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THE AMERICAN ARCHITECT AND BUILDING NEWS.

VOL. LXII.

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DECEMBER 3, 1898.



SUMMARY:—

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THE old question, of procuring sculpture for a public building without advertising for bids, has come up in New York, in connection with the addition to the Metropolitan Museum of Fine-Arts. The Park Board, which has the building in its charge, has procured, it seems, designs for four caryatides, and some medallions, which it wishes to have carried out by a certain sculptor, presumably the author of the designs, at a cost of twelve thousand dollars. The Board applied to the Aldermen for authority to conclude a contract for the execution of the work, but authority was refused, on the ground that the contract for the sculpture must only be awarded after advertising for bids in the usual manner. Of course, the Aldermen are as anxious as the Park Board to have the work done in a creditable manner, and its decision must be taken as an expression of its duty under a law which often before has interfered with the artistic welfare of the community. In the present instance, the absurdity of the law is so conspicuously displayed, in relation to a building in which all New Yorkers take great pride, that the result may possibly be a modification, allowing public authorities, under such guidance as is already provided for them, to contract directly for artistic work with the artists themselves, and if this result should be brought about, the community need not regret a little delay in the completion of the sculpture of the new building.

THE Illinois Steel Company, one of the largest metallurgical establishments in the world, has decided to attempt the manufacture of cement from slag, enormous masses of which have accumulated around its works, and a suitable plant is to be erected at Cheltenham, on the shore of Lake Michigan. The Company has plenty of money at its command, and it is reasonable to suppose that the new manufacture will be carried on in the most scientific and economical way. After the manufacture of cement is begun, the next step must be the development of a market for it, and this step, we imagine, will not be easily or quickly taken; but a good and cheap cement will find its way by degrees into use, and the ingenuity of the managers will find opportunity for exercise in devising new forms in which cement and concrete can be used. One of these, which should be suited to the needs of the Mississippi Valley, might be that of concrete bricks, to be used for foundations. Such bricks might be made practically impervious to water, and would be far superior, for cellar walls, or foundations of any kind, to the clay bricks, which, in the absence of local building-stones, are generally used in that region.

MR. JOSEPH JOINER, one of the pioneers in the manufacture of terra-cotta in America, died recently in Indianapolis. His death, at an age when he might have counted on many years more of usefulness, reminds us of the rapidity with which the terra-cotta industry has been developed here. He was the nephew, and adopted son, of the late John M. Blashfield, and associated with him in his establishment at Stamford, England. The building of the South Kensington Museum, in which, under General Scott, a large amount of ornamental terra-cotta was used, drew the attention of the public to a material which had been almost forgotten. Soon afterwards, Mr. John H. Sturgis employed the new material, for the first time in this country on an extensive scale, in the Boston Museum of Fine-Arts, the terra-cotta of which was made by Blashfield, in England, and set in place under the direction of Mr. James Taylor, who was sent out from England for the purpose. Mr. Taylor remained in this country, and was instrumental in the early management of several great terra-cotta establishments; and, a few years later, his friend Joiner was also called from Stamford as superintendent of the Perth Amboy Terra-cotta Works. From Perth Amboy he went to Indianapolis, remaining there, in charge of the Brightwood Terra-cotta Works, until his death.

WONDERS, apparently, will never cease in Egyptian exploration. The last surprise, following closely after the discovery of a great number of portraits, so brilliant and lifelike as to bring the personality of the Egyptians of the Ptolemaic period vividly before us, seems to have been the announcement that their ancestors, the rich and refined subjects of the Pharaohs, openly practised cannibalism; and a still more recent discovery carries us back, according to Professor Sayce, to the first dynasty, the mythical age, as it has generally been regarded, of Egypt. The earliest circumstance referred to in the legends relating to the history of Egypt is the reign of King Menes and his successors at Memphis. The kings of Memphis were the pyramid-builders, but the most ancient of the pyramid-building kings lived, probably, a thousand years later than Menes, and the name of the latter has been supposed to be rather a symbol than a reality, representing a period anterior to history, something as the names of Pyrrha and Deucalion are regarded as signifying the people of some remote and happy age. Very lately, however, according to a letter from Professor Sayce to the New York *Examiner*, a tomb was discovered on the west bank of the Nile, at the edge of the desert. The tomb was built, according to the letter, of "crude bricks." One would naturally suppose this expression to be a translation of the familiar "*briques crues*," or bricks of unbaked clay, but it is incredible that such a material should have endured for seven thousand years, as the letter would have us believe, and it seems probable that, unless the whole story is a fabrication, the bricks must have been baked, after a fashion which, though unusual in Egypt, was very familiar in Assyria, from which archaeologists are inclined to believe that Egyptian civilization was derived. Whatever the bricks may have been, it appears that the tomb was rectangular, and divided into several chambers; and in the largest of these was found a half-burned body, together with various objects, of ivory, crystal and lava, some of them inscribed with the name of the deceased. In most cases this was the title bestowed on him after his death, but a plate of ivory had, together with this, the personal name, which proved to be "Men," or Menes, and a description of him as "King of Upper and Lower Egypt." It seems that similar tombs have been found elsewhere, containing the bodies of other kings of the earliest dynasty, and with the help of the hieroglyphic inscriptions found with them, the history of Egypt before the building of the pyramids is likely to be tolerably well established.

M. PLANAT, in *La Construction Moderne*, makes some interesting observations on the changes of style in architecture, and, particularly, in decoration and furniture. Every architect must have noticed how rapidly fashions succeed each other, in respect to these last matters, at least. Even a tolerably young man can remember the "Eastlake" movement, the abandonment of "shaped" furniture for combinations of boards and bits of joist; the substitution of stopped chamfers for mouldings, and the appearance of tenons and pins on

the outside of chairs and sofas. This was accompanied by a revolution in the ethics of furnishing which, as it was supposed, put away veneering and glue forever; and the person who owned a dining-table weighing a quarter of a ton, and supported by timbers with the corners simply bevelled, thought that his soul was in a much more satisfactory condition than that of his neighbors. Notwithstanding the spiritual advantages of stopped chamfers and visible tenons, the regenerate style of woodwork lost its popularity with astonishing rapidity, and the seeker after moral furniture must now look for his specimens mainly in the kindling-wood pile. Next followed the craze for "Chippendale" and other furniture in the style of the last century, which also died away in a few years, to be succeeded by the "Empire" style. This last had a capacity for development, and an appropriateness to modern needs, which seemed to promise a long and brilliant career, but it went out of fashion as quickly as it came in, and its place has now been taken by the so-called "Dutch" marquetry. That this will also be superseded by something else is certain, but no one can pretend to guess what the next style will be, although it is, at least, not likely to be derived from Oriental sources.

THIS curious succession of fancies in furniture, which has had its parallel in architectural fashions, leads M. Planat to remark that the rapidity with which fashions in such things change is probably due to the increased use of machinery, and the invention of labor-saving processes, by which almost any sort of work can be approximately imitated at small cost. In consequence of this industrial development, the rich amateur who sets the fashion by purchasing, or having made for him, a set of furniture, let us say, of buhl work, glowing with delicate inlays of gilded brass on a ground of tortoiseshell, soon sees in the windows of the cheap furniture-stores glaring imitations of his treasures, covered with coarse, jigsawed brass ornaments on a ground of celluloid, or of horn, stained with nitrate of silver, and marked at prices representing a small fraction of the cost of his own furniture. Some of his acquaintances fit up their rooms with articles of this kind, which, as they assure him, are indistinguishable from his genuine pieces, and, before long, disgusted with what he has been innocently instrumental in bringing about, he and others like him take up another fancy, with a similar result. In this way, the community is successively surfeited with coarsely cast Empire ormolu, Colonial "mahogany" made out of stained white-wood, and Brobdingnagian marquetry in glaring colors, and will, apparently, be sickened in the same way of every fashion that it takes up. M. Planat thinks that there is no remedy for this condition of things, or for the similar situation in architectural matters; but there is, at least, a possibility that, when all the known styles have been exhausted, a refuge may be found in a return to nature, through the medium of sculpture and painting. No matter how much machinery may be perfected, it can never produce satisfactory carving or painting; and no builder would ever be able to make a cheap imitation of the Parthenon, or the Monument of Lycrates, which would impose on his least-cultivated customers. Of course, by a return to nature we do not mean the adornment of our architecture with cast-iron rose-bushes, or the imitation of tree-trunks in our columns, or even the abandonment of the architectural forms which twenty centuries have perfected; but it may be well to remember occasionally that the best architecture was invented—not copied—by the men who understood and represented the human form better than any others that ever lived, and that every great architectural period has been one of remarkable success in the representation of nature in sculpture and painting, while the greatest architects have generally been skilled in one or both of the representative arts.

SOME time ago, the electric arc was successfully employed as a tool, to be carried in the hand, and used for applying intense heat at a given point. It was said at the time that the experimenter could "enamel" a brick wall by passing the arc over it, melting the bricks wherever it passed. A more practical application of the idea was afterwards made, by utilizing the arc to melt through the walls of a steel vault in one of the Government buildings in Washington, when a hole large enough to admit a man was made in twelve minutes; and, since then, the safe manufacturers have been anxiously experimenting with devices to prevent burglars from employing this

means to get hold of other people's property. Some of the new safes and safe-doors are believed to be secure, even against the electric arc, but the old-fashioned ones are not, and, in Cincinnati, it is proposed to use it, not merely to perforate but to cut to pieces a large vault in the Lafayette Bank building. The vault was constructed about forty years ago, of spring steel. It would be impervious to ordinary drills, and, in place of taking it slowly apart from the inside, the bank officers have arranged with the Stacy Manufacturing Company to cut it into sections of convenient size for handling by electric currents, applied by means of carbons held in the hands of workmen.

A NEW trick, as it can only be called, in competitions, is due to the ingenuity of the corporation of the English town of Bradford. This interesting body proposes to build a new fire-engine house, at a cost of seventy-five thousand dollars, and invites designs in competition, offering three premiums, of one hundred and fifty, two hundred, and five hundred dollars respectively, the largest of which is, however, to be merged in the architect's commission. Architects must send one guinea, or a little over five dollars, for the detailed programme of the competition, but their guinea will be returned to them on receipt of a *bona fide* design. By expending one guinea, in accordance with this proposition, the architect who wishes to compete receives a document in which he is informed that the "successful" competitor, if he is employed to execute his design, will be paid five per cent on the cost of the building, but will be required to prepare, gratuitously, bills of quantities, and have them printed at his own expense. The *British Architect* sarcastically observes that the corporation might as well have stipulated that the successful competitor should furnish the materials for the building, and it is certain that no architect capable of preparing designs or quantities of any real value would agree to such terms; but the important question is whether the people who have innocently sent their guinea, supposing that the competition was invited in good faith, can get it back again, after discovering the discreditable deception which has been practised upon them. We are inclined to think that they could do so, for there is certainly an implied contract between those who advertise a competition and those who respond to the advertisement, that the money of the latter shall not be taken from them through subterfuges which they could not have anticipated, and of which no hint was given in the advertisement; but justice is dear in England, and the victims of this sharp game will probably bear their loss in silence, taking something out of their children's allowance for the Christmas holidays, or having their old coat mended up for another year's wear, as a tribute to the financial dexterity of the Bradford authorities.

THE Société Industrielle of Amiens, one of the most vigorous and efficient bodies of its class in the world, announces its annual competition for essays or other works calculated to improve the condition of working-people, and, indeed, of every one else. The rewards, in most cases, are gold medals. One of these is offered for the best plan for a workingman's house, for a family of from four to six persons, to be built in the neighborhood of Amiens, forming part of a group of similar houses, and to cost not more than three thousand francs, above the land, including the expense of fencing. Another gold medal is offered for a system of artificial lighting, applicable to private houses and factories, and superior to anything yet in use; and a third for a good system of purifying water for household use. Many other medals are offered, for various works of less professional interest, one of them being allotted to the best essay on the real influence of the new French tariff, which has a leaning toward protection, on the income of workmen. This last should call out some valuable papers. No point in political economy is more important, or more disputed, than that of the real effect of protective tariffs in improving the condition of workmen, as distinguished from manufacturers or speculators, and the evidence of the clear-headed and practical French workmen should be useful to us, as well as to them.

THE Boston Architectural Club this year is to repeat its amiable and admirable coöperative effort and raise a fund to send a vacation scholar abroad for a few months' travel. Relatively with the outlay of time and money we fancy these vacation scholars derive more benefit than do the holders of the regular travelling-scholarships.

THE ARCHITECTURAL EXHIBITS AT THE MECHANICS' FAIR IN BOSTON.

Church at Mereu, Oise, France. From *L'Architecture*.

BEFORE the close of the Boston Mechanics' Fair something ought to be said about the architectural part of the exhibition, and particularly about the designs for workingmen's dwellings, shown in competition for the Shattuck Prizes. We need hardly remind our readers that the Massachusetts Charitable Mechanic Association is the custodian of a considerable fund, the income from which is to be devoted to the improvement of the condition of workingmen; and, this year, the income, which has been for some time accumulating, was considered sufficient to warrant the institution of a serious competition for designs, both for city tenements and suburban dwellings, adapted to the needs of families of modest means. For the city tenements, a limited competition was invited, while that for country-houses was thrown open to all who wished to enter, and the result in both cases is extremely interesting. Naturally, the limited competition, which brought only designs from architects of experience, is the most interesting, for trained skill and experience count for quite as much in architectural work as in any other, while the problem of a group of city tenements is about as complex and difficult as any that the profession has to deal with.

In Mr. Sturgis's design, which was awarded the prize, we find the difficulties of the subject so thoroughly appreciated, and systematically met, that it will serve very well as a basis for making more intelligible our criticism of the other designs; but it should be understood that the lot of land on which the competitors were required to house a given number of people was much larger than can usually be devoted to the purpose in cities; and, while Mr. Sturgis certainly saw and used the opportunities that it afforded better than any other competitor, it does not follow that his plan could be successfully adapted to a smaller lot. In fact, some of the other plans could be much more easily adapted to a more restricted area; and, while Mr. Sturgis's merit is not diminished by the fact that he made the best use of the conditions as they were presented, those who have in mind the building of such structures should be careful to avoid the common mistake of taking a plan, excellent for its intended situation, and mutilating it, to squeeze it into a shape for which it is not adapted. To put the matter briefly, Mr. Sturgis, having a very large tract on which to place his blocks of tenements, and perceiving that he could set portions of them far back from the street, without interfering with the light and air in the rear, has made his outside lines very irregular, making, practically, all his apartments corner tenements, and obtaining in this way outside light and air to all his rooms; while he has also availed himself of this arrangement to secure what seems to us the cardinal excellence of his plan, an entrance from the street to every tenement. No one who has visited

the court-yards or private passageways of a large block of tenements needs to be told that, however pretty and chateau-like court-yard entrances for such buildings may look on the plans, they are to be avoided in practice, while entrances on private passageways are still worse; yet Mr. Sturgis is, we believe, the only competitor who has entirely excluded both sorts from his plan. The consequence is that every tenant of his block has the entrance to his dwelling on the public street, which is kept clean, lighted and policed at the public expense. The reserved spaces between the sidewalk line and the house walls incident to this arrangement are shown planted with shrubbery, and the effect would, in execution, be quiet and pretty, in a way particularly desirable for a tenement-house population.

Next to Mr. Sturgis's design, we should rank that of Messrs. Peabody & Stearns, who have a very skilful piece of planning, arranged with evident knowledge of the details of the conditions to be fulfilled, shown in pretty drawings. The exterior lines, both on the streets and the court-yard, are much broken, to get light to the interior rooms, but the *parti* of sacrificing the court-yard to the street-lines is not so frankly taken as in Mr. Sturgis's design, and, in consequence, the arrangement of the rooms is more complicated, while many of the dwellings are entered only from the court-yard, or the passageways. If the occupants of tenement-houses always wore their Sunday clothes, and spent their abundant leisure in polite conversation, and never had any garbage-pails to take care of, nor threw rubbish out of their back windows, so that the court-yard was always a scene of refined elegance, Messrs. Peabody & Stearns's plan would be an admirable one; and, even as it is, the professional visitor will appreciate the ingenuity of the arrangement, and the beauty of the block as an architectural composition, the design far surpassing, in this respect, any other shown. With characteristic regard for practical considerations, Messrs. Peabody & Stearns, reflecting that the population of so large a block of tenements would alone be sufficient to support several stores, have devoted the ground-floor of some of their houses to mercantile purposes.

Mr. W. G. Preston has also given up some of his street-floor rooms to stores. Like Messrs. Peabody & Stearns, he has found it necessary to put some of his entrances on passageways, but has done something to prevent these passageways from becoming receptacles of filth by providing them with gates. Unfortunately, if these were to be of any use, a janitor would be required to keep them shut, and it may be imagined that the efforts of a party of tenants, returning from a wake in the small hours of the night, to get through the gate without the janitor's help would not conduce to the repose of their neighbors.

Messrs. Alden & Harlow, of Pittsburgh, have attacked the problem from the unimaginative side, and have run four new streets through the lot, lining both sides with blocks of small tenements, only three stories high, in place of the five stories of the more imposing blocks of the preceding plans. This arrangement, which is also substantially that preferred by Messrs. Coolidge & Wright, seems to suit the Belgian idea of a "*cité ouvrière*," but it is very doubtful whether it could be successfully adopted in this country. While a settlement of the kind in Ghent or Brussels, with its neat gateways, and pretty *jardinières* in the south windows, is more attractive than one of our lofty tenement blocks, it is useless to expect a community of our city working population, composed in part of Irish, Russians, Poles and Italians, to unite in the forethought and care necessary for keeping a number of private streets and passageways in good condition; while all our habits of life require some sort of back-yard to every dwelling, and Messrs. Alden & Harlow's plan affords nothing of the kind.

Mr. S. S. Beman, of Chicago, the architect of the town of Pullman, sends an interesting plan, rather complicated with octagonal-ended rooms and bevelled corners, but with an evident comprehension of the requirements of the case. The stairways, particularly, are better than those of almost any other plan shown, all being next the outside walls, with direct light and air; but many of the entrances are on the court-yard, and the plan shows an objectionable feature, in a number of short and narrow blind alleys, accessible from the street, and lighting kitchens and sculleries, which would surely be receptacles for rubbish. Mr. Wickson, of Toronto, also has staircases next the outside walls, but he has almost no closets to the rooms, and his elevations are not equal to those of most of the other designs. Messrs. Kendall, Taylor & Stevens show a plan which puts all the entrances on the court-yard, but which has otherwise considerable merit, the staircases being good, and the arrangement of rooms convenient, without the long, dark interior passages which form a bad feature of some of the designs.

The scale of the drawings is too small to allow of much study of detail, but a good deal of difference is to be observed in the disposition and form of rooms and closets, which would become important in execution. Mr. Longfellow provides his tenants with separate living-rooms and kitchens, a luxury which experience has shown to be unnecessary, tenants of this class almost universally preferring to use their kitchen as a living-room, for one obvious reason, among others, that they can be comfortable in winter with only one fire. Where the kitchen is also the living-room, it is evidently desirable to have it as large and pleasant as possible, and, while the sink, for convenience, is, in this country, generally placed in the kitchen, some of the best tenement-houses have the wash-tubs in a scullery, opening into the kitchen, but separate from it, and having a window of its own. A little effort of the imagination will show how desirable it is

to keep the slop and vapor of washing, which, it must be remembered, is the poor woman's profession, out of the room occupied by the family, to say nothing of the advantage of washing in a place where the windows can be kept open without giving the children colds, and it is rather remarkable that Mr. Sturgis's plan should be the only one embodying this arrangement. Mr. Beman and Messrs. Peabody & Stearns show wash-tubs in the living-rooms, while none of the other plans, so far as we noticed, provide any wash-tubs at all.

In regard to the open competition, for a group of small suburban dwellings, required to be fifty in number, there is less to be said, as the possible variations in the arrangement of the individual house are almost infinite, and the most serious question is here that of the disposition of the houses on a limited area of ground. As in the other competition, most of the contributors have failed to grasp the full importance of the relation between the arrangement and the lot. In many of the plans, the houses look as if they had been dropped in a bunch from the clouds, and even in those in which some definite arrangement is attempted, the relation of the houses to each other is insufficiently considered. Mr. Rinn has had the singular idea of laying out his ground after the model of a wheel, setting the buildings on the spokes; while Mr. Norris, of Cambridge, shows in a bird's-eye view a picturesque cluster of still more picturesque little houses, suggesting an Alpine village, with crowded chalets and winding paths, but, also, suggesting the clothes-lines and generally unhygienic flavor of such villages. Where the designers have kept in mind more clearly the American love of propriety, or, possibly, of pretentiousness, in their dwellings, they have generally divided their plot by streets in various directions, reserving, as a rule, in the middle one of those areas which suburban mayors love so much under the name of "playgrounds," but which, in practice, serve mainly for the sports of the village dogs. On the streets are arranged the houses, which in many cases form dreary-looking blocks, in others are in pairs, and in a few instances are separate, each in its own little lot. Naturally, the latter arrangement consumes more land, and the larger the garden of each dwelling, the smaller is the "play-ground" in the middle of the settlement. On this matter, however, the jury seems to have thought, as we do, that, for our citizens, space around each house is more necessary than a common park, where both advantages cannot be had at once, and the prize plan, that of Messrs. Barton & Will, gives less room for the dogs to run races in than almost any other. It is not, however, in the mere fact of giving the space to the houses, and not to the dogs, that Messrs. Barton & Will's plan excels. In addition to this, they have devised a very successful arrangement of streets, not only for pleasant effect in themselves, but for placing the houses on them advantageously; and it is no small tribute to the care with which the work is done to be able to say that not one of their fifty houses looks from its front windows into the back-yard of another house, or upon anything else that would make it undesirable to live in. It is hardly necessary to add that the skill which has accomplished this result shows itself in the planning of the individual houses; and, small as is the scale, they are all clever and interesting.

Messrs. Stickney & Austin also show a scheme of streets by which there would be no back-yard views, but their plans of individual houses are not quite so architectural as in the prize design, and their streets are less interesting; and in Mr. Robert Coit's design, while the houses are pretty, and the street-plan judicious, there is a little indecision about the latter.

Taken altogether, the open competition must be regarded as successful in bringing out pretty suggestions, but circumstances vary so much in this sort of building, and, even with individual houses, so much depends upon the aspect of the rooms, the distant views, and so on, that it is hardly practicable to make a plan which will serve as a model. With city tenements, of the sort contemplated in the limited competition, the case is different, and, for a lot of a given size, under the conditions generally attaching to American city life, there is likely to be one plan which will have advantages over any other; and, while, as we have said, the lot specified in the present competition is larger than would ordinarily be available, so that a plan adapted to it would have to be greatly modified for a smaller one, the competition has shown, in a most instructive way the principles of planning best adapted to lead to a successful result.

Before leaving the subject of the architectural works at the Mechanics' Fair something ought to be said about the exhibit of the Architectural Department of Harvard University, which includes about a hundred measured drawings, original designs, and drawings from photographs. As a rule, the designing is unexpectedly good, considering the youth of the Department, and the rendering is even more so. Some of the best works, of both sorts, are shown only by photographs, so that it is not easy to give due credit to the authors of all the deserving exhibits; but one rarely sees, in a collection of school-drawings, a better piece of design and rendering than Mr. Willcutt's "Railway Station," or Mr. Blevins's "County Court-house"; or prettier wash-drawings of detail than that of the interior order of the Pantheon, shown in a photograph, without the name of the author.

Taking the exhibit as a whole, its most noticeable characteristic seems to be the general refinement of the designs shown. Some of the plans are, naturally enough, open to criticism, and the rendering of the work in the younger classes is, of course, crude; but, without exception, the elevations are refined and elegant to a remarkable degree. It must not be supposed that this elegance is secured by

slavish copying, or by suppressing originality. On the contrary, one of the most graceful and artistic designs shown, a "Memorial Library," by Mr. Ely, offers a rather amusing attempt to obtain a certain effect with a yellow roof, which, though without precedent, so far as we know, in orthodox school-work, betrays a real feeling for color, which has been judiciously allowed to gratify itself within certain limits. We do not like to say too much in praise of work which still shows plenty of room for improvement, and it must be understood that it is the encouragement given for the future, rather than its present merit, which makes this exhibit so interesting; but it can at least be said that it justifies the best hopes of the friends of the Department. We do not think that anywhere in the world, even in Paris, would a hundred drawings, contributed by a similar body of students of architecture, show more of the refined artistic feeling required for architectural design, and the University has certainly won its place among the schools where the true art of architecture is understood and taught.

PUVIS DE CHAVANNES.



166 Buchanan St., Glasgow, Scotland. From *The Builder*.

THE passing of Puv de Chavannes to the great majority deprives the world of its greatest decorative painter; for such work as his was as much a triumph for the rest of us as for his own countrymen. Whether these latter will be able just now to do more than give the great artist a passing but sympathetic sigh (considering how, for the moment, Fashoda and Jew-baiting divide their thoughts and sympathies) appears very doubtful; but the work of Puv de Chavannes will be known and loved when Fashoda, and poor Dreyfus, and the whole crew of ministers and generals are forgotten, and their names buried in oblivion. "Art is long, and life is short." Do we not realize that truth each day that we live? How many of us knew even the names of these disputed regions or of their discoverers a year ago? But the monuments which stand on the banks of the old river, and the art which is to be studied in them—the paintings which initiate us into the daily life of the Egyptians centuries ago; the architecture and sculptures of the Old-World cities—these would be immortal but for the misplaced zeal of the sanitary engineer.

And so it is when we lament the death of a great artist; his work lives forever, though he, the individual, has passed from us, and will, ere long, be forgotten.

Puv de Chavannes's greatest works are the Pantheon frescos and the decorations in the new amphitheatre of the Sorbonne. In the central picture of the latter we see figures representing Eloquence, Poetry, Youth and Age, grouped around the Classic dome symbolizing the Sorbonne. Youth drinks from the cup presented by Age. Science and Philosophy, Spiritualism and Materialism form the side-pictures, separated from the central composition by huge trees—a frequent device of the painter's. A background of landscape treated conventionally unites the whole. The color is low in tone, suited to a land of allegory and poetry; and yet the work savors more of the Renaissance than of Greek art. One can imagine a picture by Leighton being a reproduction in style, and even in color, of the great Greek artist Apelles; but the work of the distinguished Frenchman is at once both modern and Classic in sentiment. No Greek (judging from what we know of the remaining wall-paintings), nor Lord Leighton, nor Mr. Alma-Tadema, nor any contemporary French painter could have produced the series of frescos in the Pantheon illustrating the life of Ste. Genevieve. Here Paganism in its gentlest form gives place to the most living Christianity. The beautiful group of the man and woman looking on at the child saint praying, the exquisite modelling of the infant in the mother's arms, the oxen ploughing in the distance, the sheep grazing, form an exquisite idyl of country life. There is so much more emotional feeling displayed in these compositions than is general in Classic art.

We see the every-day *vie pastorale* of the saint and her family: they till the soil; they go down to the sea in ships; they look after the fowls, and attend to other domesticities; but it is all done gracefully, solemnly, prayerfully, without vulgar haste or impatient hurry. One feels that these people so ordered their lives that work was not allowed to crowd out prayer; nor was prayer made an excuse for neglect of commonplace duties.

The large compositions in the Amiens Museum are equally fine; one was bought by the State, the other was the gift of the painter, as were the succeeding "Travail" and "Repos." The decoration of the staircase was commissioned in 1865 and 1879 (respectively "Picardia nutrix" and "Ludus pro patria"), the latter work being in his completely matured style. Succeeding this work came the decoration of the museums of Lyons and Marseilles.

There is, of course, a certain mannerism in all the painter's work; the scheme of coloring is the same, and the composition is more or less similar; but there is immense variety in the treatment of the figures, and individuality in the expressions of the faces. The landscape backgrounds, too, are completely French in character (it would be impossible to imagine them planted in any other country); but how true to nature are the tall elegant trees waving to and fro in the gentle breeze, the still water, the fleeting clouds. De Chavannes was more than once *refusé* at the *Salon*, but failure of that kind made no impression on him. He had his ideals, and he worked for conscience sake only, in perfect independence. He once threw up a commission from the Chamber of Commerce at Bordeaux because he would not have his subject dictated to him by the members. He parted from the Champs-Élysées *Salon* because he would not agree to the jury's views in regard to the distribution of medals, and he steadfastly refused to take the usual steps of visiting the members of the Institute, holding that the election should depend upon a man's work and not upon his power of making himself agreeable to the "forty." In his studio, in the Place Pigalle, he was the most pleasant companion, but the most modest and simple of men—living for his art, which, to him, was life. He was for a short time a pupil of Delacroix; but his real master was the painter of the "Décadence de Rome," Couture.

Puvion de Chavannes was born in 1824. He gained his first medal, a second class, in 1861, followed by others in 1864 and 1867, and the *médaille d'honneur* in 1882. He was an officer of the Legion of Honor, and was elected president of the new Society of French Artists, which held its court at the Champs de Mars. S. BEALE.

THE NEED OF REFORESTATION.¹

WE are in the habit of considering forests as our most available commercial resource, with little or no thought of any other valuation, or even the rights of neighbors. . . .

Owing to the varying conditions of forests, the study of their climatology is very complex. The character of their subsoil, density, altitude above sea-level, and many other features have to be carefully considered, before effects on adjacent territory can be determined. By presenting a greater surface to the sun's rays than barren land, the forest-area receives and stores up a larger amount of heat than the surrounding soil, and, retaining it longer, serves to equalize the temperature of the adjoining country, having much the same effect as large bodies of water.

The sanitary influence of forests in stopping the progress of plagues was known long ago from general observation. It is said that "In India, villages surrounded by forests are never visited by cholera. For this reason Government troops are being drawn into forest-stations." Similar observations have been made in our own country in regard to yellow fever. Explorers have borne witness to the sanitary influence of forests in Africa. Stanley states in "Dark-est Africa": "While we travelled through the forest region we suffered less from African fevers than we did in the open country." He also says: "A long halt in the forest-clearing soon reminds us that we are not yet so acclimated as to utterly escape the effect of malaria. But when within the enclosed wood our agues are of a mild form." . . .

There is a wide diversity of opinion as to the influence of forests on rainfall. As early as the sixteenth century Fernando Columbus, the son of Christopher Columbus, noticed the heavy rainfall on Jamaica. This he shrewdly attributed to its dense forests, after observing the decrease of rainfall on the Azores and Canaries, owing to the removal of their forests. Since then extensive investigations have been made in Germany, France, India and South America. It is found that the heaviest known rainfall takes place in one of the densest and most extensive known forests, that of the lower and middle Brahmaputra, while at Iquitos, 1,304 miles from the Atlantic, and 217 miles from the mountains in the Amazon valley forests, there is an annual rainfall of 284 centimetres, the greatest on the earth, under similar circumstances of location.

However difficult it may be to establish conclusive evidence that forests do exert an influence on the precipitation of rain, it requires only the most casual observation to show their great influence in the disposal of rain-water.

We must distinguish between a mere orchard cleared of undergrowth and a dense forest with its impenetrable swamps and thick

undergrowth of shrubs and mosses. Rain falling on an orchard floor or denuded land, meeting with little or no obstruction, runs off rapidly. But when a forest subsoil is encountered, the water slowly percolates into the swamps and rivers, helping to maintain an equable flow in the rivers and streams derived from these sources.

To the absence of forests and the consequent sudden and abnormal overflow from denuded regions may, to a large extent, be attributed the immense damage resulting from floods. This can nowhere be illustrated better than by our own Mississippi River drawing to its fertile valley the waters of nearly half our country. Forests are disappearing so rapidly in this valley that we have nearly lost our natural regulator of floods, and must witness the annual destruction of thousands of square miles of land, so deeply scarred by flood erosion as to render it unfit for agriculture. We must further witness the loss of millions of dollars' worth of property and great sacrifice of human life, from this cause alone. We should long ago have put a stop to disastrous floods by reforestation of our denuded water-courses, and not rely on dikes and ditches in vain attempts to stop or guide the mad career of uncontrollable floods. Tree-planting for this purpose should not be delayed, lest we reap a deserved punishment, in increasing disastrous floods, in years to come. . . .

The total annual consumption of forest supplies in the United States, based on the Eleventh Census reports, amounts to 24,000,000,000 cubic feet. The present mill capacity, amounting to 30,000,000,000 feet, board-measure, requires in its production not less than 400,000,000 acres of forests in the best condition. To meet this outlay, we have now less than 500,000,000 acres of forest growth, and long ago began making inroads into this forest capital.

Lumbermen secure control of forest land, on which they pay stumpage, and then proceed to exterminate the entire crop as rapidly as it can be marketed. Records show that not infrequently a few thousand acres of public timber are included in the transaction, without payment. Not only has reckless and indiscriminate cutting been done, but a large amount of timber is wantonly wasted and improperly used. We have most of us seen miles of fence-rails split from walnut-trees. A few years ago, large quantities of chestnut oak in Alabama, along the line of a railroad, were cut for the tan bark and the logs left to decay. . . .

There is another forest enemy, fire, that with insatiate fury devastates our forests to the extent of \$25,000,000 annually. These fires destroy at the same time the forest floor, preventing reforestation, and bring on future devastation by consequent floods.

In 1880, of some 2,983 forest-fires reported, sixteen per cent were started by locomotives, nearly fifty per cent were set for making clearings, twenty-five per cent caused by carelessness, and only ten per cent by incendiarism.

Perhaps the most notable case of incendiarism is that of a high Government official who boastfully incriminated himself in these words: "It was twenty years ago when I kindled a fire at the trunk of a great pine and, in the chill of the evening, gazed at its welcome flame. Soon I saw it mount, crawling out along the branches, igniting the rough bark, kindling the cones and setting fire to the needles, until in a few minutes the great forest-pine was all one pyramid of flame, which illuminates a temple in the wilderness domed by a starless night. Sparks and flakes of fire were borne by the wind to other trees, and the forest was ablaze.

"On it spread, and the lingering storm came not to extinguish it. Gradually the crackling and the roaring of the fire became terrific. Limbs fell with a crash, trees tottered, and were thrown prostrate; and the noise of falling timber was echoed from rocks and cliffs; and here, there and everywhere rolling clouds of smoke were starred with burning cinders.

"On it swept for miles and scores of miles, from day to day, until more timber was destroyed than has been used by the people of Colorado for the last ten years."

What can be expected from an ignorant public, when such official acts of vandalism are allowed to pass unpunished?

Besides these causes, it is well known that many extensive forest-fires have been caused by lightning, and instances have been recorded of forest-fires started by friction. . . .

Interest in this subject was first aroused by Mr. G. B. Emerson and Dr. F. B. Hough, at a meeting of the American Association for the Advancement of Science, in 1873. This discussion led to the enactment of a law in 1876, directing the Commissioner of Agriculture to appoint a competent person to investigate the destruction of forests, and the means necessary for the preservation of our timber. Dr. Hough received the appointment, followed by Mr. N. H. Egles-ton, and in 1886 Mr. B. E. Fernow, the present efficient Chief,² took charge of the Government Division of Forestry, which is placed under the control of the Secretary of Agriculture. . . .

Some twenty-five States and territories have adopted laws providing for tree-planting, with a tax rebate. These enactments were not drawn up with sufficient care, for the records indicate systematic evasion of law, by planting narrow strips along the road-side. Something has been accomplished in tree-planting by establishing Arbor Day, now made a legal holiday in more than thirty States and territories. Nebraska was, in 1872, the first State to legalize the day; since then some 35,000,000 trees have been planted on Arbor

¹ Extracts from an article by Mr. Edward S. Hammatt in the *Papers of the Contemporary Club*.

² Mr. Gifford Pinchot has been appointed Chief of the Division of Forestry to fill the vacancy caused by the resignation of Mr. B. E. Fernow to accept the Directorship of the New York State College of Forestry, at Cornell University (June, 1898).

Day in Nebraska alone. Most of the State laws on forestry are ineffectual, owing to the difficulty of enforcing them. We may, however, except Maine and Massachusetts, where forest-fires are very rare, and the State of New York, where they are now unknown.

Until recently, the Federal Government has shown but little interest in forest preservation, as the Congressional records show. The first act of Congress looking towards the establishment of forest reserves was approved in 1799. This act appropriated \$200,000 "For the purchase of growing or other timber, or of land on which timber is growing, suitable for the navy, and its preservation for future use." Under this act two islands were purchased off the Georgia coast, comprising together 1,950 acres. Nothing further was done until 1817, when another provision was made for building up our wooden navy. An extension of this act in 1831 provides punishment for the destruction of naval timber. . . .

The Timber Culture Acts of 1873 and 1877 designed to encourage tree-planting, provided that the settler could obtain land to the extent of 160 acres by planting 40 acres of trees and keeping them in healthy, growing condition for ten years. The results do not indicate a very marked success, for, out of 3,800,000 acres entered under the provisions of this act, not more than 50,000 acres have been successfully covered with tree plantations. This law was repealed in 1891, owing to the great frauds perpetrated under its crude provisions.

Under the Act of 1891, the President is authorized to make forest reservations. Of these reservations some sixteen have been established, with a total aggregate of over seventeen and a half million acres, or about twenty-two thousand square miles, which is more than the total area of Massachusetts and Maryland. These forest reservations are quite distinct from the National Parks created by earlier, special acts of Congress. In the forest reserves, private rights of individuals are not interfered with, while in the National Parks, of which there are four, individual titles were extinguished. The four National Parks include an area of 374,240 acres.

WESTMINSTER ABBEY'S KITCHEN.

DO you know that Westminster Abbey was equipped with a kitchen? It has long been the attitude of the Church to regard the flesh as wicked; but in the good old days the merry monks (attached to the Monastery of St. Peter, Westminster) "lovede venerye" as dearly as the gorgeous prelate who accompanied Chaucer's pilgrim band to Canterbury. The suppression of the monastery in 1540 put an end to all the delights of dining, but the days of yesteryear are brought up to mind by the discovery of a blocked-up doorway.

If you cross Dean's Yard you will notice this discovery at the southwest corner of the cloisters, through which the Abbey masons will be found at work, under the superintendence of Thomas Wright, clerk-of-the-works. It is the entrance to the ruins of the old refectory, which ran along the whole side of the south cloister. Beyond that, and nearly half its length, was the kitchen, the two apartments communicating by the buttery hatch, now blocked up, as shown.

The cook, or "kitchener," with the aid of assistants, prepared the food to be served in the refectory to the prior and guests according to the status at the high table, and to the rank and file of the monks at the tables along the hall. But his importance was equalled, if not exceeded, by that of the cellarer, who had the care of the beer and wine, and also of the bread and provisions, stored in chambers running along the east side of Dean's Yard, close to the kitchen. It would seem that the chamber, half below ground, which Canon Wilberforce discovered when he took up his residence in Dean's Yard, and which he has converted into his dining-room, was, in the days of the monastery, one of these places of storage. Subordinate to the cellarer were several other posts connected with the commissariat. The baker, having obtained the flour from the Abbey mill, built on part of the central green in Dean's Yard, had only to take it a few yards off to the bakery. In the same block of buildings was the brew-house, also managed by monks. Then the monks with a taste for gardening cultivated the herbs and vegetables and looked after the Abbey orchard, which has given its name to Orchard Street, Westminster. The laying of the table in the dining-hall was under the charge of the "refectorian." Lastly, at the end of a meal, the almoner had his work cut ready to hand, for all the broken, uneaten victuals had to be taken to the almonry — the precise position of which was probably in the angle formed by Victoria Street and Great Smith Street — there to be distributed to the numerous poor gathered together in the neighborhood.

The Abbey kitchen was superior to the kitchens of our own time in being level with the dining-hall, so that the diners were readily served with hot food. In such a kitchen, about the twelfth or thirteenth century, there would be the equivalent of our dresser for the platters and chargers. The wood fires on the floor would require occasional encouragement from the bellows or blast-bag. As on such a fire boiling would be easier than roasting, it would be necessary to have one or more caldrons either to stand upon its three legs or to be hung from a tripod, while a flesh-hook and pot-stick would be in close proximity. But plentiful use was also made of the roasting-iron, which was not unlike the modern gridiron.

The kitchener had enough to do to prepare the two chief meals of the day. Meanwhile, refreshments, by the way, would be passed

through the buttery hatch, just as to-day in some old colleges refreshments are served in what is called the buttery. Meat was supposed to be reserved for the young, the aged and the infirm; an indulgent Superior, however, would not be harsh in defining such limits. But there was no restriction in regard to the fish, which the monks, before cooking, had first to catch in the Thames, unless, indeed, a tenant from some outlying estate brought his rent in kind, such as fish. The kitchen was always well provisioned with salmon on that day in the year when the fishermen of the Thames, through a representative, sent the first-fruits or the tithe of the salmon caught in the Thames in fulfilment of a legendary promise made by Edric, the fisherman, to St. Peter, when he consecrated the newly built church. Indeed, when the salmon began to disappear from the Thames it was regarded as a divine punishment upon the fishermen for having fallen off in their offerings to the Abbey.

The water-supply of the Abbey came from a well in Hyde Manor; for when Edward the Confessor founded the Abbey he endowed it with estates sufficient to produce an ample revenue, the lands set apart for that purpose including those broad acres known to these modern days as Hyde Park. During the reign of Henry VIII many of the estates belonging to the Abbey were exchanged for lands in other districts, the Manor of Hyde, for example, being given in lieu of the Priory of Hurley. A memorial of the old water-supply still stands on the greensward at the Knightsbridge end of the Serpentine, unnoticed by all save very few of the thousands who pass through the Park every day. When this spring was reserved to the Abbey by the charter of Elizabeth, in 1560, a conduit-house was built over the spot, and this structure survived until 1868. Seven years before, however, the supply of water was cut off by the railways, thus ending a service which had continued through many hundreds of years.—*The Sketch.*



PHILADELPHIA T-SQUARE CLUB.

A VERY successful musical evening and smoker were held by the T-Square Club November 11, enjoyed by a large number of members of the Club. The drawings, ten of the eleven designs submitted in competition for the Memorial Church of St. Paul, at Overbrook, were exhibited. Prof. Warren P. Laird, who had been retained by the church committee to act as their professional adviser, and who had drawn up the very excellent programme for the competition, made a few remarks on the drawings, explaining how the awards had been made by the committee, the consideration of cost and other requirements.

A vote of thanks was given Professor Laird for his efforts towards securing honest competitions and otherwise furthering the interests of good architecture. Mr. Horace C. Mann was the successful competitor in this competition and will at once prepare working-drawings for the erection of the church.

Another interesting feature of the evening was the exhibition of the work of the Grueby Faience Company, of Boston, comprising glazed and enamelled architectural terra-cotta, faience and decorative tile of the highest artistic merit. Mr. E. P. Kendrick, a member of the firm, addressed the Club informally explaining the manufacture of terra-cotta ware.

GEO. B. PAGE, *Secretary pro tem.*



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

FRONT VIEW: BARNARD COLLEGE, NEW YORK, N. Y. MESSRS. LAMB & RICH, ARCHITECTS, NEW YORK, N. Y.

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

VIEW OF THE SAME BUILDING FROM THE SOUTHEAST.

COMPETITIVE DESIGN FOR "SHATTUCK PRIZE" FOR ARTISANS' HOMES. [OPEN COMPETITION.] SUBMITTED BY MESSRS. WARD & DAVIS, ARCHITECTS, 203 BROADWAY, N. Y.

[Issued with the International and Imperial Editions only.]

IN submitting the accompanying set of sketches in competition for the "Shattuck Prize" for Artisans' Homes we would call attention to the following description:—

The materials for the exterior to be good hard-burned brick laid in clear cement-mortar below grade and one-half lime and one-half cement above grade. The walls above first-story beams to be 8 inches thick. The cellar-walls to be 12-inch brick or 16-inch stone.

The window and door sills throughout to be stone. The windows and doors on front to have stone lintels, over all others brick arches.

The woodwork to gables and cornices forms the heads to second-story windows. All roofs to be covered best quality white-pine shingles. The timber to be of good spruce beams 2" x 9" — 16" centres, attic beams 2" x 8". The floors laid with No. 2 $\frac{3}{4}$ -inch North Carolina pine not over 4 inches wide. The doors and trim on first story except kitchen formed with clear whitewood. The kitchen and second story formed with white pine. The first and second stories to be lathed and plastered two coats rock plaster or King's Windsor cement, and hard finished. The attic to be left unfinished, with floor only.

The plumbing for each house to consist of an iron sink, two soap-stone or slate wash-trays and one porcelain water-closet, in second story, and a small quarter round sink adjoining water-closet.

The houses to have gas-pipes throughout. The water and gas to be taken from the street for each pair of houses separately. It is supposed the gas and water companies would run their mains through the streets.

The estimate includes a 12-inch earthen pipe sewer through the streets with 6-inch branches for every four or six houses.

Cost per sq. ft.:

5 double houses fronting main thoroughfare,	
Each 1,293 sq. ft. at \$2.80.....	\$3,620
Number of houses.....	5
	\$18,100
20 double houses on private streets,	
Each 1,220 sq. ft. at \$2.80.....	\$3,416
Number of houses.....	20
	\$68,320
2 stores 1,280 sq. ft. at \$2.80.....	3,584
Total cost of buildings.....	\$90,004

Cost per cubic ft.:

5 double houses on main thoroughfare,	
Each 40,083 cubic ft. at 9 cents.....	\$3,607
Number of houses.....	5
	\$18,035
20 double houses on private streets,	
Each 37,820 cubic ft. at 9 cents.....	\$3,404
Number of houses.....	20
	\$68,080
2 stores, 39,680 cubic ft. at 9 cents.....	3,571
Total cost of buildings.....	\$89,686

Cost of land.....	\$26,136
Cost of buildings.....	90,000
Cost of streets:	
Telford pavement.....	\$4,400
Curb and walks.....	1,000
Sewer.....	600
	\$6,000

Cost of park and the fencing, sodding and walks to houses	1,864
Total cost.....	\$124,000

Income:—	
10 front houses at \$216.....	\$2,160
40 inside houses at \$180.....	7,200
2 stores and apartments at \$216.....	432
Total income.....	\$9,792

Expenses:—	
Taxes.....	\$800
Water rent.....	300
Repairs.....	600
Agent.....	600
	\$2,300

Net income.....	\$7,492
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Which is equal to a little over 6 per cent on the total cost.

PLANS OF THE SAME.

COMPETITIVE DESIGN FOR "SHATTUCK PRIZE" FOR ARTISANS' HOMES. [OPEN COMPETITION.] SUBMITTED BY MR. GEORGE T. TILDEN, ARCHITECT, 85 DEVONSHIRE STREET, BOSTON, MASS.

This scheme consists of two similar groups of buildings. Each group of dwellings is made up of twelve semi-detached houses for two families each, and one single-family house. Twenty-five families are thus accommodated in each group. This gives to each of the fifty householders his house and his house-lot, independent of every other occupant of the colony, and gives to each tenant exclusively land enough to care for and beautify in his leisure moments.

This we consider an all-important feature, and one which reduces to the minimum the chances for quarrels and misunderstandings between neighbors.

It provides a front yard and front entrance upon a broad and attractive avenue, embellished with grass and flowers, and possibly with a drinking-fountain. All this will certainly tend to encourage neatness and beauty about each individual house-lot.

Here, also, the back alley and cross alleys will take all the traffic of coal-carts, ice-carts, offal-wagons, etc., and leave the front approach always presentable.

Stores.—At the street-front, we provide for eight small stores,

which can be advantageously rented and run by residents, or non-residents, as grocery, provisions, dry-goods, boots and shoes, drugs, fruits and sweets, bakery, and branch of public library, or other satisfactions of community demands.

Useful Rooms.—Over the stores are provided rooms for sewing and cooking school, a kindergarten, a day-nursery, a manual-training room, or for other equally useful purposes. Either of these rooms can be rented for lectures and other entertainments, for religious or secular gatherings, clubs, etc., and will help to keep the householders within easy reach of home during evenings.

Shelters.—Assuming that many of this community will find their occupation at a distance from their homes, and that trolley-cars will pass on the public highway, we have arranged for sheltered waiting-places near the front entrances, so that as much comfort as is practicable may attend the coming and going of the community dwellers and their friends.

Stable.—At the back of the lot, in the middle, and fronting down the central alley, is located a stable, with accommodations for six or eight horses, generous wagon-room, and ample hay-loft. This stable can be leased by one of the community whose business requires him to keep one horse, or more, and he can sublet stall and wagon-room accommodations to such others as require them. Here is a source of income as well as an inducement to horse-keeping tenants.

Hose-carriage.—In front of the stable and central to the entire neighborhood a stand is provided for the hose-carriage whence it can be quickly run, by hand, to any part of the premises, and attached to the hydrants where, it is assumed, the water-pressure will be sufficient for fire-extinguishing purposes.

Laundries.—At each back corner of the community possessions is located a laundry building, which may be leased to some one of the community who wishes to do the washing for neighbors or outsiders. It is easy to see that these little structures will be mutually profitable to landlord and tenant.

Gas-supply, Water-supply and Sewers are all provided for in the back-alley ways, so that in case of any trouble with either, the fronts of the dwellings and their main approaches will not necessarily be disturbed. Two main lines to the main sewer, instead of three, as here shown, would result if they were placed in front of the dwellings, but it is the aspect of the front of a house which most frequently rents it or leaves it empty.

By this disposition of the area at our command no one occupant is so much better off than his neighbor as to occasion any unpleasant feelings of jealousy, while the stable, the laundries, and the stores are in themselves inducements to a permanent tenantry, while opportunities are offered for friendly rivalry in care of the front yard or the flower-bed.

A feature not unworthy of consideration is the surrounding of the premises by the back alley, common to all, thus eliminating almost entirely the possible annoyance to neighboring estates. The back alley and not the neighboring premises will catch what is thrown out of the yards by untidy tenants.

House Plans.—In planning the houses, it has been assumed best to let the main living-room occupy the entire front of ground-floor, with the kitchen just back of it, and one chimney-stack of three flues accessible to the two lower rooms and to two bedrooms above.

Each house has three bedrooms so arranged that if the family is small the two rear bedrooms can be thrown together by removing the screens which are set up to form the dividing partition, and thus one large comfortable room can be produced.

The bath-rooms have, in all cases, been put on ground-floor, as being more convenient and less expensive in the plumbing. The hot water wanted for this lavatory can then be easily taken from the kitchen stove and the kitchen heat can be made to keep the air in bath-room above the freezing-point.

COST AND RETURN.

4 acres, or 261,360 sq. ft. at 15 cents.....	\$39,204
Less cost of 16,680 " " occupied by stores.	
" " " 910 " " " laundries.	
" " " 910 " " " stable.	
18,500 " " at 15 cents.....	2,775

Cost of artisans' home-lands, roadway and alleys.....	\$36,429
Allowing each double dwelling to cost complete \$2,025, 24 will be.	48,600
Cost per sq. ft., 30' x 30':—	
900 sq. ft. at \$2.25.....	\$2,025
With 16 ft. posts, 14,400 cubic ft.:—	
Cost per cubic ft., 14 cents.	
Two single dwellings at \$1,250.....	2,500
Roadways at front, 1,300 running ft. at \$1.25.....	1,625
Alleys in rear, etc., 2,000 ft. at 40 cents.....	800

Investment for dwellings only, and front and rear approaches.....	\$89,854
Total.....	\$89,854

Sewers will be put in by the town, and water and gas by the local companies.

Rent \$12.50 per month for 50 tenants.....	\$7,500
Deduct water-rates \$10 each for 50.....	\$500
" taxes at \$10 per M. Val. \$1,000 each for 50.....	500
" repairs for year, \$20 each for 50.....	1,000
	\$2,000

Net income from dwellings, which is 6 per cent plus on \$90,000.....	\$5,500
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The above does not include cost of erecting and maintaining the stores, the laundries, nor the stables, but these together with the school-rooms and social accommodations over the stores can be safely counted upon to bring a larger per cent of profit to the owner than the dwellings, and will be important agents in keeping the dwellings constantly rented to good tenants.

With a proper management of these structures, which are separate from the artisans' dwellings, it seems reasonable to expect a net return of from 7 to 8 per cent upon the total outlay.

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

BENT IRONWORK. DESIGNED BY MR. MURRAY SMITH.

A GROUP OF COURT-YARD FRONTS.

[Additional Illustrations in the International Edition.]

BARNARD COLLEGE AND THE SIDE GATEWAY OF COLUMBIA UNIVERSITY, NEW YORK, N. Y.

[Gelatine Print.]

SOUTHWELL MINSTER, ENG., FROM THE NORTHWEST.

SOUTHWELL MINSTER, ENG., FROM THE SOUTHEAST.

PETERBOROUGH CATHEDRAL, FROM THE PALACE GROUNDS.

EAST END: PETERBOROUGH CATHEDRAL.

This and the three preceding plates are copied from the *Architect*, London, and form parts of the extraordinarily excellent series of views of the English Cathedrals which that journal has published during the last two years.



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

THE NEW GOVERNMENT OFFICES, WESTMINSTER, ENG.

77 NEWMAN ST., LONDON, W., ENG., November 18, 1898.

TO THE EDITORS OF THE AMERICAN ARCHITECT:—

Dear Sirs,—In a letter from London published in the *American Architect* of the 5th inst. are some remarks on the proposed new Government Offices at Westminster, in the course of which the writer says that "The plans and general arrangement of the buildings will be schemed out by the officials of the Office of Works," and that the selected architects "are to design the elevations." I shall be glad if you will kindly permit me to point out that this is altogether a mistake. The Office of Works has, of course, supplied a plan of each site, and a schedule of the accommodations required, but both Mr. Young for the War Office, and myself for the offices on the Parliament-Street site, are entirely responsible for the plans and general arrangement as well as the elevations of our respective buildings, as architects are in the ordinary way. Perhaps you will kindly publish this as early as convenient and oblige yours faithfully,

J. M. BRYDON.

THE SECRETARYSHIP OF THE A. I. A.

WASHINGTON, D. C., November 22, 1898.

TO THE EDITORS OF THE AMERICAN ARCHITECT:—

Dear Sirs,—In reply to editorial note in your issue of November 19th, I would most respectfully request that this be inserted in the next issue of your valuable journal:—

There can be no "Resident or Assistant Secretary" of the Institute during the coming year, for, in the Convention, we were acting under By-laws revised and amended 1896, which state in Article XI: "The By-laws may be amended at any meeting of the Institute, provided notice of any proposed amendment shall have been sent by the Secretary to each Fellow at least thirty days before the amendment is to be voted upon."

The Secretary did not send the Fellows notice of a proposed change in the By-laws by which there were to be two Secretaries of the Institute, and, therefore, there can be but one during 1899.

Very truly yours, ROBERT STEAD.



ACETYLENE GAS AND PLANT LIFE.—One of the advantages now claimed for acetylene gas is that the products of its combustion are not at all injurious to plant or animal life, as is the case with coal-gas. A test was recently made with acetylene in a greenhouse, and absolutely no effect was produced, whereas the coal-gas worked a distinct and readily seen injury to the growing plants. On this account, the new gas is recommended to photographers for their dark-rooms, which generally do not have the best of ventilation. — *N. Y. Evening Post*.

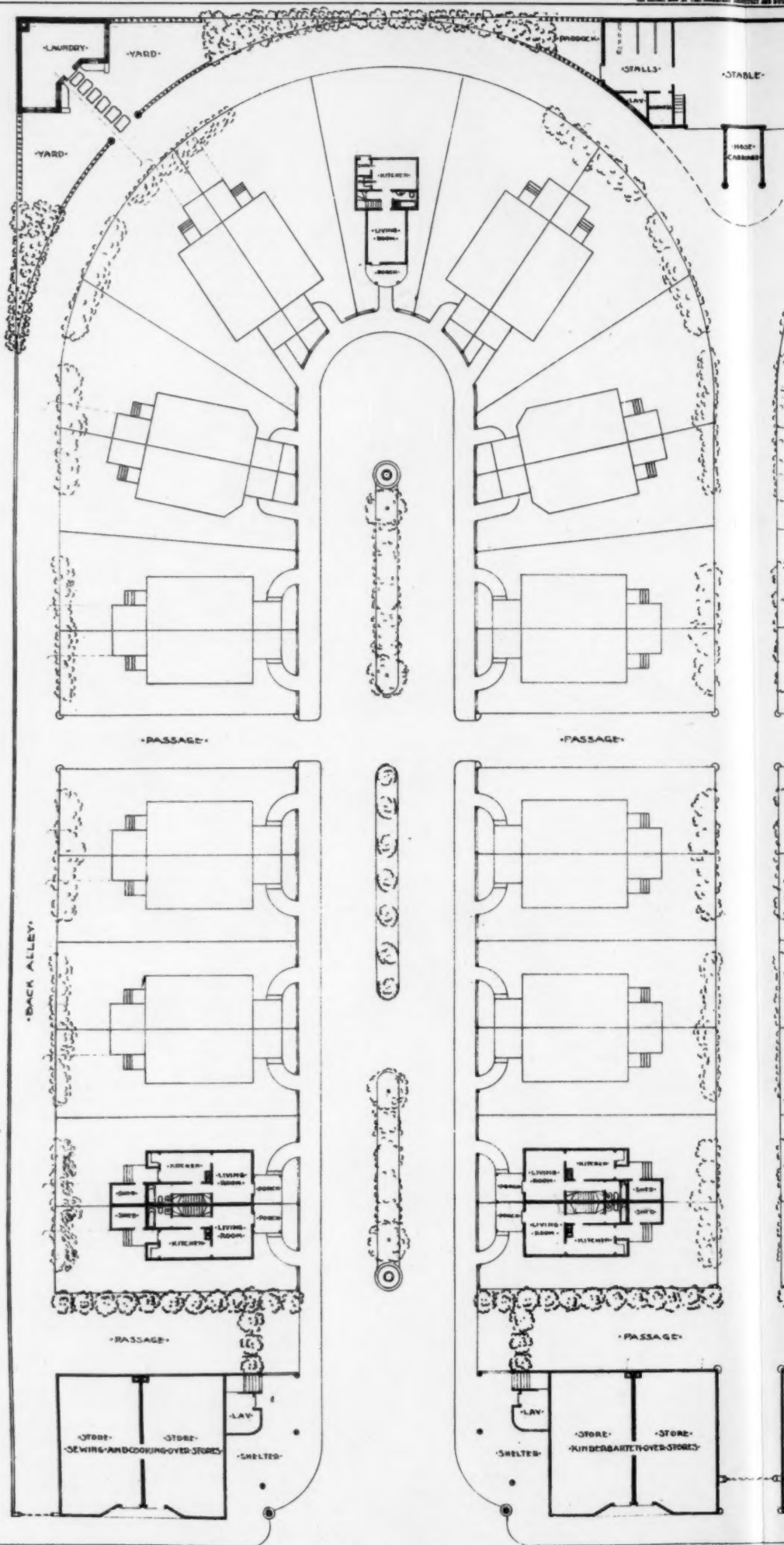
CHURCH LOST IN LONDON.—There is a derelict church in the Charing Cross Road, the existence of which will be news to most Londoners. It is called by the title of "St. Mary the Virgin." Desertion seems to have taken place because the fabric was crumbling away. Of late nobody has cared to own it, no funds being available to keep it in repair, and the public authorities have been obliged, for the safety of passing pedestrians, to undertake some precautionary work. They are naturally anxious to discover an owner, and have summoned him by notice on the door of the edifice to make good the structural defects; but if there is really an owner, he is scarcely likely to place himself in evidence and assume considerable pecuniary liability. The old place will no doubt have to be removed altogether. As some of the walls threaten to fall at any hour, the Council has charged itself with the duty of shoring them up, and will duly file the account against the missing owner. — *Liverpool Mercury*.

THE FIRST ELEVATOR.—Elevators, or lifts, as they are called in England, are now considered indispensable in high buildings, but on the European Continent they are but seldom found, even in the better hotels. This is the more surprising since the invention originated in Central Europe. The earliest mention of the elevator is made in a letter of Napoleon I, addressed to his wife, the Archduchess Maria Louisa. He writes to her that, when in Schoenbrunn, then the summer residence of the Austrian Emperor, near Vienna, he used the *chaise volante* (flying chair) in that castle, which had been constructed for Empress Maria Theresa, to save her the annoyance of climbing up the long flight of stairs. It consisted of a small square room, sumptuously furnished with hangings of red silk, and suspended by strong ropes, with counterweights, so that it could be pulled up or let down with great ease in a shaft built for the purpose about 1760. The great Corsican mentions that when he first entered the "flying chair" he was asked for his weight and that of his two companions, probably in order to employ the proper counterweights, since it was difficult for the operators to stop at the right point unless weights were about even. A similar elevator was built in the castle of Duke Charles of Lorraine about the same time, but this one was simpler, consisting only of a chair on a platform. — *Philadelphia Record*.

A REGISTER OF OLD LONDON.—Although our British metropolis has been greatly improved during the last half-century, both as regards sanitation and architectural beauty, the cost, in the loss of many picturesque features and buildings of historic interest, has been very great. Builders, speculators, vestries, and those who have to do with this exchange of new things for old rather pride themselves upon having no sentimental feeling about relics of past times and past phases of life, and these have too often been swept away without a regret. Happily this will be so no longer. Some years ago the late William Morris organized a society to protect ancient buildings, and in connection with this society a committee was appointed for the purpose of compiling a register of old things worth preserving, and beauty-spots liable to be defaced within an area comprising a large part of Greater London. It may be a building, an open space, a beautiful tree, or even a signboard. The item, whatever it be, is catalogued, and its description is accompanied by careful plans, drawings, and photographs. More than this, the committee have obtained the recognition of the London County Council, and the outcome of this is that a permanent body has been appointed to make a register or list of buildings of historic or architectural interest. It is still more satisfactory to learn that by an act passed this session the Council has acquired power to purchase or provide for the maintenance of buildings or places which come under the same description. — *Chambers's Journal*.

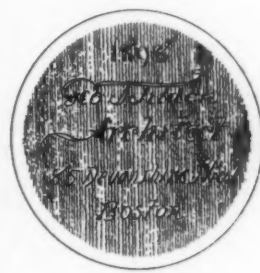
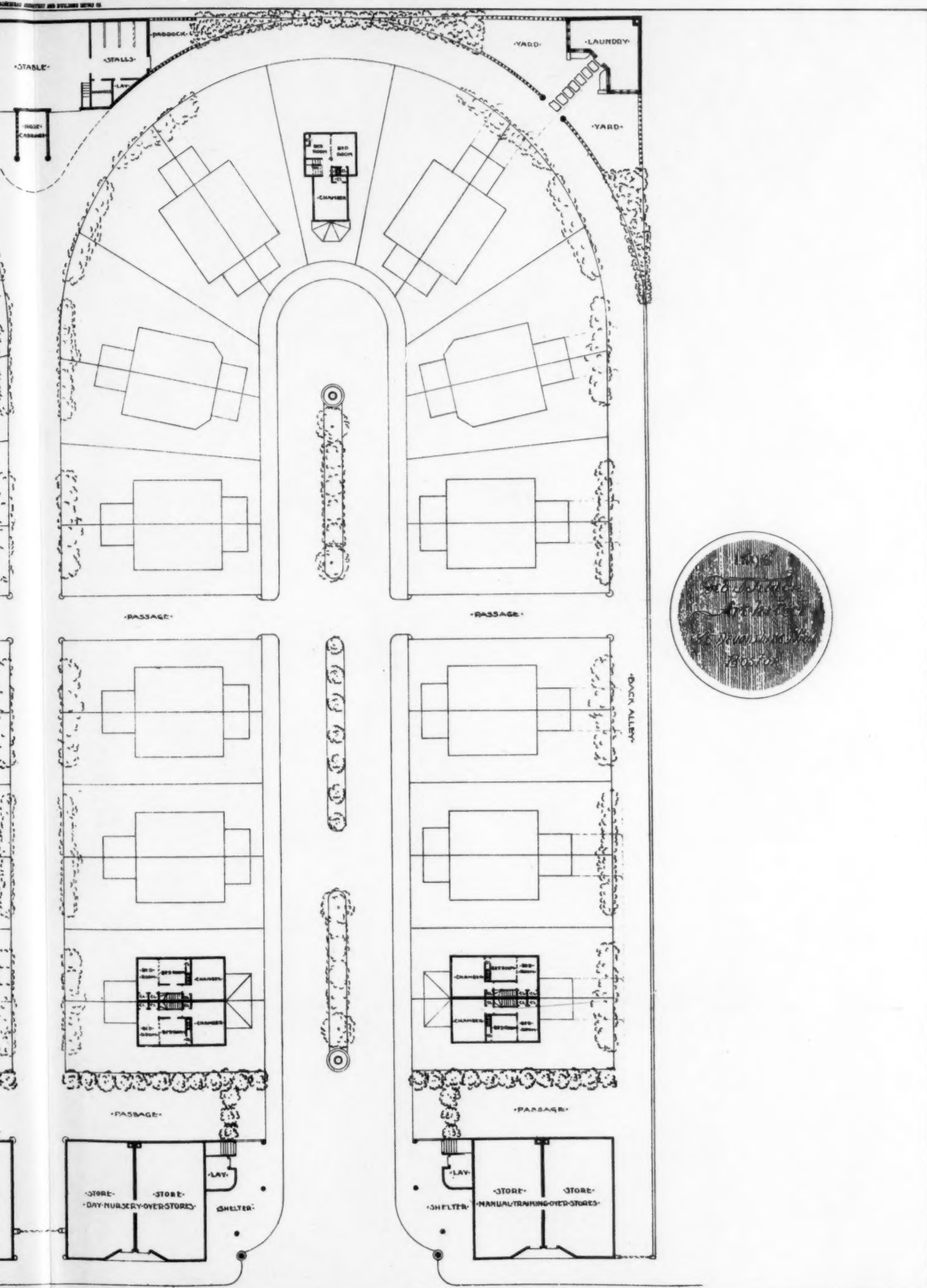
A GREAT FRENCH ETCHER.—Charles Méryon — born in 1821 — was brought up to the navy, going first in 1837 to the Naval School at Brest. As a youth, he sailed round the world. He touched at Athens; touched at the then savage coasts of New Zealand; made sketches, a few of which, in days when his greater work was most of it done, he used as material for some of his etchings. Art even then occupied him, and, deeply interested as he soon got to be in it, he seems to have had a notion that it was less dignified than the profession of the navy, and after a while he chose deliberately the less dignified — because it was the less dignified. He would have us believe so, at any rate; he wished his father to believe so. And in 1845, having served creditably, and become a lieutenant, he resigned his commission. A painter he could not be. The Gods, who had given him even in his youth a poetic vision and a firmness of hand, had denied him the true sight of color; and I remember seeing hanging up in the *salon* of M. Burty, who knew him, a large impressive pastel of a ship cleaving her way through wide, deep waters, and the sea was red and the sunset-sky was green, for Méryon was color-blind. He would have to be an engraver. He entered the workroom of one M. Bléry, to whom, in after times, as his wont was, he engraved some verses of his writing — appreciative verses, sincere and unfinished — "à toi, Bléry, mon maître." The etchings of Zeeman, the Dutchman, gave him the desire to etch. He copied with freedom and interest several of Zeeman's neat little plates, and addressed him with praises, on another little copper, like the one to Bléry — "to Zeeman, peintre des matelots." — *Pall Mall*.

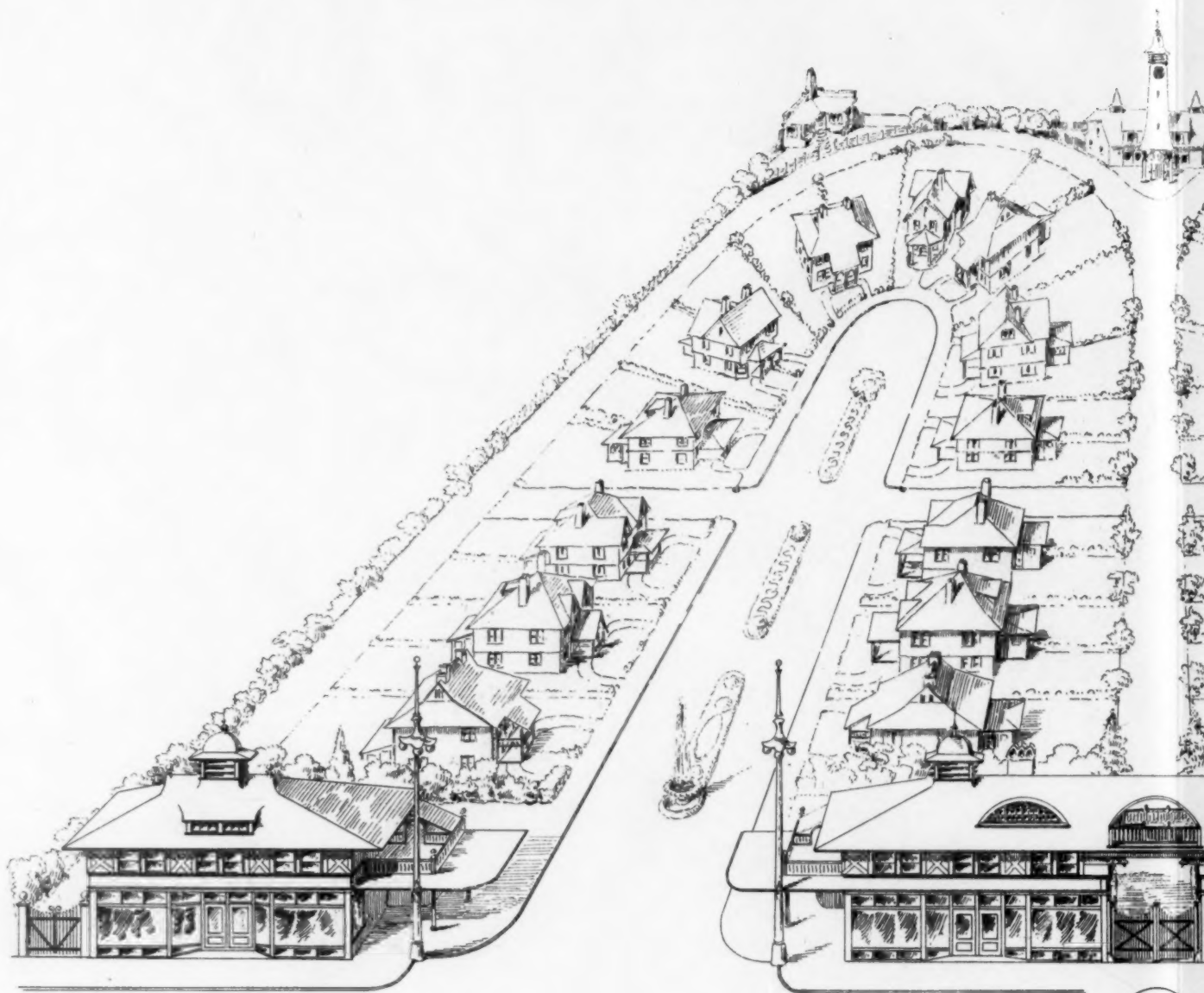
Community
of
FIFTY HOMES
for
ARTISANS



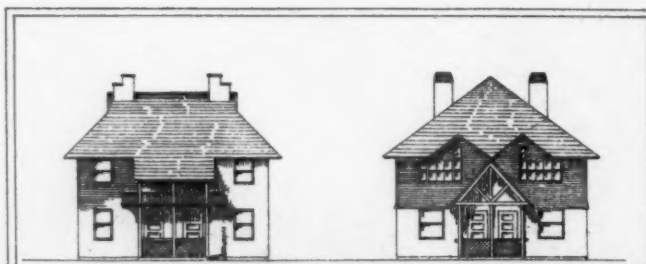
SHATTUCK PRIZE FOR COMPETITIVE DESIGNS FOR

GEORGE T. TILDEN, ARCHITECT, 85 D





Community
of
FIFTY HOMES
for
ARTISANS



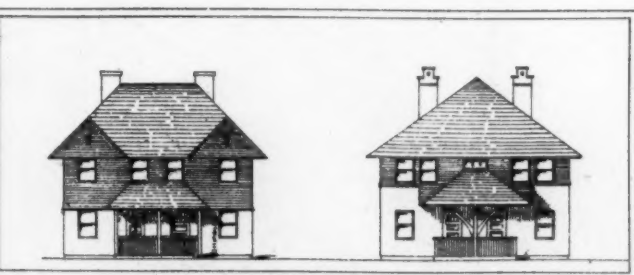
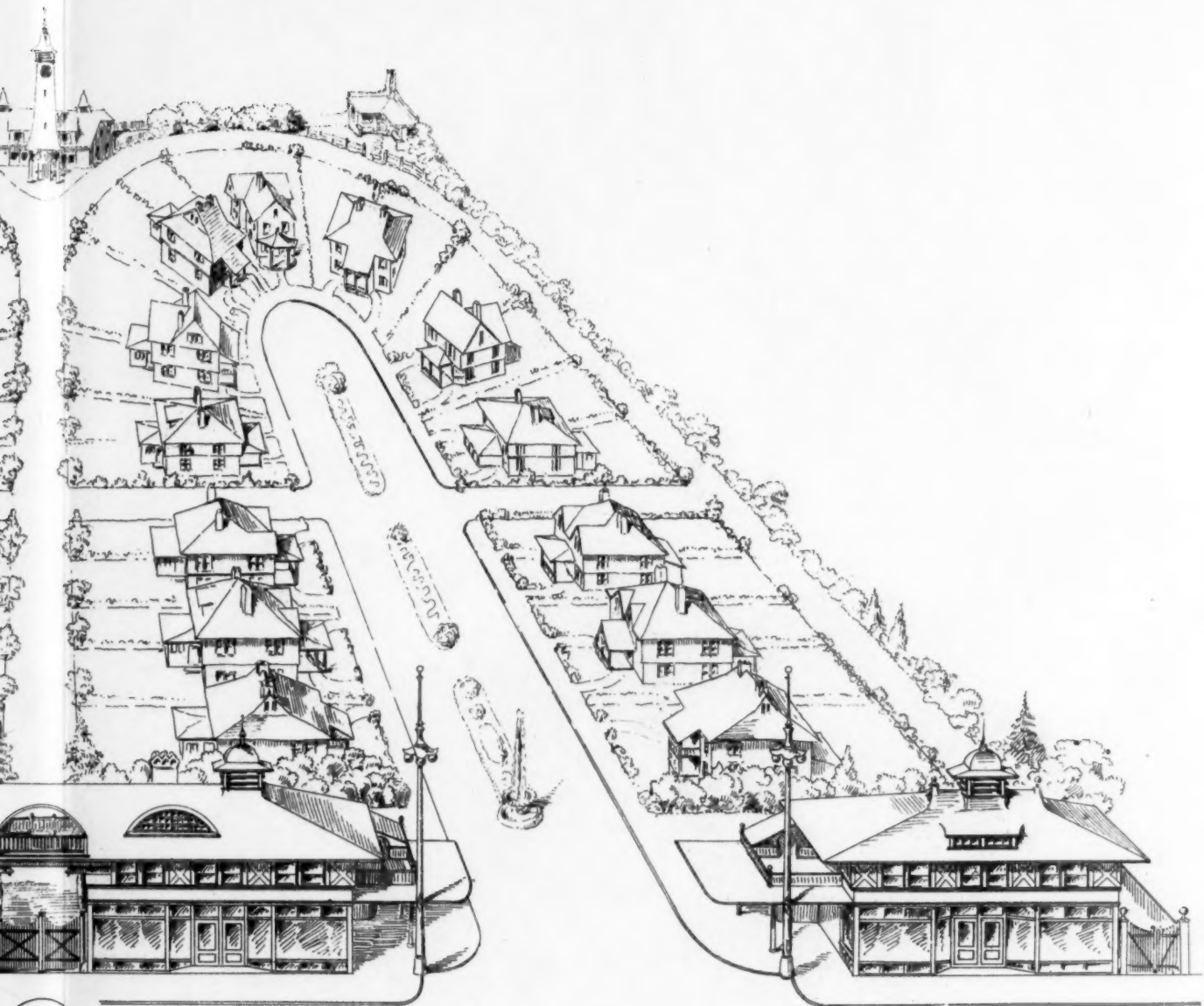
TWO DOUBLE DWELLINGS



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