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The FOGG MUSEUM of ART — HARVARD UNIVERSITY —

By
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THE MUSEUM OF SERVICE, the museum in daily use, the museum an aid to industry, the museum an educational instrument—these are concepts which have only recently struck root in museum theory. They have grown out of the static collection of objects—the mere exhibition, in other words—which was the one-time purpose and high objective of museums. Nor has the growth been easy; the soil has been favorable, but to weeds as well as grain, and the gardeners have too often been more willing than skilful.

But practice is the surest foundation of theory and by dint of much effort and many trials certain points of museum theory have been established. Of these the one paramount is, in the words of Goode, that a finished museum is a dead museum. In effect this means two things: first, that the collections are themselves alive, subject to constant modification in terms of acquisitions, improved arrange-

ment, aggrandizement by loans, amendment by special or transient collections, retirement of the less desirable, and in other ways; secondly, that the usefulness of the material practically, informationally and inspirationally by various classes of people or types of interest is the real test of its value, the measure of its service.

For many museums even today and for all museums of art twenty years ago, what to have and how to show it has been the extent of acknowledged public responsibility. Today's museum adds the ideal of use. A museum may have little, but use it much and it becomes an institution of great public importance. Or, a museum may have the wealth of empires bound up in its possessions; set them up for the untrained and so unseeing eyes of the multitude and be able to write but little to its credit as a servant of the community. Robert W. de Forest makes it

clear that as the muscle may be trained to lift, the eye that only looks may be trained to see. It is the museum's task to train the eye, which means here the mind, to appreciate.

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The best possible display is only the beginning. It becomes a matter of exposition, of demonstration, which we take to mean the process of bringing forth or pointing out the merits of works of art. It means the training of persons to do this kind of work and it means accounting for facilities for doing it in the museum building. For there are many kinds of

ording to the customary ratings of school grades and college years, and these in turn subdivided according to subjects taught there.

The busy workaday museum of art finds ways of appealing to them all. The resultant effects upon the design of museum buildings, now so much more intimately associated with life, and especially upon the plan as a practical expression of these services, are being hammered out in various current projects. Sufficient to say that for this broad educational work, this laboratory and demonstration use, a whole new functional machinery is need-



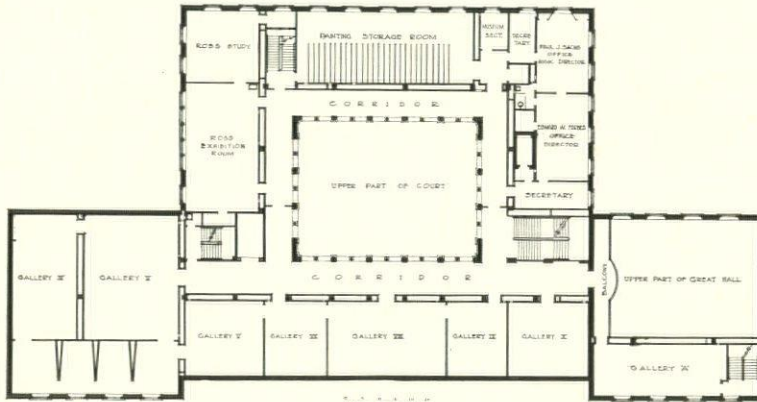
Front Elevation

FOGG MUSEUM OF ART, HARVARD UNIVERSITY, CAMBRIDGE, MASS.

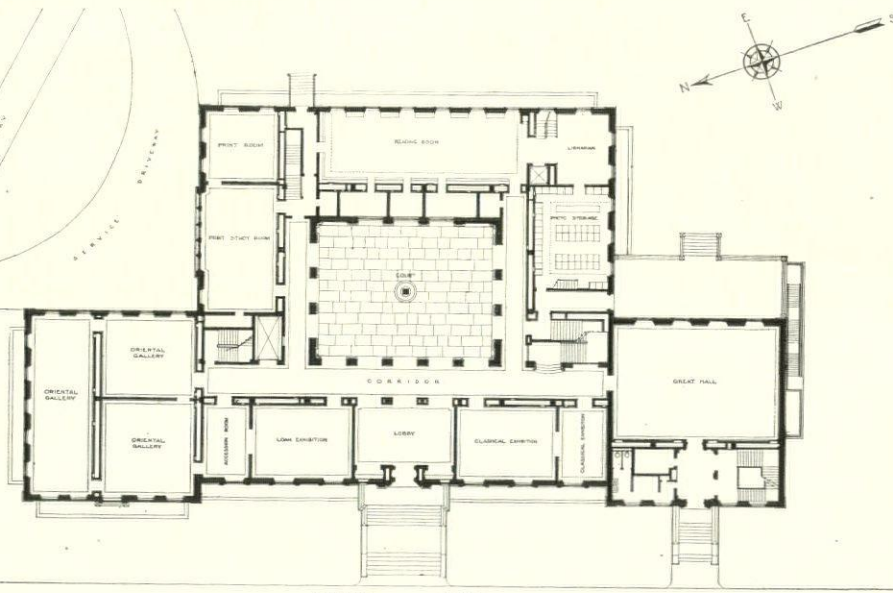
Coolidge, Shepley, Bulfinch & Abbott, Architects

people, interested in many phases of the subject, and it becomes the task of the "museum at work" to satisfy the demands of all, classifying their requirements and organizing special services to meet them. There are, for instance, adults of various types of interests, such as the designer, the home-maker, the advanced student, the cultivated layman, the manufacturer, the salesperson, the business man, the artisan. And there is the whole range of childhood and youth, disposed chiefly ac-

ed; this added to the already large demands of technical services, "museum housekeeping," and administration, and the whole then added to carefully studied exhibition space, must present for the designer of such buildings, as well as for the museum official, an alluring prospect of a great functional structure of the future which is not a palace housing "gazing galleries" but shall be rather the dignified yet handy edifice without pretense, having no other purpose than to make art

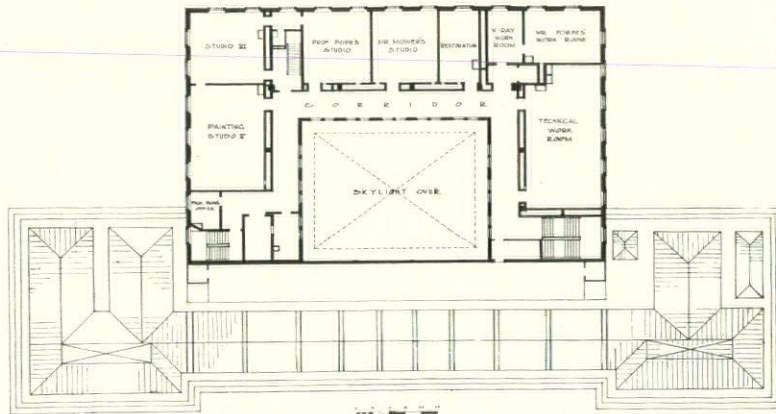


SECOND FLOOR PLAN

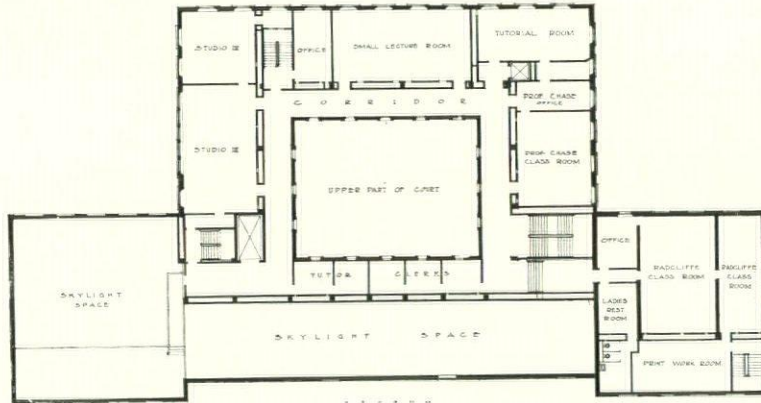


FIRST FLOOR PLAN

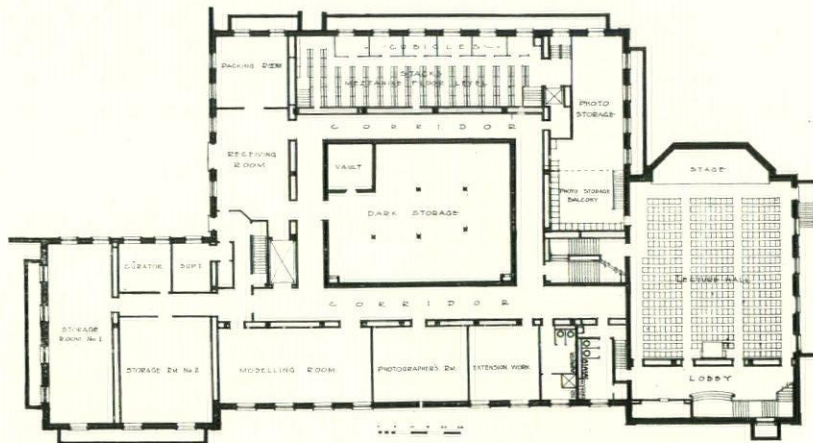
NEW FOGG ART MUSEUM HARVARD UNIVERSITY · CAMBRIDGE, MASS.
 COOLIDGE, SHEPLEY, BULFINCH & ABBOTT, ARCHITECTS



FOURTH FLOOR PLAN



THIRD FLOOR PLAN



BASMENT FLOOR PLAN

FOGG MUSEUM OF ART, HARVARD UNIVERSITY, CAMBRIDGE, MASS.
Coolidge, Shepley, Bulfinch & Abbott, Architects

understood, to the end that it may give pleasure to the beholder.

That is the general territory—the public museum. It behooves the architect to watch this interest grow. The office building, the school, the apartment house, none of these is now planned as it was twenty years ago, or even ten. The architect has grown up with these problems, kept pace with their development, and his approach has been modified as new demands have arisen or as new facilities have become available.

The country is now alive to the need for museums of art. Many are projected in communities of all sizes and kinds. The whole theory of museum design is being rewritten; the fundamental museum plan is taking shape. However obvious museum needs may seem to the worker in museums, the architect's hand needs guidance, for he still sees the problem chiefly from the outside. He is learning—and many museum workers are learning with him—that the object of the preservation of works of art is for the living to use and enjoy.

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Now against this general background of museum theory, especially as exemplified in modern public museums, is to be seen the specialized service of the museum of art in the university. Whatever ideals the public museum cherishes, the university museum has them too, but applies them in practice to a special group. It must concentrate on this 'special interest' the heavy artillery of installation and display, of administration and control, making of the whole a great textbook, a working laboratory. It has one advantage, namely, that its public is homogeneous, representing a positive interest proceeding under its own power. In turn, the interpreters of the material are now no longer museum workers only; they are primarily teachers, probably aided by museum officials, and the objects of art are tri-dimensional illustrations to classroom work. In magnitude we may say the task is smaller; in value certainly it is as great, in importance it is greater, depending, of course, upon how it is done. In any case, the university museum

of today has the further special task of developing standards and establishing method with reference to a specified part of the field. Architecturally this may mean, in most cases undoubtedly will, that the design shall be that of university building and of museum combined and the plan quite probably offer a combination of the accepted museum facilities with those required for teaching.

These considerations are given reality in the new building of the Fogg Art Museum at Harvard University.

* * *

We begin with an established institution—it was founded in 1895—a definite teaching organization, a staff of professors some of whom also function as museum officials, a group of courses of instruction long recognized as of highest merit and a truly remarkable collection of works of art. The problem is to house these various things, persons, activities, and the services they imply, in a building in harmony with others on a university campus, to the end that the museum may appear as such and at the same time serve several distinct types of students, namely, those with only a cultural interest in art, those with the intention of becoming specialists in that field as practitioners, historians, critics, and those planning to enter museum work.

It will be seen that the solution is not to be glibly stated as requiring galleries and classrooms in juxtaposition; it implies actually an interrelation of two functions. As developed in the new Fogg building these functions are admirably served and it becomes obvious from the plan that while the museum first serves the University in teaching, it remains for the public just a museum. The building is not an end in itself; it is the embodiment of a special kind of work. The problem has been thought through and a definite point of departure has been set for all future problems of this general type.

Considering first the plan, we note the disposition of galleries accessible to the public along the front of the building on two floors. The main entrance gives a central axis leading to a courtyard rising

to three stories, as the chief feature of the interior, around which classrooms, studios, offices, etc., are arranged at the sides and back and carried up an additional floor.

The basement accounts for technical services of the museum proper, for administration facilities, and for a large public lecture hall isolated from the rest of that level and with separate entrance from the streets as well as from the gallery above it. There is a corridor around the courtyard, at each level, but filled at the main floor at the rear by professors' studies and on the third floor at the front by rooms assigned to tutors and to clerks.

The courtyard has been carried out in travertine, the model for the double arcade, Doric pilasters below and Ionic pilasters and columns above, being the front of the presbytery of the Church of the Madonna di San Biagio by Antonio da San Gallo, at Montepulciano. The effect is impressive and will gain in merit as age wears down its newness, in which the severity of regularity now is noticeable. In seeking the clue to this we note especially the entirely satisfying proportions of piers and pilasters and of the superimposition, but find the columns seemingly too slender for the task assigned them. The San Gallo house is two stories high; a third story has been added here in plain stucco, with three broad-framed windows on each side. An interesting feature is the simple treatment of molding, projecting rafter ends

and tiles, the eaves suggesting a roof continuing beyond. This is a stop for the eye, and the glass ceiling above does not intrude upon the design.

The courtyard is always visible; from each door that gives upon it, and all the doors do, another angle is presented. This would seem an excellent way of obtaining unity in the plan and of aiding the visitor to orient himself, not to mention the always satisfying vista which alle-

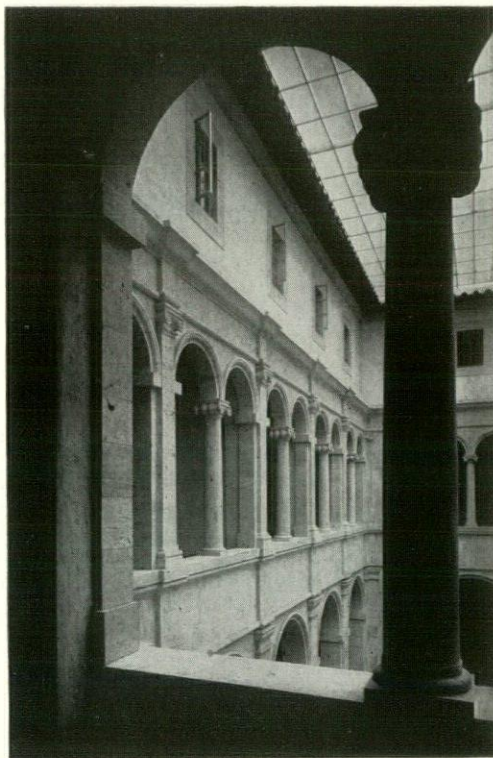
viates the concentration of mind demanded by examination of objects exhibited in adjacent galleries.

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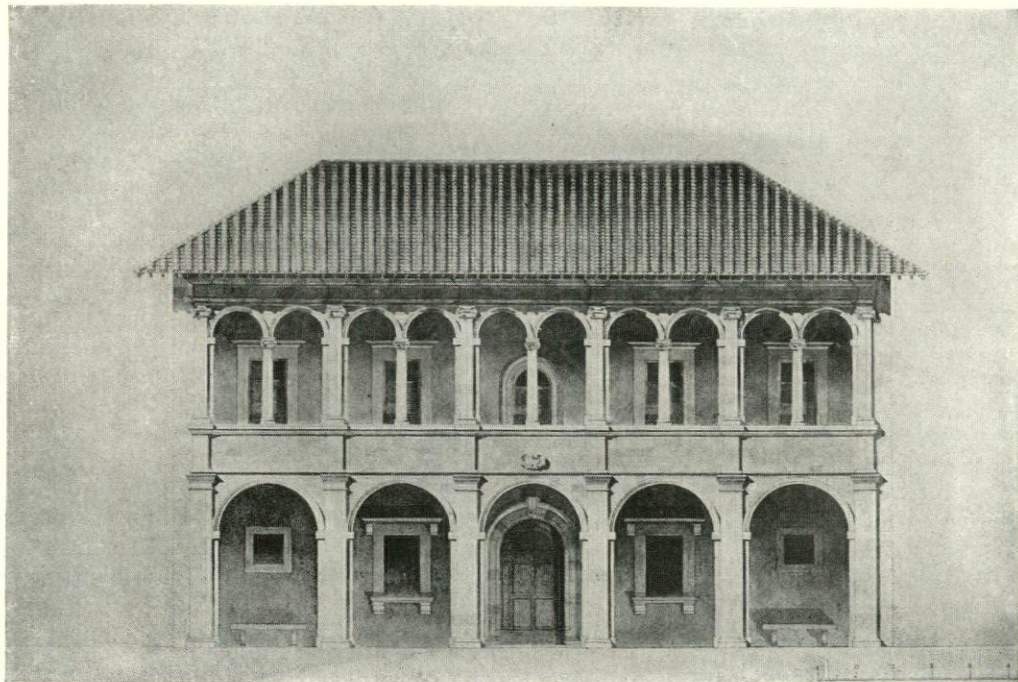
Considering again the plan of the main floor we note the ready accessibility of the loan exhibition gallery and the grouping of galleries left and right for material of specified types, such as the Oriental or Classical, with always the return to the corridor. It should be understood that the Fogg Museum possesses extensive collections continually increasing, for which these spaces were calculated. A small accessions room is provided for, again near the entrance,

on the principle that new material is shown there for a period of time before being absorbed into the collections and assigned a final place among them.

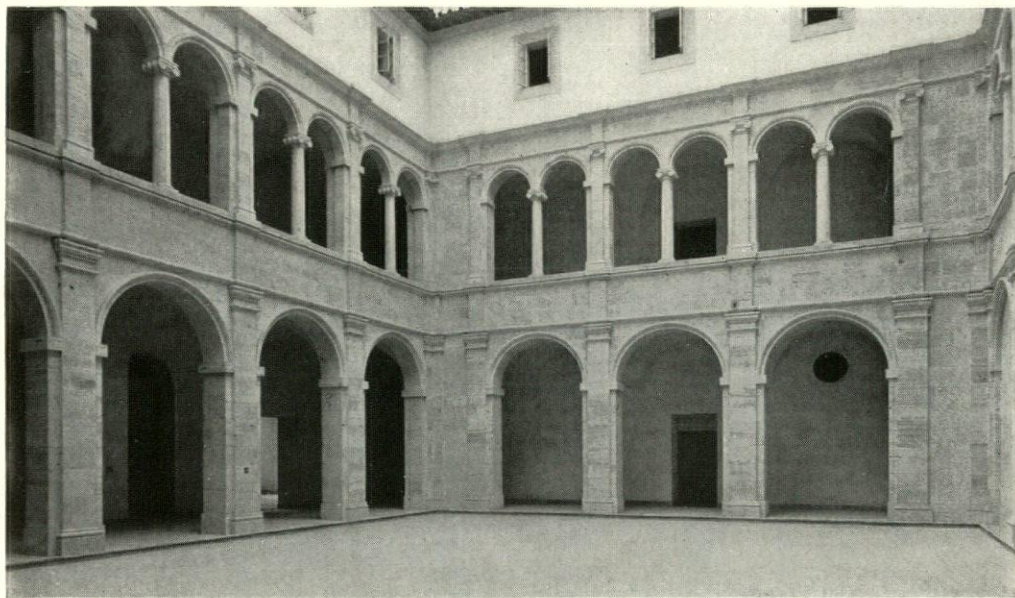
The most important gallery on this level is the Great Hall, rising through two stories, roofed with a beamed ceiling, itself a sixteenth century work from Dijon. The walls are left plain for the display of tapestries. This hall has a special purpose, serving as a sort of res-



Courtyard
Fogg Museum of Art, Harvard University



Presbytery of the Church of the Madonna di San Biagio, Montepulciano, Antonio da San Gallo, Architect. This was the model used for the double arcade in the courtyard of the Fogg Museum
Courtesy of the Avery Library, Columbia University



Courtyard
FOGG MUSEUM OF ART, HARVARD UNIVERSITY, CAMBRIDGE, MASS.
Coolidge, Shepley, Bulfinch & Abbott, Architects

ervoir for lecture audiences, which can stop there on the way to or from the lecture hall just beneath it. In this wing there is a special stairway and a separate entrance making it possible to open this end of the building independently of the museum.

The nine galleries on this floor are side-lighted. They are all of pleasing proportions and there has been no striving for architectural effulgence that might hamper the effectiveness of objects displayed. Again, there are no monumental archways or stairways; there is nowhere apparent any effort to use "too much architecture," which is once more the desire to allow the function to express itself.

To complete the main floor level we note at the rear the library and at the right the photograph storage room, both of which with their stacks, offices and storerooms, carry through to the basement level. Space is allowed for shelving 60,000 volumes and for storing upwards of 300,000 photographs. Adjacent to the stacks a series of cubicles is provided for the use of advanced students.

Books and photographs are important tools in teaching; they must be readily accessible and easily used, for they amplify classroom work and facilitate object contacts. With this in mind the library has been given an effectively central location, where it becomes a sort of node through which all vibrations pass.

Of the rooms at the left of the court, one will be assigned to students in the course on museum theory and practice as a laboratory gallery in which to demonstrate their own grasp of the work and problems they hope later to encounter in buildings of their own.

At the back of the building is a special student entrance used at times when the galleries are closed, especially at night when the library and photograph collections are still accessible.

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On the second floor the galleries and teaching space may be similarly separated. There are on this level both side-lighted and top-lighted galleries. The utmost

care has been taken in the selection of glass for the ceiling of the latter. The natural light control is of the narrow strip louvre type recently installed in a number of museums, easily controlled, minutely adjustable and operated by mechanism built in the thickness of duct walls and accessible from door jambs. Artificial lighting is direct throughout.

On this level there are also two conference classrooms at the left and at the right the offices of the directors, their assistants and the secretary of the museum. Conference rooms and studios are themselves small exhibition galleries for classes, since contact teaching is the rule.

A unique element of the plan here is the side-lighted picture storage room, equipped with sliding racks of wire mesh on which pictures are hung. This room will contain many paintings not on exhibition and the material may readily be studied there. In effect this daylight storage space, supplementing the galleries, makes the whole collection of pictures available at all times.

The third floor provides space for classrooms and offices and, in one wing, special rooms for undergraduates from Radcliffe, only graduate courses being co-educational. Classrooms have ample blackboard space and projection apparatus. There is a continuous broad ledge or shelf all around, a decided advantage for a type of work in which pictures, prints and other graphic material play so large a part. Where lantern slides are used there is a dimmer switch reducing the light in the room so that the image on the screen is clear and students may still see to make notes.

On the fourth and top floor there is further space for class and studio work, for restoration or renovation of old works of art, and for special research in the analysis of processes, pigments, X-ray, etc., for which this museum is well known.

The basement is devoted to various phases of museum housekeeping, library stack and photograph storage space, and the main lecture hall. A large dark storage space is directly under the courtyard.



Detail of Main Entrance

FOGG MUSEUM OF ART, HARVARD UNIVERSITY, CAMBRIDGE, MASS.

Coolidge, Shepley, Bulfinch & Abbott, Architects

Special daylight storage and research space is also assigned to certain collections, as well as quarters for the photographer, conveniences, etc.

Of particular interest is the arrangement of service facilities. There is a corridor all around the central storage space. A driveway gives access to a receiving room, where objects are unpacked and inspected. The superintendent's office is adjacent, with a window

room" the carpenters and other mechanics will have work space.

In the sub-basement the ventilating and humidifying apparatus is installed. Heat and light are supplied from the central plant of the University.

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The building is of brick, dark in general tone, of the kind so long associated with Harvard. Straightforward brick seems to denote dailiness and service;



Corridor, First Floor

FOGG MUSEUM OF ART, HARVARD UNIVERSITY, CAMBRIDGE, MASS.

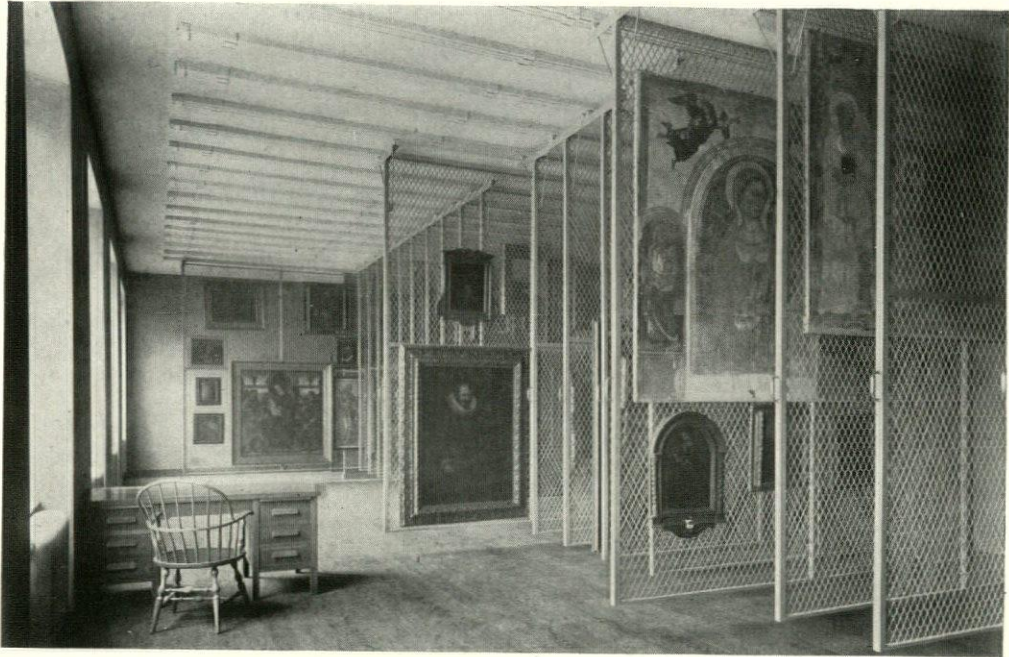
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controlling the delivery entrance. Near him the Registrar of the museum, charged with the accessioning and recording of museum property and its custodian until it is assigned to a department, will also be given quarters.

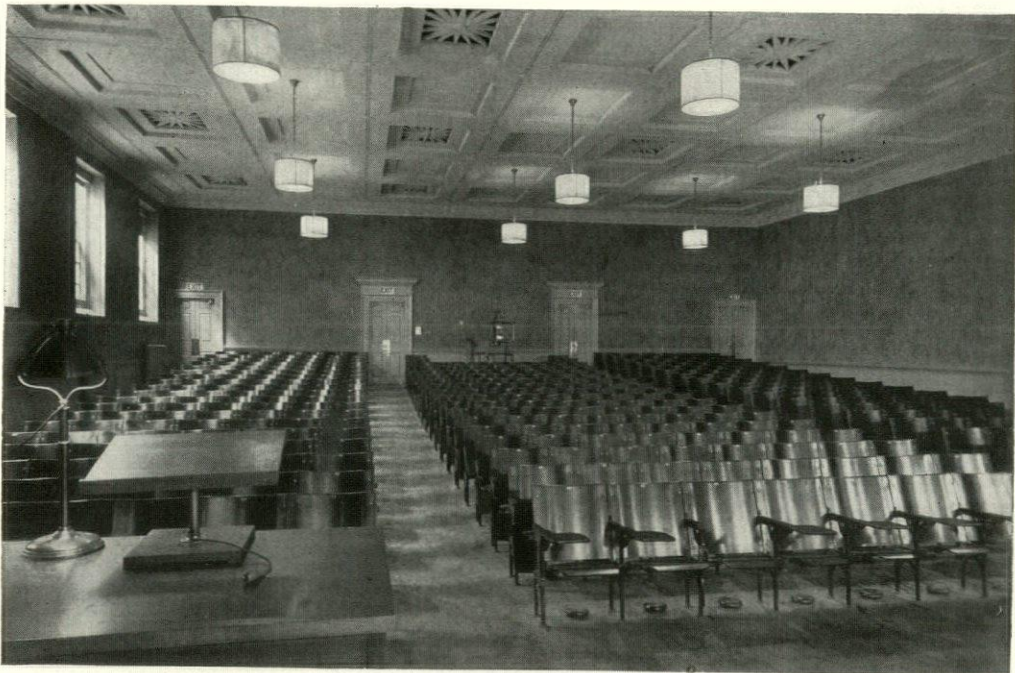
An object may readily be moved from the receiving room to dark storage or to the elevator, or along the corridor to any other room. In the area marked "packing

there is no better material for a working museum. A direct and simple treatment characterizes the design, which is Georgian, to be limited by critics as they do all styles used today by the word "modified." Possibly "Cambridge Georgian" is the best description.

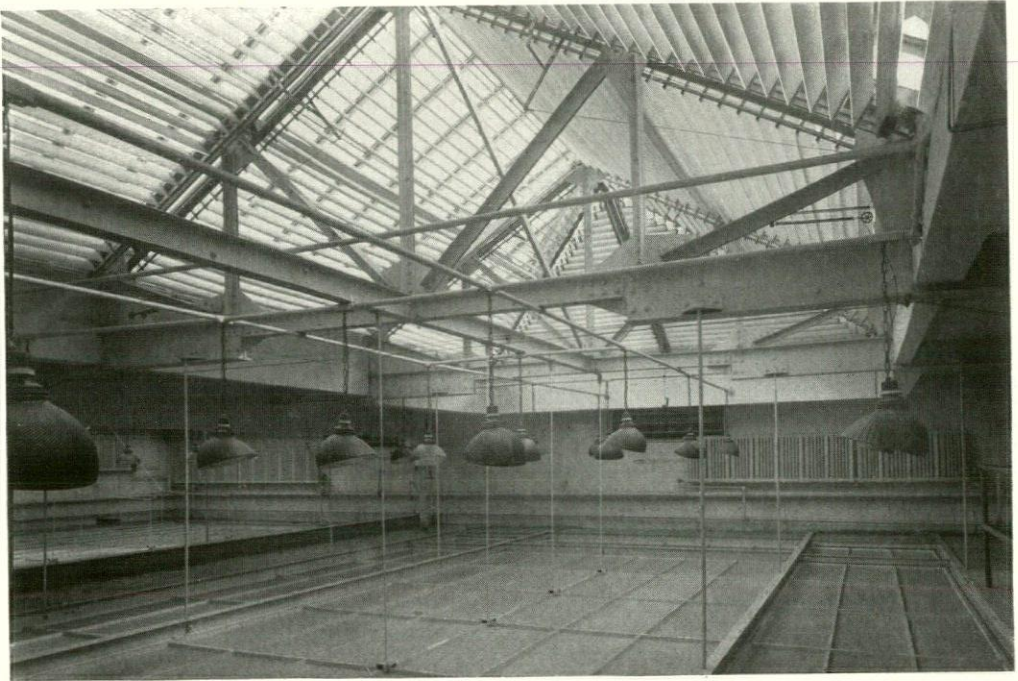
The main lines of the mass bring it into easy accord with three other buildings which it abuts in forming a quadrangle.



Picture Storage Room



Large Lecture Hall
FOGG MUSEUM OF ART, HARVARD UNIVERSITY, CAMBRIDGE, MASS.
Coolidge, Shepley, Bulfinch & Abbott, Architects



Loft Over Top Lighted Gallery
FOGG MUSEUM OF ART, HARVARD UNIVERSITY, CAMBRIDGE, MASS.
Coolidge, Shepley, Bulfinch & Abbott, Architects

The continuous line of limestone cornice and of parapet consisting of alternating sections of solid brick panels and of balustrade, emphasizes the unity of the group and sharply separates the wider gallery portions of the building from the higher court and teaching sections behind. The end motives project beyond the main frontal plane, but receive no other mass emphasis. The need for second-story windows made it possible to give these ends further detail in elevation.

A finely carved doorway, without portico or other monumental feature and with simple stairway approach is the entrance for public and students alike. For lectures at times when the galleries are closed the simpler entrance at the right is used, this being balanced at the left by a more important treatment of a central window.

The architects, Coolidge, Shepley, Bulfinch and Abbott, have done nobly by

this building, and the success has been achieved not without completely understanding that a museum is a working institution, like a library or a school, and to make it palatial, pompous or grand is to build up a kind of psychological barrier to its greatest use.

Charles Coolidge, the University architect and head of this firm, is chiefly responsible for the exterior design, and Henry R. Shepley for that of the courtyard. In their work they have had sage advice as well as practical help. Edward W. Forbes, director, and Paul J. Sachs, associate director, of the Fogg Museum, and also professors in the University, have given this problem the advantage of long experience and arduous experiment, building into this new building the ideals which have shaped themselves through many years. In the execution of the work they have had the very capable assistance of another architect and member of their staff, Meyric R. Rogers, who, as a fellow-

ship holder in the University and with the aid of experience at the Metropolitan Museum of Art, had worked out various essentials of a typical small museum plan that have been useful in the Fogg scheme. The happy coöperation of these men is, to the observer of other building projects in work, an exemplar of the best way to get things done.

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In this building, judged as a university museum, these things stand out: the simple design; the unpretentious material; the entire absence of architectural display within; the strategic use of the courtyard motive, which gives unity to the plan and provides the ever-present vista and rest for the eye; the economic disposition of space; the convenience of arrangement with reference to the laboratory use of the collections; the number of stairways all readily found but none made more important than the galleries;

the separate access to the lecture hall and the convenient location of the gallery for temporary exhibitions; the very serviceable corridor on each floor; the carefully studied disposition of teaching spaces; the making available of the latter to students only by passing through the museum.

This is a building for the study of art. It will recognize all the arts, seeing none as finer than others, only as different in material or purpose or method or appeal, seeing all as contributing to the cultural background against which our ideals appear to best advantage. Usefulness is the keynote of the new museum creed, and of the Fogg Museum especially, that art may serve succeeding classes of students, whether general or special, toward a fuller life through knowledge, toward a finer life through appreciation, toward a happier life through enjoyment. That is the ideal of art in use and of the museum in service.



Main Stairway

Fogg Museum of Art, Harvard University
Coolidge, Shepley, Bulfinch & Abbott, Architects

In the CAUSE OF ARCHITECTURE

By
Frank Lloyd Wright

II—STANDARDIZATION, THE SOUL OF THE MACHINE

JOHN RUSKIN AND WILLIAM MORRIS turned away from the machine and all it represented in modern art and craft. They saw the deadly threat it was to all they loved as such—and eventually turned again to fight it, to the death—their death. They are memories now. Pleasant ones. They did not succeed in delaying destruction nor in constructing anything. They did, however, remind us of what we were losing by using the machine or, as they might have said, letting the machine use us.

Repetition carried beyond a certain point has always taken the life of anything addressed to the living spirit.

Monotony kills.

Human feeling loves the vigor of spontaneity, freshness, and the charm of the unexpected. In other words, it loves life and dreads death.

The Machine Ruskin and Morris believed to be the enemy of all life. It was and is so still, but only because the artist has shirked it as a tool while he damned it; until now he has been damned by it.

Standardization as a principle is at work in all things with greater activity than ever before.

It is the most basic element in civilization. To a degree it is civilization itself.

An oriental rug, lustrous, rich with color and light, gleaming with all the brilliant pattern opulent oriental imagination conceived, has a very definite basis of standardization in warp and woof. In the methodical stitches regularly taken with strands of woolen yarn, upon that regular basis of cotton strings, stretched tight, lies the primitive principle of standardization. Serving the imagination full well.

Standardization here serves the spirit well—its mechanics disappear in the glowing fabric of the mind—the poetic

feeling of the artist weaver with love of beauty in his soul.

Standardization should have the same place in the fabric we are weaving which we call civilization—as it has in that more simple fabrication of the carpet. And the creative artist-mind must put it into the larger more comprehensive fabric.

How?

Not so simple.

This principle of standardization has now as its tool or body—the Machine. An ideal tool compared to which all that has gone before is as nothing.

Probably Gutenberg's invention of movable types was the first great advent of the machine in any sweeping form.

The blessing of that invention is obvious as is the curse that came with it.

The body of the book became volatile, almost infinite—and mind failed to keep up with it. Trash inundated the civilized world and streams of printed pages became wrapping paper to fill packing cases, light fires and blow unheeded about the gutters of the world.

A deluge. And yet the book lives. There are a thousand writers for one in earlier eras and mostly worth one-thousandth part as much. "Shifting type" was the principle of standardization at work. The machine is the "press," that we have to-day serving it. What happened here in printing has happened to nearly everything in our lives. Happened or is happening or soon to happen with similar but more disastrous results; quantity at expense of quality—with always the blessing that comes from it, making available to the poor and needy a cheap or debased form of what was once rare and precious. I am speaking of fine art from the architect's standpoint.

So we see in the Machine the fore-runner and ideal agent of Usonian Dem-

ocracy such as it is. A Democracy sentimental and unsound, but that is another and longer story.

We see in this old force a new agency hard to control. A force once released into the world—never to be stopped until every thing in it once precious and valuable for its own sake in its intimate relation to former good or great life has been fed to the dogs, or swine, speaking bitterly. But meantime raising the opportunities for "having things" the world over with a chance of turning the dogs, or swine, into more human beings.

And, honestly let it be said, of putting all human beings perhaps at the mercy of swine and dogs.

This is where the creative artist steps in: to bring new life of the mind to this potent agency: new understanding that will make living more joyous and genuine by abolishing the makeshift, showing up imitation for the base thing it is—saving us from this inglorious rampage and rapine upon antiquity. There is no artist conscience, it seems, in all this. The artist is like a hungry orphan turned loose in a bake shop. The creative artist is not in it.

That ancient honor of the race, creative art, can not be dead. It needs only awakening. No wonder it lies all but moribund floating in the "deluge" at the mercy of the current of ubiquity, rushing toward—well, let us hope, toward the great peace of the great ocean.

This principle of standardization then, is no detriment to art or artist. It has always existed. And like any principle has its uses and its abuses.

How foolish therefore to take a prevalent abuse of any thing for the thing itself?

An artist is sentient. He is never fooled by brains or science or economics. He knows by feeling—say instinct—right or living, from wrong or dead.

He may not, however, have the technique to make his "knowing" effective and so remain inarticulate. But it is his duty to know, for his technique is what makes him serviceable to his fellows as artist. Acquiring the technique of the Machine as the tool of standardization,

mastering the nature of both, is the only thing now that will make him the living force necessary to salvage the flotsam and jetsam of the "deluge," or, let it all go and begin over again.

Begin another era: the modern era of the machine with all it implies, economically making life more joyous and abundant as a matter of quality—as well as quantity.

Standardization apprehended as a principle of order has the danger of monotony in application.

Standardization can be murderer or beneficent factor as the life in the thing standardized is kept by imagination or destroyed by the lack of it.

By the "life" in the thing I mean the *integrity* of the thing (we are talking of the things of art and craft) in the sense of the third dimension—as I have already tried to explain it.

The "life" in the thing is that quality of it or in it which makes it perfectly *natural*—of course that means organic. And that simply means true to what made it, as it was made, and for what it was made. That would be the *body* of the "thing." A matter of good sense.

New opportunities have come, not to hand but to the mind.

This may not seem specific. But it is a point of view necessary to the understanding of the experiences which follow. For in that spirit the experiments were made and the results judged as good or bad that will appear as I write.

The first study of importance in this connection is of course, the nature of *materials*.

It is impossible to do anything intelligently to or with something you know nothing about. To know intimately the nature of wood, paper, glass, sheet metal, terra cotta, cement, steel, cast iron, wrought iron, concrete, is essential to knowing how to use the tools available to make use of those materials, sensibly or artfully.

So let us glance at these more staple materials. We will find certain properties in all, that standardization will serve well; and other properties, too, that

standardization, carried too far, will kill.

The principle of standardization, applied, may be said to be a matter of knowing by a *study* of the nature of whatever we apply it to—when to quit.

Let us begin with a short study of wood.

What is wood?

A workable, fibrous material got from trees in almost any length, certain breadths and thicknesses, now standardized. It may be had in almost any color or texture, as trees are growing in great variety all over the world. Different woods vary in characteristics, made known by use in all ages. To it man has had recourse for nearly every need. He has made of it a part, or entirely, in one form or another, nearly everything he uses. It may be polished, or painted, or stained, to bring out its grain which is the great characteristic of its beauty. It may be sawed or cut to bring this beauty to the surface in various ways. It was once laborious to hand-saw and cut and smooth it. Machines now do all that better. Machines cut veneers so cheaply and so thin and so wide they may be applied like wall paper to broad surfaces. Machines cut rotary veneers from the curling surface of the log in any width, unwinding the surface with a cut of the grain unknown before. Really, this property of wood has been liberated and made available in beautiful sheets, so beautiful in surface that it is folly to mold it, and join it, and panel it painfully any more as before.

It may be used in broad simple plastic ways now even more cheaply than in laborious joinery with its tendency to go to pieces because it was all in pieces.

Much more could be said. Here is enough to indicate new possibilities of design in machined wood.

Inlaid lines are characteristic too,—slender inlaid decorative purflings or battens between wide, plain, broad, etc., etc.

Plastic treatment, now, you see, instead of *constructed* ones or "structuralities."

There are infinite possibilities here. And in making wood into furniture, clean straightline effects, as delicate as may be, are characteristic of the machine. A lim-

itation that makes the nature of wood very beautiful as it appears within these limitations of form.

Wood carving usually did violence to the nature of wood. It tended to mutilate and destroy it.

The machine can inlay, fret and bring up the beauty of wood in plastic treatments more true to the nature of the wood. Why not then, forget ancient models that are especially made to suit freedom of the hand? The nature of wood was overwrought and lost in three out of five of such models anyway. But here the beauty that is wood lives above standardization, if the architect sees it and uses it in this new "plastic" sense.

Let us take glass.

Glass was once a delightful substance in itself. It is now chiefly a perfect "clarity" or nothing very delightful.

Such clearness in polished glass as we have is new in the world. We may have great polished surfaces for reflections, leaving openings as though nothing closed them—limpid surfaces playing the same part in all interiors that water plays in the landscape. We have lost a substance but found a freedom infinitely precious to the designer of buildings. This is the mechanical plate glass of the machine. New opportunities here. Imagine a few.

There is electro glazing to introduce the element of pattern into the clear glass in delicate straight lines in bewildering delicacy and variety.

The mind must enter now to take the place of what, in the antique, was adorable as a natural quality of the glass itself. The scene has shifted, but we are still better off, in glass.

We can make colored glass for the painter to use as pigment in his hand, but it is now a lesser interest. We have limpid surfaces, true reflections and unobstructed vision due to the machine.

And there is steel.* A new thing under the sun. And the most significant material of this age. The one that has done most harm to the established order—or Pseudo-Classic.

*Steel is the next essay in this series.

ALTERATIONS to WEST COLLEGE - PRINCETON, UNIVERSITY -

AYMAR EMBURY II, *Architect*

By
Russell F. Whitehead

AROUND 1840 THE BUILDINGS at Princeton University were a small compact group arranged symmetrically in a very pretty design. The center was, of course, Nassau Hall (often spoken of as Old North) flanked by the Chapel and Stanhope Hall. Much further to the front and about in a line with Stanhope Hall and the Chapel were the houses for the President and the Dean. Back of Nassau was the quadrangle, the base of which was Nassau, the sides East and West colleges, and the rear the small classic buildings, the American Whig Society and the Cliosophic Society. These buildings were of various dates, the oldest, old North, dating from 1756;

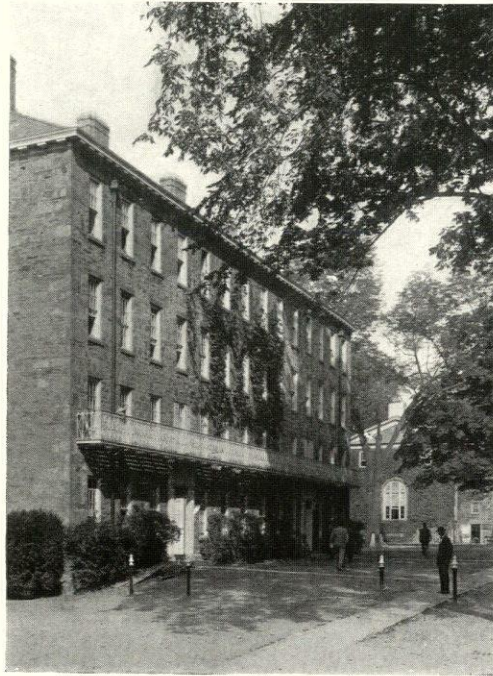
the houses for the President and Dean from the latter part of the 18th century; the Chapel, Stanhope Hall, Whig and Clio Halls from early Greek revival times; and East and West, the two college dormitories, from 1832 and 1835, respectively. Around this nucleus the great number of buildings needed to house the University has grown (although the Chapel and East college were unfortunately removed to make room for the University

library toward the end of the Nineteenth century), and is now surrounded by buildings derived from English College Gothic with which there is no apparent

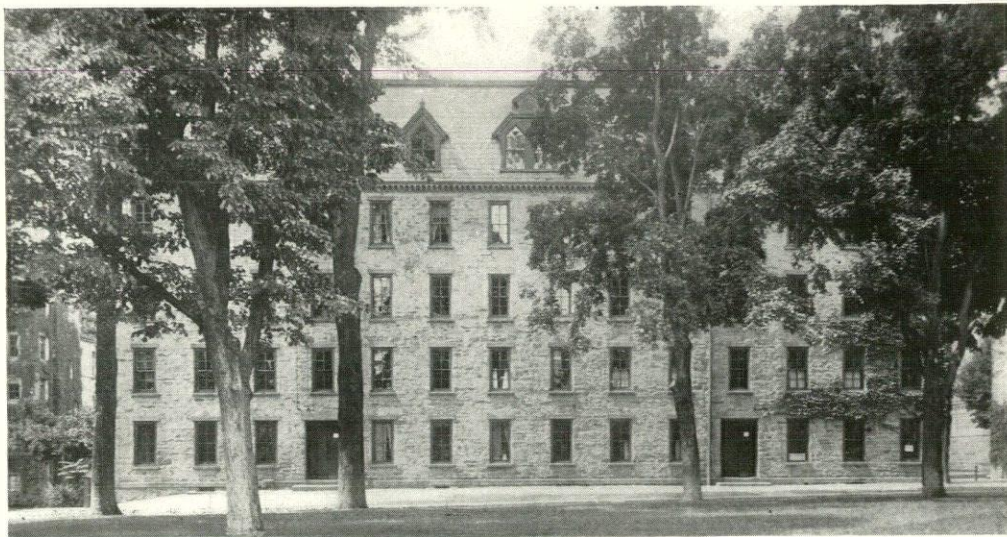
disharmony because the small scale of the old is not so very different from the scale used in the more recent ones.

West college was originally a plain square rectangle with a small unornamental cornice and no decorative feature whatever. About 1870, its hip roof was removed and a mansard substituted for it; the intention apparently being to make it harmonious with the new hall, Reunion, which is perhaps the ugliest on the Princeton campus. Although its use had gradually changed, the upper floors re-

maining as a dormitory while the lower floor was occupied by the University store, this change of occupancy was hardly intentional. The University store was founded by two hungry undergraduates some thirty years ago, as a way to earn their way through college, and the enterprise proved so profitable that it was transmitted from one student generation to another and finally taken over by the University as a cooperative. From one



Quadrangle, West College, Princeton University



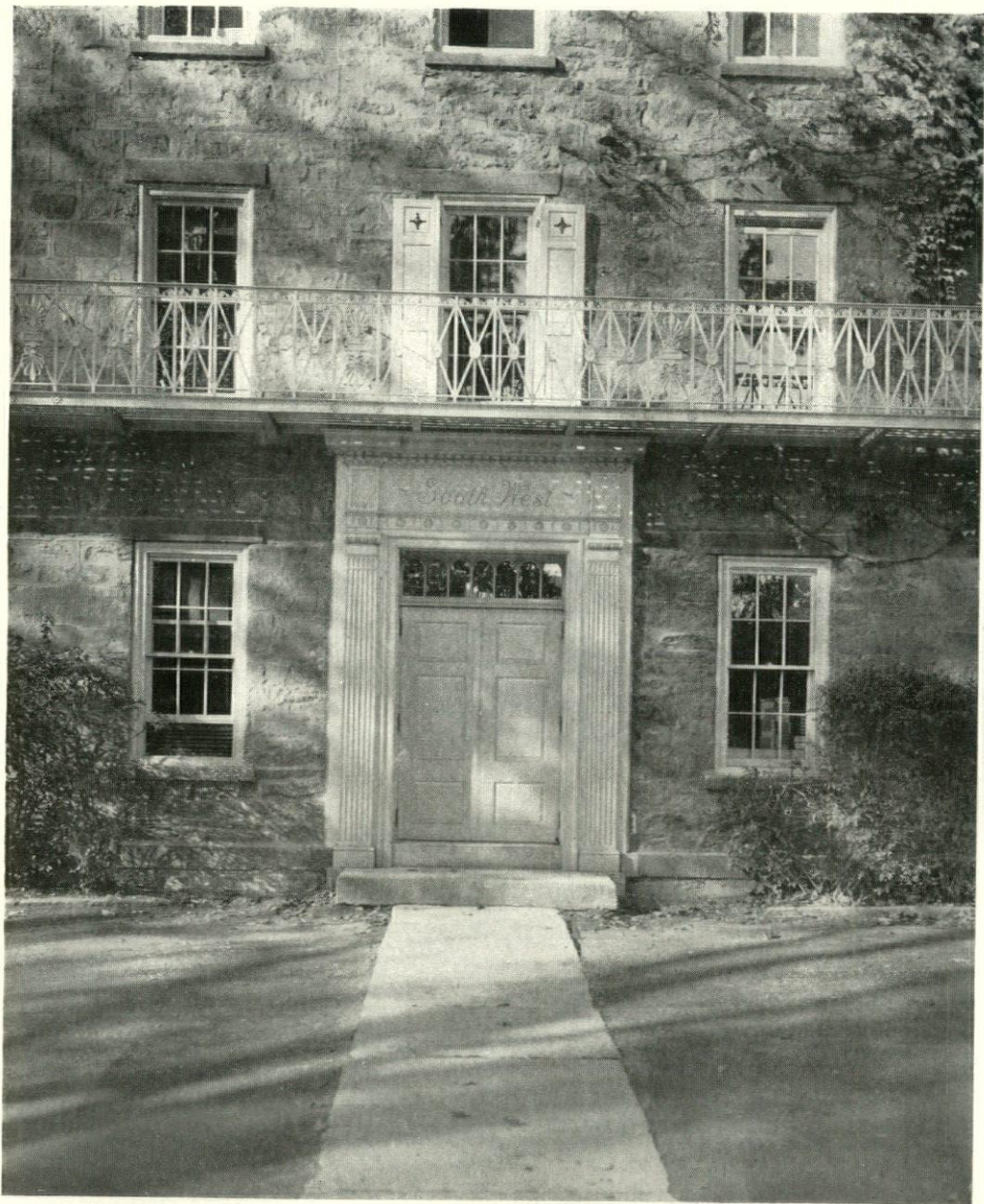
Quadrangle Elevation—Before Alteration



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June, 1927

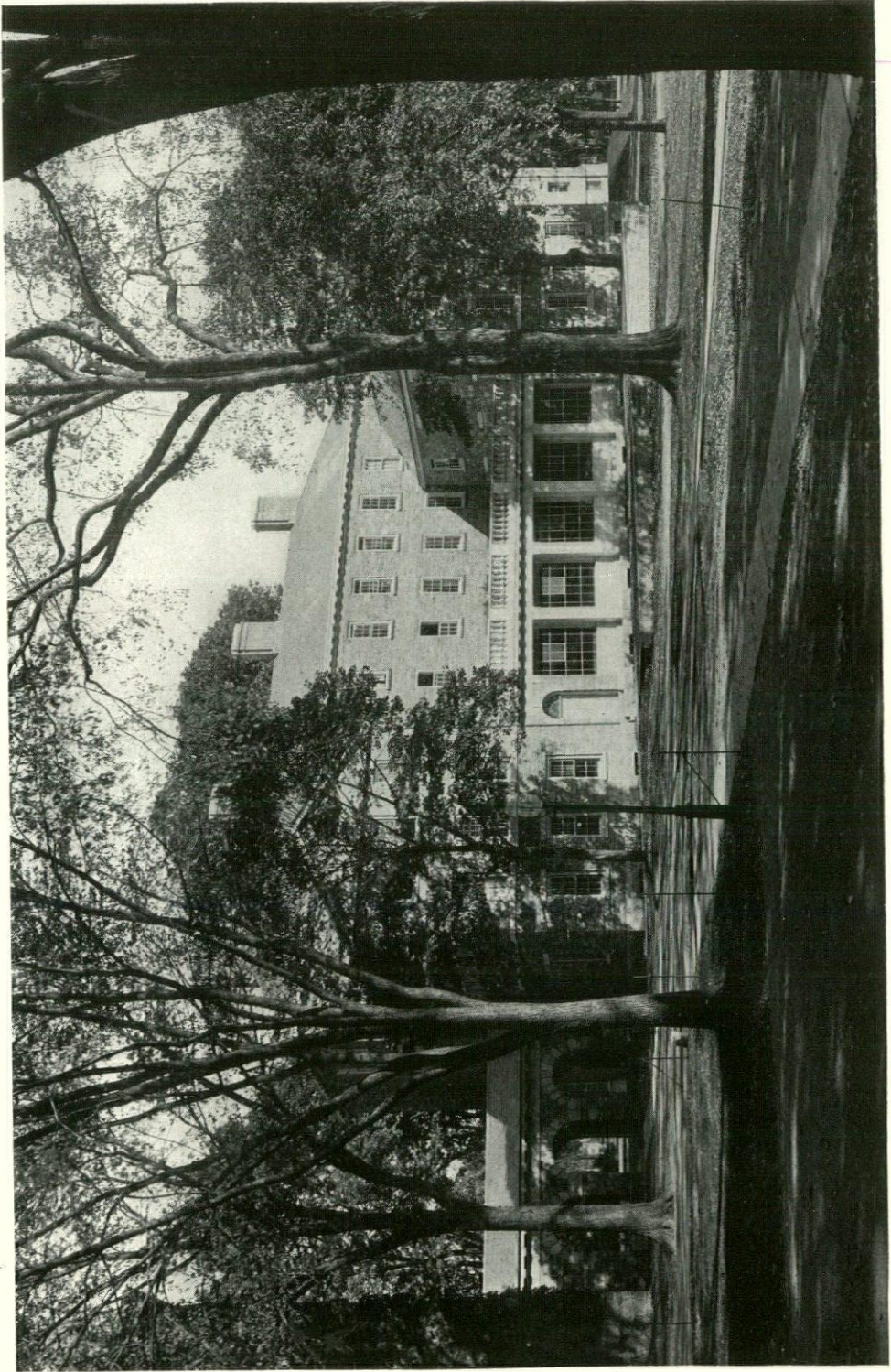
Quadrangle Elevation—After Alteration
WEST COLLEGE, PRINCETON UNIVERSITY
Aymar Embury II, Architect



The Architectural Record

June, 1927

Main Entrance Doorway to the Dormitory
WEST COLLEGE, PRINCETON UNIVERSITY
Aymar Embury II, Architect



The Architectural Record

West Elevation—Showing the New Wings
WEST COLLEGE, PRINCETON UNIVERSITY
Aymar Embury II, Architect

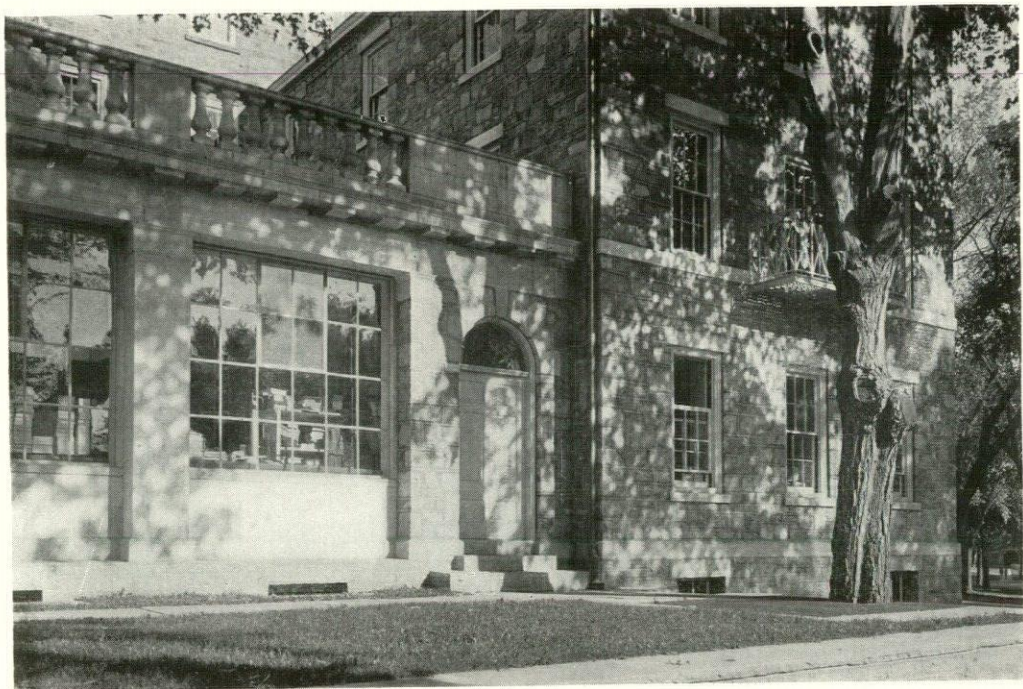
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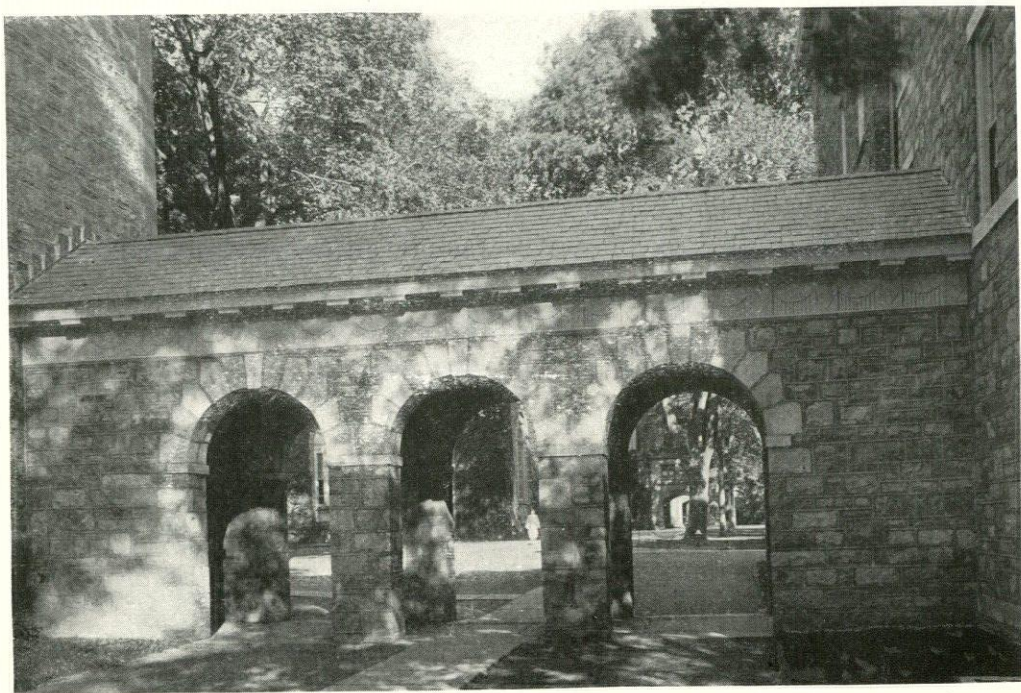
June, 1927

The New Show Windows, University Store
WEST COLLEGE, PRINCETON UNIVERSITY
Aymar Embury II, Architect

The Architectural Record



Door to University Store



Arcade Between "West" and "Reunion"
WEST COLLEGE, PRINCETON UNIVERSITY
Aymar Embury II, Architect



Terrace in Front of University Store
 WEST COLLEGE, PRINCETON UNIVERSITY
 Aymar Embury II, Architect

small front room on the ground floor it had expanded until it occupied the entire ground floor, the basement, and some of the rooms on the second floor, and the need of the University store was evidenced by the fact that in spite of very liberal refunds to the students who had joined the cooperative movement, it had rolled up a surplus, less other purchases, of nearly \$100,000, and was crying for more space which it was willing to pay for from this fund. The University authorities determined, therefore, to double the ground area of the store and give it in addition as much basement space as could possibly be provided to take care of not only its present needs but its probable future growth for some years, and at the same time to renovate the building completely and to rebuild the stairways of fire proof construction so that students lodged on the upper floors might be a little safer than they were previously.

The work of alteration was entrusted

to a Princeton graduate, Mr. Aymar Embury II, who had wanted to do something with West ever since he was a student in the University, and in addition to the necessary renovation to the interior of the building, he, with the enthusiastic cooperation of the Committee on Grounds and Buildings of the University, remodelled the exterior and added fifty per cent to the area of the building. The problem was not so easy as it may have appeared, for while it was not especially difficult to remove the mansard roof and replace it with a hip roof of suitable character, there were certain sentimental problems to be faced as well as those inherent in the building itself. It was the current feeling of all Princetonians that West was a Colonial Building, the restoration must therefore be along lines which were not substantially divergent from Colonial ones; in the second place, the building was erected at the time of the Greek revival and the archi-

tect felt it essential to preserve in his restoration the distinctive marks of that period; in the third place, the scale of the building must be such that it would harmonize with the Gothic buildings surrounding it; and in the fourth place, the main elevation toward the quadrangle was four stories of tall narrow windows spaced about equally without any break to relieve their monotony. The problem of transforming this somewhat unpromising mass into an agreeable and organized design presented sufficient difficulty without the necessity of large show windows for the shop, which should be at once Greek Revival, Colonial, and in harmony with Gothic. The illustrations show how this was accomplished. The introduction of a simple iron balcony across the inner elevation gave the building a base; an appropriate treatment of the doorways in architectural forms which were strictly neither Greek Revival nor Colonial, but which might pass for either, emphasized the entrances sufficiently and the white notes thus introduced into the facade were carried up to the second story by pairs of blinds on the windows over the balcony. The existing brick cornice was replaced with a carefully studied wooden one and the 1870 chimneys were rebuilt in brick. The old window trims in some cases remained, and new window trims matching these were set in all other windows, both old and new, replaced to match these, and new sash were installed throughout.

These changes were all comparatively slight and yet the transformation offered on the campus side has been amazing to the college authorities. Contrary to the expectations of the architect, no one has wondered why on earth he did this and that to an historic old building.

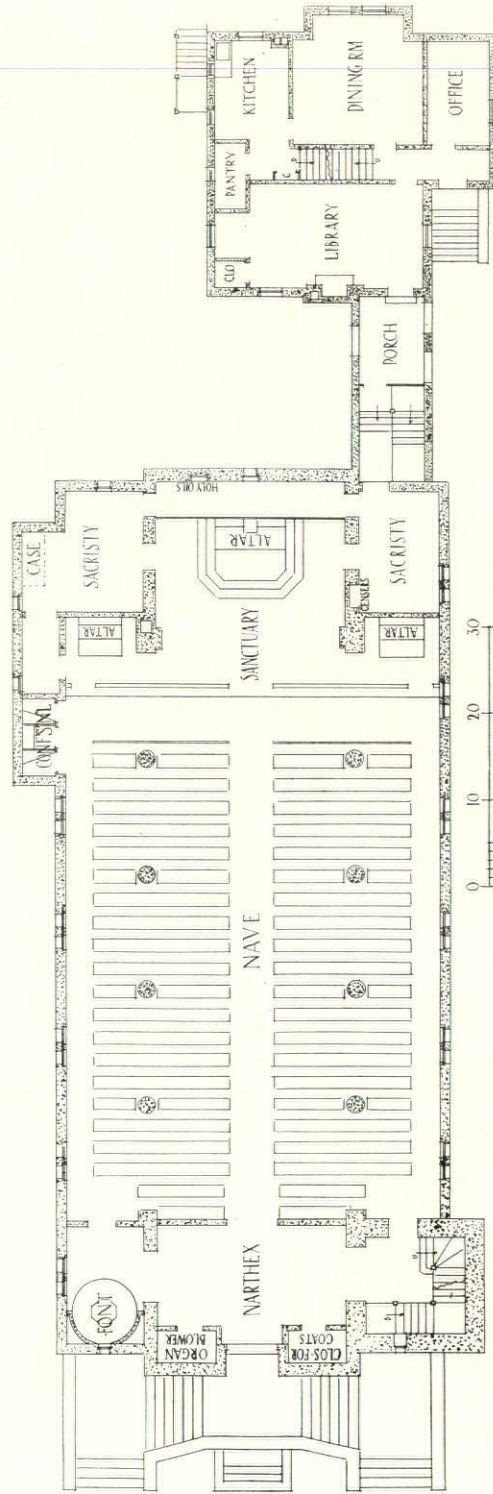
The rear elevation was the more difficult of the two, since the quarry which supplied the old stone work had run out, and stone was imported from Pennsylvania which matched the old stone only approximately; further, the old stone work had been repointed perhaps a dozen times in its existence and no two pieces of pointing were alike either in the method or in color. In adding the new wings limestone was employed for trim, lintels, and for the piers between the shop windows, while the rest of the stone work was a rough Pennsylvania stone cut as nearly as possible to match the old, and pointed with mortar of a soft dull brown which acted like a paint glaze to quiet the surface to approximately the color of the old.

The treatment of the shop windows is perhaps the most interesting single feature of the building, since they are filled with stock factory steel sash and so far no one has complained either to the architect or to the building committee that they were un-Colonial. The treatment adopted was of course reminiscent of the old Greek Revival shop fronts on Pearl and Water streets in New York, but managed in a somewhat different fashion.

P O R T F O L I O
C V R R E N T A R C H I T E C T V R E

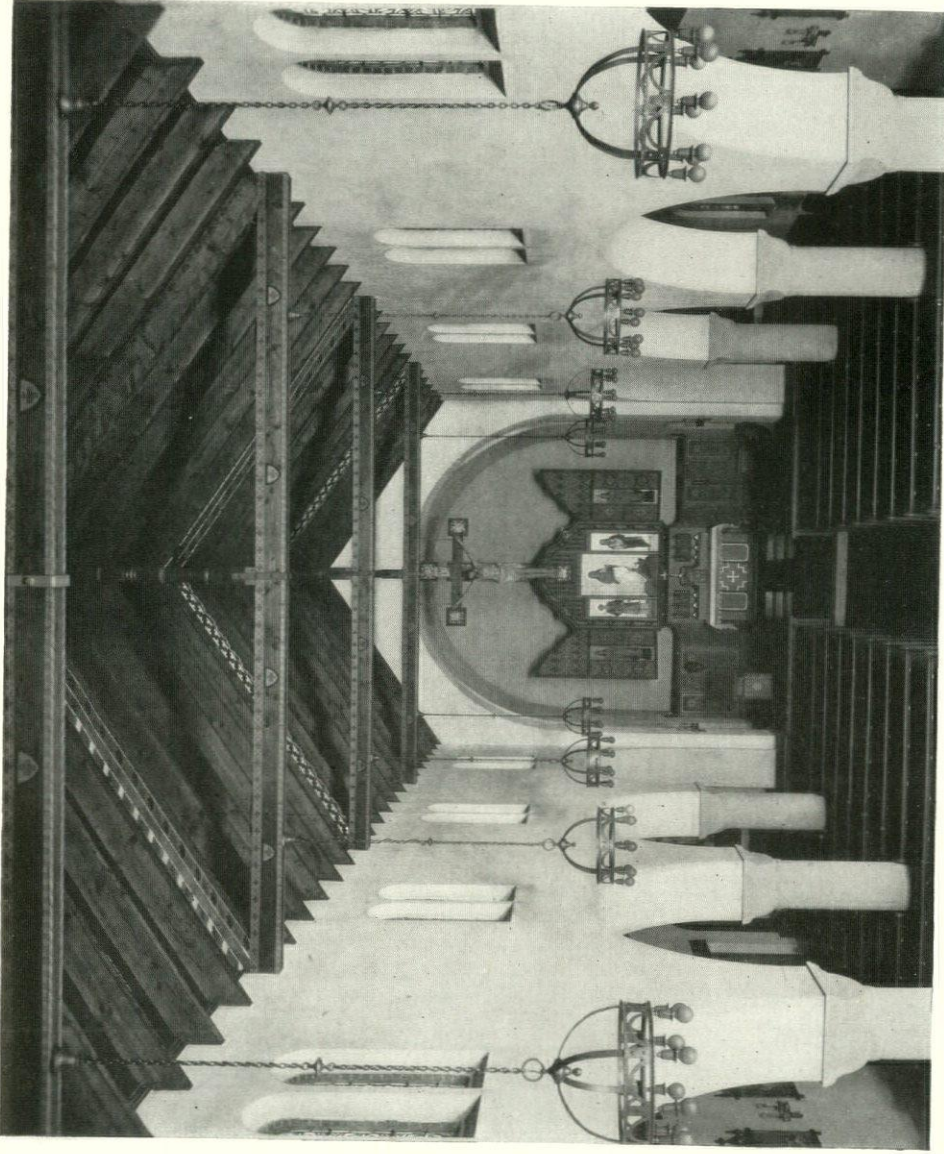


ST. JOHN EVANGELIST CHURCH AND RECTORY, WELLSBURG, WEST VIRGINIA
Edward J. Weber, Architect

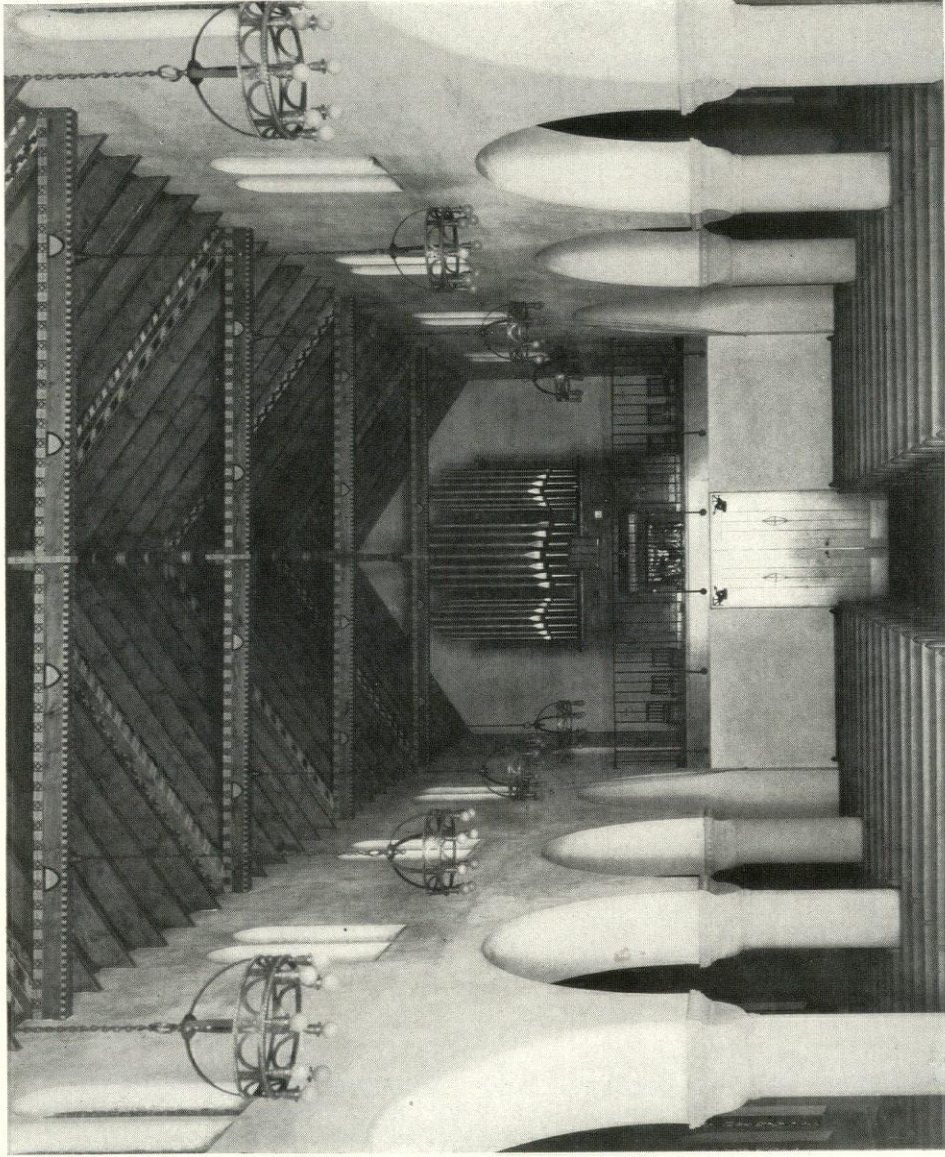


ST. JOHN EVANGELIST CHURCH AND RECTORY, WELLSBURG, WEST VIRGINIA

Edward J. Weber, Architect



ST. JOHN EVANGELIST CHURCH, WELLSBURG, WEST VIRGINIA
Edward J. Weber, Architect



ST. JOHN EVANGELIST CHURCH, WELLSBURG, WEST VIRGINIA
Edward J. Weber, Architect



Confessional in Side Aisle

ST. JOHN EVANGELIST CHURCH, WELLSBURG, WEST VIRGINIA
Edward J. Weber, Architect



ST. PETER'S PARISH HOUSE, ASHTABULA, OHIO
Edward B. Lee, Architect



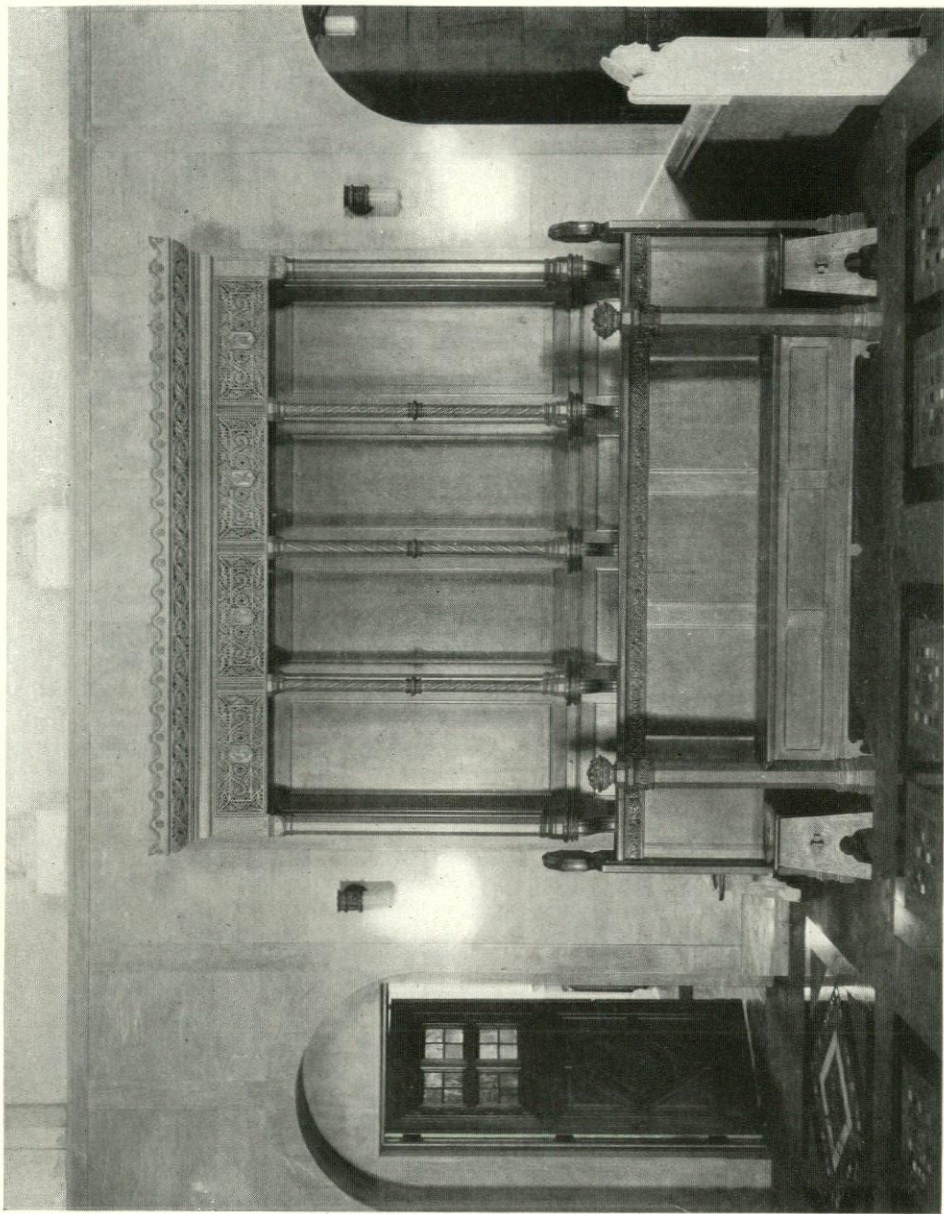
ST. ANSELM'S R. C. CHURCH, SWISSVALE, PA.
A. F. Link and Associates, Architects



Bishop's Throne

ST. JOSEPH'S R. C. CATHEDRAL, WHEELING, WEST VIRGINIA

Edward J. Weber, Architect



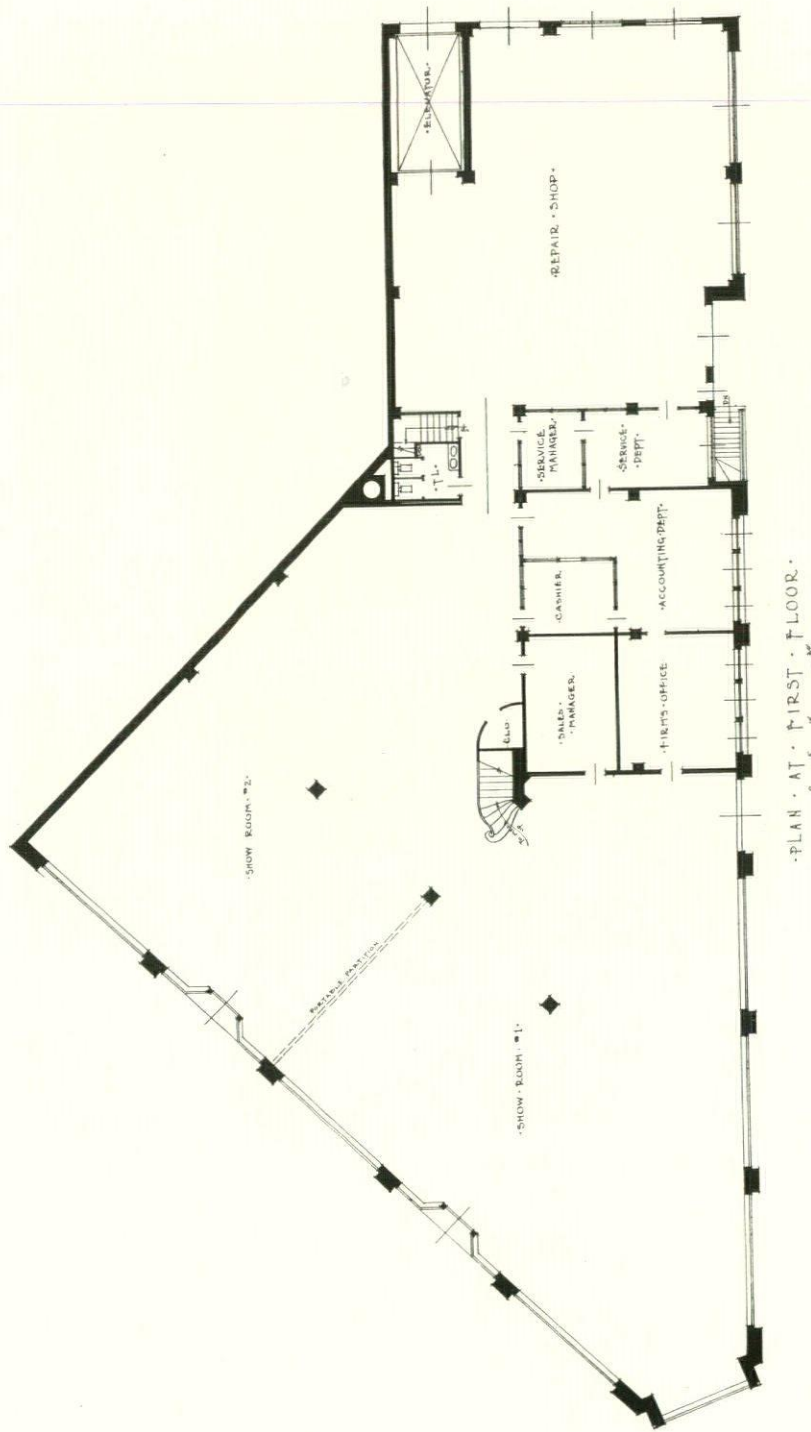
ST. JOSEPH'S R. C. CATHEDRAL, WHEELING, WEST VIRGINIA
Edward J. Weber, Architect



MASONIC TEMPLE, ASHTABULA, OHIO
Edward B. Lee, Architect



WHITEHILL-GLEASON MOTORS BUILDING, PITTSBURGH, PA.
M. Nirdlinger, Architect



PLAN AT FIRST FLOOR

AUTOMOBILE SALES BUILDING, WHITEHILL-GLEASON MOTORS, INC., PITTSBURGH, PA.
 M. Nirdlinger, Architect



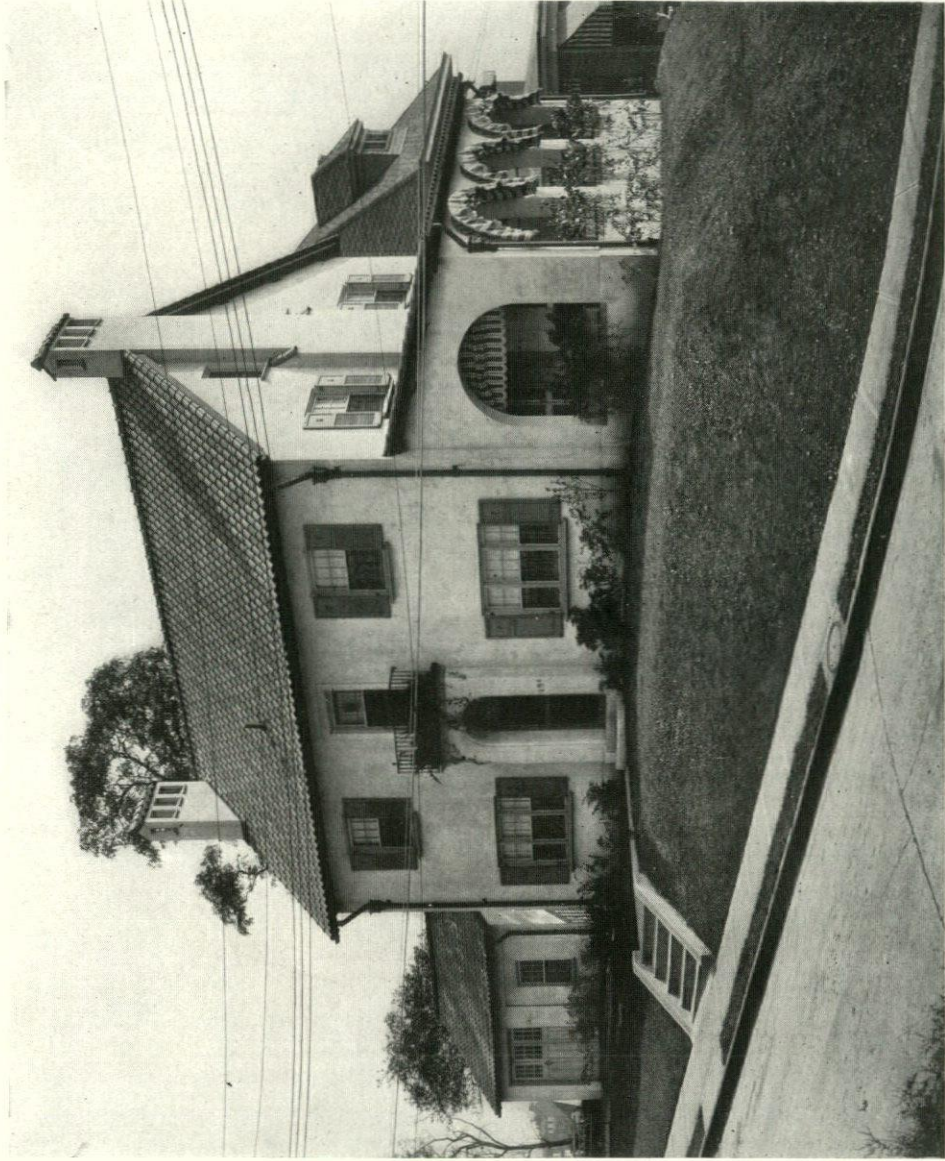
Interior of Sales Room
AUTOMOBILE SALES BUILDING, WHITEHILL-CLEASON MOTORS, INC., PITTSBURGH, PA.
M. Nirallinger, Architect



RESIDENCE OF JOHN C. OLIVER, ESQ., PITTSBURGH, PA.
R. M. Trimble, Architect



RESIDENCE OF JOHN C. OLIVER, ESQ., PITTSBURGH, PA.
R. M. Trimble, Architect



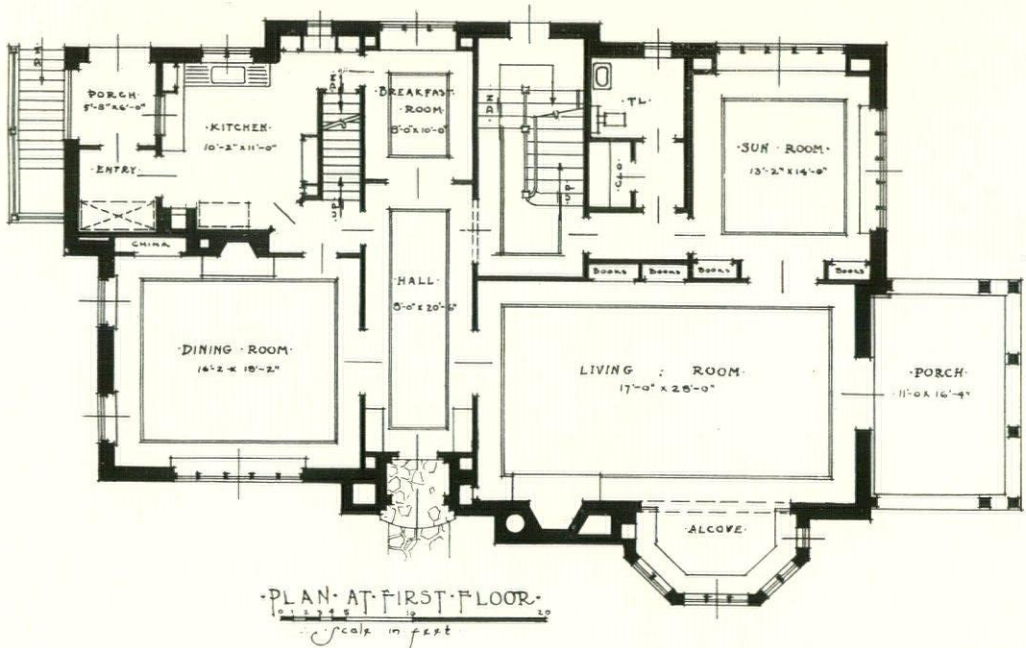
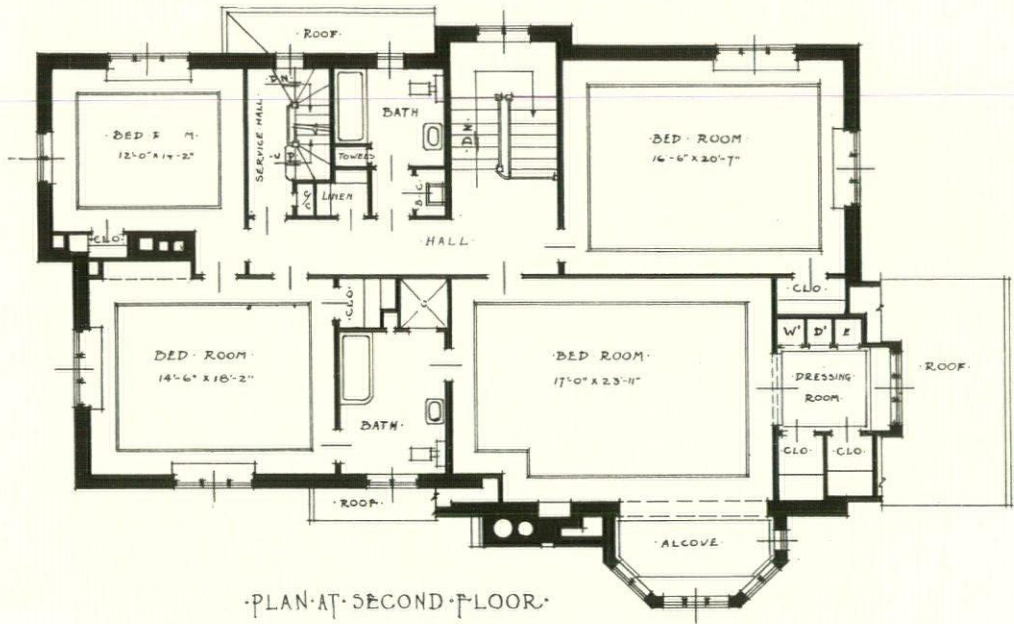
A SMALL RESIDENCE IN PITTSBURGH, PA.
R. M. Trimble, Architect



RESIDENCE OF FREDERICK HEINZ, ESQ., ASPINVALE, PA.
R. M. Trimble, Architect



RESIDENCE OF F. N. HENEMEYER, ESQ., PITTSBURGH, PA.
M. Nirdlinger, Architect



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RESIDENCE OF FRED W. HENNINGER, ESQ., PITTSBURGH, PA.
M. Nirdlinger, Architect

NORTH ITALIAN BRICKWORK

By
Myron Bement Smith

PART VI—VENETIA

IN THIS, the concluding article of the series, I wish to call attention again to the size of Italian bricks. The average brick, (for there was no determined dimension), is three by five by eleven inches. In consequence, the scale of the Italian work, when compared with American, is greater by almost a half. Hereafter I shall take care to have a scale or a human figure in all of my photographs of Italian brickwork.

The cornice detail from Ferrara (Fig. 1), is reconstructed work of recent date and is unusual in that it shows what was probably a common practice in the fourteenth and fifteenth centuries, namely, the application of fresco colors to brick. The square billets have been edged with paint as has the thin roof tile directly below. More color is found in the fresco decorations below the corbels.

The Cathedral at Parma is an almost unknown monument that presents a number of archaeological questions. The illustrations here, (Fig. 2 to 7), should be supplemented by reference to Plate II of Part I of this series (January, 1927) and if additional material is required see "L'Art Romain en Italie," by Martin, which gives some excellent general views. The two questions which provoke my interest in this Lombard edifice are, first: how did the use of terra-cotta occur at this early and isolated instance? and second: how may we account for the

extensive and remarkably successful employment of surface mosaic in brick and marble and not find it copied in later work of the period? It is generally understood that the use of terra cotta was not revived in Italy until the late Gothic and early Renaissance periods, yet here is an authentic Lombard structure that shows its use in a dozen features, such as the archivolt and the band above (Fig. 2), the corbel supports modeled as human and animal heads (Figs. 3 and 4), and the spirited arabesque of the archivolt of Fig. 6. The mosaic work is shown in Figs. 4, 5 and 6. Much of it has been covered by a thin coat of gesso that probably dates, as does the cornice of Fig. 3, with the Renaissance additions.

S. Lorenzo at Mantua, (Fig. 10), is restored. The loggia at *S. Antonio*, Padua, however, is without doubt authentic. There is no mortar visible in the joints of the archivolt. The pattern work was cut, not moulded. *S. Sofia*, (Fig. 12) also in Padua, is a Byzantine building as is also *S.S. Maria e Donata*, (Figs. 13 and 14), at Murano, near Venice. The chevron *motif* above the niches has bits of delicately carved marble set into the panels. Note the herringbone work in the niche, (Fig. 14).

The bold cornice of *S. Fermo Maggiore*, Verona, (Plate I), is varied at the end of the nave by putting the white marble background in all the sunken panels,

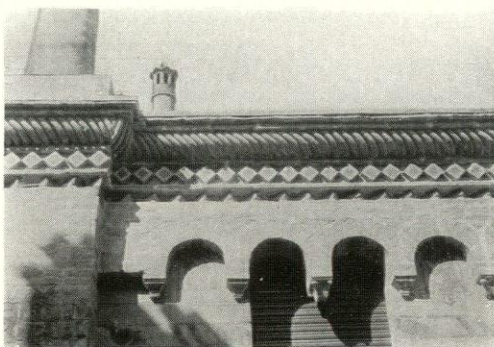
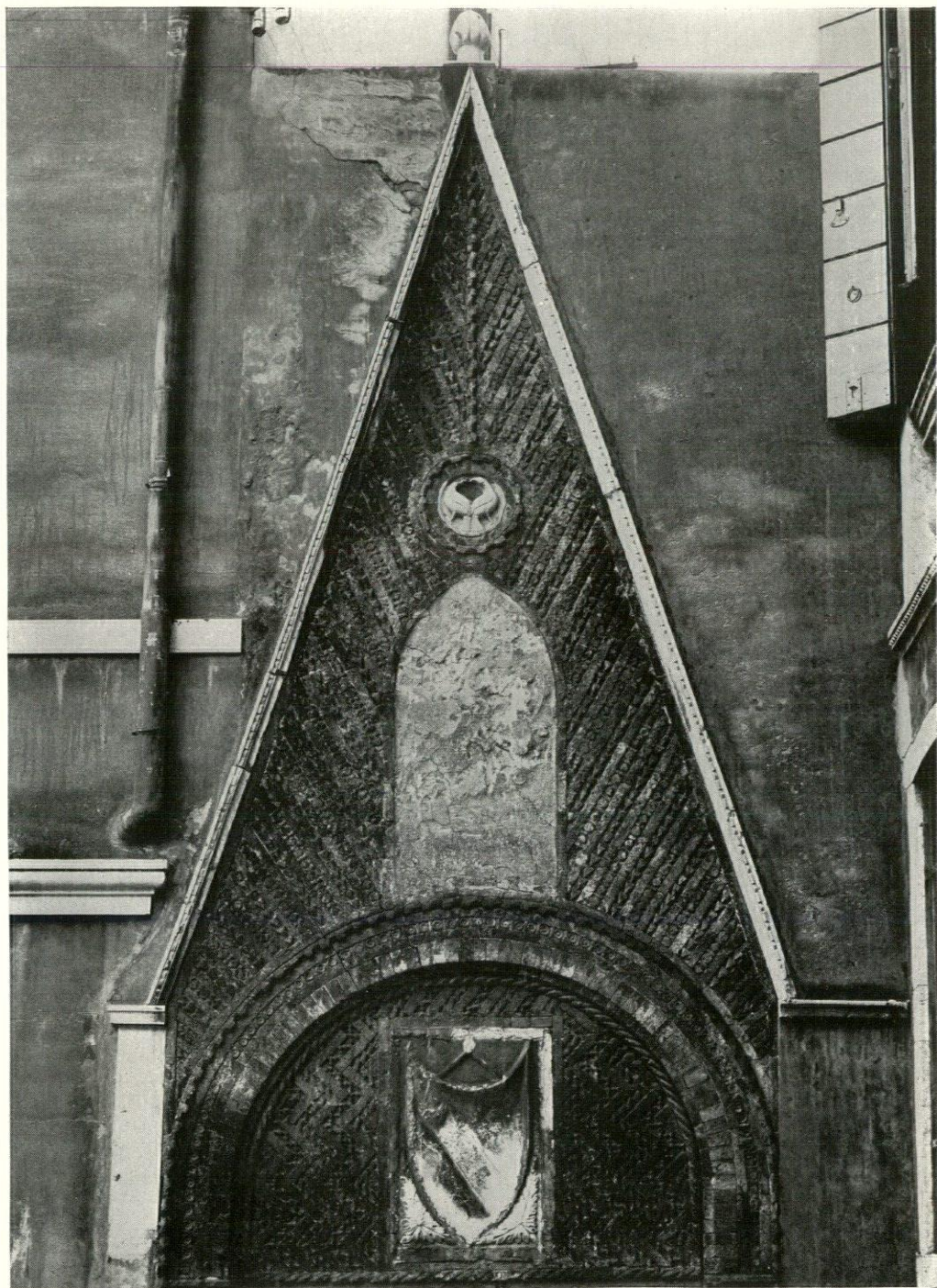


Fig. 1. Detail of Brick Cornice.
House in Ferrara



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House in *Campiello San Luca*, Venice
NORTH ITALIAN BRICKWORK. PART VI

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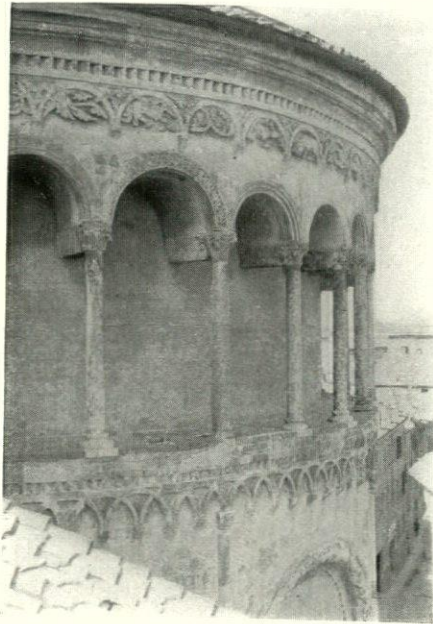


Fig. 2. Detail of Apse
The Cathedral, Parma

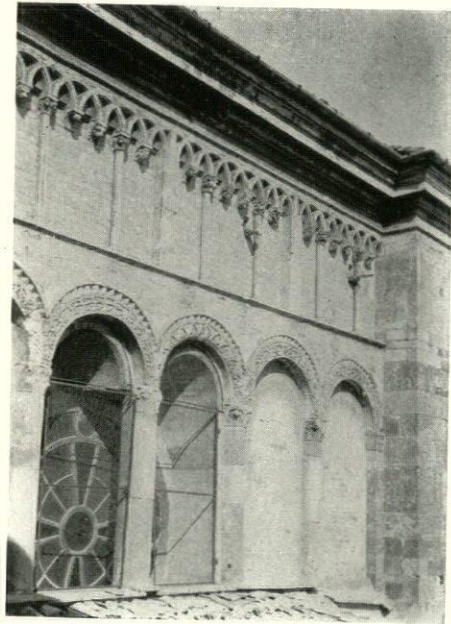


Fig. 3. Detail of Apse
The Cathedral, Parma

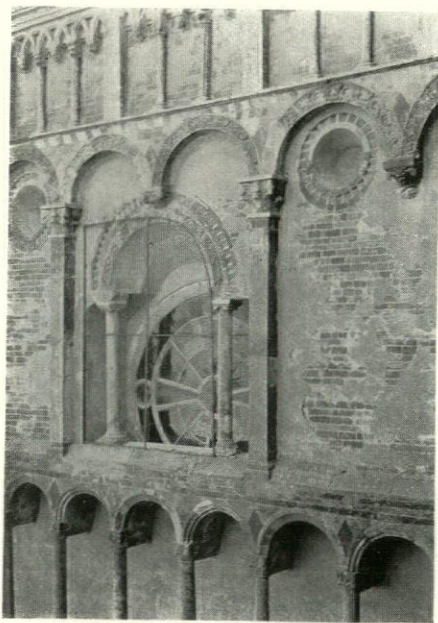


Fig. 4. Detail of Apse
The Cathedral, Parma

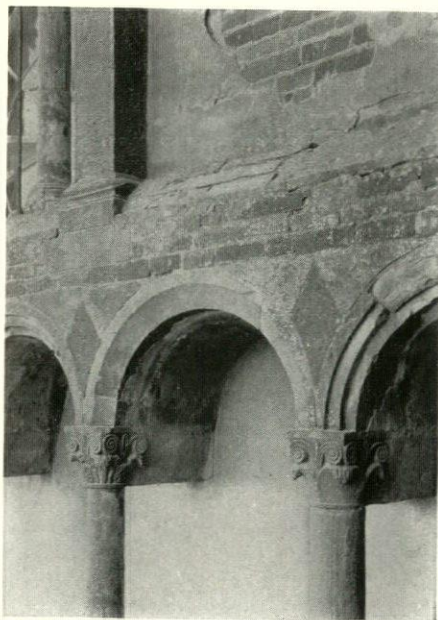


Fig. 5. Detail of Apse
The Cathedral, Parma

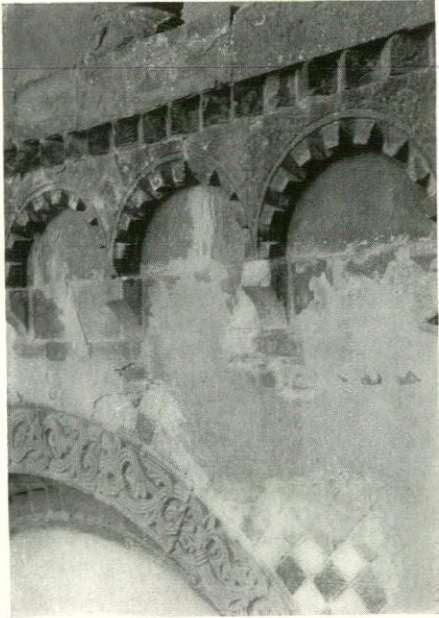


Fig. 6. Stone, Brick, Terra-Cotta and Marble. The Cathedral, Parma

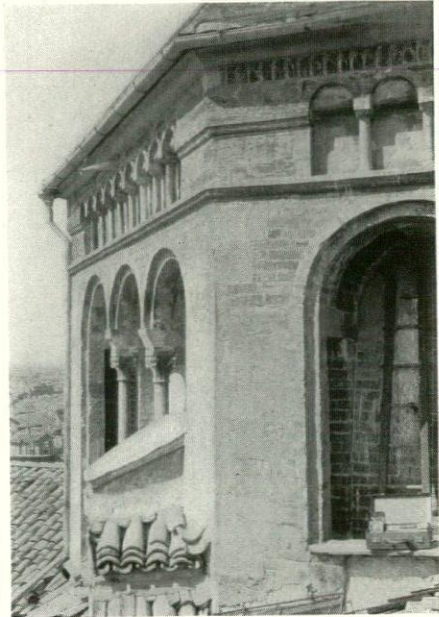


Fig. 7. Detail of the Lantern in the Cathedral, Parma

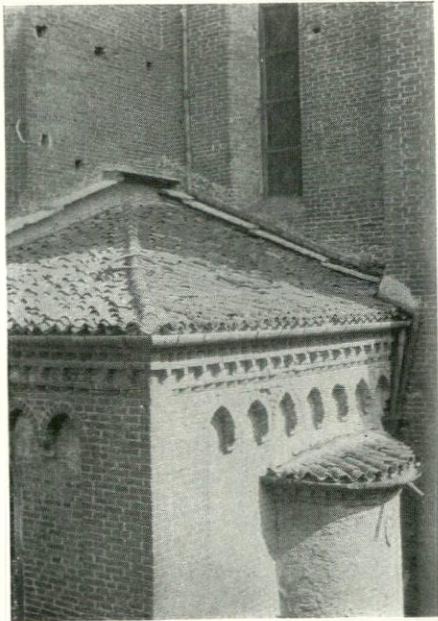


Fig. 8. Detail, S. Anastasia, Verona



Fig. 9. Detail of Cloister, Duomo, Verona

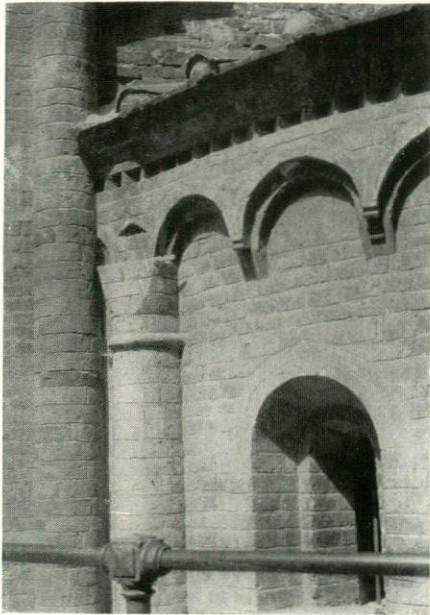


Fig. 10. Detail, *S. Lorenzo*, Mantua
(Restored)

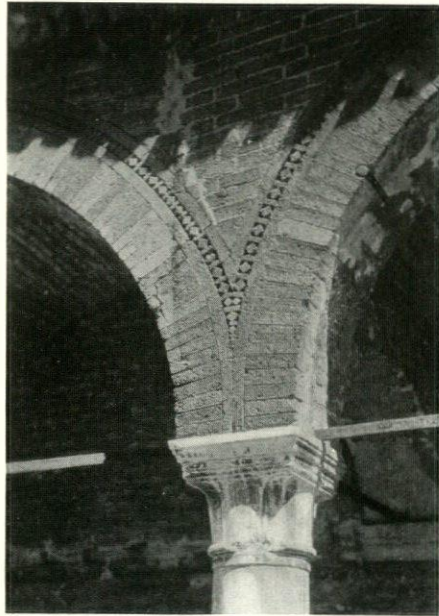


Fig. 11. Detail of Loggia
S. Antonio, Padua

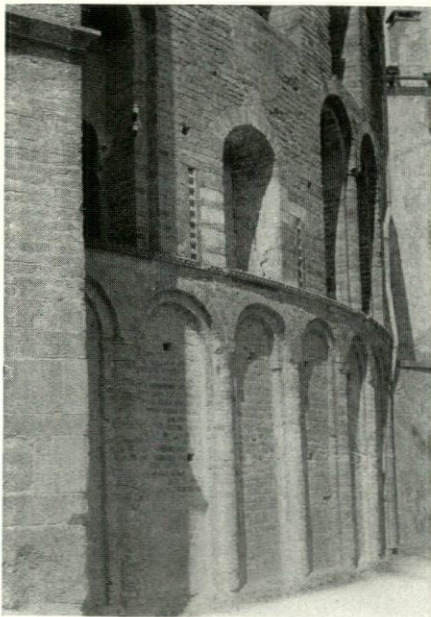


Fig. 12. Detail of Apse
S. Sofia, Padua

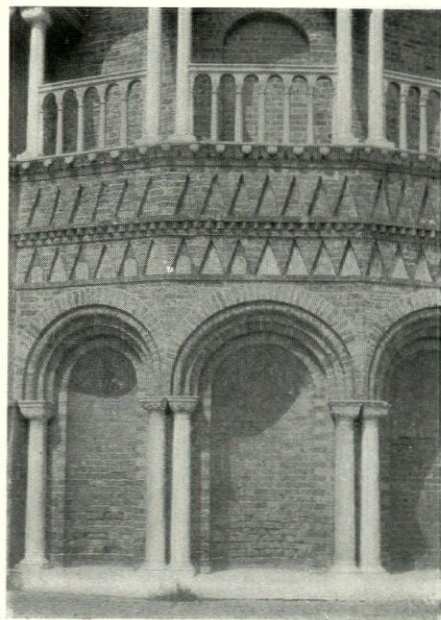
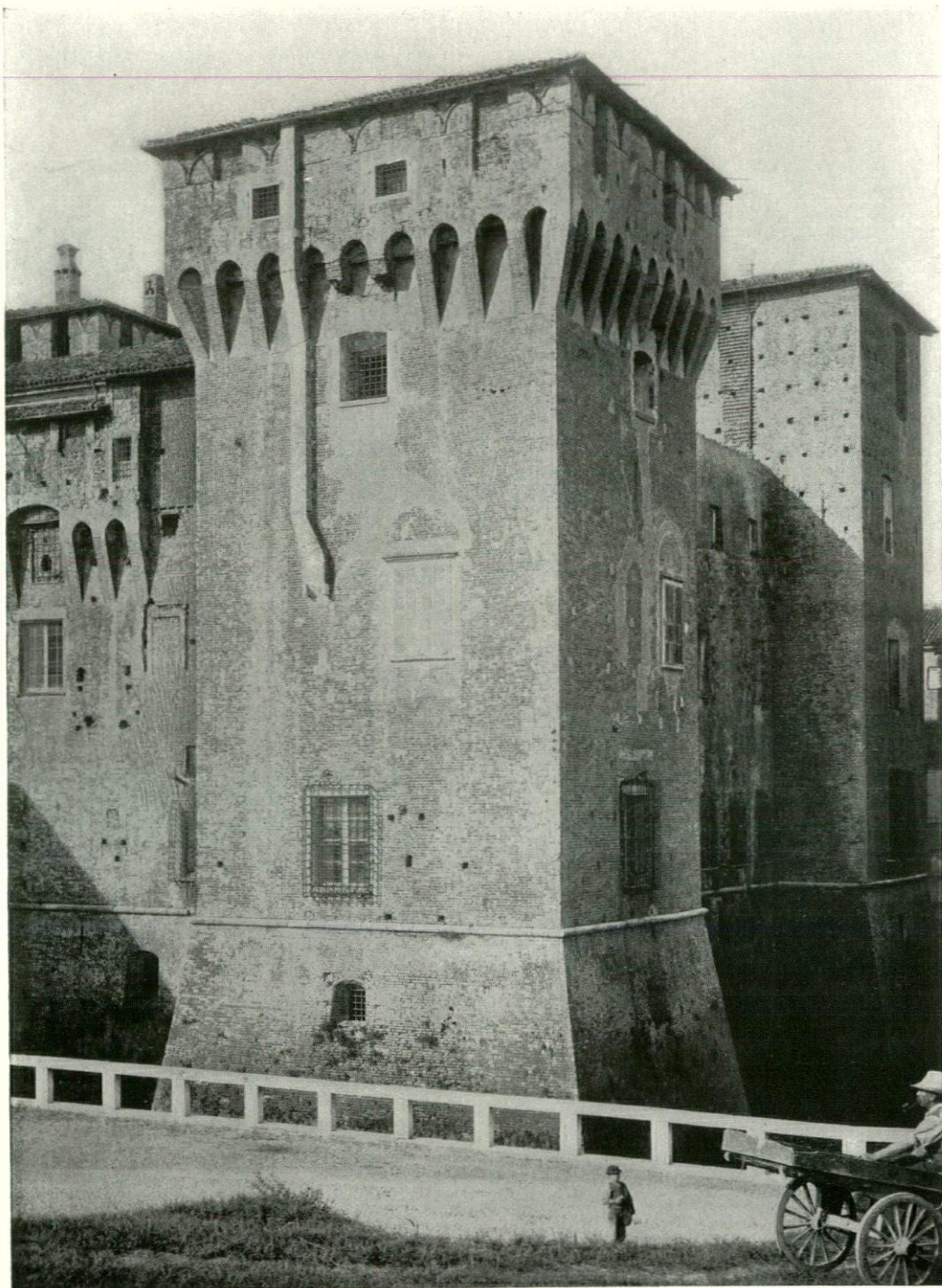


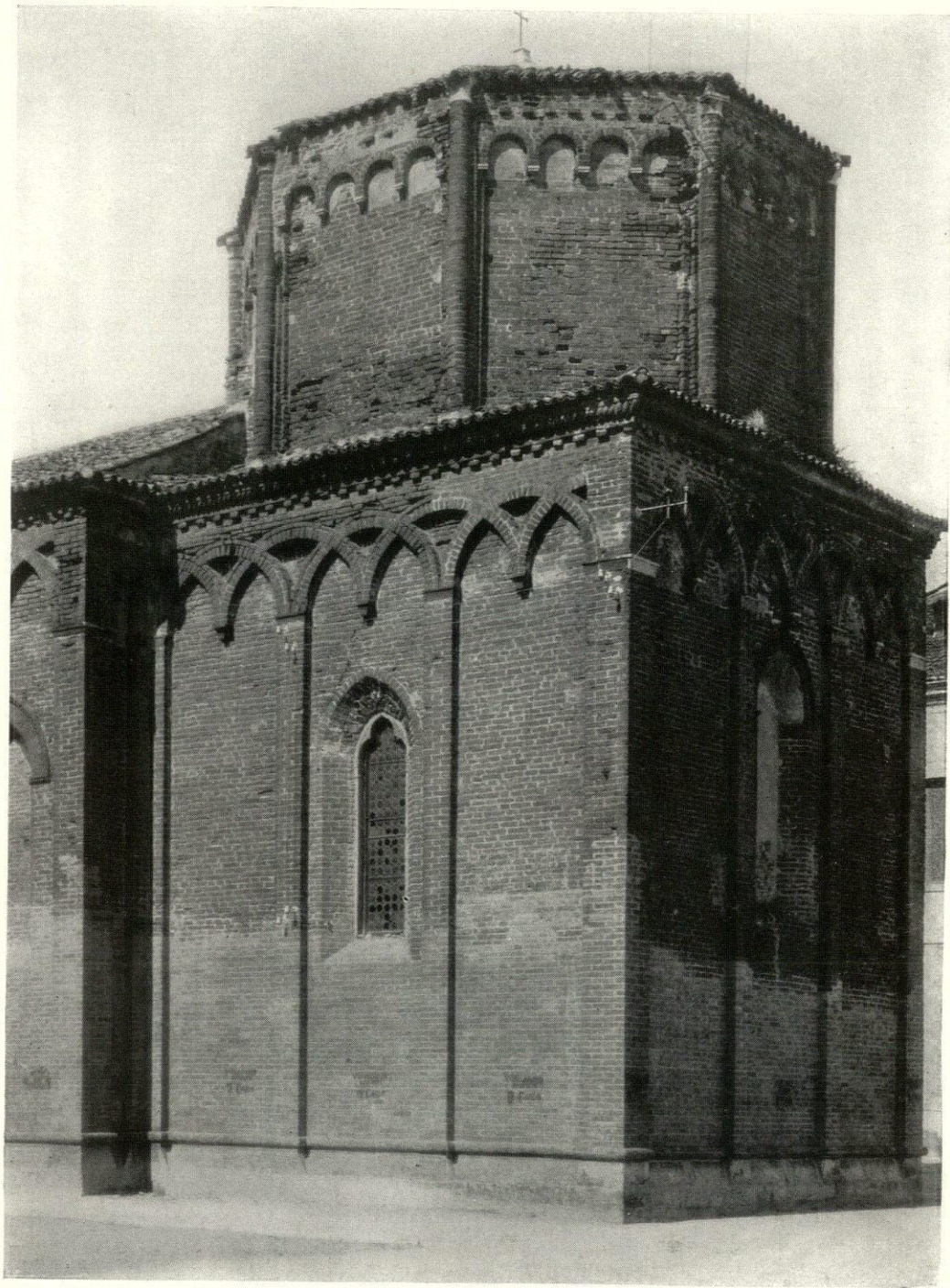
Fig. 13. Detail of Apse
SS. Maria e Donato, Murano



The Architectural Record

Castello Ducale dei Gonzaga, Mantua (1395)
Bartolino da Novara, Architect
NORTH ITALIAN BRICKWORK. PART VI
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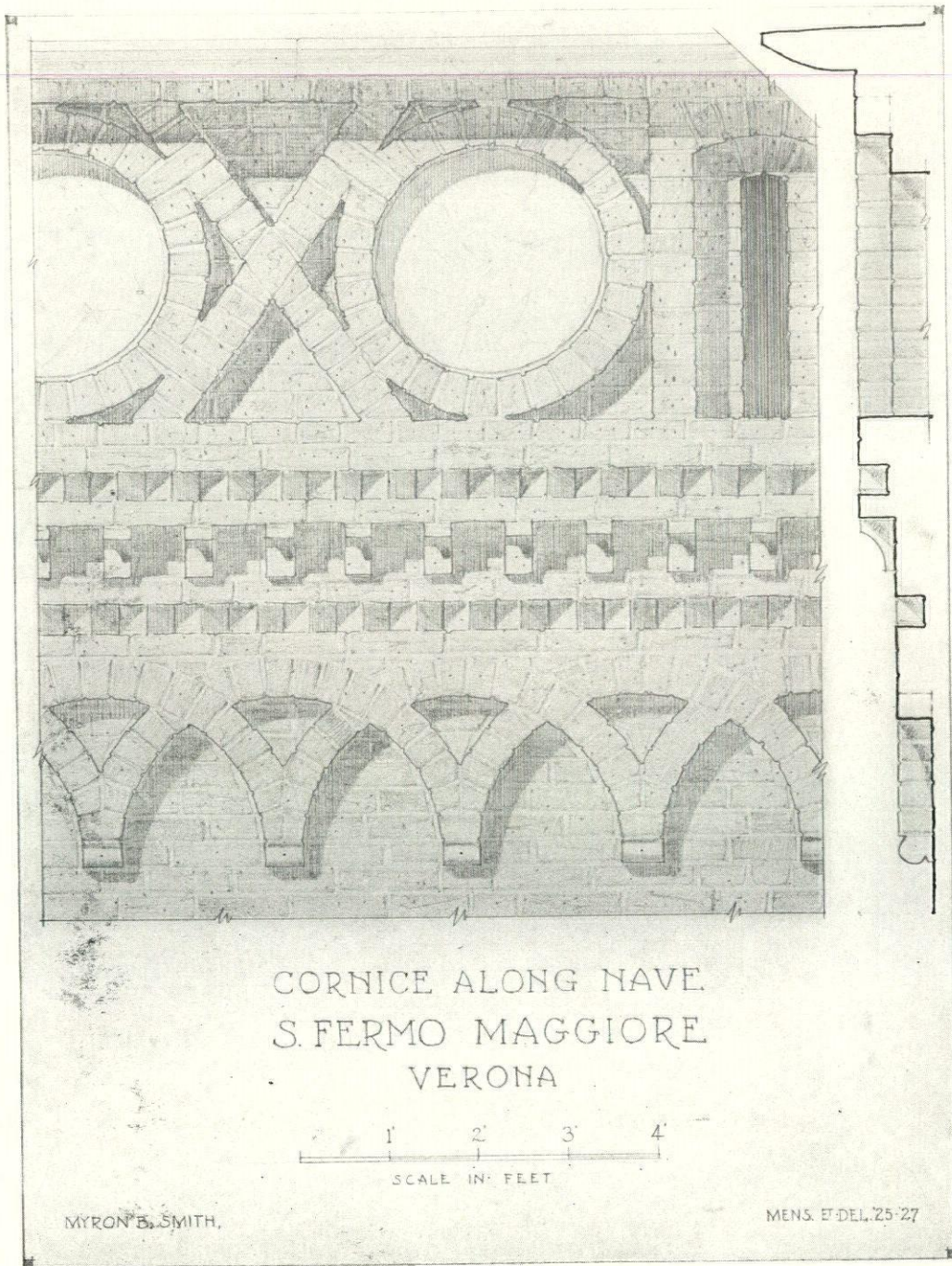
June, 1927

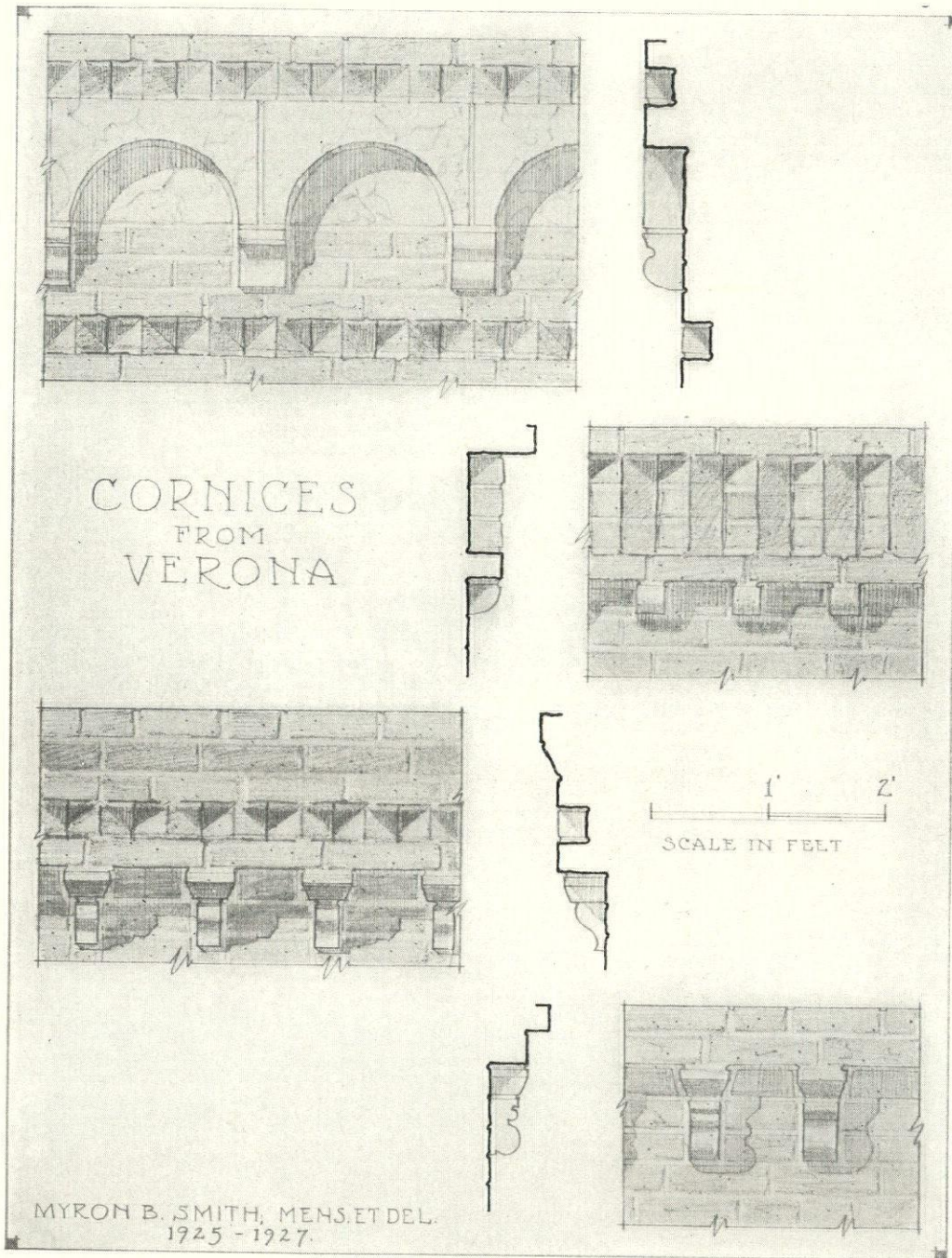


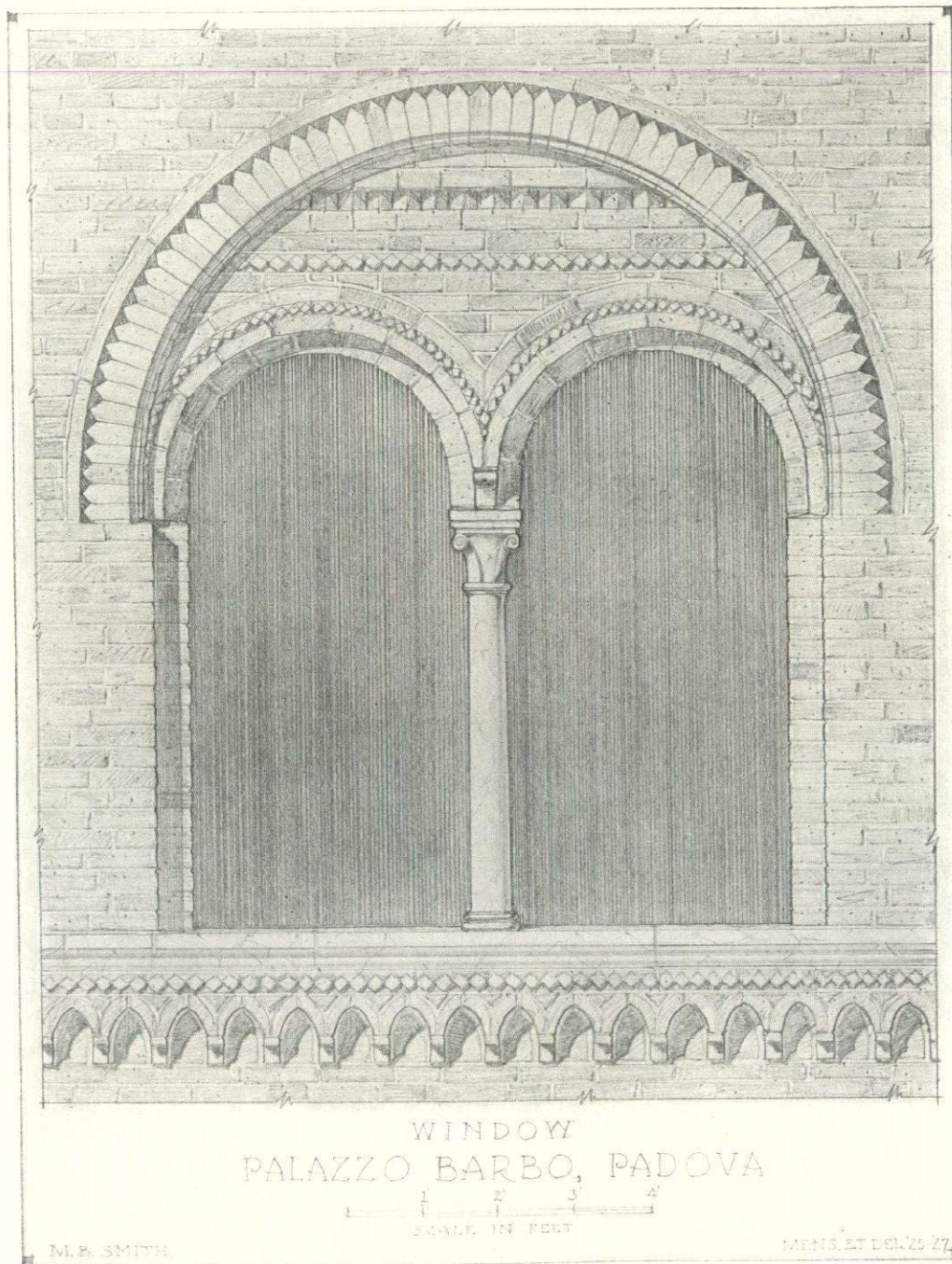
The Architectural Record

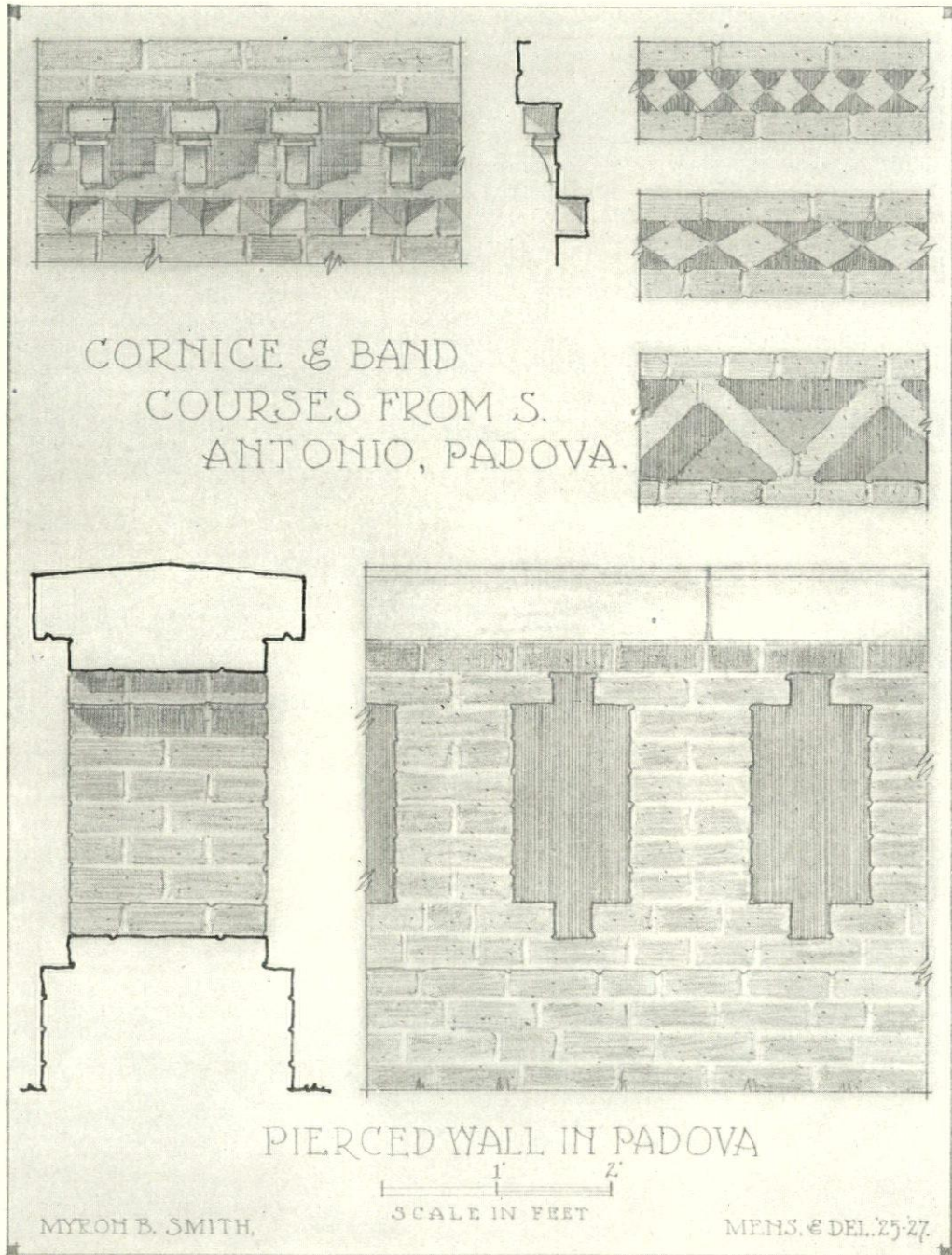
Oratory of *S. Martino*, Chioggia, Venetia (1392)
NORTH ITALIAN BRICKWORK. PART VI
[527]

June, 1927









including those under the double corbels. The top cornice of Plate II, also from Verona, shows marble corbels and tympani beneath them. The window of the *Palazzo Barbo*, Padua, (Plate III), is probably thirteenth century work. The small diamond billets were moulded on the bricks. The archivolt bricks were rubbed to fit. The wall of Plate IV, also from Padua, is modern. The use of pattern brick is shown in the full page illustration of the house in *Campielo San Luca*, Venice. (Page 522.) These bricks were probably cut after laying.

For further reference on the subject of Italian Brickwork, I refer the architect to the following short bibliography which has been carefully selected with

reference to use in the drafting room. Strack, "Ziegelbauwerke des Mittelalters und der Renaissance in Italien. p. Wasmuth, Berlin, 1889, folio. Also available in two American reprints.

Porter, "Lombard Architecture," 4 vols. Yale University Press, New Haven, 1915. The atlas of plates, sold separately, is most useful. An authoritative work.

American Face Brick Association, "Brickwork in Italy," Chicago, 1925. Contains many photographs.

Smith, "Italian Brickwork." Pencil Points Press, Inc., New York City. In preparation. Photographs and measured drawings, by the author of this series—ready 1928.

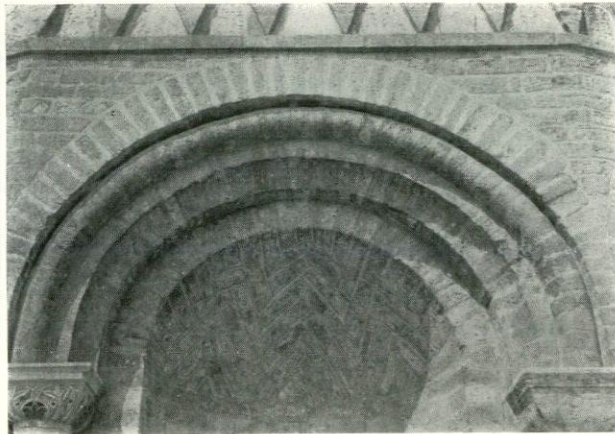
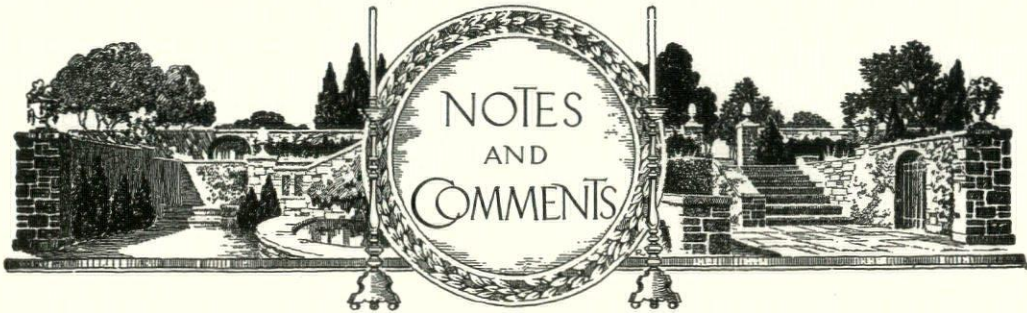


Fig. 14. Detail of Apse. SS. Maria e Donato, Murano



Lyman Judson Gage

Few are aware of the debt we owe Lyman J. Gage (died January 27, 1927), for his service in fostering architecture. His zeal and intelligence were strong factors in the success of three noted architectural epochs. He was President of Directors of the Chicago Exposition, he put the Tarsney Act into operation, and he aided the Washington Park Commission. For ten years, 1893 to 1903, he gave of his ability freely.

It is well to call the attention of the older men who knew and of the younger generation who should know to the disinterested service he rendered the profession. Gage, noted as a financier, was fortunate in his first intimate contact with the architectural profession in the Chicago Exposition work. It was a broad art education to associate with such men as Charles F. McKim, Richard M. Hunt, Henry Van Brunt, Robert S. Peabody, George B. Post, D. H. Burnham, Augustus Saint Gaudens and Frank Millet. A want of proper intelligence on the part of the President of the Board or an aggressive egotism might easily have nullified the best efforts of the architects. The effectiveness of his support combining with the ability of the artistic group was shown in the noted historic result.

Elihu Root at the McKim dinner in Washington (1905) said: "The fair white city by the Lake remains with us as a dream of Ionian Seas, to lead our people out of the wilderness of the commonplace. The lesson of the Chicago Exposition has gone into every town and hamlet."

To appreciate the influence of Secretary Gage on Government buildings a brief description of the conditions of the Supervising Architect's office before he became secretary will be necessary. The output of this office, which had been on the down grade for years, reached bottom in the early nineties (1890-95). The character of its buildings was a serious reflection upon our culture, as by them other

generations and other nations will judge us. The architects of the country for many years endeavored to secure congressional action to rectify this evil. Under the leadership of R. M. Hunt, George B. Post, E. H. Kendall, Robert S. Peabody, D. H. Burnham and Dankman Adler, they finally secured the Tarsney Act in April, 1893. While this law was not mandatory, it gave the Secretary of the Treasury authority to secure the services, by limited competition, of private architectural practitioners. The architects felt they had won a great victory that would place our buildings on a high artistic plane. They did not appreciate the power of entrenched bureaucracy.

James G. Carlisle, Secretary of the Treasury at the time (1893) was at first inclined to try the effect of the law on a proposed new building in Buffalo, N. Y. After conference with Jeremiah O'Rourke, his supervising architect, he quickly changed his mind. This action brought a letter early in 1894 from D. H. Burnham, President of the A. I. A., calling Carlisle to account for failing to carry out what Burnham considered his promise. Carlisle ignored this letter but O'Rourke sent a shifty unsatisfactory answer. At last Carlisle positively declined to try the act on the Buffalo building. Then Burnham wrote a severely critical letter. This letter being a truthful summary of the department's shifty and dilatory evasion, aroused the ire of Carlisle, who refused to receive further communications from Burnham. This controversy, while objectionable to some, was, I believe, necessary to give wide publicity to the glaring deficiencies in the Supervising Architect's Office. The information extended over the country and it was so effective that Carlisle showed a disposition to reconsider before he left office.

The Tarsney Act had been in force since April, 1893, but it was not in operation until April 1897, after Lyman J. Gage entered McKinley's Cabinet. His intimate association during the Columbian Exposition with the prin-

cipal architects, sculptors and painters in this country had educated him to appreciate the value of artistic expression. He seized the opportunity offered by the Tarsney Act to give the new public buildings superior design, more logical plans, and modern construction. The effect of his action was a startling renaissance in Government architecture. The most capable architects in the country, when invited, were pleased to enter the competitions for the new structures. In this way the country secured the services of some of the most talented practitioners in the United States. To mention a few of the earlier results will be sufficient to indicate the character of the change: Cass Gilbert, New York Custom House; Boring and Tilton, the New York Emigration Station; Rankin and Kellogg, Camden, N. J., building; Wyatt and Nolting, the one in Norfolk.

This good work continued until the repeal of the Tarsney Act in 1912, ten years after Gage ceased to be Secretary of the Treasury. It had the effect of bracing up the Supervising Architect's Office, which never relapsed to the low condition of former years.

It was fortunate he was in the Cabinet when the Senate appointed the Washington Park Commission in the early part of Roosevelt's Administration, (1901). Gage, who knew the members of this Commission intimately, appreciated the value of their work as an example of our culture. The devious ways of official Washington were new to this Commission, and it was fortunate they had a friend who had been long enough in service to surmount Departmental barriers, and who was able to conduct them through the meandering by-ways of the politician. He was able to aid the Commission in its studies and thus helped to secure this great plan, which is an artistic asset to the country.

GLENN BROWN

Boston's Exhibitions (1927)

This year the Boston Society of Landscape Architects combined with the Boston Society of Sculptors and the Massachusetts State Federation of Women's Clubs in holding an exhibition at Horticultural Hall, Boston, from February 15 to 26, inclusive.

The combination proved a happy one in many ways. In the first place, the opportunities of arrangement made possible by the decorative use of sculpture, combined with green shrubbery, were taken advantage of by those in charge of the hall, in an effective but simple manner. It would have been more cumulative, perhaps, but for the fact that the center of the floor space was occupied by pieces of very

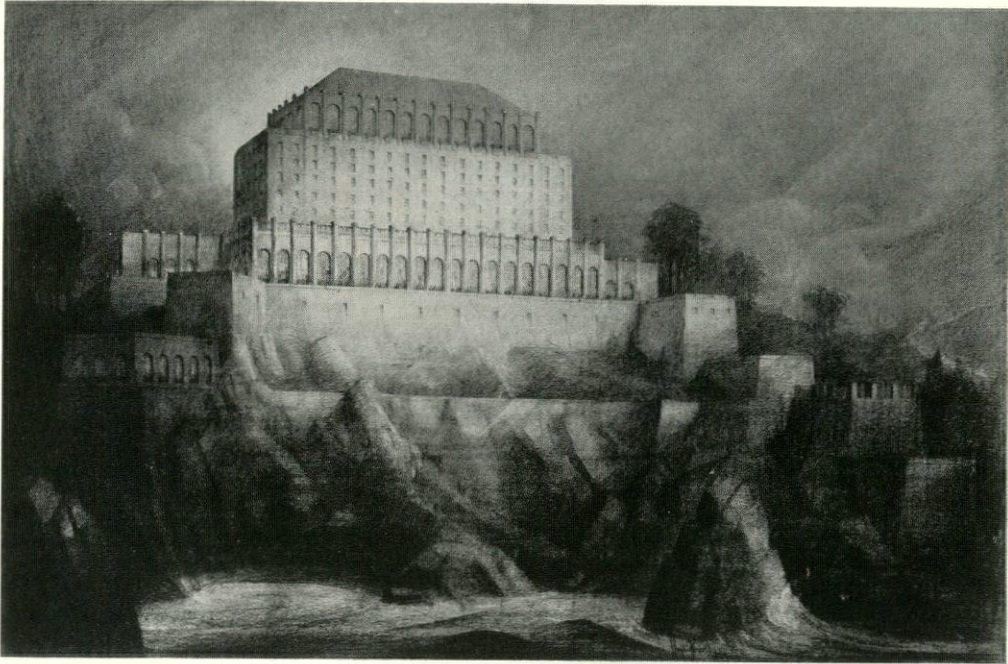
large sculpture somewhat out of scale with their surroundings. Such sculptural pieces demand an outdoor setting. In such a central open air park as the Public Gardens, for instance, these very large figure pieces would appear to greater advantage. Chicago and other cities have accomplished exhibitions of this sort, with great success.

Among the sculptors represented were Cyrus E. Dallin, Leonard Craske, Theo. Ruggles Kitson, Anna Coleman Ladd, Bashka Paeff, Richard Recchia, Nellie L. Thompson, Raymond A. Porter, Karl F. Skoog, Madeline A. Bartlett, and others, to the number of twenty-six in all. The pieces shown included War Memorials, Fountain designs, many portraits, figure pieces, imaginative compositions, and medallions.

Besides the work shown in the main exhibition hall, a smaller adjoining room contained additional work by these and other artists represented in the individual showings of the thirty-two Women's Clubs of various Massachusetts cities and towns, which almost invariably included some local monument or garden sculpture, exhibited either by means of photographs or models.

The actual showing of the Landscape Architects was possibly not so effective as usual. In the first place, only twelve of the thirty-four members of the Society were represented and possibly the work of the previous year was somewhat limited in this department. A good deal of the presentation was of small garden work, including the exhibits of Robert W. Beal, Mary P. Cunningham, Paul Frost, and part of those of Herbert J. Kellaway and Hallam L. Movius. Mr. Kellaway had a Rose garden at Newport, R. I., and a Garden at Quincy of larger size, while Mr. Bremer W. Pond showed a number of places of large and small areas, including gardens and landscape views of varied interest. Mr. Loring Underwood and Laurence Cauldwell included the Paine Estate in Wianno, along with two smaller developments; Mr. Arthur Shurtleff exhibited some views of the rock built Phelan gardens at Manchester, and also on the Crane Estate, and Mr. John Nolen two large plans of Southern community developments.

Among other large work shown by photographic views were the Cluett Gardens at Williamstown, and the two Long Island places for the Harriman and Burden families by Olmsted Brothers, and the several exhibited by Harold Hill Blossom, in the Cabot and Hallowell gardens in Brookline, and the Saltonstall and William Phillips estates in Beverly and Topsfield, Mass. Mr. Blossom, along with Mr. Guy Lee as associate, also showed several views



An interesting design by Messrs. J. R. Miller and T. L. Pflueger for the Pacific Edgewater Club to be built on Point Lobos, San Francisco, a promontory jutting into the Pacific Ocean
(From a drawing by Hugh Ferriss)

on the E. S. Webster and G. Peabody Gardner, Jr. estates in Brookline and that of Mr. Arthur Adams in Dover.

In April, the annual joint exhibition of the Boston Society of Architects and the Boston Architectural Club was held in the Exhibition Hall of the Walker Building, but several of the best known offices in this locality did not exhibit this year.

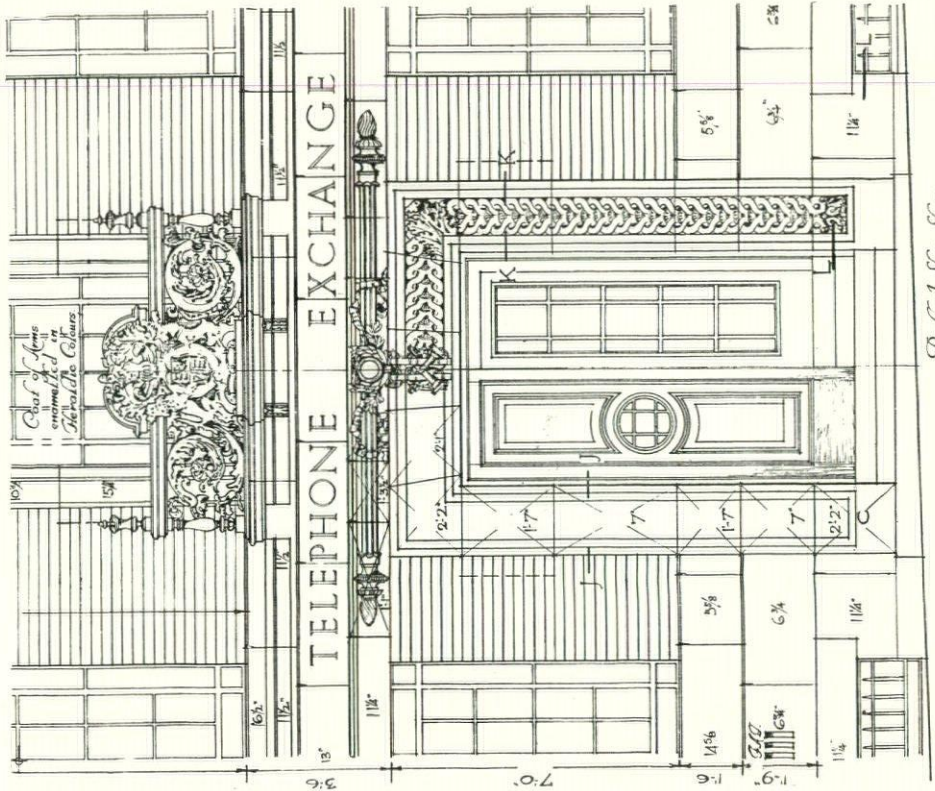
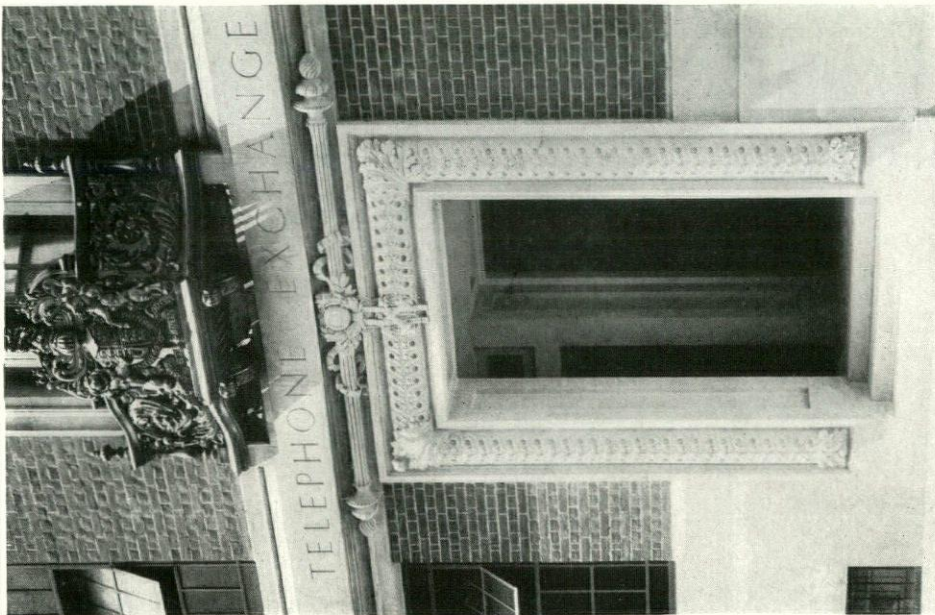
In the ecclesiastical material displayed were the exterior and interior drawings and a photograph from a model of the new design for the crossing tower of St. John the Divine, a structurally consistent solution of a difficult problem, but not yet proven to be artistically successful. Messrs. Cram and Ferguson also showed interior views in watercolors of a Church at Bedford, Mich.; St. Florian's, at Detroit, and a new Altar for St. Paul's, at Boston; two photographic interior views of All Saints in Brookline; an exterior and interior of Trinity Church, Durham, N. C., and a Chapel for Mercersburg Academy, Mercersburg, Pa.

Maginnis & Walsh exhibited several general and detailed views of their sturdy and interesting Italianate brick Nazareth Hall, St. Paul, Minn., including an airplane view which explains both its plan and environment with un-

usual completeness. The detail of an altar indicates that the design of this structure combines both the modern and the historic viewpoints with unusual success. Allen & Collens exhibited the United Congregational Church at Bridgeport, Conn., based on Colonial precedent; a building for the Hartford Theological Seminary, and drawings of a design for the Riverside Church, New York.

Mr. J. A. Schweinfurth showed a dashing watercolor for St. Anne's Church at Randolph, and his completed Quadrangle at Wellesley College, in the English brick manner. Mr. E. P. Dana exhibited a study for a small church.

Among the public buildings shown were two suburban bank buildings (one for the Wakefield Trust Co.), by Hutchins and French; a sketch for the Town Hall at Cohasset, Mass., a bridge in Pawtucket, R. I., and a Nurses' Home for the Salem Hospital, all by Haven & Hoyt; a perspective of the new Newport County Court House, at Newport, R. I., and an interior view of the Middlesex School Memorial Chapel, by W. Cornell Appleton and Frank A. Stearns; a High School Group at Reading, Mass., and a Savings Bank at Melrose, by Adden & Parker; an apartment house



The Architectural Record

ENTRANCE DOORWAY, SLOANE TELEPHONE EXCHANGE, LONDON, S.W.

Courtesy of H. M. Office of Works

Portland Stone Steps

June, 1927

on Massachusetts Avenue, Boston; a clubhouse, and a sketch of a seaside hotel on a rocky site by Harold Field Kellogg; and the new Five Cent Savings Bank in Boston by Parker, Thomas and Rice.

The largest group of frames was exhibited by Ralph Harrington Doane, including the Capitol and Governor's Palace at Manila; sketches for a school house at Cliftondale, and a city restaurant front; a new Gateway for Mt. Auburn Cemetery; a three-story Boston store building; two new Boston apartments—one a group of four buildings with courts between on upper Beacon Street; some photographs showing the Park Square Garage [recently awarded the Harleston Parker medal for 1927 by the Boston Society of Architects], and several pencil studies of a large city garage building and for a small country house.

Other domestic work included a pencil rendering of a suburban house in Wellesley by George F. Marlowe; three color sketches for houses and a façade for a theatre at Quincy, by W. T. Freethy; five interior views of some elaborately panelled and formal rooms in the residence of George Schrafft at Newton, Mass., by Parker, Thomas & Rice; a small and attractive "week-end" cottage with two home-like early informal interiors for Harry A. Gregg at Nashua, N. H., and a sketch for "Cove Cottage," at Rockport, Mass., by Adden & Parker. Chester Lindsay Churchill showed an informal plaster house in Wellesley; Robert Peabody Bellows a view of an old-fashioned cottage type of house at Walpole, N. H.; Frank Chouteau Brown a group of photographs of a brick house and garden at Winchester, Mass. for Thomas Dreier, a small plaster and tile roofed cottage and garage at Marblehead, a drawing for a Cape Cod old-fashioned mansion and a Study for a Theatre.

The three most distinguished groupings of exhibits in this class, however, were: (1) Edmund B. Gilchrist's of Philadelphia, who showed four charming photographs of the Charles Forman house at Winnetka, Ill., the W. M. C. Kimber residence at Philadelphia, and the Carroll S. Tyson dwelling; (2) the six artistically "fogged" photographs of houses in Brookline and on the Cape Cod sand dunes, and an unusually picturesque and quaint gabled studio of rustic early Colonial type on the Maine coast, by Little and Russell; (3) the nineteen or twenty frames of work by Henry Atherton Frost and Eleanor Raymond, including several views of the latter's attractive house on Charles St., Boston—interiors and garden yard—and two suburban dwellings, one in brick and clapboards, the other in plaster and shingled, at Winchester.

Mr. Walter Atherton exhibited some views of a house on Mt. Vernon Street; Perry, Shaw & Hepburn a couple of photographs of the new Harvard Cooperative Building in Cambridge, and some attractive drawings of a pleasing Country Clubhouse group in North Carolina.

Kilham, Hopkins & Greeley were represented by some rough cut posterish effects, representing a group of small house developments of the Housing Trust in Cambridge; another even more Cubistic impression of a cubicle labelled an "Office Building"; and a "Memorial Building" proposed for Lexington. Blackall, Clapp & Whittemore had a view of the Yale Theatre, and a Georgian panelled interior for L. C. Prior.

Ripley & LeBoutillier exhibited an attractive small scale model of a picturesque Country House on an irregular site and Mr. Gordon Allen another and more elaborate model of a large farm group of small units of an alteration near Peterboro, N. H., while the New England Division of the Small House Service Bureau announced their recent establishment by an unusually complete model at one-half-inch scale and a watercolor perspective of a small New England Colonial dwelling.

Mr. Hubert Ripley added another to the noted series of pencil drawings brought out by this year's exhibition; Mr. E. F. Maher showed two modelled wall fountain niches; Natacha Carlu had a decorative screen and painted panel; and Technology and Harvard architectural students exhibited two groups of drawings.

A somewhat slender showing, as was indicated; and, lacking other means of appealing to the public, productive of rather a meager attendance, as well. However, with the highly successful and popularly attended exhibit of the Landscape Architects earlier in the year, and the exhibit promised in connection with "Better Homes Week" in Boston under the auspices of the Women's Municipal League in the same Hall, in which the Society of Architects has been asked to assist, there is still hope that the yearly record will average up better than if it had alone to depend upon this year's official architectural showing, now passing into local history.

FRANK CHOUTEAU BROWN

Britain's Post Offices

Several post-offices, admirably designed by the architects of His Majesty's Office of Works, have recently been erected in Great Britain. These are worthy of note because of their simplicity and for the way in which full use is made of local materials and building tra-

ditions in order that the new buildings may harmonize with their surroundings.

One of these, the new Sloane Telephone Exchange, designed by Mr. J. H. Markham, forms the subject of the illustration on Page 536. The external architectural treatment consists of red sand-faced brick work relieved by a sparing use of Portland Stone. The entrance is emphasized by an enriched architrave surmounted by a cast-iron balcony incorporating the Royal Arms enamelled in heraldic colors.

The ground floor story is faced with bricks of a darker tint than those above and the joints are struck off flush with lime mortar with no subsequent pointing. A flat asphalt-covered roof has been adopted, as is almost invariably the case in such buildings, on account of the large area of top light which is necessary in many of the rooms on the upper floor, particularly in the switch room.

B. S. TOWNROE

Progress in Arc-Welding

The use of arc-welding as a substitute for rivetting in structural steel work is now past the experimental stage. In addition to numerous laboratory tests on arc-welded steel members, data are now available on actual construction work. The frame of the large Sharon building, which was completed in December, 1926, for the Westinghouse Company, was tested by applying a hydraulic load to a pair of adjacent 20-inch girders taken at random. The test load, which was sufficient to have caused the failure of similar girders supported by standard rivetted connectors, proved the existence of the complete continuity of the girder action for which the welded structure had been designed.

The first steps to remove the legal difficulties that face those desiring to introduce welding into city building construction have been taken by the Engineers Society of Western Pennsylvania. A committee has been formed by this society to secure recognition for structural welding on a suitable basis in the Pittsburgh building code, and similar action on the part of other engineering societies in various sections of the country can be expected in the near future. In the meantime, of course, there are no restrictions on buildings erected outside of the limits of municipalities with codes prohibiting the use of welding.

The costs of welding are being steadily reduced as experience with it increases, and the present slight margin in its favor, as compared to rivetting, promises to become a wide saving within a year or so.

On the other hand, welded building construction is not yet sufficiently common so

that it is practicable for owners and their professional representations to issue plans and specifications for welding on the basis of open competitive bidding. All those interested in the new method are making every effort to bring this condition about and it seems likely to be realized in the near future.

Arts Council of New York City

Through the initiation of the National Academy of Design and the Architectural League of New York, committees of fifty-two organizations are now able to work through an Arts Council which has been organized by leaders in the arts and education as a medium for cooperation, information, and service. Purely educational in character, it is sponsored by museums, schools, societies, and settlements, with the aim and purpose of taking the arts to the people, and to encourage and help establish better facilities throughout the entire Metropolitan District for the presentation of exhibitions, dramas, and musical performances.

The Council's first activities have already demonstrated its usefulness. A series of lectures on the subject of "Art in the Day's Work" given by Gerrit A. Beneker, painter of the laboring man and industrial subjects, has reached nearly six thousand men, women, and students: five hundred students under the auspices of the School Art League, a member in the Council, were organized for attendance at the Architectural and Allied Arts Exposition recently held in New York, and instructed in the important features of the exhibits; close relations have been established with three hundred shop teachers of the City elementary schools, thirty-seven high schools, mothers' clubs, and fifty-four neighborhood settlements.

Harvey Wiley Corbett has been elected Chairman of the Design Group in the Council, with Florence N. Levy, Director. Alon Bement, Director of the Art Center; C. Paul Jennewein, sculptor; George K. Gombarts, Principal of the New York Free Evening Industrial Art School; Hardings Scholle, Director of Museum of the City of New York; and Leon Dabo, President of the Brooklyn Society of Artists, have been elected advisors.

Wren's Plan for Hampton Court

In June, 1927, the original drawings of Sir Christopher Wren for Hampton Court Palace are to be published, though, it is understood, the volume will be available only to subscribers to the Wren Society. William III and Mary manifested great interest in Wren's plans and in the designs of the carver Grinting Gibbons. Since 1702 these drawings have been preserved in the Sir John Soane Museum.



Charleston, South Carolina*

It may be intended that the last, or Volume 20, of the Octagon Library shall have a full index of all plates in the series, but the present volume has no index, or table of contents of any kind, which is more or less distressing; and as neither the plates nor the plate pages are numbered in this volume, it is difficult to see how a general index can ever be made. The short "Foreword" by Mr. Stoney is interesting, but most interesting in proving by personal example Mr. Stoney's assertion of the native conservatism of Charleston. Of "Nullification" and South Carolina he says: "Unfortunately for her and for the country, the strongest President between Washington and Lincoln was in the White House. Jackson fought the nullification ordinance and there was a compromise." It is a bit startling to be shown that there actually are some "nullifiers" left.

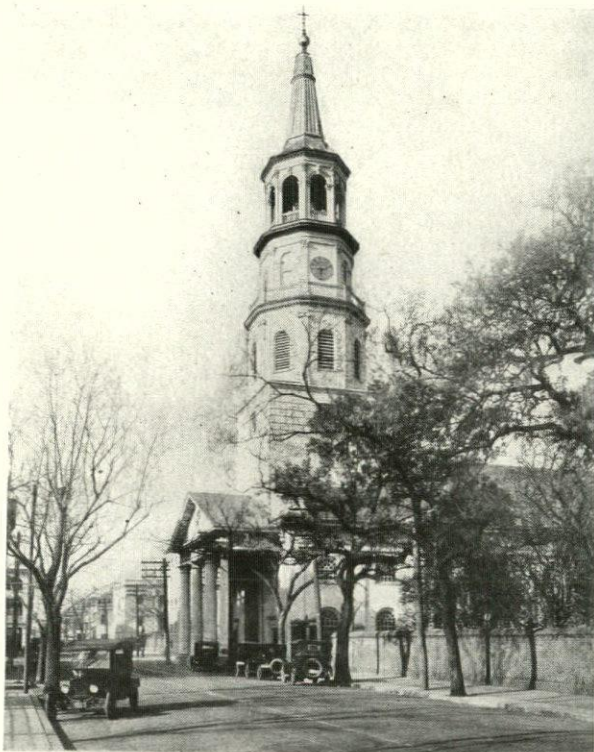
*The Octagon Library, Vol. 1, Charleston, S. C., by Albert Simons and Samuel Lapham, Jr. Foreword by Samuel Gaillard Stoney. Press of the American Institute of Architects, Inc. \$20.00.

Charleston of the old South was more of a social center than Richmond, although South Carolina was a less populous state than Virginia, for the reason that the climate and low lying

lands, the great rice crop, "the rice population with its scourge of malaria in summer, its systematized negro labor, and its rich harvests, bred a class of wealthy nomads"; that is to say, most of the planters had town houses, many came to Charleston in summer, and everyone who counted in the "Low Country" came in winter. Plantation life was in the spring and fall. The planters were extremely prosperous and some of the merchants were even more wealthy than any of the planters.

Hence there was a great deal of early domestic architecture. On the other hand Charleston has

experienced five great recorded fires, ten or more destructive hurricanes, and two devastating earthquakes. "Its periods of greatest prosperity in Colonial times seem to have been the four middle decades of the eighteenth century." The two chief architectural periods then are the Southern Colonial up to the Revolution,



St. Michael's Church—1752-61

From Charleston, S. C.

and the Palladian or Greek Revival period from about 1820 to the Civil War. From the outbreak of the Revolution to the end of the Napoleonic wars (with a slight revival in between) was a period of depression and consequently of not much architecture. In the eighteenth century the majority of Charleston's population was about equally divided between Episcopalians and Presbyterians, the remainder being various denominations including Baptists, Congregationalists, Jews, Catholics, Huguenots, and so on. Hence there is a great variety of old church buildings.

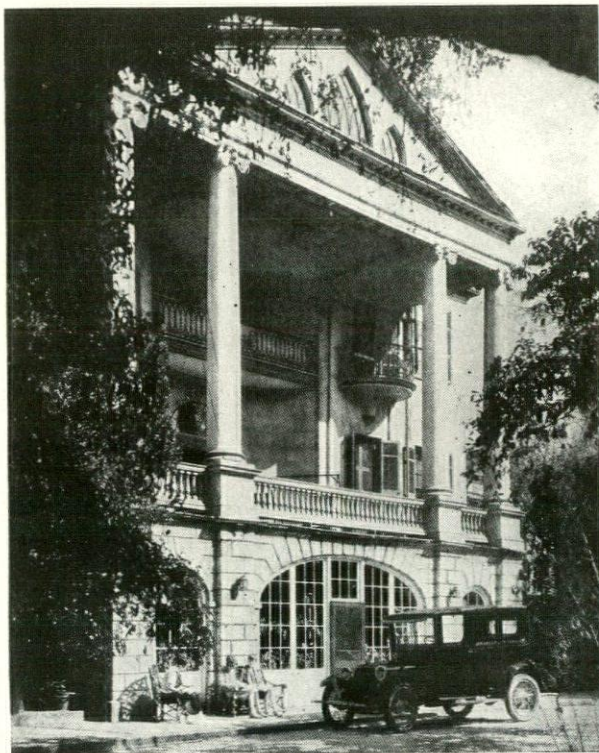
The colonial architects were craftsman builders who used handbooks for the solution of architectural problems. Nothing remains of the earliest buildings. The oldest dwelling houses, with a few exceptions, date since the fire of 1740. Until about 1760 they were built of brick covered with stucco, the first floor only two feet above the grade. The piazzas were a later addition. The drawing rooms were on the second floor. The roofs were sometimes slate, but more commonly a salmon-pink tile. The street frontage is often narrow, but the lots are usually very deep and run back through various dependencies, kitchen, washroom, servants' quarters and stables, to overgrown gardens and the shade of magnolias, oleanders, fig trees and so on. Some of the houses stand sideways on the street, and the entrance is by a gate and a path, so that this kind of house could face on its garden. After 1760 the houses are larger and the first floor raised higher, but the drawing room is still on the second floor. These later houses are less locally peculiar and more definitely English Georgian. St. Michael's, one of the most famous of Southern churches, was built

in 1752 to 1761, after the plans of an unidentified architect named "Gibson"; The Exchange and Custom House, 1767-1772, by Peter and John Horlbeck, who called themselves "masons."

In the nineteenth century Charleston's prosperity returned with peace and the growth of cotton as a staple, though the soil of the old "Low Country" showed signs of exhaustion by 1834. "Of the ante-bellum dwelling houses the most striking characteristic is the tendency toward the grandiose and magnificent tempered by an almost academic classicism: porticos of the colossal order, lofty ceilings, tall narrow windows to the floor opening on balconies with cast iron grilles. The wainscot is replaced by a baseboard of massive mouldings, the genial colonial mantel by a truncated Greek affair in black-and-gold marble. The altitude of the second story is reached by a winding stairway, with a niche for statuary part way up. The furniture is empire. There are tall French mirrors and damask hangings.

Apart from the dignity that is always possessed by good Palladian architecture, the peculiar charm of Charleston Palladian seems to be its combination with luxuriant foliage. There seems to be also a great deal of interesting iron work. Inside the house, the winding stairways are perhaps the most striking feature.

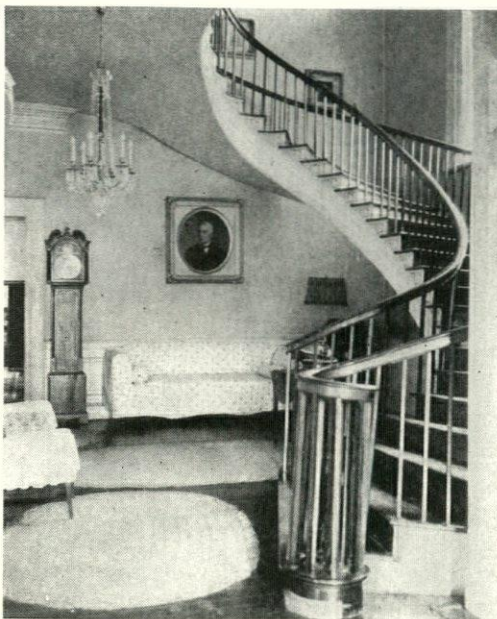
In the earlier, or Colonial house, the interest is more in the variety and taste of the detail. The men doubtless had books of designs, but Mr. Simon's plates suggest inventiveness and individual feeling on the part of these forgotten craftsmen. Not all of them forgotten, however. The Miles Brewton house was built in 1769, and the South Carolina Gazette for



James Nicholson's House
From Charleston, S. C.

August 22, 1769, gives the names of those concerned with it, principally one "Ezra Waite, Civil architect, Housebuilder in general and carver, from London," who assures the public "that he, the said Waite, did construct every individual part and drew the same at large for the joiner to work by, and conducted the execution thereof" and offers a hundred guineas to "any man that can prove the contrary."

The old life went out with the Confederacy, and the city has not developed since, to the obliteration of its history in architecture—a misfortune that has befallen so many of our cities. The old society was a small oligarchy overlying a stagnant majority. But it was a leisurely and dignified society, gracious and hospitable, and one can probably obtain a more vivid and abiding impression of it from the study of old Charleston houses than from any books descriptive of the subject. On the other hand the impression may easily be misleading. Architectural styles, like literary schools, always have some connection with the place and era where and when they flourish, but usually, or often, their main features are merely borrowed from other places and eras. The appearance of an eighteenth century Georgian drawing room was quite similar in Charleston, in Boston, and in London, but society in these cities was quite different. The Boston merchant or the Charleston planter might have essentially the same doorway to his dwelling as the third century Roman patrician, but it does not prove that



Nathaniel Russell's House
From Charleston, S. C.

they were all three alike in character or tastes. It happens, however, in these cases, that they were all three in some degree patricians.

ARTHUR W. COLTON.



George Edwards' House
From Charleston, S. C.

The Study of Architectural Design*

This work, based upon the system of instruction of the Beaux Arts Institute of Design, meets a need long felt by students of architecture, and Mr. Harbeson is preëminently qualified from his long association with the Institute to discuss the study of design from this standpoint. One is impressed with his understanding of the difficulties which ordinarily confront the student, and with the logical manner in which the material is presented. It is a work which should be required of the student as a text, whether he be affiliated directly with the Institute or with one of our universities.

The several classes of problems or projects are taken up in the order in which they occur in the program of the Institute, namely, the "Analytique" or Order Problem, the Class B Plan Problem, the Class A Plan and the Decorative Problem, the problem in each case being analyzed and the method of procedure indicated from the esquisse to the final draw-

*The Study of Architectural Design, with Special Reference to the Program of the Beaux Arts Institute of Design. By John F. Harbeson, A.I.A. New York: The Pencil Points Press. 1926. Pp. xii, 309. \$7.50.

ing. Pointing out the relative importance of each as regards the whole system of study, the author deals in the same instructive manner with the correlative Archaeological Project, the Measured Drawing, and the Sketch Problem. The completion of the above program would be followed normally by the competition for the Paris Prize, and the full and interesting discussion of this competition should be of the greatest value to the student. Much useful information is also given as to perspective, indication, and rendering, along with a glossary of the French words used in ateliers.

There are numerous and excellent illustrations which include reproductions of students' drawings for the several classes of Problems of the Institute, and for certain Paris Prize competitions; these are augmented by illustrations of work done in the *Ecole des Beaux Arts*, among them several Prix de Rome drawings; there are, furthermore, studies and actual competition drawings from modern offices, reproductions from D'Espouy and other standard works, and finally, photographs of well-chosen historical monuments. There is also a frontispiece in color, reproduced from a rendering in tempera by M. Jacques Carlu.

The book has added charm and significance for those whose interest in the Institute is of long standing and who have worked in its ateliers, in that the Foreword, referring especially to the "Analytique," was written by Lloyd Warren, founder of the Institute; it is to him that the book is dedicated.

PRENTICE DUELL.

A Method for Creative Design. By Adolfo Best-Maugard. New York: Alfred A. Knopf. 1926. 1st ed. ix. 181 pp. Ill. 5¾ x 8½ in. Cloth. \$2.50.

About fifteen years ago the author of this book was engaged by Prof. Franz Boaz to make drawings of archaeological discoveries in Mexico. The fruit of those drawings was the discovery of a principle of design, in primitive Aztec painting and sculpture, based on a system of seven fundamental lines or motifs. Research into the primitive arts of all countries, climes and periods revealed the universality of this principle, and the discovery was further confirmed by the adherence to the ancient law of design of present-day popular arts all over the world.

The great psychological importance of this law was at once apparent and Best-Maugard set about devising his revolutionary method of art instruction. His book was published by the Mexican Government and he himself was placed in charge of the work of introducing its use. Half a million Mexican school children have since studied by it, and, in our own country, after Best-Maugard had lectured at the University of California, three thousand students were enlisted. The English edition of the book, which is here presented to the American public, has been completely revised, rewritten, and in large part expanded.

Houses, Cottages and Bungalows. Edited by Frederick Chatterton, F. R. I. B. A. London, England. The Architectural Press.

1926. 1st ed. viii. 104 pp. Plate ills. 9¾ x 12½ in. Bound in boards. 7/6 net.

A selection of representative examples designed by architects and built in various parts of the United Kingdom.

The Art and Craft of Garden Making. By Thomas H. Mawson and E. Prentice Mawson. New York: Charles Scribner's Sons. 1926. 5th ed. xii. 440 pp. Ill. by 514 plans, sketches and photographs. (Part col.) 15 x 10 in. Art canvas, gilt. \$25.00.

The Fifth Edition of this encyclopædic standard work marks the quarter century since its first publication. During that time it has grown from a comparatively small manual into an imposing folio, and the present issue marks a decided advance upon the Fourth Edition published shortly before the war. The authors have taken full advantage of the waiting period to overhaul it freely, to bring the full and practical text in line with modern developments, and to eliminate subjects which could be advantageously replaced by fresh examples. A number of gardens selected from the authors' later designs are represented, among them may be mentioned the Peace Palace Gardens at The Hague; Dunira, Perthshire; Duffryn, Cardiff; Hazelwood, Silverdale; and a small Italian Garden at Harrogate. The examples given in earlier editions retained in the present one, have been enriched with new photographs showing them in their matured stages, particularly the gardens at Thornton Manor, and The Hill, Hampstead, and Roynnton Cottage, Rivington, the three principal residences of the late Lord Leverhulme.

The list of trees and shrubs has been added to and revised, and additional examples of these and of other features and details of gardening now find a place within the book's cover.

"The Art and Craft of Garden Making" may claim to be the most complete compendium of garden design.

The Study of Architectural Design. By John F. Harbeson, A.I.A. Foreword by Lloyd Warren. New York: The Pencil Points Press, Inc. 1926. 1st ed. xii. 308 pp. Ill. 8¾ x 12 in. Cloth. \$7.50.

Announced by the publisher as "the only authoritative and comprehensive book on the Study of Architectural Design based upon the Atelier System of the Beaux-Arts Institute of Design. It will be found to be of great value to all Architects, Designers and Draftsmen, and to all Students of Architecture, whether or not engaged upon the program of The Beaux-Arts Institute of Design." A complete index appears in the back of the book, as well as a Vocabulary of French Words Used in the Atelier.

Early American Wall Paintings. 1710-1850. By Edward B. Allen. New Haven, Conn.: Yale University Press. 1926. 1st ed. xiv. 110 pp. Ill. 8½ x 11 in. Cloth \$7.50.

Published in connection with the Philip Hamilton McMillan Memorial Publication Fund.

Early American Inns and Taverns. By Elise Lathrop. New York: Robert M. McBride & Co., 1926. 1st ed. xxi. 365 pp. Bibl. footnotes. Ill. 6½ x 9½ in. Cloth. \$5.00.

The romance and history of more than 1,300 old inns found in every state in the Union.

Nieuw-Nederlandsche Bouwkunst. By Prof. Ir. J. G. Wattjes. Amsterdam, Holland: Uitgevers-Maatschappij "Kosmos." 1926. Vol. II. 1st ed. xii. 163 pp. Plate Illustrations. 9 $\frac{3}{8}$ x 12 $\frac{1}{4}$ in. Bound in boards. \$9.50.

Ship Model Making, Vol. II. How to make a Model of the American Clipper Ship. By E. Armitage McCann (Master Mariner). New York: The Norman W. Henley Publishing Co., 1926. 1st ed. xx. 150 pp. Ill. 6 x 9 in. Cloth. \$2.50.

In this book the author, "a recognized authority on ship model making," with ample descriptions, illustrations and full-sized plans of every part, tells how, with a few tools, any one can make a simplified model, which, while retaining the general appearance, eliminates much work; he also gives all the details for those who desire them. The entire building and rigging are given to scale, from start to finish.

RECENT PUBLICATIONS

issued by manufacturers of construction materials and equipment.

[These may be secured by architects on request direct from the firms that issue them, free of charge unless otherwise noted.]

Ventilators. Direct connected fan ventilators for removing fumes, odors, vapors, etc. Construction, special features and characteristics. Methods of use for various purposes, including schools, dance halls, central stations and power houses, etc. Advantages of use. The Burt Manufacturing Co., Akron, Ohio. 8 $\frac{1}{2}$ x 11 in. 4 pp. Ill.

Screens. Advantages and superiority of Rolscreens, the metal screens. Description of manufacture and method of installation. Installation details and drawings. Rolscreen Co., Pella, Iowa. 7 $\frac{3}{8}$ x 11 in. 6 pp. folder. Ill.

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Paint, Aluminum. A handbook on the physical properties of aluminum paint and its uses in modern history. Composition and characteristics of paint and lacquers with directions on mixing and application. Various uses and specifications for powder and vehicle and application of aluminum paint. Aluminum Co. of America, Pittsburgh, Pa. 5 $\frac{1}{4}$ x 8 $\frac{1}{4}$ in. 36 pp. Ill.

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sociation, Dept. 504, 24 California Street, San Francisco, Calif. 7 $\frac{7}{8}$ x 10 $\frac{1}{2}$ in. 20 pp. Ill.

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