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THE Mayor of Boston, in his annual message to the City Government, makes a rather novel suggestion in regard to the municipal architectural work. Since the abolition of the office of City Architect, such public building operations as were undertaken have been entrusted to private architects, their plans, however, having been subject to the approval of a consulting architect appointed by the Mayor. The principal objection to this course is that the work is scattered among so many architects that the city loses, as the Mayor thinks, the benefit which would be derived from having one or more architects employed, year after year, on the same sort of work, as, for example, the designing of school-houses. In order to remove this objection, and, at the same time, to avoid the opposite danger of allowing city work to fall into a dull routine, Mayor Quincy proposes to establish an Architectural Department—an "Architecture Department" the bill says—for the city, composed of three or five practising architects, nominated partly by the Mayor, and partly by the President of the School Board, and confirmed by the municipal Art Commission, who shall have charge of all city work, dividing it among themselves as they may see fit, and sitting as a Board to revise the plans presented by any member. In this way, as the Mayor thinks, it will be possible to "secure the advantages of a continuous department, of a proper professional character, without being exposed to the political and administrative difficulties formerly experienced." The scheme in its essence has been carefully considered by the Boston Society of Architects, and may therefore be considered as having the approval of the profession in Boston; but, as the President of the School Board is elected every year, and the Mayor every second year, it seems highly desirable that the tenure of office of the professional members of the Department should be made less dependent upon political changes than the Mayor appears to propose. For some years, the Professor of Architecture at the Massachusetts Institute of Technology has been the consulting architect of the administration, much to the advantage of the profession and the public; and as there will always be a head of the Department of Architecture of the Institute, who will, presumably, always be an accomplished and learned member of the profession, familiar with the progress of the art, it seems highly desirable to retain his services, as a sort of permanent *ex-officio* consulting architect for all city work. In this way the confusion and uncertainty which might be incident to an annual or biennial transformation of the city Department, to say nothing of the dead-locks which might result from a disagreement between the Mayor and the School Board, and the consequent appointment to the Department of members with conflicting views, would be avoided.

THE portion of the annual message of the Governor of Pennsylvania to the Legislature which relates to the new Capitol is interesting reading, although, to our mind, a little less acrimony in language, and a little more clearness of suggestion as to what should be done under the circumstances, would have been desirable. The Governor recalls the testimony of the Commissioners before the Harrisburg court, in which they and the architect affirmed that, if the plans of the latter were carried out, the result would be "a complete building," in the "Colonial style," and "as nearly fireproof as possible"; and that it would be erected, "complete and fit for occupancy," at the time fixed by law, and for a sum within the amount appropriated. Governor Hastings disputes these claims, saying that the structure as now finished and delivered to the State "is unworthy of your honorable bodies, and is a disgrace to the Commonwealth"; that, instead of being "complete and fit for occupancy," it is "hardly fit for human habitation, much less the official abode of the representatives of the great Commonwealth," and that, instead of being in the Colonial style, "it bears no more resemblance to Colonial architecture than does the Egyptian sphinx."

ALL this is probably true enough, but the very energy of the Governor's denunciation strengthens the suspicion that public opinion is appealed to against the Commissioners in consequence of the conviction that the courts will not find cause to interfere with them. The Governor's opinion, that the new Capitol is not in the Colonial style, and therefore not in accordance with the law, is absolutely worthless as evidence, as he is not a recognized expert on Colonial architecture, and his individual opinion that it is "hardly fit for human habitation" would not be likely to stand in law against the Commissioners' claim that it is "complete and fit for occupancy," supported by the unquestioned fact that it has been occupied ever since the first of January—although many buildings are inhabited in spite of being unfit for human habitation. To the Governor's assertion that the structure is "unworthy" of the Legislature, and "a disgrace to the Commonwealth," the obvious answer is that the statute did not stipulate that it should be "worthy" of anybody or anything, or that it should abstain from being a "disgrace"; so that the Commissioners will hardly trouble themselves about this part of the message. A more serious criticism is that which describes the building as being, in certain portions, "as combustible as possible," instead of complying with the direction of the statute that it should be "as nearly fireproof as possible"; but even here the qualification "as nearly as possible" gives a latitude which it will be hard to convict the Commissioners of transgressing. In conclusion, the Governor says that "it will be more economical and more business-like to tear down everything above the foundation-walls, and sacrifice the money already expended, rather than to continue the Commission, and accede to its demands for future appropriations, which are certain to extend into millions of dollars."

HOW the Governor knows that the future demands of the Commission are going to "extend into millions of dollars" he does not say, and the Legislature is hardly likely to base its action on his prophecies; while the recommendation to pull down everything already done above ground, and start afresh, would be more likely to be adopted if it had been accompanied with some suggestion for preventing the same comedy from being enacted over again on the second occasion. It is hardly necessary for us to say that we regard with as much abhorrence as any one the perfidy which the Commissioners have shown toward their professional advisers, the architects whom they deceived, and the citizens of the State, whose plain intention they have disregarded; but we would have liked to hear from Governor Hastings some rational recommendations for doing justice to the people who have been most inexcusably wronged in the name of the Commonwealth of Pennsylvania, that is, the competing architects, and for insuring the honest completion of the work so suspiciously begun, instead of vague denunciations of his former associates on the Commission, based on opinions of no legal weight whatever. The public does not forget, even if the Governor does, that he signed the law creating the Commission; that, if he did not appoint the other members, he could probably, at least,

have influenced their selection, and that he is believed to have taken an important part in drawing up the statute. It is evident now that the law afforded numberless loopholes for evading its intention, and the Governor, if he held two years ago the same opinion of his fellow-commissioners that he does now, might, apparently, have tied them up much more closely than he saw fit to do. Again, it is not quite fair, in the discussion, to ignore the fact that the original competition contemplated the erection, at some indefinite future time, of several department-buildings, which were not included in the limit of cost, this applying to the Legislative building alone; and that the plan now partly carried out adopts the *parti*, which many architects will regard as artistically commendable, of combining all the departments under the same roof as the Capitol; so that the structure for which the foundations have been partly or wholly laid, and which, as all authorities agree, will cost, complete, several million dollars, is not the half-million-dollar Legislative building, but a combination of this with the department-buildings impliedly authorized, but not included in the appropriation. That the Legislative building has been erected, in a fashion, for the stipulated sum is incontestable, and that it will be by no means "a disgrace" to the State when surrounded by the departments as the Commission intends is extremely probable; so that, although the Commission seems to have rather stretched the discretion given it under the law, in putting in foundations for structures not yet authorized, the final result ought to be, under proper conditions, the securing of a State building, or group of buildings, more convenient, more beautiful, and more economical, than would have been obtained through the scattered and piecemeal design specified in the original programme. Whether the work will be carried out under proper conditions is another matter. We are told on all sides that it is to be made a pretext for robbing the State Treasury of immense sums; but private architects find no difficulty in preventing their employers from being robbed by contractors, and if the Governor and Auditor, and Commissioners, and their architect, are honest and efficient, the State need not spend a dollar on its building without due return; and if the citizens of the State put dishonest persons into these high offices they have only themselves to blame for the consequences.

IT is a satisfaction to learn that the full amount of the Waring fund, of one hundred thousand dollars, has been raised, and is now in the hands of the committee, nearly seventeen hundred persons having subscribed. The interest on the fund is to be equally divided between Mrs. Waring and Colonel Waring's daughter. After the death of both the money is to go to Columbia College, for the endowment of a chair of instruction in municipal affairs.

MEANWHILE, some interesting particulars have appeared in the newspapers of Colonel Waring's report to the Secretary of War on the sanitation of Havana. Although the report itself has not been published, the general conclusions that it contains are known. It seems that Havana is now what most cities in Europe and America were fifty years ago—a crowded mass of houses, standing on a soil saturated with filth, to which the vaults and cesspools under each house add fresh supplies continually. Under the hot sun of Cuba, these conditions breed yellow-fever, as they did the plague in Europe centuries ago, and, by a change in the conditions, yellow-fever can probably be held in check, or wholly eradicated, as the plague has been from civilized communities. For this purpose, all vaults and cesspools should be cleaned out and filled up, water-carriage provided for all sewage, the streets paved, and the marshes near the city drained. When all this is done, we may hope not only for the improvement of the health of Havana but the removal of the source from which nine-tenths of all the yellow-fever epidemics which have afflicted this country have been derived. Naturally, the Cubans will be slow to realize the necessity for sanitary reforms of a sort with which most of them are totally unfamiliar, but the increase of communication between Cuba and this country will instruct them, and the example of Mexico shows that people of Spanish descent are by no means naturally averse to the cleanliness of modern civilized life.

THE *Builder* mentions what is to us a novelty in electric heating, and one which might prove popular in this country, if the cost of installation were not too great. Instead of the ordinary electric heater, which resembles a

steam-radiator in appearance, a group of incandescent lamps is arranged in front of a reflector. These lamps differ from the ordinary ones in having a thick filament, and are run at a low voltage. When the current is turned on the filaments become red-hot, and radiate a large amount of heat, so that, as we are informed, "excellent toast" can be made in front of a group of four lamps. It may be imagined that the glass of the lamps is severely tried by such a heat, and it is found necessary to provide a current of cold air around them. What is the precise voltage required for the lamps the *Builder* does not say, or how an ordinary current is transformed to the necessary pressure, and it would seem that the apparatus, although it is said to be cheerful in appearance, and effective in heating, is an expensive one to use, the cost of operation being estimated by its inventor at a penny per hour for each lamp. A battery of four lamps is said to be sufficient to warm a "small room" in the climate of London, and, at eight cents an hour for this, the expense of heating an average American room on a zero day would be something startling.

MR. CHARLES H. NIEHAUS, the well-known sculptor, writes to the Commission in charge of the monument which it is proposed to erect, in the City of Paris, to Lafayette, as a gift from American school-children, protesting against the choice, which is said to have been made, of Messrs. Carl Bitter and Paul Bartlett as the sculptors of the monument. Mr. Niehaus calls attention to the fact that Mr. Bitter is an Austrian, while Mr. Bartlett has been a resident of France for a quarter of a century, and, while he expresses his appreciation of their talent, he thinks that it is desirable, in this instance, at least, to make the work one of purely American sculpture. He says, what is unquestionably true, that the United States has now a school of sculpture of its own, and suggests that such an opportunity as the Lafayette monument offers to show the best work that America can do, side by side with that of the great artists of France, is one which rarely occurs, and which can, and should, be made the means of stimulating to a great degree the efforts of our native sculptors. He thinks, as we certainly do, that the monument should be made the subject of a great competition of American sculptors, to be decided by the award of a jury chosen by the competitors, and to be carried out with as much fairness as it is possible to connect with such a matter, so that the award shall command the respect of every one. There would be no difficulty in arranging such an affair, and it would probably mark an era in American art, which needs just the sort of stimulus from occasional famous competitions which is provided in all other civilized countries.

THE Annual Report of the President of the Massachusetts Institute of Technology gives the interesting information that a Travelling Fellowship has been established in the Architectural Department, through the bequest of Willard P. Perkins, who left a fund of six thousand dollars for that purpose. The income of the fund will not allow of the award of an annual Fellowship, and, for the present, it will be used only every fourth year. It may reasonably be expected, however, that the fund will be increased, perhaps by the gifts of those who cannot afford to endow a new scholarship, but would like in this way to make their generosity immediately effective, until an annual, or at least, a biennial, scholar can be sent out. In other ways the Institute has, during the past year, received many benefactions. From the estate of the late Henry L. Pierce has been received seven hundred and fifty thousand dollars, from that of Mrs. Julia B. H. James more than one hundred and forty thousand, from that of Mrs. Ann White Dickinson forty thousand, and from that of John W. Carter ten thousand, making nearly a million dollars in twelve months; and it is expected that about four hundred thousand more will soon be received from the estate of the late Edward Austin. The President, however, observes that, as is very often the case, the restrictions attached to these bequests render a large portion of them available only for special purposes, while funds are still needed for the general maintenance of the school. It speaks well for the citizens of Boston that a private corporation, dependent almost wholly upon private generosity for carrying out its work, should, after only about thirty years of existence, now expend, on an average, three hundred and thirty dollars a year for the instruction of each student, receiving in return only two hundred dollars in tuition-fees; the balance, of course, being made up by outside contributions.

THE PALACE OF THE CANCELLERIA AT ROME NOT DESIGNED BY BRAMANTE.—I.



The Palace of the Cancelleria, Rome.

ITALY has been looking over its artistic history, and, applying the Baconian maxim, *Instauratio facienda ab imis fundamentis*, has arrived at some astonishing and unexpected results. The history of its principal monuments has been revised, and the accounts formerly accepted, under a minute and impartial inquiry, have melted away like snow before the sun. At Florence it has been proved that the Campanile of Santa Maria della Fiore is not the work of Giotto, that the Loggia of the Signoria is not that of Orcagna, and that the Cathedral itself was not designed by Arnolfo; and in Milan it has been proved that the Cathedral is not the work of German architects. In Rome many unexpected things have been told about the mediæval and Renaissance monuments, but the proof, or, rather, demonstration, that the famous palace of the Cancelleria was not designed by Donato Bramante excites amazement. Yet, until now, the propriety of attributing the palace of the Cancelleria to the greatest master of the Classic architecture of the Renaissance has seemed too obvious for dispute; and, in fact, it has not been disputed by the Baron de Geymüller, the most learned authority in Europe on the Bramantean architecture; while my friend Müntz, the distinguished historian of the Renaissance, has accepted the ancient account, without suspecting that this might belong to the category of what Ibsen would call "imaginary truths."

The considerations which I am about to lay before you are sustained by arguments of two kinds: first, the technical ones, and those based on examination of style; and, second, the historical ones; and it will be desirable to examine both of them in order to arrive at a clear and convincing demonstration.

Bramante, then, was, as I have said, the greatest representative of the Classic architecture of the Renaissance; and this assertion may be made without any reserve, inasmuch as Filippo di Ser Brunellesco, rather than the greatest master of this architecture, was its discoverer, so that he might be called the Columbus of the Renaissance. There is, therefore, an interesting difference between Bramante and Brunellesco: the latter was the precursor of the former; and Brunellesco, belonging to the Primitive School, must necessarily feel the influence of the mediævals, while Bramante does not feel it. Bramante, moreover, flourished when the mediæval influence had vanished from Italian architecture, and was the first and principal investigator of the ancient Roman architectural formulas—the Vitruvius of his time. For that reason, the architecture of Bramante is sober, and seeks its effects in the general lines of the building, in beautiful proportions, and in graceful mouldings; so that the student of the works of Bramante is impressed with their nudity of ornament. This last peculiarity is of great importance, and will be kept in mind in the course of my demonstration. I will show why: Bramante, as every one knows, had, like Leonardo and Donatello, practically two centres of activity. The first was Milan, the second was Rome; the work of his youth was at Milan, that of his mature years at Rome. But, notwithstanding all the studies that have been made of Bramante's work at Milan, there is still some obscurity in regard to it, so that buildings are attributed to him so diverse in style that it is impossible really to admit that they could have been designed by the same master: for example, the elegant portico of the chapter-house of S. Ambrogio, erected in the time of Lodovico il Moro, about 1492, and the posterior portion of the Church of Sta. Maria delle Grazie. Now, the first building is undoubtedly by Bramante, the second certainly not, and in the S. Ambrogio portico (restored in 1895) is to be seen the hand of the future enthusiast for Vitruvius, the highest representative of architectural classicism, just as it appears in another building of Lombardy, unquestionably the work of Bramante, the façade of the Church of Santa Maria ad Abbatigrosso, near Milan, begun in 1477. In both cases, in the portico at Milan, and in the church at Abbatigrosso, there is a great sobriety, and a persistent effort to obtain pleasing architectural effects through a superla-

tive simplicity of means. In a word, in the Lombard Bramante already exists the Roman Bramante, the future builder of that pearl of architecture, the little circular temple of S. Pietro in Montorio, on the Janiculan Hill, which makes one think of the verse of Dante in the "Paradiso," *Poca favilla gran fiamma seconda*.¹ In fact, it is a building of extremely small dimensions, hardly more than a toy; yet it gave rise, in Rome and elsewhere, to the movement in favor of architectural classicism, which, led by Bramante, extended over the world, producing the architecture of the Cinque-cento, which is no longer that of the primitive Renaissance, as the painting of Masaccio is not that of Domenico Ghirlandajo, and the sculpture of Donatello is not that of Andrea Sansovino. Therefore the writers who have wished to see in Bramante a double personality, the *homo duplex* of the Latins, have erred, and they have erred because they have attributed to his earlier years works which Bramante could not have built, although their real author has never been ascertained. Bramante was a single-minded person, and had but one passion, the study and reproduction of the antique Roman monuments, devoting himself particularly to the lines, rather than the sculptured ornament.

Let us now turn to the nudity of ornament of the Bramantesque architecture, which is one of the capital points of my demonstration.

Before Bramante abandoned Milan, which came about at the fall of his protector, Lodovico il Moro, that is, in the year 1499, what sort of architecture was practised in Rome? Vasari, the Plutarch of Italian artists, does not tell us, because he was ignorant of the Roman art of the fifteenth century, but we are in a position to answer the question. In the fifteenth century many architects—Tuscan sculptors—lived at Rome, and these men executed an infinity of works of decorative architecture, and, in their buildings, gave the place of honor to the ornament. Thus Rome was an extensive field of action for Mino da Fiesole, who there carried out many works—and perhaps he would have carried out still more, if two artists, even inferior to him—Isaia da Pisa and Paolo Romano—had not waged a savage war upon him.

Besides the Tuscans, there were in Rome in the fifteenth century a great number of Lombard artists, celebrated throughout the Renaissance for the richness of ornament of their works, a richness which they often abused until it became oppressive; as in the case of the façade of the Certosa of Pavia, the Colleoni Mausoleum at Bergamo, and the façade of Santa Maria dei Miracoli at Brescia.

We are therefore confronted with a remarkable antithesis, a diversity of artistic aim, which cannot fail to awake reflection in the observer; on one side, Bramante, sober, simple, a Roman insensible to the sort of architecture which was practised at Rome when he took up his residence in that city; on the other side, the architectural productions of the Tuscan and Lombard sculptor-architects.

To which sort, to which style of art, belongs the celebrated palace of the Cancelleria? Does it belong to the Bramantesque sobriety, or to the Tuscan and Lombard School of ornamental richness? Does it partake of the style of the Pantheon, the Colosseum, and the Theatre of Marcellus, or of the graceful and effeminate style of the works of Mino da Fiesole?

Here it happens that the reader has before him a reproduction of this palace, and of its details (see *American Architect*, vol. LX, No. 1173).² With the attention fixed upon the exterior of the palace of the Cancelleria, it is easy to note the enormous difference between the architecture of Bramante, Classic, Roman, Vitruvian, and that of the Cancelleria. Where is the grandiose style of Bramante in that poor terminal cornice? Where is the Bramantesque simplicity in that series of cornices and string-courses, all of them timid and feeble? Those windows, also, in the principal story, crowded with tiny pilasters, are frittered and petty, as far from the Roman feeling of Bramante as they are near to the style of the Tuscan sculptor-architects, who held the sceptre of architecture before Bramante rose to be supreme in architectural matters in Rome.

Another curious thing: the window of which I speak has been considered the type of the Bramantesque window, and yet it is one of the most barefaced copies ever made in the Renaissance, which, in the matter of plagiarism and imitation, as is well known, had no scruples. If the reader could compare the window of the Cancelleria Palace with some little windows which are to be seen on the gate of the Borsari, at Verona, and which date from the time of Gallienus, in the third century after Christ, he would see that the plagiarism could not have been more evident. The Renaissance architect copied the old work even to the roses in the ornament, and this not by chance, as the same window was copied, in our day, in the Turati Palace, at Milan, but with intention, because the arms of Raffaello Riario, who was the builder of the palace, contain a rose, and, therefore, this ornament was particularly appropriate to the Cancelleria.³

To complete in some way my technical and stylistic demonstration, I will observe that there is a notable analogy between the palace of

¹ "A little spark kindles a great flame."

² By an oversight, for which we ask the forgiveness of our readers, the palace of the Cancelleria is there erroneously titled, as if it were the Farnese palace.

³ If this were not a case of direct plagiarism, it would still be one of false attribution. The style of window, showing an arch within a rectangle, which is called "Bramantesque," dates from a period anterior to that of the construction of the windows which ornament the front of the Cancelleria. The rectangular windows exist in the two ducal palaces of Urbino and Gubbio, and rectangular ones, with an arch in the middle, are found at Rome, in the interior of the Hospital of the Consolazione, the work of the Florentine Nicciuolo di Domenico, in 1436, and elsewhere.

the Cancellaria and a celebrated Florentine palace, that of the Rucellai, designed by Leon Batista Alberti, and copied also at Pienza by Rossellino, in the Piccolomini Palace. The principal difference is in the windows of Alberti, which are not copied from the arch of the Borsari, but have a central mullion, after the semi-medieval fashion of the Primitive Renaissance; otherwise, the character of the design is the same, and, as the French say, *c'est le ton qui fait la chanson*.

ALFREDO MELANI.

[To be continued.]

THE NEW YORK CERAMIC EXHIBITION.

THE recent exhibition of the "New York Society of Ceramic Art" at the Waldorf-Astoria was, to some at least of those who visited it, a genuine artistic surprise. Instead of the expected display of good china spoiled by bad painting, weak design and incorrect drawing, there was a surprising amount of strong and even brilliant work, well-mastered color-effects, appropriate decoration and clever technique. There was little to be seen of merely amateurish work, although the exhibits were in large measure the work of amateurs. Evidently the ladies, who constitute the great majority of the membership of the Society, have been earnestly seeking to master their art otherwise than as a fashionable pastime; they have outgrown to a considerable degree the copying of other people's pictures and have been making their own designs; not a few of them can draw—an accomplishment generally considered superfluous by dabbles in decoration, and the possession of which is almost sure proof of serious purpose. These ladies are not content with the mere painting of porcelain: many of them do their own firing; some are experimenting with glazes and with the decorative effects produced by varying technical manipulations; others are seeking to master the secrets of lustrous faience; others, again, are producing excellent *barbotine* and majolica effects, or undertaking to rival the Bohemians with delicate raised patterns in gold on glass. It was interesting to observe these various enterprises and surprising to note the success with which many of these experiments had been crowned. With the help of Mr. Volkmar, of the Corona (L. I.) Potteries, himself one of the most enthusiastic supporters of the Society, a number of its members have lately been handling the kaoline itself, learning to throw and mould their own pieces for decoration, and a medal is offered yearly for the best model for a teacup and saucer, as an encouragement to such efforts.

The Society numbers eighty-six members, resident in or near New York, and is the parent society of a number of others of like character in the different States, federated in a National League of Mineral Painters. It was founded in 1892, under the artistic stimulus of the then-prospective Columbian World's Fair, largely through the efforts of its present indefatigable President, Mme. Le Prince. This lady, having devoted several years in France to study and training in the decoration of faience, has been unremitting in her efforts to impart seriousness of purpose to the work of the Society, and to inspire its members with her own high aims and enthusiasms. The reward of her labors is seen in the great advance which this exhibition marks over that of last year. Particularly noticeable is the disappearance of the amateurish quality, and the diminished proportion of merely pictorial decorations, of fruit-and-flower-pieces painted precisely as if for a wall-picture. Floral decoration predominated, it is true, not only because women love to paint flowers, and often paint them with exceptional feeling and delicacy, but also because flowers afford the most admirable motives for ceramic decoration, both in form and color. But the flowers in this exhibition were not treated as mere pictures, but as decoration, and this clear apprehension of the difference between the pictorial and the decorative treatment of flowers on pottery was to my mind a striking and encouraging fact. There were a number of superb vases with dense masses of flowers and leaves broadly sketched-in or suggested and melting away into magnificent reds, greens or purples which spread their rich hues over the whole vase. The handling of purely conventional ornament showed less of originality and power, but was by no means without interest, evidencing much careful study and good instruction, and a surprising amount of success and readiness in the execution. Under this category, one of the most beautiful objects was a teacup and saucer in blue enamel—a really exquisite bit of conventional ornament delicately executed; but it is almost invidious to particularize where so much was excellent and interesting.

The figure-pieces and miniatures belong apart and deserve a few words to themselves. Here we have pictorial art pure and simple, and this was the weakest side of the exhibition, although some of the miniatures were excellent. It was evident that some had suffered in the firing, while there was more than one case of defective drawing. Doubtless another year will show a marked advance in this department. But it is to be hoped that the copying of inferior pictures—or, indeed, of any pictures at all—may be discouraged in the Society. If pictures must be employed in china-painting, they ought at least to have the merit of originality. It is distressing to contemplate the multiplication of third-rate and fourth-rate French and German figure-subjects by amateurs unable to make a picture themselves. And if pictures must be copied, cannot the copyists learn at least to choose worthy and dignified and decorative subjects, instead of the kind made familiar, *ad nauseam*, on tea-chromos and advertisements? A thorough course in figure-drawing from the antique and from the living model as the best possible foundation

for decorative design has not yet been made a part of the programme of the Society, and is, perhaps, impracticable now; but may we not hope the day may come when this will be looked upon as an essential part of the decorator's training?

But, as I have intimated, these discouraging features were in the minority. For the most part, the exhibition bore abundant evidence of the artistic gift, of cleverness, originality and artistic ambition. Such a society as this, so seriously pursuing high aims under intelligent guidance, must exercise a salutary influence on public taste and on the industry whose artistic side it is seeking to develop. There is no reason why the designers of book-bindings, wall-papers, textiles and stained-glass, both amateurs and professional artists, should not unite in a like manner and with like aims. Such union of effort, and exhibitions like this in the other arts, each by itself, would accomplish in part the ends attained by the art-guilds of other days, and would redound to the advantage both of the exhibitors and of the public. There can be no doubt of the good that may be and is being done by this Society, and it is to be hoped that it may continue its good work and widen year by year the circle of its influence.

A. D. F. HAMLIN.

THE ADMISSION OF A WOMAN TO ASSOCIATESHIP IN THE R. I. B. A.

THE candidature of Miss Charles for Associateship in the Royal Institute of British Architects gave rise to a long discussion at the meeting of December 5th last. Clause 4 of the Charter, which the Council relied upon in support of the nomination, and which the Secretary was called upon to read to the meeting, provides that "Associates shall be persons engaged in the study or practice of architecture who have attained the age of twenty-one years. From the date of this our Charter every person desiring to be admitted an Associate shall be required to pass or have passed such examination or examinations as may be directed by the Royal Institute." The following is an abstract of the discussion:—

MR. DOUGLASS J. MATHEWS [F.] moved that the election of Miss Charles be not proceeded with until the members had had an opportunity of expressing their opinions as to the desirability or otherwise of admitting ladies to membership in the Institute. The matter came before members in a very awkward way at the present time. They must either admit the lady who was nominated, or object to her admission. It was not fair to members that they should be put to such an alternative. The nomination of a lady to membership in the Institute was such an absolutely new departure that it was only right that every member should have an opportunity of saying whether he approved of it or not.

MR. DELISSA JOSEPH [F.] seconded the resolution. He was entirely in favor of the admission of ladies; but such an absolutely new departure from precedent should have been referred to more specifically in the Institute Journal, and opportunity given to members to discuss the principle before voting on any particular name. The name appeared in the list in the ordinary way, and escaped the notice of many members till Mr. Nash drew attention to it. He felt very strongly, with Mr. Mathews, that members should have the opportunity of discussing the principle before voting.

THE HON. SECRETARY explained that, before Miss Charles was admitted to the preliminary examination, the Council were asked whether there was anything in the Charter or By-laws to prevent her coming up for election provided she passed the examinations. The Council replied in the negative. If they were to exclude ladies he considered they would be going against the Charter.

MR. HENRY DAWSON contended that the Council had no right to take upon themselves to say that it was not contrary to the Charter or the By-laws. In his opinion it was distinctly contrary to the Charter and By-laws, and members had a reasonable ground of complaint that the Council should have taken this most extraordinary departure from the previous action of the Institute. The members ought not to have been put in the position they now found themselves. The Council should have consulted the General Body. The interpretation of the Charter was not for the Council but for the Institute to determine. Clause 2, referring to classes of members, distinctly stated that they should be as "hereafter established by the Institute," not "by the Council." He should give notice that at the next meeting he would move a resolution that the Council be requested to obtain the written opinion of an eminent counsel as to whether, under the terms of the Charter, ladies were eligible for election as Associates or Fellows, and that the Council call a general meeting of members to report that opinion in order that the matter might be dealt with not by the Council but by the General Body.

MR. W. HILTON NASH [F.] said that when the lady was put up for candidature he sent in a paper signed by himself and six other members, five being Fellows. The paper was as follows: "That we, the undersigned, having heard that it is proposed to nominate Miss Charles as an Associate of the Royal Institute of British Architects, wish to express our opinion that it would be prejudicial to the interests of the Institute to elect a lady member, and we therefore beg to give notice to the Council that it is our intention to oppose such nomination, as we consider the election of a lady member should be fully discussed." They had a right to have the matter discussed before the election took place, and that could be done without the breaking of any pledge to Miss Charles. He had no personal objection to the election of ladies; but this was a question of principle and precedent, and when an Institute with two Royal Charters went against precedent it was doing a very dangerous thing. It would be remembered that though at the Universities of Oxford and Cambridge ladies were allowed to sit for

the examinations, they were not given a degree. The Colleges of Physicians and Surgeons permitted ladies to sit for the examinations, but they conferred no degree. He contended that if they admitted this lady as an Associate they conferred a degree; they were going against the general principle of all institutions and associations of this kind. The Junior Association had declined to admit this lady as a member of their body, and if the senior Institute elected her they would have to alter the Charter and By-laws. He was willing to bow to the opinion of counsel who might be consulted on the matter, but the question should be fully discussed. The reason he had not pressed for a poll to be taken was because some members of the Council asked him not to oppose the election, and so the protest in the paper he had referred to was not followed up.

MR. ROBERT WILLIAMS [F.] said that the Institute was established for the advancement of architecture. That was the main gist of the Charter. The Institute, therefore, should not stultify itself by refusing to elect this lady, who had passed all the qualifying tests. The census of 1891 showed that there were twelve ladies practising architecture in London alone, besides others in large towns, and since that time, no doubt, the numbers had been considerably increased. It would be well to honor the first lady candidate by electing her first — by placing her name before all the others. Therefore, seeing that the lady had fully qualified herself, he would propose that she be forthwith elected.

MR. H. HEATHCOTE STATHAM [F.] pointed out that the new departure was not with the Council at all. The Council might have elected a lady member any time these fifty years. The new departure was that for the first time a lady had had the spirit and ability to go through the examinations. With regard to the remark about doing injury to the Institute, if they brought this matter to a meeting to be discussed, and tried to oppose it, they would be doing the Institute the greatest injury and be making it a subject of laughter. Considering the general public feeling now, it would seem that the profession should be open to women, and it would be the greatest possible mistake for the Institute to oppose the election.

MR. DOUGLASS MATHEWS repudiated any personal feeling against the candidate, and it was on that account that he asked that the resolution might be put, and the election be postponed for the time being. Every member should have an opportunity of saying Yes or No upon the point.

The PRESIDENT observed that there was no question of a new principle involved. The candidate had passed the examinations, and everything had been done according to rule. Her election could not be set aside because some members thought it undesirable to elect her. It was evident, as all the learned bodies were admitting ladies, that the Institute would be very much behind the age if it refused to elect them.

MR. JOHN SLATER [F.], with regard to Mr. Dawson's remark that he knew nothing about the candidate having been allowed to enter for the examinations, pointed out that Miss Charles's name was announced in the meeting-room and published in the *Journal* as having passed the preliminary and intermediate examinations; therefore it must have been known that she intended entering for the final examination, and there was ample time to have opposed it.

MR. DAWSON objected that the Council ought not to have admitted the candidate to examination without consulting the General Body.

MR. E. W. HUDSON [A.] thought it a matter for counsel to advise upon.

It was finally ruled that the election must proceed, and each candidate be voted on separately.

The vote was taken on each candidate separately and all, with the exception of Miss Charles, were elected by a unanimous vote. In the case of Miss Charles the vote stood 51 for and 16 against her admission, the majority being large enough to cover her case.

It is rather interesting to remark that the Royal Institute of British Architects has a membership of about 1,600, and yet at a meeting where was to be decided a matter which might well stagger the conservative Briton only 98 members were brought together.

ELECTRICAL STAGE APPLIANCES AT DRURY LANE THEATRE.



HE proposed application of electrical power for mounting plays at Drury Lane on the lines advocated by Mr. Edwin O. Sachs has now taken a tangible form in the completion of the first section of the stage installation in time for the impending pantomime.

The present work refers principally to the stage floor and its movability in sections above and below the footlights. The total area now already movable by mechanical power exceeds 1,200 square feet.

The electric appliances just completed take the form of so-called "bridges," each working independently. Each individual section measures 40' x 7', and weighs about 6 tons, of which about 4 tons are counterbalanced. They can travel about 20 feet vertically.

The motive power is from the ordinary electric supply-mains over a four-pole motor, developing 7½ horse-power at 520 revolutions per minute. The "bridges" are suspended from cables, and these, working over the motor, allow the former to be raised with the necessary live-load at rates varying from 6 feet to 20 feet per minute.

Mr. Sachs has arranged for every possible safeguard against accident, the "bridges" themselves being so constructed that in the event of derangement of current the appliances can be worked by hand-gear. Automatic switches are provided so as not to be entirely dependent on the attendants, and automatic catches will work in case

of rope-breaking. Special locking gear has been installed to hold the "bridges" stationary at certain points, such as stage level, and a very large factor-of-safety has been allowed in apportioning the strengths and weights in the various parts of the mechanism, having special regard to the ever-increasing scenic requirements under Mr. Arthur Collins's able management.

As regards the economic aspect of the electrical installation the initial outlay on this system is about half that of Continental hydraulic work, and this is allowing for English contractors as against foreigners. The maintenance is minimal, while the actual working only costs a few pence per performance. The saving in manual labor on the stage is very considerable, while the hygiene of the theatre is materially raised by the absence of woodwork.

For the successful execution of this work, Mr. Sachs is primarily indebted to the enthusiastic encouragement of Mr. Arthur Collins, who is the first manager to have introduced modern methods on the stage, and deserves the congratulations of the technical professions.



PERFORMANCE OF CONTRACT.

WHAT is not a substantial Performance. — It was not a substantial performance of a contract to complete a partly finished building for \$3,400, that the building was completed with the exception of putting in a few locks, door-knobs, some doorsteps, and a small amount of plastering, which cost the owner \$267.

[*Smith vs. Sheltering Arms* (Supreme Ct. 2d Dept.), 35 N. Y. S. Rep. 62.]

Specific Performance of Building-contract. — The owner of a land contract agreed with a builder that the latter should erect a house, take the land as security for payment for the house, pay off what remained due of the original purchase-price, and reconvey after these amounts were repaid. The building contract was afterwards assigned to another, who mortgaged the premises and erected a building not in substantial compliance with the contract. In a suit for specific performance the court held that the party should remove the house and reconvey to the owner of the land contract, after receiving the sums he had paid for taxes and on the purchase-price, or that he accept the owner's offer for the house and a portion of the lot, and reconvey the remaining portion free from incumbrance. The Supreme Court of Michigan held, on appeal, that the positive requirement to remove the building was for the benefit of the builder and might be waived, but that otherwise the decree was proper.

[*Crawford vs. Schneider*, 64 N. W. Reporter, 39.]

Performance of Contract. — A building-contract provided that, on failure of the contractor to properly complete the work, the owner of the building could himself correct defective work, and deduct the cost of same from the contract-price. The contractor having laid defective flooring, the owner corrected the defective portions at a cost of two per cent of the contract-price, and in a suit afterwards by the contractor for payment, less the deduction for corrections, the owner endeavored to defeat a recovery on the ground that he had not performed his contract. The court held that, having been charged with the completion, he was entitled to the difference, — a performance by the owner at the expense of the contractor was performance by the latter.

[*Charles vs. Hallack Lumber & Mfg. Co.* (Supreme Ct. Colo.), 43 Pacific Reporter, 548.]

Performance of Contract. — A contract to put a gravel roof on a building, to be done in first-class shape, and guaranteed for a certain time, does not require the personal services of the contractor, so as to prevent his hiring another to do it under his supervision and instruction.

[*Curran vs. Clifford* (Court of Appeals of Colorado), 40 Pac. Rep. 477.]

A contractor who has abandoned work for which he contracted cannot recover on a *quantum meruit* for the part done by him unless the contract was rescinded, or its complete performance was rendered impossible by the wrongful conduct of the owner. The fact that the owner, upon the statement of the contractor that his failure to prosecute the work was owing to his inability to get mechanics, employed extra men himself, does not show a rescission of the contract by the owner nor cause for rescission by the contractor.

[*McGonigle vs. Klein* (Court of Appeals of Colorado), 40 Pac. Rep. 465.]

In an action to recover for work done under a contract, and for breach of the contract by the owner in preventing further performance, a report made to the contractor by his workmen that they had been stopped by the owner, accompanied by proof that they had been stopped by him, is competent to show the reason why the contractor ceased further performance of the contract.

[*Raven vs. Smith* (Supreme Court, General Term, Second Department), 33 N. Y. Sup. Rep. 972.]

Performance of Building-contract. — Though the building-contract requires a written order for any change which affects the cost of the building, or time of its completion, yet the contractor is not responsible for a delay caused by a change in the plans of a building made at the owner's oral request.

[*Focht vs. Rosenbaum* (Sup. Ct. Penna.), 34 Atlantic Reporter, 1001.]

Substantial Performance of Building-contract.—If a contractor should fail to perform some distinct or specific piece of work, which, by his contract, he had stipulated to do, the value of which was one-tenth of the contract-price, there would be no question that there was not a substantial performance of the agreement. The rule still prevails that the contractor must show performance when that is a condition of payment. The relaxation of its strict application in cases arising under building-contracts was not intended to permit courts and juries to substitute a money indemnity as an equitable compensation for unfilled covenants of the contract, but arose because of the difficulty of complying with entire exactness with all the particulars embodied in that class of agreements. Hence it has been repeatedly said in the decisions that it is only in cases where there has been no wilful omission by the contractor, but he has honestly and faithfully performed the contract in all its substantial particulars, that he will not be held to have forfeited his remuneration by mere technical or unimportant omissions or defects. But if the defects or omissions are so numerous and prevailing as to show that the whole job was done in a slovenly and improper manner, not conforming substantially with the plans and specifications, there is no rule of law which entitles the contractor to compensation. If the owner, having regard to strength and durability, has contracted for walls of specific materials, to be laid in a particular manner, the contractor has no right to substitute his own judgment for that of others. Having departed from the agreement, if performance has not been waived, the law will not allow him to allege that he has made as good a building as the one he engaged to erect.

[*Andersen vs. Peterait* (Supreme Court, General Term, Second Dep't), 33 N. Y. Sup. Rep. 741.]

When specific Performance cannot be had.—Equity cannot be invoked to compel performance of a contract to "complete" certain houses, as the owner has an adequate remedy at law in that he may complete the contract himself, and sue the contractor for his damages, where the responsibility of such contractor to respond in such suit at law is not questioned, the contract being a promise to pay for same.

[*Dove vs. Commonwealth, etc., Trust Co.* (Ct. Com. Pl.), 6 Pa. Dist. Ct. Rep. 263.]

Payment for partial Performance of Contract.—It is well settled that where one party has entered into a special contract to perform work for another and furnish material, and the work is done and material furnished, but not in the manner stipulated in the contract, yet if the work and materials are of any value and benefit to the party he may recover for the work done and materials furnished. This upon the principle that, if the other party has derived a benefit from the part performed, it would be unjust to allow him to retain that without paying anything. The more equitable rule has been generally adopted, which permits a recovery by one who in good faith attempts to perform his contract, and does so substantially, although there may be a slight deviation, or some technical and unimportant omission or defect. A substantial performance, however, is still indispensable to a recovery, and a failure to carry out any material part of the contract will not amount to a substantial performance. And where a party, by an express contract, undertakes to furnish material and perform labor, he is only entitled to payment according to its terms, and the law will not make for him a contract different from that which the parties have entered into. The implied liability arises, if at all, from the subsequent transaction or conduct of the parties, and if there is a substantial nonperformance of the contract, and the party for whom the materials were furnished and the labor performed refuses to accept, and does not receive or retain, any of the benefits of the contract, no such liability will arise.

[*Modell Tp., of Norton County vs. King Iron Bridge Co.* (Court of Appeals of Kansas), 41 Pac. Rep. 1059.]



AMERICAN INSTITUTE OF ARCHITECTS: DIRECTORS' MEETING.

A MEETING of the Board of Directors of the American Institute of Architects was held at the Octagon House, Washington, D. C., January 5, 1899, at 10 A. M.

Mr. W. C. Smith having gone to Manila as a Colonel of Volunteers his position on the Board was declared vacant. Mr. Alfred Stone, of Providence, R. I., was elected to fill the vacancy.

The following Standing Committees were appointed:—

Executive Committee.—Henry Van Brunt, *ex officio*, Kansas City, Mo.; Glenn Brown, *ex officio*, Washington, D. C.; W. L. B. Jenney, Chicago, Ill.; R. W. Gibson, New York, N. Y.; Frank Miles Day, Philadelphia, Pa.

Judiciary Committee.—Geo. B. Post, New York, N. Y.; Alfred Stone, Providence, R. I.; Levi T. Scofield, Cleveland, O.

House and Library Committee.—Robert Stead and Glenn Brown, Washington, D. C.; Frank Miles Day, Philadelphia, Pa.

Education and Publication Committee.—H. L. Warren, Boston,

Mass.; William R. Ware, New York, N. Y.; W. P. Laird, Philadelphia, Pa.; Glenn Brown, Washington, D. C.; N. Clifford Ricker, Urbana, Ill.; Cass Gilbert, St. Paul, Minn.; F. W. Chandler, Boston, Mass.

Committee on Foreign Correspondence.—J. M. Carrère and R. W. Gibson, New York, N. Y.; T. C. Link, St. Louis, Mo.; Edgar V. Seeler, Philadelphia, Pa.

Committee on Contract and Lien Laws.—R. D. Andrews, Boston, Mass.; Alfred Stone, Providence, R. I.; E. H. Kendall, New York, N. Y.

Committee on Applied Arts and Sciences.—Geo. B. Post, New York, N. Y.; D. Adler, Chicago, Ill.; F. E. Kidder, Denver, Col.

The following special committees were also appointed:—

Legislative Committee on Government Architecture.—Geo. B. Post, Chairman; Committee: Bruce Price and John N. Carrère, New York, N. Y.; James G. Hill, Washington, D. C.; Alfred Stone, Providence, R. I. Alternates: Edward H. Kendall and H. J. Hardenbergh, New York, N. Y.; Robert Stead, Washington, D. C.; R. S. Peabody, Boston.

Delegate to National Conference on Standard Electrical Rules.—Alfred Stone, Providence, R. I.

The matters coming before the Convention were referred to the different standing and special committees, asking for a report at the next meeting of the Board of Directors. The Board of Directors laid out a scheme for increasing the membership of the American Institute of Architects, and for taking active measures to collect matter and data, at the Octagon House, which will be interesting to the profession at large. The Octagon House, corner 18th Street and New York Avenue, Washington, D. C., the permanent headquarters of the Institute, will be open to members from 9 A. M. to 5 P. M. The Secretary or his assistant will be on hand and will be pleased to aid visiting members in making their stay pleasant.

(Signed) GLENN BROWN, Secretary.



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

"SHERRY'S," FORTY-FOURTH ST. AND FIFTH AVE., NEW YORK, N. Y. MESSRS. MCKIM, MEAD & WHITE, ARCHITECTS, NEW YORK, N. Y.

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

THE MAIN ENTRANCE: "SHERRY'S."

SUCCESSFUL COMPETITIVE DESIGN FOR THE "SHATTUCK PRIZE" FOR ARTISANS' HOMES. [LIMITED COMPETITION.] SUBMITTED BY MR. R. CLIPSTON STURGIS, ARCHITECT, 19 EXCHANGE PLACE, BOSTON, MASS.

THE houses are arranged in three groups of sixteen each, chiefly to give access for teams across the block, and to give more frontage for the houses. The central block differs slightly from the end blocks, to avoid architectural monotony.

In each block the houses are set forward and back, so that each house may have the advantage of a corner, obtain abundant light and air, and avoid the necessity for light-areas.

There are four principal types of houses, A, B, C, D; Ba, Ca, and Da are modifications of B, C, and D.

All have accommodation for coal in cellar, and A, C and D have hand-power lifts in the staircase-well, which can be used for coal, supplies and laundry service. In B, as there are but three stories, the lift is omitted.

There are six janitors, two in each block; each has, therefore, eight buildings in his care.

In all types the aim has been to give a certain amount of useful land and of ornamental land to each house. Under the first head are drying-yards and playgrounds, under the second, grass, trees and shrubs.

Blocks 1 and 3.—In the end blocks the central space of common land is 70' x 150'; a drive or walk surrounds this, giving access to all the houses at the rear.

Within the drive a border of trees and shrubs encloses a gravelled playground. The remainder of the land in the court is devoted to drying-yards, while on the street a considerable portion is given to ornamental grounds. All basements have direct communication with the court-yards.

Block 2.—In the central block a larger area is enclosed, and this contains a central grass-plot, with drive or broad walk around it and space for shrubs in the corners.

The remaining areas at the two ends are divided into four yards, to be used for drying clothes and as playgrounds, each yard serving four houses. As with 1 and 3, there is ornamental planting on the street. It is not intended that any court shall be for the exclusive use of the surrounding tenements, so that those in block 1 could use

the garden in 2, and those in 2 could send their children to play in 1 or 3.

Type A.—Type A has an area of 30' x 47' (1,410), a street frontage of 47', 144' out of 154' of outside wall. It is four stories high and contains seven or eight rooms on each floor. Of the total area of 1,232', 180' is occupied by stairs and passages. There is no light-well, but the stairs are lighted from above and from the glazed doors and transoms of the wash-rooms. Each tenement has a separate water-closet and sufficient space for wash-trays.¹ The water-closet is so placed that two hall-rooms could be rented separate, or by the occupant of either tenement, and the building is so arranged as to provide one, two, three or four room tenements.²

Fire-escape is provided over the entrance to the court-yard, a practicable outside staircase giving easy access to and from the court. The gallery on the third floor serves as drying-ground for third-floor tenements—the fourth story will use the roof, and the first and second the yard. No tenant has more than one flight to go.

Type B.—Type B has an area of 30' x 30', a street frontage of 60', and 95' out of 120' of outside wall. It is three stories high and contains two tenements of three rooms each on each floor. Of the total floor-area of 841', 120' is given to stairs and passages. There is no light-well: the stairs have outside light. Each tenement has a water-closet. Provisions for fire-escape on court and for drying in court and on roof.

As B is but three stories high the adjoining types are clear above the third story.

Type C.—Type C has an area of 1,500', street frontage of 50', and 132' out of 160' of outside walls. It is four stories high and contains on each floor two four-room tenements, and above the first floor a room which could be rented with either tenement or as a regular single room, there being one additional water-closet in the basement for the service of the single rooms. Of the total floor-area (1,340), 105' is occupied by stairs and passages. The general disposition of the plan is similar to A.

Type D.—Type D has an area of 25' x 48', a street frontage of 25', and 85' out of 150' of outside wall. It is five stories high and contains two tenements of four rooms and three rooms respectively on each floor. Of the seven rooms one can be let separate. Of the total floor-area of 1,100', 200' is occupied by area, stairs and passages. There is a light-well which lights stairs and plumbing. A fire-door in the wash-rooms makes both staircases available. Each tenement has separate wash-room. Fire-escape and drying facilities are as designed for A, but both fourth and fifth will use the roof. Type Da is similar to D, but has light on both sides instead of one only.

As D is five stories, the upper one is lighted on all sides. D1 and D2 are treated as one building.

It is suggested that it might be profitable to let one house, say B, entire for a restaurant where simple meals could be had, and where those who did not wish the expense of coal in warm weather could buy cooked food. B could be so arranged as to give the first story to the restaurant, have kitchen, etc., on the second, and the tenant's rooms on the third.

MATERIALS AND CONSTRUCTION.

The materials for the walls are red brick and white terra-cotta but areas and staircase-wells are white brick, unplastered.

Importance is given to the high buildings Da, D1 and D2, by making the first story terra-cotta, dividing the three stories over with pilasters, and treating the fifth as an arcade. The other buildings have the first story lined horizontally with headers set back one-half from ashlar and filled with cement; tympana of windows are also cement.

All the buildings are fireproof and up to the standard of the Boston Building-laws.

Floors and roof concrete [Aberthaw], floors at 25 cents, roof finished in granolithic laid in 10' squares, calked with Trinidad asphalt, at 31 cents; finished floors at 31 cents.

Partitions, expanded metal.

Stairs, of concrete with iron hand-rail and netting around lifts.

Walls, two-coat plaster on brick over anti-hydrine.

Ceiling, two coats on the concrete.

Gutters and conductors, zinc.

Doors and windows stock, painted; chair-rail, base and plain finish in all the rooms.

Painting outside: doors, windows and ironwork. Inside: standing finish, plastered walls, exposed plumbing, netting of stairs. Hard-pine floors, oiled.

Where a tenement has a wash-room it will contain water-closet shut off with low partition, a double wash-tray (movable centre partition, to make bath-tub), a space for gas-stove for summer use. Kitchen and single rooms have iron sinks. Ranges and hot water are not supplied.

Entries and courts are lighted by electricity by owner.

Rooms are piped for gas.

¹ Experience seems to show that bath-tubs are not appreciated, but, with the more general education of the people in respect to bathing, it is by no means unlikely that in the near future there might be a demand for them. In most cases a pair of set-tubs with central partition removable gives opportunity for a bath.

² In case the hall-rooms were permanently designated as single rooms they would be fitted with sink, but it is thought wisest to let the tenant sublet and share the plumbing accommodation.

RENTAL: TYPE A.

First floor, two three-room tenements at \$2.....	\$4.00
Second, third and fourth floors, one four-room, one three-room and one single-room, \$5.50 a floor.....	16.50
	\$20.50
For one year, 52 times this amount (\$20.50).....	\$1,066.00

EXPENSE: TYPE A.

Cost of land, 1-48 \$240,000.....	\$5,000.00
Parking, 1-48 \$9,600.....	200.00
Building at 19 cents a cubic ft., area 1,410, four stories 50 ft. high, or \$2.40 a sq. ft. for 5,640 ft. of finished floors.....	13,395.00 ⁴
	\$18,595.00
Gross return on investment.....	.0566
To arrive at net per cent return we have deducted.....	.0250 ⁵
Leaving net return.....	.0316

ITEMIZED COST OF A.

Masonry: —		
Foundations.....	\$2,000	
Brick walls.....	3,400	
Miscellaneous: paving, manholes, etc.....	300	
		\$5,700
Concrete: —		
Floors at 25 cents, roof 31 cents, finished concrete at 6 cents, stairs \$1 a foot.....	\$2,000	2,000
Partitions: expanded metal and plaster, other plaster, walls and ceilings.....	1,200	1,200
Carpentry: —		
Hard-pine floors.....	\$504	
Fire-escape and iron rail.....	240	
Windows and finish.....	630	
Doors and finish.....	560	
Other finish.....	350	
Lift.....	250	
Gutters, conductors, ash-chute.....	300	
	\$2,834	2,834
Plumbing.....		1,000
Painting.....		500
Gas in rooms and electricity in halls.....		130
A total of.....		\$13,364

RENTAL: TYPE B.

First floor, two single-room.....	\$2
One three-room.....	2
Second and third floors, two three-room at \$4 a floor.....	8
	\$12
For one year, 52 times this amount (\$12).....	\$624

EXPENSE: TYPE B.

Cost of land.....	\$5,000
Parking.....	200
Building at 19 cents per cubic ft., area 900, height 40; or \$2.50 a foot for 2,700 ft. of finished floors.....	6,840
	\$12,040
Gross per cent on money expended.....	.0518
Deducting 2½ per cent as above.....	.0250
Leaving net return.....	.0268
This building would pay better as store and janitor's house.	

RENTAL: TYPE C.

First floor, two four-room tenements.....	\$5
Second, third and fourth, two four-room and one single-room at \$6 a floor.....	18
	\$23
For one year, 52 times this amount (\$23).....	\$1,196

EXPENSE: TYPE C.

Cost of land.....	\$5,000
Parking.....	200
Building at 19 cents per cubic ft., area 1,500, 50 ft. high, or \$2.40 a sq. ft. for 6,000 ft. of finished floors.....	14,250
	\$19,450
Gross per cent on money expended.....	.0614
Deducting 2½ per cent.....	.0250
Leaving net return.....	.0364

RENTAL: TYPE D.

First floor, two three-room, at \$2.....	\$4
Second, third, fourth and fifth, one single-room at \$1 and two three-room at \$2, \$5 a floor, four floors.....	20
	\$24
For one year, 52 times this amount (\$24).....	\$1,248

EXPENSE: TYPE D.

Cost of land.....	\$5,000
Parking.....	200
Building at 19 cents a cubic ft., area 1,200, 60 ft. high, or \$2.30 per sq. ft. for 6,000 ft. of finished floor.....	13,680
	\$18,880

³ Where a space capable of being used for three rooms is shown as two rooms, the rent is based on three rooms.

⁴ For figured items see note at foot.

⁵ To fix this per cent for expenses we have written off taxes at \$12 a thousand on 60 per cent valuation, which amounts to ½ of 1 per cent on the investment. Repairs at 5 per cent of rent, which is ½ of 1 per cent (this is liberal for a building of this class). Care of property 7 per cent, collection of rent 5 per cent, unrented rooms 5 per cent and insurance, together 1 per cent. Water at \$10 a tenement and light \$2.50 a tenement is ¼ of one per cent. A total of 2½ per cent.

Gross per cent on money expended is.....	.0661
Deducting 2½ per cent as above.....	.0250
Leaving net return.....	.0411
Net returns:—	
A .0316	
B .0268	
C .0364	
D .0411	
.1359 divided by 4 is .0339	

When well filled and carefully handled the property should net between .34 and 4 per cent.

PLANS OF THE SAME.

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

A GROUP OF NAPOLEONIC EQUESTRIAN STATUES.

UPON this plate will be found the statue of Napoleon III, to which the Rome correspondent of the *Pall Mall Gazette* refers in the following extract:—

"Monuments, too, have had their ups and downs. Among the unfortunate it would perhaps be difficult to find one more so than that destined to honor Napoleon III, in Italy. It was decided to erect one after the war of 1859, when the French Emperor crossed the Alps with his army to fight for Italian unity and independence, and, addressing the people, pronounced the famous phrase: 'You must to-day be all soldiers in order to be to-morrow the free citizens of a great nation.' After the campaign there was great enthusiasm throughout the country, and especially in Milan, to subscribe to a fund for a monument to the victor of Magenta and Solferino. The monument, which took the form of a magnificent equestrian statue, the masterpiece of Barzaghi, was completely finished, but when it was on the point of being put up popular feeling had to a large extent changed, the Liberal and Radical elements insisting on the inappropriateness of Italy raising a memorial to the man of the Coup d'Etat. They forgot that Italy owed to him the liberation of Lombardy and Venetia, without which the unity of the country might not perhaps have been accomplished.

"So the bronze statue of the last Emperor of the French was hidden away in the court-yard of a palace in Milan, where it has lain for about thirty years, apparently forgotten by all, and covered by dust and spiders' webs. Now that, with the re-establishment of commercial relations between France and Italy, the political intercourse between the two countries is daily becoming more friendly, an agitation is on foot to unearth and set up the monument, not as an apotheosis of the Second Empire but as an expression of the everlasting gratitude of Italy for the help received from her Latin sister.

"Although we are still far from seeing this an accomplished fact, the question of the most appropriate site is being warmly discussed. The choice seems to be between Milan, where Napoleon III made his triumphal entry at the side of Victor Emmanuel, and the battlefield of Solferino, the scene of the greatest French victory of that period."

BRONZE STATUE OF GENERAL WOLFE, EXCHANGE COURT BUILDING, NEW YORK, N. Y. MR. J. MASSEY RHIND, SCULPTOR, NEW YORK, N. Y.

[Additional Illustrations in the International Edition.]

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NEW YORK CITY'S PARKS.—The old settlers of Manhattan would open their eyes in astonishment if they could see the marvellous changes that have been wrought since the good old days when Bowling Green satisfied their ideals of a park. The sight of Central Park alone on a May day, or, in fact, on any Saturday in the spring or summer, is one that cannot be witnessed in any other city in America, and it is not surprising, therefore, that the great pleasure-ground is an objective point for visitors from all over the world. Bowling Green was the beginning of the park system, which led to a desire for Battery

Park, that beautiful spot overlooking the finest harbor of the world, and to the numerous other breathing spaces which punctuate the stuffy brick-and-mortar extent of the city. The list of the city's parks, with their acreage, as taken from the records of the Park Commission, follows:—

	ACRES.
Abingdon Square.....	.202
Battery.....	21.190
Beach Street.....	.038
Bowling Green.....	.517
Bryant.....	4.775
Boston Road and 16th Street.....	.060
Boston Road and 19th Street.....	.160
Central.....	839.921
Canal Street.....	.318
Christopher Street.....	.139
City-hall.....	8.239
Cooper Union.....	.229
Cedar.....	17.470
Duane Street.....	.108
East River.....	12.546
Five Points.....	.114
Fourth Avenue.....	5.630
Fulton Avenue and 167th Street.....	.200
Fulton Avenue and 170th Street.....	.950
Fort Washington.....	12.000
Grand Street.....	.630
High Bridge.....	23.380
Jackson Square.....	.227
Jeannette.....	.870
Manhattan Square.....	19.051
Madison Square.....	6.840
Morningside.....	31.238
Mount Morris.....	20.174
Park Avenue, 34th to 40th Street.....	1.168
Riverside Park and Drive.....	177.800
Stuyvesant Square.....	4.229
Tompkins Square.....	10.508
Union Square.....	3.483
Washington Square.....	8.115
Corlear's Hook.....	8.300
St. John's.....	1.700
Mulberry Bend.....	.552
Rutgers.....	.450
Van Cortlandt.....	1,132.350
Bronx.....	661.600
Pelham Bay.....	1,756.000
Crotona.....	141.650
St. Mary's.....	28.700
Claremont.....	38.050

TRIANGULAR SPACES.

Boulevard and 63d Street.....	.344
Boulevard and 66th Street.....	.069
Manhattan Avenue and 114th Street.....	.018
Sixth Avenue, 32d and 35th Streets.....	.186
St. Nicholas Avenue and 117th Street.....	.072
St. Nicholas Avenue and 123d Street.....	.038
St. Nicholas Avenue and 137th Street.....	.240
Boulevard and 72d Street.....	.005

Total..... 6,003.353

— N. Y. Tribune.

EARLY ENGLISH CHARACTERISTICS.—Arches pointed, generally lancet, often richly moulded. Triforium arches and arcades open, with trefoiled heads. Piers slender, composed of a central circular shaft, surrounded by several smaller ones almost or quite detached, generally with horizontal bands. In small buildings the plain multangular and circular pier is used. Capitals concave in outline, moulded or carved with representations of conventional foliage, delicately executed and arranged vertically. The abacus always undercut. Detached shafts often of Purbeck marble. Base, a deep hollow between two rounds. Windows at first long, narrow and deeply splayed internally, the glass being within a few inches of the face of the wall; later in the style, less acute, divided by mullions, enriched with foliated circles in the head, often of three or more lights, the centre light being carried highest. Doorways often deeply recessed and enriched with slender shafts and elaborate mouldings. Shafts detached. Buttress projection about equal to breadth, with but one set-off, or without any. Buttresses at angles always in pairs. Fonts of various shapes, often ornamented with foliage in high relief or the tooth ornament, the stem surrounded by detached shafts. Mouldings bold and deeply undercut, consisting chiefly of pointed and filleted bowtells or rounds separated by deep hollows. Great depth of moulded surfaces generally arranged in rectangular planes. Hollows of irregular curves and sometimes filled with the tooth ornament or foliage. Roofs of high pitch, collar-beamed, timbers plain and open. Early in the style, finials plain bunches of leaves; towards the close, beautifully carved finials and crockets were introduced. Carved foliage of conventional character. Flat surfaces often richly diapered. Spires broached.—*The Architect*.

MOTIVE-POWER IN GERMANY.—An official table recently compiled to show the amount and methods of application of power in the German Empire in various industries, including commerce and traffic, horticulture and stock-breeding, gives the grand total as 3,421,194 horsepower, procured from the following different sources:—

Wind.....	18.364
Water.....	629,065
Steam.....	2,715,078
Gas.....	53,841
Petroleum.....	7,249
Benzine, gasoline, etc.....	3,501
Hot air.....	1,298
Compressed air.....	11,162

Electricity was employed in 2,245 establishments. In the mining and iron industry, about one-third of the total amount, or 994,060 horsepower, was used; in the manufacture of food stuffs 686,279; in the textile industry 514,986; in the machine industry 182,767, and in the chemical industry 83,164.—*Exchange*.

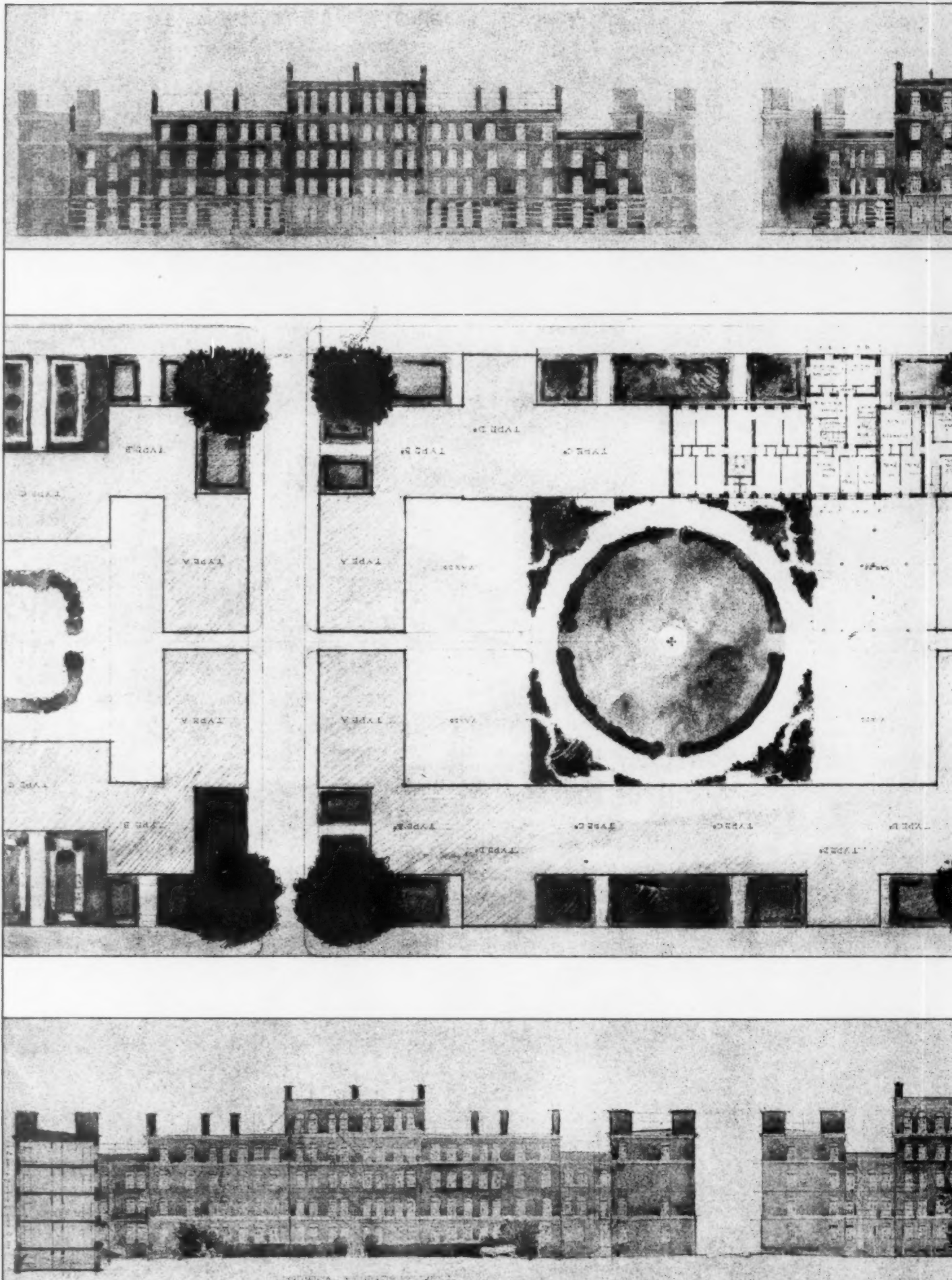
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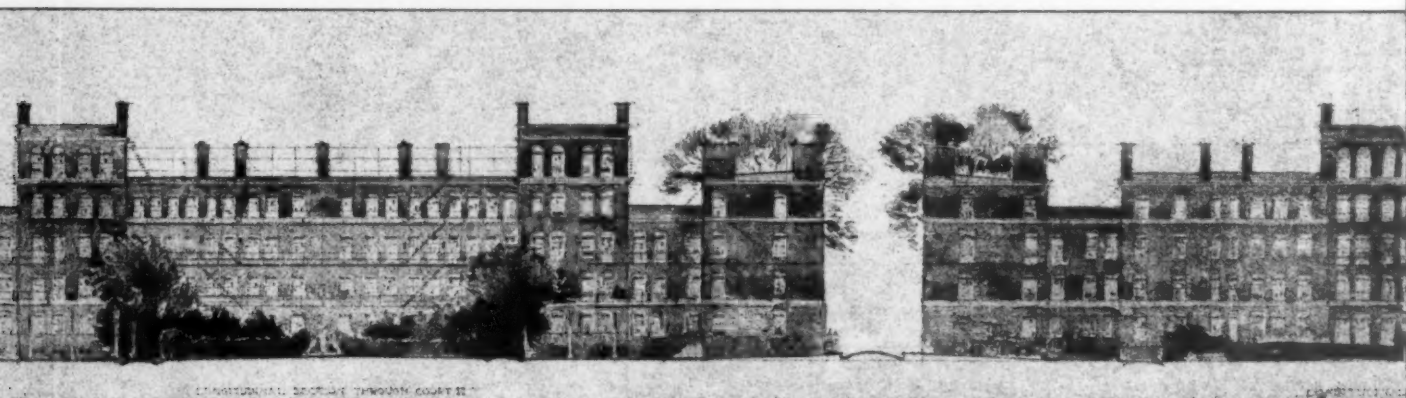
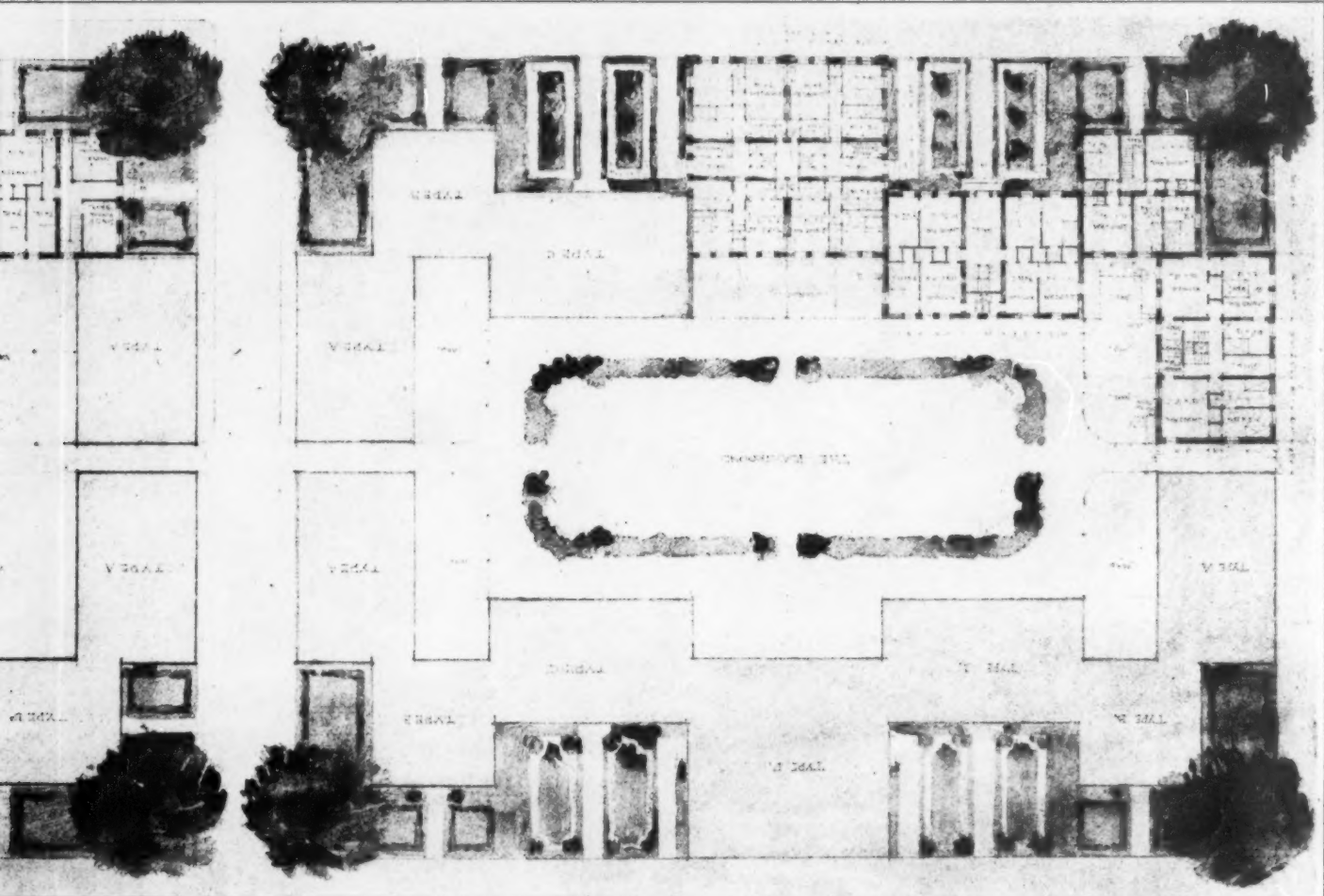
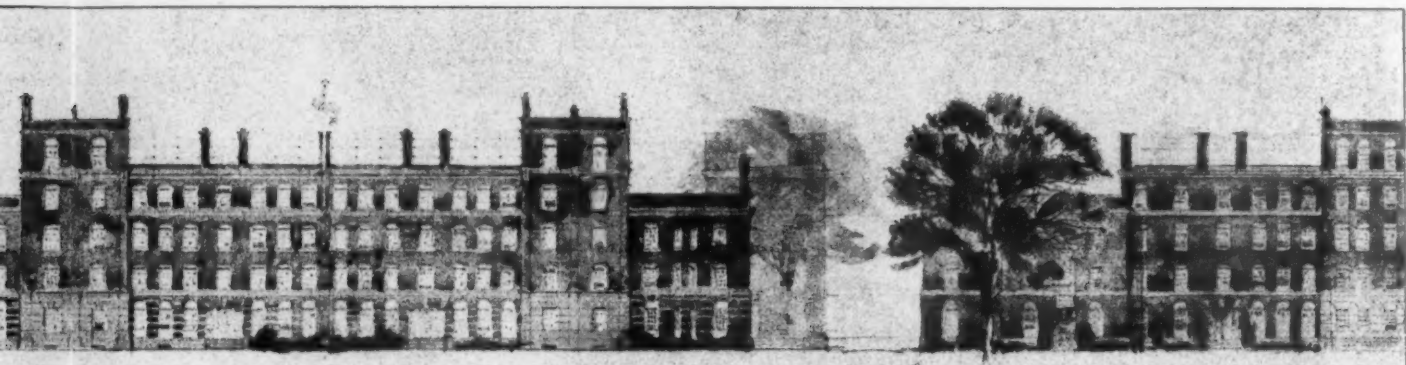
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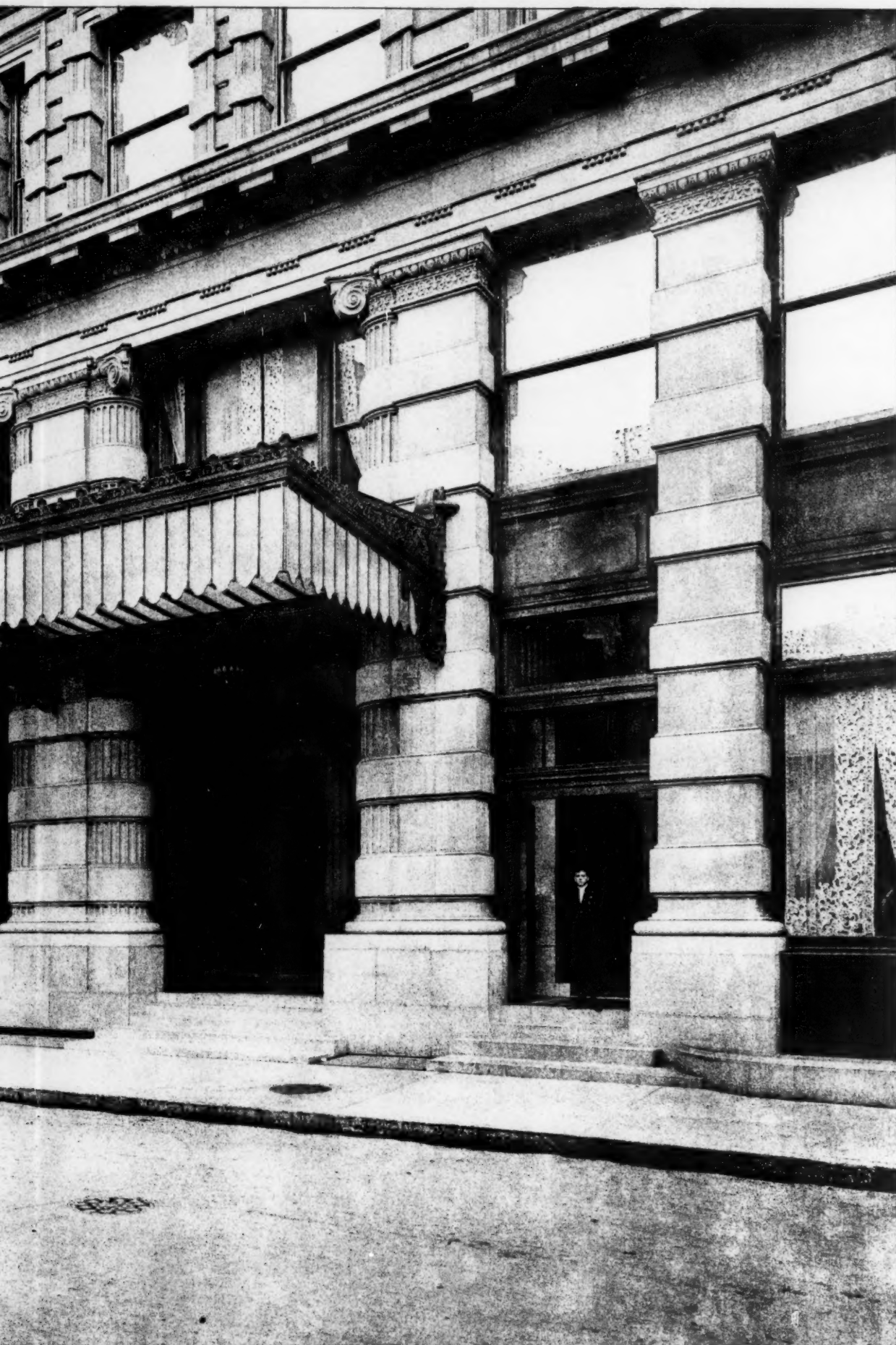
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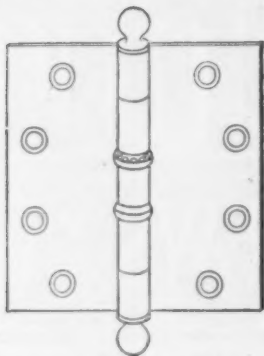
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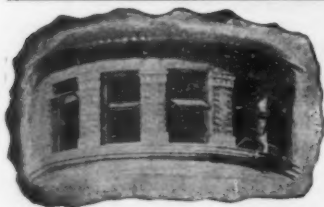
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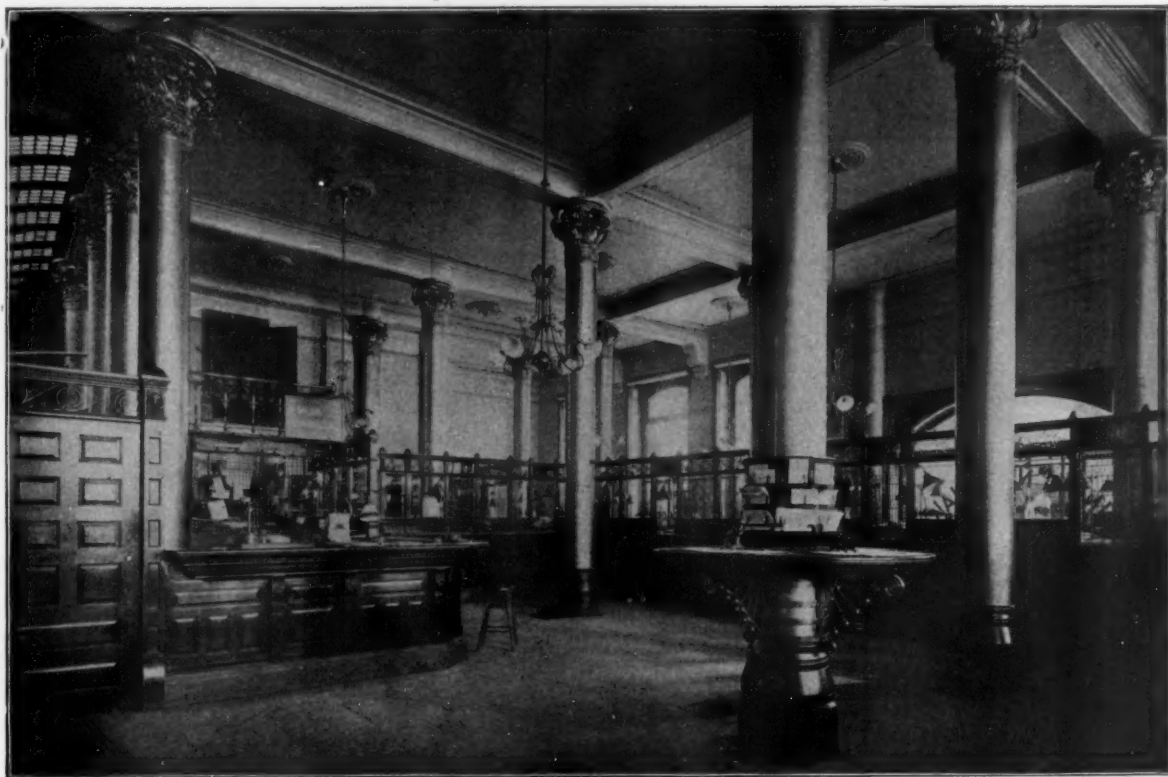
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Joliet.....	1 00 @			Richmond
Lemont.....				75 @ 1 50
Serpentine.....		10 50 per ton.		Perch 4 50 @ 5 50
Bluestone: (P sq. ft.)				1 in. th. 10 @ 25
Sidewalk.....	30 @ 5 00	40 @ 1 75	1 00 @ 1 25	37 @ 50
Planed.....	50 @ 6 00	6 @ 75	1 00 @ 1 25	
Marble: (P cu. ft.)				
Lee, Mass.....		1 75 @ 2 50	Not sold.	2 00 @ 2 50
Rutland, white and blue.....		3 00 @	3 50 @ 6 00	2 00 @ 3 00
Sutherland Falls.....	1 25 @ 1 75	2 00 @	3 50 @ 6 00	1 70 @ 3 00
Glens Falls, black.....			Not sold.	4 00 @ 4 50
Italian, blue-veined.....			4 40 @	2 50 @ 2 75
" Sienna.....			Not sold.	5 00 @
Tennessee, red.....			4 40 @	4 00 @ 6 00
" Knoxville.....			4 40 @	3 00 @ 4 00
Pennsylvania, blue.....			Not sold.	2 00 @ 3 00
Vermont, white.....			3 50 @ 6 00	2 25 @ 3 00
Slate: Roofing (P square)				
Green.....	5 00 @ 6 00	4 75 @ 5 25	3 75 @ 5 00	2 00 @ 3 00
" unfading.....	5 00 @ 6 00	5 50 @ 6 50	5 25 @ 6 00	4 25 @ 5 00
Purple.....	5 00 @ 6 00	5 50 @ 6 50	5 25 @ 6 00	4 50 @ 5 50
Red.....	10 00 @ 11 00	10 00 @ 11 00	10 50 @ 12 50	11 50 @ 13 00
Black, Lehigh.....	4 25 @ 4 75		4 50 @ 5 50	4 00 @ 4 35
" Chapman.....			5 30 @ 6 15	4 50 @ 5 00
Genuine Bangor.....	4 35 @ 5 50	4 75 @ 5 90	5 25 @ 6 50	4 35 @ 5 50
Unfading black.....	6 00 @ 8 50	6 00 @ 8 50	4 25 @ 8 95	6 50 @ 9 00
" ".....	5 50 @ 8 00	5 50 @ 8 00	5 50 @ 9 20	6 50 @ 9 00
Tiles, Am..... P M.			Salt-glazed tiles	
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LUMBER.—P M.				
Boards: (Ordinary dimensions.)				
Pine, 1st quality, clear.....	65 00 @ 75 00	55 00 @ 70 00	50 00 @ 60 00	47 50 @ 60 00
" 2d quality.....	55 00 @ 60 00	42 00 @ 50 00	42 00 @ 50 00	38 00 @ 48 50
" 3d quality.....	18 00 @ 22 00	30 00 @ 40 00	20 00 @ 28 00	27 50 @ 36 50
Spruce.....	18 00 @ 25 00	12 00 @ 18 00	Not sold.	15 00 @ 21 50
Hemlock.....	ea 13 @ 14	12 50 @ 14 00	10 00 @ 12 00	11 50 @ 13 75
Yellow pine.....	20 @ 40	19 00 @ 35 00	18 00 @ 25 00	14 00 @ 29 00
Cypress.....		26 00 @ 40 00	30 00 @ 35 00	30 00 @ 38 00
Clapboards:				
Pine.....		35 00 @ 55 00	25 00 @ 30 00	14 00 @ 25 00
Spruce.....		24 00 @ 35 00	Not sold.	Not sold.
Shingles:				
Pine.....			15 00 @ 25 00	25 00 @ 37 30
Spruce.....	14 00 @ 16 00	14 00 @ 16 00	Not sold.	15 00 @ 21 50
Hemlock.....	12 00 @ 16 00	12 00 @ 15 00	10 00 @ 15 00	14 00 @ 20 00
Yellow pine.....	18 00 @ 21 00	19 00 @ 25 00	16 00 @ 25 00	22 50 @ 30 00
Laths:				
Pine..... Round Wood		2 00 @ 2 50	1 90 @ 2 00	2 75 @ 3 00
Spruce..... Slab.....	2 25 @	1 80 @ 2 25	Not sold.	2 30 @ 2 35
Shingles:				
Pine, shaved..... P M.	5 00 @ 6 00		Not sold.	
Pine, sawed..... " "	4 00 @ 5 00		2 60 @ 2 75	
Spruce, sawed..... " "	1 50 @ 2 00	1 50 @ 1 75	Not sold.	
Redwood..... P 125.	1 40 @ 1 60	3 00 @ 3 75	4 80 @ 6 00	30" \$35 @ 40
Cedar split..... P M.			Not sold.	34" 8 @ 21
Cedar sawed..... P M.		2 00 @ 3 25	2 50 @ 2 90	30" 35 @ 14
Cypress, Split..... 7 x 24 " "	18 00 @ 30 00	5 00 @ 6 00		11 00 @ 14

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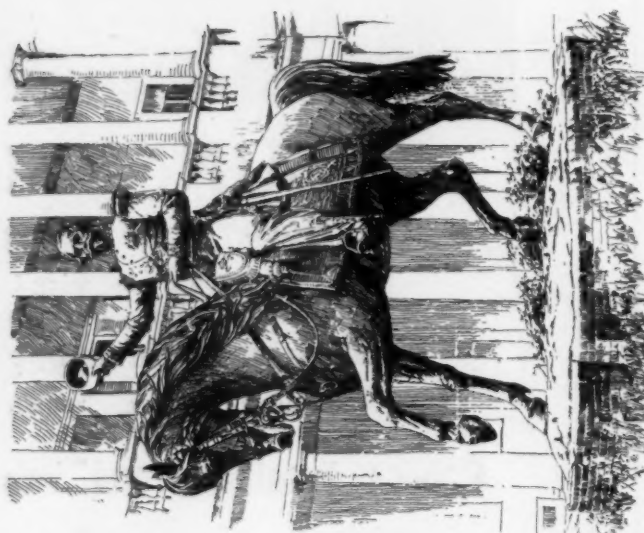
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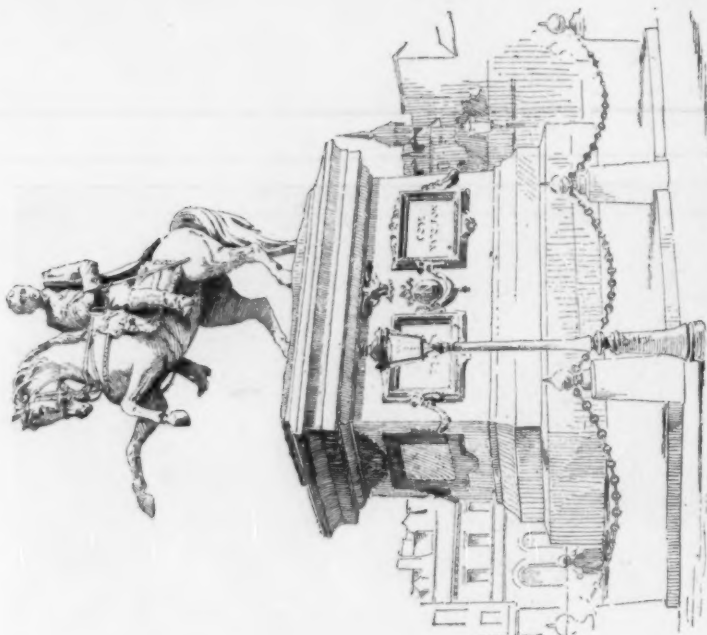
Marceau, bronze, Ecole Militaire, Paris, France.
Clesinger, Sculptor.



Napoleon I, Lyons, France.
Nieuwerkerke, Sculptor.



Napoleon III, bronze, Courtyard of the Palazzo della Società per le Belle Arti, Milan, Italy. Francesco Barzaghi, Sculptor.



Napoleon I, bronze, in front of Hôtel de Ville, Rouen, France.
Vital-Dubray, Sculptor. 1865.

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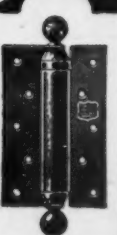
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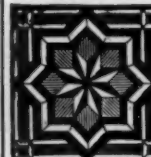
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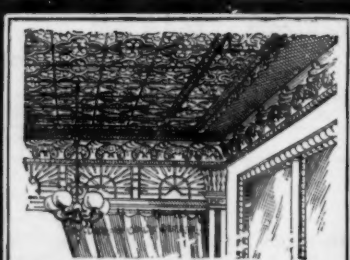
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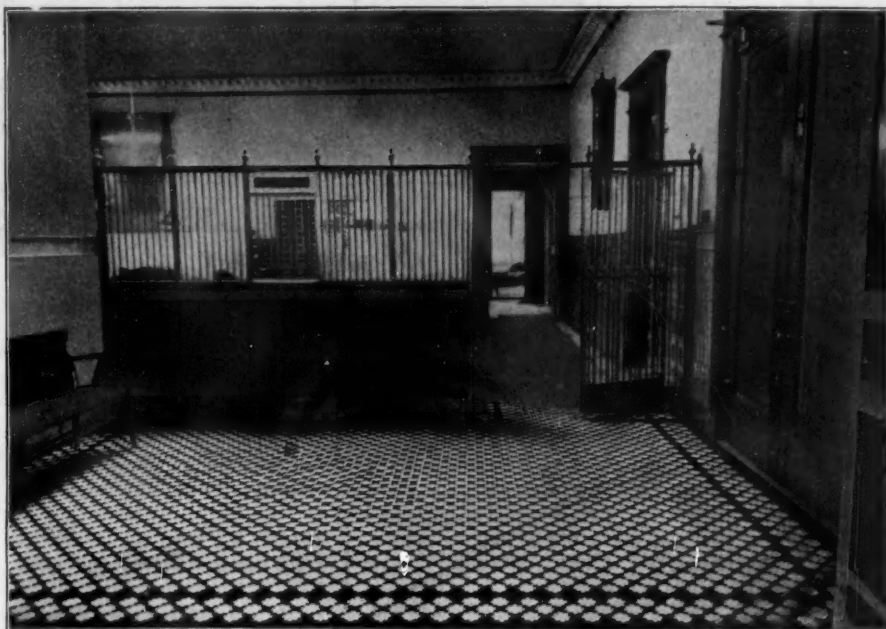
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[Printed specifications of any patents here mentioned together with full detail illustrations, may be obtained of the Commissioner of Patents, at Washington, for five cents.]

617,326. FIRE-ALARM.—George W. Fallin, Sherman Heights, Tenn.
617,330. SASH-LOCK.—William P. Gelabert, Sweet Springs, Mo.

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617,658. EAVES-ROUGH.—John H. Schwone and Eugene W. Lamber, Salamanca, N. Y.
617,662. AUTOMATIC THRESHOLD.—Charles R. Sowden, Basin, Mont.
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BUILDING INTELLIGENCE.

(Reported for The American Architect and Building News.)

[Although a large portion of the building intelligence is provided by their regular correspondents, the editors greatly desire to receive voluntary information, especially from the smaller and outlying towns.]

ADVANCE RUMORS.

- Aberdeen, S. D.**—The County Commissioners voted to erect a jail, 35' x 52', of Chaska brick, to cost complete \$12,500. It will contain three tiers of cells. E. W. Vannatter, architect.
- Albuquerque, N. M.**—It is reported that Frank P. McGuire, of Toledo, O., will erect an opera-house in this city, to cost \$25,000.
- Algona, Ia.**—Smith & Gusterson, Des Moines, are preparing plans for a high-school building. It will be constructed of brick and stone, and cost \$12,600.
- Appleton, Wis.**—H. Wildhagen, of this city, and A. W. Holbrook, Milwaukee, associate architects, have prepared plans for the City-hall and library building, two-story, 72' x 107', Bedford stone, brick, tin roof, steam heat; cost, \$25,000. The contract will be let soon.
- Austin, Tex.**—A new \$25,000 high-school building is proposed and the matter is under consideration.
- Beatrice, Neb.**—The erection of a Catholic orphanage and school are proposed. The buildings will cost about \$50,000.
- Boston, Mass.**—Plans have been prepared for a new chapel to be erected at Mt. Hope Cemetery this year. Local stone quarried on the grounds will be used in the construction.
- Bridgeton, N. J.**—Bonds to the amount of \$15,000 for a new school-house are to be issued.
- Brooklyn, N. Y.**—Hugo Smith, 836 Broadway, is preparing plans for a \$175,000 office and theatre building to be erected on Broadway and Flushing Ave., for Chas. Reinhard and others.
- Brownsville, Tenn.**—L. M. Weathers, of Memphis, has prepared plans for a \$17,000 church.
- Calumet, Mich.**—Plans by J. C. Shand, architect, have been adopted for the opera-house. It will have a seating capacity of 1,200 and will cost complete \$30,000. Bids will be asked in about 30 days.
- Canton, O.**—The Board of Education has decided to erect a new school-building to cost \$15,000. A. O. Slentz, Superintendent of School Buildings.
- Chicago, Ill.**—The plans of Architect Mundie, of the Board of Education, have been adopted for the North Division High School. It will cost about \$150,000.
The Chicago University has received gifts of land and funds aggregating \$400,000. Martin A. Eyer-son's gift of land is valued at \$34,000 and Marshall Field's at \$125,000. A gymnasium is to be built and the athletic grounds are to be equipped at a cost of over \$200,000, which sum has been donated by John D. Rockefeller for that purpose.
- Denison, Tex.**—The National Cotton Seed Co. will rebuild its mill which was recently damaged by fire to the extent of \$75,000.
- Dothen, Ala.**—A \$12,000 school-house is contemplated.
- Evanston, Ill.**—The Township Board of Education is stated to have decided to erect a high school; probable cost, \$50,000.
- Frankton, Ind.**—Reports state that a three-story business-block will be erected on the site of the recently burned Commercial Block by W. H. Quick, J. Sharp and A. Wise; cost, \$60,000.
- Independence, Idaho.**—C. W. Spoelmann, Rex-

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BUILDING INTELLIGENCE.

(Advance Rumors Continued.)

- burg, is preparing plans for a one-story \$10,000 stone church.
- Kansas City, Kan.**—A new high-school building, to cost \$65,000, will be erected in this city.
- Kenosha, Wis.**—The Y. M. C. A. proposes erecting a building in the spring. Plans have been drawn for a building to cost \$15,000.
- Louisville, Ky.**—The plans of Kenneth McDonald, 1401 Garvin Pl., have been accepted for a \$40,000 addition to the Court-house.
- Malden, Mass.**—Phineas W. Sprague will build three houses on Salem St.
A. W. Robinson is to build a fine residence on Summer St.
- McKees Rocks, Pa.**—Plans are being prepared for a \$50,000 edifice for the congregation of St. Francis de Sales' Church. C. F. Engle, Chmn. Bd. Trustees.
- Mincola, L. I., N. Y.**—The Supervisors of Nassau County are stated to have decided to bond the county to the extent of \$150,000, for the erection of county buildings.
- Minneapolis, Minn.**—Plans are being made for a \$50,000 residence for Frank R. Semple to be erected on Franklin Ave. It is to be a three-story brick and stone structure with all modern conveniences.
- Nashville, Tenn.**—Mr. Norman Kirkman contemplates erecting a six-story building at Union and Summer Sts., to be used by the various fraternal societies in this city; cost, \$60,000.
- New York, N. Y.**—The Taxpayers' Alliance of the Borough of the Bronx, composed of about thirty associations, has passed resolutions calling for a Federal Government Building in the borough.
Architect C. P. H. Gilbert has filed plans for the twelve-story fireproof office and storage warehouse building to be erected on the northeast corner of 125th St. and Park Ave. The size of the building will be 90' on the 125th St. front and 99' 11" on the Park Avenue front. The front elevations will be built of marble and a light-gray brick. The cost will be over \$200,000.
Report states that the People's Tabernacle is to erect a new church on 102d St., near Madison Ave., to cost about \$40,000.
- Princeton, Ind.**—It is rumored that Geo. P. Kidd, of this city, will erect a \$20,000 opera-house.
- Rockwell City, Ia.**—The Masonic Lodge contemplates erecting a building this year, to be about three stories high, 40' x 100'.
- San Francisco, Cal.**—Report states that the Board of Supervisors will shortly receive bids for a \$50,000 police-station.
- Sherman, Tex.**—A new high-school building, to cost about \$40,000, will be erected here.
- St. Joseph, Mo.**—The South St. Joseph Commercial Club will erect a new three-story building at King Hill and Missouri Aves. It will cost about \$20,000. Dr. E. H. Bullock, Clerk of Committee.
- St. Peter, Minn.**—The State Board of Corrections and Charities recommends that new buildings be erected for the County poorhouse.
- Utica, N. Y.**—Plans have been prepared by Leon H. Lempert, 31 Pearl St., Rochester, for the \$65,000 opera-house to be erected by Jesse L. Oberdorfer on the Blandina-Devorius.
- Vandergrift, Pa.**—J. E. Allison, Pittsburgh, is

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Editors of the American Architect.

BUILDING INTELLIGENCE.

(Advance Rumors Continued.)

- preparing plans for a Town-hall to cost about \$40,000.
- Washington, D. C.**—Fuller & Garrett have prepared plans for a new school building to be erected at 12th and D Sts.; cost, \$27,000.
George N. Saegmuller will build a dwelling at 116 Maryland Ave., to be four stories, 22' x 85', with pressed-brick and Indiana limestone front and flat tin roof; cost, \$10,000.
Architect Wm. J. Palmer has prepared plans for a dwelling to be erected near the American University. It will be two-and-one-half stories, of brick and stone construction, steam heat, laundry fixtures and other modern conveniences; cost, \$8,000.
- Wilmington, Ill.**—The Wilmington Tin-plate Co. have secured a tract of 80 acres and will erect a tin-plate plant, costing \$150,000.
- HOUSES.**
- Brooklyn, N. Y.**—Liberty Ave., cor. Vermont St., two-st'y fr. dwell., 25' x 60'; \$6,000; o. Gus Marquardt, Liberty Ave. & Wyona St.; a. C. Infanger, 2500 Atlantic Ave.
- STABLES.**
- Boston, Mass.**—Grosvenor Pl., nr. Hawthorne Ave., Ward 21, two-st'y bk. stable, 65' x 120', flat roof, stoves; \$8,000; o. Fred'k Ayer; a. & b., A. S. Drisko, 166 Devonshire St.
Harvard St., No. 224, Ward 20, two-st'y fr. stable, 22' x 31', pitch roof, stoves; \$800; o. & b., C. H. Lindsey, 25 Nightingale St., Dorchester.
Hawthorne Ave. and Grosvenor Pl., Ward 21, two-st'y fr. carriage-house, 26' x 62' x 120', pitch roof, stoves; \$6,000; o. Fred'k Ayer; b., A. S. Drisko, 166 Devonshire St.
- Brooklyn, N. Y.**—Thirteenth Ave., cor. 54th St., 11-st'y stable & carriage-house, 84' x 120', shingle roof; \$8,000; o. W. H. Reynolds, 40 Court St.; a. B. Driesler, 1432 Flatbush Ave.
- Elberon, N. J.**—2-st'y fr. stable, 30' x 63'; will contain living apartments and accommodations for eight horses; \$5,000; o. & a., Robert T. Lyons, 41 Union Sq., New York City.
- Milwaukee, Wis.**—Whitefish Bay Drive, two-st'y & base, stable, 75' x 110'; \$10,000; o. Pfister Estate; a., E. J. Esser; c., John Langenberg.

(Continued on page xli.)

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COMPETITIONS.

SOCIETY OF BEAUX-ARTS ARCHITECTS.
SEASON 1899-1900.

A SOLDIERS' MONUMENT FOR A SMALL TOWN, IN THE ROMAN DORIC ORDER.

[CLASS B, ORDER PROGRAMME NO. 2.]

COMPETITION NO. 34.

The Committee on Education proposes as a subject for competition, "A Soldiers' Monument for a Small Town, in the Roman Doric Order."

REQUIREMENTS.

The monument is to stand in a triangular green in the centre of the town. The green measures 200 feet on one side and 400 feet on the other two sides. There are streets on all sides. The form the monument is to take is left to the taste of the students, except that the Roman Doric Order must be used. Fountains may be introduced at the base.

The height of the monument must not exceed 46 feet and no part of the base can project beyond a circle of 25 feet radius.

This programme will be judged especially on the merits of the details, which need to be carefully drawn and rendered.

COMPETITIONS.

Sketches Required: Students intending to compete are required to send, on or before February 1, 1899, to Ernest Flagg, Chairman, 35 Wall St., New York, the following sketch on tracing-paper: Elevation drawn to scale of 1-3" to the foot.

Finished Drawings Required: Elevation of monument to the scale of 1-4" to the foot. Plan of monument and green at the scale of 1-8" to the foot. Details of entablature, capital and base at one-fourth full size. Drawings may be rendered in water-color or India-ink, at student's option.

Drawings to be mounted on strainers or compo board and forwarded, on or before April 15, 1899, to W. S. Budworth & Son, 424 West 52d St., New York City, expressage prepaid.

NOTICE.

Non-observance of the following conditions will render a student liable to be thrown hors de concours: —

First. — If the sketch is carelessly drawn.

Second. — If the limits set by the programme are exceeded.

Third. — If the rendered drawings differ essentially from the sketches.

Fourth. — If the drawings are not delivered to Messrs. Budworth & Son, or to the Express Co., or Carrier, on the date mentioned.

NOTE. — This competition is open to all students of architecture, the conditions of judgment and jury to be arranged by committee.

Students will be required to obtain four values in this class before being eligible to Class A. The values will count as follows: —

Mention for a sketch problem equals 1 value.

Second Mention for an order problem equals 1 value.

First Mention for an order problem equals 1 value.

Second Mention for a plan problem equals 1 value.

First Mention for a plan problem equals 2 values.

At least one of these values must be for an order problem.

(Signed) ERNEST FLAGG, Chairman,

JOHN M. CARRERE,

CHAS. MORRIS,

JNO. G. HOWARD, ex officio,

EDWARD L. TILTON, ex officio,

Committee on Education.

NEW YORK, January 15, 1899.

COMPETITIONS.

Date of following competition: Programme will be issued April 15, 1899.

Drawings will be rendered September 15, 1899.

A SUBURBAN HOUSE WITH ITS DEPENDENCIES.

[CLASS A, PROGRAMME NO. 15.]

COMPETITION NO. 35.

The Committee on Education proposes as a subject for competition, "A Suburban House with its Dependencies," including stable, gardener's house and water-tower, also the laying-out of the grounds.

The buildings are to be of local stone and shingles, the trimmings and other architectural details are to be in wood.

House: On the ground-floor the main features are to be an entrance-hall, living-room or library, billiard-room, dining-room with its pantry, a conservatory and a swimming or plunge bath, the tank of the latter to measure 15' x 50', and the room to be covered by a glass roof. The greatest dimension of the house must not exceed 200 feet.

Ten bedrooms are desired for the family, and each bedroom on the second floor is to have its own bathroom.

The kitchen may be in the basement or on the ground-floor.

There must be a large piazza and a porte-cochère or a marquise.

Gardener's House: This is to answer the purpose of a gate-lodge. There must be two bedrooms, a bathroom, sitting-room and kitchen.

Stable: The stable is to have accommodations for ten horses, each horse to have a box-stall. There must be a paddock containing at least 5,000 square feet.

The Grounds: The plot is in the form of a rectangular parallelogram and measures 400' on the road by 1,000' in depth. From the road the land rises gradually for 250' until it reaches an elevation of 15' above the road, it is then nearly level for a farther distance of 200 feet. This plateau is finely wooded, and there is a fine view from it in the direction of the road. From the grove the land falls gently for a distance of about 350' to a brook running parallel to the road, the general level of which is about 10' below the level of the road. From the brook the ground again rises gently to the rear line. The land in front of the grove is to be used as a lawn, and the back of

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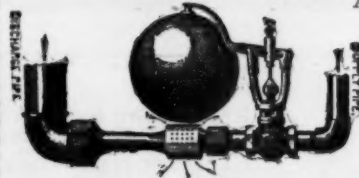
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COMPETITIONS.

the grove is to be a formal vegetable and flower garden. An artificial geometrical ice-pond is to be made on the line of the brook. There may be terraces about the house.

Sketches Required: Students intending to compete are required to send, on or before February 1, 1899, to Ernest Flagg, Chairman, 35 Wall St., New York, the four following sketches relating to the house, on tracing-paper: Plans of ground-floor and first floor, and a section at a scale of 1-32" to the foot, and an elevation at a scale of 1-16" to the foot.

Finished Drawings Required: Plans of ground and first floors and section of house, all at a scale of 1-16" to the foot.

An elevation at a scale of 1-8" to the foot. (The elevation may show, besides the house, any or all the buildings mentioned above, also one or more human figures.)

A plan of the grounds and buildings at a scale of 1-32" to the foot. This plan is to show the arrangement of the ground-floors of stable and gardener's house.

These drawings may be rendered in water-color or India-ink.

Drawings to be mounted on strainers or compo board and forwarded, on or before April 15, 1899, to W. S. Budworth & Son, 424 West 52d St., New York City, expressage prepaid.

NOTICE.

Non-observance of the following conditions will render a student liable to be thrown *hors de concours*:

- First.—If the sketch is carelessly drawn.
- Second.—If the limits set by the programme are exceeded.
- Third.—If the rendered drawings differ essentially from the sketches.
- Fourth.—If the drawings are not delivered to Messrs. Budworth & Son, or to the Express Co., or Carrier, on the date mentioned.

NOTE.—This competition is restricted to students having already obtained a mention in Class A, or having already obtained four values in Class B.

New York, January 15, 1899.

Date of following competition: Programme will be issued April 15, 1899.

Drawings will be rendered September 15, 1899.

A BATH-HOUSE AND ADDITIONAL LODGINGS FOR A COUNTRY CLUB.

[CLASS B, PLAN PROGRAMME NO. 7.]

COMPETITION NO. 35.

The Committee on Education proposes as a subject for competition, "A Bath-house and Additional Lodgings for a Country Club."

This little building is supposed to be situated at about one hundred yards from the club-house, in a grove, and on the line of a small stream or brook which it is proposed to make flow through the plunge. It is to be built of local stone, laid up as rubble, and shingles. The trim and other architectural details are to be of wood.

The requirements are a plunge-bath or tank containing not less than 1,000 square feet of area, with a platform around it not less than three feet wide, the tank-room to be covered by a glass roof. A vestibule, a lounging-room of not less than 600 feet area, 12 dressing-rooms for males and a like number for females (these to be about 4' square, arranged in two groups, each group to be connected with a toilet-room and to be provided with a shower, and to have direct connection with the tank-room). A room opening from the bath to be used as a small gymnasium, which should contain at least 1,000 square feet of floor area. There may be a sun parlor covered with glass like the pool, where bathers can sit in the sun after a bath, and there may also be a second story over a part of the building to be used as bedrooms by men who take their meals at the club.

There must be a court-yard in front of the main entrance, enclosed on two or three sides by twelve small attached dwellings for young married couples who take their meals at the club. Each dwelling is to consist of an entrance-hall with a stairway, a living-room downstairs, and two bedrooms and a bathroom upstairs. There must be a suitable entrance to the court-yard for carriages on the side opposite the main entrance to the bath-house. The greatest dimensions of the group must not exceed 200 feet.

Sketches Required: Students intending to compete are required to send, on or before February 1, 1899,

COMPETITIONS.

to Ernest Flagg, Chairman, 35 Wall St., New York, the three following sketches on tracing-paper: First-floor plan, front elevation and section, all to a scale of 1-32" to a foot.

Finished Drawings Required: First and second floor plans and section at the scale of 1-16" to the foot; front elevation at the scale of 1-8" to the foot. A single human figure to be drawn on the elevation.

These drawings may be rendered in water-color or India-ink.

Drawings to be mounted on strainers or compo board and forwarded, on or before April 15, 1899, to W. S. Budworth & Son, 424 West 52d St., New York City, expressage prepaid.

NOTICE.

Non observance of the following conditions will render a student liable to be thrown *hors de concours*:

- First.—If the sketch is carelessly drawn.
- Second.—If the limits set by the programme are exceeded.
- Third.—If the rendered drawings differ essentially from the sketches.
- Fourth.—If the drawings are not delivered to Messrs. Budworth & Son, or to the Express Co., or Carrier, on the date mentioned.

NOTE.—This competition is open to all students of architecture, the conditions of judgment and jury to be arranged by committee.

Students will be required to obtain four values in this class before being eligible to Class A. The values will count as follows:—

- Second Mention for an order problem equals 1 value.
- First Mention for an order problem equals 1½ value.
- Second Mention for a plan problem equals 1 value.
- First Mention for a plan problem equals 2 values.
- Mention for a sketch problem equals ½ value.

At least one of these values must be for an order problem.

New York, January 15, 1899.

Date of following competition: Programme will be issued April 15, 1899.

Drawings will be rendered September 15, 1899.

AN ENTRANCE TO A NAVY YARD.

[CLASS B, SKETCH PROGRAMME, NO. 4.]

COMPETITION NO. 33.

The Committee on Education proposes as a subject for competition, "An Entrance to a Navy Yard."

The entrance is situated at the foot of a city street 60 feet wide; another street at right angles to the first, and of the same width, runs along the outside of the wall of the yard. The entrance should be dignified and monumental in appearance and in keeping with the purpose for which it is to be used. It may be recessed somewhat from the street so as to form a small place in front of it. Provision must be made for a guard-house and an office. These may be in one or two small buildings. The guard-house must have a room containing about 400 square feet, a small office for the officer of the guard, and a toilet-room. The office is to consist of a small public waiting-room, two small private rooms and a toilet-room. There must be two sentry-boxes. The structure is to be of stone.

No restrictions are made regarding the dimensions, style of architecture, or method of rendering the sketch, but the drawing is limited to a single sheet of paper about 14" x 20".

Scale: Plan and section must be shown at 1-16" scale. Elevation or perspective at 1-8" scale.

Each competitor is required to design and render the problem unaided, and to devote but 18 hours of actual work upon it.

The finished sketch must be sent flat, unmounted, on or before April 15, 1899, to Ernest Flagg, Chairman, 35 Wall St., New York.

These drawings will be exhibited and judged at the next regular exhibition of the Society.

A mention awarded for this sketch will count as a half-value.

NOTE.—This competition is open to all students of architecture, the conditions of judgment and jury to be arranged by Committee.

Students will be required to obtain four values in Class B before being eligible to Class A. The values will count as follows:—

- Mention for a sketch problem equals ½ value.
- Second Mention for an order problem equals 1 value.
- First Mention for an order problem equals 1½ value.
- Second Mention for a plan problem equals 1 value.

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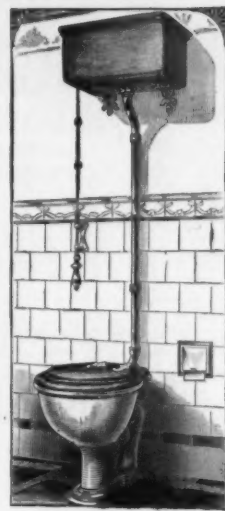
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COMPETITIONS.

First Mention for a plan problem equals 2 values. At least one of these values must be for an order problem.

New York, January 15, 1899.

Date of following competition: Sketch Programme will be issued April 15, 1899.

Sketch will be rendered April 23, 1899.

PROPOSALS.

Treasury Department, Office Supervising Architect, Washington, D. C., January 12, 1899. Sealed proposals will be received at this office until 2 o'clock P. M. on the 2d day of February, 1899, and then opened, for the new isolation ward and disinfecting annex at the United States Marine Hospital, St. Louis, Mo., in accordance with the drawings and specification, copies of which may be had at this office or the office of the Custodian at St. Louis, Mo. JAMES KNOX TAYLOR, Supervising Architect. 1205

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

SECTION 16. A Member should so conduct his practice as to forward the cause of professional education and render all possible help to juniors, draughtsmen and students.

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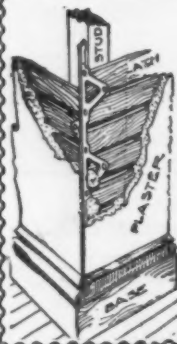
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23 S. 17th St. Philadelphia.

NEW ENGLAND MATERIAL-MEN & CONTRACTORS.

BLUE PRINTING.

CHAS. E. MOSS,
Rapid Printing Papers.
14 Broad Street, Boston.
Telephone: Boston, 2731-2.

GRAVITY CONCRETE MIXERS.

CONTRACTORS PLANT CO.,
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PERSPECTIVE DRAWINGS.

AMERICAN ARCHITECT AND
BUILDING NEWS CO.
211 Tremont St.
Boston, Mass.

SASH CORD.

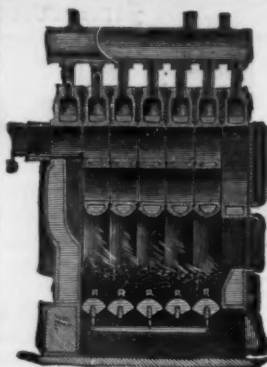
SILVER LAKE CO.
78 Chauncy St.
Boston, Mass.

WATERPROOF CELLARS.

FRANK B. GILBRETH,
160 Fifth Ave.,
85 Water St., Boston, New York.

SEAM-FACE GRANITE.

GILBRETH SEAM-FACE GRANITE
CO.,
160 Fifth Ave.,
85 Water St., Boston, New York.



Mercer Boiler.

THE H. B. SMITH CO.

MANUFACTURERS.

133-135 ...
Centre Street,
New York.

Steam and Water

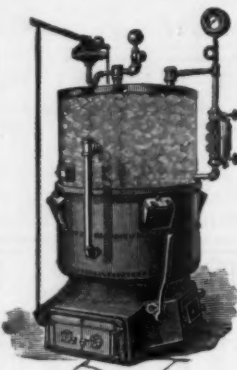
Heating Apparatus,

Factory: Westfield, Mass.

ESTABLISHED 1853.

Send for Catalogue.

NEW YORK, PROVIDENCE
PHILADELPHIA.



THE "Gorton Side-Feed" Boilers

Will burn Hard or Soft Coal.

YOU WANT THE BEST. WE HAVE IT.

Send for Catalogue and investigate for
yourself.

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Old Colony Building,
CHICAGO.

201 Congress St.,
BOSTON.

96 Liberty Street,
NEW YORK.

DRAWING-OFFICE.

Drawings rendered in line or color with
reasonable despatch.

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BUILDING MATERIALS.

Reported for the American Architect and Building News.

New York.

Boston.

Chicago.

Philadelphia.

BRICK. — P. M.

Common: Cargo afloat.

Pale..... 3 75 @ 4 00
Jersey..... 5 50 @ 6 00
Long Island..... @ 6 50
Up River..... 6 00 @ 6 50
Haverstraw Bay Rd..... 5 50 @ 6 00
1st..... @ 7 00
Hollow..... @
Fronts:..... @ 12 00
Croton, Brown..... @ 12 00
" dark..... @ 12 00
" red..... @ 12 00
Chicago pressed.....
" Moulded.....
Baltimore..... 37 00 @ 41 00
Philadelphia..... 19 00 @ 21 00
Trenton..... 17 50 @ 18 50
Milwaukee.....
Moulded:..... @ 29 00
Buff..... @ 27 00
Moulded Red & Buff..... 45 00 @ 70 00
Enamelled: Imp..... 85 00 @ 100 00
Enamelled (edge)..... 90 00 @ 110 00
Enamelled (edge and end).....

CEMENT, LIME, etc. (P. M.)

Rosendale Cement..... 65 @ 75
Louisville..... Not sold.
Utica, Akron, Buffalo, Milw'ke..... 2 25 @ 2 50
Portland, Eng. (Gibbs)..... 2 50 @ 3 00
" (K. B. & S.)..... 2 25 @ 2 50
" (Black Cross)..... 2 50 @ 2 50
" (Burnham)..... 2 65 @ 3 00
" (White's)..... 3 00 @ 3 75
" French (Lafarge)..... 2 90 @ 3 25
" Ger. (Alsen)..... 2 25 @ 2 40
" (Fewer)..... 2 50 @ 2 90
" (Vorwöhler)..... @
" (Lagerdofer)..... 2 75 @ 3 00
" (Dyckerhoff)..... 2 50 @ 3 00
" (Hanover)..... 2 35 @ 2 45
" Stettin, (Anchor)..... 2 75 @ 3 00
Roman..... 4 25 @ 4 75
Keene's coarse..... @ 6 50
superfine.....

Lime:

Lime of Tell..... @ 4 00
Hydraulic Lime..... @ 1 45
Chicago Lime in bulk..... (St. John)
Wisconsin Lime..... 70 @ 75
Rockland and Rockport, (Com.)..... 80 @ 83
Rockland, finish..... @
Kelley Island Lime, finish..... @ 65
State, Com. cargo rates..... @ 75
Plaster-of-Paris (calcined)..... 1 30 @ 1 40
" (casting)..... @ 1 00
Hair (cattle) & bush..... 14 @ 16
" (Goat)..... 18 @ 21
Sand, & load..... 1 00 @ 1 25

(Wholesale Prices.)

(Prices to Builders and Contractors.)

Domestic Com. 3 50 @ 4 00
Enam. Imp. Bk. 8 50 @ 9 50
Domestic Face 18 00 @ 25 00
Philadelphia 35 00 @ 40 00
Select Red Sand 10 00 @ 11 00
Phila. mould 50 00 @ 80 00
Collinsville, do.....
Enamelled B'k. 22 00
Imported 22 00
Enam. (edge) 105 00 @ 120 00
" (edge & end) 120 00 @ 135 00
Domestic 100 00 @ 100 00
Enam. (edge) 90 00 @ 100 00
" (edge & end) 110 00 @ 115 00

Building 4 50
sewer add 1 00
hollow, add 1 25
Enam. Imp. Bk. 125 00 @ 145 00
Enam. Domes. 70 00 @ 85 00
Select Red Sand 10 00 @ 11 00
Mold... 10 00
St. Louis Hyd'ic 27 00
Press... 27 00
Collinsville, do.....
Findlay, do 22 00
Chicago, do 22 00
assorted shades 16 00 @ 20 00
Chicago, do 24 00
Brown, 24 00
Chicago, do Red 24 00
Roman, 24 00
Chicago, do Br'n 27 00
Roman, 27 00
Bushnell Buff 25 00

In Yard.
Sq. Hard 800 @ 9 00
" @ 7 00
Salmon @ 5 50
Sq. " @ 5 50
Light Stretchers 9 00 @ 11 00
Medium " @ 12 00
Red " @ 12 00
Dark " @ 12 00
Pressed " @ 17 00
Paving 11 00 @ 13 00
Second " @ 12 00
Third " @ 10 00

Dom. { @ 65
@ 85

Not sold. 1 30 @ 1 50
S. H. Fe'1 20 @ 1 50

2 50 @ 2 60 2 85 @ 3 15
2 50 @ 2 60 2 30 @ 2 60
2 50 @ 2 60 2 85 @ 3 15
2 50 @ 2 60 2 75 @ 2 85
Belg'n 2 10 @ 2 40
Hemmoor 2 50 @ 2 75
2 75 @ 2 85
Joeseon 2 60 @ 2 75
3 00 @ 3 25
2 75 @ 2 85
B. Egl. 2 50 @ 2 75
3 00 @ 3 50
6 50 @ 7 00
8 00 @ 9 00

White Lime & bush 25 @ 30
White Mash 1 25 @ 1 50
1 00 @ 1 00

Not sold. 1 50 @ 1 75
Not sold. 1 75 @ 1 90
12 @ 20
20 @ 25
1 00 @ 1 25

Not sold. 1 50 @ 1 75
Not sold. 1 75 @ 1 90
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1 00 @ 1 25

Not sold. 1 50 @ 1 75
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