common Council of Bridgeport, Conn., at Room 10, City-hall, until June 12, 1903, for furnishing and laying about 4,100 square yards of brick, wood, or bituminous macadam pavement. Specifications, including form for bid, may be had by addressing H. G. Scofield, City Surveyor. E. T. BUCKINGHAM, Clerk. 1432

DRAINAGE SYSTEM. [At Lawrence, Kan.]
Bids will be received June 12 by the Comrs. of Indian Affairs, Dept. of Interior, Washington, D. C., for furnishing material for constructing a tile drainage system and extending the sewer at Haskell Ins. For further information, apply to H. B. PEAIRS, Supt. of Ins. 1432

ADDITIONS. [At Sandusky, O.]
Bids will be received until June 18 by Frank L. Packard, archt., Columbus, for furnishing material and making alterations and additions to the sanitary appliances and also additions to buildings at the Ohio Sailors' and Soldiers' Home at Sandusky. 1432

ADDITIONS TO BUILDING. [At Salem, Ore.]
Proposals will be received until June 21 for alterations and additions to the industrial building and main building of the State reform school by the board of trustees at the State Capitol. 1432

PROPOSALS.

DWELLINGS. [At Kentucky River, Ky.]
U. S. Engineer Office, Custom-house, Cincinnati, O. Sealed proposals for furnishing all labor and materials for constructing two lock tenders' dwellings at Lock No. 11, Kentucky River, Ky., will be received here until June 18, 1903. Information furnished on application. LIEUT. COL. ERNEST H. RUFFNER, engrs. 1432

FIRE-STATION. [At Houston, Tex.]
Proposals will be received by the mayor until June 22 for the erection of a central fire-station to cost about \$30,000. 1432

COURT-HOUSE. [At La Grange, Ga.]
Proposals for the erection of a court-house will be received by the county commissioners until July 13. 1433

JAIL. [At Napoleon, N. D.]
The board of county commissioners will receive proposals until July 8 for the erection of a jail. 1433

BUILDING. [At New Orleans, La.]
Sealed proposals will be received at the Bureau of Yards and Docks, Navy Department, Washington, until June 27, 1903, for constructing a two-story brick office building at the naval station, New Orleans, La. Appropriation, \$30,000. Plans and specifications can be seen at the navy yard named, or will be furnished by the Bureau upon deposit of \$20 to secure their return. MORDECAI T. ENDICOTT, chief of bureau. 1433

ADDITION. [At Creston, Ia.]
Bids will be received until June 7 at the office of R. C. Winter for the erection of a two-story addition to the Jefferson School. Plans can be seen at the office of Architect W. S. Joseph, Room 4, Liberty Block. 1431

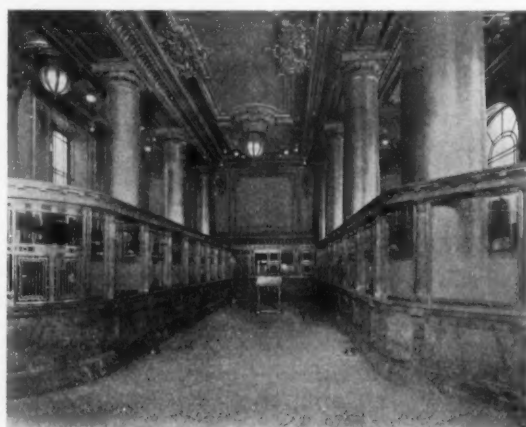
BRIDGE. [At Castlewood, S. D.]
Proposals for the construction of a steel bridge will be received by L. H. Forde, county auditor, until July 10. 1431

BUILDING. [At Philadelphia, Pa.]
Frankford Arsenal, Philadelphia, Pa. Sealed proposals will be received until June 12, 1903, for constructing one 2½-story brick and steel building, 54' 3" x 143' 10", for a shrapnel shop. Information upon application. FRANK HEATH, Major Ord. Dept., Commanding. 1431

Bank

Counter

Railings



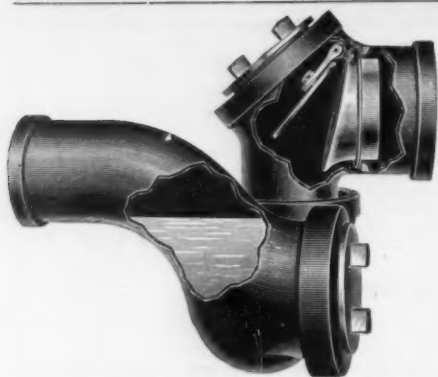
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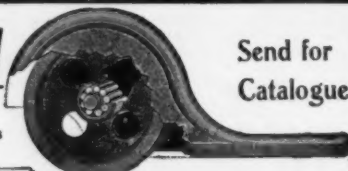
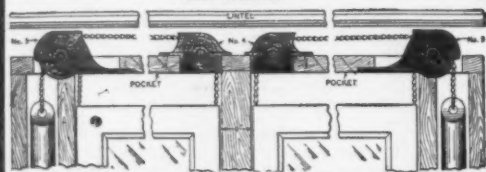
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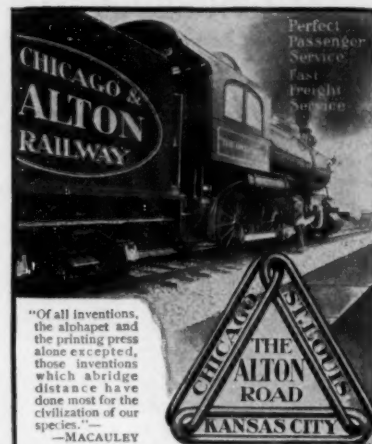


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PROPOSALS.

Treasury Department, Office of the Supervising Architect, Washington, D. C., May 14, 1903. Sealed proposals will be received at this office until 3 o'clock P. M. on the 18th day of June, 1903, and then opened, for the construction (including plumbing, heating apparatus, electric wiring and conduits of the U. S. Post-office at Boone, Iowa, in accordance with drawings and specifications, copies of which may be had at this office, or the office of the Postmaster at Boone, Iowa, at the discretion of the Supervising Architect, JAMES KNOX TAYLOR, Supervising Architect. 1431

Treasury Department, Office of the Supervising Architect, Washington, D. C., May 14, 1903. Sealed proposals will be received at this office until 3 o'clock P. M. on the 16th day of June, 1903, and then opened for the construction (including plumbing, heating apparatus, electric wiring and conduits) of the extension of the U. S. Custom-house and Post-office at Alexandria, Virginia, in accordance with the drawings and specification, copies of which may be had at this office or at the office of the Custodian at Alexandria, Va., at the discretion of the Supervising Architect, JAMES KNOX TAYLOR, Supervising Architect. 1431

Treasury Department, Office of the Supervising Architect, Washington, D. C., May 14, 1903. Sealed proposals will be received at this office until 3 o'clock P. M. on the 25th day of June, 1903, and then opened, for the construction (not including heating apparatus, electric wiring and conduits) of the U. S. Post-office at Leadville, Colorado, in accordance with drawings and specification, copies of which may be had at this office or at the office of the Postmaster at Leadville, Colorado, at the discretion of the Supervising Architect, JAMES KNOX TAYLOR, Supervising Architect. 1431

TRAINING WALLS.

[At Jacksonville, Fla.] U. S. Engineer Office, St. Augustine, Fla. Sealed proposals for constructing training walls in St. Johns River, Fla., will be received at U. S. Engineer Office, Jacksonville, Fla., until June 9, 1903. Information furnished on application. FRANCIS B. SHUNK, Capt., Engrs. 1431

PROPOSALS.

SEWERS.

[At Washington, D. C.]

Proposals will be received until June 6 by the commissioners of the District of Columbia for constructing sections B and C of the B Street and New Jersey Avenue trunk sewer. HENRY B. F. MACFARLAND, et al., commissioners. 1431

SEWERS.

[At Washington, D. C.]

Sealed proposals will be received until June 20 for constructing sewers in certain streets. Specifications and blank forms of proposals may be obtained at this office. HENRY B. F. MACFARLAND, et al., commissioners, D. C. 1432

CONCRETE WALK.

[At Fort Mott, N. J.]

Sealed proposals for constructing about 16,000 square feet concrete walks here will be received until June 6, 1903. Information furnished on application. QUARTERMASTER, Fort Mott, N. J. 1431

Treasury Department, Office of the Supervising Architect, Washington, D. C., May 16, 1903. Sealed proposals will be received at this office until 3 o'clock P. M. on the 22d day of June, 1903, and then opened, for the construction (including heating apparatus, electric wiring and conduits) of the U. S. Post-office at Stillwater, Minnesota, in accordance with the drawings and specification, copies of which may be had at this office, or the office of the Postmaster at Stillwater, Minnesota, at the discretion of the Supervising Architect, JAMES KNOX TAYLOR, Supervising Architect. 1431

PILE DOCK.

[At Sandy Hook, N. J.]

U. S. Engineer Office, Army Building, New York. Sealed proposals for building a pile dock at Sandy Hook, N. J., will be received here until June 10, 1903. Information on application. W. L. MARSHALL, Major, Engrs. 1431

PROPOSALS.

GYMNASIUM.

[At Fort Huachuca, A. T.]

Denver, Col. Sealed proposals will be received here until June 6, 1903, for constructing a gymnasium and post exchange building at Fort Huachuca, A. T. Information furnished on application to quartermaster, Fort Huachuca, A. T., or the undersigned. LIEUT. COL. J. W. POPE, C. Q. M. 1431

COURT-HOUSE.

[At Denison, Ia.]

George A. Berlinghof, architect and superintendent, care M. J. Collins, auditor, will receive bids until June 9, for the erection and completion of a court-house for Crawford County at Denison. Bids for the steam heating, plumbing, gas fitting, electric wiring, etc., will be received later. 1431

COURT-HOUSE.

[At Iola, Kan.]

The county commissioners will receive bids until June 9 at the office of the county clerk, J. W. Kelso, for constructing a court-house for Allen County. Plans by Architects J. C. Holland & Squires, Topeka, Kan. 1431

BUILDINGS.

[At Rapid City, S. D.]

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 June 10, 1903, for furnishing and delivering the necessary materials and labor required to construct and complete a frame employes' quarters; a frame addition to laundry and a brick employes' quarters, all with plumbing and acetylene gas piping; also an addition to a brick dormitory, with plumbing and gasoline gas piping, and a frame acetylene gas house, with plumbing and heat, all at the Indian School, Rapid City, S. D., in strict accordance with plans, specifications and instructions to bidders which may be examined at this office. For further information apply to Sam B. Davis, superintendent Indian School, Rapid City, S. D. A. C. TONNER, acting commissioner. 1431

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