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SENATOR McMILLAN, of Michigan, who has for many years been one of the firmest and most enlightened friends of public art in Washington, has had the courage, according to the newspapers, to speak with disapproval of the scheme for building a "memorial bridge" across the Potomac in memory of the late President McKinley. Some of the people most familiar with the subject speak of the plan as an attempt to utilize the affection of the nation for Mr. McKinley to resuscitate the project for a "memorial bridge" which has been agitated for several years in connection with various other objects; and Mr. McMillan says, with good reason, that the agitation at present for a huge memorial at Washington injures the prospect of obtaining a satisfactory monument at Canton, Ohio, which should certainly possess the first, if not the most imposing, memorial of its beloved citizen. As Mr. McMillan was one of the best and most devoted friends of the late President, no one can twist his words into any disrespect to his memory; and, in pointing out the objection to public agitation for two monuments at once, he has rendered a service to the cause of American art, which will be much more effectually promoted by the dissemination of important monuments through the country, leaving the memorials which should adorn Washington to mature consideration, in connection with the general treatment of the city, than by hastening to crowd the Capitol with gigantic combinations of engineering, architecture and sculpture, dedicated to the memory of public men.

WE sincerely hope that, if no other changes are made in the tariff at the coming session of Congress, the ridiculous and injurious duty on works of art may be removed. Practically, every artist of reputation in the United States has joined, over and over again, in protests against a tax which is simply a piece of ignorant barbarism, and in petitions to have it abolished. So far as we have ever heard, only two classes of persons favor the tax, one being composed of the small designers of tin-can labels and advertising placards, while the other consists of the disappointed and envious grumblers who devote their intellects to what they call repressing the luxury of the rich. As the latter class is supposed to prevail mostly in the manufacturing regions of the Mississippi Valley, it might be well to observe that the most serious obstacle which our manufacturers find in extending the range of American exports, apart from the taxation of raw materials, lies in the rude and unskilful design of such of our productions as have an artistic character; and that several million dollars' worth of examples of artistic manufactures, such as the foreign designers can

study in their museums, are now owned by Americans who are ready and willing to bring them to this country, and place them permanently on free exhibition, ~~whereas~~ ^{now that} they can do so without being subjected to an enormous fine for their presumption in having tried to do something to benefit their fellow-citizens. In the case of Mr. Morgan's magnificent collection of objects of art-workmanship, it is said that, rather than have it lie useless in storage-rooms in Paris, he has given permission to have it exhibited at the South Kensington Museum, in London, where it will be eagerly welcomed by the English manufacturers of pottery, artistic metal-work, jewelry and textiles, and will, undoubtedly, be utilized by them as quickly as possible, to improve the design of their productions, before a change in the American tariff shall make it practicable to bring it to this country.

THERE is a rather curious confusion in regard to the completion of the new Hall of Records in New York. At the time of the death of the late John R. Thomas, a sum of money is said still to have been due him from the city for services rendered in connection with the building; and his legal representatives, following, we believe, a precedent recognized as valid, refused to deliver certain plans which had been prepared by him until full settlement was made. Meanwhile, Messrs. Horgan & Slattery, the "city architects," or "Tammany architects," or whatever else may be their proper title, had been employed to complete the building in accordance with the Thomas plans; but, not having the plans, they were unable to do so, and the matter still remains open; while, as Tammany influence will, presumably, vanish temporarily from the municipal administration in about six weeks, it is supposed that Messrs. Horgan & Slattery's appointment will be revoked. The contractor for the building has in his possession a set of plans sufficient for his present needs, and is proceeding with the work, apparently under Messrs. Horgan & Slattery's supervision; but there is a large amount of detail-work still to be done, and the question of who shall carry it out is an interesting one for the profession.

THE inauguration of the new municipal government of New York will, it is supposed, be accompanied by the appointment of a new Building Commissioner to succeed Mr. Wallace. The administration of the office by Mr. Wallace seems to have been satisfactory, but it is argued, with much force, that the Building-Department is so intimately connected with the great system of corruption and plunder which has so long reigned in New York that a man appointed by Tammany influence, however honest personally, cannot be expected to make the sweeping reforms which are needed in every branch of the service. Nothing is known as to the probable new appointment. There are many candidates, but Mr. Cantor, who will make the appointment, very considerably refuses to reveal their names, only saying that he hopes to secure a vigorous and well-trained young man, who will perform the duties of the office energetically and intelligently.

COL. JOHN JACOB ASTOR, who is very much more than a mere rich man, has invented a steam turbine of great interest. Since the total failure of the two turbine-driven torpedo-boats built for the English navy, steam turbines have fallen into much disfavor, and Colonel Astor's modification of them should do something to revive public interest. In principle, the Astor turbine is extremely simple. Like the Parsons engine, it consists of a screw, turning in a tubular casing which has a corresponding screw formed by projecting flanges on the interior; but, while the casing is stationary in the Parsons turbine, it is free to revolve in the Astor form, so that on admitting steam at one end, the inner screw and the casing revolve at the same time, in opposite directions. By forming the ends of the casing into hollow shafts, and running the spindle of the inner turbine through them, the casing and the turbine are each made to carry a propeller; and, by reversing the position of the blades in the two propellers, they act together in pushing the boat forward. There are no moving parts in the machine except the turbine and the casing, so that the whole energy of the steam is devoted to

driving the two propellers. The casing is made conical, so that the steam expands from the smaller end toward the larger, and, by leading the exhaust along the keel, close to the outside, condensation is easily and cheaply effected. If some device could be arranged for either reversing the motion of the turbine, or for changing the position of the propeller blades, so that a turbine-driven boat could be stopped or backed with the same facility as one using reciprocating engines, a good turbine motor would be very valuable in marine engineering, and Mr. Astor, who seems to have made a material advance on the present type, might do well to turn his ingenuity to the remaining problem, which does not seem insoluble.

A GERMAN architect, Herr Goecke, gives, in the *Deutsche Bauzeitung*, some interesting details, from his own practice, of the construction of the modern sanatoria for consumptives in Germany. As our readers know, the German life-insurance companies, which are obliged to insure against disability from sickness as well as against death, are now the most active promoters of the crusade against tuberculosis, which is the principal source of claims of this sort against them; and, in their efforts to reduce their own losses by encouraging the application of medical science to the cure of consumption, they have conferred a blessing on the whole human race. Two or three years ago, the essential principle of the new sanatoria for consumptives was simply to get as much sun and air as possible into the bedrooms of the patients, and to encourage the latter to spend as much time as possible in the open air. Now, while the principle remains the same, improvements have been made in the methods of carrying it into practice. Experience has shown that there is less benefit to tuberculous patients in a change to mountain or sea air than was once imagined; and, if the sufferer can be protected from dust and smoke, an abundant supply of the air in which he has been brought up, and in which he will live after he has recovered sufficiently to go back to his employment, is more likely than a temporary change of climate to produce lasting benefit. In order, however, to secure the best effect, the site of the place of treatment should be dry and well-drained, and, if possible, surrounded, at a sufficient distance, with trees, which will shelter it from winds, strain out dust from the atmosphere, and, perhaps, supply oxygen and resinous exhalations. In the most recent establishments, very great care is taken to exclude dust, not only from the surrounding atmosphere, but from the air in the building, by placing the general reception-room close to the entrance, so that visitors will not leave mud or dust from their boots in the halls and passageways; and the patients, in passing between the main building and the "liegehallen," or covered porticos, where they lie in the open air, and from which they can go directly into the gardens, are obliged to pass through a "shoe-room," where they must change their muddy or dusty shoes for clean ones, adapted to house use, and can, if they like, leave their coats or other outside garments.

BESIDES this elaborate care to prevent dust of any kind from reaching the lungs of tuberculous patients, the most modern establishments show material improvement in the matter of thorough aëration of the rooms. It was, until lately, common to arrange wards for several patients with outside windows only on one side; now such wards are planned with outside air and light on at least two, and often on three, sides, and rooms for one or two beds, while they may have outside windows only on one side, have, in the partition opposite the windows, doors and often other large openings into a corridor, which is itself full of windows, so that the air passes freely through every part of the room. The same plan, of providing interior windows in partitions, is followed, wherever practicable, in the dining-rooms, parlors and elsewhere, so that the patients are, practically, never out of reach of a gentle current of air. Moreover, for the feeble patients, who cannot, without too much exertion, make their way to the "liegehallen," balconies are, in some of the newer establishments, provided; so that they can go or be carried from their rooms directly out of doors. For the stronger or convalescent patients the planning of the grounds is arranged with consistent hygienic purpose. Paths and gardens are laid out in such manner as to interest and please the sufferers, on the principle, well recognized in these admirable establishments, that a cheerful and homelike sanatorium will effect more cures than an unattractive one; but the garden-walks are carefully planned, in recent instances, in such a way that some of the more interesting ones have a

tolerably steep grade, the intention being to encourage the patients to exert themselves unconsciously in such a way as to strengthen the action of the heart.

MR. ASTON WEBB'S successful design for the Memorial to Queen Victoria, in London, is published in the English journals, and is extremely interesting. Visitors to London will recollect the Duke of York's column, and the flight of steps beyond it, leading down to the dingy and doleful St. James's Park. They will probably also remember seeing from this spot Buckingham Palace, ugly and huge, across the muddy footpaths, and grass-plots strewn with recumbent tramps, of the park; and it is quite possible that, descending the steps and following the footpath southward toward Westminster Bridge, they may have had glimpses, between the Government buildings, the rear of which overlooks the park on the east side, of the busy streets on which the buildings face. The problem set before the competitor was to transform a portion of this space into a "processional path," of architectural character, leading from the crowded centre of Charing Cross, where four or five of the principal streets in Europe meet, just outside the precincts of the Park, to the front of Buckingham Palace, where it was to be utilized as a setting for a statue of the late Queen, the commission for which was already in the hands of the sculptor. As the "processional path," in order to get from St. James's Park to Charing Cross, had to dodge at an angle between the backs of several important buildings, and was crossed by five thoroughfares of various degrees of importance, the task of giving it architectural dignity was not an easy one, and, as it seems to us, Mr. Webb's success is, perhaps necessarily, rather topographical than architectural.

IN order to reach the "processional path" from Charing Cross, Mr. Webb adopts frankly, and very happily, the idea of a diagonal entrance, forming a large circle in the irregularly quadrilateral space, behind the buildings on Whitehall and Trafalgar Square, and cutting through from this circle in such a way that a line drawn through the axis of the Strand, on the other side of Trafalgar Square, and cutting the centre of the circle, passes through the middle of the opening, which is made into a sort of triumphal arch. Beyond the circle the "processional path" continues, in a slightly different direction, straight toward the Palace, where it terminates in a vast semi-circular space, the back of which is formed by the fence of the Palace enclosure. The carriage-road through the Park, which now runs in front of the Palace, is diverted, so as to pass around the outside of the semicircle, into which only foot-passengers, or vehicles specially privileged, will be allowed to enter; but the present foot-paths are allowed to cross without change. The main line of the "processional path," which, in reality, is a vast avenue, about two hundred feet wide, is marked only by an iron fence on each side, and a quadruple row of trees, interspersed with a score or so of little triumphal arches, standing alone, at right angles with the street; but the terminal semicircle is surrounded by a colonnaded passageway, interrupted by pavilions. Within the enclosure are flower-beds and grass-plots, and two small basins, with fountains; and, at the back, facing down the main "path," is to stand the statue of the Queen, under a canopy. Although the statue, with its pedestal and canopy, is raised on a platform, the whole affair looks rather insignificant in comparison with the enormous dimensions of the enclosure in which it stands. This, judging from the plans given, must be nearly a thousand feet in width across the back line, against which the statue stands. This is about one-half more than the diameter of the Rond-Point de l'Étoile, in Paris, and the Queen's statue looks, in the middle of it, something as the Gambetta monument might in the place of the Arc de Triomphe.

THE Liverpool Cathedral Committee has very amiably given notice that it waives the condition contained in its programme of competition requiring that all the designs shall be in the Gothic style, that is, naturally, in English Gothic; and it also announces that a professional jury of award will be employed. As we observed not long ago, we are inclined to think that the Committee was wise in restricting competitors to English Gothic, and we still hope that the best design may be an unrivalled example of that style; but the courtesy that it has shown in yielding to the general opinion of the profession, which was, in some instances, not very graciously expressed, deserves recognition.

THE AMERICAN VIGNOLA.¹—V.

PART I.—THE FIVE ORDERS.

THE CORINTHIAN ORDER.

THE three distinguishing characteristics of the Corinthian Order are a tall, bell-shaped Capital, a series of small brackets called *Modillions* (74), which support the Cornice instead of *Mutules*, in addition to the *Dentils*, and a general richness of detail which is enhanced by the use of the *Acanthus* leaf in both Capitals and *Modillions*.

Here, again, the Attic Base is commonly used, but sometimes, especially in large columns, a base is used which resembles Vignola's Ionic Base, except that it has two *Beads* between the *Scotias*, instead of one, and also a lower *Torus*. The Shaft is fluted like the Ionic shaft, with twenty-four semicircular flutings, but these are sometimes filled with a convex moulding or *Cable*, to a third of their height.

The Capital is seven-sixths of a Diameter high, the upper sixth being taken up by the *Abacus*, which is nine sixths, or a Diameter and a half, in width, though it does not look so. It is moulded on the edge with an *Ovolo* and *Fillet* above a large *Congé* and small *Fascia*. The corners are cut off at an angle of 45 degrees, and the sides hollowed out in a curve of 60 degrees. The width across from curve to curve is seven-sixths of a Diameter. Each face of the *Abacus* bears a flower called the *Fleuron*.

The *Bell* (75) of the capital is one Diameter high, or six-sixths; it terminates under the *Abacus* in a *Beak-moulding* called the *Lip of the Bell*, which measures seven-sixths of a Diameter across, its greatest projection coming just under the least projection of the upper line of the *Abacus*. The lower two-sixths are covered by a row of eight *Acanthus* leaves, which bend over at the top to the extent of half a sixth, or a quarter of their own height. The next two-sixths show a similar row of eight leaves, set alternately with those below, four facing the sides of the Capital, and four the corners. Like those of the first row, they spring from the *Astragal* at the top of the Shaft, and the mid-rib of each leaf shows between two lower leaves, being really four-sixths high. These also bend over half a sixth. Between the eight leaves of the second row are eight *Caulicoli* (76),

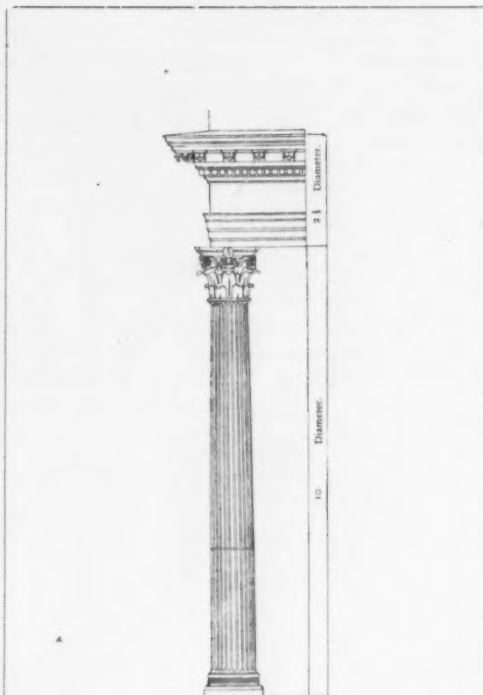


Fig. 74.



Fig. 75.

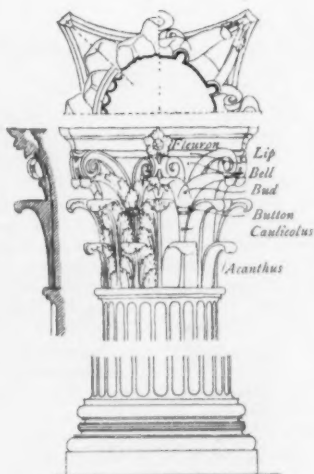


Fig. 76.

or cabbage-stalks, which terminate in a *Button*, upon which rests a sort of *Bud*, which divides into two leaves. These turn right and left, the larger one toward the corner of the Capital, the smaller toward the side or front under the *Fleuron*. From each *Bud* rise also two scrolls or *Volutes*, one of which runs out to support the projecting corner of the *Abacus*. The other, which is smaller, and does not rise higher than the *Lip* of the *Bell*, supports the *Fleuron*. Sixteen leaves of a third row curl over under these sixteen volutes, making with them eight masses of ornament, one on each corner of the column, and one in the middle of each side. These give in plan an eight-pointed star, each point consisting of a large leaf, two small leaves, two *Volutes*, and, above them, either the *Fleuron* or the horn of the *Abacus*. Between them is seen the *Bell* of the Cap, with its *Lip*.

The *Architrave*, which is three-quarters of a Diameter high, has three *Bands* and a large *cymatium*, which is as wide as the first *Band*. The two lower *Bands* occupy the lower half of the *Architrave*, and the third *Band* and the *cymatium* the upper. A small *Bead*, or a small *Cyma Reversa*, generally crowns each *Band*. The *Frieze*, which is also three-quarters of a Diameter high, may be either plain, pulvinated or sculptured.

The height of the *Cornice* (78) is divided into five parts. The two lower and the two upper parts resemble the lower and upper halves of the *Ionic Cornice*. The middle fifth is occupied by a *Modillion Band*, which carries the *Modillions*, or brackets. These, as well as the *Modillion-band*, are crowned by a small *Cyma Reversa*. They consist of a double scroll, below which is an *Acanthus* leaf. Each *Modillion* is half a Diameter long, one-fifth high, and as wide as a *Dentil* and two *Interdentils*; that is to say, two-ninths of a Diameter. They are set two-thirds of a Diameter on centres, one being over the axis of the corner Column, and one over the outer face of the *Double Dentil*. The soffit of the *Corona* between the *Modillions* is occupied by a sinkage with mouldings, called a *Caisson*, in the middle of which there is often a large *Rosette* (77).

¹ Continued from No. 1343, page 92.

As the Modillions are two-thirds of a Diameter on centres, or four-sixths, and the Dentils are one-sixth, on centres, it follows that there are four Dentils to each Modillion, *i. e.*, a Dentil under every Modillion, and three between. As in the Ionic Order and in the Denticulated Doric, the last Dentil, which is the first half of the Double Dentil, is centred over the face of the lower Diameter of the column.

Almost all the buildings erected by the Romans employ the Corinthian Order.

TABLE OF THE CORINTHIAN ORDER.

	$\frac{3}{4} D$	Equals height of Architrave.
	"	height of Frieze.
$1 D = \frac{1}{4} D$	"	height of Cornice.
	"	projection of Cornice.
$\frac{1}{6} D$	"	projection of Plinth.
	"	height of Plinth.
	"	height of Lower Band.
	"	height of Dentils.
	"	distance of Dentils, o. c.
$\frac{1}{3} D = \frac{2}{3} D$	"	height of Leaves.
	"	projection of Abacus.
$\frac{1}{4} D = \frac{3}{4} D$	"	length of Modillions.
$\frac{2}{3} D = \frac{1}{3} D$	"	distance of Modillions, o. c.
	"	distance from Axis to face of Double Dentil.
$\frac{5}{8} D$	"	upper Diameter.
$1 D = \frac{6}{8} D$	"	lower Diameter.
	"	height of Bell.
	"	height of Cornice.
	"	projection of Cornice.
$\frac{7}{8} D$	"	height of Capital.
	"	width of Abacus (least).
	"	width of Lip of the Bell.
$1\frac{1}{8} D = \frac{9}{8} D$	"	width of Plinth.
$1\frac{1}{2} D = \frac{10}{8} D$	"	width of Abacus (greatest).
$2 D = \frac{16}{8} D$	"	width of Abacus (diagonal).
$\frac{1}{6} D$	"	width of Dentil.
$\frac{2}{6} D$	"	width of Modillion.
$\frac{1}{8} D$	"	width of Interdentil.
$\frac{1}{2} D$	"	height of Astragal.
	"	projection of Astragal.
$\frac{1}{3} D$	"	height of Modillion.

THE COMPOSITE ORDER.

The Composite Order is a heavier Corinthian, just as the Tuscan is a simplified Doric. The chief proportions are the same as in the Corinthian Order, but the details are fewer and larger. It owes its name to the Capital (79), in which the two lower rows of leaves and the Caulicoli are the same as in the Corinthian. But the Caulicoli carry only a stunted leaf-bud, and the upper row of leaves and the sixteen Volutes are replaced by the large Scrolls, Echinus and Astragal of a complete Ionic Capital,

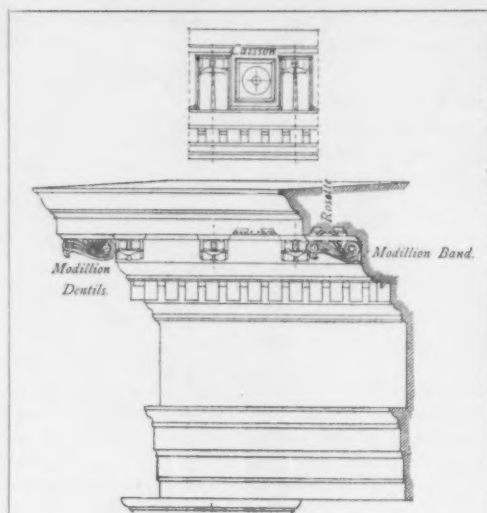


Fig. 77.

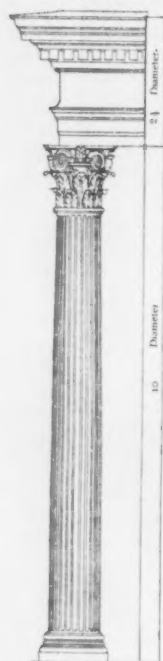


Fig. 78.

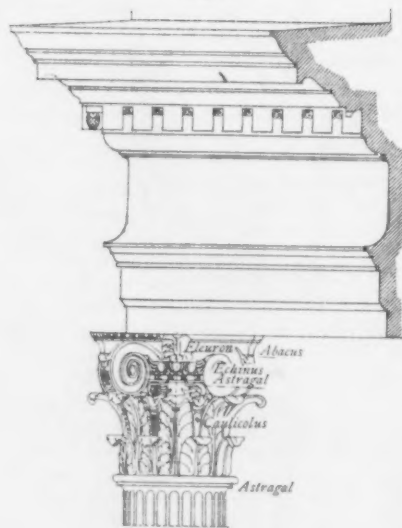


Fig. 79.

with four faces like Scamozzi's. A Composite Capital thus has two Astragals. The Scrolls are nearly half a Diameter high, covering up half the Abacus and coming down so as to touch the second row of Acanthus leaves. They measure fully nine-sixths across, and are only three-sixths apart, or half a Diameter, instead of four-sixths, as in the Ionic.

Vignola's Composite Entablature differs from his Ionic chiefly in the shape and size of the Dentils. They are larger, and are more nearly square in elevation, being a fifth of a Diameter high, and one-sixth wide, the Interdentil being one-twelfth, and they are set one-fourth of a Diameter apart, on centres. The last Dentil, or first half of the Double Dentil, is centred over the outer face of the Column, at the bottom, as in the Corinthian, Ionic and Denticulated Doric. The outer face of the Double Dentil is three-quarters of a Diameter from the axis of the Column, and there is only one Dentil between the Double Dentil and the one over the axis, against two in the Corinthian and Ionic, and three in the Denticulated Doric. The Frieze terminates in a large Congé over the Architrave, and the Corona is undercut with a large Cyma Recta, making a drip.

Palladio's Composite Entablature is more characteristic than Vignola's, the parts being fewer and larger. The Architrave (79) has two Bands, the Frieze terminates in two large Congés, and the Cornice is divided into two equal parts each half a Diameter high. The upper half is shared about equally by the Cymatium and the Corona, and the lower half is almost entirely taken up by a series of large brackets, or Blocks, a third of a Diameter high, and one-fourth wide, divided into two Bands. Their projection is also one-fourth of a Diameter. The Double Block at the corner is, accordingly, half a Diameter wide. Its inner face comes just in line with the Frieze below. The bands and mouldings which decorate the Blocks are continued between them.

These dimensions apply to Palladio's entablature where it is made of the same size as Vignola's, that is to say, a quarter the height of the column, or two Diameters and a half. But Palladio himself made his Composite entablature only two diameters high, or one-fifth the height of the column, cutting down the Frieze to half a Diameter, the

Architrave to two-thirds, and the Cornice to five-sixths. If the dimensions of Palladio's Cornice given in the table are, accordingly, taken from the upper diameter of the shaft instead of from the lower, they will exactly conform to Palladio's own usage.

The Block entablature used by Scamozzi for his Composite Order is even less than two diameters in height, and this seems to have been the case also with the entablature of the Olympæum at Athens, which Palladio is thought to have imitated.

The mouldings below the Blocks are often made to project more than in Palladio's example. This increases their distance apart, on centres, since one must still come over the axis of the column and the one on the corner must be as far out as the end of these mouldings. The Blocks also vary considerably in length in different examples.

The upper part of the Composite Capital, as has been said, is often used alone as a variety of the Ionic Capital.

The Composite Capital is employed in the Arch of Titus in Rome, and elsewhere, with a Corinthian entablature, and the Block Cornice occurs in the so-called Frontispiece of Nero, as well as in the temple at Athens, in connection with a Corinthian Capital.

TABLE OF THE COMPOSITE ORDER.

$\frac{1}{2} D = \frac{3}{8} D$	equals height of Scrolls.
"	space between Scrolls.
$\frac{3}{4} D$	" distance of Eyes, o. c.
$1\frac{1}{2} D = \frac{5}{8} D$	" width of Scrolls.
"	width of Plinth.
"	width of Abacus.

VIGNOLA'S CORNICE.

$\frac{1}{4} D$	equals height of Dentil Band.
"	distance of Dentils on centres.
$\frac{3}{8} D$	" distance from Axis to face of Double Dentil.
$\frac{1}{5} D$	" height of Dentils.
$\frac{1}{4} D$	" width of Dentils.
$\frac{1}{12} D$	" width of Interdentil.

PALLADIO'S CORNICE.

$\frac{1}{3} D$	equals height of Block.
"	length of Block.
$\frac{1}{4} D$	" width of Block.
"	height of Lower Band.
"	height of Corona.
"	height of Cymatium.
"	distance between Blocks (plus).

W. R. WARE.

[To be continued.]

ELECTRICAL INSTALLATION AND DECORATIVE WORK IN CONNECTION WITH EXPOSITION BUILDINGS.¹

IN planning the electrical installation for an exposition, the first thing to be taken into consideration is the source of energy, and it must be decided whether it is to be from steam-plants on the grounds, or, as at the Pan-American Exposition, partly from a water-power plant and partly from steam-plants on the grounds. A large exposition requires an immense amount of energy, and the various ways in which it is called upon to give service raise the question whether or no it would be wisdom for such an exposition to depend entirely upon any outside source of power, no matter how reliable it might be.

The electrical installation in an exposition calls for a number of classes of lighting-service. First, there is the patrol lighting of the grounds, which is for the strictly utilitarian purpose of enabling employes and the public to see their way about the exposition grounds at such times and places as the illumination or display lighting is not available. Second, there is the general illumination of the grounds and buildings, which forms so important a part in all modern expositions, and, as press reports show, is by far the most important drawing feature of any of the attractions. Third, there is the display lighting, which may form an adjunct to the general illumination, or may seriously interfere with it, all depending upon the skill with which the general scheme of illumination is carried out. In this class may be included fountain-lighting or other features of embellishment.

Fourth, there is the lighting required on the interior of the buildings by exhibitors for general and special purposes. Fifth, there is the lighting of concessions, a point where an exceptional service is always demanded. In addition to these features, it is necessary to take into consideration the fact that an electric-power service has to be considered both for concessionaires and exhibitors. The Pan-American Exposition is evidence of the fact that the use of electricity in exposition work and attractions has developed surprising popularity, and it is reasonable to suppose that the probabilities are that each succeeding exposition will be more exacting in its demand upon electricity and the electrical department than the one before it.

The great exposition of to-day calls for something besides splendor and beauty, and the general utility of the various services to which electricity has been applied is not forgotten. For this reason an exposition calls for complete police, fire-alarm and signal systems, as well as the most perfect telephone and telegraph service: an ordinary exposition requires several hundred alarm-boxes. Work in all departments is greatly expedited by the telephone, and its early installation is a great aid to progress.

The custom now is to place the mechanical and electrical work of an exposition service under one head in order that this department may be responsible for all the energy generated or distributed, the greater part being distributed by electrical means. The electrical necessities have become so extended that the placing underground of conductors at expositions has become an established rule. To place such a mass of conductors overhead would obtrude on the main vistas to such an extent as to entirely spoil the architectural effect aimed at.

Naturally, the greater part of the electrical energy of the modern exposition is expended on lighting, and the major part of this is applied to the general and decorative illumination. In arranging the illumination of an exposition, it is far easier to supply too much light than it is to properly diffuse the light at one's command. In other words, the engineer is more likely to err in providing too much light at points than by failing to supply enough. The illumination itself should never be the primary object, but should always be considered the means of obtaining artistic results. Judicious distribution of the light is far more desirable than great brilliancy and glare. In fact, the latter effects are what ruin the beauty of any illumination. An exposition that seeks or aims to be called "beautiful" has little or no use for an intensely brilliant light. It is generally recognized that the interpolation of a brilliant light between the object to be viewed and the spectator destroys the effect and injures the eyes of the spectators.

In this paper it is not the intention of the writer to more than briefly outline the general principles underlying all truly successful decorative work accomplished by the aid of electricity with especial reference to expositions, which at the present day offer the most extended fields for this class of work. Many creations of man in this day are repetitions, combinations, or modifications of something that has been handed down by the ancients. From generation to generation they have been passed until the originator is forgotten in history, and then the modern creation is passed off as something new. A busy world accepts the result and glories in the apparent progress of the age. However, when we enter the field of embellishment for night effects by the aid of the electric-light, to the credit of the electrical fraternity be it truthfully said that we are dealing with a strictly modern affair and thoroughly modern creation. This is one of the things not transmitted down through generations from the ancients. We build on modern thought, modern intellect, modern knowledge; not on the way-behind conditions of centuries ago. As one popular and learned writer, just before the opening of the Pan-American Exposition, put it, "A Greek or a Roman could no more have imagined the splendors of the nocturnal scene we shall behold at the Court of Fountains at Buffalo than a cave-dweller or a man of the Stone Age could have imagined the daytime aspect of Classic Athens or Imperial Rome."

No matter what beauty the architecture may possess, the night aspect and beauty of a structure are dependent on the skill of the expert in decorative illumination, and this expert must at the same time bear in mind the practical requirements of installation. It seems almost needless to point out the fact that electric-lighting has made possible effects undreamed of a few years ago, and that its installation and distribution at expositions calls for a kind of special knowledge only acquired by experience in this line of work.

Unfortunately, it is the constant experience of those who have made a specialty of this subject that their part of an undertaking is considered of minor and secondary importance, something that may be supervised by non-specialists, by those having little or no knowledge of the fundamental principles of practical, decorative and useful illumination.

In planning the general illumination and display lighting, it is the province of the engineer and expert in this line to produce the most beautiful and pronounced effects possible with the energy at his command, and here is where a thorough knowledge of the principles and long experience in similar work count.

The incandescent-lamp permits of a more artistic and enjoyable scene of illumination because of the freedom with which it may be placed in any position the fancy may suggest. In all artificial illumination it is essential to secure uniform diffusion of light, if the best results are to be obtained. This can never be done by having the light concentrated in a few extremely brilliant centres about the space to be lighted. Such attempts to rival the sun are failures.

¹A paper by Luther Stieringer, A. I. E. E., read at the Thirty-fifth Annual Convention of the American Institute of Architects, held at Buffalo, October, 1901.

While the centres are brilliant enough, their very brilliancy makes the outlying space seem dark. No artificial method of illumination is perfect, and must be always open to some objections arising from many limitations. Very often it is necessary to place the light in the line of sight. This is a difficulty which is met by the simple expedient of subdividing the light into small units and distributing these units uniformly. A lamp of over 16 or 20 candle-power should never be used. What has just been said about diffusion and distribution of light holds true not only in regard to illumination for useful purposes, but applies as well to decoration and embellishment. There is another method of obtaining the same effects, namely, by using high candle-power lamps and diffusing by means of globes, shades, and reflectors. This system, however, is seldom used.

The expert in illumination has constantly to urge the fundamental fact that in artificial illumination we can secure but relative effects, the harmony of which will accomplish infinitely more than costly and laborious sensationalism. In the case of exposition buildings, the principle which experience has shown to give the best results is to outline and accentuate the lines of architecture with relatively small incandescent-lamps. The night furnishes a background, and the imagination has free play to fill in the gaps. The effect produced in the illumination of an exposition is so largely a matter of artifice that the actual number of lamps used to accomplish certain results would be surprisingly small if known. The same amount of energy spent in illumination, if not skilfully distributed, might give very insignificant results, and when removed leave no trace of its imperfections.

Expositions are such a popular attraction, and of such general interest usually, especially in industrial fields, that they justify and demand illuminations that are exceptional and only fitted for just such occasions. An illumination such as might be presented at an exposition, if repeated night after night in a city for a period that expositions hold their sway, would be charged with having gone glory mad. The moral of this is that an exposition and its illumination cannot be judged as being in the category of one-night stand events, but should be looked upon as being thoroughly unique and of special requirements and character.

HOT-WATER HEATING FROM A CENTRAL STATION.¹



THE system of furnishing heat to business-blocks, hotels and residences from a central heating-station is not a new one, but the application of hot water in a return system of heating is now receiving the attention of those in search of the best and latest improvements in public utilities, and is one in which economy of fuel and the wide distribution of heat at a minimum cost are worthy of attention.

The system as now in operation in a number of cities embraces a central heating-plant located at, or near, the waterworks pumping-station or an electric-light station, where the waste steam can be utilized, from which radiate through the streets and alleys two lines of pipe of equal size, one for the outflow of hot water and the other for the return. These pipes are placed underground in properly insulated boxes side by side, taps of the proper size being made in each line for blocks and dwellings, which carry the water through radiators and to the central station by the return lines.

Pumps at the central station force the water through the outgoing lines of pipes, through the radiators, and back to the station under a pressure of twenty to thirty pounds—the return water passing through a larger heater into which the exhaust-steam from the pumping-station or electric-light plant is discharged, or into which live steam is delivered from the boilers. The loss of heat from the pumps through the mains and radiators back to the heater has by experience been shown not to exceed twenty to thirty-five degrees: so that water sent out at a temperature of 190 degrees will be returned to the heater at an average of 165 degrees, and while passing through the heater is again raised to its original temperature by the exhaust, or live steam. The plant of the Delaware Electric Light, Heat and Power Company, at Delaware, Ohio, has for four years furnished heat from a central station as above described (among them being one of the large buildings of the Ohio Wesleyan University). It has in that time encountered extreme cold weather, reaching twenty-nine degrees below zero, and yet its patrons have been entirely satisfied and use no other heat. During the past year, under the supervision of the Gwynn Central Station Heating Company of Delaware, Ohio, this system was extended to over two miles of mains, taking in the City-hall with 7,500 feet of radiation, through eighty-seven radiators, Hotel Donavin, court-house and county jail—these being among the largest of ninety-five consumers who were on the lines during the winter of 1900-1901. The Gwynn system gives a uniform temperature in all buildings at all times, night and day, without attention from the occupant, and with the use of thermostats or other regulators, and, if properly equipped with radiators, can be maintained in all varying temperatures within two per cent.

To the consumer this means a constant and uniform temperature in offices and dwellings of seventy-two to seventy-five degrees through the winter—being regulated at the central station to meet the changes of temperature. If the weather becomes colder, the water is sent out at a higher temperature, and the speed of the pumps is increased; with nothing to do with fires or fuel through the entire winter, not even the turning of a valve to regulate the heat; whether the house is occupied or not, the plumbing and even house-plants are

safe, without the danger attendant on fires in stoves and dilapidated furnaces. It means freedom from dust, ashes and soot where coal is used (and in some residences in our city not a pound of coal is used), hot water for heat, electric-lights and gas for kitchen-range. It means a reduction in insurance-rates—to the personal knowledge of the writer, the insurance on one property was reduced thirty-three per cent on account of the change from stoves to hot-water heat.

Its superiority to steam-heating is fully recognized by all who have examined the system. It is a great saving of fuel, for the reason that the partially heated water is returned to the station with a loss of but little above that given out at the radiators, while a steam-heating plant will lose much more heat, being under a higher temperature, and cannot be regulated so as to give the proper radiation in varying changes of weather; when the consumer becomes overheated, the first thing is to open the windows and doors, thus wasting the heat that cannot be controlled. The loss is further augmented by discharging the hot water from the condensed steam at a temperature of 100 to 150 degrees into the sewer or waste-pipes, and this heat is lost, while in the hot-water system, as shown, it is returned to the central station to be again reheated to the desired temperature and again sent out. The combining of the units of heat at a central station from the exhaust-steam that is usually wasted is a clear saving of fuel, and should the system require more heat than this, cheap fuel costing less than half the amount paid by individual consumers for lump-coal can be used to supply live steam to the heater. In the use of slack and other cheap fuel at the central station we are able to send out to the consumer heat at a much less cost than he can generate for himself—to say nothing of the waste in old stoves and furnaces. Then, again, if you have exhaust-steam to turn into the heater, this is a clear saving of a waste-product, which is at once turned into ready money, for it is just what the consumer wants. Plants of hot-water heating are now being constructed in several cities, and many delegations have visited the plant at Delaware during the past year and in every case have recognized its advantages both to the consumer and owner.

The economy of this system of heating must be apparent to all, where the consumer can be furnished with heat, with all the advantages above mentioned, at a less cost than the fuel which he burns, with rooms constantly heated, night and day, no dust or ashes, with no danger from fires, and a less rate of insurance. To the company who furnishes the heat, it means a saving of all heat lost in exhaust-steam, which is a clear gain, and at once becomes a marketable product and source of revenue, with little, if any, increased cost of operation, as the same force in the water or light station, with but little, if any, extra work, can care for the pumps of the heating-plant. The possibilities of this system are, not only furnishing heat, but hot water for bath and domestic use, and even the pumping of ice-water during the hot season through the radiators.

BOOKS AND PAPERS

IT is a pleasure to welcome another book² by the author of "*Bricklaying*." As in that excellent little treatise, Mr. Maginnis gives in the newer book the results of the experience of an intelligent and skilful mechanic in actual work, expressed in clear language, and with a simplicity and earnestness which are very pleasing. The book does not pretend to be a manual of statics or a treatise on the properties of materials; but it shows the right way of performing the operations incident to the rough work of framed buildings, and architects, who often see trusses put wrong side up over openings, and ingeniously useless bridging, can understand the value to young mechanics, and even to old ones, of a book full of information and suggestion. As for the architects themselves, although most of them understand the theory of framing, there are few who possess a complete knowledge of the practice; and even those who do possess such knowledge will find it advantageous to know how builders understand it, so that they may be sure that their instructions will be properly comprehended.

As in his "*Bricklaying*," the author concludes his book with a collection of "practical hints," which architects will find particularly useful in superintending. Among other things, he calls attention to the carelessness, which, as architects know, is just now singularly prevalent, of floor-layers in making heading-joints. Nothing injures the appearance of a floor more than wide black heading-joints; and Mr. Maginnis urges his readers to make them "absolutely tight," even if they have to saw the ends of the boards off with a slight bevel for the purpose.

WHAT may prove, if it continues as it has begun, a very valuable addition to the art-magazines of London, is the new-born *Connoisseur*. Its outward appearance is not very inviting, being a combination of gray and emerald green, with a design by Mr. Byam Shaw, but the beauty of its illustrations compensates for external dullness. The chief item of the first number is the picture-collection of Sir Charles Tennant; and, apparently, "collections visited" will form the leading feature of future numbers, the second being the Old Wedgwood collection of Mr. Arthur Sanderson.

¹ Paper by C. W. Niles, Delaware, O., read at the convention of the Central States Waterworks Association, Evansville, Ind., September, 1901.

² "*How to Frame a House*," or House and Roof Framing. By Owen B. Maginnis. Illustrated: Published by the Author, New York.

Then we have papers upon every collectable object from pictures, ceramics, old oak, gems, silver-plate, autographs and coins down to — stamps! It seems a pity that these latter should have been included; one cannot imagine such an art review as the *Gazette des Beaux-Arts* including stamps! But, presumably, it is a matter of L. S. D., and when we see a stamp fetch £60, we may appreciate the publisher's point-of-view when he includes them in his new art-social. It is a humiliating reflection that, whereas France supports an eight-shilling monthly which criticises, at length, all kinds of artistic work, and which prints analytical monographs upon art of considerable length, the English reviews and magazines cannot be more lengthy in their articles than a page or two. How can you justly discuss the work of a great painter or a collection of fine porcelain in some five hundred or six hundred words? The British public will not tolerate a serious artistic review; anything beyond a few jottings upon half a dozen subjects will not pay — or rather the British public will not pay the price of serious work by first-rate writers upon art. It is just the difference of a shilling artistic public and a ten-shilling one.

But the *Connoisseur* fills a gap, nevertheless, as it quotes prices given for works of art — and stamps, and thereby it teaches the would-be collector. It also has a list of objects to be sold, "bringing the collector into direct communication with the seller"; but why an "old carved reredos by Grinling Gibbons, from parish church in Essex," should be for sale, we should like to inquire of the rector, the church-wardens and the arch-deacon. It certainly seems a scandal that work by Grinling Gibbons should have been taken out of a church and sold, and one can only exclaim, When and by whose authority?



DETROIT ARCHITECTURAL CLUB.

THE semi-annual meeting of the Detroit Architectural Club was held October 7. This being the first meeting of the season a very pleasing reception was given in connection with it. The rooms had been handsomely decorated for the occasion.

During the summer months the Club had also been greatly improved with pieces of furniture, etc.

The election of officers held that evening resulted as follows: —

President, Cheri Mandelbaum; *Vice-President*, Walter E. Chaffee; *Secretary*, Dalton R. Wells; *Treasurer*, John J. Fraunfelder.

The reports as given by the officers and different Committees of the past year proved the Club to be in good condition in every particular.

At this meeting it was also decided to have the regular business meetings monthly instead of every two weeks, as has been done heretofore. The season's work will consist of four lectures by architects of national reputation, and of a class each in design and steel-construction. The former to meet Thursday nights and to be taught by Architect J. W. Chase; the latter to be given on Monday evenings and to be conducted by Mr. Walter O. Chaffee, a graduate of the Boston Institute of Technology.

At this meeting the medals awarded by the Michigan Chapter, A. I. A., in competition for designs for an entrance to Palmer Park of this city, were awarded to Messrs. Richard Mildner and F. C. Pollmar. Mr. Louis Risher received honorable mention.

DALTON R. WELLS, *Secretary*.



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

THE CORINTHIAN ORDER: TWO PLATES.

THE COMPOSITE ORDER: TWO PLATES.

For explanation of these and the preceding plates see the article "The American Vignola" elsewhere in this issue.

FIRST CHURCH OF CHRIST, SCIENTIST, ORANGE, N. J. MR. F. R. COMSTOCK, ARCHITECT, NEW YORK, N. Y.

HOUSE, AND PLANS, OF NEILSON BROWN, ESQ., TORRESDALE, PA. MR. WILSON EYRE, JR., ARCHITECT, PHILADELPHIA, PA.

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

THE WAITING-ROOM: GARE DE LYON, PARIS, FRANCE. M. TOUTOIRE, ARCHITECT.

This plate is copied from *La Construction Moderne*.

[Additional illustrations in the International Edition.]

FRONT AND REAR VIEWS OF THE HOUSE OF NEILSON BROWN, ESQ., TORRESDALE, PA.: TWO PLATES. MR. WILSON EYRE, JR., ARCHITECT, PHILADELPHIA, PA.

INTERIORS AT THE PARIS EXPOSITION OF 1900: CORRIDOR IN THE PAVILION OF THE MINISTRY OF THE COLONIES; — ENTRANCE-HALL: PETIT PALAIS DES CHAMPS ELYSEES.

FRENCH CATHEDRALS: ALBI — THE PORCH; THE APSE.

FRENCH CATHEDRALS: POITIERS; ORLEANS.

FRENCH CATHEDRALS: BRIOUDE; RODEZ.



[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.]

IMPORTANCE OF THE STREET-NUMBERED ADDRESS.

NEW YORK, N. Y., November 7, 1901.

TO THE EDITORS OF THE AMERICAN ARCHITECT: —

Dear Sirs, — I would like to interest you in the following subject, and have you give it some expression in your valuable publication.

You will notice on looking over letter-heads of many firms, or even those of private individuals, that they omit the street and number of their address. They will sometimes give the number of the room in some public building, or they will simply state the name of the building where their office is located.

Now, this may be all well enough for a citizen in their locality, but when a stranger desires to see these parties, or writes them, it is another question.

In correspondence, usually the name of a building is a long one, and it takes a great deal of time to write it out, and one is more apt to make a mistake. For example, I correspond with parties in the Metropolitan Life Insurance Company; again, in the West, with parties in the Keith-Perry Building, whereas the number and name of the street would be more simple. Or, here is a party who lives on the corner of Commonwealth Avenue and Washington Street.

Now, in my travels, I have been to many cities trying to find people located in some of these buildings, and awhile ago, while in Cincinnati, with the letter-head of the kind above mentioned, I asked a policeman where such a building was located, and he directed me some six blocks away. I showed him the letter-head, and spent about an hour trying to find the place, and to my surprise, as well as disgust, the building I was looking for was directly across the street from the corner where I showed the policeman the letter-head. Now, if the street and number were on that letter-head, I would not have had to ask questions, and anybody could have directed me to the street, and it is only a question of intelligence to follow up the number.

I spoke to a gentleman only yesterday about this question, and showed him his letter-head, and he replied, as everybody does, and perhaps you will, "Why, everybody knows where the Benedict Building is."

So, to prove this, I asked a policeman and a hotel clerk, and neither of them knew where it was.

Now, you see this takes a great deal of valuable time.

People should give their numbers and street addresses. It saves time in writing it out and looking it up, and it seems to me that this subject is an important one, and I trust that you will endeavor to bring it before your subscribers, and greatly oblige,

Yours truly, F. R. COMSTOCK, *Architect*.

[This is an excellent suggestion. It may be imagined that we suffer as much, perhaps, as anybody from this cause, and whoever will be instrumental in effecting a change shall have our grateful thanks. In Paris, the post-office authorities have a way, if street and number are not given in the direction of letters, of returning them without ceremony to their writers, stamped "Adresse Incomplete." Our post-office is obliging enough to look up addresses in the "Directory," but it is possible to require too much of official courtesy, and the Post-office Department might do well to give a hint, by notices in city post-offices, that the street and number must be given in addressing city letters. — EDS. AMERICAN ARCHITECT.]



DISCOVERIES AT POMPEII. — The noted archaeologist Rodolfo Lanciani writes to the *Athenaeum*: In July, 1899, certain desultory excavations were undertaken on the farm of Signor Matrone between the River Sarno and the Stabian gate of Pompeii, near the Molino Fienzo, not for any archaeological or scientific purpose, but in quest of valuable and marketable objects. The remains brought to light include a set of shops, built in the reticulated style, opening on a porch or veranda which runs parallel with the high road. One of the shops, filled with earthen amphorae, belonged to a wine-seller, a second to a carpenter, a third to a dealer in fishing-implements. A large court opens behind the shops, with an oven in the centre; the place, in short, shows the

characteristics of a country inn located on the Via Stabiana near the mouth of the Sarno, on the main line of retreat of the panic-stricken Pompeians. Seventy or eighty fugitives have been found, apparently smothered while seeking shelter under the roof of the inn, almost in view of the fleet which had sailed from Miseno to their rescue. The greatest number fell at the east end of the porch towards the river, where Pliny's Liburna was probably anchored—a poor and wretched lot of fugitives, carrying away in their flight only a few coppers. Six or seven skeletons were found lying in the court near the oven, also with no objects of value; but a party of twenty men, women and children of much higher rank were overtaken by death in the middle section of the veranda. Their gold necklaces were still fastened round their necks; bracelets still encircled their wrists; precious rings still fitted their fingers. Among this group of well-to-do fugitives one seemed to occupy the place of honor, a person whose skull betrays a superior intelligence, and of a noble demeanor. He wore a chain of sixty-four gold rings wound thrice round the neck, two armlets on the right arm, a heavy signet-ring, and a dagger on the left side. The dagger has a blade of steel, a handle carved in ivory, and a scabbard ornamented with gilded shells. This person was suffocated by the deadly fumes of the volcano while sitting against the wall, probably on a sedan-chair or a *lectica*, the brass ornaments of which have been found *in situ*. The excavations, unfortunately, were carried on with surprising negligence, no descriptions nor photographs being taken of the tale-telling details. I cannot express, therefore, any opinion on the statement made by Signor Mariano Canizzaro (in a pamphlet published September 15, 1901, for private circulation only, by the Ballantyne Press of London) that the skeleton may be that of Pliny the Elder himself. Canizzaro's deductions are extremely clever, but at the very outset I note an objection. The skeleton was found surrounded by a vast number of household goods, such as tripods and lamps; with statuettes of domestic gods, some cast in bronze, some moulded in terra-cotta. Unless these objects belonged to Pompeianus, in whose company Pliny probably was at the time of the catastrophe, we cannot reconcile ourselves to the notion of the gallant old admiral rushing to the rescue of the Pompeians and Herculaneans with a lot of clay figurines in his hands.

SANITARY ADVANTAGES OF UNDERGROUND CITIES.—Dr. A. Wynter Blyth, barrister-at-law and medical officer-of-health for Marylebone, had a startling proposition to make in his capacity of new President of the Incorporated Society of Medical Officers of Health, who held their annual gathering at the Hotel Cecil. In his Presidential address he discussed the subject of "Ventilation" in all its bearings. To improper ventilation he attributed the low state of public health, which conduced to the spread of tubercular and other maladies. After dilating upon the atmosphere and excellent ventilation of the tube railway, he said it was within the possibilities of modern science to make the deepest mine not only habitable, but agreeable and healthy. It might be hereafter a contribution to the solution of the housing question to build downward in the depths instead of upward on the mountain. One could imagine a Jules Verne cavernous city, where the sky was the ever-white, changeless chalk, where no rain fell, where no frost penetrated, where the light never failed, and where dry, warm, filtered, purified, ozonized air bathed the lungs and fanned the cheeks of the denizens in the constant white glare of a never-dying summer's day. In tenement-houses and work-places it was better to deal with each individual room and give them their own ventilating system. With regard to the ordinary tenement-house it was doubtless at the present time hopeless to suggest any mechanical appliance. They must seek the great factor in the propagation of tubercle in the constant breathing of bad air added to close contact of the healthy and diseased. If some of the great expert talent now employed in the investigation and discussion of problems relating to sewage and sewage-disposal were diverted to the study of ventilation, our factories and workshops would put out more work in a given time, and the mean duration of human life in this country would be appreciably lengthened. — *London Chronicle*.

MEXICAN MARBLE DEPOSITS.—A prominent Mexican engineer, who was connected with the preparation of the Government's geological reports, says that one of Mexico's richest industries which no one has as yet attempted to develop is the immense marble formation on the southern frontier, in the vicinity of Ximulco. The formation, he says, is situated near the surface of the ground, and in some places is so near the top that the rains have washed all the earth away, leaving the marble exposed and ready for quarrying. This formation extends over a very large area, and, while its depth has not been ascertained, every indication is that it extends many feet. He says that several millions of cubic feet of marble could be easily obtained without the necessity of digging away more than a few feet of earth. Several varieties of marble are noted by him. The most abundant one is with black and white stripes. Another is pink in color and is of very fine quality. Labor in that section is cheap, the country roads are good, and are over an almost level, rolling land, and railroad communication is only a few miles distant. At present no marble is produced in Mexico, and all that is used here has to be imported at high cost. The opening of such quarries would find a ready market for the output. — *N. Y. Evening Post*.

LABOR'S EFFORTS TO RUIN A BUILDING'S OWNER.—War has been declared by union labor against every one interested in a building erected at Fifty-ninth and Halsted Streets by non-union men, and a unique fight is being waged, which has already involved the tenants. At the meeting of the Chicago Federation of Labor recently it was openly announced that the purpose was to ruin the owner of the property because he had consented to the employment of non-union workmen in the construction of the building. It was suggested that the same tactics be used against other buildings throughout the city that are not union made. Large posters warning union men to keep away from the building appeared on the walls of Federation Hall and have also been

tacked up throughout the neighborhood in which the structure is located. To make the warfare more effective, circulars have been sent out. Members of unions in all trades who live in the district have been enlisted in the crusade to keep the place tenantless, and those who have moved into the building are being made to feel the displeasure of the unionists. One of the first to suffer has been the large store which has recently been opened there. It is in the midst of homes of workingmen, and a combine is being formed among them to divert their trade from the "branded" building. The store handles union-made goods and employs union clerks, but the demand is made that it occupy a union building. — *Chicago Record-Herald*.

AN OCTAGONAL HOUSE.—A house built on an octagonal plan is described by a Philadelphia newspaper, whose correspondent vouches for some special advantages in a building of this shape. It is, it is claimed, more compact and more readily heated than the long square houses now generally built. Through the middle of the house, from the ground-floor to the roof, is a stairway, and the rooms are built around this. There are four chambers, which are square, or very nearly so, and sandwiched among these are four smaller and irregularly-shaped rooms, which are available for playrooms, servant's room, sewing-rooms, and similar purposes. The heater in the cellar is located directly in the middle of the house, and the pipes radiating from it in no case extend more than 4 or 5 feet, where they take an upward turn and are carried to the upper floors through an interior wall, following the general lines of the outer wall. These pipes go directly by the shortest line to the rooms which they are intended to heat, and therefore very little of the heat is lost in the process of delivery. The occupant of the house says that his coal bill was less than half that of his neighbor, who occupies a stone house, rectangular in shape. In the summer time it has a like advantage. No matter from which direction the wind blows, a fine current of air can always be found there. By throwing open the windows of a cupola on the top of the house and opening the doors and windows at that side from which the wind is blowing a strong draught is immediately experienced, the walls acting like a chimney. — *Building News*.

STRENGTH OF THE AMERICAN LABOR-UNIONS.—A report on trade and labor organizations has been prepared under the direction of the Industrial Commission by Charles E. Edgerton and E. Dana Durand. It gives a rough estimate of the aggregate membership of the labor organizations in the United States on July, 1901, as follows:

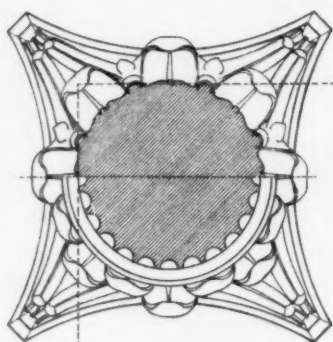
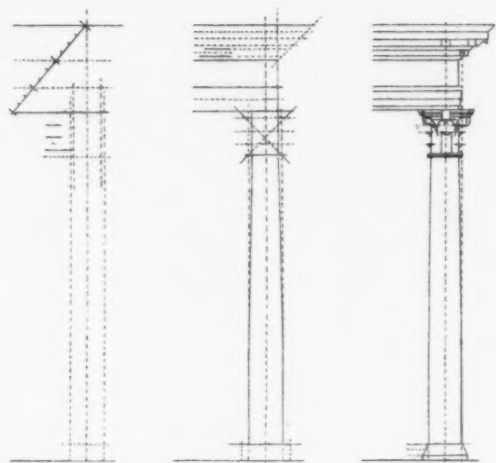
Unions affiliated with the American Federation of Labor...	930,000
Custom clothing-makers.....	3,800
Lithographers.....	2,100
Bricklayers.....	39,000
Plasterers.....	7,400
Stone-cutters.....	10,000
Box-makers.....	5,500
Piano-workers.....	7,700
Engineers, marine.....	6,000
Engineers, locomotive.....	37,000
Firemen, locomotive.....	39,000
Conductors, railway.....	25,800
Trainmen, railroad.....	46,000
Switchmen.....	15,000
Letter-carriers.....	15,000
Knights of Labor and unenumerated organizations, say.....	191,100
Total.....	1,400,000

As to the American Federation of Labor, the report says that the representation in the conventions of that body, the basis used for calculation, does not accurately represent the membership of the Federation. "The Federation," it says, "has tended year by year to embrace an increasing proportion of the American unions, so that its growth has been somewhat greater than the growth of unionism as a whole. Yet, while not showing even approximately the absolute membership of American unions, the figures may give some indication of the direction and the velocity of movement. The number of members apparently represented in the Federation conventions rose from about 200,000 in 1890 and 1891 to nearly 250,000 in 1893, fell sharply to about 175,000 in 1894, then rose gradually to a little more than 250,000 in 1898, and went up by leaps to nearly 325,000 in 1899, and to more than 500,000 in 1900. — *Exchange*.

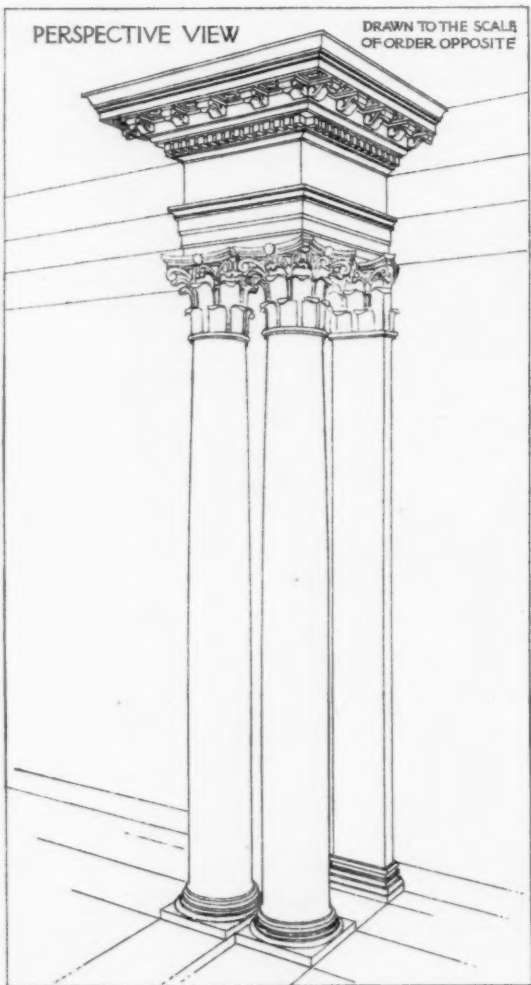
ANOTHER PROSECUTION UNDER THE PACCA LAW.—There is another art-scandal in the Italian aristocracy. Prince Barberini is to be prosecuted, under the Pacca Law of the Papal times, for selling mediaeval masterpieces outside the kingdom. The works in question are an ivory registry and a triptych, which have been sold, indirectly of course, to the Louvre. The way in which the illegal sale came to be revealed is curious. Having been acquired for the Louvre, the objects have, of course, been catalogued, and the entry states that they were once the property of the Barberini family. This, falling under the eyes of the Italian Art Department, has led to proceedings. The Prince is summoned to appear on November 26. The edict on which the prosecution is based was issued by Cardinal Pacca, Secretary of State to Pius VII. Princes Sciarra, Borghese, and Chigi have already been proceeded against under its provisions. The decree confers upon the Government the right of preemption, for which notice of an intended sale is required. If the right of preemption is not exercised, a tax of 10 per cent is levied on the purchase-money. — *London Pall Mall Gazette*.

THE "WHITE HOUSE."—The following circular has been issued to officers of the Treasury by Secretary Gage: "In view of the desire of the President, it is hereby ordered that the heading or date-lines of all official papers and documents prepared or written in the executive department of the Treasury and requiring the signature of the President be hereafter headed 'White House' in place of 'Executive Mansion.'" — *Washington Star*.

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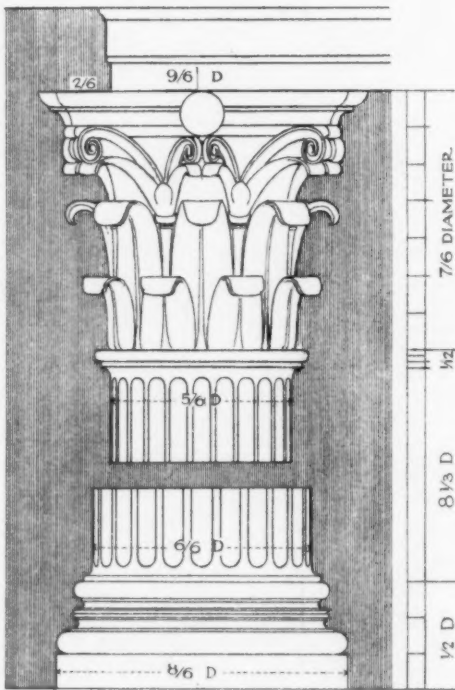


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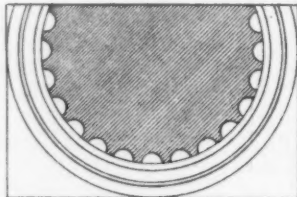


PERSPECTIVE VIEW

DRAWN TO THE SCALE OF ORDER OPPOSITE



ELEVATION OF CAPITAL AND BASE



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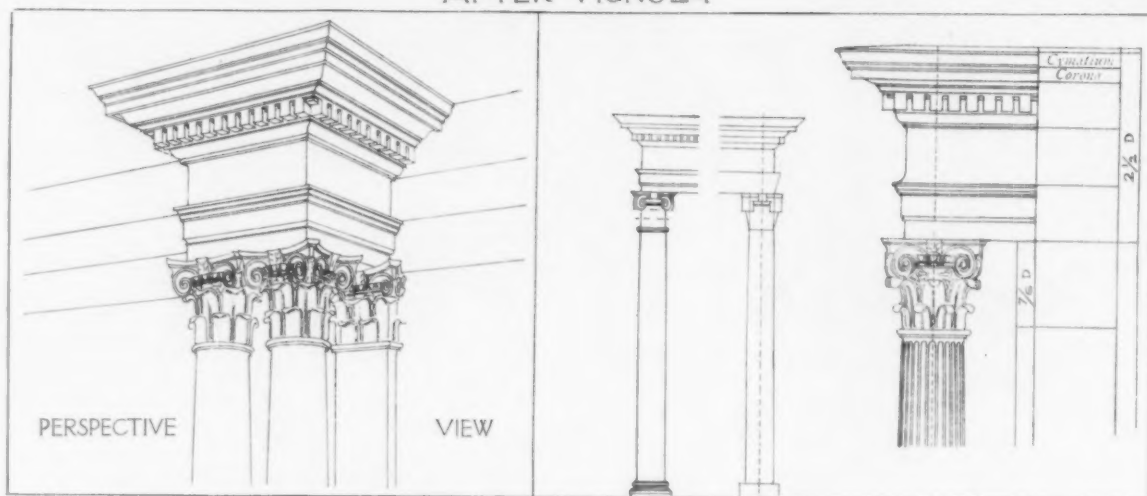
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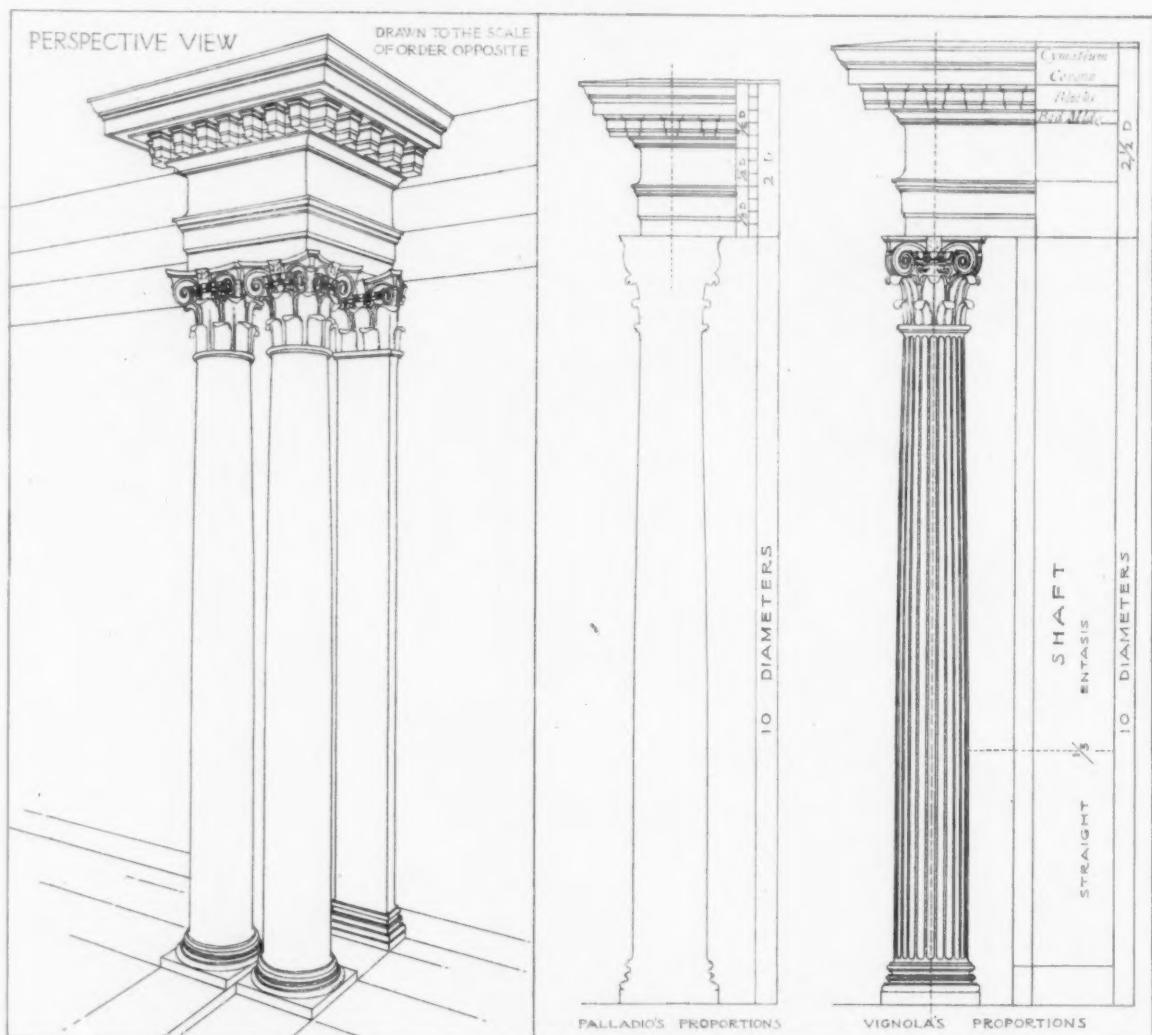
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COMPOSITE ORDER

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AFTER PALLADIO



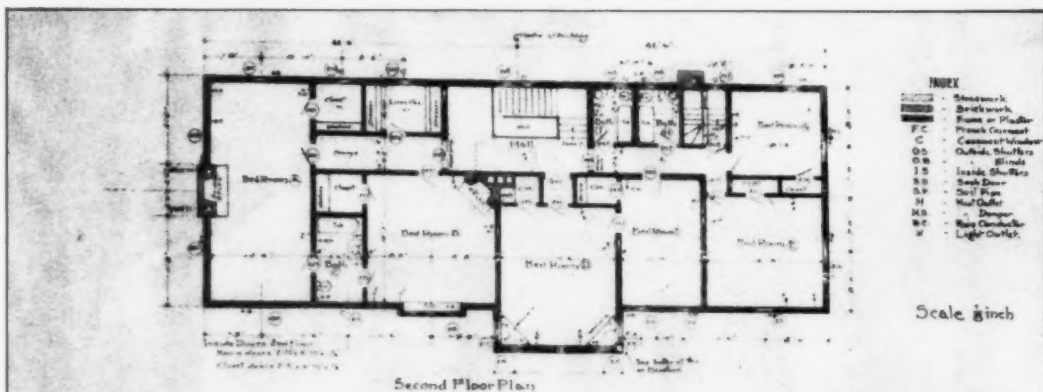
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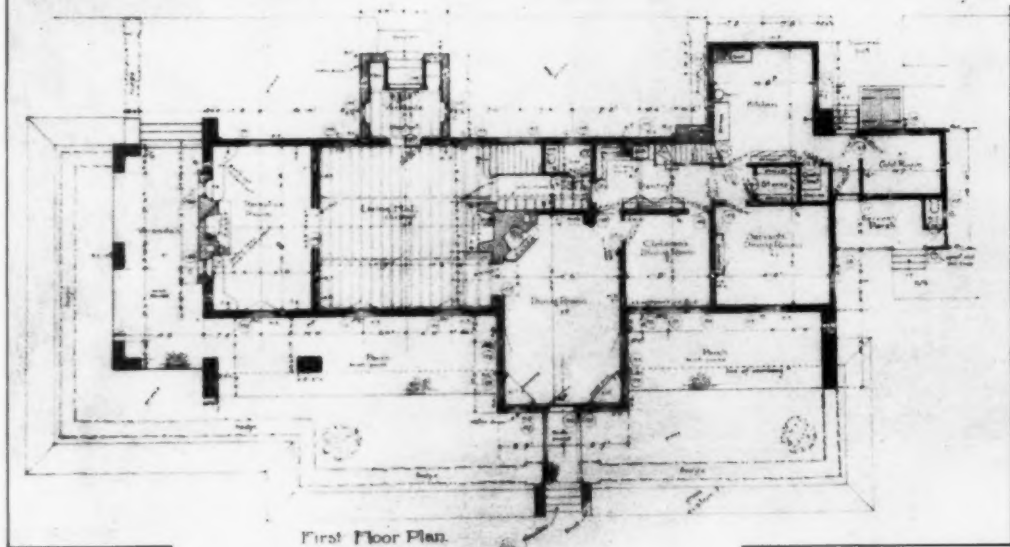
INDEX

—	Staircase
—	Breakfast Room
—	Room or Hall
P.C.	Plaster Ceiling
C	Cement Floor
O.S.	Outside Stairs
O.B.	Outside Balcony
I.S.	Inside Stairs
I.B.	Inside Balcony
S.D.	Sleeping Porch
S.P.	Sleeping Porch
H.	Hall
M.B.	Master Bedroom
B.T.	Bath
L.C.	Light Chandelier

Scale 1/8 inch

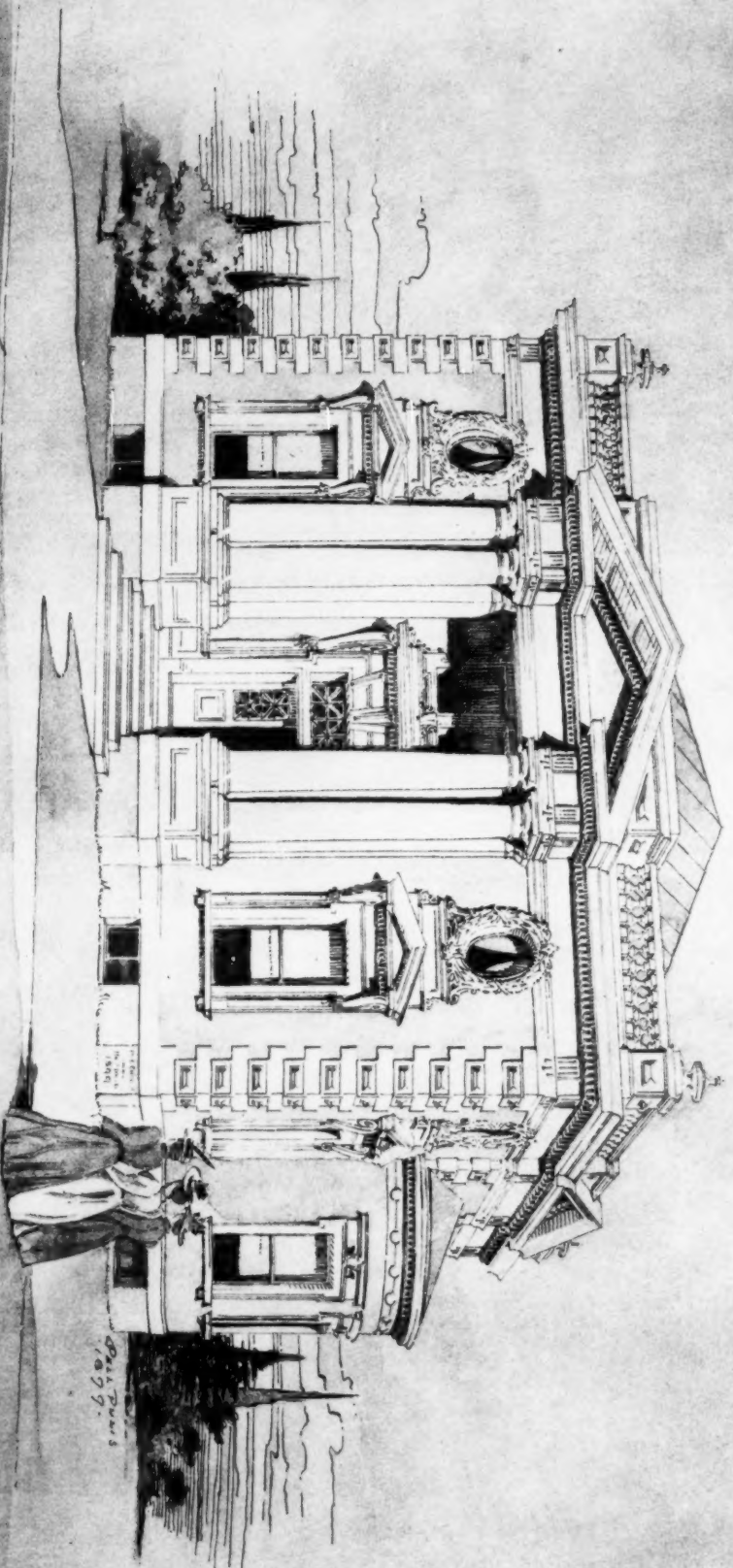
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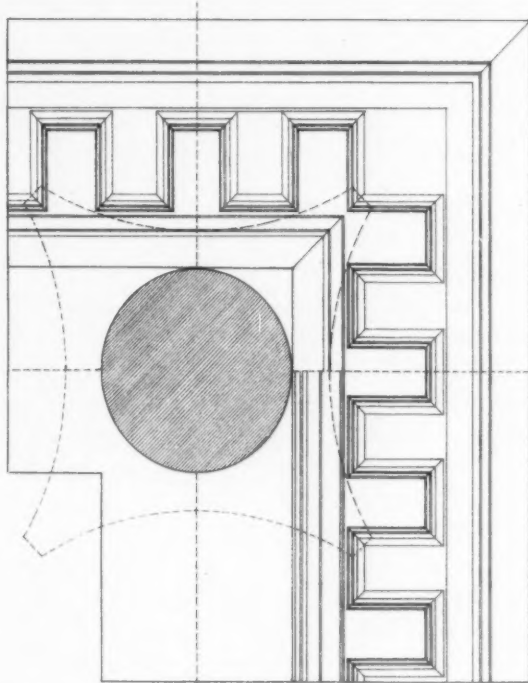
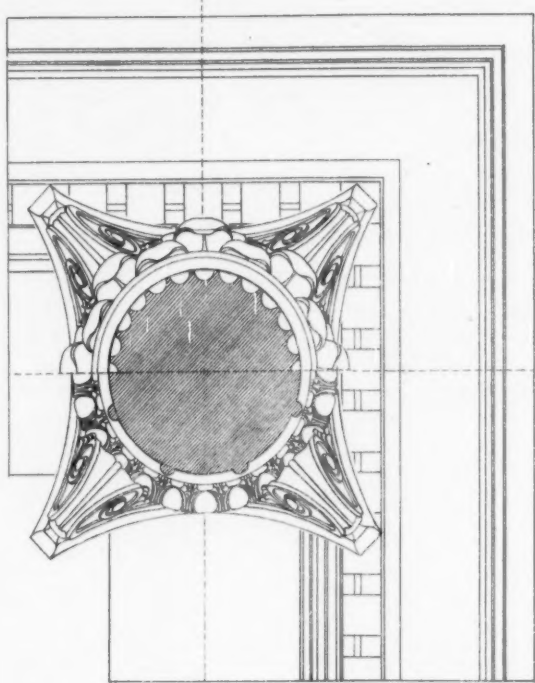
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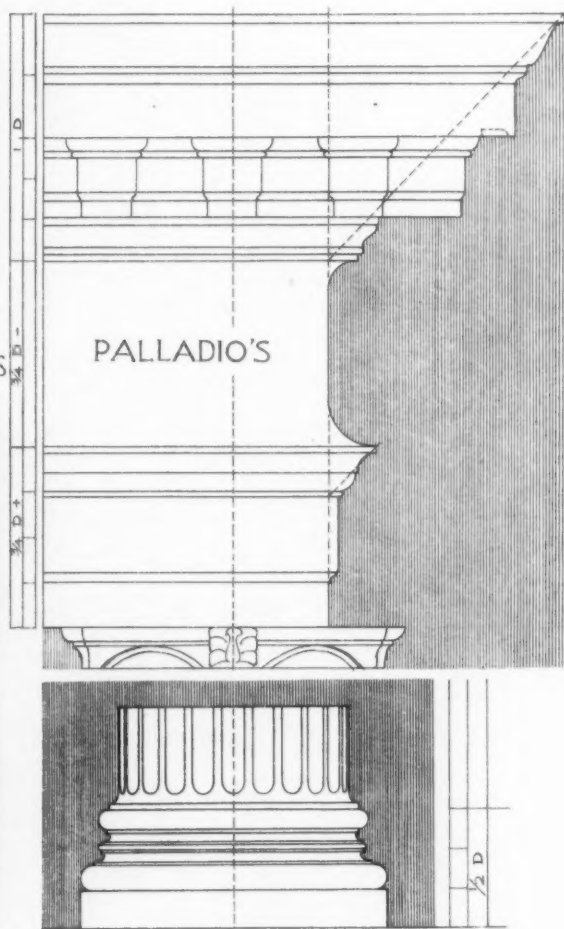
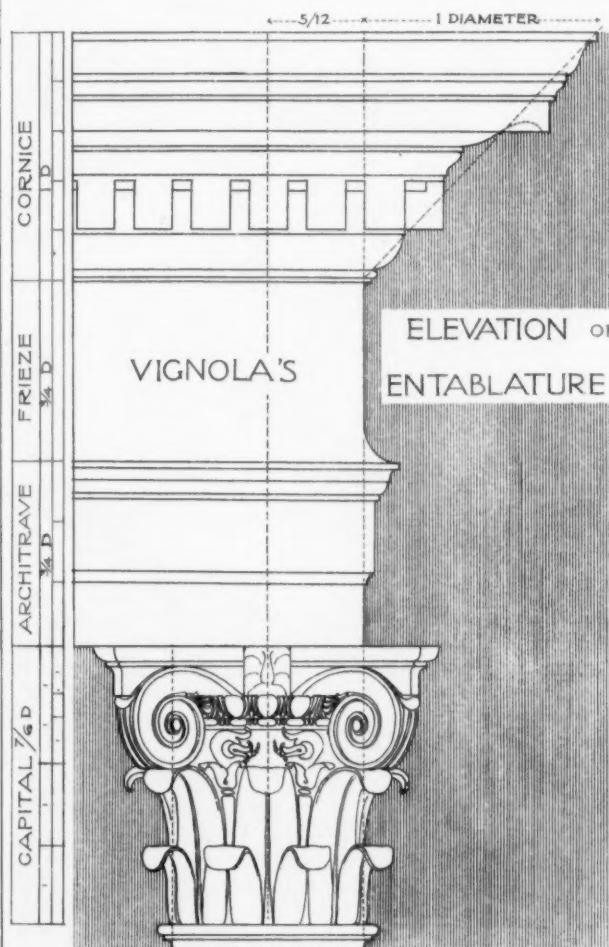
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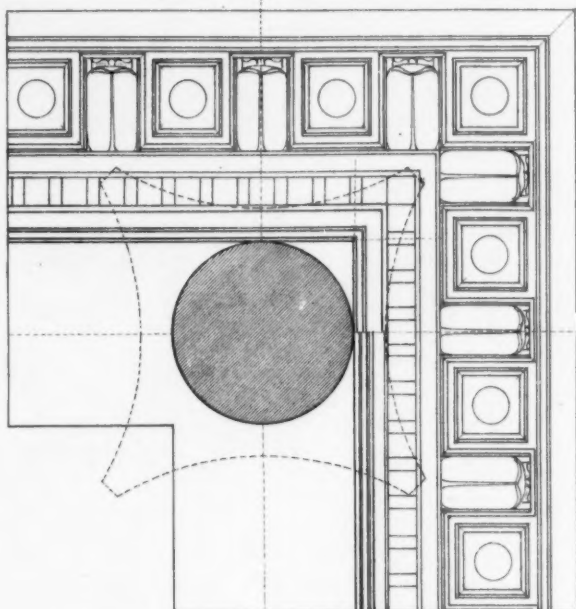


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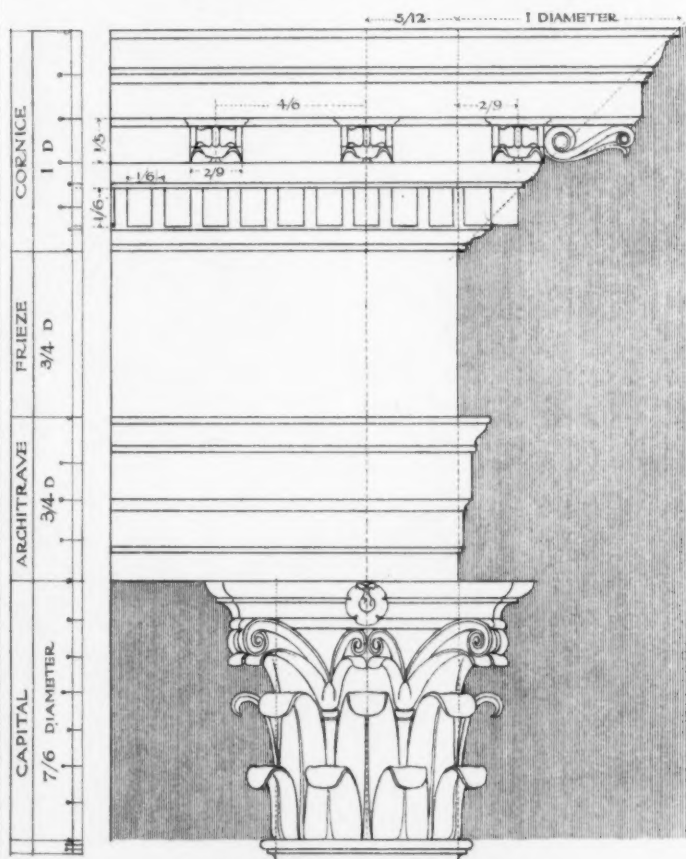


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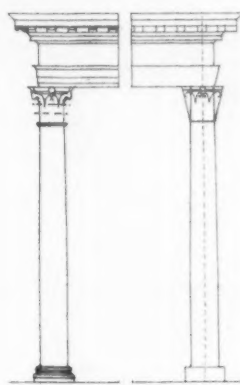
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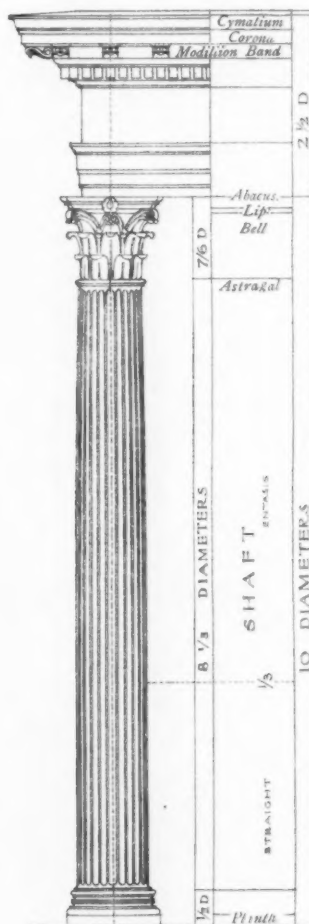


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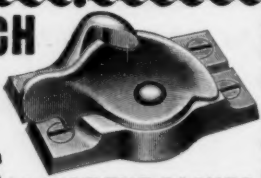
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St. Paul's Chapel, New York, N. Y.		" 1764
Old South Church, Boston, Mass.		" 1729
First Church, Hingham, Mass.		" 1681
St. John's Chapel, New York, N. Y.		" 1803
First Congregational Church, Canandaigua, N. Y.		" 1812
St. Peter's P. E. Church, Philadelphia, Pa.		" 1758
Gloria Dei Church, Philadelphia, Pa.		" 1700
and others.		

IMPORTANT HOUSES

Fairbanks House, Dedham, Mass.		Date 1636
Royall Mansion, Dedham, Mass.		" 1737
Philipse Manor House, Yonkers, N. Y.		" 1745
Tudor Place, Georgetown, D. C.		" 179-
Mappa House, Trenton, N. Y.		" 1809
Woodlawn, Va.		" 1799
Mount Vernon, Va.		" 1743
and others.		

Incidentally there are shown special measured drawings or large views of the following features and details:

Porches and Doorways		67 Subjects
Staircases		21 "
Mantelpieces		81 "
Pulpits		6 "
Fanlights		60 "

In addition to the subjects enumerated above there is a large quantity of measured and detailed drawings of Cornices, Ironwork, Gateposts, Windows, Interior Finish, Ceiling Decoration, Capitals, etc., together with elevational and sectional views of entire buildings.

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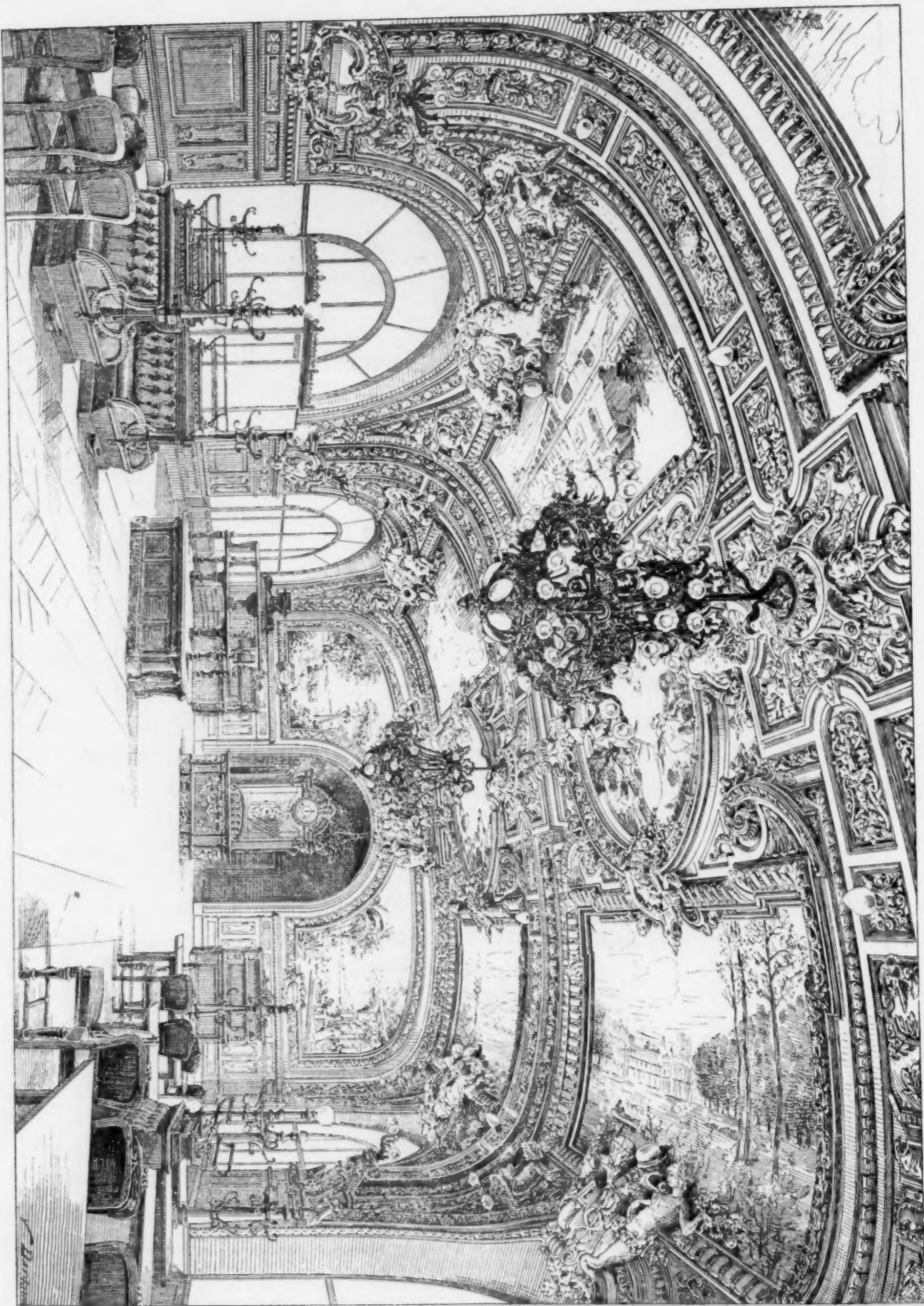
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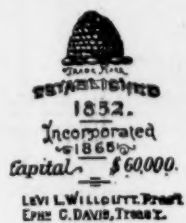
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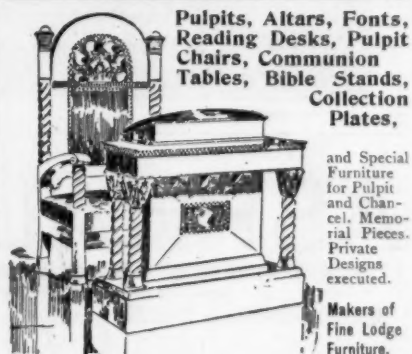
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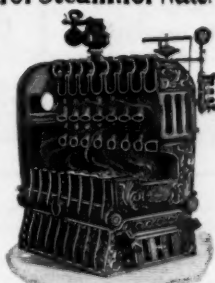
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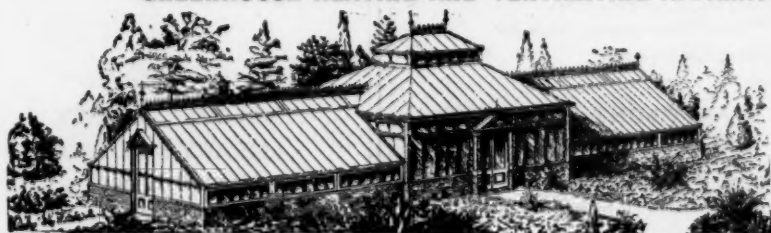
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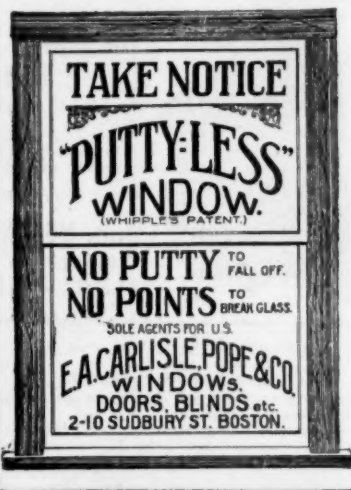
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EDWIN H. GAGGIN,
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["COLLEGE OF ARCHITECTURE, CORNELL UNIVERSITY," Ithaca, N. Y.]

I have looked over the plates of "Topical Architecture" and think the idea excellent.

ALEX. B. TROWBRIDGE,
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BUILDING INTELLIGENCE.

(Advance Rumors Continued.)

The Woman's Branch of the Brooklyn City Mission is planning to erect a new mission building for the colored children of "Chicago Row." The appeals for the new building are signed by Mrs. Hiram Jones, of 183 McDonough St., who is acting as treasurer for this fund. Mrs. L. Stober is now president of the woman's branch, and Mrs. Darwin R. James honorary president.

Burlington, Ia.—It has been voted to expend \$40,000 in addition to the insurance money for new buildings at the poor farm.

Calumet, Mich.—The A. O. U. W. will erect a three-story brick and stone building; cost, \$40,000.

Charlotte, Mich.—Claire Allen, of Jackson, has prepared plans for a church for the Methodist Episcopal Society, to cost about \$25,000.

Chelsea, Mass.—It is stated that orders have been signed by the Mayor for a \$138,000 high school and a \$40,000 grammar school. Wm. Hart Taylor, 6 Beacon St., Boston, has been selected as the architect, but work will not commence until next spring.

Chicago, Ill.—Chicago is to have a memorial building to Robert G. Ingersoll. Judge C. B. Waite, the president of the Ingersoll Memorial Association, is preparing a plan which will be brought before the Executive Committee.

Victor F. Lawson, owner of the Chicago Daily News, has purchased property on 5th Ave. and on Madison St. for \$600,000. It is said that he will construct a modern fireproof building on the site, which adjoins his present building on 5th Ave.

Fritz Foltz, McCormick Block, has drawn plans for a sheet steel warehouse for the Scully Steel & Iron Co. on Fulton, near Halsted St. Two stories and basement, 60' x 170', brick and steel concrete, etc.; cost, \$30,000.

Report states that Hibbard, Spencer, Bartlett & Co., wholesale hardware dealers, 32 E. Lake St., have acquired property at State and S. Water Sts., upon which they will build a large fireproof warehouse and freight-house. The new building will be eight or ten stories high and will cost \$1,000,000.

BUILDING INTELLIGENCE.

(Advance Rumors Continued.)

French Consul Henri Merou, 59 Clark St., states that the proposed French technical school has taken definite form. Chicago is the only location that is being considered. The University of Chicago has promised to furnish a site for the building, and it is proposed that the structure shall cost in the neighborhood of \$250,000.

Cleveland, O.—Report states that the Salvation Army is to erect a \$30,000 building on Erie and Eagle Sts.

John Hartness Brown will erect a \$1,500,000 hotel on Euclid Ave. and Muiroon St.

Columbus, O.—It is reported that the Association of Experiment Stations and Agricultural Colleges, in an annual convention at Washington, decided to establish a summer school for the study of agriculture, agronomy, zootechny and dairying at this place. The Ohio State University will furnish the building and equipment.

Concord, N. H.—At a meeting of the City Government it was voted to build a new city building at a cost of \$150,000.

Des Moines, Ia.—The Elks contemplate forming a stock company for the erection of a two-story and basement club-house to cost \$20,000.

Detroit, Mich.—Malcomson & Higginbotham, Moffat Building, have prepared plans for a four-story brick flat to be located on Trumbull Ave; cost, \$25,000.

Donora, Pa.—The construction of a bridge, connecting Donora and Webster, is said to be contemplated; probable cost, \$500,000.

Easton, Ind.—The Muncie, Hartford City & Ft. Wayne Electric Line Co. has purchased land here and will erect shops at a cost of \$125,000 and put up many houses for its employees.

Emporia, Kan.—Plans have been drawn by Mauran, Russell & Garden, Chemical Building, St. Louis, Mo., for a \$60,000 library to be erected in this city for the Kansas State Normal School.

Galveston, Tex.—The Directors of the Rosenberg

BUILDING INTELLIGENCE.

(Advance Rumors Continued.)

Library Association have accepted the plans of Fames & Young, Lincoln Trust Building, St. Louis, Mo., for a library to be erected on Tremont St. and Seely Ave.; cost, \$100,000.

Great Falls, Mont.—The Board of Education has asked an appropriation of \$30,000 for new buildings. An 8-room building, a 1-room addition to the West side building and repairs are to be made.

Gravel, Ont.—Andrew Carnegie has offered this city \$20,000 for a public library.

Indianapolis, Ind.—It is reported that Mr. and Mrs. E. C. Thompson have added \$20,000 to the \$10,000 previously given by them to Butler College for the construction of the Bona Thompson Library, as a memorial to their daughter.

The Rathbone Sisters will erect a \$60,000 orphan's home.

Jennings, Ia.—T. C. Mahaffey has engaged an architect to prepare plans for a \$25,000 hotel to be erected here at once.

Lufkin, Tex.—The citizens of Angelina County have voted to issue \$40,000 bonds for a brick courthouse.

Milwaukee, Wis.—The Milwaukee Post-Graduate Polytechnical College, recently incorporated with a capital stock of \$50,000, will establish a post-graduate college at Wells and 9th Sts., at a cost of \$100,000.

Minneapolis, Minn.—The First Swedish Methodist Church Society will have a new church, costing \$20,000, erected near the present site, 7th St., near 12th Ave., S.

The Commercial Club and others will make a strong effort to induce the next Congress to appropriate \$250,000 for an addition to the post-office building.

The Hennepin Ave. Methodist Society has under consideration the erection of a new church on the present site, 10th and Hennepin Ave.; cost, \$100,000.

Mitchell, Ind.—The corner-stone of the new plant of the Lehigh Portland Cement Co. has been laid.

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(Advance Rumors Continued.)

It is said that the company will spend \$400,000 in land and buildings.

Moline, Ill.—The Deere & Mansur Co. plan additions and extensions to their plant next year to cost \$200,000 to \$300,000. There are to be four new buildings and another story added to the machine-shop.

Montreal, Que.—A hospital will be erected by the Board of Directresses of the Montreal Maternity Hospital on Durocher St., to cost about \$30,000.

New Dorp, S. I.—It is stated that St. John's Guild is soliciting funds with which to erect a new hospital, nurses' and physicians' quarters; also quarters for male and female help. The present Seaside Hospital is a frame building, and has become too small.

New York, N. Y.—Charles Baek, 109 W. 42d St., has taken title to lot, 62 Madison Ave., and will erect thereon an eleven-story apartment hotel from plans by Charles Brendon & Co., 109 W. 42d St. Two six-story brick and stone apartment-houses

BUILDING INTELLIGENCE.

(Advance Rumors Continued.)

will be erected on W. 113th St., costing \$200,000. August D. Heyne, 810 Broad St., Newark.

Norfolk, Va.—The plans of J. K. Peebles, Columbia Building, have been accepted for a \$75,000 building for the Business Men's Association, to be erected on Plume and Atlantic Sts.

Noroton, Conn.—It is announced that Anson Phelps Stokes, of New York, has purchased 12 acres of choice shore front property at Collender's Point, a part of the Collender estate. It is understood that Mr. Stokes will erect a fine summer residence before next season. The property adjoins that of Edwin T. Trowbridge and of John D. Crimmins, both of New York.

Pensacola, Fla.—Press reports state that the Episcopal Church is about to let contracts for the erection of a \$20,000 building.

Pittsburgh, Pa.—The George A. Fuller Co., 135 Broadway, N. Y. City, have the general contract for the erection of a twenty-four-story office-building for the Farmers' Deposit National Bank. It will be at the corner of Wood St. and 5th Ave., on

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BUILDING INTELLIGENCE.

(Advance Rumors Continued.)

plot 160' x 190', and will cost \$2,000,000. Alden & Harlow are the architects.

Mr. Andrew Carnegie has increased his donation for a Polytechnic School from \$1,000,000 to \$2,000,000, provided the city will provide the site. The Board of Trustees adopted plans for the new school and selected a site for the buildings. They will be modelled after those of the Worcester Technical School and the site, comprising 11 acres, which the Board will ask the city to donate, lies just west of the Carnegie Library building and extends along Forbes Ave. to Bouquet St. It is believed that the erection of the school-buildings will begin in a very short time.

Poughkeepsie, N. Y.—Plans have been drawn by W. J. Beardsley for a court-house and jail, to cost about \$200,000.

Racine, Wis.—The contract for erecting the proposed \$50,000 depot for the Chicago & Northwestern R. R. has been awarded to H. R. Edwards.

Richmond, Ind.—The Wayne Works are making factory improvements costing \$25,000.

Richmond, Va.—Hodges & Leach, of Baltimore, Md., have completed plans and are now ready to receive bids for a \$250,000 fireproof hotel to be erected at 9th and Grace Sts.

The Southern Bell Telephone Co. will erect a building on Grace St., near 8th St., estimated to cost \$30,000.

San Francisco, Cal.—Edw. J. Vogel, Spreckles Building, has prepared plans for a six-story brick building to be erected on Geary and William Sts.; cost, \$70,000.

Shamokin, Pa.—Report states that the Shamokin Inn Co. has been formed with A. G. Marr as pres., its purpose being the construction of a fireproof hotel to be located at 9th and Independence Sts.; estimated cost, \$75,000. Architect, W. U. Jury.

South Boston, Mass.—A stable for 70 horses is to be erected at 531 and 535 E. 1st St. by Frank J. Hannon.

St. Louis, Mo.—Plans have been drawn by Chas. K. Ramsey, 105 N. 7th St., for a \$60,000 apartment-house, to be erected on Cabanne Ave. and Belt St.

Nicholls-Ritter Co. is looking for a site for a \$1,000,000 hotel. The company is negotiating for a corner at Grand and Washington Aves.

It is stated that the Regina Construction Co. will soon be incorporated with a capital of \$1,500,000 to build a \$700,000 World's Fair hotel, ten stories high, at Grand and Washington Aves. Henri de Pensacola is the prime mover.

The Traveller's Protective Association contemplates erecting a 2,000-room hotel at a cost of \$200,000 to accommodate visitors at the St. Louis Fair. Eames & Young have completed the plans.

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BUILDING INTELLIGENCE.

(Advance Rumors Continued.)

St. Paul, Minn.—J. W. Stevens has completed plans for an addition to the Grant school building on Magnolia and Arkwright St. It will be two-story and basement, costing \$20,000.**West Point, N. Y.**—The Board of Visitors to the West Point Military Academy recommends that the Academy be rebuilt.**Yellow Springs, O.**—The trustees of the Methodist Home for the Aged are reported to have under consideration the construction of a \$25,000 building.

ALTERATIONS AND ADDITIONS.

Middletown, Conn.—Alterations to two-story fr. dwell., 40' x 50', shingle roof, hot air; \$22,000; o., Cornelius Vanderbilt, Newport; a., Dudley Newton, Newport.

APARTMENT-HOUSES.

New York, N. Y.—Union Ave., cor. 168th St., four-story & base. bk. flat & stores, 25' 3" x 82'; \$35,000; o., Thomas I. Smith, 51 E. 62d St.; a., Paul C. Hunter, 1148 Stebbins Ave.

HOTELS.

New York, N. Y.—E. Thirty-second St., No. 11, seven-story bk. & st. hotel, 25' x 82', tile roof; \$80,000; o., Mitchell A. Cass Levy, 95 Liberty St.; a., Oscar Lowinson, 39 Cortlandt St.**Park Ave.**, 41st to 42d St., nineteen-story bk. & st. hotel, 105' x 197' 6", tile roof; \$2,500,000; o., The Subway Realty Co., 23 Nassau St.; a., Warren Wetmore & Morgan, 3 E. 33d St.; m'ns, Marc Elditz & Sons, 489 Fifth Ave.

HOUSES.

Brooklyn, N. Y.—Marlborough Road, nr. Beverly Road, two-story & attic fr. dwell., 35' x 35', shingle roof; \$8,500; o., J. Parkins & Son, 1603 Beverly Road; a., J. J. Pettit, 186 Remsen St.**E. Eighteenth St.**, nr. Albemarle Road, two-story & attic fr. dwell., 29' x 34', shingle roof; \$5,000; o., Lizzie M. Moore, 1617 Beverly Road; a., E. B. Chestersmith, 60 Broadway, N. Y.**Marlborough Road**, nr. Beverly Road, two-story & attic fr. dwell., 37' x 50', shingle roof, steam; \$9,700; o., W. H. C. Leveritt, 560 McDonough St.; b., Ryan Bros., 470 Pulaski St.**De Kalb Ave.**, nr. Emerson Pl., three-story bk. dwell., 30' x 40'; \$10,000; o., Edith Drissler, 1013 Bedford Ave.; a., L. Berger & Co., 300 St. Nicholas Ave.

BUILDING INTELLIGENCE.

(Houses Continued.)

Church Ave., cor. E. 17th St., two-story fr. dwell., 28' x 46'; \$6,000; o., J. S. Cawkins, 81 Church Ave.; a., A. D. Isham, 220 Broadway, New York.**St. Paul's Pl.**, cor. Crooke Ave., two-story fr. dwell., 28' x 46'; \$6,000; o., J. S. Cawkins, 81 Church Ave.; a., A. D. Isham, 220 Broadway, New York.**New York, N. Y.**—Union Ave., nr. 165th St., 4 two-story & attic fr. dwells., 17' 10", 17' 11" & 18' x 70', shingle & tin roofs; \$24,000; o., Mrs. Helene Tremberger, 829 Cauldwell Ave.; a., W. C. Dickerson, 3d Ave. & 149th St.**Fifty-third St.**, No. 15, five-story bk. & st. dwell., 20' x 67', tin & copper roof; \$35,000; o., Mrs. J. J. Manning, The Bienenheim, 60 W. 58th St.; a., Augustus N. Allen, 5th Ave. & 47th St.; b., Harvey Murlock, 116 Nassau St.**Loring Pl.**, nr. Fordham Road, 14 three-story bk. dwells., 20' x 50', tin & shingle roof; \$88,000; o., Wm. M. Ryan, 149 Broadway; a., A. De Saldern, 130 Broadway.

COMPETITIONS.

HIGH SCHOOL.

[At Oshkosh, Wis.]

The Board of Public Works, it is stated, will receive plans until November 30 for a high school; cost, \$60,000. 1352

LIBRARY.

[At Fresno, Cal.]

Plans will be received until December 1 for the Carnegie library. Address CHARLES E. JENNY, Box 602, Fresno. 1352

SOLDIERS' MONUMENT.

[At Philadelphia, Pa.]

Office of Clerks of Common Council, Room No. 494, City-hall, Philadelphia, Pa. Competitive designs for the erection of a monument in honor of the Soldiers, Sailors and Marines who served in the War for the suppression of the Rebellion are invited; to be submitted on or before March 3d, 1902. Competition open to any architect who is a citizen of the United States. Copy of a printed programme will be furnished on application to GAVIN NELSON, Clerk of Committee on Soldiers' Monument. 1357

PROPOSALS.

LIBRARY.

[At Green Bay, Wis.]

Sealed proposals will be received until December 5, 1901, by F. H. Martin, chairman of the committee, for the erection of a library at Green Bay, Wis., according to plans and specifications prepared for same by H. A. Foeller, architect, which may be seen at the Builders and Traders Exchange, Milwaukee, Wis.; the Improvement Bulletin, Minneapolis, Minn., at the office of the architect, Green Bay, Wis., and at the Brown County Contractors and Builders' Association Rooms, Green Bay, Wis. P. H. MARTIN, J. H. TAYLOR, C. W. LOMAS, committee. 1352

MANUAL TRAINING SCHOOL.

[At Pittsburg, Kan.]

Sealed bids will be received by the Board of Education of the city of Pittsburg, State of Kansas, for a High School Manual Training building until December 2, 1901, for the furnishing of all material and labor necessary for the erection and completion of the proposed High School Manual Training building at Pittsburg, Kan., according to the plans and specifications made by J. W. Gaddis, architect, Vincennes, Ind., as approved by the Board of Education, Pittsburg, Kan. P. P. CAMPBELL, pres. A. E. MAXWELL, clerk. Board of Education of the City of Pittsburg, of the State of Kansas. 1352

CHAPEL AND LIBRARY.

[At Waco, Tex.]

Bids are wanted November 30 for erecting the F. L. Carroll Chapel and Library for the Baylor University. E. R. NASH, ehmn. 1352

CHURCH.

[At Richford, Vt.]

Bids are wanted December 3 for erecting All Saints Catholic Church. N. O. Dorion, P. P.: L. L. Gauthier, archt., 180 St. James St., Montreal, Que. 1352

LIBRARY.

[At Houston, Tex.]

Bids are wanted December 2 for erecting a Carnegie Library. S. H. BRASHEAR, Pres. Houston Lyceum & Carnegie Library Assoc., Mason Bldg. 1352

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PROPOSALS.	PROPOSALS.	PROPOSALS.
TREASURY DEPARTMENT. [At Washington, D. C.] Office Supervising Architect, Washington, D. C., November 14, 1901. Sealed proposals will be received at this office until 2 o'clock P. M. on the 7th day of January, 1902, and then opened, for the installation of a conduit and wiring system for the U. S. Post-office building at Salem, Oregon, in accordance with the drawings and specification, copies of which may be obtained at this office or at the office of the Superintendent of Construction at Salem, Oregon, at the discretion of the Supervising Architect. JAMES KNOX TAYLOR, Supervising Architect. 1353	JAIL. [At Crockett, Cal.] Bids are wanted December 2 for erecting a jail at Crockett. J. E. RODGERS, co. clk., Martinez. 1352	COURT-HOUSE. [At Hazelhurst, Miss.] Sealed proposals will be received until December 2, 1901, for the construction of a new court-house at Hazelhurst. Plans and specifications may be obtained at the office of J. Riley Gordon Co., at Shreveport, La. J. B. MAYES, clerk. 1352
BRIDGE. [At Des Moines, Ia.] Sealed proposals will be received by the Board of Public Works of the city of Des Moines, Ia., at the office of the said Board of Public Works, until December 14, 1901, for material and the construction complete of a steel highway bridge across the Des Moines River from the south end of E. 6th St. to the north end of an extension of Main St. in Sevastopol, according to plans and specifications to be on file in the office of the city engineer and the Board of Public Works on or before December 1, 1901. G. A. EBERHART, J. E. STOUT, Board of Public Works. 1354	STORE. [At Mobile, Ala.] Bids will be received about December 1 for erecting a department-store for L. Hammel & Co., to cost about \$60,000, and to be equipped with electric freight and passenger elevators. Stone Bros., architects, New Orleans, La. 1352	TRAINING-SCHOOL. [At Washington, D. C.] Sealed proposals will be received at the office of the commissioners of the District of Columbia until November 30 for constructing a manual training school at the corner of 7th and G Sts. southeast, Washington, D. C. Blank forms of proposals and specifications, together with all necessary information, can be obtained upon application therefor at the office of the inspector of buildings of the District of Columbia, and bids upon these forms only will be considered. HENRY B. F. MACFARLAND et al., commissioners, D. C. 1352
	BARRACK. [At Watertown, Mass.] Watertown Arsenal, Watertown, Mass. Sealed proposals will be received here until December 2, 1901, for erection of barrack building complete, at this arsenal; separate proposals may be offered for building, heating and plumbing, and gas-fitting. Information can be had on application to LT.-COL. JOHN G. BUTLER, Ord. Dept., U. S. A. Comdg. 1352	SCHOOL-HOUSE. [At Marquette, Mich.] Sealed proposals will be received until November 30th, 1901, by George Barnes, secretary of the Marquette School Board, for the erection of school-buildings at Marquette, Mich. Plans and instructions can be seen in the architects' offices at Marquette, Mich., and Camp Building, Milwaukee, Wis. CHARLTON, GILBERT & DEMAR, architects. 1352

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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 criticize 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.

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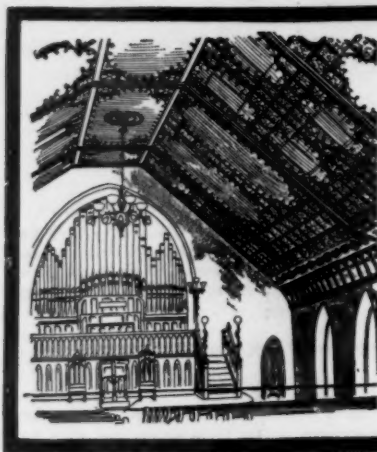
SECTION 12. The American Institute of Architects' "schedule of charges" represents minimum rates for full, faithful and competent service. It is the duty of every architect to charge higher rates whenever the demand for his services will justify the increase, rather than to accept work to which he cannot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

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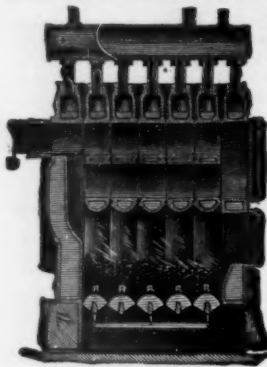
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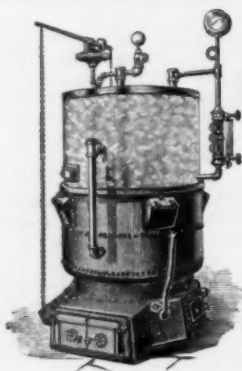
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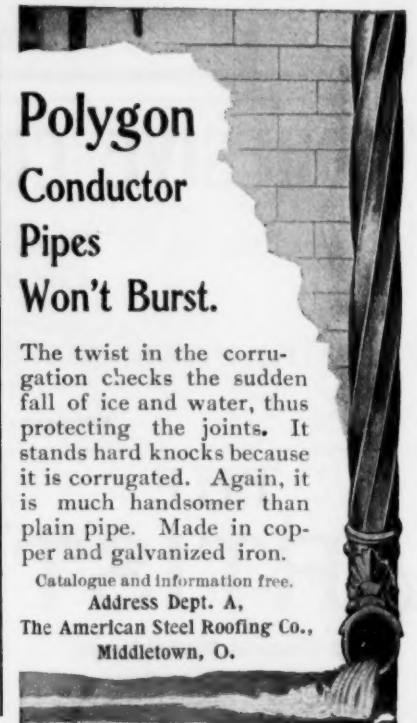
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