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THE ARCHITECTURAL RECORD INDEX

Volume XXXV

January-June, 1914

ARTICLES	PAGE.
APARTMENT HOUSE POSSIBILITIESCosten Fitz-Gibbbon	
ARCHITECT, THE, PART IWilfred Beach	425-434
Architect, The, Part IIWilfred Beach	519-525
Architect's Library, The (Book Reviews)	00.02
Work of Charles A. Platt Memoir on Charles F. McKim	463-465
Work of E. L. Lutyens	574-575
Architecture in Miniature (Models)Alwyn T. Covel1	261-268
Architectural Practice, Variety in (Walker & Gilette)	
ARCHITECTURE, IN THE CAUSE OF, SECOND PAPER Frank Lloyd Wright	405-413
BAUERNHOF, THE (MODERN STABLE)Ernest E. Klipstein	
BILTMORE, THE, HOTEL Walter S. Schneider	222-245
COUNTRY HOUSE ON LONG ISLAND, A RECENT (Stephen- son & Wheeler)C. Matlack Price	
FURNITURE FROM THE ARCHITECTURAL VIEWPOINTH. D. Eberlein and Albert M Clure	
First Article—Introduction Second Article—Early Jacobean Third Article—Cromwellian and Carolean	
GARGOYLES, GROTESQUES AND CHIMERASG. Leland Hunter	1.32-1.39
GRAMATAN COURT—A FIREPROOF SUBURBAN APART- MENT HOUSE	,
HELLERAU, THE GARDEN CITY OFJohn T. Klaber	
INDUSTRIAL BUILDINGS NOVELTY IN THE GROUPING OF	N
(Nela Park)	469-504
INTERCESSION, CHAPEL OF THE (Bertram G. Goodhue)C. Matlack Price	526-543
KILLENWORTH, RESIDENCE OF G. D. PRATT, ESQ. (Trowbridge & Ackerman)	558-573
LIGHTING, WHAT DO WE KNOW ABOUT?F. Laurent Godinez PART VII—ON INDIRECT LIGHTING (Continued)	00 00
PART VII—ON INDIRECT LIGHTING (Continued) PART VIII—LIGHTING THE HOME	
PART IX—LIGHTING THE HOME (Continued)	443-449
LUKEMAN, AUGUSTUS, A REPRESENTATIVE AMERICAN	414 404
Sculptor	414-424
NELA PARK, CLEVELAND, O.—Two Articles, IllustratedF. Dempsey, Montgom Schuyler	.ery 469-507
New Departure in "Big Business," A	505-507
Norma AND COMPANY (Language)	04_100
George Browne Post: Obituary—Building for the American Institute of A tects—Congress Hall Restored (Illus.)	rchi-
Notes and Comments (February)	
Direct Contract Letting—Architecture at the Panama-Pacific Exposition, (Illus.)—A Detail of Construction—Another Dissolution—The Awards of American Academy at Rome.	of the
Notes and Comment (March)	269-276
Notes AND COMMENT (March) The Truth about the Cathedral Plans—Medals for Industrial Housing- Rome Fellowship—The Children's Theatre (Illus.)—1915 Estimating Congr	-The
Pension for Mr. Howard—Practical City Planning—Illustrations of Par Pacific Buildings, 1915	iama-
	385-388
Notes and Coments (April) The Functions of Art Commissions—Valuable Architectural Records (Illu Loan Exhibition of Old Tapestries.	1s.)—

ARTICLES (CONTINUED)

....466-468 Pacific Exposition (Illus.).

of Colonial Gravestones by Frank Cousins (Illus.).

COVER DESIGNS.

January:

"CLEVELAND TOWER," Princeton, N. J. (Cram, Goodhue & Ferguson)....C. Matlack Price February:

ENTRANCE DETAIL, ST. THOMAS' CHURCH (Cram, Goodhue & Ferguson), From a photograph by Julian Buckly

March:

April:

Architects' Sign-Board......Everitt Shinn

Mav:

St. PAUL'S CHURCH, New York City From a photograph by Frank Cousins June:

e: Administration Building, Nela Park, Cleveland, O. (Wallis & Goodwillie), F. E. Wallis

INSERTED DETAILS.

January:

DETAIL FROM PALAZZO MASSIMI, Rome, Italy (measured and drawn by Andrew R. Cobb).....Facing 32 DETAIL FROM PALAZZO MASSIMI, Rome, Italy (measured and drawn by Andrew R. Cobb)......Facing 32 February: ST. THOMAS' CHURCH, New York City (Cram, Goodhue & Ferguson)......Facing 116 STUCCO CEILING, CASTLE ST. ANGELO, Rome, Italy (measured and drawn by Andrew R. Cobb).....Facing 180 April:

INSERTED DETAILS (CONTINUED)
May:
May: PLAN OF ST. JOHN'S CHAPEL, New York City (measured and drawn by F. L. Finlayson). Facing 404
DETAILS OF ST. JOHN'S CHAPEL, New York City (measured and drawn by F. L. Finlayson)
June:
THE OLD ASSAY OFFICE, NEW YORK, FRONT ELEVATION (measured and drawn by ' Howells & Stokes)

ARCHITECTS REPRESENTED.

NAME. HOME OFFICE.	PAGE.
Andrews, F. MNew York City	
Bates & How New York City	
Baum, Dwight J New York City	
Boring, W. A New York City	
Chichester, George H	
Cram, Goodhue & Ferguson New York City and B	oston, Mass., 1-27, 101-131, 173-175, 526-543
Cram, Ralph A Boston, Mass	
Davis, McGrath & Kiessling New York City	
Emerson, William New York City	
Gardiner, Robert WNew York City	
German Architects, Modern School	
Gilbert, Cass	
Klipstein & Rathmann	EAA EET
Koehler, V. HugoNew York City	
Lindeberg, Harrie TNew York City	
Mann & MacNeille New York City	
Platt, Charles A New York City	
Reiley & Steinback New York City	
Stephenson & Wheeler New York City	
Trowbridge & AckermanNew York City	558-573
Trowbridge & LivingstonNew York City	
Walker & Gillette	
Wallis & Goodwillie New York City Warren & Wetmore New York City	221 245 250 261
Webb, Gregory B New York City	388
Woodsend, H. E England	
Van Valkenburg, CarltonNew York City	
Vickers, NathanielNew York City	

TYPES OF BUILDING ILLUSTRATED ARCHITECT

APARTMENT HOUSES. Interior Decoration of City ApartmentC. J. Charles Fireproof Suburban Apartment HouseBates & How14 Small City Apartment House	10-150
BANKS. Union Trust Company, New York CityWalker & Gillette	333
CHURCHES (Early). St. John's Chapel, Varick Street, New York City	1.
CHURCHES (Modern). St. Thomas' Church, New York CityCram, Goodhue & Ferguson. C (Plan and Photographs). St. George's-by-the-River, Seabright, N. JWalker & Gillette330 (Plan and Photographs). Chapel of the Queen of All Saints, Brooklyn, N. Y.Reiley & Steinback350 (Plan and Photographs). Chapel of the Intercession (Trinity Parish), New York City. (Plan and Photographs)B. G. Goodhue520	/3-174 6-338 6-374

DOMESTIC ARCHITECTURE (Country and Suburban).	PAGE
ARCHITECT. OWNER AND LOCATION Gardiner, Robert WArthur C. James, Esq., Miami, Fla	28-30
German, ModernGarden City of Hellerau, Germany Stephenson & WheelerJ. A. Garver, Esq., Oyster Bay, L. I., (Cover, March, 1914),	181-201
Woodsend, H. EWodels of the English Type Walker & GilletteW. M. Salisbury, Esq., Pittsfield, Mass Walker & GilletteJoseph E Stevens, Esq., Tuxedo Park, N. Y.	.278-292
293-296, Walker & Gillette	.306-308
Walker & GilletteA. H. W. Johnson, Larchmont, N. Y Mann & MacNeilleV. Sutro, Esq., "Fieldston," New York Mann & MacNeilleG. B. Pegran, Esq., "Fieldston," New York	.312-313 455 456
Mann & MacNeilleJ. M. Richardson, Esq., "Fieldston," New York Mann & MacNeilleBishop Charles S. Burch, "Fieldston," New Yo Baum, Dwight J. Dwight J. Baum, Owner, "Fieldston," New Yor Vickers, NathanielFrederick R. A. Camp, Esq., "Fieldston," New York Chichester, George HCharles E. Niles, Esq., "Fieldston," New York	rk459 rk456 Zork 458
Chichester, George H	
Domestic Architecture (City). Early City Houses—Varick St., New York City Apartment House Interiors.	49-57
Walker & GilletteTwo New York City Residences Walker & GilletteW. Goodby Loew, Residence, N. Y. City Walker & GilletteExterior Detail, New York City House Walker & GilletteCity House Interior Walker & GilletteNew York City House, 53 East 61st St	
EXPOSITION BUILDINGS. Panama-Pacific Exposition, 1915. Panama-Pacific Exposition, 1915. St. Louis Exposition—"The Festival Hall"	.272-276
 HOTELS. Hotel Biltmore (Plans and Photographs)—Warren & Wetmore221-245, Hotel St. Regis (Interior)—Trowbridge & Livingston	
Cover, June, 1914), Scholastic Architecture. Graduate College of Princeton UniversityR. A. Cram,	, 469-507
(Cover, January, 191 Barnard School, "Fieldston," N. YMann & MacNeille	4), 1-27 462
THEATRES. Children's Theatre (Interior), New York CityV. Hugo Koehler Berlin Opera House, Competitive DesignProf. Martin Dülfer STABLES AND GARAGES.	271
STABLES AND GRACES. Stevenson & WheelerAt Oyster Bay, L. I Walker & GilletteAt Pittsfield, Mass Klipstein & RothmannAt St. Louis, Mo VARIED TYPES.	.291-292
Casino on Estate of H. P. Davison, Esq., Locust Valley, L. I	332 334 335
way Garden")	335 347-349
port, R. I	353

INDEX OF ARCHITECTURAL DETAIL.

PAGE
Altaks
BALCONIES
BALUSTERS
BUTTRESSES12, 14, 15, facing 101, 115, 117, 118, 121, 371, 372
Candelabra
CARVING (Gothic Details).8, 20-24, Feb. Cover, 102, 103, 115-122, 129, 131, 358, 359, 367, 370-374
CEILINGS: Figured Plaster
CONSOLES
CROCKETTS (See Decorative Styles, Gothic).
CUPOLAS
DECORATIVE STYLES:
Renaissance, Italian
"Adam"43, 44, 223, 237, 241 Early American
Doorways: Gothic
Early American
Domes
FINIALS (See also "Gothic," for Gothic Finials)
FIREPLACES (See Mantels). Flèche
FOUNTAINS
GARGOYLES (See Grotesque).
GARLANDS
GOTHIC (See Decorative Styles, Gothic).
GROTESQUES19, 22-24, 131, 132, 139, 357
GRILLES: Bronze
• Iron
INSCRIPTIONS
INTERIORS : Dining Room
Restaurant (Hotel)
Library
Living Room
Boudoir
LANTERNS
LOGGIAS
MANTELS:
Gothic
"Oueen Anne"
"Adam"
Italian Kenalssance48, 321, 325

NICHES: PAGE. Gothic
Organs, Church
Pergolas
Pools (See Fountains).
Porticoes
PULPITS
Sculpture, Architectural, etc
SHIELDSFacing 1, 10, 180, 230, 341, 358, 367, 415
Spandrils
Spires (See also "Flèche")
STAIRWAYS:
Georgian
STAINED GLASS (See Windows).
TABLETS 415
TAPESTRIES
Towers
TRACERY, ROMANESQUE
URNS (See Finials).
VAULTING (See Ceilings, Vaulted).
WAINSCOT, PANELLED
WINDOWS:
Bay and Oriel
Gothic
Stained Glass107, 113, 116 and Detail facing, 162-169



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· THE · ARCHITECTVRAL RECORD

Volvme XXXV

JANVARY, 1914

Nymber I



Photograph by W. L. Perham. PROSPECT OF THE GROUP FROM THE WEST-THE GRADUATE COLLEGE OF PRINCETON UNIVERSITY, PRINCETON, N. J. Cram, Goodhue and Ferguson, Architects (The Boston Office).

A STVDY IN SCHOLASTIC ARCHITECTVRE

Cram.Goodhue & Ferguson, Architects The Graduate College Group of Princeton University

Photographs by Julian Buckly.



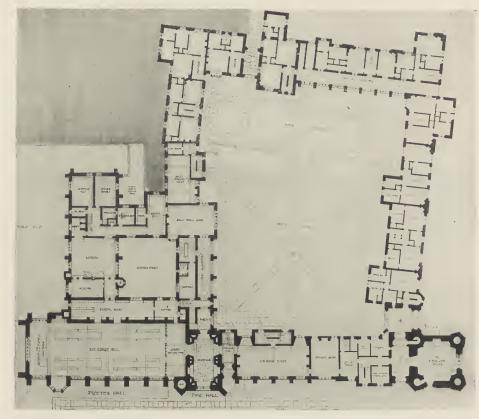
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ERTAIN Universities in this country would seem to have been others in their architectural possessions. It is an unfortunate circumstance that most of our Universities, however, have been, architecturally

speaking, of gradual growth. This has occasioned a dis-tinctly distressing diversity in archi-tectural styles in the several buildings, growth. and has caused many colleges to present

rather an exemplar of passing phases of style than any semblance of a consistent theme or a pre-studied general more favored than group plan. Some are fortunate in possessing a good general arrangement, but unfortunate in the indiscriminate juxtaposition of Gothic, Byzantine, Classic and other conceptions of varied derivation; while others, with grievously scattered buildings, possess certain units or groups of marked architectural merit and propriety.

At Bryn Mawr and at the University of Pennsylvania, and at Washington University in Illinois there are some splendid studies in English Collegiate archiTHE ARCHITECTURAL RECORD.

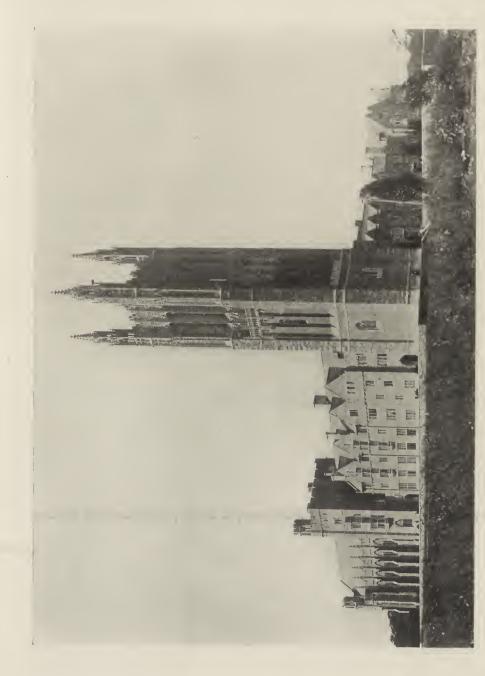


PLAN OF THE GRADUATE COLLEGE OF PRINCETON UNIVERSITY, PRINCETON, N. J. Cram, Goodhue & Ferguson, Architects. (The Boston Office.)

tecture by Cope and Stewardson and by Day Brothers and Klauder. Pre-eminently there is the group of the Military Academy at West Point, by Cram, Goodhue & Ferguson, in which, however, it was intended to express certain rugged fortress-like qualities in addition to certain less marked collegiate qualities. After West Point there is the College of the City of New York, by the late George B. Post, a group planned and executed, like West Point, at one time. Both have this advantage, with all its attendant merits, though the harsh contrast of materials in the New York group has been reckoned unfortunate.

Princeton, despite its age, has been especially fortunate in its new buildings, for the reason that all are unusually pleasing renderings of a more or less native conception of the collegiate architecture—part Gothic and part Renaissance—which constitutes the revered charm of Oxford and Cambridge in England. And, unlike some other universities, the older buildings at Princeton, even when they are *banal*, are at least inoffensive. They almost seem to serve as a background for the newer buildings, and their very lack of character prevents them from unpleasing conflict.

Perhaps a discussion of the group of buildings constituting Princeton University, however, may not seem entirely germane to the consideration of a group so isolated, or so sufficient to itself as the newly completed Graduate College, the work of the Boston office of Cram, Goodhue and Ferguson. Despite this, it is important to appreciate the fact that, since the newer buildings at Princeton are the buildings which give it what might be called its architectural stamp, the general conformity of the Graduate



PROSPECT OF THE GROUP FROM THE SOUTHEAST. THE GRADUATE COLLEGE OF PRINCETON UNIVERSITY, PRINCETON, N. J. CRAM, GOODHUE & FERGUSON, ARCHITECTS. (The Boston Office.)





THE ARCHITECTURAL RECORD.



ACROSS THE LINKS FROM THE EAST. THE GRADUATE COLLEGE OF PRINCETON UNIVERSITY, PRINCETON, N. J. Cram, Goodhue & Ferguson, Architects.

College Group with this already existing English Collegiate style is at once a matter of commendation to the architects and congratulation to the University.

The purposes of the Graduate College, educationally speaking, must be reasonably obvious from its name. A brief outline, however, cannot fail to aid in an appreciation of the architectural expression of this educational idea, for here are to be reckoned with not merely strait considerations of architectural technique *per se*, but more intangible qualities as well, popularly included in the term "atmosphere."

It is the intention of the University to constitute the Graduate College a center of advanced study. Mr. Andrew F. West, Dean of the Graduate College, says:

"All those and only those who show capacity and desire for high intellectual effort should be encouraged to enter. It is no place for either shallow dabbling, narrow intensity, dull mediocrity or unsocial isolation. Young men, young in spirit, rich in intellectual and moral worth, responsive to scholarly impulses, eager

to seek and find, able to perceive, take and use the more valuable as distinguished from the less valuable materials of knowledge, willing to do all and dare all to make themselves master-students, open-eyed to ideas in their relevancy, worth and beauty, pulsing with energy, inventiveness and fantasy, men companionable, magnanimous and unselfish, such are the students to be longed for and prized supremely. These are the sons of knowledge who are best fitted to live not for themselves alone nor by themselves alone, but first in the household of knowledge and then in the larger society of the world. On the basis of such convictions the Graduate College of Princeton was planned. In spirit and substance it is to be a new institution planted in the midst of the present Graduate School, to take root there and gradually transform it into something higher. Thus far American Universities have made little provision for the physical and social welfare of graduate students. Here and there a dormitory has been set apart for the purpose. As a rule, how-



THE CLEVELAND TOWER AND A PORTION OF THE SOUTH ELEVATION. THE GRADUATE COLLEGE OF PRINCETON UNIVERSITY, PRINCETON, N. J. CRAM, GOODHUE & FERGUSON, ARCHITECTS. (The Boston Office.)



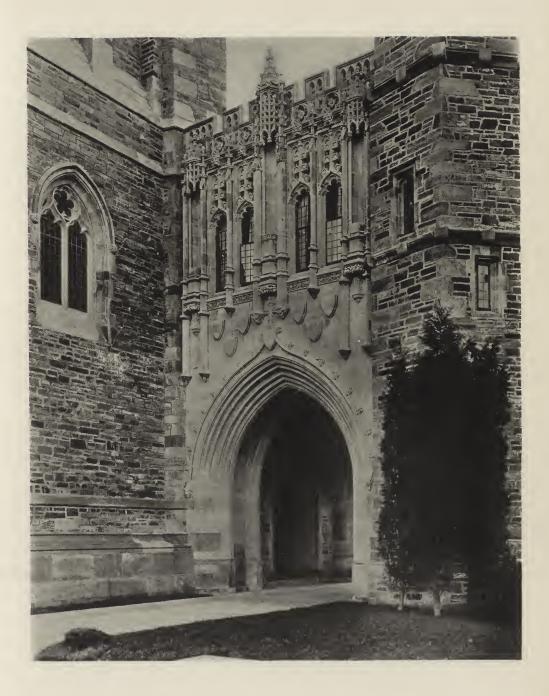
DETAIL ABOVE THE MAIN, OR EAST ENTRANCE. THE GRADUATE COL-LEGE OF PRINCETON UNIVERSITY, PRINCETON, N. J. Cram, Goodhue & Ferguson, Architects.

ever, they have been left to shift for themselves. . . If the best results are to be had, their standard of social living should not be that of a boarding house, a hotel, a club or a dormitory. It should be the quiet dignity of a home of learning. If the higher teachers of the nation should be trained in a place and society worthy of their calling, why should they not dwell in a beautiful, even a stately, home? The loveliness of King's College Chapel, which appealed so deeply to Milton and Wordsworth, is part of the best endowment of Cambridge."

The Dean further amplifies this thought with pertinent generalities on the value and importance of association, and on the unquestionable fact that surroundings which are essentially and traditionally scholastic must definitely and beneficially influence all students.

It is this quality of scholastic repose, with others of dignity, of propriety, and of nobility, that has been so powerfully achieved in the architectural treatment of the Graduate School of Princeton University. And this is the more remarkable by reason of the fact that certain superficial but potent scenic accessories were lacking in the site. Here was an open hill, out upon a golf links-a site devoid of the venerable trees which one associates with scholastic surroundings, and the buildings but recently being completed, no time has elapsed for the work of the softening touch of ivy or the mellowing aura of age. That the group should present such powerful sugges-tions of long use, that it should impress one as "a place of known abode" must be reckoned an architectural achievement as powerful as it is delicate.

The plan, despite the appearance of axial symmetry had from distant prospects, will be seen upon study to be interestingly irregular. The ultimate whole has been planned to extend itself in two additional quadrangles-one to the southeast and one to the northeast, the first explaining the placing of the Cleveland tower. Looking westward across the links, the tower has a little of the unfortunate appearance of isolation from the group proper which characterizes the Victoria tower of the Houses of Parliament in London, but the future addition of this proposed quadrangle will obviously throw the Cleveland Tower back into the mass composition, be it viewed from any angle. Even in its present location, most



THE MAIN, OR EAST ENTRANCE, AND THE BASE OF THE CLEVELAND TOWER. THE GRADUATE COLLEGE OF PRINCETON UNIVERSITY, PRINCETON, N. J. CRAM, GOODHUE & FERGUSON, ARCHITECTS. (The Boston Office.)



DETAIL LOOKING WEST THROUGH THE MAIN ENTRANCE INTO THE INNER COURT. THE GRADUATE COLLEGE OF PRINCETON UNIVERSITY, PRINCETON, N. J. CRAM, GOODHUE & FERGUSON, ARCHITECTS (The Boston Office.)



DETAIL OF THE DOOR IN THE SOUTHWEST ANGLE OF THE INNER COURT. THE GRADUATE COLLEGE OF PRINCETON UNIVERSITY, PRINCETON, N. J. CRAM, GOODHUE & FERGUSON, ARCHITECTS. (The Boston Office.)

THE ARCHITECTURAL RECORD.



DETAIL. ELEVATION OF THE NORTH CLOISTER IN THE INNER COURT. THE GRADUATE COLLEGE OF PRINCETON UNIVERSITY, PRINCETON, N. J. Cram, Goodhue & Ferguson, Architects.

prospects of the group, especially that from the northwest, are distinctly happy. As proposed by the architects, this southeast quadrangle should be designed to comprise a chapel, a library and livingrooms, while the northeast quadrangle would be made up solely of residential units.

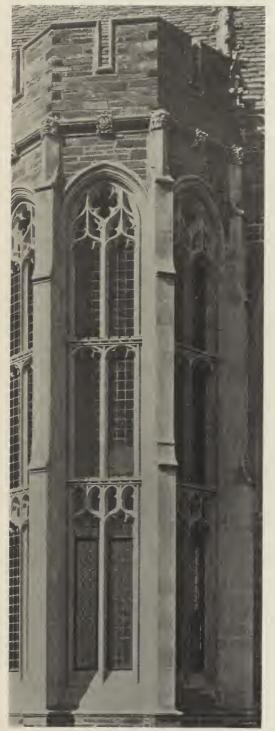
In general there is manifest a successful result in giving the impression of a great English college (albeit a thought ecclesiastical in some particulars) without copying, with careful stupidity, any specific portion of any specific English college.

The dominant feature of the group is the great tower, its designation forever commemorating Grover Cleveland, dear to the hearts of Princetonians. Certainly it is an exceptionally interesting study, for the reason that it is in exact conformity with no similar tower of the past. The use of hexagonal instead of octagonal turrets at the corners is unusual, but successful, and so also is the extreme splay of the bell-deck windows, and there is a distinct sense of architectural logic (or logical architecture) in the extreme severity of the base, with progressive enrichment and glorification as the tower rises to its full height.

The main entrance is to the right of the tower, directly at its base, with a long bank of dormitories running north at a marked splay from the orientation of the tower. At right angles with this dormitory building (and consequently obliquely to the rest of the group) lies another bank of dormitories, the two enclosing two sides of the inner court, or quadrangle. Before the North dormitories, with their engaging cloisters, a portion of the court is raised as a terrace, and is intended to be used as a bowling green.

Directly behind the tower, and running





DETAIL OF THE ORIEL WINDOW OF THE GREAT HALE. THE GRADUATE COLLEGE OF PRINCETON UNIVERSITY, PRINCETON, N. J. Cram, Goodhue & Ferguson, Architects.

westward, lies the third side of quadrangle, containing first the several service offices of the building, and further a quiet reading room and the reposeful and clublike "commons room"—the name and intent happily borrowed from the English college.

The west side of the quadrangle is lightened and given interest by another cloister, as well as by the broken irregularity of its contour. On axis with the main entrance, and to the left of the west cloister, is another beautifully detailed portal, giving into a porch which, in turn, gives into the rib-vaulted vestibule to the Great Hall. The door itself is massively fashioned of wood, with excellently interesting hardware, as throughout the college. The vestibule, albeit somewhat mediæval in its Gothic spirit, as opposed to Transitional, or English Renaissance, is distinctly impressive, with a fireplace of fascinating detail, and it is appropriately furnished with armor, old carved oak furniture and the severity of the stone walls warmed and softened by a tapestry.

A few steps lead from the vestibule up to the Great Hall, where certain very strong impressions immediately make themselves felt. The hall itself, the Refectory, or Dining Hall, of the group, is seen through a very finely carved wood screen. Oak wainscoting, seemingly and artfully of great age, reaches to the splayed sills of tall Gothic windows, and the perspective leads the eye to a sort of dais at the far end, with the "Upper Table" for the masters, and above it a great colored window. Overhead are gracefully massive open trusses, fashioned from great oak timbers. There is splendid honesty of construction here, for these trusses support, by their own staunchness, the heavy slate roof, for all that the eye is beguiled by the spirited grotesques carved in the solid beam-ends. The fire place in this great hall is particularly pleasing-the whole character is sometimes Gothic and sometimes Transitional and always interesting. Some of the carved panels are enriched with Gothic arabesques, and others with characteristic "Linen-fold," and the Princeton tiger, holding a shield, enlivens the frieze of the wainscot. There is a splendid



SOUTH ELEVATION OF THE WEST END OF THE GREAT HALL. THE GRADUATE COLLEGE OF PRINCETON UNIVERSITY, PRINCETON, N. J. CRAM, GOODHUE & FERGUSON, ARCHITECTS. (The Boston Office.)



DETAIL. A GABLE ON THE EAST ELEVA-TION. THE GRADUATE COLLEGE OF PRINCETON UNIVERSITY, PRINCETON, N. J. CRAM, GOODHUE & FERGUSON, ARCHITECTS. (The Boston Office.)



DETAIL. UPPER PORTION OF THE CLEVELAND TOWER. THE GRADUATE COLLEGE OF PRINCETON UNIVERSITY, PRINCETON, N. J. CRAM, GOODHUE & FERGUSON, ARCHITECTS. (The Boston Office.)



WEST ELEVATION OF THE GREAT HALL. THE GRADUATE COLLEGE OF PRINCETON UNIVERSITY, PRINCETON, N. J. CRAM, GOODHUE & FERGUSON, ARCHITECTS. (The Boston Office.)



230

LOOKING WEST IN THE GREAT HALL. THE GRADUATE COLLEGE OF PRINCETON UNIVERSITY, PRINCETON, N. J. CRAM, GOODHUE & FERGUSON, ARCHITECTS. (The Boston Office.)



DETAIL OF WOOD SCREEN IN THE GREAT HALL. THE GRADUATE COLLEGE OF PRINCETON UNIVERSITY, PRINCETON, N. J. Cram, Goodhue & Ferguson, Architects.

(and, in this country too-unusual) quality of *craftsmanship* in the whole group, but it is paramount here, and the most potent factor of all else but the conception itself in producing the illusion of age in this Great Hall. This quality of craftsmanship even redeems what might be too much *finesse* in the detailing of the screen at the east end—and certainly it lends character to the trusses overhead.

Facing the fireplace is a tall oriel window, and considering the exterior of this, one is impelled to feel that here is an over-marked leaning toward the ecclesiastical. Chapel or Refectory? The question is not asked by the observer, but imposed by the mounting buttresses, the tall Gothic-mullioned windows and the aspiring pinnacles. And yet it could not well be otherwise, in all but the pinnacles, yet the terminal octagonal turrets are reassuring, and the grotesque heads and the heraldic Princeton tigers interpose a happy distraction.

At the end of the Great Hall, and out from the main group, lies a delightfully domestic building which is the Deanery, not shown in the plan reproduced with this article. It is connected with the end of the Great Hall only by a stone wall, in which is a door, giving into a sheltered garden close. Here is the porch of the Deanery, and a view of its charmingly informal mingling of stone and half-timber, and that informality of roof-line and fenestration which is the best of its own sort of English domestic architecture.

Wandering from corridor to quadrangle, through cloisters, under great collegiate portals, or along the terrace that flanks the south side of the Graduate College, one has forgotten how entirely new it is—and one is impelled to realize the poverty of common diction. What is meant by "new?" The artisans have but recently departed, the place has not been hallowed by long use and scholastic association, and yet it is old. And that is because the ideals which went into its conception, and the ideals which inspired the craftsmanship of its execution were old ideals. And here, then, is architectural technique of the highest orderhere is the most that architecture, as an art of expression, is capable of attaining.



CARVED WOOD SCREEN, LOOKING EAST IN THE GREAT HALL. THE GRADUATE COLLEGE OF PRINCETON UNIVERSITY, PRINCETON, N. J. CRAM, GOODHUE & FERGUSON, ARCHITECTS. (The Boston Office.)



DETAIL OF GROTESQUE. MANTEL IN THE VESTIBULE OF PYNE HALL. THE GRADUATE COLLEGE OF PRINCETON UNIVERSITY, PRINCETON, N. J. CRAM, GOODHUE & FERGUSON, ARCHITECTS. (The Boston Office.)



DETAIL OF GROTESQUE. MANTEL IN THE VESTIBULE OF PYNE HALL. THE GRADUATE COLLEGE OF PRINCETON UNIVERSITY, PRINCETON, N. J. CRAM, GOODHUE & FERGUSON, ARCHITECTS. (The Boston Office.) THE ARCHITECTURAL RECORD.



DETAIL—A PORTION OF THE MANTEL IN THE VESTIBULE OF PYNE HALL, THE GRADUATE COLLEGE OF PRINCETON UNIVERSITY, PRINCETON, N. J. Cram, Goodhue & Ferguson, Architects.



WEST WALL OF THE VESTIBULE OF PYNE HALL, THE GRADUATE COLLEGE OF PRINCETON UNIVERSITY, PRINCETON, N. J. Cram, Goodhue & Ferguson, Architects (The Boston Office).



DETAIL OF THE DOOR TO THE GREAT HALL-VESTIBULE OF PYNE HALL, THE GRADUATE COLLEGE OF PRINCETON UNIVERSITY, PRINCE-TON, N. J. CRAM, GOODHUE & FERGUSON, ARCHITECTS. (The Boston Office.) THE ARCHITECTURAL RECORD.



THE COMMONS ROOM. THE GRADUATE COLLEGE OF PRINCETON UNIVERSITY, PRINCETON, N. J. Cram, Goodhue & Ferguson, Architects.



DETAIL OF MANTEL IN THE VESTIBULE OF PYNE HALL. THE GRADUATE COLLEGE OF PRINCETON UNIVERSITY, PRINCETON, N. J. Cram, Goodhue & Ferguson, Architects.



DETAIL. FIREPLACE IN THE GREAT HALL. THE GRADUATE COLLEGE OF PRINCETON UNIVERSITY, PRINCETON, N. J. CRAM, GOODHUE & FERGUSON, ARCHITECTS. (The Boston Office.)



VILLA OF ARTHUR CURTIS JAMES, ESQ., MIAMI, FLA. Robert W. Gardner, Architect. "The Architect had achieved a very sympathetic expression of the Spanish-American style."







A Flagrant Case of Plagiarism



T IS NOT often that the plagiarist in art or letters allows himself to be caught red-handed. If he copies a thing he ordinarily does so with just enough craft to admit his copy under the guise of an "adaptation." A change

here and there, a reversal of the composition, and his result is effected sufficiently either to escape detection by any but a captious critic, or, at least, not to arouse indignation.

It is the inalienable right of a designer to adapt. Many of the best buildings of today are adapted either wholly or in part from other sources, but in the adaptation there have been apparent certain elements of scholarly appreciation for the original which has furnished the source of the inspiration, and often added creative thought has been expended to produce the whole.

Even a reasonably strict code of ethics will condone an adaptation, provided the source of such adaptation be not contemporary, but few will be found to condone out-and-out piracy on the high seas.

Adaptation, furthermore, has generally been only partial—certain details have been altered to suit, or frankly borrowed outright from well-known originals, or a general scheme has been borrowed, and details have been devised to conform with specific requirements.

A case has recently been presented to us, however, wherein niceties of adaptation have given place to crudities of absolute plagiarism—wherein a beautiful original has been parodied in a debased copy. The copy, curiously enough, is sufficiently like the original to leave no

THE ARCHITECTURAL RECORD.



THE "ADAPTATION" OF THE JAMES VILLA. "A remarkable illustration of architectural piracy, in which crudity takes the place of finesse. Note the uncompromising centering of the entrance."

doubt as to its "inspiration," yet so unlike it in those finer qualities known as "feeling," to be a cruel libel.

The facts, as we understand them, constitute in themselves an affront to the commonest tenets of ethics, professional or unprofessional. Mr. Arthur Curtis James is the owner of a charming villa, of Spanish-American type, at Miami, in Florida. Its architect, Robert W. Gardner, is to be congratulated in having achieved a very sympathetic expression of the style in which he was working and its owner in the possession of so delightful a winter retreat. Mr. James had every reason to pride himself upon a unique and unusually charming bit of architecture.

It is unfortunate that Mr. James' villa

at Miami should not have been allowed to remain unique, and doubly unfortunate that it should have suffered so grievously in its "adaptation."

A reasonably prominent politician (not unknown on the lecture platform) saw and admired the villa at Miami, and desired a counterpart for his own domicile, An architect would not have duplicated work already done for one client in order to please a new client, nor would he have debased the work of his own hand by so crude a copy. Our politician, therefore, approached the *builder*, who, being in possession of a set of plans of the James villa, ventured to erect a duplicate building (with "a few slight changes," of course)—and the result, though it may have pleased the builder's client, certainly



VILLA OF ARTHUR CURTIS JAMES, ESQ., MIAMI, FLA. Robert W. Gardner, Architect.



AN IDENTICAL VIEW OF THE "ADAPTATION" OF THE JAMES VILLA. "Not even an accurate copy, but a good design debased."

THE ARCHITECTURAL RECORD.



THE VILLA OF ARTHUR CURTIS JAMES, ESQ., MIAMI, FLA. Robert W. Gardner, Architect. "It is a pity that Mr. James' villa was not allowed to remain unique."

constitutes grounds for grave professional concern among architects.

It is fortunate that instances of such flagrant plagiarism are rare among builders—but even their general rarity cannot condone or alleviate the seriousness of the example here exposed, illustrating as it does a disregard not only of professional ethics, but of the ordinary amenities of life, in a transaction so crudely compassed as to offend architect and layman as well.



THE "ADAPTATION" OF THE JAMES VILLA. "Ill-studied proportions were substituted for refined ones, and crude banality for sensitive expression."

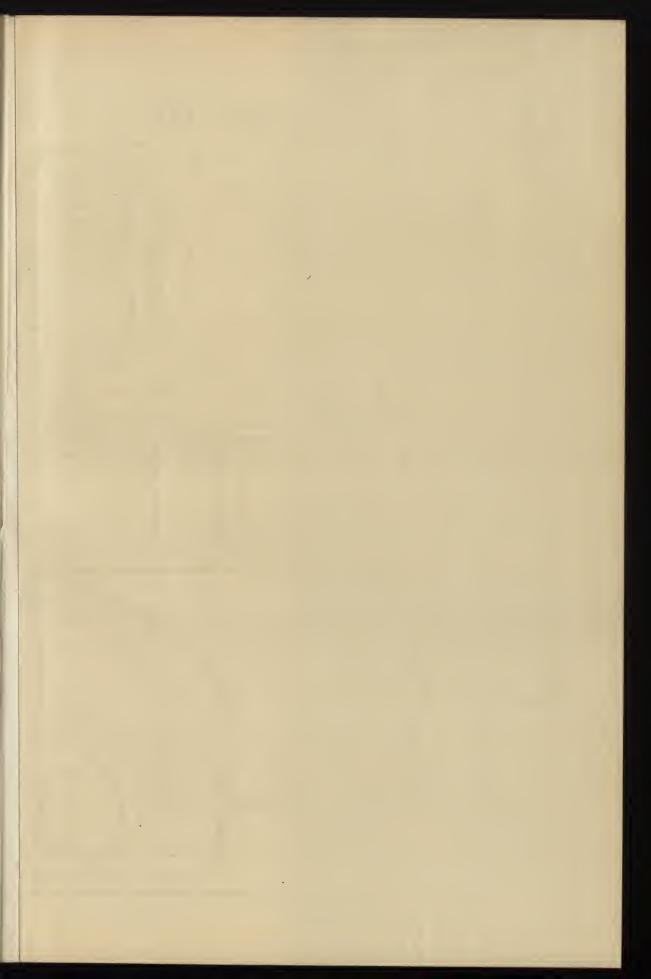


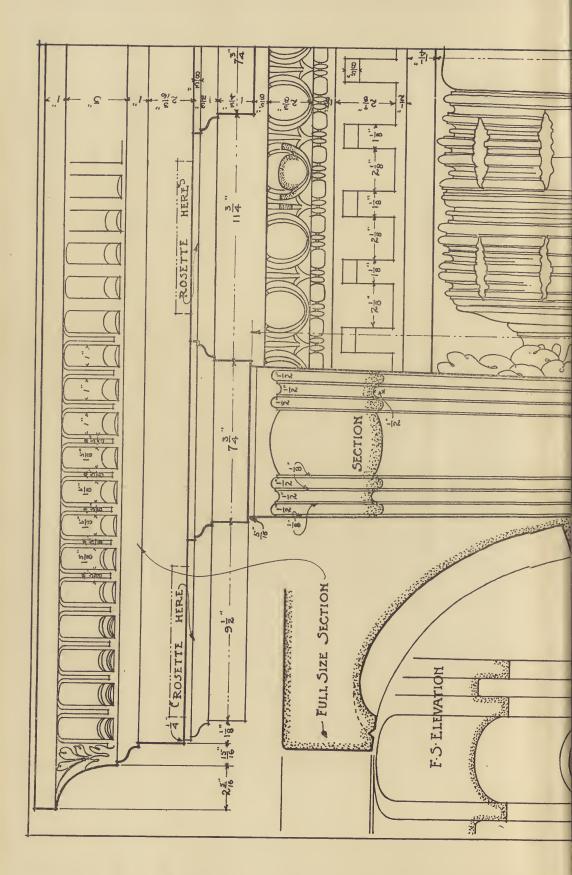
PORTICO OF THE PALAZZO MASSIMI, ROME, ITALY. Photograph to accompany Measured Drawing by Andrew I. Cobb, Architect.

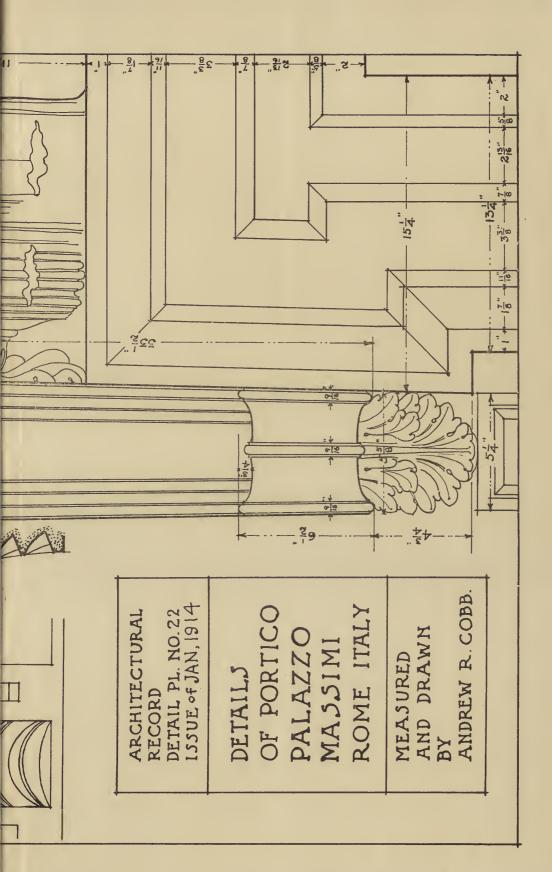


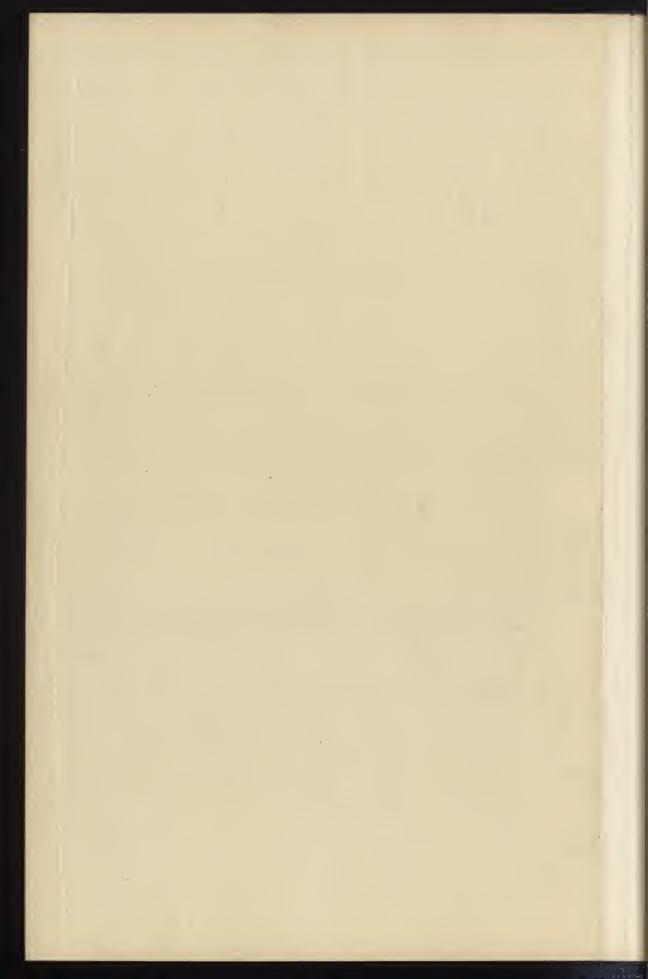
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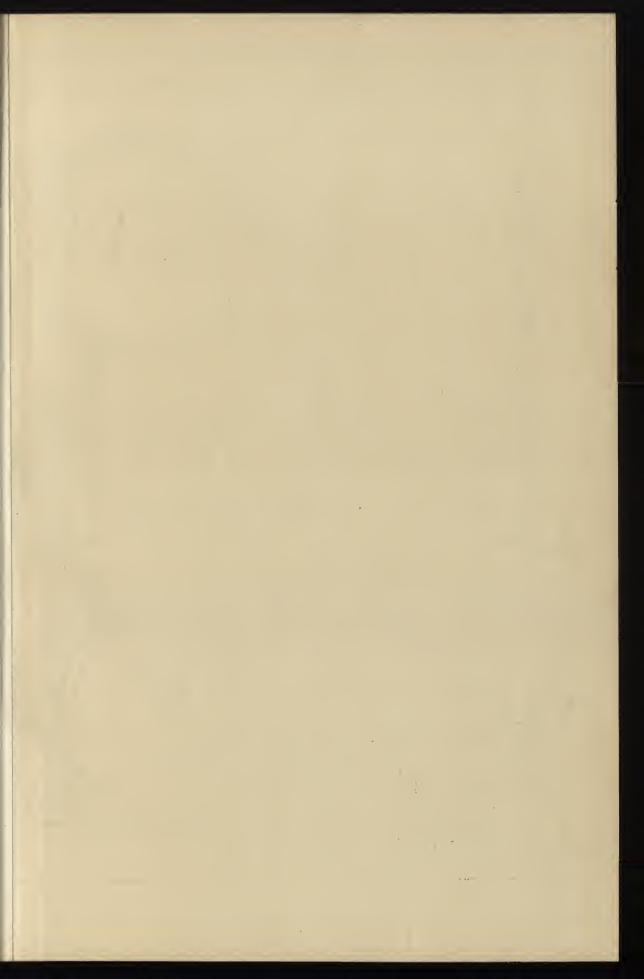
PORTICO OF THE PALAZZO MASSIMI, ROME, ITALY. Photograph to accompany Measured Drawing by Andrew I. Cobb, Architect.

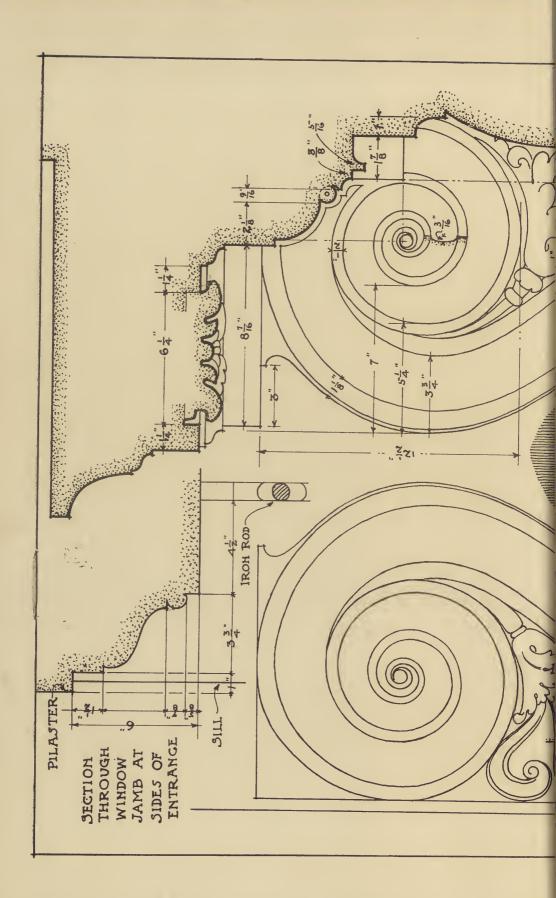


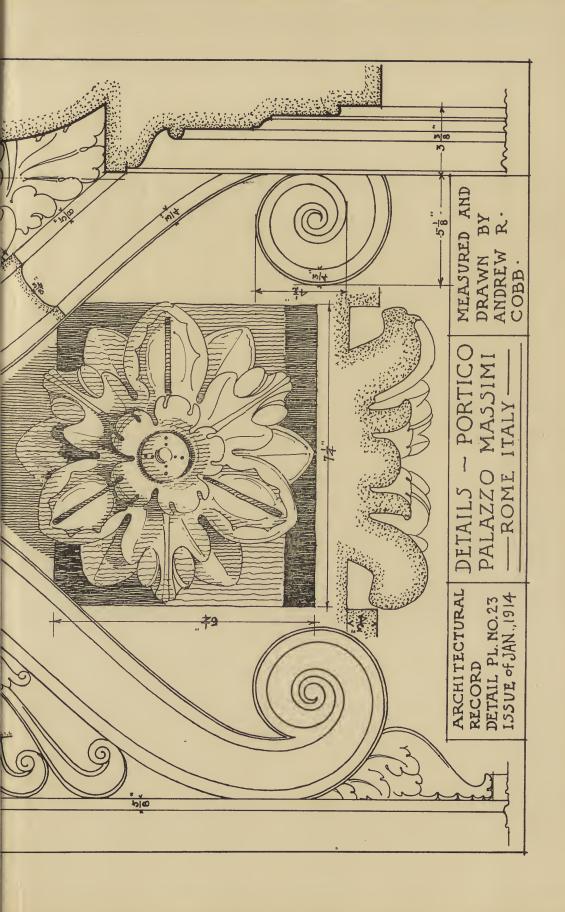


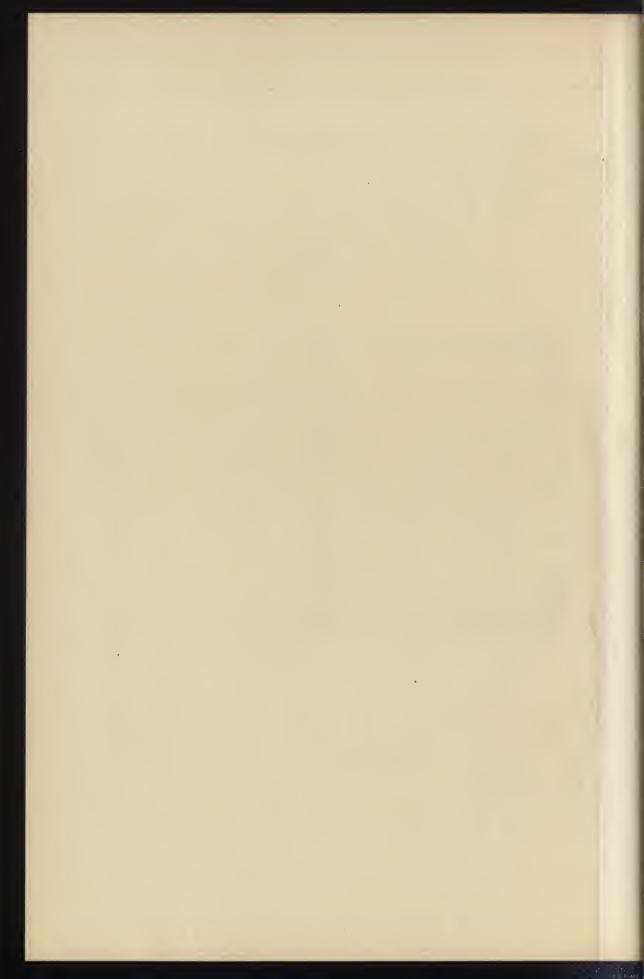














AN EXAMPLE OF THE JACOBEAN INTERIOR, THE BANQUET HALL FROM "ROTHERWAS HOUSE," ENGLAND, RECENTLY IMPORTED TO THIS COUNTRY.

FVRNITVRE FROM THE ARCHITECTVRAL VIEWPOINT

By H.Donaldson & berlein — — 🦇 Abbott M. Clure



ONSISTENCY is a jewel. Never was truer word uttered. This maxim is of universal application. It holds good equally whether we deal with abstract principles or with the most material objects, whether we discuss nice m or a l distinctions and obscure

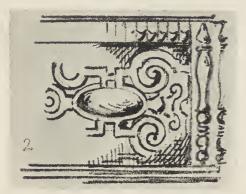
points in casuistry or talk of "cabbages and kings." Architecture and furniture, being neither at the extreme of abstraction nor its material antipode, come well within the category of subjects in which consistency's rare value is recognized. We are all, doubtless, inconsistent at times and perhaps we occasionally enjoy the whimsical tang of a bit of inconsistency for the sake of contrast but, in the long run, we may be perfectly sure that only adherence to consistency's decrees will stand the searching tests of time and usage.

Between furniture and architecture there exists an obvious and close relationship which, however, in spite of its potency and propinquity, we seem sometimes to lose sight of amid all the medley wealth of possible choice that to-day con-



GOTHIC TRACERY MOTIF FROM AN OLD ENGLISH OAK STOOL.

fronts mind and eye alike. To be consistent at any time requires a degree of clear vision and intelligent discrimination and it is just because we are in danger of having our vision dulled and our sense of discrimination blunted by the multiform distractions, mobiliary and architectural, with which modern conditions have surrounded us, that the ensuing papers are presented for consideration, especially the consideration of architects who, of all people, most need to realize keenly the vital connection between furniture and architecture if they are to exercise



STRAP-WORK AND OVAL BOSS DETAILS COMMON TO BOTH FURNITURE AND ARCHITECTURE OF THE JACOBEAN PERIOD.

a wholesome influence upon the interior appointment of the houses they have designed and ensure the permanency of their satisfying quality. This much, indeed, do they owe their professional reputations.

It is easy enough to avoid the glaring inconsistencies and barbaric gaucheries, the mere mention of which makes one's blood run cold and which none but madmen or depraved criminals would dream of perpetrating; it is easy enough to avoid such missteps as furnishing an Elizabethan oak panelled room with the gilded and brocaded gaudiness of Louis Quinze tables and chairs or to shun the equally incongruous combination of rugged Jacobean cupboards and settles in an Adam room of exquisite delicacy and refine-

ment. It is not so easy to catch the subtle relationships that determine the ultimate fitness of things. It is only by patient study and thoughtful observation that we shall grasp the full meaning and significance of the connection between the various modes of architectural expression and the changes in mobiliary styles.

These papers are written to call attention, before all



Corner Pillar of Jacobean Court-Cupboard, Showing Architectural Influence.

else, to the urgent Aremeetural innuence. necessity for architects to have a broad acquaintance with furniture types and peculiarities, and in the second place to present a reasoned digest of the subject that may be helpful in stimulating to further interest and independent research. This presentation of the subject presupposes that architects, upon the completion of houses, will retain at least a guiding interest and influence in their furnishing, whether by personal supervision and advice to clients or by procuring the appointment of a capable and responsible interior decorator. Too often do we see



TYPICAL ARCHITECTURAL WOODWORK OF THE JACOBEAN PERIOD — A PORTION OF THE BANQUET HALL, "ROTHERWAS HOUSE," ENGLAND.



THE FIREPLACE IN THE MAIN LOUNGE—THE LAWYERS' CLUB OF NEW YORK CITY. Francis H. Kimball, Architect.

Here the mantel and ceiling are in excellent conformity with the Jacobean Period, but the furniture is not well-studied or fortunate.

houses of much architectural merit either completely spoiled within or at least with much of their excellence nullified by ignorant and injudicious furnishing where an undiscriminating client has been left to his own devices or an obstinate one has given rein to his mulish perversity.

From force of circumstance some of these cases are unavoidable, but in most instances, if the architect possesses the confidence of his clients, he can and ought, for his own sake if for no one's else, to assist and co-operate with them in the furnishing equipment by giving his own advice or by bringing in a competent decorator. For a long time, indeed, many of the most successful architects have done this very thing, but now the practice is becoming more general. This is a hopeful sign, but it is, at the same time, fraught with some danger, and that danger lies, as danger so often does, in ignorance.

While not a few architects feel a deep interest in furniture and have an excellent knowledge of its sundry phases, it cannot be denied that a very large number might know much more about the subject with advantage both to themselves and to their clients. Let them remember the Brothers Adam who thought no detail too small, no matter too unimportant, to receive their personal inspection and care. The ill feeling which unfortunately seems so often to exist between architects and interior decorators is undeniably due to the architect's ignorance in more cases than one. Neither side is entirely without fault, but we may be sure that greater knowledge all round would certainly tend



THE BOUDOIR, "HURSLEY PARK," ENGLAND. A. Marshall Mackenzie & Son, Architects. An interior excellent in its architectural treatment, but unfortunate in all its furniture excepting the cabinet on the left wall.



"ARMOIRE" OR CABINET IN CARVED OAK-THE JACOBEAN PERIOD. In this and similar pieces there is a pronounced architectural feeling.

to greater harmony and more charity. The ideal relationship is one of amity and co-operation between architect and decorator. The two ought to work hand in hand and, where they have done so, the most successful results, as one might expect, have been achieved.

It is a comparatively easy matter to master the characteristics and requirements of the strict period styles. It is a comparatively easy matter, once having mastered this knowledge, to furnish a room or a house in these styles correctly and—if the person directing has within him the requisite feeling and qualities with good taste. But while a great deal of straight period furnishing is being done, and excellently well done, too, there is likewise noticeable a strong trend in favor of "no-period" furnishing, especially in houses of a less formal character. The heavy expense entailed by a strict adherence to period modes and the aspect of extreme and occasionally oppressive formality that is sometimes concomitant have been partly responsible for a rebellion against the too narrow confines of a rigid purism. Our tendency is to become more and more catholic minded in our appreciation of individual things, things beautiful, and our proclivities are eclectic, so that we are prone to pick here and choose there and surround ourselves only with what most appeals to us.

There is vast satisfaction in doing this but, if we are not careful to govern our have they developed and from the earliest times they have mutually interacted. So closely are they allied that it is impossible to say which first appears in the murk of prehistoric twilight. Of one thing, however, we may be quite certain —when furniture first emerges from the dense mists of remote antiquity and begins to exhibit any decorative element, when it begins to do the least bit more than fulfill the merest and meanest utilitarian functions, it unmistakably takes its cue and draws its inspiration from archi-



LIVING ROOM, RESIDENCE OF WILLIAM A. WHITCOMB, ESQ., BOSTON, MASS. Parker, Thomas & Rice, Architects. An interior excellent in the conformity of its furniture and architecture.

choice by some constructive canons of selection and good taste and some knowledge of the principles of judicious combination, we shall find ourselves landed, the first thing we know, in a maze of heterogeneous incoherence. Our best safeguard against such catastrophe is an analytical knowledge of furniture in its several phases.

As stated before, there is an obvious relationship between furniture and architecture which only the most grossly unobservant could fail to notice. Together tecture. On the other hand, in later ages, variations in furniture styles often foreshadow coming changes in architecture. This is quite natural since furniture from the character of its materials is more sensitive to slight changes of artistic feeling and more susceptible of reflecting them than architecture with its more ponderous and difficult fabric could possibly be.

All this only serves to emphasize the propriety and profit of studying furniture and architecture side by side, keep-

39



CABINET OF THE PERIOD CALLED "QUEEN ANNE." Here is an example presenting strong architectural qualities.

ing their interrelation ever clearly in mind. For our present purpose it is not necessary to delve into the remote past for illustrations to stress our points. Confining ourselves to England for the nonce, since most of us are of English blood and traditions and presumably, therefore, more conversant with English historical aspects than with intricate Continental phases of cultural development, let us glance briefly at the prospect before us, beginning our cursory survey in the latter part of the fifteenth or early sixteenth century.

All the more pretentious architecture of the period was of a type we should now consider essentially ecclesiastical in tone, no matter whether a building was devoted to secular purposes or the use of churchmen. As the buildings were ecclesiastical in spirit, so also was all the furniture within.

Indeed, we may truthfully say that the furniture of that day not infrequently constituted an integral architectural feature of the building in which it stoodin other words, the furniture was part and parcel of the architecture. Of comfort, as we understand it, there was none. Furniture was scanty and was held a great luxury.

Such as was movable was bulky and ponderous and closely patterned after the immovable fitments, choir stalls, episcopal thrones, cupboards, aumbries and the like in churches and abbeys. The movable chests, armories, credences and state chairs in the houses of the great showed the same decorative motifs in carving and color as their fixed prototypes in cathedral or monastery. There were the same geometrical piercings with flamboyant or quatrefoil tracery. There were the same pointed or ogival arches. There were the same clustered columns and pilasters with capitals richly carved with oak leaves. Lastly, there was the same gorgeous color applied to brighten the sombre tones of the woodwork.

Passing thence by a leap to the reign of the "Wisest Fool in Christendom," we still find the close alliance between architectural and mobiliary forms. Indeed, the resemblance is now much more striking because there is so much more furniture before our eyes to impress us with the points of likeness. The great difference now is that an overwhelming wave of Renaissance feeling has swept over the land, but furniture and architecture have both faithfully reflected its influence. Look at the details of buildings erected in the latter part of the Elizabethan and early part of the Jacobean periods and then examine the furniture of corresponding date. The same forms and motifs, nay even the same proportions, appear in both. We find precisely the same pilaster mouldings, finials, bosses, strapwork and balusters in architecture and furniture alike. Chests and cupboards seem to be all of a piece with the carved panelling of the walls against which they

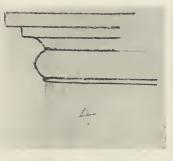


AN INTERIOR CARRIED OUT IN THE STYLE OF QUEEN ANNE AND WILLIAM AND MARY. BLOW & BILLORY (ENGLAND), ARCHITECTS. stood. The ant.logy is perfectly obvious. Nothing could be more so.

In the days of "good Queen Anne," skipping again to another well defined and strongly contrasting period, we find an intimate connection between architecture and furniture, so intimate, indeed, that we frequently hear the expression

"architect's furniture" applied to many of the larger pieces of cabinet work which truly followed architectural precedents in its proportions and ornamental detail and was not seldom designed by architects. Along with the so-called "architect's furniture" we find carved cupboards and buffets of strongly architectural tone, being often built into the panelling. In the chairs, tables and various smaller pieces of furniture, too, we find conspicuous points of similarity to the current forms of architectural expression.

Changing our field of inspection once more, we regard the manifold activities of the Brothers Adam. They surely realized fully the strong, compelling relationship between architecture and furniture and in the light and guidance of this realization they wrought much of their best work. The hypercritical may cavil at their attempts to reproduce in one material forms that were manifestly intended for another, but no one with



A "William and Mary" Cornice.

an atom of artistic appreciation in his makeup can look at the delicate creations they called forth, whether in the houses they builded or in the furniture they designed to go into those same houses, without acknowledging their essential grace and beauty.

However, questions of aesthetics and apprecia-

tion are quite beside the point at the present moment. The thing immediately necessary is to recognize resemblances, and the resemblances between Adam architecture and Adam furniture are so clearly apparent that we may, without more ado, make one more leap and transfer our investigations to the last few years of the eighteenth and the fore part of the nineteenth century where we shall find Empire styles and Classic Revival keeping company in their respective realms of furniture and architecture. We are all too conscious-in some instances we might appropriately say too painfully conscious-of the peculiar characteristics of both Classic Revival architecture and Empire furniture to make it necessary to do more than mention the existing analogy to show that the force of relationship, established at the beginning, remains undiminished.

Enough has been said on this score to light the pathway of our investigations. We are now living in an age when there



DETAIL FROM A "QUEEN ANNE" HIGHBOY, SHOWING ARCHITECTURAL MOTIFS.



CLASSIC ARCHITECTURAL MOTIFS IN "DECORATED QUEEN ANNE" TABLE.



AN EXCELLENT MODERN ADAPTATION OF THE ADAM STYLE, IN A PENNSYLVANIA COUNTRY HOUSE. Wilson Eyre, Architect.

is no prevailing type of architecture. It may appear to some that we are in a state of architectural flux and active evolution, to others that we are merely exercising our indefeasible right as freeborn Americans to be eclectic and choose whatever style of architecture pleases us individually. Nay, further, we have no compunction about jumbling two or three styles together if the fancy strikes us. Who shall say us nay?

Be all this as it may, there is really no sound objection to reasonable eclecticism and adaptation if proper regard be had to principles of consistency and good taste. And if we have consistency and good taste in architecture, it is just as necessary to observe the same principles when it comes to dealing with furniture. It is both expedient and desirable to have furniture combination so long as we know the properties of the elements we are concerned with. It would be exceedingly imprudent and might be disastrous to combine chemical elements in a hap-

hazard way without knowing the properties of each and how they would act under certain given conditions. Just so it is in combining different kinds of furniture and adapting it to mixed architect-The chemicals if ural surroundings. wrongly and stupidly combined revenge themselves by exploding in your face. Outraged furniture, though less violently demonstrative, can wreak potent vengeance on the perpetrator of ill assortment by its distressingly jarring appearance of which he must be at least subconsciously cognizant and hence uneasy without knowing the cause.

The only way in which one can hope to understand the underlying principles governing successful combinations of several different styles of furniture or suiting them to architectural surroundings for which they were not originally intended, is by analyzing each and every one with the utmost care. This searching analysis we shall endeavor to make in the course of ensuing papers. First, THE ARCHITECTURAL RECORD.



DINING ROOM, RESIDENCE OF MRS. L. Z. LEITER, BEVERLY FARMS, MASS. Parker, Thomas & Rice. Architects. An "Adam" interior, correct architecturally, but incorrectly, though inoffensively furnished.

however, it is necessary to indicate the general lines upon which the analysis will be based. In each instance the salient characteristics of the architecture of the period will be summarized, special heed being given to such details of ornament as are likely to exert an influence on the designers and makers of furniture. Having established this point of comparison, the furniture of the period will be dealt with in detail from several points of view. Lastly, attention will be paid to the question of using furniture of that same stamp in equipping our own houses and instances of successful treatment will be discussed.

It is necessary to revert for a moment to the second step in the scheme of analysis to explain the particular points to be considered and the manner in which they will be dealt with. First in the list of topics for analytical study comes an enumeration of the articles found in com-

mon use at the several periods. Upon first thought such an enumeration may not appear to have any vital significance for the aspect of furniture treatment before us. It must be remembered, however, that an inventory of the pieces belonging characteristically to this or that period affords valuable ground of comparison with other periods, reflects the social conditions of the day, which all had more or less bearing on both architecture and furniture, and, lastly, that it serves a double function as guide and suggestion in contriving decorative schemes and avoiding errors of anachronism where rigidly correct period treatment is contemplated.

The next, and by long odds the most important, subject for close analytical consideration is contour. Form and line are of infinitely more moment in tracing the architectural relationship than material or color or any type of decoration. To contour we owe the subtle charm so captivating in old furniture that bespeaks fine sensibility and master craftsmanship on the part of nameless cabinetmakers whom, unknown, we honor for their skill. Also by watching contour we may quickly detect coming changes of style and taste and follow the merging of one period into another. In analyzing and comparing contour, cornices and mouldings constitute a particularly vital point.

Proportions also have their definite les-

the sort fitted to receive it. Under such circumstances it must always be at a disadvantage.

Next, materials demand due measure of critical attention. The lesson to be learned about wood harmonies may not be disregarded with impunity. Here, too, must we take account of the fabrics that have entered the furniture field in the past as valuable decorative accessories. Their examination opens up to us wonderful resources of color that we may most profitably avail ourselves of.



AN EXAMPLE OF THE STYLE OF THE BROTHERS ADAM.

son to teach. The height, breadth and width of a cabinet carcase that would accord with the dimensions of a long, low-studded Jacobean room would have been conspicuously out of keeping in a square, high-ceiled parlor of Queen Anne's day where it would have appeared ridiculously squat. This fact alone, by way of practical application, should be sufficient to deter the modern architect or decorator from advising the purchase of old oak cabinet work for a house or apartment whose dimensions are not of

It is important, too, in this connection that we gain an accurate knowledge of the peculiar characteristics of the design and color of the fabrics belonging to each period.

Under "decorative processes" and "types of design" a fascinating and valuable field of study presents itself. Then "structure," in due order, claims attention and demands careful examination if our knowledge is to be thorough. Mounts and finish are items too frequently neglected and they are just the things we

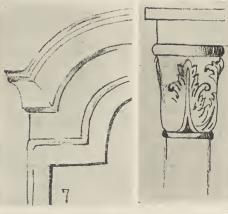
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AN EXAMPLE OF THE "CLASSIC REVIVAL" OR "AMERICAN EMPIRE." An old house in Baltimore, Md.

cannot afford to neglect if we are to employ faithful, accurate and intelligent methods in our decorative work.

In all the foregoing matter we have endeavored to convey some notion of the way in which the critical faculties must be brought into play in the pursuit of an absorbingly interesting and significant investigation. In the ensuing papers the methods previously indicated will be adhered to and in the course of development certain principles of successful combination will be enunciated in addition to giving a detailed review of rigid period proprieties. Never was there a time wealthier in decorative furnishing resources than our own. Never was there a time when larger liberty in the employment of those resources was permissible. And never was there a time when more accurate and thorough knowledge upon all details pertaining to our subject was more appreciated and in greater demand or, we might add, more needed.



DETAIL OF A QUEEN ANNE CORNICE. ACANTHUS CAP-ITAL OF A PIL-LAR ON EM-PIRE SIDE-BOARD.

EDITORIAL NOTE: Subsequent articles in this series will deal in detail with the several decorative periods reviewed in this introductory paper, and emphasis will be given to the parallel development of architectural and furniture motifs, as well as to the importance from the architectural viewpoint, of furnishing interiors consistently and correctly.



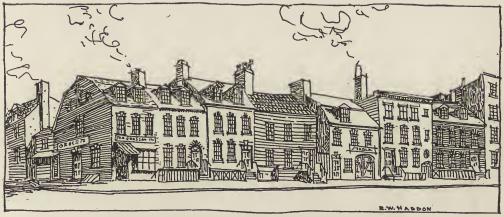
Here the architectural treatment is an excellent study in the Adam style, but the French furniture, while pleasing in itself, is not in accordance.

AN INTERIOR IN A RESIDENCE IN WASHINGTON, D. C. JOHN RUSSELL POPE.



RESIDENCE OF FREDERICK AYER, ESQ., PRIDES CROSSING, MASS. PARKER, THOMAS & RICE, ARCHITECTS.

An example of an interior furnished regardless of the "periods," but successful because of its consistent good taste. Such examples are very rare.



A PROSPECT OF OLD VARICK STREET, NEW YORK CITY.

•: VARICK STREET: Which is in Greenwich Village, Manhattan

A Narrative and Some Pen Sketches By Rawson W. Haddon



ARICK STREET, in the days long before St. John's Chapel was built, was little more than a path through a vast, dismal swamp, known as Lispenard's M e a d o w s. Before 1800 it was inhabited entirely by

cartmen, blacksmiths, and tallow chandlers, with here and there a farmer, who had leased a farm in this dismal region twenty or more years before the Chapel at the foot of this street was even thought of. But after 1807, when this "elegant and genteel building" was erected, the street was improved and its former occupants were all put out. It was hoped that the new church would attract a more desirable class of tenants to this almost suburban region. New houses were built, the land was carefully restricted, and everything was done that possibly could be made to make Varick Street the most desirable location for residences in the city.

All houses in the future were to be built of brick or stone, they were to be not less than a certain height in front, and certain businesses, including "Cartmen, Blacksmiths and Tallow Chandlers," were forever excluded from the location in which they had formerly held sway. The street was paved, perhaps by some predecessor of the famous Mc-Adam, and lanterns were undoubtedly hung up at regular intervals to be lighted on nights when the moon did not shine; or if the woeful tales of irate citizens, who wrote to the papers of that time are true—on nights when the official lamplighter was not too lazy to come out to attend to his official business.

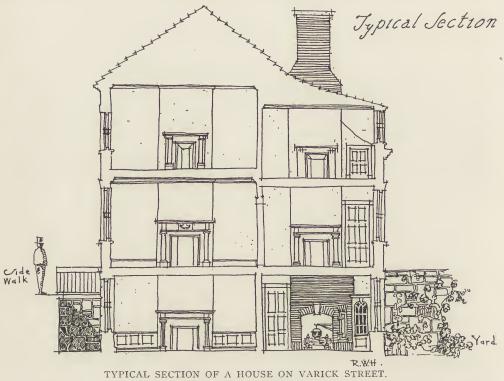
Queer things these houses were, for which the city's "best families" deserted their homes in the lower part of the city. Some were built of brick, a few of stone, and here and there was a frame one. A few were large, but most of them were so very small that they seem most cramped and uncomfortable to modern eyes, and one wonders what the "best families" of today would think of them. But—

"Little of all we value here

Wakes on the morn of its hundredth year Without both feeling and looking queer."

The queerest thing of all about them

THE ARCHITECTURAL RECORD.



Drawn by Rawson W. Haddon.

may have been brought about by the restriction relating to the heights of the buildings. The builders of long ago seem to have been every bit as good at "getting around things" as are those of the present time, and it was, perhaps, some genius among them who discovered that this restriction applied only to the front of the house. You could do whatever you pleased with the rear. The result was that the roofs of many of the smaller houses were made to slope down in the back so that the second story rear rooms were in the roof with dormer windows, and the rear elevation showed but a basement and first floor, while the front elevation showed as brave a two-story and basement house as was ever built. The "typical section" shows how this worked. Another favorite device was to bring the roof in the rear down to within two feet or less of the floor with the windows only a few inches above the floor level. This is shown on the part of the house to the right of the "typical rear elevation."

In many of the houses, as in this "typical" one, the ceilings of the rooms in the rear of the house were much lower than those in the front. In this house the ceiling of the front room on the first floor was nine feet high and the rear room only eight. On the second floor, there was also a difference of a foot between the rooms in the front and rear.

tween the rooms in the front and rear. This "typical" house was one of the most interesting in the Varick Street section. It was on Watts Street about fifty feet from the corner of Varick, and it has just recently been torn down. The old lady who occupied it was perfectly willing to show the house to visitors, but she was not at all kindly disposed to having her domicile measured up and, it is, perhaps, to our disgrace that permission to take the measurements was only received after we had presented a half dollar-hard money-to Sally, this lady's maid of all work, and even then it had to be measured while "the Missus" was out shopping.

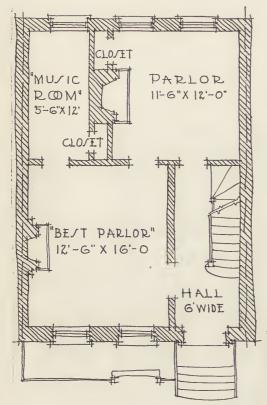
Most of the houses that were built on

50



Drawn by Rawson W. Haddon.

TYPICAL FRONT ELEVATION OF A HOUSE ON VARICK STREET, NEW YORK CITY.



First Floor

SKETCH PLAN OF A HOUSE IN VARICK ST.

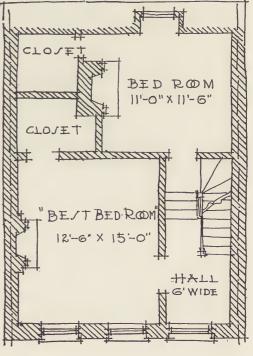
Varick Street were unusually small, many as narrow as twelve or fifteen feet, and few wider than twenty or twenty-five feet. In plan each was the same as its neighbors on either side. You came into a narrow hall-no vestibule-and to the right or left, as the case happened to be, was the "best parlor." At the rear, usually the entire width of the house, was a good old-fashioned settin' room, with large windows, sometimes a wainscoting or chair rail, and always a big fire-place. In some houses there was another little room at the rear, generally used as the "best bedroom," which cramped and uncomfortable place of abode was sacred to the occasional country cousin, who stopped or tarried in town for a spell, to see the sights and hear the sounds. In the "typical" house, this room was

occupied by a battered violin, that had

been "touched by the hand of death in 1863," as H. C. Bunner said, and another ancient and obsolete musical instrument, and it gloried in the name of "music room."

By the way, Sally told us, in spite of the evident fact that this house was not built until a dozen or more years after Washington's death, that the General once spent, not a night or a day, but a whole week; and she also mentioned that there was a house not far away, just where, she was not sure, where "an Indian Princess named Pochahontas, who was much celebrated for her beauty and elegant manners, spent her honeymoon after marrying one of Washington's generals." Perhaps her dates were a little mixed, but this did not lessen her enjoyment in walking in the footsteps of this "celebrated beauty."

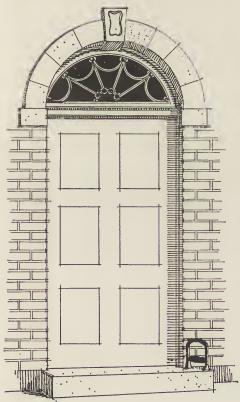
Upstairs in most houses were two large rooms, and a smaller one of the same size as the "best bedroom" on the floor



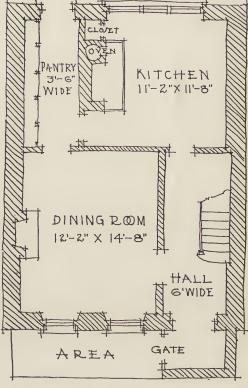
reconditioor SKETCH PLAN OF A HOUSE IN VARICK ST.

below. In some houses this room was later divided into two perfectly glorious closets, but otherwise there were no closets in the houses at all.

There was no other way of heating them than by open fireplaces. The rooms were, and still are, in spite of Franklin stoves and Baltimore heaters, exceedingly cold and draughty. Warming pans must have been welcome and necessary luxuries on cold winters' nights when these houses were new. Neither was there any plumbing; and candles, and later Betty and Tilly lamps shed but feeble rays of light. But in spite of all this, these houses, from one end of Varick Street to the other were happy as well as beautiful and at one time most fashionable dwellings. And one may still find people living in some of them, whose parents and grand and even great grand-



₹.₩.₩. A DOORWAY IN VARICK STREET, NEW YORK CITY.



Basement

SKETCH PLAN OF A HOUSE IN VARICK ST.

parents lived there before them. I have in mind one old lady now nearly ninetyfive years old, who has never lived in any other house but the one in which she now lives, on Varick near Dominick Street.

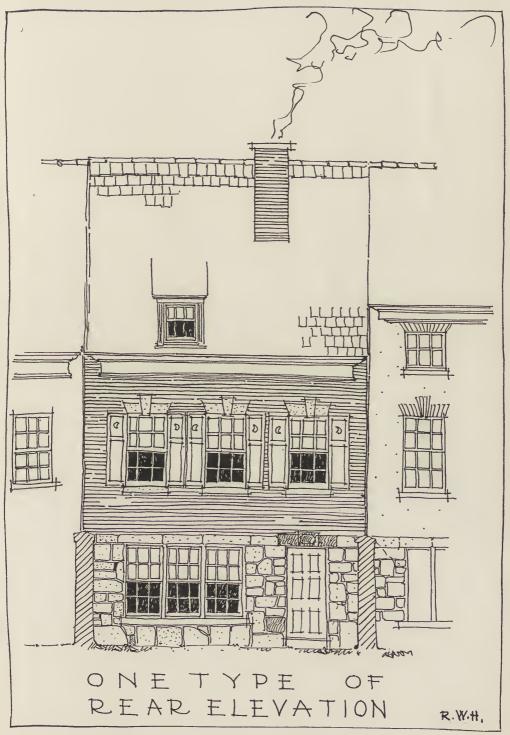
For many years that has been one of the most popular of the streets of old New York. Very few, if any, of the houses here can be called Colonial in the really historical sense of the word. Much of the best work—the Rectory of St. John's Chapel, for instance, which was not built until after 1823, and which was *not* designed, as it is often said to have been, by John McComb—can date to no more remote times than those of the war of 1812.

It has long been a street where people were rather suspicious of modern progress and the "march of the encroaching city" has until now done it little harm. But perhaps, because of its hundred or more years of quiet life, the street is soon to be the scene of bustle and confusion and Varick Street will soon be little more than a memory—an "aromatic memory," one might say—of pleasant days long gone bye. Seventh Avenue is to be extended to Varick Street and made into one of New York's greatest thor-

oughfares. Varick Street, in turn, is to be widened nearly forty feet. This means that hundreds of these fine old houses both here and on the side streets will soon have to be torn down. Many of these have already been destroyed. The "typical" house is among these, and Sally and her *Missus* have flown to other parts unknown.

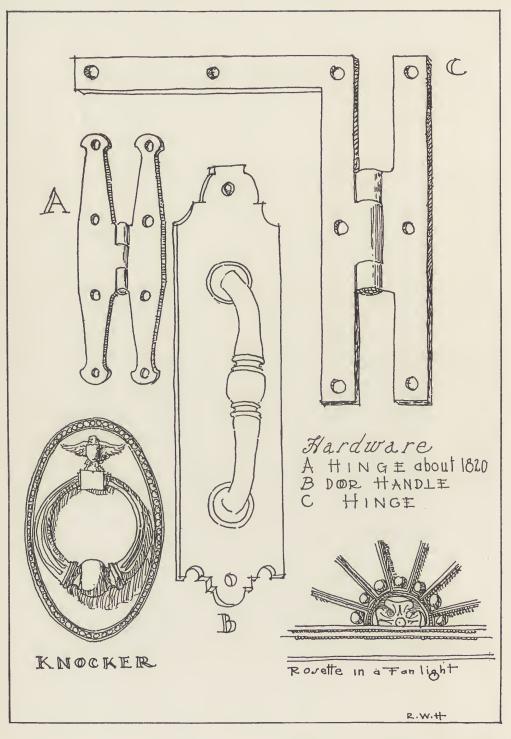


THREE SNAPSHOTS OF VARICK STREET, NEW YORK CITY.

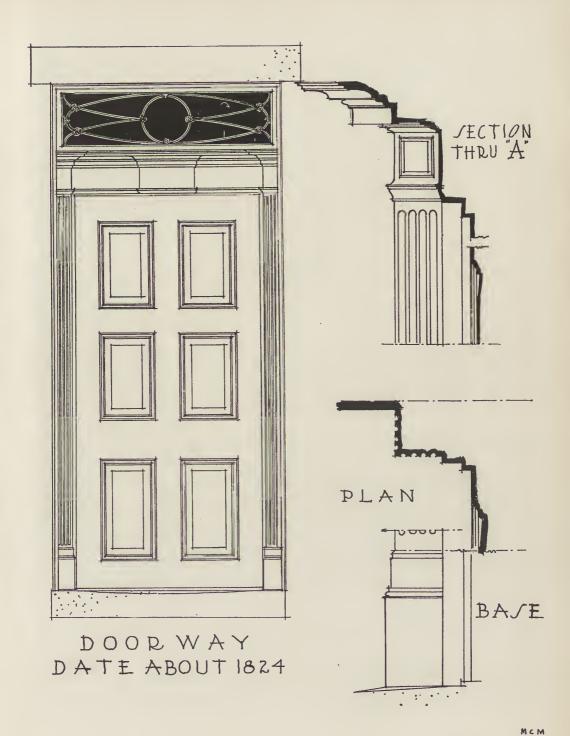


Drawn by Rawson W. Haddon.

REAR OF AN OLD HOUSE ON VARICK STREET, NEW YORK CITY.



SOME DETAILS FROM VARICK STREET. DRAWN BY RAWSON W. HADDON.



R.W.H. XIII

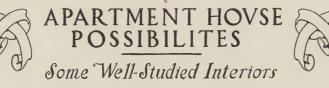
SOME DETAILS FROM VARICK STREET. DRAWN BY RAWSON W. HADDON.



STAIR HALL. THE CITY APARTMENT OF L. B. KENDALL, ESQ., NEW YORK CITY.



RECEPTION ROOM IN THE CITY APARTMENT OF L. B. KENDALL, ESQ., NEW YORK CITY.



By Costen Fitz-Cibbon



AN YOU conceive of a door that has only one side? With this apparently harmless question a well-known professor in a large American university is fond of puzzling his students when they first essay the time honored study of logic under his

tuition. Whether or not the concept of a one-sided physical door be possible to the mysteriously intricate workings of some philosophical minds, there *is* a very important and lively question, in which doors play a part.

that has but one side-the question of the interior decoration of a suite of rooms in an apartment house. Here the considerations of furnishing the rooms are wholly dissociated from all connection with the exterior aspect of the building. No architectural proprieties have to be deferred to, no canons of consistency between outside and inside have to be observed. The only individuality and claim to recognition possessed by the apartment must be conferred solely by its own internal merits. The field offers a perfectly clean surface whereon may be written what one chooses. The only restricting factors to be reckoned with are dimensions, the exposure or lighting and the dictates of personal inclination.

Freedom from exterior trammels, however, does not absolve one from bestowing his best efforts and most careful thought. Rather does it challenge him to exert his utmost skill and cunning in making a neutral, and often characterless, setting the ground-work for most pleasing and excellent furnishing. He must create individuality and charm altogether by the deft manipulation of his decorative resources. For that very reason, because the attractiveness of the result depends entirely upon decorative art and because personality has, in certain respects, freer scope, the manner of solving apartment house problems has a peculiar interest.

The well-planned duplex suite under consideration is in an apartment house designed by Mr. W. A. Boring, architect, and the interior arrangements have been carried out under the direction of Mr. C. J. Charles, who is widely known as a connoisseur and authority on the historical element of old English interiors to the study of which he has devoted many years. In one respect circumstances have been peculiarly favorable in the present instance—the rooms are all of sufficient size to permit work unham- " pered by cramped spaces. The illustrations show the private staircase, the library, the drawing-room, the diningroom, a bedroom, a boudoir and the servants' dining-room. In treating these rooms the scheme has not been confined to one historic period. It has, instead, followed several closely related periods that merge into one another, beginning with late Jacobean or Carolean and coming down to Decorated Queen Anne. This course is quite justified by the happy results achieved. In choosing a setting embracing Carolean, William and Mary and Queen Anne characteristics it was possible to introduce into the scheme a wealth of vigorous and varied color and yet, at the same time, keep straitly within the bounds of historic precedent. No epoch was ever more gorgeously chromatic with regard to upholstery stuffs, hangings and the methods of decoration applied to cabinet work itself. It seems a thousand pities that more avail has not heretofore been made of this op-

portunity and one cannot but feel gratified that such worthy modes are now winning more esteem than was for many years their lot.

To furnish a room or a suite in a "noperiod" mode, or with a combination of period forms, is often more agreeable than to adhere strictly to a straight period interpretation. We may add that the practice is obtaining more and more favor as the subject of interior decoration increasingly engages popular interest and patronage. At the same time, the acceptable achievement of this method of furnishing demands vastly more skill and judgment than the following of rigid period precedents.

Let us examine the rooms before us according to their chronological period affinities. By this sequence the library first claims our attention. The floor of this room, and of the other rooms, too, for that matter, is made of old oak boards removed from an ancient house, about to be torn down, in England. Chinks and knot holes have been plugged with patches and, by careful relaying, the whole surface has been made as even and tight as could be desired. The charm of such a floor is its marvelous color and smoothness that nothing but centuries of wear and wax polishing will impart and its absolute consistency in tone with the rest of the old woodwork in panelling and overmantel. Panelling that once graced a Seventeenth Century English house sheathes the walls to within several feet of the ceiling, the space between the cornice of the panelling and the plaster cornice above being filled with a rich red brocade-patterned paper which sounds the dominant note of the room's color scheme. The expanse of small square panels in the wainscot is relieved by a simple and effective frieze of vertical nulls. More elaboration has been lavished upon the fireplace and overmantel. A Caen stone fireplace of excellent Tudor design is surmounted by an oak mantel shelf supported at the ends by pillars wrought with an intricate guilloche pattern. The overmantel, divided into three bays of characteristic Jacobean quintuple panels by four detached fluted pillars supporting an en-



A MANTEL DETAIL. THE CITY APARTMENTS OF L. B. KENDALL, ESQ., NEW YORK CITY.

tablature with a deeply channelled frieze, is instinct with the Renaissance spirit that pervaded the Stuart period. Bookcases built into the wall are also fashioned from old timber and the top rail, adorned with carving in the much favored demi-lune motif, really forms a decorative band or frieze around the room. The whole setting of the room is carried out with such scrupulous nicety of regard to correct detail that even old locks and knobs have been secured for the doors.

One cannot suppress a qualm of regret that all this beautiful oak, with its wonderfully mellow tone, should have been wrenched from its original surroundings, but the consolation of philosophy is that it is better it should be where it is valued and cared for than left to decay in neglect or turned over to the tender mercies of the housebreaker. The ceiling is a well executed piece of plaster work of geometrical ribbed design copied from a Tudor model and enriches the aspect of the room in a marked degree. A glance at the illustration will show how greatly the ceiling adds to the appearance of the apartment; it will also serve to remind us that we do not ordinarily pay enough heed to the element of decorative value in the overhead part of our rooms. The windows are of small leaded panes as are also the casements above the bookcases---set there to light a passageway in the rear-and cartoons of painted glass are let into them to add an enriching note of color. Painted glass need not carry the savor of ecclesiasticism with it and it is encouraging now and then to find someone who will boldly snap his fingers at narrow prejudice and avail himself of its large resources for domestic use.

When we come to consider the movable equipment of the library it is hugely refreshing to see that the mantel and tops of the bookcases have not been loaded to repletion with all manner of fiddlede-dees and fallals till they look like votive shrines in a Chinese joss house. Fascinating baubles and oddments have an insidious way of multiplying before one realizes it and it requires perpetual vigilance and stern resolve on the part of both decorator and occupant, especially the latter, to keep alluring gimcracks within bounds. This is not to be qualified as an unqualified condemnation of bric-a-brac; it is merely a caution in behalf of reasonable restraint. The little personal things make a room look as though it were really lived in but when there are too many the value and beauty of all are obscured.

The chief pieces of furniture in the library are the long oak table and the ample sofa placed dos-a-dos to it so that two lamps shed a subdued but abundant light for reading to anyone sitting there. The table, with its bulbous legs of the familiar "cup and cover" type and the heavily carved rail of its underframing, is an exceptionally beautiful piece of Jacobean oak, rather severe, it is true, but impressive while the sofa, by way of sharp contrast, its spiral turned legs and stretchers of a somewhat later date upholding a seductive structure of upholstery, is eloquent of solid comfort. Before the fire and close beside the table, though not visible in the cut, is a long backless form or bench such as was commonly used by those sitting at table till the middle of the Seventeenth Century or even later. It is not the most inviting seat imaginable and scarcely conducive to fireside reveries. Few, in our ease-loving day, would choose it in preference to the luxurious comfort of a soft sofa and one rather wonders why the position of sofa and table was not reversed. All the chairs in the room are of Jacobean stamp and several are covered with parti-colored petit-point of quaint design, full of interest both pictorial and archaeological.

The old Oriental rugs of mellow hue, harmonizing with the prevailing red scheme, leave enough of the floor bare to reveal its beauty, an arrangement worthy of commendation. It does seem illogical to do as so many people do—take prodigious pains with their floor, secure a beautiful surface and then cover the whole thing so closely with rugs that the average person never suspects what he is treading on. Such crowding with rugs both obliterates the floor and detracts from the beauty of the individual rug. A



THE LIBRARY. THE CITY APARTMENTS OF L. B. KENDALL, ESQ., NEW YORK CITY. good rug, like a good picture, often needs to be by itself to be properly appreciated. It needs a sufficient space of surrounding unobstructed floor as a setting to show its charm of pattern and color to advantage.

The other distinctly Jacobean room is the dining-room. Here the oak wainscot of square panels covers the whole wall surface and is surmounted by a narrow frieze of strapwork, oval bosses and pendants, in mid-Jacobean taste, just beneath the angle of the ceiling. The almost total absence of cornice, the narrowness and simplicity of the frieze and the unbroken range of rectangular panels create a severe setting that makes an excellent background to throw into strong relief the bewilderingly elaborate carving of the overmantel and the richly adorned court cupboard and buffet which unfortunately do not appear in the illustration. The overmantel deserves close study for its admirable execution as well as for its engagingly hideous and interesting grotesques in human form. As in the library, the windows have leaded casements into which are let exquisite bits of old painted glass that have been gathered up here and there on the other side of the water.

The pargetted ceiling, with relief mouldings in geometrical patterns, is of different design from the one in the library. The stiff little floral sprigs and sprays by the very naivete of their outline suggest the buxom, untrammelled invention of the craftsman who took pleasure and pride in the work of his hands and was not afraid to indulge in the play of fancy. Of course this ceiling is quite modern but was scrupulously copied from an old model, rich in its sweep of inspiration, by those who are laudably trying to restore the art of the plasterer to its ancient rank and dignity and in their reproduction they have preserved the softness of line that distinguished the Seventeenth Century work. Between all the fixed physical features of the room, panelling, overmantel, floor, pargetted ceiling and windows spotted with gorgeous bits of color, the place is really furnished without furniture, if one may be permitted to indulge in an Hibernianism.

As to movables, the room is just what it should be. There is enough for all possible needs and no more to add distraction. Consequently, with its hangings, upholstery and floor covering of old, dull red, it is easy and restful in aspect. As the picture shows, a Jacobean refectory draw table, with richly carved gadroon bulb legs and lunette underframing, does satisfactory duty for modern uses. By an ingenious device, worthy of modern reproduction, these draw tables can be extended to almost double length and that without any annoying legs to pull out. Closed, they are not of bad shape or size for an ordinary sized family, extended they are not without their advantage in bringing opposite dinner guests nearer together. Some may object that the stretcher underbracing near the floor is in the way of one's feet. To this we might answer "When you are in Rome do as the Romans do." In other words, our forefathers put their feet on the stretchers and if they bother you, do the same. The chairs are of late Carolean type with carved Flemish scroll legs and underbracing and carved posts. seat rails and arms.

The drawing-room, between the dining-room and the library, presents a contrast in style, though not a violent nor objectionable one, as it is furnished in the manner of a period that grew naturally from late Stuart antecedents. Here we have an agreeable mixture of things dating from the reigns of William and Mary and Queen Anne, things which, after all, had so much in common that they are constantly confounded unless the most punctilious care be observed. Before considering the furniture, however, a word must be said about the room itself. From floor to ceiling the walls are sheathed with oak in the big bold panels of Queen Anne's day, the mouldings marking the borders of the panels and the marble surround of the fireplace being of a like trenchant boldness while the intricate acanthus carving in the cove of the cornice and on the door and window trims adds a counterbalancing touch of refinement. The simple design of the ceiling follows the fashion of the day and is an exquisite piece of work.



THE DRAWING ROOM. THE CITY APARTMENTS OF L. B. KENDALL, ESQ., NEW YORK CITY.

THE ARCHITECTURAL RECORD.



THE DINING-ROOM. THE CITY APARTMENTS OF L. B. KENDALL, ESQ., NEW YORK CITY.

Floor covering, hangings and upholstery are prevailingly of an old dull green. Distributed here and there about the room is a set of six William and Mary chairs, with cup-turned legs and serpentine stretchers, covered in varicolored petit-point on a dark ground. Several armchairs and a settee with serpentine stretchers and Spanish feet belong also to the same mobiliary period. Queen Anne's day is represented by a tall clock with a margueterie case in the corner, a lacquer cabinet on a carved and gilt stand, an elaborately carved and gilt console table and above it a gilt mirror with swan-neck pediment and, last of all, an unusually fine burr walnut secretary. The gilt table with goat heads and satyr masks really belongs to a slightly later date. The careful observer has

probably noted the absence of a multitude of pictures. It would have been a serious mistake to hang too many. The beauty of the oak panelling would have been lost. Better the dignity of a few sconces and the glow of color from a few portraits. Certainly more in keeping with the spirit of the periods represented. It is a modern aberration to esteem quantity rather than quality and load our walls till they look like wouldbe picture galleries.

In passing up the staircase to the rooms above, one cannot forbear a word of praise for the tapestries hanging on the white panelled walls and for the commendable restraint displayed in furnishing. The walls of the bedroom and boudoir are happily a standing protest against the foolish obsession, under



ANTECHAMBER. THE CITY APARTMENTS OF L. B. KENDALL, ESQ., NEW YORK CITY.

which not a few otherwise intelligent people labor, that white paint was a sine qua non for the interior woodwork in houses of Queen Anne or Georgian type. They are done in a pale canary color of warm tone and radiate a cordial cheer that frigid white could never have given. They likewise afford a congenial surrounding for the paintings of fruits and flowers let into the panels above the mantels and elsewhere. The bedsteads of course are modern but made with due regard to the Queen Anne spirit of fur-niture design. The rest of the bedroom outfit consists of excellent Queen Anne pieces brought together from various sources and the Oriental rugs, especially an old Chinese one, are particularly pleasing.

A side table before a wall mirror is a most felicitous substitute for that ugly, illogical, cumbersome and altogether objectionable piece of furniture commonly called a bureau. It is always refreshing to find people who have the courage to discard them. In the boudoir are choice specimens of late Stuart, William and Mary, Queen Anne and Chippendale chair, table and cabinet work very agreeably brought together. Before quitting the apartment one must pause to bestow a bit of admiration on the servants' dining-room with its cottage rushbottomed chairs of Stuart date, its barley twist gate table and its general aspect of immaculate neatness and cheer.

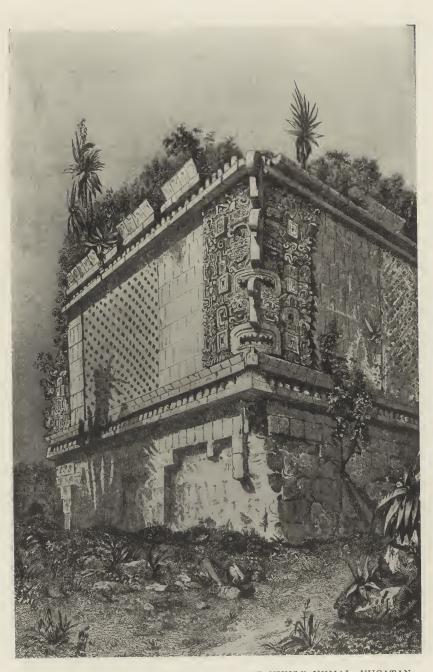
Two lessons may be clearly read from the study of these apartments. First, how pleasing may be the combination of two or more related styles, so long as the contrast be not too violent, giving heed to historical accuracy where it is due and yet making daring juxtapositions. Second, it is quite patent that an apartment may be made just as attractive and homelike as a detached house so that there is little excuse for the indifference of many apartment dwellers to their surroundings on the ground that apartments are difficult and don't belong to you anyway.



A BEDROOM. THE CITY APARTMENTS OF L. B. KENDALL, ESQ., NEW YORK CITY.



THE SERVANTS' DINING ROOM. CITY APARTMENTS OF L. B. KENDALL, ESQ., NEW YORK CITY.



SOUTHEAST ANGLE OF "THE HOUSE OF THE NUNS," UXMAL, YUCATAN. Here the stone carvings recall the superimposed masks like those on the "Totem Poles" of the northwest coast of America, and the side walls suggest that, in the prototype, screen walls of woven mats were hung between these. (Illustration from Stephens': "Incidents of Travel in Yucatan.")



THE COURTYARD OF THE PALAZZO VECCHIO, FLORENCE, ITALY.

The columns enriched with stucco reliefs are as though swathed in woven and embroidered work, held in place by bands above and a guard of upright staves below. The walls beyond the columns were painted, to fix permanently in color the tapestries that were too fragile.



TEXTILE ORIGINS IN ARCHITECTVRE ~ A Theory of Evolution —



By Charles De Kay

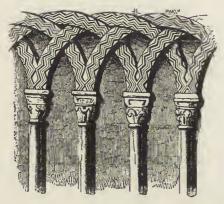
Continued from the November, 1913, Architectural Record



M B R E L L A S and sunshades are objects far from modern; ladies used them in Greece five centuries B. C.; they antedate by thousands of years architecture as we now think of it. The early kings of Chaldea and Babylonia used them on or

about their chariots as a royal symbol. So did those of India. Now, royal umbrellas entered into primitive Indian architecture as the *kti*, the umbrella forms in Ceylon, Burmah and parts of China—that finial which tips the topes, pagodas and other religious towers near temples and monasteries with an oddly shaped excrescence not easily understood. In Japan we find five, seven or nine of these reminiscent umbrellas topping the pagodas.

Another textile guard against sunstroke and swordstroke, the turban, may, for all we know, have entered early into Oriental architecture. But we are certain it did from the eighth Christian century onward, because Mohammedan architecture has made it its own. Not only does the turban form the common-



INTERLACED WORK CHURCH AT DEVIZES, ENGLAND, ABOUT 1160 A. D.



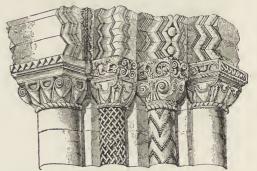
CATHEDRAL OF CANTERBURY, ENGLAND, ABOUT 1120 A. D. Both these treatments show strong suggestions of braided and emb.oidered vestments of priests.

est decoration of Moslem tombstones, the domes of mosques are very often shaped and colored like splendid turbans. The Great Mosque of Teheran in Persia, for example, suggests a head-covering with a band below the balloonlike upper part, nobly decorated with inscriptions in the Kufic or architectural script. We see just such turbans on the Orientals in illustrated books from the fifteenth to the seventeenth centuries.

The porch before this mosque, with its three high openings, allowing one to see the decorated front of the sanctuary, presents, as it were, a series of magnificent carpets of the later Oriental type carried out in terra-cotta plaques. There is no mistaking the influence of textiles on "Saracenic" architecture. It was introduced into northern Africa and Spain. A doorway of Tarragona looks for all the world as if the builder had hung up a prayer-rug and copied the main part of the design—border, inner squares and horseshoe arch, resting on fanciful capitals of columns—from that woven object in which there was no necessity to consider matters of weight and artistic "sincerity."

Consider the slender columns that form the distinctive feature of the Court of Lions in the Alhambra. They make the chief decoration of that cloistered garden, with its fountain resting on the backs of lions. These columns have "binders" above the base and below the capitals, proclaiming thereby that some thousands of years before the Moors came into Spain the column was a fasces or bundle of rods. The capitals and upper screen within and without are sculptured and painted, but the designs retain the original suggestion of plaited and woven work in materials of differing hues. Mosaic, faience, molded plaster, carved wood-the materials may differ, but the origins are clear to whomsoever possesses the clew. This "arabesque" or geometric" style was once a free-handed style of ornamentation produced by primitive looms.

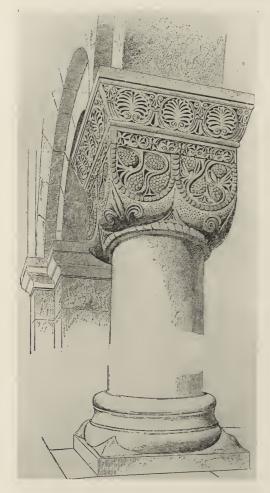
This attention to pattern, to superficial



ROMANESQUE CAPITALS, PORCH OF ST. PETER'S, NORTHAMPTON, ENGLAND, ABOUT 1160 A. D., SHOWING LATTICE WORK, WOOD CARVING, ETC., DERIVED FROM ORIENTAL WOVEN MATERIALS.

(Illustration from Sturgis: "Dict. of Architecture.")

THE ARCHITECTURAL RECORD.



- A TYPE OF DESIGN TRANSMITTED TO WEST ERN EUROPE FROM ASIA MINOR OR EGYPT, ON RUGS, VESTMENTS, SHAWLS, ETC.
- This type of ornament appears in the Romanesque churches of the 8th to 12th centuries, carved on capitals and walls.

design, to the play of colors is an inheritance from remote Asian antiquity. For we see the same thing in the decorations which have survived among the ruins of Assyrian cities, sacked and destroyed more than three thousand years ago. These tiled and painted-stone coverings of walls of palaces, inside and outside, are imitations in durable materials of perishable rugs, carpets, mats, hangings. The reception room of an Assyrian King was plainly copied from that grandiose tent which Oriental monarchs carried about with their armies



BYZANTINE INTELACING RIBBON OR "ROPE-WORK," ALSO CALLED THE "BASKET PATTERN," SEEN IN THE WINDOW OF A SMALL CHURCH AT ISH KHAN, IN ARME-NIA.

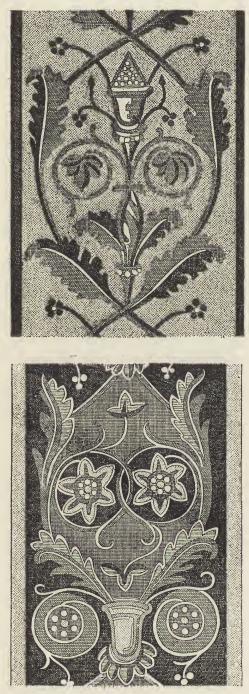
(Illustration from Ferguson: "History of Architecture.")

when at war or when moving about their own domains. Such a movable room roofed, walled and floored with magnificent textiles, the product of artisans renowned in their day, descended from



BYZANTINE INTERLACING RIBBON AND ROPE DESIGN, WITH HEAVY TASSELS LIKE THOSE ON THE ROBES OF ASSYRIAN DEITIES AND KINGS. WINDOW IN A SMALL CHURCH IN ARMENIA.

(Illustration from Ferguson: "History of Architecture,")



(From Gerspach, "La Mosaique.") MOSAICS OF THE 13TH CENTURY, IN ST. JOHN LATERAN, FOLLOWING OLD TRADI-TIONS OF THE 6TH CENTURY.

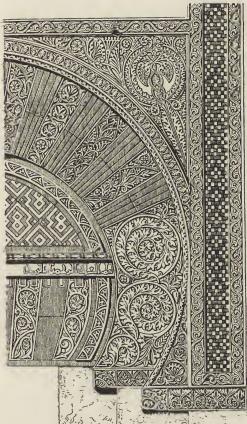
The design is distinctly of a textile nature.

famous artist ancestors—was considered fitting for gods as well as monarchs.

That is why Moses called upon Jewish experts in the arts of carpentry and weaving to arrange the Tabernacle, a portable temple derived from the tentcourts of Egyptian kings and those of Mesopotamia. That we instantly per-ceive, when we read the specific and minute description of the tabernacle in the Old Testament, its curtains and veil and hangings of blue and purple and scarlet and fine linen. The Temple at Jerusalem, the synagogue in any country, are merely amplifications of the tabernacle. But this is not at all special to the Jews. As we have seen, it is the natural, normal evolution of architecture. One may say that, owing to the small interest the Jews have taken in architecture, the original tent and textile origin has been less overlaid and forgotten in their case than among some other peoples.

Among Egyptian wall paintings there are scenes of the making of yarn, dyeing and coloring, and of weaving at the loom, all executed by women under the superintendence of a man. Coming out of Egypt, which had been for countless generations the home of skilled artificers in carving, metal work, ship and chariot building, of weaving and of embroidery, the Hebrew hosts could not fail to have among them persons with similar accomplishments. Moses named two as artists of the tabernacle, Bezaleel from the tribe of Judah, expert in carpentry and metal work, and Aholiab from the tribe of Dan, expert in woven work; and then called upon the "wisehearted" women of Israel to supply the cloth of scarlet and blue and purple for the hangings. Thus, in these wall paintings, we have pictures of the loom employed by women in Egypt and Palestine before the Hebrews became a settled nation.

So in Jewish history at a much later date we are told in "Esther" how Ahasueras at Hashan in the court of the garden of the King's palace caused pavilions to be set for the princes and servants to honor the third year of his reign, "Where were white, green and blue



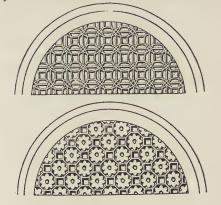
DECORATION OVER A DOOR IN AN EARLY MOORISH MOSQUE AT CORDOVA. Imitation of woven work and embroidery in relief, both in color and form.

hangings fastened with cords of fine linen and purple to silver rings and pillars of marble; the beds were of gold and silver upon a pavement of red and blue and white and black marble."

The tent lies at the root of Chinese and Japanese architecture. Some of the finest temples in Japan keep the central tentpole through tradition, although their architects do not need it to give stability to the pagoda-like superstructure. That peculiar curve in the multiple roofs of Chinese and Japanese temples and public buildings, which adds so much charm, so much picturesqueness to the skyline, irrespective of the beauty of color, is a reminiscence of the time when roofs were made of textile work, matting or cloth, which, because of their yielding quality, took the sagging line natural un-

der such conditions. In Europe and America it is only old wooden roofs which have gained some of this charm through decay. It has been left to our generation of architects, enamored of this grateful "catena" curve, to copy it in new buildings.

And, speaking of the central post, is not that a curious passage in the Odyssey where Ulysses describes the building by his own hands of his own bedchamber, in order to prove to Penelopé that he is no other than her husband? Taking a growing wild olive—for Ulysses, ever protected by the ancient night and dawn goddess Pallas Athené, giver of the olive tree, is at bottom a human embodiment of the wisdom, craftsmanship and martial prowess of that deity-Ulysses cuts off the top and trims its branches as it stands; he then builds his bed and the room itself round the trunk. Architects might well place Ulysses in a high niche as a patron of their craft, owing to his cleverness in constructing a house or a raft as need arose. He is an embodiment of the old owl-goddess Pallas, for it is by night that he beats up the camps of the enemy on the Trojan plain, he lies out all night under the walls of Troy, he visits the entrance to Hades, and overcomes at her own magic arts the hawk-goddess Kirké, and finally, as the day declines over his own halls in Ithaca, pounces upon the flock of unsuspecting suitors and does them to death as the owl at nightfall murders the birds of the day. It is noticeable in the Odyssey how



SYRIAN DIAPER-WORK, 6TH CENTURY. The designs taken from embroidered or netted materials in domestic fabrics.

THE ARCHITECTURAL RECORD.

textiles are menoften tioned, not merely the famous web of Penelopé, but the gifts of Helena to Telemachos, the coverlets supplied to Ulysses before his identity is known, and the big cloak he himself tells about in that yarn he spins to the faithful swineherd, when describing the night-ambush close to Troy. The Iliad also mentions looms and glorious purple webs, and cloaks and coverlets; but not so often as the Odyssey.

Embroideries and hangings woven on the loom cannot fail to suggest themselves to the mind when one visits Ravenna and stands in one of the Byzantine churches. Mosaics on all sides, mosaics in the vaults of the windows, mosaics on the ceiling! One thinks of the great hangings for pagan

great hangings for pagan Architecture. statues and pagan temples in earlier epochs which took years to weave and decorate, and cost each a fortune, those peploi, which were carried to the temple in pomp by a procession of the most eminent men, women, youths and maidens of the city. Plato, Euripides and Virgil have celebrated a *peplos* woven in honor of Pallas Athené, made in a great square. with a saffron ground, on which were woven figures that told of the various exploits of the goddess, not forgetting, we may be sure, the scene of her contest at the loom with the nymph Arachné. Her the cruel deity hanged by the heels, in Arachné's own web with her head down—and so turned her into a spider!

Another famous *peplos* was made for Alkisthenes the Sybarite for the temple of Juno on the heel of Italy (Juno Lakinia) which formed a landmark for navigators sailing over from Greece to Sicily. A tyrant of Syracuse who got possession of the hanging sold it to the Carthaginians for one hundred and



G OT H I C E N T U R Y G O T H I C E N T U R Y G O T H I C BOISERIE, REPRESENTING FOLD-ED LINEN HANGINGS. ENGLAND, ABOUT 1509 A. D. (From Sturgis: "Dict. of

Architecture.")

twenty talents, enough money to equip armies and carry on a war.

Such hangings or curtains were extended across the inner sanctuary or on occasion were used to drape the idol. Hecuba in Troy selects her finest piece in order to propitiate the goddess Pallas Athené who is known by the Trojans as a friend of the Greeks. The marvel of oriental loomwork is borne to her temple in Trov by the most distinguished matrons. It is difficult for those who live in cold climates to realize how much screens, mats and curtains take the place of our solid walls and impermeable windows among the dwellers in hot countries.

At Persepolis we find an arhitecture that must have depended largely for comfort and luxury on the use

of hangings, for we have cut-stone gateways and stone window frames which seem built independently at the proper distance one from another but without connecting walls.

The approaches ornamented with figures in tilework and the decorations carved in the live rock above the tombs of the kings have the colors and the repetition of the same design which are natural and common to loomwork.

When the Romans grew rich from conquests, the enormous awning, which was used to shelter the open theatre from the sun, became a favorite article of princely luxury. Great sums were paid by ambitious leaders for *velaria* that taxed to the utmost the resources of the weavers of the Levant. The church of St. Maryacross-Tiber at Rome shows in mosaics such a *velarium* with various Christian emblems; the cross, the lamb, a hand holding out a wreath from the clouds though the *velarium* itself was a memory of old cruel pagan sports.

76

THE ARCHITECTURAL RECORD.



BASKETRY AND BEAD-WORK EXPRESSED IN STONE-THE "EGLESIA," CHICHEN-ITZA, YUCATAN. (Illustration from Stephens': "Incidents of Travel in Yucatan.")

Architecture in western Europe does chipped, rather than carved, decorations not lack proofs of the one-time sov-ereignty of the needle and loom, of ilies, such as those on the River Boyne, woven-work in early times. The "bee-warrant the guess that these designs were hive" huts of stone found along the taken from textile originals, some from west coast of Ireland preserve the pris- wickerwork, others from cloth. Very

tine fashion of circular shelters made likely the immediate models were found of osier covered with clay. Singular in and on the halls of provincial kings,



INTERIOR OF CENTRAL ROOM IN RUINS AT KABAH, YUCATAN, THE ROOF SHOWING ITS ORIGIN IN THE CABIN, WITH ROOF-BEAM SADDLED WITH MATTING. (Illustration from Stephens': "Incidents of Travel in Yucatan.")

which were made of wood and wickerwork, plastered and carved, and painted. Ninth-century outlook towers of stone attached to churches and monasteries in Ireland and western Scotland, (the famous "round towers") often reveal their descent from basket-work by unnecessary bands, which, like the now useless bands about our hats, betray a former usefulness. We can feel sure that the graceful wood-and-wattle forerunners of the round towers were discarded because they were easily ruined by battering-rams and fire.

Analogous to the bee-hive stone huts of Ireland are the dome-shaped *igloos* of the Eskimo, which are fashioned of slabs carved from hard snow and built moreover with a skill that argues great intelligence. For the snow bricks are carried round and round in a spiral, so asto sustain themselves without the support of scaffolding or frame, the builder standing within the circle. A final block, properly trimmed to shape, closes the dome.

To prevent drip from the vault, skins are fastened inside. There is a parallel to this in the development of tapestry in the Orient and in Europe wherever stone or brick construction arose, for there was need of some guard against the percolation of water or the condensation of vapor on inner walls. Perhaps the cave dwellers in most countries where moisture exists in the rock and air found it necessary to line the cave with skins or textile hangings to correct dampness. The great development of tapestry in Western Europe coincides with the increase of stone and brick buildings.

Both Orient and Europe made hangings a vehicle for instruction in mythology and history. We know through the Greeks that the Persians wove into magnificent hangings the story of their attacks on Greece, such as the destruction of the guard at Thermopylæ, the sack of Athens, the canal that was excavated north of Mount Athos, the bridge of boats across the Hellespont. This was



"THE HOUSE OF THE BIRDS," UXMAL, YUCA-TAN, SHOWING A THATCHED ROOF OF FEATHERS.

(Illustration from Stephens': "Incidents of Travel in Yucatan.") far from original with the Persians, for they had before their eyes the practice of much more ancient conquerors and builders who committed historical events to woven pictures and then strove to make some of them imperishable by translating them into fixed wall paintings, using either tiles or We see how in the painted stone. European middle ages three important branches of art touched each other and exerted an influence one upon the other, viz.: tapestry, mosaic and stained glass. Besides their functions as decorative adjuncts to architecture they had their use in the teaching of religion and of history. An example of mediæval European hangings teaching history is Queen Matilda's embroidered frieze telling of William the Conqueror's occupation of Southern England—the noted Bayeux tapestry.

Not only theatres, but many temples in Greece and Rome were open to the air and sun and required tent-like coverings or *velaria* for the comfort of those who frequented them. It is certain that a large part if not all of the Parthenon was open to the sky, else the statue by Pheidias could not have been seen from the hills and bays round about. So at Olympia the head of the scated Zeus could be seen above the temple. Doubtless in private houses the open court with fountain had its suspended covering for shade, which could be raised or lowered, furled away or closely fitted down as the weather demanded. When Pericles had the Odeon built at Athens he is said to have taken as model the huge tent of Xerxes captured from the Persians, and suspended the *velarium* to masts from captured Asian vessels. So close are theatre and tent, that the Greek word skene, from which we have "scene," means tent. Temple, palace and private house, each was equally dependent on hangings, portières, curtains for comfort and privacy, so that what in modern buildings are dividing walls to form rooms were largely hangings and tapestries hung from pillar to pillar. One sees such interiors in early Italian paintings and many bas-reliefs from the classical ages tell the same story,

while Herculaneum and Pompeii show that a similar arrangement was often made in comparatively small houses.

Textile origins are to be found in a host of ornaments in religious and secular interiors. Churches offer in the reredos and retable a clear descent of the reliefs in carved stone and wood, above and back and in front of the altar, from hangings similarly decorated with embroidered or woven designs. Here we see the same process of turning perishable into enduring materials going on almost in recent years. The interlacing carved reliefs on Irish crosses may connect by way of Christian Byzantium with the art of the East; but in any case the decorative effect is produced by designs. studied from embroidery or woven work. and the same thing is perhaps true of the simple moldings of Romanesque portals in Western Europe during the middle ages.

The Alhambra and other Moorish buildings in Spain suggest textile forerunners in their interlaced work and arabesques and their brilliantly painted moldings in plaster. The mosque at Cordoba transformed into a Christian cathedral, like the Christian basilica in Constantinople transformed into a modern mosque, contains abundant evidence of the influence of textiles on the ornamentation, as if the most splendid shawls from Cashmir and Persia had served as inspiration for the workmen in colored tiles.

Byzantine architecture affecting the churches of Venetia and other parts of Italy brought much less textile design with it, but more than one finds in the Romanesque and Romantic or Gothic. Yet even so, such edifices as the Cathedral of Rouen, and Saint Maclou in the same old town on the Seine, make one think of lace work. Early stained glass recalls embroidery. Pulpit canopies repeat the tent form. Without proposing to exhaust the subject, I merely wish to call attention to the number of instances in all parts of the world where a textile original may be detected in architecture, and to suggest that lovers of the art might well bear this in mind during their travels.



VII.--Some Unique Lighting Applications

Note.—In this article the restrictions of direct and indirect lighting are defined. Interiors are shown illustrating methods of lighting which aid architectural expression, and the treatment of artificial light, representing average conditions which are or could be amenable to architectural influence and suggestion. Sketches by the author depict original lighting arrangements. The next articles continue the subject of light in the home.—Editor.



ET us have attractive lighting. If every architect would aid in a crusade against commonplace, unattractive lighting effects, by refusing to specify equipment, unless of an original, attractive nature, the mark of progress would soon

leave a visible impression in the community. Lighting companies who have unthinkingly allowed themselves to fall in with commonplace conditions have fostered and engendered the false doctrine of "economy" in the minds of their patrons—the consumer of gas and electricity.

The engineer is incompetent to consider the subject of lighting from other than the crude, narrow, "efficiency" viewpoint. This has been demonstrated again and again. An electrician of a testing laboratory writes a treatise on some features of interior lighting—illustrating for residence use, some glassware of the most obnoxious commercial type, and advocating the same, unmodified "white" light of the tungsten lamp which is just as incongruous and undesirable in the home as it is appropriate and desirable for the ware-room or factory.

We have discussed the subject of color, only inasmuch as walls and ceiling tints are concerned in the absorption and reflection of light rays incident thereto.

The illuminating engineer has always

advocated light colored walls and ceilings solely because of their reflective qualities over dark colors and without regard for architectural or decorative considerations. Strictly speaking, I do not regard the side wall as an important utilitarian factor in redirecting light downward into a room, and am inclined to give more attention to its physiological function. Here, again, we are confronted with the axiom that the condition which meets aesthetic requirements -- is bound to satisfy physiological demands. Fig. 1 represents an interior, quite light in tone. That sense of monotony which is quite invariably associated with all blank, white surfaces, has been relieved in this instance, by decorative treatment. In other words there is some relief for the eye, in straying upwards from the reading page or bright working surface.

I have repeatedly urged the importance of introducing amber tints instead of flat white on ceilings, which serve as diffusing media above indirect lighting equipment—to avoid the mortuary aspect attendant upon the dead white effect.

With particular reference to interiors devoted to clerical work I have found that the visual function is depressed by too great a lack of contrast in luminosity (surface brightness) between the working page and the perspective (wall). On the other hand, an extremely dark wall affords too abrupt a contrast, which is depressing and bad for the eye. The moderately dark wall suggests "perspective" and, if properly done, literally deceives the eye as regards distance and the significant point in this relation is that the eye is at rest when regarding objects more than 20 ft. distant. Hence in the Garden of Eden there was no astigmatism. The average condition, dangerous to the eye, is typified by a dropcord and shade near the working surface, in a moderately large room, with the walls in comparative darkness—a room, faces, which reflect with mirror-like fidelity all the glare—all the annoyance—and all the eye strain. It seems peculiar that a society avowedly organized for the purposes of bettering lighting conditions, after an extended discussion on the subject of "glare," offers a committee report, recommending that all polished surfaces of books and papers are undesirable, and should be depolished, not one word being said regarding the ad-



FIG. 1. THE AMOUNT OF USEFUL LIGHT REDIRECTED BY THE SIDEWALLS IS NEGLIGIBLE. GENERAL ILLUMINATION ON LIGHT COLORED WALLS, UNLESS RELIEVED BY DECORATION, IS PRODUCTIVE OF MONOTONY AND OCULAR FATIGUE.

or space so large that the light reflected upwards from the small illuminated area beneath the shade, insufficiently illuminates the surroundings to dispel the abrupt contrast between light and shadow. After regarding Fig. 1, look at Fig. 2, which illustrates the various points above discussed. In addition, the polished table top is a warning against the use of glaring lamps in more glaring shades hung above such polished sur-

10

visability of depolishing the interior of polished glaring reflectors.

Amongst the many letters which the writer has received from architects interested in these articles, several have referred to the subject of church lighting, with reference to restrictions governing the application of indirect lighting. The writers express themselves freely regarding their preferences, and very courteously agree with the author's

81

contentions, requesting, however an elaboration on the following points. These inquiries are of such general interest that it has been deemed advisable to answer them in detail. Fig. 3 shows a church interior illuminated by indirect lighting fixtures specially designed. It is apparent that with such architectural conditions as those depicted—and a moderately light ceiling, indirect light, with or without source visability, offers nothing unusual or difficult in the way of a lightA glance at the photograph reveals the fact that it does not. It must be remembered that these rays of diffused light from lamp to silver reflecting surface from there to ceiling and thence downward, have a definite direction—a direction which may be calculated by application of the simple rules previously given —and so as to impart various expression to relief work. This is shown by Fig. 4, where four strips of moulding, exactly similar. are revealed by diffused light



FIG. 2. A MODERATELY DARK WALL SUGGESTS PERSPECTIVE, AND BE CONTAINS WITH BRIGHT WORKING SURFACES, RELIEVES THE EYE. POLISHED TABLE-TOPS REFLECT EVERYTHING, ESPECIALLY GLARING LIGHT SOURCES PLACED ABOVE THEM.

ing installation. That is the placement of fixtures, arrangement of reflectors, hanging heights, and lowering arrangements to facilitate maintenance are considerations of the ordinary every day variety encountered in practical work. This photograph was selected to answer one of the questions propounded i. e. Does indirect lighting, obliterate shadow —particularly in relief work? from different directions. First, from the left (top Fig. 4); second, from below; third, from above, and fourth, an equal quantity of diffused light from all sides—a condition never existing with applications of indirect artificial light. It is quite unnecessary to indicate conditions where absence of shadow would be undesirable. Perhaps an indication of one, of countless of instances where it THE ARCHITECTURAL RECORD.



FIG. 3. SHADOW CONTRAST WITH INDIRECT LIGHTING, CONVEYING THE ARCHITECTURAL IDEA.

is necessary, might be more *apropos* and Fig. 5 is such a one.

Another question, reverted to the lighting of such churches as represented in Fig. 6, by indirect lighting, reference being made to the dark ceiling and the obvious impossibility or undesirability of changing it in any way. It is certain that with the iminent improvements in illuminants it will soon be possible to disregard the high absorption of dark ceilings for indirect lighting applications. Illuminants will be so much brighter (all the more necessity for concealing them) and so much more economical that, within the same space, a fixture of the future will give much more light. Certainly enough to reveal the architectural expression of an interior beautifully, and if fixtures are to be used as part of the architectural treatment their pictorial value need not be destroyed by excessive luminosity. We will then have reached a stage where an interior, lighted at night, with artificial illuminants, will

be a veritable treat to the eye, not a threat to the eyesight-and the day is not far distant. As to the present, it is not possible to light such an interior as that represented by Fig. 6, with indirect lighting, using the ceiling area as a redirecting surface. Neither is it possible to light it directly with any regard for architectural considerations unless some practical restrictions are observed. The ordinary procedure, adopted by those selling equipment, would be to install clusters of bare lamps within any fixture which might be considered appropriate. We will ignore the horrible possibility of drop cords or stems whereon dangle miserably, wash-basin-like affairs of commonplace glass

The thing necessary is to drive the light from the illuminants downwards, into the church, and illuminate the glass panels of the fixture sufficiently to give adequate emphasis to it as a relative symbol of decoration. The latter is accomplished by the use of small lamps—

83

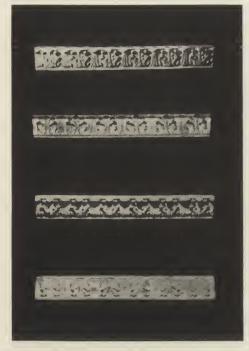


FIG. 4. VARIATIONS PRODUCED BY LIGHT FROM DIFFERENT DIRECTIONS ON BAS-RELIEF WORK. UNIFORM LIGHT FROM ALL DIRECTIONS OBLITERATES DETAIL.

the former by large lamps within silver plated reflectors, which allow no light to be wasted in a direction skyward. While the author is not entirely in sympathy with the feeling expressed by these fixtures, they serve admirably to illustratively reply to the inquiries submitted. Of course the lamps and reflectors are



FIG. 5. A SITUATION WHERE DIRECTION OF LIGHT GREATLY INFLUENCES ARCHI-TECTURAL EXPRESSION.

placed above the circular openings at the fixture base. The glass plates are of opal, quite dense, and interiorally de-polished. The fixtures are within no one's visual range, and this absence of bright lights in the visual field places all responsibility for the congregation's drowsiness directly where it belongs. Another instance where opaque reflectors have been used appropriately with pleasing effect is shown in Fig. 7. One large lamp and reflector being placed well within the beaded hemisphere-the light floor indirectly-casting all the necessary light back upon the ceiling. Still another instance where any light transmitted through and above a reflector is wasted is shown in Fig. 8. In such interiors, which are typical, an attempt to illuminate by utilizing the side wall as a locale, is fustrated by a glaring blotchy effect, encouraging repose amongst those who haunt the benches of public lobbies by ocular fatigue. Here, even ceiling fixtures are too tediously conventional and the best solution of the problem is to place concentrating reflectors above the skylight-over the attractive glass.

These should be spaced so as to distribute the light evenly over the area to be illuminated—a simple matter, since all concentrating reflectors, light circular areas, in diameter one-half the distance from the reflector to the surface illuminated. They can be covered with galvanized iron boxes for weather protec-



FIG. 6. A CASE WHERE LIGHT DIRECTED CEILING-WARD IS WASTED. Opaque reflectors within these fixtures direct every ray of light downward. Small auxiliary lamp illuminates the glass panels.

tion, and can be strung on wire cables with trolleys for facilitating maintenance.

Another illustration of proper light utilization, but one where æsthetic considerations are nil, is shown by Fig. 9. Here the use of translucent glass shades permitting any transmission of light upwards is an absurdity, since even a dark floor diffuses sufficient light ceilingwards to reveal all necessary detail of shafts, pulleys, belting, etc. The selection of reflectors resolves itself, in such instances to a consideration of reflecting surfaces (available commercially), and their relative efficiency, and permanency, the latter quality being of supreme importance. Ofttimes, installation, or "first cost"



FIG. 7. ANOTHER SUITABLE APPLICATION FOR OPAQUE REFLECTORS. THE LIGHT FLOOR REDIRECTS SUFFICIENT LIGHT UPWARD TO REVEAL THE CEILING ORNA-MENTATION.

figures, are apt to persuade the thoughtless in the adoption of certain types of reflectors, which do not afford permanent redirecting surfaces. In cases of this sort, if the parties involved would lend their serious consideration to an addition of small cost items, associated with promiscuous changes of equipment on their premises the "sum total" of these apparently trivial items would stand forth in the light of a colossal, and extravagant expenditure. The lighting of the interior, or workshop represented in Fig. 9, requires uniformity of illumination.



FIG. 8. HANGING FIXTURES HERE WOULD BE INCONGRUOUS. OPAQUE REFLECTORS ABOVE CEILING LIGHTS WOULD BE SUIT-ABLE AND EFFECTIVE.

This can be easily attained by the proper spacing of outlets. The prevailing mode of dividing the room into squares, and then selecting the corner of each square as a locale of an outlet is to be condemned. The outlets should be placed in the *centre* of each square, thereby, increasing the intensity of light near the side walls by the closer placement of the adjacent light source thereto.

The question of hanging heighth, depends on the general dimensions of the



FIG. 9. INDUSTRIAL LIGHTING, WHERE GOOD GENERAL ILLUMINATION IS OB-TAINED ECONOMICALLY BY OPAQUE RE-FLECTORS EVENLY SPACED, BUT NOT HUNG DIRECTLY ABOVE THE POLISHED SURFACES OF MACHINES.

THE ARCHITECTURAL RECORD.



FIG. 10. ANOTHER INSTANCE WHERE LOSS OF LIGHT UPWARD IS ELIMINATED BY UTILIZING OPAQUE REFLECTORS (PROTECTED BY WIRE CAGES). AT SUCH HEIGHTS USE SPACING TO GIVE UNIFORM ILLUMINATION DESIRED.

room. The interior shown in Fig. 9, represents average conditions, which give ceilings of fair height. This enables deep, concentrating reflectors which distribute light beneath them in a circle of a diameter one-half the hanging height, to be regularly spaced at not too frequent intervals, provided large size tungsten lamps are used. We are not directly concerned at this point, with the extremely fundamental detail of spacing, mounting heights, etc., except, with reference to their effect on light utilization, as described. Naturally with very low ceilings concentrating reflectors would have to be spaced at too close range to produce anything like uniform illumination on the working plane, and, conversely, distributing reflectors, giving a wide distribution of light, even if placed close against the ceiling would have a directional effect, intensely painful to workmen, in any part of a shop so mislighted. The proper arrangement in such extreme cases (very low ceilings) is the location of outlets, at close, regu-

lar, intervals, with small sized tungsten lamps, in concentrating reflectors. Of course a total energy of let us say 7,200 watts could be distributed over 72 outlets using 100 watt tungsten lamps, or over 120 outlets using 60 watt lamps, or over 288 outlets using 25 watt lamps. The use of small size lamps, increasing the cost of maintenance (lamp renewals) and the initial expense of wiring, but solving the physiological side of the problem.

Fig. 10 represents the interior of an armory. Here again we encounter one of the few applications where the æsthetic may be properly ignored. There is a general tendency to substitute tungsten lamps for electric arcs, and inverted gas lamps for low hanging gas fixtures. Basket ball and similar "relaxations" necessitate the protection of lighting units even at great mounting heights. Here again we note the action of the floor in directing light on the ceiling. This is another example of appropriately utilizing light, and preventing a trans-

mission of light, through a shade, toward a dark, light-absorbing ceiling, yet one may see on all sides examples of such wasteful and extravagant lighting. We can pardon a waste of light when the effect is artistic and pleasing, but never when even practical utilitarian restrictions have been ignored. The question of maintenance with high ceilings must not be neglected. The opportunity which the high ceiling affords for using infrequent outlets with large sized lamps should be taken advantage of from this viewpoint, including arrangements for ladder support, lowering of fixtures, or removal attachments in the form of poles with catch-prongs, or lever-grips. An exceptionally successful design for indirect lighting with gas is shown in Fig. 11. Two large Roman braziers (detail Fig. 12) supplemented by urns, arranged on the mezzanine balcony rail, contain upright Welsbach gas mantles. The two large braziers contain 20 upright mantles, each within its opaque reflector, shaped to give a concentrating distribution of light, the projected shadow of the pilasters being relieved by the light emitted

by the balcony rail lights. Applications of this sort offer unlimited opportunities to progressive gas companies in expressing character and individuality in small store lighting. Pipes can be easily brought up from cellars, and in long, narrow stores a single row of pedestals, supporting bowls of pottery, or any original design, conceal the gas mantles and reflectors from view within artistic interiors.

It has been urged that gas tends to discolor ceilings when placed too close -this, of course, cannot occur, when the units are less than eight feet above the floor, and furthermore maintenance (renewal of gas mantles or electric bulbs) is greatly facilitated. In small stores which are square, one centre floor pedestal is sufficient, provided there are no pillars to cast shadows (unlikely in small areas). There is no restraint imposed upon the expression of character and attraction in such lighting, other than the imagination, and æsthetic instinct of the designer. Even crude material, boxes, baskets, etc., can be treated so as to possess artistic value and attraction.



FIG. 11. AN APPLICATION OF GAS TO INDIRECT LIGHTING. ANTIQUE BRAZIERS, CONTAIN-ING UPRIGHT GAS MANTLES WITHIN SILVER-PLATED REFLECTORS, SUPPLEMENTED BY ROMAN URNS PLACED ON THE MEZZANINE RAIL, CREATE A DISTINCTIVE LIGHTING ENSEMBLE.

I urge that the crusade against commonplace lighting must be eternally waged, by those who respect and love artistic expression in any form.

With the "economy" of modern illuminants there is no reason why every one cannot enjoy the comforts which light has to give, and the attraction and advertising value, invariably attendant upon any departure from stereotyped monotony. In office buildings where first floors are to be used for stores, by all means specify frequent baseboard outlets so that the tenants may exercise some individual preference in their lighting arrangements. This cut and dried pre-liminary assignment of lighting equipment has done much to distract the mind of the tenant from this vital subject of artistic different lighting, for he has assumed that lighting conditions must be accepted as found.

This mental attitude on the part of the

mercantile public has reached a stagnation point where only concerted avoidance on the architects' part, in specifying equipment, will materially better lighting conditions. A united effort by the architect, to place outlets, so as to encourage and even force the tenant to depart from commonplace monotony in his lighting arrangement, will result in a general awakening on the part of the mercantile public, of inestimable value to themselves and their community. The merchant must learn to avoid, in planning his lighting, the exact arrangement of his neighbor. He will discover that advertising value, from lighting or anything which affects our mind by the sense of sight, results from attraction. And we are only attracted by the thing different, which, in these days of commonplace shades and globes satirically happens to be anything in the slightest degree suggestive of æsthetic expression.

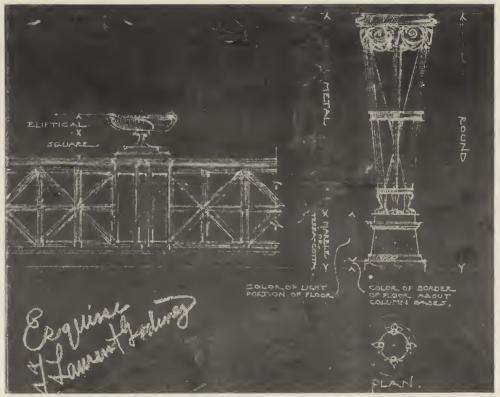


FIG. 12. SKETCH SHOWING TREATMENT OF BRAZIER AND URNS ILLUSTRATED IN PLACE IN FIG. 11.



The monograph on the work of Charles A. Platt, which has just been issued by the Architectural Book Publishing Co., is a very remarkable publication. The fact that any publisher should find it a promise of profit in preparing so handsome, elaborate and costly a record of the work of a living architect is both a clear indication of the popularity and permanent value of certain phases of contemporary American architecture and an extraordinary tribute to the particular architect who has been first selected for this work of distinction. Numerous monographs on contemporary architects have been printed both in architectural and other periodicals; but this is the first book devoted exclusively to the work of any one designer. It is a compliment and recognition of which Mr. Platt may well be proud; and which every careful reader of the book must feel to have been fully justified.

In their prefatory note the publishers are modest in their promises. They expressly disclaim the idea that the book contains either an exhaustive compilation of Mr. Platt's work or the portrayal of any single building in all its interesting aspects. Neither has an attempt been made to arrange the illustrations of the different buildings according to the time of their erection or on any other systematic plan. On the other hand this particular compilation has certain advantages over any previous at-tempts to illustrate Mr. Platt's work. While by no means complete, it is, we believe, sufficiently complete for all practical purposes. It exhibits Mr. Platt's gifts and accomplishments as a designer in all their varied phases and from every really significant point of view. Many examples of his earlier and more tentative designs are

given, as well as many examples of his later and more finished product. A sufficient amount of space has also been devoted to some of the very small country houses which he designed early in his career. In the case of most all of these buildings, not only have a generous number of photographs been printed, but a sufficient supply of house and ground plans and working drawings. The book consequently, while it is intended primarily for the architect and will help his professional brethren to inderstand and interpret Mr. Platt's work better than ever before, should make an equally lively appeal to the intelligent layman. All of Mr. Platt's work has the quality of being convincing to any person of taste. Its rare distinction and beauty can be immediately felt, even if its admirer is not capable of analyzing and understanding the technical means, which the architect has adopted in order to create the effect.

In only one respect do we feel disposed to criticize the plan and makeup of the book. It is a real defect and a real loss that Mr. Platt's work has not been arranged chronologically, or that no data have been given which will assist a reader to discover the sequence in which these various houses have been built. The work of every eminent artist, like the work of a great statesman or a great country cannot be understood apart from its history. In the case of Mr. Platt the development of his gifts as an architectural designer is of peculiar importance because he is, if you please, a self-made architect. His early technical training was that of a painter and an etcher. Never in his life did he take a lesson in architectural design. Not only can certain distinguishing traits of his work



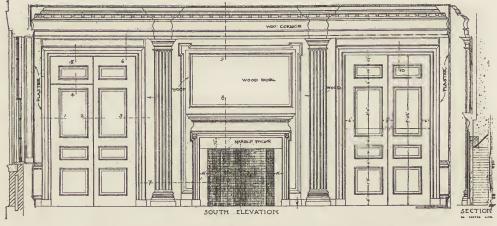
DETAIL OF THE LOGGIA--RESIDENCE OF W. HINCKLE SMITH, ESQ., BRYN MAWR, PA. CHARLES A. PLATT, ARCHITECT. (From "The Work of Charles A. Platt.)



THE POMPEIAN ROOM-HOUSE OF HAROLD F. McCORMICK, ESQ., LAKE FOREST, ILL. CHARLES A. PLATT, ARCHITECT.

(From "The Work of Charles A. Platt.)

THE ARCHITECTURAL RECORD.



DETAIL OF AN INTERIOR-CHARLES A. PLATT, ARCHITECT. (Reduced from "The Work of Charles A. Platt.)

be clearly traced to the fact that in his case a born architect happened to have his eye trained as a landscape painter, but his architectural gift received was unfolded gradually and as the result of concrete practical necessity rather than of predetermined plan. The different phases of the process whereby the amateur architect became a professional and the professional gathered an increasing mastery over his own means of expression and an increasingly clear consciousness of his own scale of architectural values would constitute a peculiarly fascinating and helpful essay in architectural criticism.

The introduction which has been written in a spirit of warm but discriminating appreciation by Mr. Royal Cortissoz, constitutes a really illuminating interpretation of Mr. Platt as an architect. Mr. Cortissoz has had the advantage not only of a genuine enthusiasm for Mr. Platt's work, and the trained eye of an experienced critic, but also of an intimate and long continued familiarity with his subject. No matter how well acquainted the reader may be with Mr. Platt's designs, he cannot fail to obtain a juster and finer understanding of Mr. Platt's achievement from a careful perusal of Mr. Cortissoz's introduction. The final criticism of Mr. Platt as an architect cannot, of course, be written at present, because Mr. Platt is still practising, and is far from having exhausted either his possible architectural opportunities or his own latent powers as a designer. An artist, such as he, who is so incorruptibly true to his own standards and so relentlessly but so imperturbably critical of his own achievement, is certain to make the end add something to the total value of his work. But when the time comes for the final criticism of Mr. Platt as an architect the essay of Mr. Cortissoz will be found to constitute an essential and substantial contribution thereto.

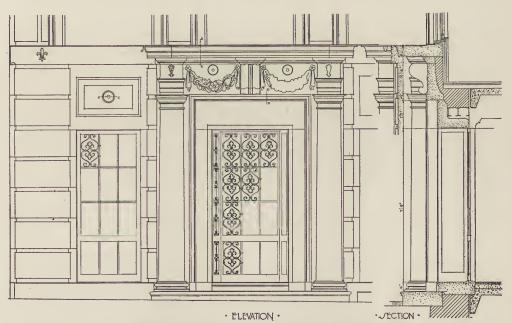
The keynote of the introduction is contained in the statement made in the first paragraph that "Mr. Platt's work strongly urges the critic to subordinate the question of tradition to that of personality. By this the critic does not mean, of course, that traditional influences have not made peculiarly important facts in the formation of Mr. Platt's personal style. He recognizes fully that Mr. Platt has more than anything else been seeking to reproduce the architectural and domestic qualities of the Italian Renaissance villas. But he recognizes also that the "old Italian ideal is so tactfully and with such sincerity adjusted to local conditions that the completed work becomes part and parcel of a veritable characteristic American home." It would be idle, Mr. Cortissoz says, to question Mr. Platt's indebtedness to the past or what he owes more especially to the Italian precedent, both in his buildings and in his gardens. "Tradition of a sort is in his blood and he could not do without it. Yet his originality, his essential independence, remains untinged. There is nothing factitious about his work, nothing that is done from the outside. All proceeds from a central inspiration, from the creative instinct craving the outlet of beauty, which has made him etch and paint and build as with an imperious force. He makes a work of art, because he cannot help himself. The constructive nature of the artist must out. It is this fact which has made him such a commanding figure in the field of archi-

92

tecture as a designer of houses. He was born to design them. He could not but make them beautiful. . . . Beauty, the reality of his dream, reveals itself to him today as it did years ago, when he was painting pictures, which is to say in nature's clear fragrant paths. He is at peace with his art in the 'green silence' of the poet, in the light and color of gardens, in the quietude of houses where one dwells with finely wrought possessions, symbols of the things of the mind. Under such conditions his ideas expand and he puts forth noble energies. You know when you follow his footsteps that an artist has passed that way."

That is the scent of the great impression which has been and is still being made by Mr. Platt. There are few architects in the country whose personal clientele is more loyal and whose popular reputation is greater; but warmly as his work is appreciated by his clients, many of his most cordial admirers are to be found among his personal associates. He is useful to them. He has the originality, not of a mere experimentalist, but of a man who, as his critic says, cannot help seeing things under the form of beauty. Hence it is that his work is so intensely personal in spite of its high impersonality and so thoroughly impersonal in spite of profoundly personal inspiration. He is of use to his professional associates because he is so completely himself and yet so emphatically more than himself.

His success in giving such a very individual and contemporary version of the noblest phase of domestic architecture in the past is the secret of his formative influence on others. He can give because he has really appropriated. And we feel sure that great as his influence hitherto, it will as a consequence of the publication of this book be still more considerable. The total effect made upon any sympathetic and considerate observer by the careful scrutiny of its pages is extraordinary, and those who have delighted in his work as it has been published in parcels will most assuredly feel as the result of this completer exposition that they have under rather than overestimated the rare distinction of his achievement. H. C.



DETAIL OF A RESIDENCE ENTRANCE-CHARLES A. PLATT, ARCHITECT. (Reduced from "The Work of Charles A. Platt.)



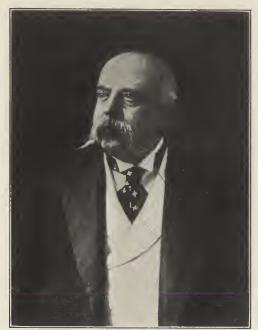
George Browne Post Obituary

moral. It is that purely artistic sensibility is only one of the factors of an architect's equipment, and that a man may be a highly successful and conspicuous architect with only a moderate degree of it. Doubtless Mr. Post had more than Mr. Burnham. He was fond of sketching from nature in water color, not badly, and when he

was seventy or near it, exhibited some of his work of that kind, done during a holiday in Italy. One cannot fancy Mr. Burnham beguiling his leisure in that way, nor even choosing rural Italy for his holiday. He once accurately described himself as "a business man with a knowledge of building." But the two men were alike in that the "architectonic" element in each was stronger than the picturesque. They personally fulfilled the function which Viollet le Duc assigns to the Roman engineer in the Roman monuments; that is to say, of the maker of the "parti," of the

The death of George "lay out," which he devised with a view not B. Post, following so only to economy and convenience but also soon upon that of Danto dignity and impressiveness. The man who does that, call him what you will, is an iel H. Burnham, who was his junior by a decade, points the same

architect, even though he should leave his buildings in the rough, or turn them over, as the French critic maintains that the Roman architect did, to a Greek decorator for their ornamentation. As planners, Burnham and Post were distinguished by the largeness and straightforwardness and simplicity of their works. The most notable of Mr. Burnham's works, and the most notable for these qualities, is doubtless the Union Station in Washington.



GEORGE BROWNE POST. Dec. 15, 1837-1913.

Following his service in and through the Civil War, in which he rose to the rank of colonel of volunteers, Mr. Post, who had already before the war taken a course in engineering, took a course of architecture in the "atelier R. M. Hunt," along with other pupils who subsequently became distinguished. Early in the '70's he was already in full professional swing. To these years be-long the Williamsburgh Savings Bank, a square, simple and classical erection crowned with a dome, and fireproof throughout. A much more influential erection was the original building of the West-

ern Union Company, since so built over as hardly to be recognizable, but the earliest of the "elevator buildings," excepting the original Tribune building, since doubled and more in capacity by vertical extension, which was at the same time under construction from the designs of Mr. Hunt. These at least were the first buildings in the design of which the elevator was distinctly recognized, for in the original Equitable building, with reference to the construction, though not to the design of which Mr. Post was employed in a consultative capacity, though elevators were contemplated, and the height was really of seven or eight stories, impracticable without them. Each architectural story included two actual stories and the fronts thus appeared as of the usual five-story office building, though at an unusual scale. But in the two newer buildings the number of stories was confessed. In the Tribune building, however, the story as the architectural unit was replaced by a group of stories, while in the Western Union the four stories of the "shaft," between a two-story base and a two-story capital, were separately and identically treated and the division attained which imposed itself upon subsequent designers and to which, after a few years of tentative and unsuccessful experimentation, they all returned. The old Western Union building had its capacity, as well as its architectural attractiveness increased by a steep wedge-roof.

The effect of this building upon the fortunes of the designer was immediate and marked. Nobody ever imitated the Tribune building, and its architect never did another tall building, except the pretty Marquand building in lower Broadway, but took off into "palaces" in New York, Rhode Island and North Carolina. On the other hand the architect of the Western Union building did far more than any other ar-chitect of the "elevator buildings" in which the elevator was the only novel factor of altitude, and in which the walls had still to carry themselves, before the steel frame came in to take away the previous limitation of height. Mr. Post always maintained that he himself had, as it were incidentally, invented the steel construction in the court of the Produce Exchange, which was, perhaps, the most noteworthy architecturally, as it was the most expensive, of his commercial buildings, although it reached only ten stories. It remains an impressive work, even though its one monumental feature, the earliest of the New York studies of the campanile of Giotto, had to be put behind the building of which it was meant to

be the crowning glory, and up an alley. Their name is legion. They are all straightforward and practical, and they are by no means wantonly ugly. Not one of them is a freak, though the St. Paul makes that effect by reason of what seems its intractable ground plan. Possibly some other architect might have made us forget the intractability. At all events, the treatment rather aggravated it in one respect, by the doubling of the stories so as to make one architectural out of two actual floors. This was assumed to be done in order to "give scale," but the architect explained that it was to avoid the square opening which resulted from the dispositions. Even so, those who look at the square openings left untreated in the less conspicuous walls will be apt to hold that the more conspicuous wou'd have looked better if they had been left untreated there also. However that may be, the crowning feature of the threestory colonnade will be agreed to be a seemly and impressive piece of architecture.

The old Times Building in Park Row has been done much injustice to by the superposition of several stories and the substitution of a flat for the originally steeply Mansarded roof with which its author left it as completed. In this, however, he violated his own principle as exemplified in the earliest of his elevator buildings, by subdividing his "shaft." This error was retrieved in a restudy of the north front of the old Times building for the Broadway front of the Union Trust Company in which identity of treatment is resumed through-out. The result is not only its author's most successful work in the Romanesque inspired by Richardson-it is one of the half dozen "best" of those buildings of the transition from the old office building to the modern skyscraper, of which the height is still limited by the necessity of building actual and self-carrying walls of masonry or brickwork.

All these buildings show more or less their author's talent for simplification, which was shown also when he was employed to reconstruct the Equitable. But that talent was even better exemplified in smaller works, of which one is the building of the Long Island Historical Society. A still better one was Chickering Hall, at Fifth avenue and 18th street, a concert hall over a warehouse, which one is inclined to call the most artistic and satisfactory thing he ever did. Of his town houses there is not so much to be said in praise. The original Vanderbilt House at Fifth avenue and 57th street, completed in the early '80's was at that time said to be "more successful and less interesting" than the other Vanderbilt house by Hunt five squares below. But when, a decade or so later, its author was invoked to carry it through the block, he destroyed the unity of the old edifice without substituting for it a larger unity, insomuch that the enlarged building degenerates into a miscellany. Of the Huntington house opposite there is even to be said, what can very seldom be said of any work of its author's that it lacks even a definite and intelligible architectural motive.

So far as New York is concerned, it is in his commercial and public or quasi-public buildings that Mr. Post's best work was done. And there is to be said that no architect has done more to promote the invocation by architecture of "the allied arts" to heighten its effects. The great corridor of the Equitable was a work of which the destruction was distinctly a civic loss. But perhaps in this as well as in its purely architectural aspect, his most noteworthy work in downtown New York is his latest. To see and seize the opportunity for the New York Stock Exchange in the multitude of "applied" orders and porticoes with which modern New York abounds, of bringing the classic order back to its original function of constituting the structure of the building, was an intuition one may say of genius. For there is no sacrifice here of practicality. The great order was as good an instrumentality as could possibly have been devised to secure the abundant illu-mination which is the chief requirement of the interior. The detail of design and decoration might be much worse than it is, in order to efface or obscure the success of the general scheme, and in fact it is not bad at all. This success is promoted by the provision of almost the only and by far the most impressive example New York has to show of the best architectural use of a classic pediment, that of a frame for sculpture. One could not find a better illustration of the author's large and truly "architectonic" way of looking at his architectural problems, or a fairer occasion of describing him as a great architect.

Montgomery Schuyler.

Mr. Post was born in this city December 15, 1837, and was consequently in his 76th year. He was educated at Churchill's Military School at Ossining, and was graduated as a civil engineer from the Scientific School of New York University in 1858. After studying architecture with the late Richard M. Hunt he formed a partnership in 1860 with Charles D. Gambrill, a fellow

student. The partnership with Mr. Gambrill was dissolved when Mr. Post resumed practice after the war. The present firm of George B. Post & Sons was formed in 1905.

> Building for the American Institute

Building of the national headquarters of the American Institute of Architects, at Eighteenth and New York avenue northwest, was taken up when a convention of architects from all parts

of the country was held at New Orleans December 2, 3 and 4. The meeting was called to discuss and raise \$300,000 for the future structure, and was attended by representatives of every branch of the institute in the country, of which Washington has one of the most active Chapters.

The present plan which awaits ratification and money to carry it through, contemplates a large addition to the Octagon House at Eighteenth street and New York avenue, extending the structure in narrow crescent-shaped length from Eighteenth street to New York avenue. It will be built so as not to overshadow the Octagon House, to which is attached a great deal of sentiment and architectural significance.

Due to the odd figure which the Octagon House occupies, the addition is similar in its complicated lines. The main addition will be located a hundred feet north of the Octagon House, on Eighteenth street, and connected to it by a brick wall. Colonial architecture will be featured, the main front containing three apertures beneath colonnaded entrances communicating with the main auditorium designed to accommodate 500 people.

Three stories will be contained in the building. In the basement will be found the banquet hall, with space for the heating apparatus adjacent. Through the other two stories will be distributed the offices of the institute and numerous rooms representing the prominent architectural and art societies in the country, similar to the scheme adopted in the present building used as headquarters by the Daughters of the American Revolution. The Sculptors' Society, the Painters' Society, the Mural Decorators' Society, the Federal Arts Society and the Archaeological Society will be represented, with other as ociations with a room each.

The building fronting on Eighteenth street will run in a form suggestive of a crescent, until it reaches the building line

THE ARCHITECTURAL RECORD.



DETAIL OF THE CORNICE IN THE SENATE CHAMBER, CONGRESS HALL, PHILADELPHIA, PA.

on New York avenue. Another entrance will be featured overlooking this street. Within, and between the addition and the Octagon House, large gardens will be located where visitors to the institute may promenade between rows of hedges, and through artistically planted beds of flowers, where fountains will play, and a rusticated setting will be sought by one of the most notable landscape architects of the country.

The main offices will be retained in the Octagon House, where the present headquarters of the American Institute of Architects now is represented. The home, as well as being one of the most historic Colonial homes in the country, is said to feature a type of architecture to be most representative and artistic of its kind in the United States.

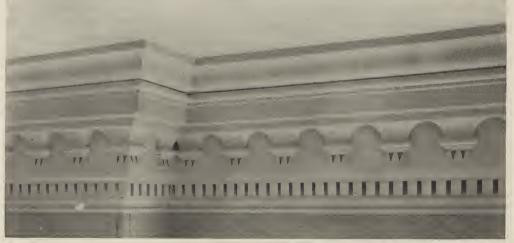
The Octagon House was built in 1798-1809 for Col. John Tayloe, by Dr. William Thornton, who designed the Capitol and the Washington Inn, and who submitted competitive plans for the White House, but lost. The house was one time the home of President Madison, when he had to make

ce his quarters there after the White House et. was burned by the British.

Bedford Brown, architect of this city, is in charge of plans for the future additions to the present structure.—The Washington "Times," Nov. 15, 1913.

Congress Hall Restored On October 25 the Philadelphia Chapter of the American Institute of Architects assisted in the dedication of the restored Congress Hall in Philadelphia. For the moment, Philadelphia

through the efforts of the Chapter became again the capital of the United States. Indeed, for ten years the Chapter has been working to make the restoration of Congress Hall a reality, but not until two years ago did the city appropriate the necessary funds. Since then a committee of architects has worked unselfishly, enthusiastically and without pay on this task. Over one hundred meetings have been held and a vast amount of research and study



DETAIL OF THE CORNICE IN ONE OF THE COMMITTEE ROOMS, CONGRESS HALL, PHILADELPHIA, PA.

THE ARCHITECTURAL RECORD.



Photograph by Ph. B. Wallace.

CONGRESS HALL, PHILADELPHIA, PA.

has been put into the work to insure historic accuracy. The President, the Speaker of the House and a trainful of Cabinet officers, members of the Supreme Court, Senators, Congressmen and diplomats came on to the reconsecration of this historical shrine, thus making October 25, 1913, one of the big days in the history of Pennsylvania.

The following architects, John Hall Rankin, Frank Miles Day and Charles A. Ziegler, were among the speakers, national and civic, and, further, the Mayor laid full emphasis upon the obligation the city is under to the profession. Mr. Ernest Yardley was the architect in charge of the actual work on the building.

Probably the most significant aspect of this piece of reconstruction is the conspicuous recognition afforded by the public officials to the services of the architectural profession. First there was the appropria-



Photograph by Ph. B. Wallace. STAIR HALL TO THE CHAMBER AND COMMITTEE ROOMS, CONGRESS HALL, PHILADELPHIA, PA.

tion of the funds necessary to carry out the work; second, the latitude and freedom from restriction accorded the committee of architects entrusted with its execution, and, last, the public appreciation and approbation of the final result, on the occasion of the dedication.

By all means, the conduct of this important restoration, painstakingly and conscientiously carried out by the Philadelphia Chapter of the American Institute of Architects, should encourage other cities, through their officials, to entrust similar works to the architectural profession, which will al-

THE ARCHITECTURAL RECORD.



Photograph by Ph. B. Wallace.

CHESTNUT STREET ENTRANCE AND STAIRWAY, CONGRESS HALL, PHILADELPHIA, PA.

ways be found willing to go considerably more than half way in such undertakings.

The proof of the pudding is in its tasting. Arrangements are being made with the city of Philadelphia, through Mr. Milton B. Medary, president of the Philadelphia Chapter of the American Institute of Architects, to restore the old City Hall at the opposite end of the Independence Hall group (see "The Architectural Record." July, 1913). Therefore, when the Chapter shall have completed this new work, as well as the remodelling of Independence Square, now actually under way, with so able an architect as Mr. Horace Wells Sellers directing another committee, the Chapter will then have to its credit a patriotic achievement of lasting value to the entire nation, and of peculiar interest to all foreigners who may in the future visit the shrine of American liberty.

THE ARCHITECTURAL RECORD



Wood Carving in the Sacristy, St. Thomas' Church, New York City. Cram, Goodhue & Ferguson, Architects VOL. XXXV. SERIAL NO-CONTENTS No. 2. 185 FEBRUARY, 1914. PAGE COVER-ENTRANCE OF ST. THOMAS' CHURCH, NEW YORK CITY Cram, Goodhue & Ferguson, Architects From a Photograph by Julian Buckly FRONTISPIECE-ENTRANCE OF ST. THOMAS' CHURCH, NEW YORK CITY Cram, Goodhue & Ferguson, Architects From a Photograph by Julian Buckly THE STORY OF ST. THOMAS' CHURCH - 101-131 By H. L. Bottomley Cram, Goodhue & Ferguson, Architects Photographs by B. G. Mitchel NOTES ON GARGOYLES, GROTESQUES AND CHIMERAS - 132-139 By G. Leland Hunter GRAMATAN COURT—A FIREPROOF SUBURBAN APARTMENT - 140-150 By Kenneth G. How Bates & How, Architects THE GARDEN CITY OF HELLERAU - 151-161 A German Housing Development By John T. Klaber THE ART OF MAKING A STAINED GLASS WINDOW 162-169 Notes on the Work of Clara M. Burd By Charles H. Dorr NOTES AND COMMENTS - 170-179 PHOTOGRAPHS AND MEASURED DRAWINGS OF AN ITALIAN CEILING 180 By Andrew R. Cobb PUBLISHED MONTHLY BY

THE ARCHITECTURAL RECORD COMPANY 115-119 WEST FORTIETH STREET, NEW YORK F. W. DODGE, President F. T. MILLER Secretary and Teacourse

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Photographed by Julian Buckley.

ST. THOMAS' CHURCH, NEW YORK CITY. CRAM, GOODHUE & FERGUSON, ARCHITECTS.

THE ARCHITECTVRAL RECORD FEBRUARY, 1914

VOLVME XXXV



NVMBER II

The story of S! Thomas' Church

Cram, Goodhue & Ferguson, Architects

By L. L. Bottomley

Photographs by B. G. Mitchell



T SIX O'CLOCK ON a rainy Tuesday morning the eighth of August, nineteen hundred and five, the old S a in t T h o m a s' Church burned. The cause of the fire was probably defective insulation of the electric light wires in the organ loft. The fire

organ loft. The fire spread rapidly to the wooden roof and in an incredibly short time had so completely demolished the church that it was impossible to rebuild it. Even the stone walls had crumbled from the tremendous heat, so that the corner of Fifty-third Street and Fifth Avenue, which on August seventh was the site of a great church, became on the day following a huge rubbish heap.

The Rector, Dr. Ernest M. Stires, hurried from his vacation on Lake George to the scene of the disaster, horrified and stunned by what he saw. St. Thomas' was in ruins and in six weeks a congregation of fifteen hundred people would have returned from their summer holiday and there must be a church in which to receive them. Before him rose a Herculean task. He, the rector, must devise a way of raising a temple from the dust—he must accomplish a miracle rivaling the feats of the genii of Aladdin's lamp with only human means at his disposal. He accomplished the impossible.

Never before within the memory of man has a church holding fifteen hundred people been built and equipped and made ready for service in sixty days.

New York in August is not a fruitful field for labor of any sort—every one is away in the country—builders, carpenters, manufacturers, all taking advantage of the dead season, have fled the sultry heat rising from the pavements. Look-



DETAIL—THE BRIDE'S DOOR, ST. THOMAS' CHURCH, NEW YORK CITY. CRAM, GOODHUE & FERGUSON, ARCHITECTS.



DETAIL—THE MAIN ENTRANCE, ST. THOMAS' CHURCH, NEW YORK CITY. CRAM. GOOD-HUE AND FERGUSON, ARCHITECTS. ing up and down Fifth Avenue one sees a solitary hansom, perhaps, with its drooping horse, flapping reins and languid driver, or an empty 'bus rolling over the soft, hot asphalt—a mere handful of people walking the streets of that district, not a soul, it would seem, behind the hot walls that stretch in every direction. How could human hands be conjured up from this wilderness of overheated brick and mortar to build a church on the scene of the fire?

Through unfailing energy it was accomplished. A temporary wooden structure was erected; an organ was hurried from the West; pews were manufactured. Since enough carpet could not be found in the stock of any of the wholesale or retail dealers, a pattern was selected and the carpet necessary to cover the floor area was specially woven. On the first of October this temporary building was ready to receive its already fast assembling congregation.

The great fire which seemed so disastrous at the time proved to be in reality a blessing in disguise, for it was the spur which urged the building of the New Saint Thomas', without doubt the most important and the most successful parish church that has been built in North America.

To obtain the best possible design, it was thought best to have a competition to which ten architects were invited. Gothic was the style determined upon by the committee on plan and scope for the new church. This was a wise and natural choice, for at the time this style reached its perfection, church planning and church building formed the absorbing interests of artists, craftsmen, churchmen and laity. It followed that through practical experience the most perfect architectural expression was evolved of what a great Christian church should be. Certain fundamental truths were established, to be observed by church builders of all time.

The plan selected in the competition was that submitted by Messrs. Cram, Goodhue & Ferguson. It showed a very remarkable versatility in the handling of Gothic, an ease and freedom and familiarity with the style, resulting in great origi-

nality of effect. These architects were unhampered by the bonds which rule and intimidate the mere copyist, and evidently found Gothic the natural medium in which to solve the difficult problem. They were confronted in the planning of St. Thomas' by many conditions which were unknown to the mediæval architects and therefore called for a fresh invention only possible to artists already impregnated by the style; its possibilities and its limitations. This church was to stand in a city whose size alone was undreamed of in the thirteenth century. If it were to fulfill the ideal which the parish held for it, it must more than hold its own amid buildings of by no means the humble stature of those that surrounded the great churches of France and England in the days when church building was the passion of the people. The forced competition with nearby loft buildings called for a bold, strong exterior design. In the mediæval town the church was the dominant feature, its towers and spires soared high into the sky above everything else. Even the town hall made no attempt to approach it in height or bulk. In New York in the twentieth century there was no hope of impressing the multitude by unusual height or size. The proposed church would have had to have a spire seven hundred feet high to even equal that of the Metropolitan Tower, a spire that is twice as high as the one on the Cathedral of Amiens. Its only hope, therefore, of being re-markable among its New York neighbors lay in the intrinsic superiority of its design. Then, too, the New St. Thomas' had to be planned from the point of view of the congregation. They must hear the sermons and join in the service; whereas the ecclesiastical buildings of the middle ages were created primarily for the service of the priests and to awe the laity. Furthermore, an enormous number of seats in proportion to the ground area of the building had to be supplied. To add to the difficulties it was impossible to increase the building by one inch in any direction, besides the church itself adequate accommodation must be provided on the lot for the various parochial organizations.



THE NAVE, LOOKING TOWARD THE ALTAR. ST. THOMAS' CHURCH, NEW YORK CITY. CRAM, GOODHUE & FERGUSON, ARCHITECTS.



A STAIR DETAIL. ST. THOMAS' CHURCH, NEW YORK CITY. Cram, Goodhue & Ferguson, Architects.

The plan chosen in the competition was not the same as that finally decided upon for the completed church; in fact, the various modifications might be said to be almost without number. The plot of ground on which the church was to be built measured 235 feet by 100 feet. Every possible arrangement of church and parish house on that given plot was carefully worked out on paper in a series of plans. To facilitate refer-ence to the various schemes, and comparison of their respective merits, each one was given a letter to designate it. The first scheme was marked A, the second B, and so on, letter by letter, through the alphabet to Z; then they were lettered from the beginning again, A1, A2, etc. As Dr. Stires says, Saint Thomas' is what it is through hard work, hard work at every step over every detail.

To show how radical these changes have been it may be stated that the rectory was originally included within the confines of the space that is now covered only by the church and the parish house, and was in one of the first schemes, embodied within the tower on the busy corner of Fifty-third Street and Fifth Avenue. It was afterward decided to buy the house next door, No. 3 West Fiftythird Street, for the rector, and so obtain a larger ground area for the church itself.

Building preparations were not made until about two years had passed after the judging of the competition. The difficulties of continuing the church services and at the same time of carrying on the work of the building of the new church under, above, and around the temporary structure, had to be surmounted. Most of the heavy construction was done during the summer months, when services were not held, but the building on St. Thomas' was continued throughout the year, while people assembled regularly and frequently. It is interesting to remember that the Grand Central Station, a few blocks away, was built at almost the same time and after the same manner. While the new station was being erected a constant stream of people passed through the temporary station, unconscious of the building that was growing on all sides of them.

One experience goes far to prove the indomitable spirit that animated the building of Saint Thomas' Church. In the second summer when the time came to lay the floor and construct the sidewalls of the new building, the temporary church was taken down in sections, which were stored away, to be replaced before the autumn. August was almost over before it could be rebuilt. There remained very little time and the order was given to replace it without delay. At that a most unexpected delay arose to confront the resourcefulness of all concerned in the form of a refusal from the Building Department of New York City to allow it to be put up again. The time for which the permit had been issued by the department had expired, and on no account, the members said, could they allow this church within a church to be re-erected. Nothing could move them. Everyone pleaded with them, the architects, the rector, the building committee, but they could accomplish nothing. Finally, as a last resort, they appealed to the Board of Examiners, a most formid-



THE NAVE, LOOKING TOWARD THE ROSE WINDOW. ST. THOMAS' CHURCH, NEW YORK CITY. CRAM, GOODHUE & FERGUSON, ARCHITECTS.



DETAIL OF THE SPIRAL STAIR IN THE NORTHWEST CORNER OF THE TOWER. ST. THOMAS' CHURCH. Cram, Goodhue & Ferguson, Architects.

able body composed of an architect, an engineer, a builder, the Chief of the Fire Department, and other heads of Departments.

Meanwhile the Building Department declared the appeal would be useless, as they had inside information that the Board of Examiners would agree with them in refusing the permit. Dr. Stires argued the case himself and, contrary to expectations, the Board of Examiners consented to veto the Building Department, provided a fireproof temporary church were erected in the place of the old one. So short was the time left and so great the determination to have the church ready for service on October first that in the two weeks which intervened between the appeal and the official answer, in spite of the uncertainty as to what that answer would be, the temporary structure was erected. The congregation was peacefully received within its walls, utterly unconscious of the tireless efforts that had been made in their behalf.

In the third summer after the church

was begun the temporary structure was taken down for the last time, and the present church was opened last October.

The building fund for St. Thomas' Church, of about a million dollars, was raised in five of the hardest years financially that New York has ever known. This goes far to prove the real enthusiasm which is felt for the church in what we are accustomed to hear slightingly spoken of as our commercial city.

The total subscriptions of twelve hundred and seventy-five thousand dollars for the church and rectory were, of course, largely made by well-to-do people, but scores of contributions came from the very poor.

The stories of these contributions from very poor people throng before the mind full of interest and touching incident. It is to be regretted that space is too limited to give more than one such instance here, that of a bent old woman of over sixty, aged beyond her years by



DETAIL OF WROUGHT ELEVATOR GRILLE IN THE PARISH HOUSE. ST. THOMAS' CHURCH, NEW YORK CITY. Cram, Goodhue & Ferguson, Architects.



INTERIOR—ST. THOMAS' CHURCH, NEW YORK CITY. CRAM, GOODHUE & FERGUSON, ARCHITECTS.



INTERIOR—ST. THOMAS' CHURCH, NEW YORK CITY. CRAM, GOODHUE & FERGUSON, ARCHITECTS.



SIDE AISLE, ST. THOMAS' CHURCII, NEW YORK CITY. CRAM, GOODHUE & FERGUSON, ARCHITECTS.

hard work and the crippling force of rheumatism. She supported herself by what sewing she could do, though her hands were permanently knotted and her fingers so curled up and stiffened that she was almost unable to ply her needle. At times, indeed, her cruel malady had made it impossible for her to hold her sewing, and she had been obliged to apply to friends and relatives for help. When she heard of the plans for the New Saint Thomas' and knew that a general subscription was being taken up among the parishioners she was on fire with enthusiasm and the desire to contribute something-to have a hand in the building of the new church which was to replace the old one she had known since her youth. Finally after two years of saving and hard work she came to the rector with the result of her untiring self-denial held in her stiffened hands. Ten dollars she gave him, insisted so absolutely on his taking it that it was impossible for him to refuse. This incident brings vividly to mind the story of the widow's mite and the words:

"Of a truth I say unto you that this poor widow hath cast in more than they all. For all these have of their abundance cast in unto the offerings of God: but she of her penury hath cast in all the living that she had."

It is gratifying to know that contributions have come from all parts of the country as well as from non-Episcopalians in New York City, who felt they would like to give something toward the building of the church that was to benefit so greatly the community at large.

Seven hundred years after Gothic architecture reached its highest fulfillment in France, a Gothic church has been built in New York City that is as vital as if the style were but growing to perfection in our midst. This church, the new Saint Thomas', is the last work of Messrs. Cram, Goodhue and Ferguson, a firm of twenty-two years' association, whose buildings all over the country are too well known to need enumeration here. They dissolved their partnership on January 1st, 1914, leaving Saint Thomas' as their last monument. They have undoubtedly, as they themselves have said, given it the best that is in them. Mr. Cram is responsible for the general plan, Mr. Goodhue for the carrying out of it.

No means of architectural expression have ever approached the finest Gothic in religious feeling and so, from the first, there was never any question as towhat the style of the new church should be. Imagine the thrill of wonder and delight that animated the people of Troves, for instance, when the full possibilities of beauty that lay hidden in the new style dawned upon the crowds of devout townspeople, artists and priests who had assembled to build the proposed cathedral, who were to accomplish the realization of a marvelous dream. This tremendous, limitless enthusiasm kept all concerned keyed up to their best. Something new was being created in the world before their very eyes, something that expressed better than anything ever had done before the uplift of the human soul to God. A tidal wave of religious devotion was swelling over the land. Somewhat the same tense feeling of expectation is felt by the modern crowd at an aeroplane meet.

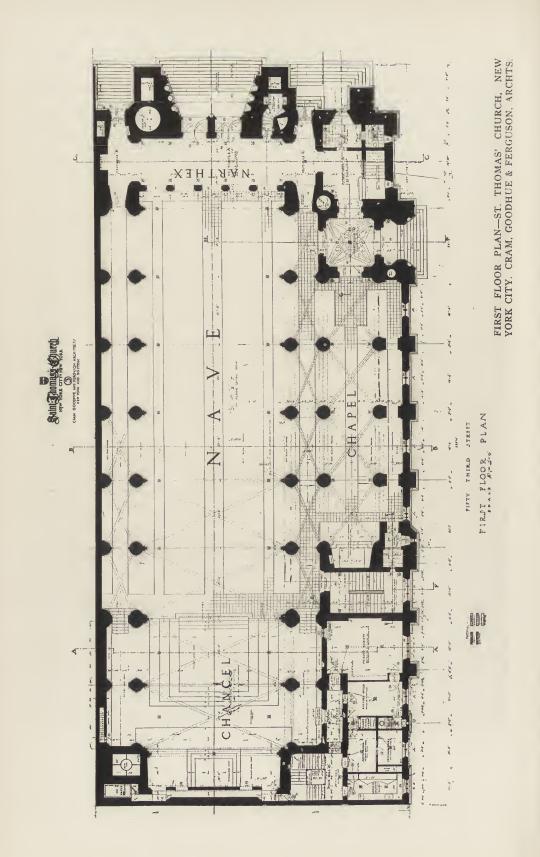
Incvitably, the tremendous enthusiasm of the mediaeval builders brought forth abundant results. They erected churches which, though wonderful as structural organisms, were even more wonderful as works of art.

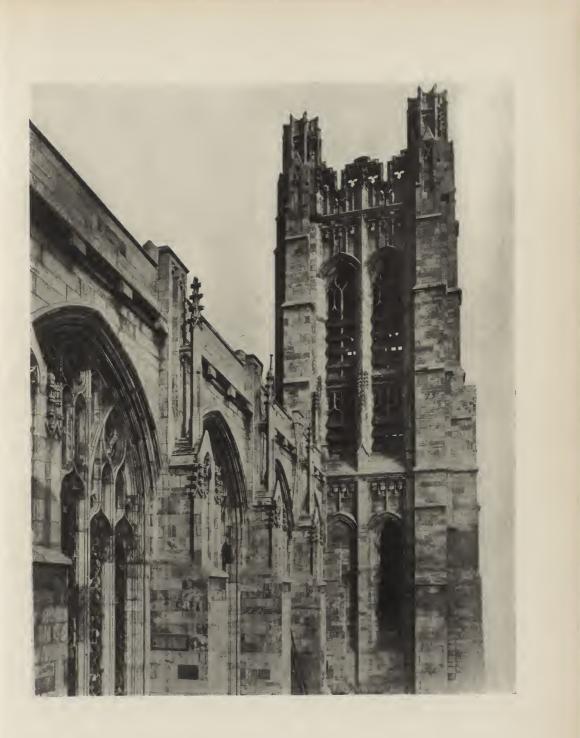
An architectural style like any other perfect fruit may grow very dry indeed in seven hundred years. In the case of Saint Thomas' however, the architects took a fresh, unfettered view of the problem before them. They knew their Gothic so well, it was so much a part of their thinking and their feeling that they could let precedent fly to the winds, and' from their own reason and artistic sensedesign a church that was true to the best Gothic in every detail without being a copy of anything any where. They, too, were working for enthusiasts who were satisfied with nothing short of perfection. and consequently they worked for all' that was in them.

As has been said, the conditions governing the design of Saint Thomas" were unprecedented in Gothic architec-



THE ORGAN, ST. THOMAS' CHURCH, NEW YORK CITY. CRAM, GOODHUE & FERGUSON, ARCHITECTS.



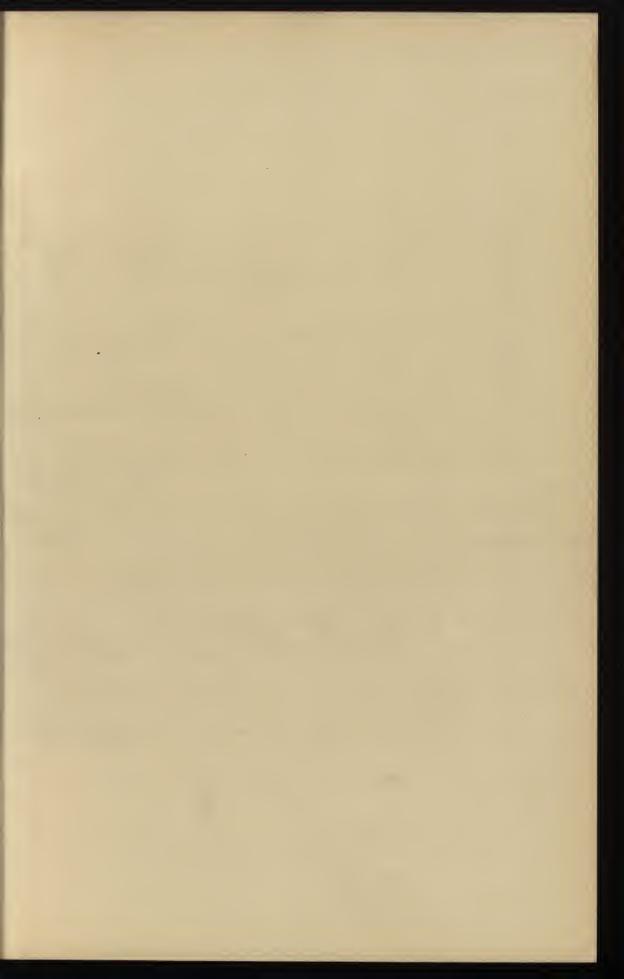


PERSPECTIVE LOOKING EAST. ST. THOMAS' CHURCH, NEW YORK CITY. CRAM, GOODHUE & FERGUSON, ARCHITECTS.

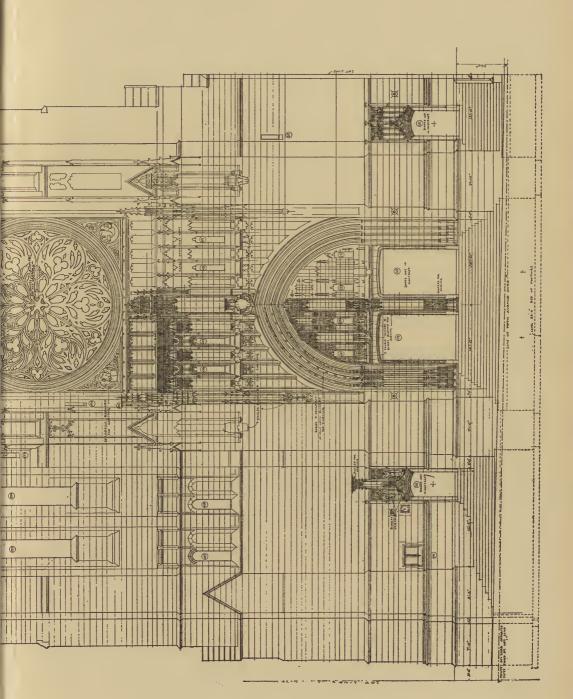


See inserted reproduction of Architects' line drawing for the facade.

DETAIL—ROSE WINDOW, PARAPET AND NORTH TOWER. ST. THOMAS' CHURCH, NEW YORK CITY. CRAM, GOODHUE & FERGUSON, ARCHTS.

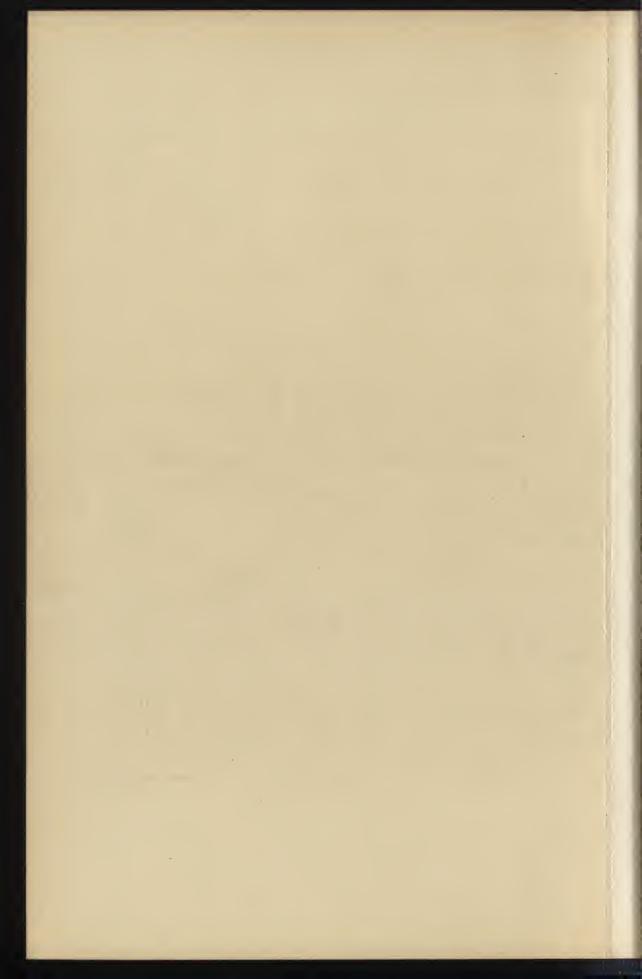






Architectural Record Detail Plate No. 21. ST. THOMAS' CHURCH, NEW YORK CITY. Cram, Goodhue & Ferguson, Architects.

Line Drawing of the West Elevation, or Fifth Avenue Front. Reprinted from the Architectural Record, January, 1911. ("The Works of Cram, Goodhue & Ferguson.")





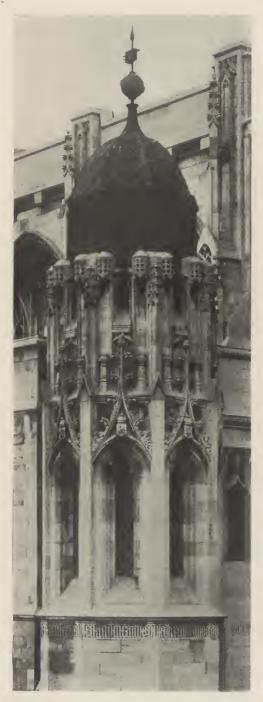
DETAIL, UPPER PORTION OF THE SQUARE TOWER. ST. THOMAS' CHURCH, NEW YORK CITY, CRAM, GOODHUE & FERGUSON, ARCHITECTS.



ELEVATION OF THE SQUARE TOWER, ST. THOMAS' CHURCH, NEW YORK CITY. CRAM, GOODHUE & FERGUSON, ARCHITECTS.



DETAIL OF STAIR TURRET, FROM THE DECK OF THE SQUARE TOWER. ST THOMAS' CHURCH, NEW YORK CITY. CRAM, GOODHUE & FERGUSON, ARCHITECTS.



DETAIL OF THE SOUTH TOWER, WITH LEAD TURRET AND FINIAL. ST. THOMAS' CHURCH, NEW YORK CITY. Cram, Goodhue & Ferguson, Architects.

ture. The nine different architects who competed for it had vastly varying convictions as to how those conditions should be met. One of them made a semi-circular plan with the main façade on 53rd street, and one design had neither tower nor spire, while yet another was planned, with one enormous vault and no piers between the side walls. The present building is the result of years of ardent study on the part of the architects, the rector and the Committee of Plan and Scope.

The only hope of obtaining a lasting effect among the ambitious, parvenu, loft buildings that were already flocking around it. lay in the attainment of a majestic scale enriched by intricate detail of baffling delicacy and refinement. This has undoubtedly been achieved. The Fifth Avenue façade is to all intents and purposes the exterior of the church in the mind of the man in the street. Here, therefore, the richness of design has rightly been concentrated. The West Front (the situation of Saint Thomas' made a reversal of the church necessary so far as the points of the compass are concerned, but, architecturally and ecclesiastically speaking, the chancel end is always the East end) is about equally divided between the tower on the corner and the splendid main portal, which recalls that of Amiens in its general design. It strikes the strongest note in the facade and will force the attention and admiration of the passers-by, no matter what its progressive neighbors may do. Above this cavernous entrance is the beautiful and original rose window, whose equal in tracery is hard to find even in the lovely windows of the old world. The ultimate richness of this half of the façade is at present hardly more than hinted at. Rows of statues are to fill all the niches in the entrance, and above and below the rose window which is to be framed in elaborately and gracefully carved stone.

The other half, the tower, is in severe contrast to that just described. At the base it is massive and severely plain, lightened only by two long windows when it reaches the level of the rose window, but not until it has climbed above



SOUTH TOWER, CORNER OF PARISH HOUSE, AND WEST END OF CHURCH. ST. THOMAS' CHURCH, NEW YORK CITY. CRAM, GOODHUE & FERGUSON, ARCHITECTS.



DETAIL OF WOOD-CARVING. (ST. CHRISTOPHER.) THE SACRISTY. ST. THOMAS' CHURCH, NEW YORK CITY. Cram, Goodhue & Ferguson, Architects.

the roof of the nave is it ornamented to any considerable degree. Even then it makes no attempt to challenge its neighbors by its height, but it holds the admiration of all by its incomparable grace and charm and by its four crowning turrets of unequal measurements.

The whole exterior is massive and varied in silhouette and extremely fine in proportion. The plain base of the tower, the severe simplicity of the buttresses and the flat wall of the Parish House are cleverly offset by the exquisite lace work of carving and the picturesque turrets that soften the building against the sky, as well as by the remarkably lovely rose window and the splendid doorway.

Some slight idea of the ultimate effect of this sculpture may be gained by noticing the graceful and rich carving of the details of the niches in the Main Portal. These will eventually hold statues of various saints.

It is a great disappointment that the graceful designs for the South porch, had, for the present at least, to be abandoned and that entrance left plain. The 53rd street side of the church needs lightness and elaboration, and the design for this porch with its turrets and pinnacles and statues is so lovely that its present incomplete state is greatly to be regretted. The charming tower at the angle of the Parish House is an insufficient contrast to the otherwise massive side of the church. The interest is now centered in the façade to an extent that is unfair to the church as a whole.

The very unusual and effective composition of the façade is due to the exigencies of the plan. Seats had to be provided for over seventeen hundred people, an enormous number in proportion to the size of the building. There was no possibility of increasing the width or length of the church by so much as one foot in any direction. A way out of the difficulty was found by the construction of a side gallery holding three hundred and twelve people. It had to be placed on the South side of the nave, as the wall on the other side was blank and could not be pierced by windows. The nave, therefore, instead of being in the centre of the structure is at one side, and directly in line with the main portal.

It was unquestionably advisable to have the altar and pulpit visible from the greatest possible number of seats, and to accomplish this it was necessary to widen the nave to the greatest possible extent. It was inevitable that the piers would cut off the view from a number of the seats, but such seats were reduced to a minimum. Had the nave been narrower and the side aisles wider, as is usually the case, a greater number of seats could have been placed in the body of the church, but there would also have been many more without a view of the chancel. Since the width of the nave was so great it



THE SOUTH PORCH ENTRANCE TO THE PARISH HOUSE. ST. THOMAS' CHURCH, NEW YORK CITY. CRAM, GOODHUE & FERGUSON, ARCHITECTS. was, of course, necessary to make it proportionately high.

The laws of proportion and construction, which were as important as any of the foregoing conditions, had to be carefully worked out and related to them, and to the ultimate effect of light and shadow and color and line in the finished interior. It was, indeed, far from the seemingly simple proposition of designing a beautiful church for the corner of 53rd street and Fifth avenue. It was a problem of "exact science united to intensive ingenuity" in the application of inflexible laws. is now much darker than it will eventually be, when the weather has had time to impart to it that peculiar and attractive soft whiteness that lead takes on after exposure. The Gothic lettering running around this turret and across the wall of the Parish House is very decorative.

The loggia in 53rd street at the entrance of the Parish House is delightful. The charm of its massive piers and powerful ribs, its deep shadows and veiled lights is shown in the photograph. The perfection in the cutting of the smallest moulding profile is also shown here.



DETAIL OF FIGURED PLASTER CEILING. THE SACRISTY. ST. THOMAS' CHURCH, NEW YORK CITY. Cram, Goodhue & Ferguson, Architects.

An interesting detail that clearly shows Mr. Goodhue's ease in handling Gothic, his sensitiveness to the spirit of the style, and his boldness resulting from a perfect intimacy with it, is the use of brackets on the two front buttresses in conjunction with that of the usual crockets. These brackets are undoubtedly of Renaissance origin and yet in perfect harmony with the rest of the design. Having a stronger outline they impart a charming variation to the clusters of tiny projections that enliven the façade with a sprightly play of light and dark points.

The picturesque lead cap on the 53rd street turret rising from a setting of fretted carving and pinnacles, is a delightful contrast to the stone of the church. It From the street the three deep openings of this loggia are very effective.

The stone of which the church is built is a white oölitic lime stone from the quarries at Bowling Green, Kentucky. It varies in tone from a warm gray color to white, and the longer it is exposed to our climate the whiter it becomes. The gray color is due to the presence of oil, which preserves it from the disintegrating action of moisture and frost, bleaching it and also protecting it against the dirt and soot of the city. It grows finerand harder with age. The stone used forthe interior, a rich yellowish color, was obtained from South Carrollton, Kentucky, from the quarry that had not been. used since the Civil War.



The lock is illustrated in detail on page 127.

DETAIL—DOOR AND PANELLING IN THE SACRIS-TY. ST. THOMAS' CHURCH, NEW YORK CITY. CRAM, GOODHUE & FERGUSON, ARCHITECTS.

The interior of St. Thomas' is as beautiful in effect as the exterior. The wide and lofty nave impresses the visitor by its dignity, and reserve. The straight, strong ribs rise from the pavement in aspiring lines that lead the soul of the worshipper heavenward with them in simplicity and truth. The rushing world is left without. The mere sightseer entering the church forgets to criticize or compare. It is beautiful, uplifting-spiritual-and he is awed by the presence of an indescribable something. The impression of truth and sincerity has been gained by the use of no less powerful agents than absolute truth and sincerity themselves. There is not a sham in the whole building. The construction of St. Thomas' fol-

lows everywhere the best precedent of French Gothic. The vaults and ribs and arches are all true to their outward appearance and honestly and scientifically do the work which they seem to do. The spaces in the vaulting are filled with tile harmonizing in color with the stone work instead of with stone as in the mediaeval churches, but this difference is apparent to the casual observer. The tiles were made with special regard to the acoustic properties of the church, and are of seven times the porosity of any other tiles ever made, and therefore absorb sound instead of echoing it. The structural Gothic of St. Thomas' is the structural Gothic of Amiens Cathedral. There can be no higher praise than this. The one difference is in the roof which protects the vaulting of the nave. The wooden roofs of Gothic churches were the main defect of the style. They were at best only temporary, having to be frequently renewed to protect the edifice against weather if the church was to stand for any length of time, and were the cause of innumerable destructive fires. St. Thomas' is absolutely fireproof in its construction. This fact, unusual in Gothic architecture, is brought about by the use of steel beams instead of wooden ones. These steel beams in no way resemble the steel construction of our skyscrapers, but do exactly the same work that wooden ones would do in their place, having the advantages of being lasting and fireproof.

In the entrance vestibule are two stairways leading up to the large South and West galleries. Between them, near the Brides' Portal, is a small but forbidding door, studded with nails, opening on the spiral flight of stairs that leads up to the triforium gallery and the crest of the tower. It is a dizzy ascent. Round and round one goes, in black darkness some of the time, and sometimes dimly lighted on one's way by a slit of a window looking either out on the city or down into the church, which from the triforium gallery is well worth seeing. The floor of the nave is about fifty feet below, the spring of the vaulting is high overhead, and the church seems enormous. From the chancel end of this gallery a winding passage leads down into the Parish House, and on to the Sunday School room, where there is to be a statue of Saint Nicholas, patron Saint of children, and also of New York City. From a landing on the main stairway of the Parish House one may again enter the main body of the church.

Of the equipment of the church, only the pews, the beautifully carved organ case, the hardware and the electric light fixtures are permanent. Handsome choir stalls with carved and canopied backs are to take the place of the temporary ones now used, and the glass in all the windows is temporary. The latter, how-ever, which was done by Heinigke, is surprisingly good for temporary glass. A great deal of thought has been given to the minutest detail, and all the carving, statuary and glass that is still to be added will also be a matter of the greatest interest and most careful study. The hardware is beautifully executed and is worthy of special notice, as may be seen in the illustrations, especially in the photograph of the door to the Parish House, where the heads of six of the Apostles are in relief on each of the door plates. Inside the Parish House is a "mediaeval elevator," truly a difficult thing to imagine, but most interesting in reality. The bars of the elevator cage are all of wrought iron and a spiral band of decoration runs around it holding these bars together.

There is no transept in St. Thomas' Church, or triumphal arch to mark the



DETAIL OF ONE OF THE LOCKS IN THE SACRIS-TY (EACH LOCK SHOWS SIX OF THE TWELVE APOSTLES). ST. THOMAS' CHURCH, NEW YORK CITY, CRAM, GOODHUE & FERGUSON, ARCHITECTS



A PORTION OF VESTMENT CLOSET IN THE SACRISTY. ST. THOMAS' CHURCH, NEW YORK CITY. Cram, Goodhue & Ferguson, Architects.

chancel except a slight strengthening of the arch at the choir. In plan the main body of the church is a simple rectangle, 214 feet long by 43 feet wide in the clear and 89 feet high in the nave. The effect of length is greatly increased by this simple treatment of the nave with its nine equal bays. Since the nave could not be actually lengthened in proportion to its breadth and height, this design was adopted as the one which would give the greatest possible effect of length.

The square termination of the chancel is English in design. The reredos against the end wall is eventually to be the most beautiful and unusual feature of the interior. There is a brilliant sketch in color in the vestibule of the church showing this proposed reredos. At present its place is filled by a simple dossal that falls in rich folds from the three lancet windows back of the altar, which is also temporary.

It is to be doubted whether there is another church of the size of St. Thomas' in the world where there are such varied vistas of vaulting to be seen between the columns. This is largely due to the width of the chapel and the side gallery, by the high narrow side aisles with their very pointed arches and the strongly contrasting proportions of the nave. The side gallery is one of the most unusual pieces of design in the whole church. By making it wide a greater variety of effect has been gained than would otherwise have been possible. From this gallery superb views of the church are to be had.

What wonderful music and poetry and color there is here. One borrows from all the other arts and yet can make a word picture that gives but the faintest idea of the beauty of line and form and proportion. Here is a recurrence of form which is the architectural equivalent of rhyme in poetry; a play of note upon note, of light upon shade that is music, pure and simple; there is a rhythm that could not be surpassed in either of these forms of artistic expression; and there is variety in color that is very satisfactory now, and will be superb when the stained glass is set in the clerestory windows.

The symbolism of the church is most interesting.

The cathedrals of mediaeval France with their countless sculptures of Saints and Angels, of imps and demons, and of Biblical scenes served as a huge picture book to the masses of the people. Although they could not read, they could,



THE SEAL OF ST. THOMAS, EXECUTED IN PLASTER ON THE CEILING OF THE SACRISTY. ST. THOMAS' CHURCH, NEW YORK CITY. Cram, Goodhue & Ferguson, Architects.

by remembering what the priests had told them from time to time, and by the help of the emblems and symbols with which they were perfectly familiar, piece together the great fabric of mingled tradition and truth which had grown up in the church. They could review the lives of the saints and martyrs and bring back to their minds the thrilling stories that had been told them. They must have had much the same feeling that we should have in looking at a profusely and fancifully illustrated book of familiar stories whose text was written in a foreign language which we could not read-we would follow the stories in imagination as we looked at the pictures, more impressed doubtless by the excellence and quality of the illustrations than we should have been could we have read the context.

To the devout mediaeval church-goer these sculptural forms were the symbolical embodiment of religion as well as an inexhaustible field for romance and imaginative journeying.

The legends of Thomas, the Apostle, are unexcelled by those of any other saint in their picturesque qualities, though they contain little that is of value as history. He was the patron saint of architects and a great traveler. After the Crucifixion he is said to have gone into the East, and to have preached the gospel to the Medes and Persians and Indians and many other Oriental nations. He built a great church and converted thousands to the Christian religion. Finally he was killed by a spear thrust in his heart, a victim to the jealousy of the priests whose followers had become converts to the new religion which St. Thomas preached, we are told, with infinite persuasiveness and gentleness. In one of the chapels in the Cathedral of Chartres, some of the most stirring incidents in the life of this Apostle are shown in stained glass.

It is proposed and expected that the new St. Thomas' will be as beautiful in its symbolism and in the execution of its sculpture as any of the churches of the middle ages. The fact that we can read the stories instead of being obliged to wait until others more learned than our-



DETAIL OF CARVINGS IN THE SACRISTY. ST. THOMAS' CHURCH, NEW YORK CITY. Cram, Goodhue & Ferguson, Architects.

seives find the time to tell them to us should in no way lessen our interest in them or their appeal to us. The intense religious enthusiasm felt by the people of the twelfth and thirteenth centuries for their cathedrals is echoed today by the feeling of each parish for its church. Every member of St. Thomas' is intensely proud of the new building and has a personal interest in it. The plan, not as yet fulfilled, but which we hope soon will be, is to have the interior representative of Biblical characters and the exterior "show forth the subsequent exponents of Truth, forming a visible continuity between the past and present, a sculptured witness of the appeal of the church through all ages." An idea that is, indeed, very fine. There is so much in the church history right up to our own times that is wonderfully symbolic, that it seems narrow to draw from the Bible alone for subjects, as is done so much in modern churches.

The proposed Symbolical Sequence of Saints for the exterior of St. Thomas' is so delightful that I cannot resist giving at least a portion of it here, although it has as yet progressed no further than to be worked out on paper. Let us hope that it may be carried out in the very near future.

The main portal is divided in the centre by a stone pier symbolical of the two natures embodied in Christ, the human and the divine. On the pedestal supporting the figure of Christ are to be three angels holding the six symbols of the attributes of the Diety. 1, Tower (Power); 2, Crown (Majesty); 3, Torch (Wisdom); 4, Heart (Love); 5, Mercy (Broken Shackles); 6, Justice (Scales). In the three niches on either side of the porch there are to be six of the Apostles, St. Peter, St. Andrew and St. James, the Greater, on the right; on the left, St. Paul, St. Philip and St. John. Above in the central niche in the tympanum is to be a statue of the patron of the church, St. Thomas, the Apostle. The other two large niches are to contain statues of St. Thomas of Canterbury and St. Thomas, the Doctor, while in the six smaller niches are to be statues of the six remaining apostles. Each holds a scroll

on which is written his particular contribution to the Apostles' Creed. These exterior sculptured saints are not only interesting to the eye of the passerby, they "lend themselves to the heightening of the architectural ensemble."

On the thirty-three bosses over the main portal the three periods of Christianity, early, mediaeval and modern, relating to the Anglican church, are to be depicted. The first division will contain such scenes as the Nativity, the Crucifixion, the Resurrection; the second, scenes in English Christianity, such as St. Joseph of Arimathaea and the Holy Grail. St. Augustine's meeting with the bishops of the British church; the third, scenesfrom the development of the church in America, from the ships containing the early Anglican emigrants down to the building of the new St. Thomas'.

I will not go more fully into the details of this sculpture except to say that the four niches in the two front buttresses are to contain the doctors of the church, SS. Gregory the Great, Ambrose, Athanasius, and Jerome, who are symbolical of the dogmatic strength of Christianity.

The twelve signs of the zodiac are to be carved in the twelve bosses of the rose window, six on the exterior and the remainder on the interior. The Bridal Porch to the South of the main entrance will be presided over by the patron saint of brides, St. Joseph. There will be bridal scenes in bas relief on each side, one from the Old and one from the New Testament, namely, the marriage of Isaac and Rebecca, and the marriage in Cana.

The interior of the church does not contain nearly as much sculpture as the exterior. Here the symbolism will be largely carried out in the stained glass windows, in the wood carving and even in the hardware. Every detail down to the keys that lock and unlock the various doors to the church and parish house has been carefully considered and designed from the symbolic as well as the artistic point of view. Everything has a hidden meaning which makes it appropriate to its use in the house of God.



DETAIL OF WOOD CARVING IN THE CHOIR ROOM, ST. THOMAS' CHURCH, NEW YORK CITY. Cram, Goodhue & Ferguson, Architects.

The figured plaster ceiling in the clergy sacristy has as the central decoration the seal of St. Thomas, with its builder's square, its book and the spear of the Saints' Martyrdom. Around it run those brave and loyal words, "Let us also go, that we may die with Him." This ceiling was brought in sections from England, as, at the time it was made, there were no modellers in this country who could do this sort of work. Since its importation, however, American craftsmen are learning to do the same kind of thing. We may be thankful to those who have had the direction of the work of all kinds on this church for the untiring supervision they have given it and their determination to realize their ideals for it. It has raised the standard of workmanship in every branch of art represented in the Church.

Indeed, every one, I am sure, who has gone up Fifth avenue since the building of St. Thomas' is grateful to each person who has had a hand in the making of this building. It grows more beautiful the more we see it and with our affection for it, grows our gratitude to its designers and our admiration of their peculiar abilities.



GARGOYLES—DETAIL FROM THE WOOLWORTH BUILDING, NEW YORK CITY. CASS GILBERT, ARCHITECT. "Without them the Woolworth Building would be distinctly less alive and less attractive."



BY G LELAND HUNTER

Photographs by B. G. Mitchell



monsters.

Darkness in visible form are concerned, "the lid is on," and even newspaper caricaturists suggest them most politely and reverently. Photographic realism is the order of the day, despite sporadic efforts toward allegory and symbolism like "Everyman" and "La Princesse Lointaine" and "Sumu-rûn" in dramatic literature, and occasional lapses into the picturesque on the part of Cubists and Futurists and poster artists. Only in the realm of dressmakers and modistes is there evidence of a conscious return to styles that are alive, and to decorative -compositions that

HE world of architectural and decorative ornament, as well as the religious world, would seem to have exorcised demons and devils in the form of gargoyles, grotesques and chimeras, goblins, dragons and griffins, tarasques, magots and gorgons, salamanders and other awful They seem to have almost disappeared. As far as the Powers of

say less than they suggest, and are fascinating because they keep the imagination active and stimulate curiosity to the extreme.

Of Gothic architecture, the essential quality is life, physical and spiritual, just as Classic architecture represents perfection in shaping of lifeless forms. Whether a Gothic building be beautiful is of far less importance than that it should be interesting. That it should achieve the impossible structurally and decoratively is almost a sine qua non.

Classic architecture has very aptly been described as frozen music. Gothic architecture is music still active and still



DETAIL-A GARGOYLE FROM THE WOOL-WORTH BUILDING, NEW YORK CITY. Cass Gilbert, Architect.

fluid, though corporeal rather than aerial. Gothicarchitecture is the esthetic expression of all humanity, evil as well as good, poor as well as rich, trivial as well as significant.

Hence, gargoyles. that are as fundamentally Gothic as grotesques are Renaissance and chimeras are Classic. Gargoyles are the efflorescence of living organisms. Gargoyles take all the hardness out of stone, and all the rigidity out of sculpture.

Unfortunately, architects have gotten into the fashion of fussily limiting the use of the word gargoyles to those

2



GARGOYLE—DETAIL FROM THE WOOLWORTH BUILDING, NEW YORK CITY. Cass Gilbert, Architect.

"Unlike Medieval gargoyles, they are made of terra cotta instead of stone."

gargoyles that terminate waterspouts and formerly served a useful purpose in rainy weather. Just because the great Viollett-le-Duc narrowed the term in his Dictionary of Architecture, and because Ducange in his Glossary of Mediaeval Latin described *Gargoullia* as *lapideum apuæ pluviæ emissarium*. But "grotesque water spout" was only one of the meanings, as is made clear by Ducange's quotation from Stat. pro aurifab. ann. 1378. tom. 6, where *Gargoulle draconis figura appellatur;* and by the use of the word for "certain serpents figures employed in heraldry," and for dragons of French cities such as the "Gargouille de Rouen"; and by Holland in his translation of Pliny II, 552 (1601): "His invention it was to set up Gargils or Antiques at the top of a Gauill end, as a finiall to the crest tiles"; and by Hall Caine in his Deemster II, 9 (1888): "A tall brass candlestick with gruesome gargoyles carved on the base"; or the *Spectator*, p. 841, Dec. 14, 1889: "To carve verval gurgoyles. grotesque figures of speech";



GARGOYLE—DETAIL FROM THE WOOLWORTH BUILDING, NEW YORK CITY. Cass Gilbert, Architect. "Gargoyles . . . are the efflorescence of living forms."

or Hormanus, *Vulgaria* (1519): "Make me a trusse standynge out upon gargellys that I may se about," and "I wyll have gargillis under the beamys breedis," which the Dictionary of the Architectural Publication Society arro-

gantly and ignorantly describes as "all in mistake of the meaning of the word."

A little learning is a dangerous thing, but a little etymology is even worse. Just as certain grammatical purists insist stupidly on confining the use of the

135

word *none* to the singular, and on spelling welsh rabbit as rare-bit, so the connotation of the English *gargoyle* and the French *gargouille* has been pinched, until now it is the universal custom in architects' offices to refuse to allow the word its full richness of meaning, and when quaint non-spouting figures are meant, to substitute the Classic *chimera* or the Renaissance *grotesque*.

Even the non-spouting gargoyles of Notre Dame de Paris are now designated on the post cards that picture them as chimères, following the lead of the archaeologists who were obliged to add to the Classic term what they abstracted from the Gothic one. Chimera in its Greek origin meant shegoat only, then by extension a fabulous fire-breathing monster, with lion's head, goat's body and serpent's tail; or sometimes with three heads, those of lion, goat and serpent. They are described by Wycliff in 1382, Bibl. Prol. 31, as "Beestes clepid chymeres, that hav a part of each beest, and such ben not, no but oonly in opynyoun."

It is not the substitution of chimera for gargoyle to which I would take strong exception-unnecessary and even misleading as it is-but to the substitution of grotesque for gargoyle, of a Renaissance for a Gothic word to describe a Gothic creature. Grotesque is from the Italian grotte, or underground excavations of the Classic decorative art of the Golden House of Nero in Rome, at the beginning of the sixteenth century, which Raphael borrowed and adapted developed so wonderfully and for the loggie of the Vatican. Perino di Vaga for the Palazzo Doria in Genoa, and Giulio Romano for the Palazzo del Té in Mantua. Primarily, gro-tesque designates these Classic and Renaissance symmetrical interlacings of conventionalized plant forms with fantastic and human and animal shapes, satyrs, centaurs and similar fabulous creatures, heads, masks and festoons, birds and insects, arms and armor, vases and allegorical figures of virtues and vices. Only by a monstrous perversion of the word can grotesque be twisted from Renaissance to Gothic, leaving its

own place to be taken by the inappropriate and incorrect *arabesque*.

Even if *gargoyle* did mean the *spouters* only, the extension of its meaning to include all the Gothic satirical figures that throng the roofs and towers of Gothic buildings would be in line with the normal and natural development of language, and in every way commendable. All the more reason, then, for holding on to a meaning that is sanctioned by ancient general usage, though for some time spurned in the technical phraseology of architecture.

Probably the best ancient literary expression of the *spout* meaning is in Lydgate, *Chron. Troy.* 11, XI (1412-20):

- And every House covered was with lead,
 - And many gargoyle, and many curious hede,
 - With spouts through, and pipes, as they ought
 - From the stone work to the kernel rauht.

But the wider connotation is clear in Withal's Dictionary (ed. 1608) who has: "Gargels of men's figures, telamones, atlantes; gargels of women's figures, cariatides vel statuae mulieres." Also in more modern times-in the last half of the nineteenth century-Adeline in his Sculptures, Grotesques et Symboliques, with many line illustrations of those in Rouen, freely and unhesitatingly designates non-spouters and spouters alike as gargouilles, while Canon Auber in the Bulletin Monumental says practically the last word on the subject when he defines gargouilles as: "Symbolic monsters, emblems of the paganism conquered by religion at Rouen"; and adds as a secondary meaning: "Imitation of these chimerical animals to conduct water from roofs."

The most vivid literary pictures of *gargoyles* are those given by Victor Hugo in his dramatic novel *Notre Dame*: "At the very top of one of the towers, a fantastic dwarf climbing, writhing, crawling on all fours, descending outside above the abyss, leaping from projection to projection, and going to ransack the belly of some sculptured gorgon; it was Quasi-



GARGOYLE--DETAIL FROM THE WOOLWORTH BUILDING, NEW YORK CITY. Cass Gilbert, Architect. "I wyll have gargillis under the beamys...."

modo dislodging the crows. On a bell tower, an enormous head and bundle of disordered limbs swinging furiously at the end of a rope; it was Quasimodo ringing vespers on the Angelus. Once at night a hideous form was seen wandering along the frail balustrade of carved lacework, which crowns the towers and borders the circumference of the apse; again it was the hunchback of Notre Dame. Then, said the women of the neighborhood, the whole church took on something fantastic, supernatural, horrible; eyes and mouths were opened here and there; one heard the dogs, the monsters, and the gargoyles of stone.

which keep watch night and day, with outstretched neck and open jaws, around the monstrous cathedral, barking. And all this came from Quasimodo. Egypt would have taken him for the god of this temple; the Middle Ages believed him to be its demon."

"Above the flame, the enormous towers, two sides of each of which were visible in sharp outline, the one wholly black, the other wholly red, seemed still more vast with all the immensity of the shadow which they cast even to the sky. Their innumerable sculptures of demons and dragons assumed a lugubrious aspect. The restless light of the flame



GARGOYLE—DETAIL FROM THE WOOLWORTH BUILDING, NEW YORK CITY. Cass Gilbert, Architect.

made them move to the eye. There were griffins which had the air of laughing, gargoyles which one fancied one heard yelping, salamanders which puffed at the fire, tarasques which sneezed in the smoke. And among the monsters thus roused from their sleep of stone by this flame, by this noise, there was one who walked about and who was seen, from time to time, to pass across the glowing face of the pile, like a bat in front of a candle."

Of course it is unreasonable to expect any American building to achieve such a wealth of dramatic picturesqueness as that. Even if the architect did recommend a thousand gargoyles, the owner and his board of directors would cut the number to a dozen, or else have them in groups of fifty all alike, in order to save the money necessary for individual modeling. And as for putting gargoyles on churches. Christians of the twentieth century would consider it sacrilegious. Even on the Union Theological Seminary in New York City, the architect, Charles Collens, dared not employ the real thing. He says:

"The religious character of the buildings does not allow such freedom. The ornament is very restrained and the grotesques are confined to the library and tower, depicturing the various symbols of knowledge, with the owl, the sphinx, and busts of monks typifying pedagogy, thought, research and preaching. The chapel, while having various ornamented billet courses well adapted to grotesques, has been treated only with angels, cherubs and evangelists. The ornament of the other buildings consists in armorial bearings of foliation. The day of the grotesque in church decoration," adds Mr. Collens, "has gone by."

In secular architecture, more ambitious attempts have been made to revive the glories of the past. On one of the barracks at West Point are quaint and humorous figures illustrating the development of war, designed by Mr. Lee Laurie for the architects, Cram, Goodhue and Ferguson. On the dormitory presented by the Class of '79 to Princeton University are numerous interesting gargoyles designed by Mr. Gutzon Borglum for the same architects. But the best modern example of the free use of gargoyles and grotesques is the College of the City of New York, whose building the architect, George B. Post, has enriched with more than 600 figures, all different-on the gymnasium, athletic contortions; on the chemical building. mysterious experiments; on the mechanical arts building, goblin mechanics; on the sub-freshman building, the beginnings of education; on the main building, the higher studies. And although the figures are inferior to those turned out in thousands by the architectural carvers of the Middle Ages, they do help vastly to relieve the deadly monotony of geometrical shapes and forms.

Mr. Post also introduced as corbels under the balcony at the twelfth story of the National Arts Club in New York City, four droll figures typifying the four arts, Painting, Architecture, Sculpture and Music.

Richardson was fond of introducing grotesque animal forms among the intricate interlacements of his Byzantine ornament, and used quaintly distorted human figures in the capitals of the columns of the crypt-like lobby of the Law School Building of Harvard University.

The grotesque, as illustrated in the treatment of the Newark Normal Training School by E. F. Guilbert "even if it is to be considered as a latter-day expression of a mediaeval joke, is serious enough to be a symbol" presenting at the same time qualities ridiculous enough to be full of meaning.

One of the most interesting set of grotesques in this country are those with which John Russell Pope has embellished the gate-lodge at Mr. Vanderbilt's place, "Deepdale," Long Island. The heads, each entirely different in facial expression, carved from wood and set under the overhanging second story, in conjunction with the hand-hewn oak timbers, make the little building as unique as it is thoroughly excellent in that toorare architectural quality of craftsmanship, combined with good design.

The loftiest gargoyles in the world, and the only important or serious ones on an office building with which I am acquainted, are those on the 29th, 49th and 51st floors of the Woolworth Building. Like all modern gargoyles they do not spout even when in the horizontal position of water spouts. And unlike Medieval gargoyles, but like those of ancient Rome, they are made of terra cotta instead of stone, and consequently have the characteristics of moulded rather than of carved ornament.

But while they are not sufficiently numerous to assert themselves as an important decorative feature of the edifice, yet they do deserve respectful attention



GARGOYLE-DETAIL FROM THE WOOLWORTH BUILDING, NEW YORK CITY. Cass Gilbert, Architect.

as suggesting the possibilities of gargoyles for use in the decoration of commercial structures. Without them the Woolworth Building would be distinctly less alive and less attractive. So that we ought rather be grateful for what we have, than complaining for lack of what we haven't. Among the animals gargoyled, some of which are illustrated in connection with this article, are the bat, the pelican, the puma, the frog, the owl.



"GRAMATAN COURT," BRONXVILLE, N. Y., BATES & HOW, ARCHITECTS.



"GRAMATAN COURT," BRONXVILLE, N. Y., FROM THE ARCHITECTS' DRAWING. Bates & How, Architects.

GRAMMATAN COVRT A FIRE PROOF SVBVRBAN APARTMENT

BY KENNETH G. HOW



ANY who are habitual city dwellers, and I may say others who are not confined to this class, will learn in amazement that there is such a thing as an apartment house in the country, as their idea of country life has been, without doubt,

synonymous with the country house. One of the reasons for this impression may be that when in the city, they have always occupied an apartment and never associated the country with this mode of living, having in mind the idea of the country house, and possibly, too, because apartments have not been erected in the suburbs to any great extent, until comparatively recent years. Where these buildings have been well built and planned with an idea of giving all the comforts and conveniences of the best apartments to be obtained in the city; and with the additional advantage of plenty of good country air, splendid sanitary conditions and, let me not fail to add, the supreme quality of freedom from fire, they have proved most popular and desirable. It may be mentioned in proof of this, that all the apartments in Gramatan Court were rented long before the completion of the building—in fact most of them shortly after the start of construction.

To those who do not wish the care and trouble which a country house necessarily demands of one, and who are still lured by the many charms of the country, may well rejoice in this solution of their problem.



THE PLAN OF "GRAMATAN COURT," BRONXVILLE, N. Y. Bates & How, Architects.

Gramatan Court, of which we give some illustrations accompanying this text, is a fireproof apartment building that has recently been completed at Bronxville, one of the most charming suburbs near New York, and well known for its picturesque rolling hills and many charming houses.

We were fortunate enough to secure a number of photographs taken during the progress of construction of these buildings-there being two separate structures, one large building facing the main or Sagamore road, and one smaller one. facing on the side or New Street, also views of the buildings taken shortly after their completion. The first mentioned, we think, will be of much interest to those who care to delve, as it were, somewhat below the surface. They show in considerable detail the method of construction and the great possibilities to be obtained in these materials when properly used.

Terra cotta hollow tile was employed in the exterior and interior bearing walls. in varying thicknesses; ten inches for the first and second, and eight inches for the third and fourth stories; all resting on stone foundation walls twenty inches thick. The interior partitions having, of course, not the thickness of the bearing walls, are also of this same material, but as made in its cheapest form, being not so hard and always used where no great weight is required to be supported. They are commonly designated "Partition Block" and those used for the bearing walls, both exterior and interior, being called "Wall Block.'

These partition block are much to be preferred over either wood studding or plaster block. The last mentioned, though fire resistant, is not a satisfactory backing for the interior finish; it not being free from shrinking, nor proof against holding dampness.

The floor construction used was the



"GRAMATAN COURT," BRONXVILLE, N. Y., BATES & HOW, ARCHITECTS.



combination system of hollow tile and reinforced concrete. The beams being of this material reinforced with steel rods and the hollow tile having a different shape from that used in the walls, filling the spaces between. This filling has the advantage of giving a level ceiling which may be readily plastered.

In the building of today, whether it be a small residence, apartment house or office building, many appurtenances are required, such as plumbing, heating, electric wiring and vacuum cleaning, etc., and considerable difficulty is sometimes experienced in extending the many pipes required through the building. To a great extent this problem is solved by the addition of two or three inches of ash or cinder concrete laid over the floor slab to properly cover them. Where a wood floor is required, two by three inch bevelled strips of wood are placed sixteen inches apart and imbedded in the concrete fill. Over this the finished wood floor is laid. We have made a diagram explaining this in further detail. When a finished floor of composition or tile, etc., is desired, these wood strips or "Sleepers" as they are called, are omitted.

Sections of the hollow tile walls may be easily noted in the various photographs of construction here reproduced and also the system of laying up. It can be seen that the joints are broken the same as is commonly done in brick or stone walls, and where the spans are not too great over openings, this same tile is used; but laid sidewise, so that they may be filled with concrete and reinforced with steel rods. The other scheme which was also used, was the reinforced concrete beam the same as employed in the floors.

The circular arch construction is also worthy of notice, showing that the same principle was employed as in either brick or stone. The views were taken before the removal of the forms.

Although hollow tile is comparatively new, when compared with the age of other standard materials, it is by no means an experiment as that stage has passed long since and when properly used in conjunction with reinforced



THE ENTRANCE, "GRAMATAN COURT," BRONXVILLE, N. Y., BATES & HOW, ARCH-ITECTS. concrete, the result is more than satisfactory.

By the use of hollow tile, all furring and lathing is omitted. The hollow spaces in the tile serve as a complete insulation against changes in the atmosphere and the dovetails on the sides serve as good clinches for the stucco or plaster. These omissions of course, materially reduce the cost, and the tile, besides possessing great strength, has also the advantages of being proof against the annoying settlements and shrinkages, so commonly felt in wood construction.

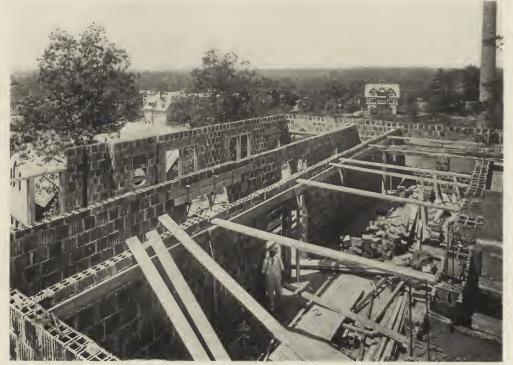
We must not fail to mention another factor of great economy, and that was the elimination of all structural steel work commonly employed in most large fireproof buildings, excepting the steel rods used for reinforcing the concrete beams. This item played an important part in making these buildings possible.

By noting the divers forms, curves and projections of the various gables, balconies, etc., may be seen how flexible and adaptable these materials are and what is more, they are built to stay with no danger of expense and trouble for possible repairs.

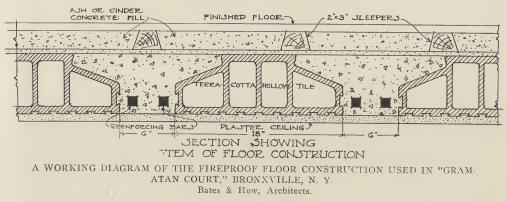
The illustrations given here and numberless others shown in the journals devoted to architecture, give ample proof of the great variety and good design possible to be obtained in this construction. Let the prospective owner realize that while the initial cost of this system is more than in wood, it will be far cheaper in the end—in that the repair bills will be down to a minimum and the building will endure in good condition for countless years.

The great advance in engineering along these lines, has made possible the accurate results obtained from the use of reinforced concrete and has made this system well adapted for any type of building or difficult detail of construction.

It may be interesting to note that these buildings, four stories and basement, are the highest which have ever been erected



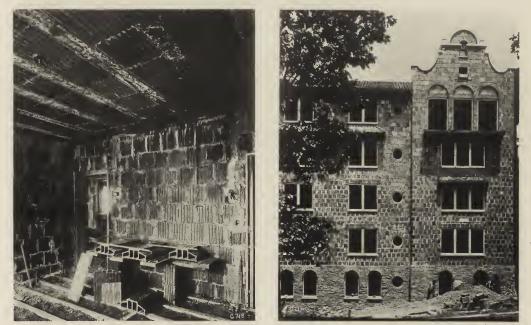
PROGRESS PHOTOGRAPH, SHOWING WALL CONSTRUCTION "GRAMATAN COURT," BRONXVILLE, N. Y. Bates & How, Architects.



in this country where these materials and this method of construction was exclusively used throughout and is in consequence quite a departure from the conventional type of structure.

They contain thirteen apartments in the upper building, and eight in the lower, besides additional servants' rooms, janitor's quarters, etc., in the basements. The apartments range in size from five rooms and one bathroom to seven rooms and three bathrooms, and each provided with an open air balcony, a feature which is seldom enjoyed in the city apartment. Each living and dining room has a wood wainscot to the height of the window sills and over this the plaster walls have been tinted or papered in various designs and colors. Each living room has an ample fireplace with a wood mantel. The bathrooms have both tile floors and wainscots, and the kitchens and pantries, etc., have composition floors. This is a most modern and sanitary treatment.

The only wood used in the main halls is the handrail of the iron stairway, and



TWO PROGRESS PHOTOGRAPHS, THE FIRST SHOWING THE FLOOR CONSTRUCTION, THE SECOND, A PORTION OF THE EXTERIOR BEFORE THE APPLICATION OF THE STUCCO. Bates & How, Architects.



PROGRESS PHOTOGRAPH OF "GRAMATAN COURT," BRONXVILLE, N. Y. Bates & How, Architects.

with the treads of marble, as is also the base and strings, and the floors of tile, with the entrance door and trim to each apartment of metal, we may say that the last word has been said on the fireproof question, as far as is known to the best modern practice.

In speaking of the stairs, we will add that it may also be built of reinforced concrete and is not a difficult undertaking. In this instance both this and the iron stairs were considered and it was concluded that inasmuch as the strings, newels and balusters, was to make it of this material in its entirety.

Each apartment is supplied with service stairs which are open to the air and are also of iron. The floors of the balconies through which they run, are of cement. The heating is by the vacuum system, supplied by the power plant of the owners, The Lawrence Park Realty Company. The buildings are supplied with electric lights throughout from the same source, and also have the intercommunicating telephone system for the vestibules at main entrances to all apartments.

Considerable difficulty was encountered in successfully meeting the conditions of the site which was a very peculiar one, owing to the two roads running at obtuse angles and the great slope of the ground, causing great differences in the grade. In the main, this was met by placing two parts of the larger building and the smaller structure on different levels following the grades of the street as much as possible, giving an effect which mars so many buildings. Another feature was the projection of each gable one beyond the other, following the angle of the road, the effect of which adds to the general interest and picturesqueness of the buildings.

The exterior is treated in an adaptation



"GRAMATAN COURT," BRONXVILLE, N. Y. Bates & How, Architects.

of the Spanish mission style with the walls of white stucco and red tile roofs so as to be in harmony with the architecture of the Hotel Gramatan of which it is a near neighbor, and considerable study and care was required in obtaining a

8

building of four stories in height, to look well in this style as practically all of the old mission buildings, upon which the design of this is based, are quite low, being rarely more than two stories high and many less than that.

149



PROGRESS PHOTOGRAPH SHOWING "MISSION" GABLE END, BEFORE STUCCO WAS APPLIED. Bates & How, Architects.



PROGRESS PHOTOGRAPH SHOWING "MISSION" GABLE END, BEFORE STUCCO WAS APPLIED, "GRAMATAN COURT." BRONXVILLE, N. Y. Bates & How, Architects.



DRAWING FOR A PROPOSED HOTEL IN THE MARKET PLACE, HELLERAU. Prof. Richard Riemerschmidt, Architect.



A CERMAN HOVSING DEVELOPMENT



HE housing reforms accomplished in Germany, though less known to our American readers than the English work of the same nature, are nevertheless of very great interest. Most of the great German industrial centres have made

notable progress in this respect during recent years, and their problems have been treated in a great variety of ways. Both in the cities themselves and in their environs districts have been set apart for systematic development, and this has usually been accomplished in an artistic and economical manner.

Dresden, the capital of the kingdom of Saxony, and the fifth largest city of the

By John T. Klaber.

Empire, has been by no means backward in this respect. Important public works have been, and are still being, carried out in the city and its environs, with the aim of rendering it more beautiful and livable. Dresden is an important manufacturing place, being the centre of the German camera industry, and having also other important manufactures, among which cigarettes and chocolate are perhaps the most prominent. The famous Dresden china is, however, not made at Dresden, but at Meissen, about sixteen miles to the northwest. Nor is Dresden exclusively industrial, being the seat of the Saxon court, and an important art centre.

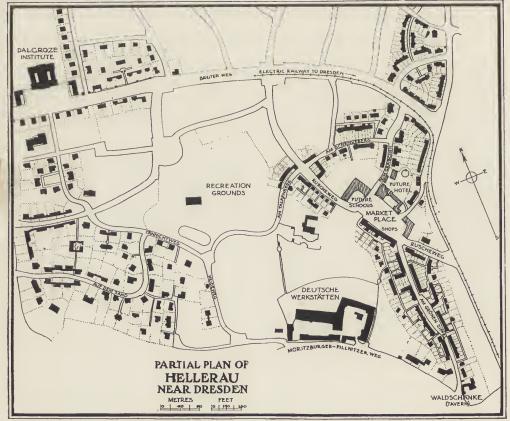
Because of its agreeable situation and its industrial importance, Dresden has gradually surrounded itself with a considerable number of residential suburbs, many of which offer valuable models for emulation. Of these suburbs, Hellerau is perhaps the most attractive, and certainly one of the most interesting, both for the general disposition and for the architecture of the individual structures.

Lying to the north of Dresden, on an undulating tract of ground that rises from the valley of the Elbe, Hellerau is connected with the city by an electric tramway, which makes the trip of about four miles in some twenty-five minutes. The cars are modern in equipment and almost luxurious in their fittings, and the traction company goes so far as to furnish free newspapers for the delectation of the travelling public. There seems, therefore, no reason why it should not attract a high class of business and professional men, for whom it furnishes excellent homes at very favorable terms.

The foundation of Hellerau seems to have been due to the initiative of the Deutsche Werkstätten, a co-operative

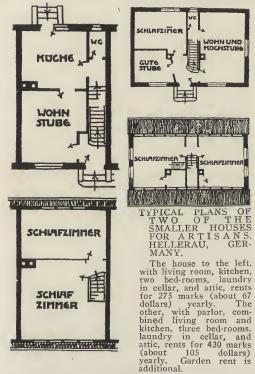
corporation who manufacture furniture and household fittings of a very modern type. Their designs are made by some of the best German architects, and particularly by Prof. Richard Riemerschmid, of Munich, who planned the garden suburb and many of its buildings. The furniture factory of the company is located at Hellerau, and a considerable part of the town is built up in small houses, suitable for the artisans employed there, while other sections are devoted to a more expensive type of building. The factory and the artisans' houses are from the design of Prof. Riemerschmid, the larger cottages are by different architects. and vary considerable in their type of design, though stuccoed walls and red tile roofs are the dominant note.

The factory of the Deutsche Werkstätten has been designed with the express idea of not having too decided a factory look, and the same principle has



GENERAL PLAN OF THE LAY-OUT OF THE GARDEN SUBURB OF HELLERAU, GERMANY.





HOUSES ON THE MORITZBURGER, PILLIUTZER WEG, HELLERAU. Prof. Richard Riemerschmid, Architect.

been followed in the artisans' houses in the part of the town adjoining it on the north and east. Although these houses are built in long rows, with a view to economy, their irregular forms and location prevent any appearance resembling the usual factory town. The street called "Am grünen Zipfel," entirely built up in rows of small houses, is saved from monotony by its irregular form and by the curving lines and oblique setting of the buildings. The plans of these little houses are of the greatest simplicity, and some of them can be rented for as little as seventy dollars a year, in addition to a small charge for garden rent, about half a cent per square foot yearly. Others of the houses, of somewhat larger size, rent for one hundred to one hundred and twenty-five dollars yearly, but here the accommodations are rather more elaborate, many of the houses at the higher

ARTISAN'S HOUSES IN THE STREET "AM-GRUNEN ZIPFEL, HELLERAU. Prof. Richard Riemerschmid, Architect.





DETAIL OF ARTISAN'S HOUSES, HELLERAU. Prof. Richard Riemerschmid, Architect.

price having their own bath-rooms, which the smaller houses lack.

The exterior appearance of these houses is decidedly pleasing. They have, as a rule, only two floors, and the arrangement in rows, in addition to its economy, has the advantage of preventing the boxy look that is inevitable in isolated houses of this size. Their grayish stuccoed walls and red tiled roofs produce an agreeable contrast of color, enhanced by the woodwork, which is usually stained in dull tones of blue and green. The architecture is that habitually used by Prof. Riemerschmid, and may be classified as a free adaptation of the prevailing domestic architecture in southern Germany during the middle ages, a type that persisted through the period of the Renaissance in the smaller towns and villages.

At the northern end of this street is the market-place, with shops and the sites of the future hotel and school buildings. At the southern end is a tavern, remodelled by Prof. Riemerschmid, at the corner of the road running east and west. On this road, somewhat to the west, lies the factory, whose irregular plan and informal architecture suggest rather an old German farm. Its disposition is, nevertheless, altogether practical, and its well-lighted interiors form excellent working quarters for the employees.

While the entire eastern portion of the estate is devoted to small houses for artisans, mostly built in rows, the southern part is built up with larger cottages, in some cases grouped together, but more often isolated. Here more variety prevails, the houses being the work of several different architects, and showing examples of various types of design and construction. This part of the ground is more irregular in its contours, lending itself to picturesque effects, and the buildings, both existing and projected, give witness to the extent to which the



SHOPS IN THE MARKET-PLACE, HELLERAU. Prof. Richard Riemerschmid, Architect.

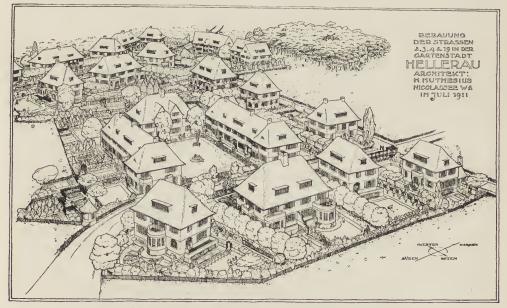


FURNITURE FACTORY OF THE DEUTSCHE WERKSTATTEN, HELLERAU. View from the Street. Prof. Richard Riemerschmid, Architect.

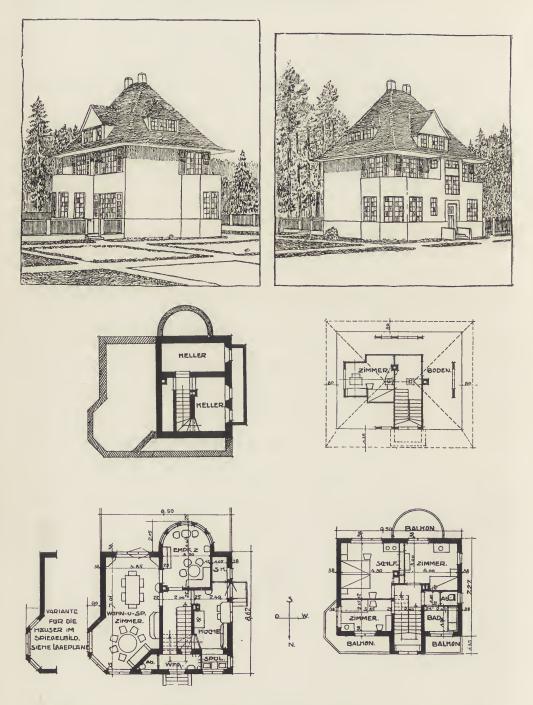
architects have sought for variety without departing from a strict adherence to the unity of character that is so desirable in any group of this nature. A large part of the estate is overgrown with forest, and in many cases the trees have been left growing about the houses, forming a pleasing background and adding intimacy and privacy.

Among the most interesting groups of houses is that designed by Hermann Muthesius, of Nicolassee near Berlin. This includes several houses built around a quadrangle, and the others adjoining. Another group of eight houses, arranged on the two sides of a street by Prof. Riemerschmid, is scarcely less interesting. As yet, however, these plans have not been completely executed, but the houses are gradually being built as occasions present themselves. Many of the houses are built in pairs, but two-family houses in which each family has its own floor are rare. An excellent example of this type is to be found in the street "beim Gräbchen," erected from the plans of Hermann Muthesius.

Other architects, also, have contrib-

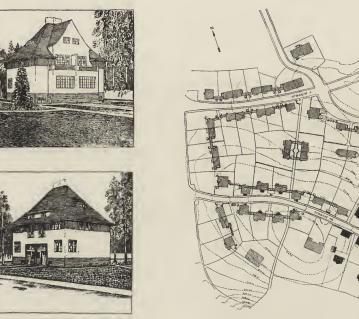


PROPOSED GROUP OF HOUSES—TANNICHTWEG, HELLERAU. Hermann Muthesius, Architect.



TWO PERSPECTIVES AND CELLAR, FIRST FLOOR, SECOND FLOOR AND ATTIC PLANS OF A TYPICAL HOUSE, HELLERAU, GERMANY. Herman Muthesius, Architect.
 A house containing reception room, combined living and dining room, kitchen, etc., with three bed-rooms and bath in second floor, and an additional bed-room in the attic. This house rents-for 970 marks yearly (about 240 dollars).

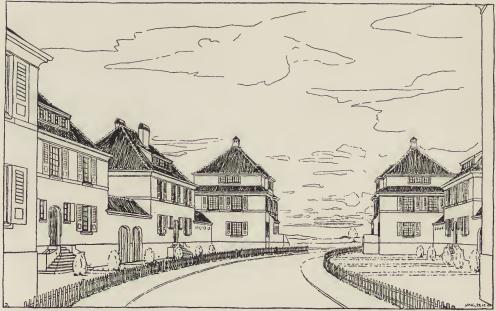
156



TWO VIEWS OF A TYPICAL DOUBLE FAMILY HOUSE, HELLERAU, GERMANY.

General Plan of Proposed Houses, Hellerau, Germany.

Herman Muthesius, Architect. The houses shown in solid black in this plan are executed, the others proposed for future building.

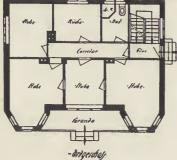


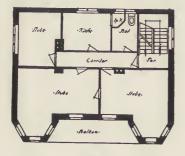
VIEW IN STREET (AUF DEM LAND). PROPOSED HOUSES FOR HELLERAU. Prof. Richard Riemerschmid, Architect.

157

PROJEKTIERT.







Obergeschag.

STREET FRONT, GROUND AND SECOND FLOOR PLAN, TWO-FAMILY HOUSE IN THE STREET "BEIM GRABSCHEN," HELLERAU. Herman Muthesius, Architect. The rental of each house is 550 marks yearly (about 135 dollars).



ONE FAMILY HOUSE, HELLERAU. Theodore Fischer, Architect.

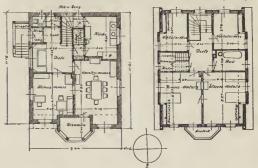
The ground floor contains living room, dining-room, kitchen, pantry; the second floor contains studio, nursery, three bed-rooms and bath. The rental of this house is 1,600 marks (400 dollars) yearly. uted their designs in the building of this part of the town. Prof. Theodor Fischer of Munich has built a very charming house with stuccoed walls on the lower floor and planking above, and a tiled hip roof. This house, despite its very considerable accommodations, has been made to rent for four hundred dollars a year, plus ground rent, which in all cases is reckoned separately. A stuccoed house with tile roof, by the same architect, rents for three hundred dollars. These houses are substantially built, roomy and well arranged.

Professor Ernst Kuhn has built a gambrel roofed house, set among the trees, with stuccoed and tile-hung walls. Other houses are by Oswin Hempel, Heinrich Tscharmann and Alexander Horath. All of these rent for about three hundred and fifty dollars a year, a very moderate figure, in view of the accommodations they furnish.

accommodations they furnish. The residence of Dr. Günther, the official physician of the town, has been planned by Rudolf Lewicki, with a view to its special use. In addition to the living rooms in the main body of the house, a wing with a separate entrance contains the doctor's offices, laboratory and other necessary features. This is



ONE FAMILY HOUSE, HELLERAU. Prof. Theodor Fischer, Architect. The rental is 1,200 marks (about 300 dollars) yearly.





ONE FAMILY HOUSE AT HELLERAU (THE FLOOR PLANS SHOWN ABOVE). Prof. Ernst Kuhn, Architect.

The first floor contains a large hall, living room, dining room, kitchen; the second floor, four bed-rooms and bath. The rental is 1,400 marks yearly (about 350 dollars).



STREET VIEW, ONE-FAMILY HOUSE, HELLERAU Prof. Heinrich Tscharman, Architect.

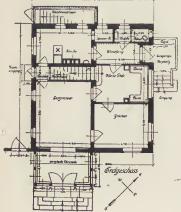
one of the largest houses in Hellerau, and is situated on a little square in the space between the Heideweg, Tännichtweg, and auf dem Sand, on the slope of a hill with an outlook to the south and east. The house by Prof. Kühn adjoins it on the west, and the larger house by Prof. Fischer on the north.

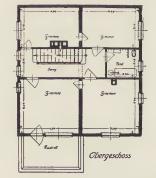
Among the other houses already executed are several from the plans of Heinrich Tessenow, of varying sizes, including some small houses in the street "am Schänkeberg," as well as villas lying near those above described. Like the other architects, he has also prepared some plans that are as yet unexecuted.

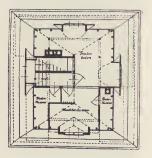
Between the cottage section and the artisans' homes a considerable area has been set aside for recreation grounds, of easy access from all directions. The remainder of the estate is for the most part undeveloped, except for the buildings of the Dalcroze Institute. This is a school of modern gymnastics, founded by Jacques Dalcroze of Geneva, the buildings having been planned by Heinrich Tessenow, and recently completed.

The main building, with its stone pillars, produces a curious, though striking, effect, and is connected by covered passages with the cottages for the resident pupils, the whole forming an effective group.

In the plan of such a town as this the development accomplished in recent years is most striking. Instead of the old idea of straight streets crossing at right angles, with endless series of identical houses, we find a pleasing variety and irregularity, well adapted to the needs of a country town, and planned in view of the differences of level and the possibilities of traffic requirements. The streets are by no means uniform in width; they twist and turn in such a manner as to offer continual changes of perspective, and the houses, in some cases, are not even parallel with the







FLOOR PLANS OF ONE-FAMILY HOUSE AT HELLERAU. (Photograph above,) Heinrich Tscharman, Architect.

Ground floor contains glazed porch, living hall, dining-room, study, kitchen; upper floor contains rooms and bath; maid's room and drying room in attic; storage and laundry in cellar. Yearly rental, 1,350 marks.







HOUSE OF DR. GUNTHER, HELLERAU, GER-MANY. Rudolf Lewicki, Architect.

streets. Many lots, also, have no street frontage, and can be reached only by a private right of way, and this arrangement has made it possible to avoid the long, narrow lots of our American suburbs without devoting an undue pro-



GARDEN GATE, MORITZBURGER, PILLIUTZER-WEG, HELLERAU. Prof. Richard Riemerschmid, Architect.

portion of space to the streets. The greater isolation of houses on such sites will to some persons seem undesirable, but others will prefer them for their seclusion and quiet.

In the building of Hellerau the absence of discordant structures has been assured by the peculiar terms of rental adopted. The houses are built by the town, organized as a co-operative stock company, and are not sold outright, but rented to the members of the society. All work must be done by the authorized architects of the society, and thus any disfiguring additions are prevented. There seems to be no reason why a similar device could not be adopted in America to the same purpose, if, indeed, it has not already been used.

161



Courtesy of E. P. Dutton & Co.

A STAINED GLASS STUDY. BY C. M. BURD.



THE ART OF MAKING A STAINED GLASS WINDOW With Notes on the Work of Clara M. Burd



By CHARLES H. DORR



ANDERING through foreign countries the traveller of artistic temperament will find today among the ancient mosques and temples of Egypt and Syria translucent mosaics set in a framework of stone and cement, which date back to the Fifth Century, and

marking the early stages of the art of stained glass.

Examples of ornamental glass set in alabaster may also be seen in the temples of Egypt and in the historic cities of the Holy Land. So far as known the art of stained glass as a decoration attained full development in the eleventh century, and like all arts it has passed through various stages of depression and eras of popular vogue. According to a prominent American artist. who is represented by numerous examples of colorful stained glass in the churches of this city and elsewhere, this art flourished and reached its zenith in the thirteenth century, and after several periods of depression again took a flight upward and soared on the wings of artistic endeavor through the sixteenth century. Although the introduction of the art of stained glass for the ornamentation of churches in America is comparatively of recent origin, much has been accomplished by American artists within the past quarter of a century, and many examples of native art may be found in the large cities, notably New York, Boston, Philadelphia and Pittsburgh, and from New England to the Pacific coast.

Stained glass as a decoration in America may be traced back to the work of three pioneers in this art, John La Farge, the noted colorist and mural painter, Frederic Crowinshield, an eminent painter, and Francis Lathrop, who is probably best known in the realm of art as a mural decorator.

These artists gave a decided impetus to decoration with stained glass soon after the opening of the Centennial in Philadelphia, or in the seventies, and since then the art has flourished and developed rapidly in America.

One of the first notable examples of ornamentation accomplished by John La Farge may be found in Trinity Church, Copley Square, Boston, where perchance visions of the colors of the stained glass windows were reproduced by the American artist for church embellishment. La Farge looked upon the glass of Chartres as the finest in all the land, and doubtless he was influenced in his work by the famous stained glass windows he witnessed during his sojourn in European cities.

Another instance of his approach to beautiful color effects may be noted in the Paulist Church of New York, at the right and left of the sanctuary. La Farge unquestionably marked an epoch in the art of making stained glass windows in this country, and as he often remarked to his fellow-artists, "I am only trying to do an old thing in a new way," and he succeeded.

This American artist introduced two innovations into stained glass making, and one of these (the opalescent glass) has since been developed by Louis Tiffany, who has applied the process to windows of fabrile glass.

To obtain this quality a material



DRAWING FOR A WINDOW IN THE BRAD-LEY MAUSOLEUM, WOODLAWN, N. Y. By C. M. Burd.

something similar to porcelain has been introduced, which produces a refraction of the light and consequently an opalescent character. This quality found in antique glass was supposed to have been produced by age like the early glass of the Phenecians and Egyptians, and examples of this type were therefore studied and greatly admired by La Farge and contemporaries. Thus efforts were made to reproduce antique effects by artificial methods. The other innovation credited to La Farge is the process of over-plating, which consists of the superimposing of one piece of colered glass upon another. The artist carried this method of window building to great lengths, often employing six or eight pieces of glass in order to attain the desired effect of rich tone and color.

For a number of years these innovations introduced by La Farge were universally employed by American artists, but in recent years there has been a tendency manifested to return to the painted glass commonly in vogue abroad. Two reasons may be advanced for this tendency—the European method is cheaper and the windows of this type permit much more light to filter through.

Among contemporary artists a staunch advocate of stained glass windows in light key is Miss Clara M. Burd, who is usually a contributor to the annual exhibitions of the Architectural League, and who is represented by examples of her art in several prominent churches in New York, Pittsburgh, and other large cities.

As a stained glass artist Miss Burd has evolved a certain process whereby she combines or merges two methods the opalescent and the painted glass, and she has achieved successful results through this blending of processes.

She makes her own designs and afterwards works in the shop with the artisans, directing their efforts to a fulfilment of the commission, which is contrary to the methods employed by many who essay the art of working in stained glass.

Usually the stained glass worker does not attempt any flesh painting on the glass, but hands it over for some one else to do, and consequently one sees so many dolls in various compositions, instead of characteristic heads and figures.

How can the art of stained glass and window ornamentation be applied to architecture?

This is a question of general interest to both the architect and the artist, and is not always carefully considered when the subject of window ornamentation is to be solved.

Miss Burd contends that a window should not be so much a picture as a decoration, and I am inclined to her belief.

"I do not mean," she says, "that I do not believe in figure windows, but I do believe in insisting strongly on the dec-



A STAINED GLASS STUDY. BY C. M. BURD.



DRAWING FOR A WINDOW IN THE SHER-MAN MAUSOLEUM, UTICA, N. Y. By C. M. Burd.

orative quality, if it is to be a figure window.

"The window should be subordinate to the architecture of the church, and not the prominent feature of the edifice, and the color should be in harmony with the color scheme introduced into the decoration of the church.

"The stained glass worker is too apt to disregard the architectural lines of the church in designing and placing his window, and sometimes takes more interest in making a conspicuous exploitation of himself than in conforming to the style of architecture already there."

An instance of this kind was illustrated not long ago in the First Church of Pittsfield, Massachusetts. A window in the church needed repairs, and as the mullions had been taken out in order to put in a picture, the architectural lines of the edifice were consequently interfered with through these changes. She suggested that she be allowed to do the figure portion of the window, and to replace the original mullions. The mullions were replaced and much of the plating removed, which made the window lighter. Another important feature to be considered in this art is the treatment of the lead lines in a decorative window. Without proper regard for this arrangement of lead lines, figures introduced into a design are frequently marred, with resultant jarring effect to the entire composition.

This feature is exemplified in the memorial window to Dr. William Davis, which Miss Burd placed in the First Church at Pittsfield, Massachusetts. The window consists of two panels with decorative figures representing the angels of Life and Death. Among the characteristic features of this work are the treatment of the lead lines, the sentiment expressed, the striking character of the faces and the effective arrangement of the drapery. The canopies of the window are also in keeping with



DRAWING FOR A WINDOW IN A MAUSO-LEUM IN CLEVELAND, O. By C. M. Burd.



TWO WINDOWS—"ANGELS OF DEATH AND LIFE," FIRST CHURCH IN PITTSFIELD, MASS. By C. M. Burd.

the other glass ornamentation in the church.

Typifying Life, one of these figures stands with left hand holding the symbolic resurrection lily, with right hand raising the drapery from her face.

In the companion panel the stern figure of death carries the inverted torch and sword. The most delicate opalescent coloring has been used in order to admit ample rays of light, for the artist who designed this memorial does not believe in dark windows.

One of Miss Burd's characteristic examples in stained glass was unveiled last Easter in the Collegiate Church, West End Avenue, New York, to the memory of Anna Van Nostrand.

In the upper part of this window the figure of Christ stands with hands

raised toward the rising sun. The figures of two kneeling angels decorate the base of the window.

This memorial window has been greatly admired because of the delicacy and subtle coloring. Here the artist has not hesitated to combine the opalescent and painted glass in order to attain the desired effects. A rich ornamental border completes the decorative quality of the window and harmonizes with the color of the church.

Another window of unusual interest is the one just placed in the mausoleum of William Bradley at Woodlawn, New York.

The figure in the composition represents Memory, and is seated with head inclined upon one hand, and withal is fraught with sentiment and feeling. The face in this as in the other windows is characterized by individualism, and is in marked contrast to the numerous mechanical and lifeless faces so evident in many churches of the land.

Here again a subtle and delicate quality of coloring plays an effective role in the decoration, and the iridescence of the opalescent glass combined with the painted work gives distinction to the window. This quality is seldom apparent where the window is only painted or of opalescent glass, therefore the value of the two combined can easily be discerned.

An example of purely ornamental work designed by Miss Burd is the mausoleum window to the memory of the late Vice-President, James Sherman, which has recently been placed in Utica, N. Y. A border of lilies surrounds a background of antique ruby glass, against which the painted Easter lilies stand out effectively. In this memorial the combination of opalescent and antique glass has been successfully introduced to produce a glowing effect of sunset sky.

As a memorial to a member of a prominent family in Cleveland, Ohio, another example of ornamental type has just been placed in Lakeview Cemetery of that city. A river may be seen flowing through a lily bed, with a background of delicate pink sky. A descending dove is introduced into this colorful window, which forms an effective decoration for this stone mausoleum on the shores of Lake Erie.

Another of the illustrations accompanying this article is one of a series of color plates designed by the artist for a recent Christmas magazine. It is entitled "The Annunciation," and it bears a distinct resemblance to the work in stained glass herewith reproduced.

Miss Burd was formerly a student of the National Academy of Design, and also studied with William M. Chase, the American portrait painter. eminent One day she packed up her palette and paint brushes and sailed for France, and naturally joined the artist's colony in Paris. She pursued the study of art in the French city and studied with Courtois and Renarde. Upon returning to America she essayed the art of decoration with stained glass and has designed many memorial windows for the Tiffany Studios and Church Decorating Company. These memorials include the windows presented by Mr. Clarence H. Mackay to the Episcopal Church at Roslyn, Long Island; the Cunningham mausoleum windows at Wilkesbarre, Pennsylvania; the McIntosh Memorial for Episcopal Church, Springfield, the Massachusetts, and the chancel windows for Saint Andrew's church, Pittsburgh.

A long span of time has elapsed since the art of stained glass was introduced for the ornamentation of ancient mosques and temples of the far east, when alabaster formed a setting, but it is safe to assume that these antique examples of art represent the work of individual artists.

And only through individual expression can the highest ideals be attained not by mechanical process, but in the atelier of the artist, for the harmony of color, originality of design, and individualism all play an important role in the artistic decorative schemes of stained glass.



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WINDOW IN THE COLLEGIATE CHURCH, NEW YORK CITY, BY C. M. BURD.



Direct Contract Letting. Considerable importance is to be attached to the following resolution adopted by the American Institute of Architects at its annual convention:

"Resolved, that the American Institute of Architects in convention assembled, recommends to the members of our profession the adoption of the practice of direct letting of contracts for mechanical equipment, such as heating apparatus, plumbing and electrical equipment. This recommendation is based on the conviction that direct letting of contracts, as compared with sub-letting through general contractors, affords the architect more certain selection of competent contractors and more efficient control of execution of work, and thereby insures a higher standard of work, and, at the same time, serves more equitably the financial interests of both owner and contractor.'

It is certainly of interest to the profession to know that for some years there has been a strong movement on the part of the members of the National Association of Master Plumbers and the National Association of Master Steam and Hot Water Fitters to secure the letting of their contracts by owners and architects instead of general contractors. They have petitioned the Institute to take under serious consideration the evils of the general contract system, so far as it affects the me-chanical equipment of buildings. They presented the matter in the most temperate and reasonable way, maintaining that the system of an economic waste and works injury to the legitimate interests of all concerned. They mentioned that general contractors, after securing contracts on the basis of bids of competent plumbing and heating contractors, proceed to

farm out their work to lower grade contractors, and, by putting in their own pockets the difference in price between cheap and good work, lower the quality of work to no advantage except their own.

It is the custom of many offices to let contracts for mechanical equipment separate from the general contracts and that there seems to be a tendency in this direction on the part of architects in general. It is interesting to note in this connection that laws have been passed in New York Pennsylvania requiring exclusion and from general contracts and the direct letting of plumbing and heating apparatus for state and municipal work, and that in perhaps a dozen other states legislation along similar lines has already been undertaken.

There is a strong feeling in employers' associations, aroused by the treatment accorded them by general contractors, and made intense by the lowering of standards of work to which the best men are committed, and there is little doubt that they might, if they would adopt union methods, make a concerted effort to boycott general contractors in their bidding. It is evident, however, that the best men in their associations are totally opposed to the adoption of such tactics and that they prefer to appeal in a legitimate way to the architectural profession. The prominent members of the architectural profession have already to a large extent made it a practice to let directly contracts for mechanical equipment,-work which is most sure to suffer and most difficult for the architect to protect where there is a tendency to lower the quality of construction.

Such activity on the part of the American Institute is in character with its general policies, and it is to be earnestly hoped that all architects, whether institute members or not, will support this kind of reform. We are indebted to the management of the Panama-Pacific Exposition, to be held in San Francisco in 1915, for the following note by Mr. Thomas Hastings, of Carrère and Hastings, on the architectural aspect of the Exposition. Mr. Hastings comments upon the architectural propriety of "Exposition Architecture" are of exceptional interest.

Architecture at the Panama-Pacific Exposition, 1915. The most vital period in the artistic development of a great exposition is the beginning of the architects', sculptors' and painters' conference; and the spirit in which this first meeting is car-

ried on, and the allotments made, is of the utmost importance to the artistic success of the whole work. In this country, with one single notable exception, the architects have always met informally to discuss the general aspect of the work, doing this without the participation of the administrative officers of the exposition, therefore being quite unhampered in their consideration of their own individual qualifications and fitness for the different portions of the work as allotted. If this is undertaken in a frank and friendly spirit, the work is begun under the most favorable conditions, and not only as to the division of the work, but as to the probabilities of intimate co-operation.

The first meeting of the Board of Architects in San Francisco were, in every way, all that could be desired. The first day was devoted to a discussion of the general plan, the general disposition of the different sections of the exposition, determining the main axes, the relation of the different courts and buildings to each other, the main entrances, the avenue of approach, and minor circulations, the terrace, fountains, and other landscape features. These general features once determined upon as nearly as possible in preliminary discussion, it was agreed to meet the following day when each of the seven architects constituting the Architectural Board was to make a drawing on a small scale, incorporating in his plan as nearly as possible the program which had been agreed upon the day before. These plans were brought together and naturally strongly resembled each other, so that with further study they were developed into a harmonious ensemble, incorporating what was best in each one. This was the origin of the general architectural plan.

The scheme once determined, each man was asked to indicate his preference in the



W. W. Swadley, Photo.

"THE TOWER OF JEWELS." Thomas Hastings, Architect. (Carrère and Hastings.)

This structure will constitute the dominating architectural feature of the Panama-Pacific Exposition, San Francisco, 1915. This tower will be 430 feet in height, its base occupying one acre, and, as this photograph of the scale model indicates, will be richly decorated with sculpture and other detail.

allotment of the different parts of the work, either as regarded the part he himself was to take, or the part others seemed most fitted to undertake. All was decided in the most informal and friendly way, and the members of the conference parted with a feeling of enthusiasm, happy because such a beginning was full of promise for the future.

It was my good fortune to have allotted to me the central elevation of the Court of Honor, including the tower and main entrance to the court. Messrs. McKim, Mead and White were given the other two sides of the same court. It was a very difficult problem to solve, because there are always so many solutions to a problem which on the one hand presents little restraint and on the other suggests little for reasons of utility. An added difficulty was found in the realization that a tower of the general dimensions agreed upon had to be designed to compose and harmonize with the classic and almost Roman architecture of the other two sides of the court yard. There seems to be no precedent for a tower entrance of these dimensions in classic architecture. The tower will be of large proportions—429 feet five inches high and 125 feet six inches broad at the base; with an arch 109 feet high and a 60 foot span.

It also seemed necessary to increase the scale of the order so that it would dominate as a central motive. At either side flanking the tower is a recall of the columns and entablatures of the main court, enclosing two small courts 109 feet by 64 feet in size, also serving as entrance vestibules to the main court of honor.

The Director of Sculpture, Mr. Karl Bitter, and Chief of Sculpture, Mr. A. Stirling Calder, have selected two women,—Mrs. Harry Payne Whitney and Mrs. Bryson Burroughs,—to do the sculptural fountains, in the form of great prows of vessels, in these courts, the subjects to be the Fountain of Youth and the Fountain of El Dorado.

Mr. F. M. L. Tonetti will execute the sixteen equestrian statues, enormous in scale, nearly 25 feet in height; and the statues on the engaged columns will be executed by Mr. John Flanagan.

There will be elevator equipment in the tower to carry visitors to the top, to obtain a view of the surrounding country.

I believe that it is perfectly legitimate, architecturally, to design temporary buildings of an exposition in a character that one would not contemplate for a permanent building, and this is not merely because the work is to exist only for a year, but because the exposition motive is made up not only of the educational aspect, but also has purposes of diversion and amusement, and it is therefore proper to relax our seriousness to some extent. Nevertheless, I think there is always the danger that we may go too far in this direction and make our work over fantastic. This is hardly justified because the large amount of money expended should be devoted to the construction of buildings which will be educational as well as diverting, and be an ob-

ject lesson both to the public and to the profession.

It is to be regretted that in this country there is no provision made to make permanent such features of an exhibition that would better the general character and plan of the municipality which has fostered its construction. I refer more especially to the landscape treatment, such as avenues, terraces, or fountains and decorative features. A permanent building is of comparatively little importance as compared with a great avenue or park when well designed to improve the looks or extend the limits of a city. When the buildings, covering several hundred acres of land are removed, certain avenues and much planting should remain as a permanent investment. To illustrate, consider the new Avenue Alexander III, and the Pont Alexandre. What an acquisition they have been made to the City of Paris since the exposition of 1900. An avenue built from, and at right angles to, the Champs Elysees leading dirct to Mansart's great dome of Les Invalides. One of the most beautiful domes in the world is now to be seen as never before.

San Francisco is to have in its exposition a profusion of planting, made possible by its climate and by the generosity and good judgment of the authorities in charge, which will produce results in landscape treatment unsurpassed by any exposition which has ever been held either in this country or in Europe. Situated as it is on the Golden Gate, the Pacific entrance to the harbor of San Francisco, few can realize what picturesque splendor will be obtained by the combined efforts of painters, sculptors, architects and of landscape gardeners who have recourse to the most beautiful supply of vegetation which nature can provide,-nowhere more luxurious than on the Pacific Coast. Let us hope that those who have control of the property and who are interested in the future growth of the municipality will make every effort to preserve the landscape which at best can be only the beginning of a possible development which, if preserved, would in time become a monument to American Municipal Art.

Thomas Hastings.



AN INTERESTING CONSTRUCTION PHOTOGRAPH OF ST. THOMAS' CHURCH, NEW YORK CITY.

Cram, Goodhue & Ferguson, Architects.

A photograph taken between the outer roof and the tops of the vaults of the great nave below.

A Detail of Construction. The new St. Thomas' Church in New York City, fully illustrated in this issue of "The Architectural Record," presents a great number of interesting bits of construction. The spiral

stair in the tower, for example, is a splendid piece of honest masonry, being constructed only of stone, each step forming at its pointed end a drum of the central core, and each step being bonded into the wall. The above photograph shows a portion of the space above the great nave, with the steel trusses which support the roof. This roof is of terra-cotta slab, covered with copper. Below the steel trusses is seen the top of the vaults, and to the right of the nearest truss is seen the device by which the great chandeliers below are hung directly, and independently of the vaulting.

Other than the steel shown in this photograph, none was used in the construction. Another reco Dissolution. effec We

The dissolution of another well-known firm of architects is to be recorded as having taken effect January 1, 1914. We have already noted the dissolution of the great firm of Cram,

Goodhue & Ferguson, which at the first of of the year became Cram & Ferguson and Bertram G. Goodhue.

Among the best known firms specializing in country house work, that of Albro & Lindeberg has, for several years, been one of the most popular. The public at large is very familiar with the work of Albro & Lindeberg, which has appeared extensively in the architectural and general press, and it will be interesting to follow the individual development of Mr. Lindeberg and Mr. Albro. While Mr. Lindeberg will continue in practice alone, under his own name, Mr. Albro has affiliated with him Mr. Paul Phipps, and will practice under the firm name of Albro & Phipps.



THE NORTH GALLERY, ST. THOMAS' CHURCH, NEW YORK CITY. CRAM, GOODHUE & FERGUSON, ARCHITECTS.



END OF SIDE AISLE, ST. THOMAS' CHURCH, NEW YORK CITY. CRAM, GOODHUE & FERGUSON, ARCHITECTS.



A HALL OF FAME, WASHINGTON, D. C., WINNING DESIGN BY WALTER L. WARD. Competition of the American Academy in Rome.

The American Academy Awards The scholarships for the prizes of Rome in architecture, sculpture, and painting for the year 1913 have been awarded to Messrs. Walter L. Ward, Leo Friedlander and George Davidson, New York

respectively, all of New York.

Mr. Ward is 24 years of age, and studied at Princeton and Columbia Universities. The subject of the competition in architecture was a hall of fame in Washington, D. C.

Mr. Friedlander is 25 years of age. He has studied at the Beaux Arts, Brussels and Paris, and at Cooper Union and the Academy of Fine Arts, New York. In addition to this he has had seven years' experience in practical studio work. He was second in the competition in sculpture last year.

Mr. Davidson is 24 years of age, studied at the National Academy of Design, New York, and was admitted to the Final Competition in Painting last year.

The subject for the competitions in sculpture and in painting was the name "Work," and six weeks are allowed for the final to complete the works in all three competitions. The jury of architecture was composed of Messrs. Breck Trowbridge, chairman; Henry Bacon and Wm. M. Kendall, architects; E. H. Blashfield, painter, and D. C. French, sculptor. In sculpture, Messrs. D. C. French, chairman; Herbert Adams and James E. Fraser, sculptors; E. H. Blashfield, painter and Breck Trowbridge, architect. In painting, Messrs. E. H. Blashfield, chairman; Kenyon Cox and Francis C. Jones, painters; D. C. French, sculptor, and Breck Trowbridge, architect.

The scholarships in the three branches, architecture, sculpture and painting, are for \$3,000 each—\$1,000 a year for three years. In addition to this each scholarship winner on his departure for Rome receives his travelling expenses directly to that city, and on completion of his full three courses there receives his return expenses to his home in the United States.

All the works in the final competitions will be shown at the annual exhibition of the Architectural League, in the fall.

During their sojourn in Rome the students are required to live in the Acadamy, where studio facilities and sleeping rooms are provided free of charge. During the first year of their term the students are obliged to remain in Rome, or in central Italy; during the second year they travel



SIDE ELEVATION—A HALL OF FAME, WASHINGTON, D. C., WINNING DRAWING BY WALTER L. WARD.

Competition Drawing of the American Academy at Rome.

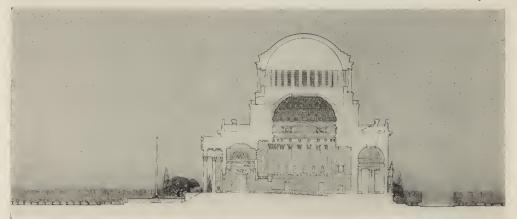
in Italy and in Sicily, and during the remainder of their term in Italy, Sicily and Greece, and other countries where classic and Renaissance remains exist. Competitions are held annually in Paris as well as at Rome, to enable Americans studying abroad to also compete for the scholarships. Students may enter for the competitions from the first of January to the first of March in each year, the competitions beginning about one month later.

The American Academy in Rome was founded to promote the means for developing in the fullest way possible those American youths who manifest exceptional talents in the fine arts. Its purpose is not to give personal advantage to the individual student, but through the highest training of his already proven powers to benefit his country.

The civilized world has so universally accepted Rome as the best place for such training that no insistence upon the reason for that choice is necessary.

Nothing is more needed for the full fruition of our abilities than a mutual knowledge and understanding of each other's arts among those engaged in the various branches. Only thus may be accomplished that union of the arts which made glorious every great period of the past.

glorious every great period of the past. The academy offers an agency for bringing about that union. It goes even further, for by its consolidation with the School of Classical Studies, under the general title of the American Academy in



SECTION—A HALL OF FAME, WASHINGTON, D. C., WINNING DRAWING BY WALTER L. WARD. Competition Drawing of the American Academy at Rome.





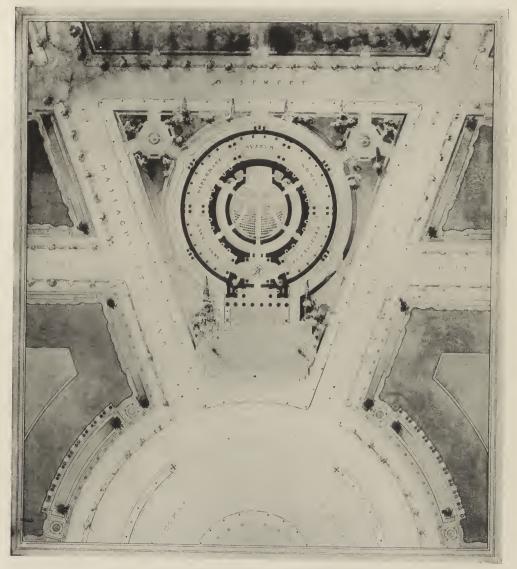
SCULPTURE GROUP---"WORK"--WINNING EN-TRY, BY LEO FRIEDLANDER. American Academy at Rome.

MURAL PAINTING—"WORK"—WINNING EN-TRY, BY GEORGE DAVIDSON. American Academy at Rome.

Rome, with its two schools, or fine arts and classical studies, it throws together the students of art and archaeology, giving to the artist the historic background of the latter, so necessary for the cultivation of his mind that he may grasp the true significance of the work of former days; to the student of archaeology, contact with the artist must freshen his conception of the human interest of that which he studies.

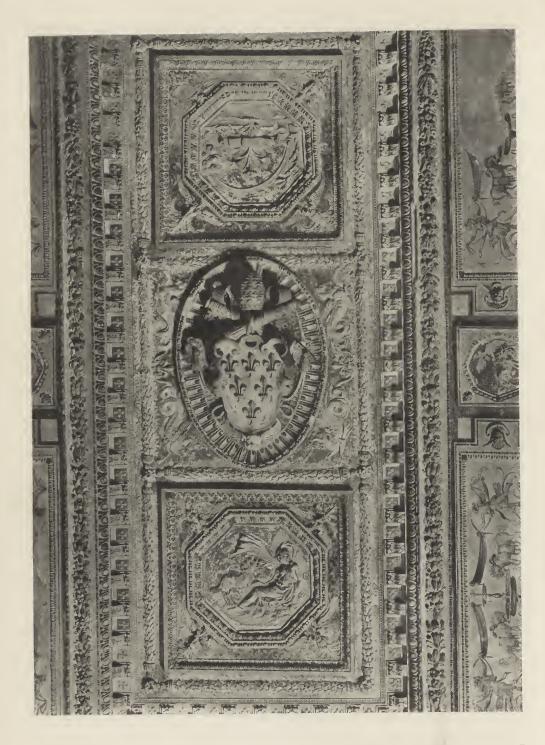
It must be understood that no matter to what degree of excellence our schools at home may attain, the young men who graduate from them still need study abroad. Outside the academy the most they are offered is travelling scholarships. Even the Ecole des Beaux Arts, distinguished as it is, is but a school; its final prize which France holds out as the supreme reward and testimonial of excellence—the Grand Prix de Rome—is not open to Americans. America, however, now offers to her sons the equivalent in the academy scholarships.

The headquarters of the academy upon the Janiculum occupy the finest of all possible sites, overlooking all of Rome. It is historic ground, rich in associations and most inspiring. The Administration Building, called the Villa Aurelia, stands upon a portion of the old Aurelian wall, and was



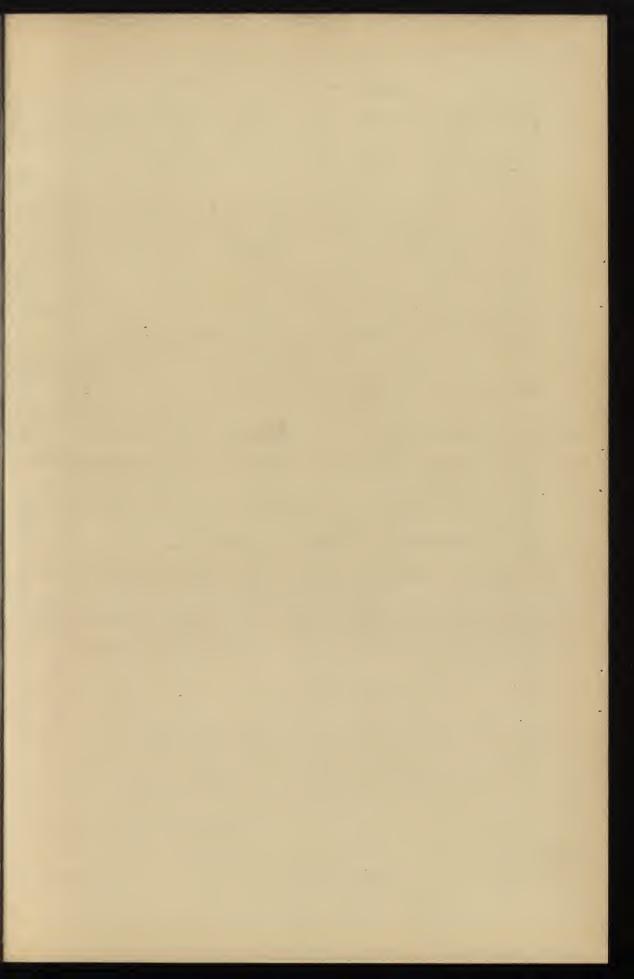
PLAN-A HALL OF FAME, WASHINGTON, D. C., WINNING DESIGN BY WALTER L. WARD. Competition of the American Academy at Rome.

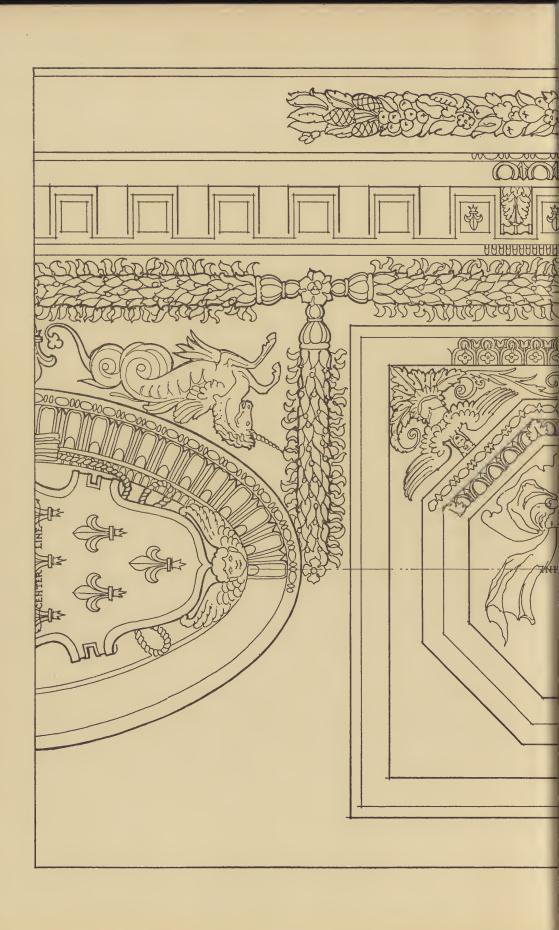
Garibaldi's headquarters during the fierce next year. The winning entries in ar-fighting at the siege of Rome. Here a chitectural design, sculpture and rural new building is under construction, with painting were illustrated in "The Arnew building is under construction, with painting were illustrated in "The Ar-adequate accommodation for the residence chitectural Record" in November, 1912. and work of a full complement of fellows; It is most interesting to follow the meanwhile the work of the two schools work being done by the competigoes on in their present separate quarters, tors for the prize of Rome, from year to until the completion of the new building year.

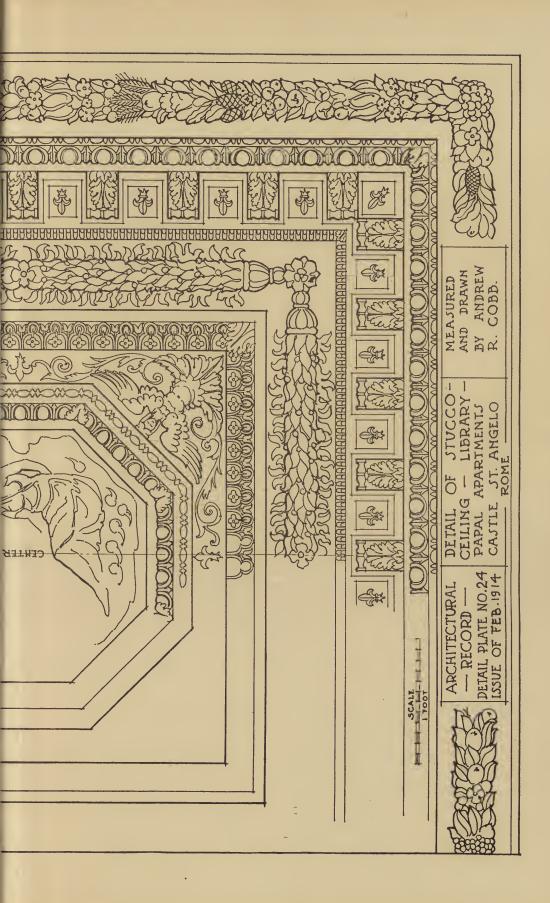


To accompany measured drawings herewith by Andrew L. Cobb.

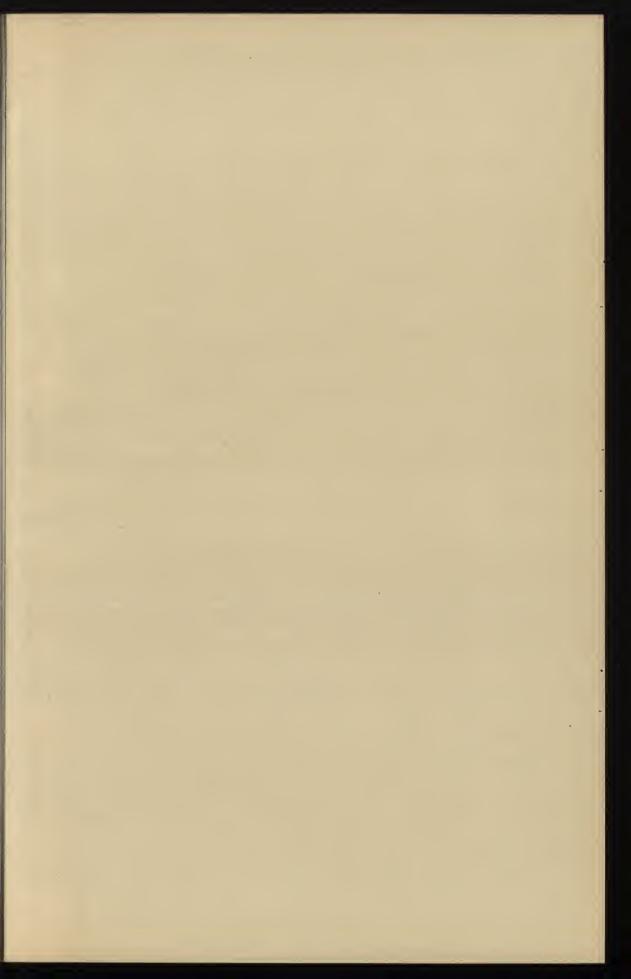
DETAIL OF STUCCO CEILING IN THE LIBRARY OF THE PAPAL APART-MENTS, CASTLE ST. ANGELO, ROME.



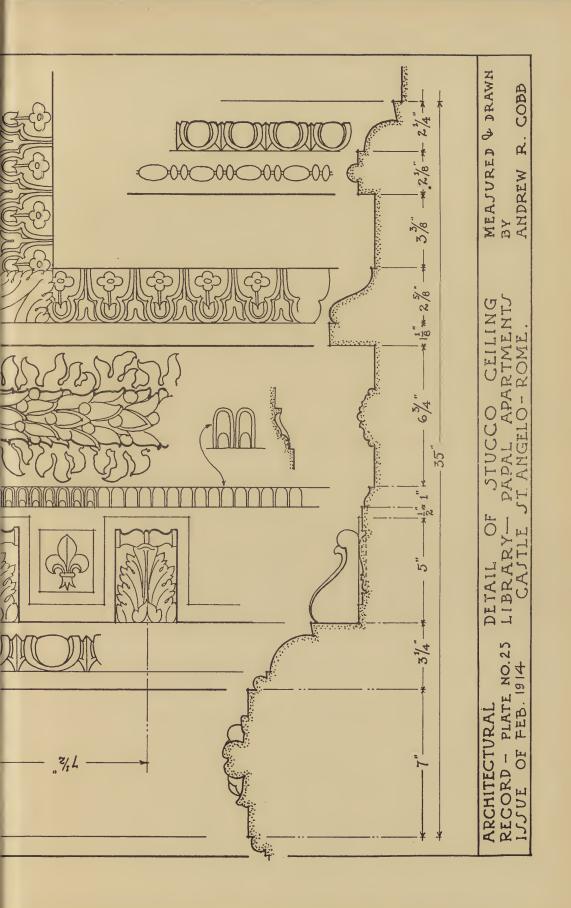


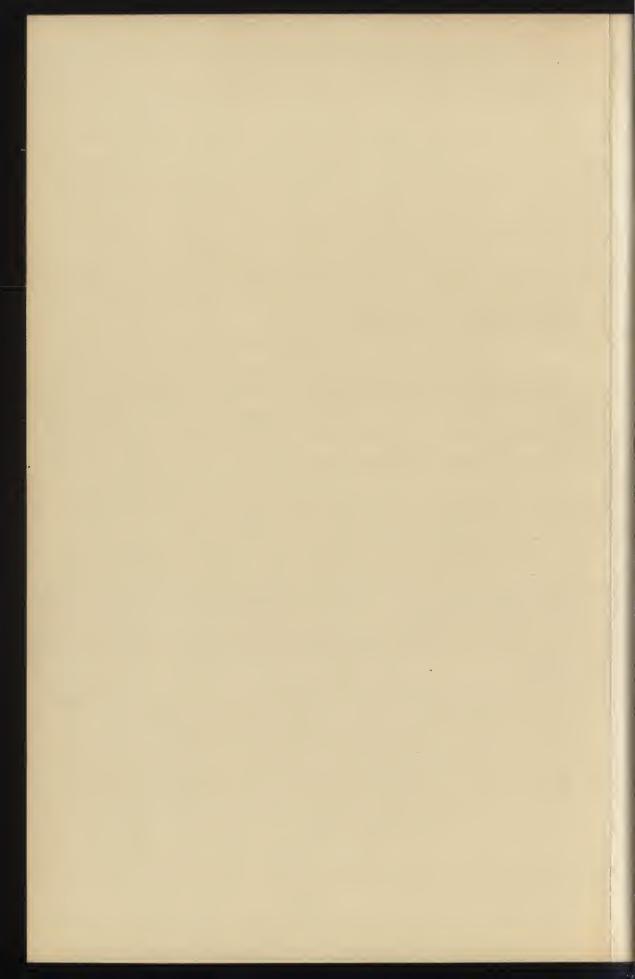














VOL. XXXV. No. 3.

CONTENTS

SERIAL NO. 186

MARCH, 1914.

Page

COVER—A Country House on Long Island. Painted by Adolph Treidler. Stephenson & Wheeler, Architects

FRONTISPIECE—Detail—Residence of J. A. Garver, Esq. A Recent Country House on Long Island. By C. Matlack Price. The Garver Residence at Oyster Bay, L. I.

Photographs by Julian Buckly. - - 181-201 Stephenson & Wheeler, Architects

FURNITURE FROM THE ARCHI-TECTURAL VIEWPOINT. By H. D. Eberlein and Abbot McClure. Part II. Early Jacobean Furniture. - 202-220

Page THE HOTEL BILTMORE. By Walter S. Schneider. - - - - 222-245 Warren & Wetmore, Architects

TAPESTRIES AND THE HOTEL. By G. Leland Hunter. - - - - 246-261

ARCHITECTURE IN MINIATURE: The Plastic Model Studies of An English Artist-Architect By Alwyn T. Covell. - - - - 262-268

NOTES AND COMMENTS - - - 269-276

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DETAIL—RESIDENCE OF J. A. GARVER, ESQ., OYSTER BAY, L. I. STEPHENSON & WHEELER, ARCHITECTS.

THE ARCHITECTVRAL RECORD MARCH, 1914

VOLVME XXXV

NVMBER III

A RECENT COVNTRY HOVSE ON LONG ISLAND THE GARVER RESIDENCE AT OYSTER BAY STEPHENSON & WHEELER, ARCHITECTS

BY C MATLACK PRICE



HE architectural critic is usually confronted with b u i l d i n g s of which the design is based upon some given precedent among the historic styles, and for this reason a design which cannot be definitely pigeon-holed as "Italian" or "Georgian," or what not

presents unique properties for consideration.

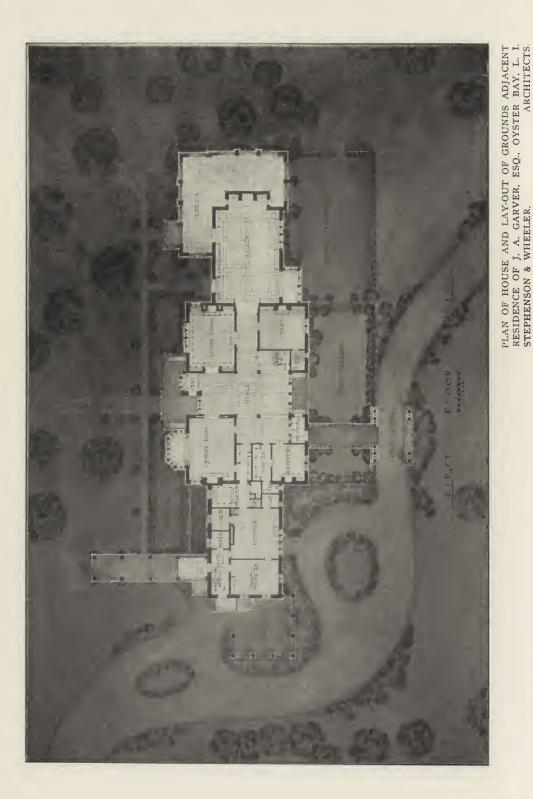
The historic styles are not difficult to recognize, and with even a small amount of discrimination one may say if a building is a complete study in a given style, or if it is an adaptation, or if it is a failure. In such consideration there are only two broad questions—first: Is the style selected an appropriate one for the given building? and second: If the style be an appropriate one, is this style rendered in terms at once scholarly, consistent and convincing?

Proceeding along these lines, an intelligent and competent sort of architectural criticism cannot fail to result, but when the critic leaves the sheltered enclosure of "historic style" his responsibility is far greater, and any valuable critical estimate can result only from general discrimination.

If the type of house identified with current English domestic achitecture has not yet been definitely registered in the archives of the history of architecture as a "style," one feels almost at liberty to do so, in that it resembles exactly no other type of design.

In considering the country house recently designed and built for J. A. Garver, Esq., Oyster Bay, L. I., by Stephen-

5





THE ENTRANCE FRONT AND PORTE-COCHERE—RESIDENCE OF J. A. GARVER, ESQ., OYSTER BAY, L. I. Stephenson & Wheeler, Architects.

son & Wheeler, it would not be entirely lucid or even intelligent to dismiss it with the mere statement that it is of the general character of the modern English country house.

Having accepted this statement, and submitting that the Garver house resembles in style modern English work of the same sort—what are the characteristics of this English work? One speaks of English country houses by such architects at Lutyens, Voysey, Bidlake, Bailey Scott or Mallows.

Of this type of house, the characteristic elements of design are several, and not altogether easy to define—elements of informality, of the picturesque, of originality, and of domesticity are perhaps the most salient—and all these qualities appear to a marked degree in the Garver house.

By informality it is intended to convey ideas opposed to balanced composi-

tion, to that kind of dignity which is on the narrow edge of being pompous and as opposed to all ideas of a classic nature. This architectural informality in design, however, must always bear the same relation to ill-studied design that the social informality of well-bred people bears to the license of ill-bred people. Only the thoroughbred, architecturally or otherwise, can safely venture to be informal to any pronounced degree. On occasions where social informality is in order, the gentleman and the "bounder" show up respectively each in his true color to a far more marked degree than in the ballroom. And so, if the analogy is an accurate one, the architect who designs in a vein so informal as the modern English domestic style, must be very sure of himself.

By "elements of the picturesque," one intends to convey a certain idea, or group of ideas usually associated with the word.





THE ENTRANCE FRONT-RESIDENCE OF J. A. GARVER, ESQ., OVSTER BAY, L. I. STEPHENSON & WHEELER, ARCHITECTS,



DETAIL OF THE DINING ROOM BAY, RESIDENCE OF J. A. GARVER, ESQ., OYSTER BAY, L. 1. Stephenson & Wheeler, Architects.

Much has been written about the subject of the picturesque—its nature, its properties and the like, and it may suffice here to dismiss it rather briefly. Broadly speaking, the picturesque element of any work of nature or artifice—a landscape, a painting, a piece of architecture—depends upon *composition* rather than upon detail or upon considerations historical or otherwise. Sir Uvedale Price, writing at length "On the Picturesque," in 1792, or thereabout, went into the meaning and derivation of the word in a manner perhaps more thorough than any other authority. In the third chapter he says: "In general, I believe, it [the picturesque] is applied to every object, and every kind of scenery, which has or might be represented with good effect in a painting—just as the word beautiful. when we speak of visible nature, is applied to every object and every kind of scenery that in any way gives pleasure to the eye—and these seem to be the significations of both words, taken in their most extended and popular sense." In this intricate study of the exact meaning of the word "picturesque," Sir Uvedale brings up similar definitions to support this—one from a letter to Sir Joshua

186



PERSPECTIVE ALONG THE GARDEN FRONT, RESIDENCE OF J. A. GARVER, ESQ., OYSTER BAY, L. I. STEPHENSON & WHEELER, ARCHITECTS.



DETAIL OF ENTRANCE FRONT, RESIDENCE OF J. A. GARVER, ESQ., OYSTER BAY, L. I. STEPHENSON & WHEELER, ARCHITECTS.



£

DETAIL—THREE BAY-WINDOWS ON THE GARDEN FRONT. RESIDENCE OF J. A. GARVER, ESQ., OYSTER BAY, L. I. STEPHÈNSON & WHEELER,







DETAIL OF CARVED WOOD BRACKETS, RESIDENCE OF J. A. GARVER, ESQ., OYSTER BAY, L. I. STEPHENSON & WHEELER, ARCHITECTS.



DETAIL OF GARDEN FRONT, RESIDENCE OF J. A. GARVER, ESQ., OYSTER BAY, L. I. STEPHENSON & WHEELER, ARCHITECTS.



WINDOW DETAIL, RESIDENCE OF J. A. GARVER, ESQ., OYSTER BAY, L. I. STEPHENSON & WHEELER, ARCHITECTS.



WINDOW DETAIL, RESIDENCE OF J. A. GARVER, ESQ., OYSTER BAY, L. I. STEPHENSON & WHEELER, ARCHITECTS.



WEST END—RESIDENCE OF J. A. GARVER, ESQ., OYSTER BAY, L. I. STEPHENSON & WHEELER, ARCHITECTS.



THE HALL—RESIDENCE OF J. A. GARVER, ESQ., OYSTER BAY, L. I. Stephenson & Wheeler, Architects.

Reynolds, to the effect that we may consider picturesque "such objects as are proper subjects for painting."

Now, the application of the term "picturesque" to the Garver house cannot be disputed, for proof of which one has only to glance at the photographs, in which every viewpoint discloses charmingly irregular and unexpected groupings of roof-line, chimney or window. The several members of the design "compose," and the lack of symmetry gives a charm which is an essential part of the picturesque. Distant prospects show the variety of roofline, while the roof texture is made interesting by the use of rugged slates of graduated size, contrasting with the warm yellow hue of the rough stucco. At close range there are an infinity of "pictures," composed of quaint and varied window groupings, carved wood brackets and unusual details.

This element of the picturesque is a rare one in American architecture, and has been consistently attained with better effect, perhaps, by Wilson Eyre, than by any of his contemporaries. Grosvenor Atterbury and Albro and Lindeberg have designed many picturesque country houses, and may be said to owe much of their success and popularity as specialists in this sort of work to their appreciation of that element. Many Philadelphia country-house architects, younger than Wilson Eyre, have been profitably inspired by his genius, and a distinct school of picturesque architecture is evolving itself in that vicinity. It is doubtful if Mr. Eyre's masterpiece-"Fairacres" at Jenkintown-may be said to be excelled in its picturesque qualities by any other similar piece of work in this country, for it possesses as well those rare values in craftsmanship and creative imagination which have placed



THE HALL-RESIDENCE OF J. A. GARVER, ESQ., OYSTER BAY, L. I. Stephenson & Wheeler, Architects.

its designer in his unique place among the architects of his time. In considering the Garver house, however, one is considering the same sort of thing, and the illustrations show a house which is eminently successful for the same reasons that "Fairacres" is successful. Possibly the Garver house is less subtle, but certainly it is little less a work of art.

This quality of the picturesque was attained, though in less abstract terms, by Stephenson and Wheeler in the great Tudor house they designed for F. F. Brewster, Esq., at New Haven, Conn.,* and while this was a splendid example of country house design, it is not to be compared with the Garver house, because its success was dependent, in the main, upon its adherence to a style, while the Garver house is excellent and interesting in proportion to the amount of imagination and creative artistry in it. To be sure, certain details of the Garver house recall certain historic phases of English architecture, and certain of its aspects remind one of modern English domestic architecture—but a fair critical estimate must find it a forceful and sincere expression of a clean-cut idea. Evidently and primarily it could have resulted only from clear vision and high architectural ideals.

The third element in the design of the Garver house, enumerated at the outset of this article, was given as "originality." Here is a term as important to accurately define as "picturesque," but one upon which the writer finds no authorities to quote. The derivation of the word obviously indicates that an original creation can base none of its significance upon its identity with any previous work of a similar kind. This, broadly speaking, should define it, were it not for the

^{*}Illustrated and described in Architectural Record of October, 1913.



THE HALL BAY—RESIDENCE OF J. A. GARVER, ESQ., OYSTER BAY, L. I. STEPHENSON & WHEELER, ARCHITECTS.



THE DINING ROOM—RESIDENCE OF J. A. GARVER, ESQ., OYSTER BAY, L. I. Stephenson & Wheeler, Architects.

fact that there are new ways of doing old things, new expressions for old thoughts-and perhaps, for the purposes (at least of architectural criticism) it were better to regard originality as that attribute of creative genius which depends upon the power of imagination. Certainly the Garver house is a monument to the imaginative ability of the architects-to their powers of visualizing the picturesque and their abilities in carrying their visions to an execution successful by reason of its accuracy in interpreting these visions. Were there even more historic elements or motives woven into the design than exist, the Garver house could still be properly called an original country house.

Its fourth characteristic, enumerated earlier, was given as a distinct flavor of "domesticity." It would seem upon first thought that one should scarcely need to compliment an architect for achieving this quality in the design of a country house, yet its rarity in the work of to-day in this country merits serious thought. Although Mr. Lindeberg has strongly emphasized his opinion of the importance of expressing ideas of domesticity in country-house design, and although a few other prominent archi-tects have shown their belief in its importance by the houses they have designed, there is an appalling lack of domesticity in the appearance of most of our larger country houses, as compared with those of a similar type in England. Usually the picturesque and the domestic, or livable elements in the design of this type of house, merge very pleasantly into each other, and contribute, in so doing, to the unity and consistency of the whole.

An interesting fact to be noted in connection with the Garver house, is that qualities of dignity need not be sacrificed to those of the picturesque or "original." An architectural design may be original



THE DINING ROOM-RESIDENCE OF J. A. GARVER, ESQ., DYSTER BAY, L. I. Stephenson & Wheeler, Architects.

without being bizarre, and may be dignified without having a tall and stately colonnade, or classic portico.

Which considerations, incomplete as they are, may serve to cover the more abstract or theoretical aspects of the design of the Garver house, and attention need only be directed upon certain more tangible details which appear in the illustrations.

Certain interesting features in the design of the entrance front make themselves felt at once—the long sweep of the gable to the right of the porte cochere, and especially the interesting variety and disposition of the windows. The color scheme is an interesting one, the roof being in a range of soft-hued slates, grey, blue and purple, the walls in a rich, warm yellow stucco, and the wood trim a weathered oak brown. The porte cochere is an interesting study, and is in excellent conformity with the house itself, although the problem was not an easy one. The revival of turned spindles has been most sucessfully effected, and their introduction here, as well as elsewhere on the exterior, does not even recall to mind the epidemic of spindles, complicated with sun-flowers, rosettes and other vagaries, which characterized that amazing style of architecture known as "Eastlakian," which flourished about the time of the Centennial.

The exterior details of the Garver house—a spindle here and there, or a carved wood bracket—have been sparingly and thoughtfully applied, possessing enough elaboration to indicate study, but not so much as to detract in the slightest degree from the dignified simplicity of the design as a whole. The various bays and groups of casements have been very happily handled; the use of this type of window has been a most important contributing factor in creating the picturesque quality of the whole house. There is, perhaps, but one detail of the exterior which is not entirely a happy one—the obelisks on the rail of the loggia at the west end of the house and this only by reason of the fact that the formality of this detail is not consistent with the pleasant informality of the rest of design.

The interior, without entering into an elaborate discussion, may be said to express a good deal of architectural character, and more important than this, have a quiet, well-bred, unostentatious and livable quality cminently in keeping with the exterior. The interesting arrangement of the rooms is well worthy of study in the plans, and the hall, diningroom and library are reproduced. Possibly the dining-room is the most successful of the main rooms, and is furnished with the same quiet good taste which is the keynote of the whole scheme. The library is given added attraction by a slight drop in its floor level, reached by a short flight of steps down from the hall, and it is unfortunate that the beam treatment of the ceiling should seem a little inadequate to so large a room.

As a contribution to the domestic architecture of this country, the Garver house is a worthy addition, and, already subtly suggesting age by the picturesque qualities of its design and the natural appearance of its placement, it will grow old gracefully, and will attest as long as it stands the architectural significance of a country house which is informal, picturesque, original and domestic in the character of its design.



THE LIBRARY-RESIDENCE OF J. A. GARVER, ESQ., OYSTER BAY, L. I. Stephenson & Wheeler, Architects.





An exceptionally good example of early Jacobean carving and rich in the variety of decorative motifs characteristic of the period.

CARVED OAK MANTEL WITH POLYCHROME DECORATION, RECENTLY BROUGHT OVER FROM ROTHERWAS HOUSE, ENGLAND.



JACOBEAN DRAW TABLE PARTLY OPEN, SHOWING STRUCTURE. ON THE TABLE STANDS A "LIVERY CUPBOARD."

FVRNITVRE FROM THE ARCHITECTVRAL VIEWPOINT

By H.Donaldson & berlein — % Abbott McClure

(Authors of "A Practical Book of Period Furniture," now on the press)



UR history has it that in the Year of Grace, 1603, Elizabeth, the last of the masterful Tudor line, was gathered to her fathers, and thick - tongued, stammering, gawky James Stuart, the "Wisest Fool in Christendom," reigned in

be too much to say that this change of rulers directly caused a change in the fashion of furniture, as it did in some later instances in both England and France, but the change came, nevertheless, although the transition progressed by almost imperceptible degrees, so that we are quite justified in attributing certain distinguishing phases and features to certain epochs and in designating the furniture in which they occur by the names of the sovereigns then ruling.

For several reasons we shall not enter into a detailed consideration of Elizabethan furniture. In the first place, its general characteristics were so similar to those of the early Jacobean that practically the same principles apply respecting its use. In the second place, genuine pieces of Elizabethan date are so rarely met with that their presence in the commercial world is an altogether negligible



SECTION OF PANELLING FROM THE BAN-QUET HALL OF ROTHERWAS HOUSE, ENG-LAND. Strapwork frieze, guilloched arches in panels and other decorative details in style typical of the early Jacobean period.

quantity and, for the vast array of oaken reproductions that flood the market, Jacobean models seem to have furnished most of the inspiration.

Since, therefore, the similarity between Elizabethan and Jacobean furniture is so close that it must be patent to the most casual observer that one proceeded from the other by a course of natural and orderly growth, it will be unnecessary to do more than indicate, from time to time, the slight points of contrast between the two that mark the several periods.

During the reign of Henry VIII the spirit of the Renaissance struck deep root in English soil, but it was not till the second half of the Sixteenth Century,

when Anne Boleyn's daughter swayed the sceptre, that evidences of the new feeling became strongly manifest in furniture or architecture. By that time, however, it was plain to be seen that the spirit of revived classicism had effectually supplanted mediaeval conceptions as an energizing force. It is then that we note the absolute passing of old Gothic ideals.

Our styles, whether in architecture, furniture or clothing, are invariably determined by our mental and intellectual bias. It has ever been thus since the beginnings of human history. The outward and visible forms of man's handiwork



MANTEL PILLAR FROM ROTHERWAS HOUSE, ENGLAND, SHOWING CHARACTER-ISTIC "JEWELLED STRAPWORK" IN PILAS-TER AND BASE OF COLUMN.



THE BANQUETING HALL OF ROTHERWAS HOUSE (AFTER ITS REMOVAL AND RE-EREC-TION IN THIS COUNTRY).

The chair and the wing settee on either side of the fireplace are of later period. The rest of the furniture is approximately of early Jacobean date.

with which he has surrounded himself have always supplied an infallible index to the state and trend of his inward and spiritual growth. It may be the cave man's rude scratchings on the bone of an animal or the canvas of a Rembrandt. As a piece of human art each faithfully expresses the mental conceptions and technical proficiency of its maker. Each is altogether honest and truthful and there is not the least likelihood of our confounding the creator of one with the perpetrator of the other. Were our surroundings not an expression of our ideals, an indication of our manners and thought, it can readily be imagined how utterly false and incongruous the whole outward aspect of life would be.

We are not surprised, therefore, to find the advent of the New Learning and the growth of Humanism attended by new methods of expression in furniture design and in every other branch of art. When the liberty of the Renaissance had broken through the trammels of narrow mediaevalism it would have been unnatural for Gothic motifs to persist in vogue. Notwithstanding the change of garniture in decorative patterns and details of design, no very radical revolution took place in contour or structure. Chairs for the most part retained their resemblance to choir stalls, and only by slow degrees were more modern, graceful and comfortable forms evolved; chests were chests, no matter what forms decorated their sides and lids; cupboards and armoires were still substantially rectangular and low in stature, while the bedsteads of the great remained cumbrous contrivances of imposing presence.

For some years the chief difference



THE OVER-MANTEL FROM THE 3ANQUETING HALL OF ROTHERWAS HOUSE, ENGLAND, RECENTLY BROUGHT TO THIS COUNTRY.

Armorial bearings are blazoned in proper tinctures, and the rest of the carving is parti-colored, and parcel gilt. Strapwork, rosettes, guilloche and grapevine details are typical.

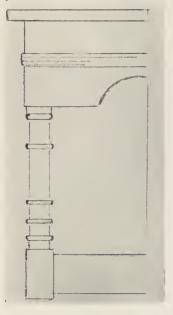


CUPBOARD SHOWING AN EXCELLENT EXAMPLE OF "ROMAYNE WORK," OR CARVED MEDALLIONS.

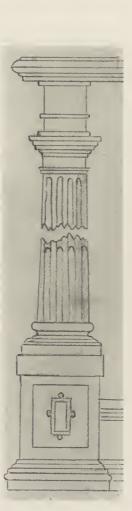
was that ecclesiastical Gothic symbolism, as an inspiration for decorative design, was almost wholly supplanted by motifs whose classic derivation was plainly traceable. To quote only one instance of this, "Romayne-Work," as it was called, as a decoration for panelling, largely took the place of flowing tracery, geometrical diaperwork or the graceful linenfold patterns which were sometimes further embellished with grapes and leaves or with fleur-de-lys. "Romayne-Work" consisted of heads of notabilities carved in medallions, while above or below sometimes occurred grotesque animals or foliations. The classic antecedents of such types of ornamentation were considered as sufficient excuse for any lack of technical ability on the part of the carver. As far as execution is concerned, it must be admitted that the degree of skill possessed by most British



DETAIL OF PANEL SHOWING "ROMAYNE-WORK."



RING TURNED TABLE.



ARCHITECTURAL TREATMENT OF LATE ELIZABETHAN TABLE LEG.



HIGHLY ARCHITECT-URAL TREATMENT FROM EARLY 17TH CENTURY CABINET.

PENCIL SKETCHES OF CHARACTERISTIC JACOBEAN DETAILS By Abbot McClure.



CARVED OAK CUPBOARDS SHOWING INTERLACING AND OTHER CHARACTERISTIC MOTIVES OF THE PERIOD.

craftsmen at this time was much better suited to the achievement of the conventional patterns they were thoroughly familiar with than to the successful portrayal in a new-fangled mode of the heads of emperors and kings. However, notwithstanding the many crudities born of inexperience, much of the "Romayne-Work" is distinctly interesting and full of suggestive vigor.

The subjects of "Romayne-Work" and panelling bring us to an interesting structural aspect of Sixteenth and early Seventeenth Century English furniture. A great deal of it was made in panels. Cupboards were panelled, chests were panelled, chair backs were panelled, settles were panelled, the tops of testers and the heads of bedsteads were panelled and we even have examples of panelled cradles. Apart from all other considerations of structure or contour, so much panelling imparted a distinctly architectural flavor to the furniture. In material and types

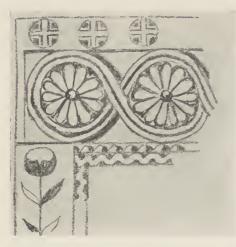




"LOZENGE" MOTIVE THAT BECAME POPU-LAR IN THE SECOND QUARTER OF THE 17TH CENTURY.



TWO TYPES OF JACOBEAN MOULDING.



GUILLOCHE PATTERN WITH ENCIRCLED ROSETTES IN RELIEF, TULIP MOTIVE.



LUNETTE MOTIF, POLIATED.



TUDOR ROSE MOTIF, CONTINUING IN FAVOR IN JACOBEAN CARVING.



EARLY JACOBEAN COURT CUPBOARD.

In this example the lower portion is made into a large cupboard. Earlier form was open below. "Demi-lune" motif on frieze and door-heads, nulling, channelling "cup-and-cover" pillars and guilloche work in round arched panels are typical of the period.

of ornamentation alike it so closely rerembled the wainscot against which it stood that one might not inappropriately say that many pieces of furniture were merely movable bits of architecture.

In both the Elizabethan and Jacobean periods, just as much as in preceding times, the furniture was actually built with a substantial architectural frankness that is really refreshing. Witness the massively proportioned bedsteads and cupboards, the chests and tables of ponderous weight and the chairs that would make one think twice before venturing to carry them from one place to another. All these things were really built in a carpenter-like manner and by the same workman who built houses, using the same tools he would use in making wainscot. They were mortised and tenoned and pinned together with wooden pins. They were meant to last and they did. The apparent structure, too, as well as the actual structure was usually strongly architectural in feeling. Cupboards, armories and large chests were apt to be supported on substantial plinths. Their superstructures were often re-enforced with pilasters or pillars, while tops were finished with friezes and well-moulded cornices. Some of the accompanying illustrations sufficiently emphasize this aspect so that we may pass on without further delay to the consideration of other matters.

Having spoken thus generally of the Elizabethan and Jacobean periods together, we shall now devote attention altogether to early Jacobean furniture phases, noting only as they occur, the points of difference from Elizabethan antecedents.

Before going further it is perhaps well to define exactly what is meant by the term *Jacobean* and also what we are to understand by *"early Jacobean."* A somewhat loose use of terms has given rise to a degree of confusion. The whole period from the accession of James I, in 1603, to the downfall of James II, in 1688, is generally called in a comprehensive way, "Jacobean."

Besides the properly so-called "Jacob-

ean" or "early Jacobean," period, which extended from 1603 to the death of King Charles I, in 1649, it embraces the Cromwellian period covering the years between 1649 and 1660, and also the Carolean or late Stuart period, which began with the Restoration and lasted till the coming of William and Mary in 1688. Needless to say, the more detailed classification, although it may occasionally have to be explained, is preferable in point of precise definition and also because the lesser divisions correspond broadly with the successive manifestations of distinct and fresh sets of influences in the making of furniture, influences that were pretty nearly contemporaneous with the political changes that marked an eventful century.

First of all, as a step in the direction of lucidly establishing in the mind of the reader the close connection between the furniture and the architecture of the period, let us briefly summarize the salient architectural characteristics, paying especial attention to detail, for it was in point of detail, necessarily, that resemblances between the two were most patent and striking.

Classic feeling, as interpreted by the foremost English architects of the day,



OAK CHEST WITH HIGH RELIEF STRAPWORK IN THE PANELS.



AN EARLY JACOBEAN OAK TABLE, WITH CHARACTERISTIC BULBOUS LEGS AND HEAVY UNDERFRAMING.

was paramount. It is beside the point to dwell here at length upon the immediate sources of their Renaissance inspiration. Suffice it to say, that, whatever local peculiarities and mannerisms it may have contracted in the course of its passage thither from Italy, the British architectural genius of the latter part of the Sixteenth and the whole of the Seventeenth Century was ecsentially classic in spirit and manifestation and unmistakable in trend.

Examine some of the finer work of the early Seventeenth Century and everywhere we find in evidence pillars and pilasters whose forms at least, if not invariably their proportions, were conceived and brought to fruition in ancient Greece or Rome. At the same time, in the very forefront of details we find the round Roman arch. "Frieze," "entablature," "pediment" and many more words of that ilk were common in the architectural vocabulary of the period. Cornices and mouldings fell naturally into the classic cast. Balustered parapets and balconies made their appearance.

The true parentage of all these bold outstanding features could not be masqued by any ill-advised modification of purpose or proportion or by the parasitical foliations of strapwork whose seed had attached itself to the architectural stock while in passage through the Low Countries. This strapwork in all its manifold varieties, beautiful as it was at times, did not of right belong to the branch on which it was fortuitously implanted and where it flourished with such amazing vigor.

From the time of its appearance in Tudor days it worked towards greater restraint and purity of form until we find the "jewelled work" studded with projecting oval bosses and lozenges in the time of the first James. Whatever its source or its merits, strapwork constituted a favorite decorative motif and we find it abundantly displayed as an architectural embellishment, both outdoors and

7



From the Metropolitan Museum. TYPICAL JACOBEAN "JOINT," OR "JOYNED" STOOL.

in and likewise, as might be expected, on the furniture.

The interior woodwork of the period reflected the same influences as the exterior features exhibited. The great point of difference was that here the carver had free scope for the exercise of his craft. It mattered not to him or his patrons that he travelled far afield from classic precedent in choosing his motifs for the adornment of panelling, newel posts, banisters or over mantels.

Rich and elaborate carving had always been dear to the heart of the English craftsman and, when the forces of Renaissance influence became supreme, that deeply ingrained love could not be uprooted. It merely received a different bent. The carver who aforetime had busied his hands fashioning graceful linenfold panel enrichments, fleur-de-lys, poppy-head finials, oak leaves and all the delicate intricacies of Gothic foliation, when the tide of fashion turned, labored just as assiduously to cover every available inch of the surface before him with designs that were presumab', of classic origin but which in the meanwhile had passed through so many media of German, French and Flemish design books

that oftentimes their original form was lost and they appeared as grotesque and almost unrecognizable mongrels. Decorative foliage of even such vigorous growth as acanthus did not wholly escape injury from the frost of "barbarism." Of course we are not surprised to find distinctively old English forms creeping into this medley now and again.

It is this enrichment of interior woodwork that we find one of the most convincing points of connection between the architecture and the furniture of the day and the close resemblance must be kept constantly in mind if we would fully comprehend our subject.

Before passing on to an analytical examination of the furniture of the period we are dealing with, we must make an enumeration of the articles in common use, for, as we have said before, an inventory of the pieces characteristic of this or that period affords valuable ground of comparison with other periods and serves as a guide in contriving decorative schemes and avoiding errors of anachronism where scrupulously accurate period treatment is intended.

During the reigns of James I. and



From the Metropolitan Museum. TYPICAL JACOBEAN "JOINT" OR "JOYNED". STOOL

OAK OVERMANTEL, SHOWING CHARACTERISTIC CARVING OF STRAPWORK, AND TREATMENT OF PILASTERS.

Charles I. the articles of furniture in ordinary use were chairs, stools, settees, daybeds, bedsteads, tables, footstools, chests, cupboards of sundry sorts, cabinets, buffets and dressers or sideboards. Mirrors, long clock cases and several other articles that later received much attention, played but a small part in the

outfitting of the early Jacobean household.

The furniture of the early Jacobean period, as indeed of every other period, faithfully reflects in contour and style the social, intellectual and religious temperament and manners of the times. It was thoroughly in accord with the genius of the people. Stout and staunch, even to clumsiness and severity of form and line, bedizened and overloaded with a repletion of ornament, it matched the roystering manners. abrupt morals and vigorous theology of t h e d a y with all t h e i r grotesquerie, terrible earnestness and redundancy of polemics, brimstone, anathema and persecution.

In the early Jacobean epoch we find straight lines strongly predominant, simple structure and craftsmanship of typ-

ical British vigor and energy. No cabinet work was of any considerable height and even the heavily carved and panelled bedsteads, with their ponderous tester superstructures supported on massive posts, were in reality much lower than one would fancy from merely seeing pictures of them. Bedsteads and cabinet work usually bore heavy, bold cornices enriched with a barbaric profusion of carved ornament.

Pillars and posts were stoutly propor-



From the Metropolitan Museum. TYPICAL JACOBEAN WAINSCOT OR PANEL BACK CHAIR.

tioned and frequently had great bulbous swellings near the middle, as did also the legs of many of the tables, especially the so-called "refectory" tables. Most of the tables were long and narrow, while stout rails or stretchers near the floor braced and stiffened the whole structure and, at the same time, supplied a "roost" for the feet which it was advisable to keep well above the drafts, dampness and dirt of the rush-strewn floor. As people were expected to use these stretchers for footstools the tables, as a rule, were higher than those of the present day.

The seats of chairs and settles were high and there were usually stout stretchers between the legs. Chair seats were, for the most part, square or almost so, while the backs were high and so nearly perpendicular that the "rake" was scarcely perceptible. Stools and forms, like the chairs, had heavy legs and stretchers.

As to the materials for early Jacobean furniture, oak was, of course, the wood commonly used, but other woods were by no means unknown. Walnut, though used sparingly, was beginning to attain some vogue. Cherry was sometimes employed, while elm and beech were utilized for much of the simpler furniture, but neither being particularly durable, very few of such pieces have survived. Chestnut also and deal were highly esteemed. Other woods, too, were occasionally called into service, though not to a sufficient extent to warrant making specific . mention of them. Mahogany, holly, bog oak, box, ebony and other precious woods from the Indies or America were used for inlay. Except in rare instances. upholstery was not used in early Jacobean times, so that woven stuffs were not in much demand save for hangings, bedcurtains and bed-spreads.

The decorative processes of the early Jacobean period were, first and foremost —one might say almost exclusively—



From the Metropolitan Museum. TYPICAL JACOBEAN WAINSCOT OR PANEL BACK CHAIR.



JACOBEAN CARVED OAK CHEST, WITH CHARACTERISTIC INTERLACE LUNETTE MOTIF, AND STRAPWORK.

carving, turning, inlay, painting and gilding. "Carving was the traditional favorite and hence the most common method of decorative expression" and the sundry types practiced were "capable of yielding considerable variety of effect in the hands of a skillful craftsman." Tasteful moderation and a sense of decorative restraint apparently did not exist and the carved furniture exhibited a riotous exuberance of fancy and an unparalleled ingenuity in multiplying ornament rather than any conception of artistic fitness. The usual methods of carving employed were "modelled," "flat" and "scratch."

In the matter of turning a good deal of taste and appreciation of form and line were shown, and not a little variety was achieved.

To relieve the monotony of oak walls and oak furniture color was introduced oftener, perhaps, than most people imagine. From mediaeval times in England, as on the Continent, paint had been used for the embellishment of panelling and furniture. The paint was applied both to flat surfaces and to carvings. Armorial bearings were blazoned in their proper tinctures on the panels of bedsteads or chests. Other subjects of freer design were occasionally depicted in similar places. Sometimes arabesques in two or three colors were painted on a solid ground of another hue. Cornices also were sometimes picked out in two or three colors. Frames of chairs and other pieces of furniture, too, made of cheaper woods, were not infrequently painted black or some dark hue and enriched by gilding.

An excellent example of this rich polychrome work is afforded in the mantel taken from "Rotherwas House," near Hereford, shown in one of the accompanying cuts. The whole interior of the banqueting hall of this ancient mansion, which was about to be dismantled, was removed and brought in sections to America, where it was exhibited before its final installation in the house of a purchaser. The mantel details and some of the carving on the panelling, also shown, exhibit the marked characteristics of the carving that enjoyed such high favor at this period.

"Great importance attaches to the

types of decorative design as well as to the sundry sorts of decorative processes employed. It is by carefully heeding just such small details that we shall learn most about furniture and become able to establish relationships and approximate In carving whether 'modelled,' dates. 'flat' or 'scratch,' the most favorite and frequently recurring types of design were as follows: Guilloche, an ornamental pattern of enrichment in the form of two or more interlacing bands or ribbons so braided or intertwined as to repeat the same figure in a continued series of circles; diaperwork, strapwork, cabochon and cartouche motifs; lunettes or half-circle patterns more or less elaborate and foliated; tulips, hearts, roses, acanthus leaves, foliated and floriated scrolls, channelling, reeding, fluting, grapevines, gadroons nulling, human figures to some extent, lozenges, and laurelling.'

Besides these that have been named as being of usual occurrence in the carving of the period, "there were others frequently met with, such as the palmated chain pattern, the pomegranate, the sunflower, in Welsh carving the dragon, and in both English and Welsh work sundry other devices too numerous to be rehearsed."

As to the structure of early Jacobean furniture, it was extremely simple and straightforward and "however much types and processes of decoration may have been affected by Continental influences, the subtleties of foreign joiners did not gain an appreciable hold in England till a later date." "Strength and staunchness of carcases were the objects aimed at rather than grace of contour."

During the early Jacobean period chairs were not nearly so numerous as in the Commonwealth times and subsequently. Stools or backless forms and settles afforded most of the seating accommodation, while chairs were regarded as seats of special dignity and were oftentimes accorded to only the master and mistress of the household. Like the rest of the furniture, they were cumbersome in pattern, distinguished by strength and elaborate ornament rather than by any grace.

The characteristic chairs had "wain-

scot" or panelled backs, were provided with substantial arms and their prototypes probably owed their inspiration in the first instance to choir stalls. The seats were nearly square and uncushioned, the backs nearly perpendicular and the stout legs joined by equally stout stretchers. Elaborate carving, particularly at the cresting, and sometimes intricate inlay were lavished on these chairs. Occasionally X-shaped chairs covered with rich upholstery were to be met with in the houses of the wealthiest nobility and gentry.

A little before the Commonwealth we find the Yorkshire and Derbyshire type of chair with no arms and open backs. The uprights ended in finials and there were usually two or three carved and hooped crosspieces which were often further ornamented by acorn pendants. Sometimes, instead of the hooped crosspieces, there were several horizontal bars, the spaces between which were filled with arcades of slender spindles and carved rounded arches. Another type of chair of about the same or slightly later date had a spindle back and afterwards became highly popular among the humbler classes in both England and America, retaining its popularity till well into the Eighteenth Century.

Joint or "joyned" stools were used everywhere and made up for the scarcity of chairs. Both they and the forms or benches were heavily underbraced with stretchers which were frequently adorned with elaborate carving. The legs often had an outward spread.

Settles with high panelled and carved backs and sometimes with panelled carving below the seat, followed the same general lines as the wainscot chairs and were quite common.

The early Jacobean day-beds, prototypes of the modern lounge, fared so ill at the hands of the Roundhead soldiery that few remained after the war and the Carolean day-bed, which will be treated later, is perhaps our best representative of this type of furniture. Bedsteads have already been alluded to.

In addition to the long, narrow "refectory" tables with fixed tops we have the ingeniously contrived "drawing-



TYPICAL JACOBEAN "COURT CUPBOARD," CARVED AND INLAID.

tables," whose length and seating capacity could be doubled. This was accomplished "by means of two shelves, sliding under the central top, but so arranged that upon their being drawn out, the upper top falls into their place, thus forming a level surface." The smaller flap tables and the gate tables have also been previously mentioned.

Chests, coffers, caskets and hutches, which were chests with fixed tops and door in front, were all decorated with the wonted rich carving and panelling. Cupboards of many forms occur, but the chief representatives of the cupboard family next to court cupboards were the "hanging cupboards," prototypes of the wardrobe, livery cupboards, which were hung on walls or set on tables, "bread and cheese cupboards," bulky affairs to hold larder supplies, and "almeries," small affairs closely resembling livery cupboards.

"Court" cupboards were really "short" cupboards and were originally small cupboards set on sidetables. "Afterwards the two were combined into one piece and the lower part, originally but a table, was fitted sometimes with shelves, sometimes with doors, making a lower cupboard. The upper part was bedecked with pillars supporting an ornate corniced top."

"But little removed from the court cupboard in type was the buffet, meant for the display of plate and also for convenience in serving." It was in reality a heavy table set against the wall having a superstructure on pillars but no cupboard. Nearly related to the buffet was the dresser, having a cupboard in the lower part and a high back with open shelves. Very similar to some of our modern sideboards was a piece of furniture like a long narrow sidetable with deep drawers. It was not often met with, however, till Crontwellian times.

Owing to the ponderous character of early Jacobean furniture any room, however large, where much of it is gathered together must necessarily take on an exceedingly substantial or even an oppressively heavy appearance. The age was heavy in outward manifestation and if a room is carried out correctly in this period style it is apt to assume the same heaviness which can only be avoided by most skillful management and by keeping down the number of large pieces used. Old oak furniture is now and has been for several years past enjoying a great vogue and many people are either carrying out their whole houses or several rooms at any rate in this style. In the majority of cases, however, it will probably be found more feasible, both from financial and aesthetic reasons, to use early Jacobean furniture in combination with fittings of a later date. Judiciously placed in a "no-period"

Judiciously placed in a "no-period" room a fine old piece or two of Jacobean carved oak, especially if supplied with a rich-colored background, will often impart a note of combined richness and balance. Indeed, one might say that early Jacobean furniture is to interior decoration as plum pudding is to a dinner. It is very rich and a little goes a great way, but too much is apt to cloy.

The subjects of finish and mounts are so closely connected with later developments that they will be reserved for a subsequent paper.



From the Metropolitan Museum. AN EXAMPLE OF THE JACOBEAN "GATE TABLE."



UPPER PORTION OF THE HOTEL BILTMORE, NEW YORK CITY. Warren & Wetmore, Architects.



THE HOTEL BILTMORE THE NEWEST ADDITION TO NEW YORKS PALATIAL HOTELS WARREN & WETMORE, ARCHITECTS BY WALTER S. SCHNEIDER

I.



MONG the notable hotels in a city noted for the number, sumptuousness and magnificence of its hotels, is the new Biltmore the terminal hotel of the Grand Central Railroad in New York City. And the Biltmore, following the Belmont, the R it z-

Carlton and the Vanderbilt, makes the fourth great New York hotel to bear the name of Warren & Wetmore, architects.

The plan of this latest and most complete of hotels is unusual in many of its features. Rising to a height of twentysix stories, the Vanderbilt Avenue façade is recessed twenty-one feet above the sixth floor, in order to preserve a relationship to the height of the Terminal Station across the avenue. Moreover, the same façade above the sixth story is broken by a light court seventy feet wide and one hundred and thirty-six feet deep, dividing the upper two-thirds of the Vanderbilt Avenue façade into a semblance of twin towers. It is through such considerations in planning and the general quietness and refinement of the exterior design, that the Biltmore Hotel is kept in an harmonious relationship with the other buildings of the "Terminal City."

Many of the departments of the hotel have been arranged in locations unusual in hotel planning, due to the fact that the hotel stands, to a great extent, over the Incoming Station, which eliminated the use of subsurface stories. This condition fortunately obviated all possibility of using any of the ground-floor space for commercial purposes, which has always seemed an architectural detriment to the Hotel McAlpin.

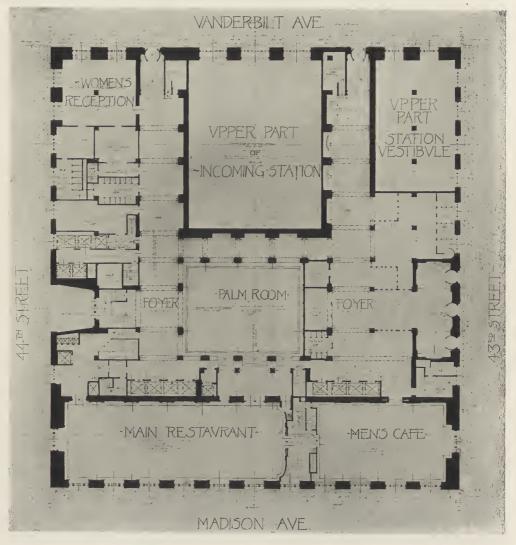
The Biltmore occupies the block 200 x 215 feet bounded by Madison and Vanderbilt Avenues, and Forty-third and Forty-fourth Streets. Part of the Terminal Station extends under Vanderbilt Avenue and the Biltmore, and is known as the Incoming Station. This Incoming Station is on two underground levels and is an extension of the Main Station. It has, however, its own station facilities, including waiting-rooms, train-platforms, concourse, and subway ramps to



UPPER STORIES FROM WITHIN THE COURT, HOTEL BILTMORE, NEW YORK CITY. WARREN & WETMORE, ARCHITECTS.



TYPICAL DETAIL OF MANTEL, LIGHTING FIXTURE, ETC., BED-ROOM SUITE, HOTEL BILTMORE, NEW YORK CITY. WARREN & WETMORE, ARCHITECTS.

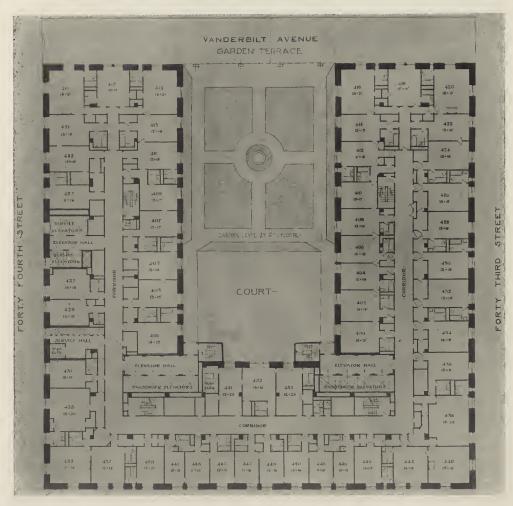


MAIN FLOOR PLAN OF THE HOTEL BILTMORE. Warren & Wetmore, Architects.

the Forty-second Street Station of the Interborough Subway.

The exterior treatment of the hotel is, for the most part, a very much modernized adaptation of the Italian Renaissance, with certain elements of French character to be expected of Warren and Wetmore, sufficiently related in treatment to harmonize with the Main Station. The materials used in the façades were granite, limestone, terra cotta and brick. The terra cotta, which is largely employed for the exterior ornamental treatment, is cleverly executed, and a great deal of it has much refinement of detail. The color of the terra cotta matches the limestone used almost perfectly. In the lower portion of the building, the panels at the fifth floor are of this material, and it was also used for the window sills throughout the main building, as well as for modelled panels containing the floor numbers in the elevator shafts.

The crown, or upper portion of the building is entirely of terra cotta—the

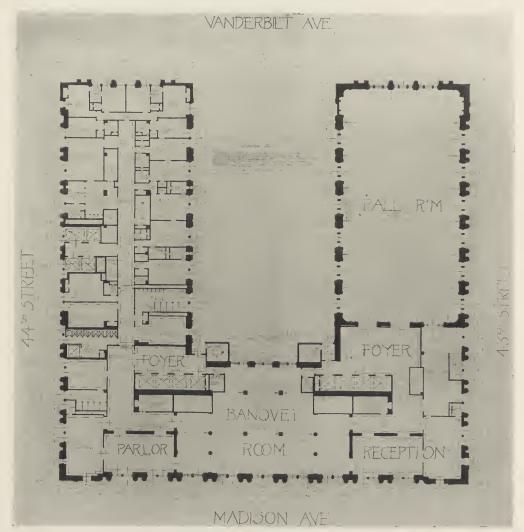


TYPICAL FLOOR PLAN OF THE HOTEL BILTMORE, NEW YORK CITY, SHOWING THE GARDEN AT THE 6TH FLOOR. Warren & Wetmore, Architects.

principal architectural motif being the coupled columns surmounted by, rather, unfortunately stilted arches. The effect of these arches has been more or less unfavorably criticized, but the treatment of the urns and garlands in the spandrils (far more French than Italian) goes far to offset this. The color scheme of this treatment is gray, accentuated by a bluish-gray blackground. Surmounting the whole is a richly ornamented cornice, also executed in terra cotta. Possibly one of the most pleasing details of the exterior is the console and balcony on the main floor, and even though the two are astonishingly out of scale with each

other, a certain happiness in the detailing makes them seem in accord. The bas-relief panels immediately below the first string-course are also well detailed, and in a vein curiously blended of French and Italian feeling.

A charming feature of the hotel—and one distinctly notable for its difference from any other New York hotels, is the garden terrace at the sixth floor level of the Vanderbilt Avenue façade. The incoming visitor, gazing up at the two great towers mounting up into the sky, and perceiving this ledge of flowers and vine-covered pergola, must perforce think of the Hanging Gardens of Baby-



PLAN OF THE HOTEL BILTMORE, AT THE 19TH FLOOR. Warren & Wetmore, Architects.

lon, suspended between earth and air. Not Assyrian, however, but more of Louis XVI in treatment, the garden lies at the base of the light shaft, between the great flanking towers of the building, and extends over the twenty-one foot ledge. The balustrades, benches, urns, and the caryatides supporting the pergola are all of terra cotta, and this pergola treatment, in point of design, is in the best French vein of Warren and Wetmore, strongly reminiscent of the similar bit of detail on the New York Yacht Club. Around the enclosed garden, a lattice grille of *treillage* emphasizes not only the garden idea of this little oasis in Manhattan's busiest center, but carries out as well the French character which it was the intention to express. The ledge on Vanderbilt Avenue is laid out as a tiled promenade under the pergola, while the garden itself, laid out with attractively planted greens and hedges around a central fountain pool, has pebbled walks.

There is a portion of the two subsurface floors of the building that is not given over to the Incoming Station.



The first floor contains a kitchen for the grille-room, barber shops and the public toilets. A Turkish bath and swimming-pool and also a machine room are on the second floor.

On the basement level are the grilleroom, two bars and the men's café. The prevailing style throughout is the Jacobean, with one of the rooms in a semblance of German Gothic which one does not associate with Warren and Wetmore. In all of these rooms there is a high wainscot paneled in oak.

For the convenience of guests arriving by train, the hotel elevators descend to the station concourse level, carrying one directly to the lobby of the hotel, on the first floor. On this floor also are the palm room, or the tea room, the main dining-room, the main grilleroom and the ladies' reception room. There are mezzanine floors on both the men's and ladies' sides of the first floor, on which are the men's and ladies' writing rooms, and also hair dressing, reception and cloak rooms. The entire Madison Avenue frontage is occupied by the grille-room and the main dining-room. This dining-room, which, as in the Ritz Hotel, is reached by a short flight of steps from the tea room, is a very dignified bit of modernized Italian Renaissance, tastefully worked out in its color scheme. Pilasters of



THE HOTEL BILTMORE, NEW YORK CITY. Warren & Wetmore, Architects.

227



DETAIL—CONSOLE AND WINDOW BALCONY, HOTEL BILTMORE, NEW YORK CITY. Warren & Wetmore, Architects.

pink-veined Norwegian marble run to the ceiling, the field of which is of gold, with low relief figures picked out in whites and grays, producing an unusual and very striking effect. The hangings are a subdued red, as are the upholstery and carpet, with the furniture a dark oak. Three large crystal glass electroliers furnish the lighting for the room. The lobby and palm room are in Caen stone with low relief ornament. The piers which rise in these rooms are capped by ornamented moldings with low and delicate relief details. A light shaft at the back of the garden on the

sixth floor allows of a large skylight over the palm room. There is interesting detail in the enormous electrolier, hung from the center of the palm room and in spite of its large scale it is worked out in harmony with the other details of the room. The ladies' reception room on this floor while restfully treated in an adaptation of the Adam style, in soft grays and white, lacks somewhat of the success of its neighbors of the first floor, though undeniably it is "smart" and suggests more than merely architectural refinement.

The walls of the first floor corridors

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MADISON AVENUE FACADE—HOTEL BILTMORE, NEW YORK CITY. WARREN & WETMORE, ARCHITECTS. 69

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DETAIL—STRING COURSE, PANELS AND FIFTH FLOOR WINDOWS, HOTEL BILTMORE, NEW YORK CITY. Warren & Wetmore, Architects.

are effectively hung with tapestries of historical interest and marked decorative value, and the corridors themselves are lighted by very interestingly designed fixtures, the globes of which, however, irrepressibly recall inverted sugar-bowls or salt-cellars. The entire treatment

throughout the corridors is of Caen stone, with very clean-cut, simple mouldings and low relief. The elevator indicators are exceedingly pretty little clocklike affairs, very similar to those used in the Hotels Ritz-Carlton and Vanderbilt—also designed by Messrs. Warren-

230



PERGOLA DETAIL ON THE GARDEN TERRACE—HOTEL BILTMORE, NEW YORK CITY. Wørren & Wetmore, Architects.

& Wetmore. The service rooms for the main dining-room, including the main kitchen, are on the second floor. Also on this floor the library for the guests has been placed—a comfortable and restful room with high oak panelling and a Jacobean plaster ceiling, with the furniture in the same period and book cases unostentatiously placed in alcoves. The third floor is a service floor.

On the fourth floor is located the Presidential Suite—perhaps the finest in the entire hotel. This suite contains a private salon, dining room, library, re-



THE TEA-ROOM-HOTEL BILTMORE, NEW YORK CITY. Warren & Wetmore, Architects.



LOBBY AND STAIR TO MAIN LOBBY, HOTEL BILTMORE, NEW YORK CITY. Warren & Wetmore, Architects.

ception rooms and bed rooms. The suite is connected with the station by a private elevator, bringing the tenant of the suite directly into the apartment. The dining-room is tastefuly designed in the Adam style, with the color scheme gray and white. Suspended from the center of the ceiling is an appropriately designed electrical fixture of oxidized silver. The walls of the reception room are panelled in oak, which is stained a light natural coloring. A charming and harmonious glass chandelier lights this room. The library is similar in style to the dining-room, but more ornament has been used both in the wall treatment and on the low relief ceiling. The bed rooms resemble the other bed rooms in the hotel, the walls being panelled in light grays and whites, and the doors and furniture of dark oak. Many of the connecting bed rooms have each a door, set in the same frame, insuring greater privacy. The remainder of the fourth floor is given over to private dining-



"TERRACE" FROM THE TEA-ROOM TO THE MAIN DINING ROOM—HOTEL BILTMORE. Warren & Wetmore, Architects.

rooms and to a special suite for private entertainments.

The quarters for the service are on the fifth floor. Here are dormitories and other conveniences for help. This floor is also the distributing center of the mechanical features, such as the

plumbing, heating pipes and electric fans. From the sixth floor to the twentieth floor are the typical guest chambers the bed rooms very similar in arrangement, coloring and furnishings to those of the Presidential Suite. The Adamesque semi-indirect lighting fixtures are



THE MAIN DINING-ROOM-HOTEL BILTMORE, NEW YORK CITY. Warren & Wetmore, Architects.

tastefully colored in light buff and cream color. The corridor walls are of Caen stone, and make up in their sense of cleanliness for their first impression of coldness. The bareness is slightly relieved by the charmingly designed lighting fixtures. The bath rooms for the guest chambers are in white tile and plas-

ter, the tiling running to a height of five feet above the floor.

Facing Vanderbilt Avenue and Fortythird Streets on the eighteenth, nineteenth and twentieth floors, a number of apartments have been provided for tenants who wish to make a prolonged stay in the hotel, or to actually lease an apart-



A CORNER OF THE CAFE-HOTEL BILTMORE, NEW YORK CITY. Warren & Wetmore, Architects.

ment. In these apartments all the appurtenances of a home are to be found, with the exception of a kitchen. The individual tastes of the tenants have been consulted, and largely followed, in the matter of layout and decoration. The

view from those rooms looks out upon the garden and the court walls, which are of buff-gray tapestry brick. High up on the twenty-second floor

High up on the twenty-second floor are the banquet hall and ball room. The ball room, situated in the south



THE LIBRARY-HOTEL BILTMORE, NEW YORK CITY. Warren & Wetmore, Architects.

wing, is three stories in height. This imposing room is in the style of Louis XVI, with more than a hint of the Adamesque. Leading to it is a reception room two stories in height. The ball room itself is lavishly colored in gold, picked out by blues. But in spite of this lavishness, the architects have kept a feeling of restraint and refinement. The ceiling is of that particular blue effect occasionally called "bird's-egg soufflé." The glass electroliers are of very delicate design and workmanship, as are the floral-form side lights which seem to spring directly from mirrors. On three sides of the ball room, there is a low balcony, projecting from the wall a distance of perhaps seven feet. It is this moderation in the height of the balcony which contributes largely to the intimate effect of the room. The hangings have been selected with evident care, enhancing as they do the values of the

room, and contributing to the ensemble. The windows, twenty-five feet in height, are double, and can be removed in summer in order to convert the room, if desired, like the Belvidere on the roof of the Hotel Astor, into a cool and restful place of enjoyment.

But to my mind the very finest room in the entire hotel is the banquet hall, on the Madison Avenue side of this same floor. The design is Italian Renaissance, with walls of Caen stone, the ceiling recalling that of the Davanzati Palace in Florence. Two beautiful columns of green Cippilino marble run to the coffered ceiling, which is delightfully colored in deep buff, and subdued golds and blues. In two corners of this room are wine closets of very fine workmanship in wood, conforming in design and coloring to the rest of the banquet hall, and the doors are detailed in a manner at once unusual and pleasing.



THE LADIES' RECEPTION ROOM—HOTEL BILTMORE, NEW YORK CITY. Warren & Wetmore, Architects.

There are other rooms on the twentysecond floor-among them being a private bar, special private dining-rooms and several other suites of rooms. A hospital, also, is situated in the north wing, with suites for patients, and rooms for their attendants and nurses. The picked out with gold.

elevator which serves this floor is of sufficient dimensions to carry a fulllength cot. The interior of the other passenger elevators of the hotel are decorated in the Adam style, and in coloring a chocolate-brown leather,

237



THE RENAISSANCE BANQUET ROOM ON THE 19TH FLOOR, HOTEL BILTMORE, NEW YORK CITY. Warren & Wetmore, Architects.

It is specially worthy of comment, and a cause for congratulation to those who were responsible for the Hotel Biltmore, that one can go from any part of the ing of different rooms has been exerhotel to another without experiencing cised, from the entire scheme down to

discriminating visitor in so many of the New York hostelries. In the Biltmore a uniformity and restraint in the designthat feeling of shock which strikes the the smallest details. It has not been



DETAIL—DOOR TO THE RENAISSANCE BANQUET ROOM, 19TH FLOOR, HOTEL BILTMORE. Warren & Wetmore, Architects.

thought necessary (as in so many glaring instances) to plaster mirrors and gilt leaf over every space not otherwise occupied, or to ornament all the wall space merely for the sake of "filling up space." And so, while nothing is ever

perfection, or even nearly so, the Biltmore is at least an earnest attempt to approach the desired goal in up-to-date hotel design, though opinions differ and many of its details are open to architectural criticism.

239



A CORRIDOR IN THE HOTEL BILTMORE, NEW YORK CITY. Warren & Wetmore, Architects.

11.

The mechanical equipment and layout of the Hotel Biltmore is interesting and novel in very many respects. All power, and heat, is supplied by the service plant of the Grand Central Terminal at Lexington Avenue and Fiftieth Street. There is not one boiler of any kind whatsoever in the entire hotel building, as all the compressed air, steam, hot water and electric energy comes from the service plant.

The building is the highest in the world to be entirely heated by a hot water circulation system, the hot water for heating purposes being supplied by three mains, carrying various pressures to conform to the pipes that each supply. The low pressure system heats the subbasement, basement and the first six stories; the second, or intermediate pressure of heating, supplies the floors from the seventh to the seventeenth, and the high pressure takes care of the floors. from the eighteenth to the twenty-sixth.

The number of the radiators in the building is 2,500, the majority of whichare concealed. These radiators have a heating capacity of 104,000 square feet of direct radiation and fourteen thousand feet of heating surface is supplied by temperature coils. All of the heating apparatus has been tested to 250 lbs. water pressure.

The ventilating system of the building consists of thirteen supply and exhaust fans, having a capacity of 856,200cubic feet of air per minute with a motor connected load of 593 horsepower.

The electric light system has been well safeguarded. The energy enters the building at two separate points by means of individual feeders, by what is known as a loop system. The current supplied by each one of the feeders is alone entirely sufficient to supply all the electric



PARLOR OF TYPICAL BED-ROOM SUITE-HOTEL BILTMORE. Warren & Wetmore, Architects.

power necessary for lighting and service. By this means, a constant supply of electric energy is assured, guarding against the possible blowing out or short circuiting of one of the feeders. The system is further strengthened by the maintenance of a storage battery of suffieient capacity to carry the entire load of light and power for a limited time, pending the completion of any needed repairs to the feeders.

The illumination of the hotel is supplied by 15,360 tungsten lamps, ranging in size from 15 to 150 watts.

The bed rooms in the hotel number one thousand nine hundred and fifty, having bath rooms attached. Each room is illuminated by means of a semiindirect ceiling light containing one 100watt tungsten lamp. A portable desk light, two bracket mirror lights and a reading light over each bed completes the lighting equipment. The bath room equipment consists of two wall fixtures. As a small, but thoughtful detail, each bath room is installed with an electric curling iron heater, and softened water for bathing as well as drinking purposes is supplied in the bath rooms.

The electrical illumination of the main ball room is supplied by three crystal chandeliers containing 96 tungsten lights in each. There are also threelight wall brackets. The main restaurant is lighted principally by three crystal chandeliers with 100 tungsten lamps in each. Besides these, there are the necessary wall brackets, table lights, etc. Where the lights are in continual service—as in elevators, corridors, on stairs and at exits—they are hooked up to an emergency storage battery and lighting system. This is an independent system, controlled from different points, so that sufficient illumination may be provided in the event of the failure of the general lighting system.

The work of wiring the building, including all mains, feeders, etc., required from 500,000 to 600,000 feet of conduit and from three to four million feet of electric wire.

There is a pneumatic tube system throughout the hotel, having the main station in the office of the hotel and branches in all the principal departments.

The fire alarm system has four breakglass stations on each floor, with indicator stations in the manager's office and in the office of the chief engineer. The system is also connected at all points with the fire alarm system of the city.

Dictaphones have been installed for the use of the management, insuring rapid service with the various hotel departments. The system is operated from two master stations and from thirtythree subsidiary stations. This system, while quite a novelty, has obtained a quick popularity with the hotel management. There are no mouthpieces to these instruments, the person using them being able to speak in an ordinary conversational tone from any part of the room. Another improvement is the platinum contact points, which last at least three times as long as the ordinary copper points in general use in telephones.

There is a telautograph system in use, consisting of sixty-five sending transmitters and one hundred and forty-five receiving stations, controlled by two telephone switch boards, as well as by thirteen transmitters located in various parts of the hotel. Thus the necessity of "paging" is practically eliminated. The elevator equipment consists of the two main banks of four passenger elevators each. These are of the 1 to 1 traction type, operated by directly connected motors, each of sixty horsepower. The elevators have a speed of 600 feet per minute.

The elevator for the Presidential Suite is also of the traction type. There are five service elevators of a special design, known as the geared traction type, with a speed of 450 feet per minute. One beer lift and sixteen electric dumb-waiters complete the elevator equipment.

The waiter in the Biltmore is not asked to carry any dishes upstairs from the main dining-room, as the used dishes are taken from the table to an escalator, which deposits them on a dish-washing counter on the same floor with the kitchen. Here the waste is raked off and pushed into a funnel running to a refuse incinerator in the basement. Another escalator takes the clean dishes to the kitchen again. The electric dumb-waiters mentioned above are operated and controlled automatically from the kitchen by means of push-buttons so that they stop only at the floor indicated, where the dumb-waiter door will open and close automatically. These dumbwaiters have a speed of 300 feet per minute.

The system of plumbing that has been installed in the Biltmore is complete in every respect, and is the most up-to-date of any system that has ever been installed in a building of this character. All of the water used is filtered and softened. It is pumped to the house tanks by means of automatic centrifugal electricallydriven pumps. Two of the tanks are in a pent house on the top floor and two more are on the fifth floor. The capacity of these tanks is over 50,000 gallons of water. All of the tanks and pumps are cross-connected. The roof tanks furnish the supply down to the fifth floor, and those on the fifth floor supply all the lower stories. Reducingvalves regulate the water pressure all over the building. There are thousands of these located on the rising lines, taking care of all fixtures.

The hot water for the plumbing fixtures is heated in generators located in the service plant, and is circulated by means of electrically-driven pumps through lines which parallel the cold water circulation system. As in the case of the cold water system, so are the hot water pipes by-passed in order to secure a constant supply.

The number of plumbing fixtures installed in the Hotel Biltmore is three thousand five hundred.

An electrically-operating refrigerating plant has been installed in the hotel, which consists of three 40-ton units.



DETAIL IN THE BALL-ROOM, HOTEL BILTMORE, NEW YORK CITY. Warren & Wetmore, Architects.

The ice is made in the plant situated on the roof of the building, and which has a capacity of twelve tons a day. There is a separate equipment for the exclusive use of ice-cream making and which is operated in the same manner as the larger plant. A vacuum-clear put into the buil sweeper cleaning of cally operated. T system have outle and public spaces. Gas facilities ar

A vacuum-cleaning system has been put into the building, with a twelvesweeper cleaning capacity, and is electrically operated. The standpipes for this system have outlets in various corridors and public spaces.

Gas facilities are to be found through-

out the building. The gas, coming from the street, is carried to the various kitchens, pantries and other places where gas is required. All stairways have combination fixtures for electricity and gas.

There is a remarkably complete telephone system throughout the building. Not only is a telephone to be found in every guest room, but also at every table in the men's café.

The maids' call system insures good supervision of the room help. There is a panel with electric connection beside each door leading to a guest room. Every maid carries a small lamp on a flexible cord with a three-pronged plug. Whenever she wishes to enter a room she inserts the plug in the panel. The lamp is lit by two of the prongs. This light may be seen from any part of the corridor. The third prong illuminates an indicator on the main switchboard. The whereabouts of any maid is therefore easily known to the floor superintendent and to the switchboard operator. Besides registering the whereabouts of the maid, the switchboard also indicates the button calls from the different rooms.

All of the latest and best fire protection apparatus has gone into the hotel. Moreover, there are six continuous stairways leading from the main floor to the roof. Of these, two are brick firetowers, centrally located. The fire equipment includes an electric-driven Fire Underwriters' pump, street connections for fire engines, standpipes and hose.

The fire pump in the basement has a capacity of 1,000 gallons per minute against a head of 450 feet. The main portion of the building has four standpipes, one rising near each stairway, with a fire hose in the stairway on each floor. Four Siamese street connections are placed around the building. A steel fire tank of 5,000 gallons capacity is in the penthouse on the roof, thus effectually taking care of the water supply for the control of a fire prior to the arrival of engines.

The Hotel Biltmore, when running at its full capacity, will have 200 waiters, 150 chefs and cooks, 100 bell boys, 100 chambermaids, 50 engineers and 15

watchmen, as well as managers, assistant managers, housekeepers, clerks, bookkeepers and numerous other help. Each group of employes have separate accommodations, baths, libraries and dining-rooms, thus making them entirely comfortable and allowing them to receive their friends in these quarters. In this way the management of the hotel hope to cultivate a strong "esprit de corps," so essential to the success of the large modern hotel.

Indeed here is a wonderful fabric, this newest hotel of our ever-new New York. Last year the towering Hotel McAlpin amazed us with its marvelous facilities of equipment, service and comfort, and now the Biltmore breaks the skyline with its vast bulk, behind which lies this net-work of intricate mechanism. The Germans, self-sufficient and progressive in all things, recently sent a delegation of experts to this country to study the American hotel. They found a wonderfully elaborate but efficient organism, superficially covered by a varied architectural mask-in points mechanical and executive they found food for endless amazement and admiration. What of the New York hotel of the future? In the month of March, 1913, THE ARCHITECTURAL RECORD printed comment and illustration of the Hotel Mc-Alpin-"New York's Newest Hotel":

"That old ideas of hotel design and treatment were ill-taken was evidenced by the yearly abandonment of once-popular hotels as soon as new ideas come in. It is a long call from the old Astor House on lower Broadway to the Hotel Astor on Times Square-and now even the latter is not reckoned a "new" hotel. In New York the old Fifth Avenue Hotel, the Grand Union, the Murray Hill, the Chelsea, and once most magnificent of all, the Park Avenue Hotel-these are 'one with Nineveh and Tyre,' their glory departed, their clientele confined almost entirely to ultraconservative patrons."

Is it safe to make prediction of the future? The decade past has witnessed unbelievable evolution and development of the New York Hotel. What of the decade to come? Has the evolu-



A DOOR DETAIL—HOTEL BILTMORE, NEW YORK CITY. Waiten & Wetmore, Architects.

9

tion, any more than that of the tall building, reached its limit? At this great new Hotel Biltmore, sitting at a dinner-table on the hanging garden of a modern Babylon, and, looking out

245



"WINTER"-DUPLICATE LOUIS XIV GOBELIN TAPESTRY AT SHERRY'S. (In the French National Collection.)



"SOLOMON RECEIVES PRESENTS FROM THE QUEEN OF SHEBA." Seventeenth Century Brussels Tapestry at the Hotel St. Regis.

TAPESTRIES AND THE HOTEL

Some Aspects of the Decorative Value of Woven Hangings ~

By G. Leland Hunter

Author of "Tapestries, their Origin, History and Renaissance."



HAT New York hotels and restaurants surpass all others in America, is a fact so widely recognized and so often published, as to need no assertion here. New York is the paradise of those who from choice or necessity live publicly, and here alone do

bonifaces provide the luxuries of decorative art which distinguish the choice of persons of culture, taste and wealth, from the choice of the inexperienced and the ignorant.

It is the purpose of this article to develop the idea that tapestries are especially and primarily the form of decorative art suited to beautify hotels and restaurants in a way more satisfying and permanent and less expensive—in the long run—than any other wall adornment. This seems a fact that is worthy to be promulgated with a wealth of illustration and comment. Hence this article, that breaks the ice, and that owes its publication to the prominent use of tapestries in the new Biltmore hotel nine on the main floor, and two on the nineteenth, in the alcove of the reception room outside the great ball room.

Not that the Biltmore is the first hotel to display tapestries boldly and wisely. Indeed, in the main dining room of the Knickerbocker hotel, tapestries have been hung more magnificently than in any other place of public entertainment, but with the possible exception of the main



EIGHTEENTH CENTURY VERDURE. (From the Marquand Collection.) Tapestry at the Hotel St. Regis.

entrance hall of the Metropolitan Museum, the main hall of the Decorative Arts wing of the Metropolitan Museum, and the main tapestry room of the Boston Museum of Fine Arts. The new installation of the Morgan tapestries in the Hartford Museum I have not yet seen. Of course there are several private residences—but that is another story.

The lesson taught by the Knickerbocker dining room is that if tapestries are to be hung effectively, generous and proper wall spaces must be provided. If Mr. Regan had urged his architect and his decorator to destroy by trivial mural panels and plaster ornament, the dignity and grandeur of the stately salon, there would have been no chance for huge seventeenth century woven pictures, with their wide and splendid borders.

Only recently when asked to suggest a scheme of tapestry decoration for the

main lobby of a new hotel in the South, I found it impossible to recommend any really worth while, because doors and windows and balconies usurped the walls. To introduce merely a tapestry frieze, and small tapestry panels hung over the balcony railing, I felt ashamed. So the owners and managers are spending on *attached but non-durable* decorations almost as much as would have provided decorations that would be *unattached but durable*.

However, it is at Sherry's that the value of the *movability* of tapestries is most fully appreciated. Frequently is the position changed of at least six of the twelve tapestries, several of which, notably the Louis XIV Gobelin, at the entrance of the main dining room, and the huge Late Renaissance Alexander panel that dominates the large ball room, are of noteworthy excellence. Indeed, the Gobelin is the most valuable tapestry displayed in any restaurant on this side of the Atlantic.

Comes a ball of unusual importance socially, the room in which it is to be held draws tapestries from the other ball rooms, until the scene is like that presented by the immense halls of the



"FIRE" LOUIS XIV BRUSSELS. Tapestry at the Hotel Biltmore.



"SOLOMON AND HIRAM." Seventeenth Century Brussels Tapestry at the Hotel St. Regis.

Renaissance and before, when kings and nobles vied with one another on public occasions to make a show of their arras, as did Henry VIII and Francis I at their meeting on the Field of the Cloth of Gold, June 7, 1520. So that at Sherry's there is a variety in the backgrounds very grateful to those who, under polite auspices, pursue the primrose path of pleasure. And if in a private dining room, you desire to give a dinner to celebrate some event, or honor some man, it is possible to surround yourself with tapestries appropriate in subject to the occasion.

Less important than the others, but decidedly pleasing, are the four in the Tapestry room, picturing scenes after

Teniers, small in size and with narrow woven-frame borders of the type that flourished during the eighteenth century in France and elsewhere. Two others belonging to the set-but one of them much surpassing all the other five in merit and signed with the Brussels mark and the signature V. LEYNIERS, D. L .hang in the small ball room. The signature is that of Urbain Leyniers, whose family was famous in Brussels for the weaving of tapestries in the sixteenth. seventeenth and eighteenth centuries. Urbain himself lived at the beginning of the eighteenth century, and was the father of the Daniel Leyniers, who wove and signed the large tapestry Commerce that once hung in the late Stanford



"TRIUMPH OF THE ELECTOR." Seventeenth Century German Tapestry at the Hotel Knickerbocker.

White's music room and that was sold at the White sale to Mr. Robert Goelet for \$10,500.

In the small ball room also hangs another tapestry of the same period, but woven in Lille and signed by the widow of the well-known maker, LA VEUVE DE G WERNIERS, L F, with a fleur-de-lis between the L and the F. The border is one characteristic of this manufactory, and similar to those seen in many other tapestries signed by G. Werniers himself as well as by his relict. The subject interest of this, as well as of the companion piece in the foyer of the small ball room, is not great, but the general effect of the small personages backgrounded by landscape and verdure is decidedly pleasing.

The Alexander tapestry in the large ball room at Sherry's is impressive and noble. It has a wide and magnificent border, and is woven with Renaissance skill of technique, though dating from the seventeenth century (early), and showing strong Baroque influence. The colors are splendidly preserved and the signature in the right selvege is a red cross on a yellow shield. The composition of the equestrian and other personages— Alexander, mounted, on the the left, the Queen of Persia, afoot, on the right is effective, and the story interest great. The caption occupying the cartouche in the middle of the bottom border is in Latin, as follows:

DARVIS. CVRRV. DISCEDENS. FVGIT. ET.

RIVS. REGINA. CVM. FILIS. CAP-TIVA.

DVCITVR.

Which, translated and with the RIVS expanded to PRIVS, reads: "Darius, departing in his chariot, flees, and first the queen with her daughters as a captive is brought [to Alexander].

One of the tapestries, not hung at the time of my last visit, shows Antony watching Cleopatra in her barge on the

250



"CAESAR FIGHTS ON FOOT." Seventeenth Century Brussels Tapestry at the Hotel Knickerbocker.

Nile, is signed with the Brussels mark in the bottom selvage, and with a monogram formed of the latters H and M in the right selvage. It is Baroque in style, but I have not had an opportunity to study it sufficiently.

In the main foyer of Sherry's, on the right as you enter, hangs a superb Louis XIV woven picture of the *Duke of Condé With His Army in Flanders*, after the design of Van Der Meulen and attributed to Flemish looms. On the left as you enter is a *Blind Man's Buff* with modern selvage, dating from about 1700 and with a border of the Lille-Werniers type mentioned above. It is a very satisfactory tapestry for the position where it now hangs, but of course loses by comparison with the Gobelin that graces the hall just beyond leading to the main dining room.

This Gobelin, signed in the bottom selvage MOSIN, who was a low warp manufacturer at the Gobelins from 1667-1693, is decidedly worthy of attention. It is called sometimes *Cybele*, sometimes *Winter*, depending on whether one wishes to emphasize the goddess or the season, and is one of six designs copied from the painted decorations of the Gallery of Saint Cloud, that were the work of Pierre Mignard, who, on the death of Charles Lebrun, in 1690, succeeded to his office as director of the Gobelins, and who already, after the death of Colbert, with the support of Louvois, had undermined his influence. Although primarily paintings, the designs were very successfully translated into tapestry. The subjects are: *Spring, Summer, Autumn, Winter, Parnassus, Latona.*

Our illustration is reproduced from the photograph of the one of the *Cybeles* in the French National collection, that has the same panel as the Sherry one, but a different border. In the foreground of the wintry scene, on the left, is seen Vulcan bringing a brazier to help warm Cybele, who, reclining between the tawny lions of her chariot, implores in vain **a** pale Phoebus (sun) half hidden in the background. Above, are the stars raining down frozen drops, and old Boreas blowing his wintry blast. An interesting composition that tells the story admirably, though less lively in color—from the nature of the subject—than the rest of the set.

The St. Regis stands by no means in the background as a hotel that takes advantage of the decorative possibilities of tapestries—six in all, one an eighteenth century verdure, without border, from the Marquand collection, of very fine quality; four, part of a seventeenth century set that pictures the Story of Solomon; one seventeenth century piece that pictures the ordeal of fire undergone by Flavius, who to show the hardihood and stoicism of the Romans, held his hand in the burning flames until it was consumed, without letting a sign of pain escape him. The middle of this tapestry is charmingly backgrounded by a landscape that throws the figures forward into reliefas does the tiny landscape in the centre of the famous Mazarin tapestry lent by Mr. Morgan to the Metropolitan Museumand the ground of the right lower corner of the panel is floriated delightfully but quaintly and in a manner almost like that of the Chinese. The king's blue robe is especially fine.

The largest and most spectacular of the four *Solomon* tapestries hangs in the ball room of the St. Regis—"Solomon Receiving Messengers and Presents Sent to Him From the Queen of Sheba," according to the very interesting booklet descriptive of the hotel that is given by the management to present and prospective patrons.

At this point I want to call attention to the importance from the hotel man's point of view of having in easily accessible form descriptions and illustrations of tapestries exhibited. Some architects and decorators affect to despise the story interest of tapestries, following the fad of those painters who would abolish story interest from painting. But this does not "go" with the public, even or perhaps especially, with the instructed public. They like to know what the tapestry or picture is about, and thus have a peg on which to hang their impressions of it. The story interest is important, not only in selling tapestries, but also in using them to advertise a hotel and help retain and increase its patronage.

All of the four *Solomon* tapestries are signed in the bottom selvage with the Brussels mark and the signature I. V. ZEVNEN, otherwise Jacques Van Zeunen, who wove many other well-known sets of tapestries, among them a *Story of Jacob*, about 1660.

The St. Regis also has some very excellent modern tapestry furniture coverings woven in Aubusson, especially the set picturing the fables of Lafontaine and copied from the set in the Petit Trianon, and the floral set in the main salon of the state suite.

The Manhattan hotel has a very creditable modern tapestry verdure frieze. woven at Williamsbridge in New York City, on the west wall of the main dining room. It is necessarily subdued in tone to conform with the other decorations. but much more subdued than pleases me.

However, the most ambitious attempt with modern tapestry in any New York hotel is on the first mezzanine floor of the McAlpine. Here a series of twentysix tapestries tell the Story of the City of New York, from the days when the redskins bartered the entire island of Manhattan for a few coins and beads, down to the Civil War and the victory of the Blue over the Grey. It is a series of especial importance from the story point of view, and the management of the hotel would be wise to have on sale a set of post cards illustrating all the panels in color, and for free distribution a booklet telling the story in detail of each panel simply and briefly without inflation. Also, the tapestries should be numbered, so as to make reference to the descriptions easy.

As regards the artistic merit of the designs there seems to be a wide difference of opinion. Personally I feel the charm of the conceptions, and am impressed by the fidelity of costumes and characters to their historic originals. But there is a lack of power and vigor surprising when one considers the great talent of the artist responsible.



"CAESAR DEFEATS ANTONY"—SEVENTEENTH CENTURY BRUSSELLS TAPESTRY AT THE HOTEL KNICKERBOCKER.

"SOLOMON AND THE QUEEN OF SHEBA"-SEVENTEENTH CENTURY BRUSSELS TAPESTRY AT THE HOTEL KNICKERBOCKER





"FIRST FERRY TO BROOKLYN." Twentieth Century New York Tapestry at the Hotel McAlpin,

Of the texture of the tapestries, I can only say that it is disappointing, and fails to show an understanding of how the great weavers of the fifteenth and sixteenth centuries secured their wonderful effects on the loom. And the coloration I like least of all, considering it far too dull and monotonous to please long or much. There is no more life in it than in the coloration of those seventeenth century tapestries from which the reds have entirely or almost departed. The surface of a tapestry should be vibrant and alive with both color and texture contrasts.

Yet, I do not hesitate to say that great credit is due to Mr. Albert Herter and to those who worked with him, for what they accomplished in limited time and under most difficult circumstances. They have produced a set of tapestries that will be remembered for what they are, rather than for what they are not, long after all of us now writing and reading have gone elsewhere. These tapestries represent the most important attempt that has yet been made to perpetuate in woven form a *Story of American Life*. How decorative they are my illustrations suggest.

Among the subjects of the different tapestries are: Hendrick Hudson, the Dutch Buying Manhattan Island from the Indians for Sixty Guilders, Peter Stuyvesant, the Ship of Adrian Block, Peter de Vries, Dominie Bogardus, the Cattle Fair, George Washington Taking the Oath of Office, the First Ferry, the Opening of the Erie Canal, the Clermont, the Indian Massacre, Smoking the Pipe of Peace, Nathan Hale, Ellsworth's Zouaves.

The woven captions on the tapestries are especially to be commended.

The Plaza hotel has modern floral tapestry covering in the style of Louis XIV, on the chairs of the main lobby, woven in Aubusson. The general effect is not unpleasing, but the borders are too strongly and stiffly outlined.

What are on the whole the most interesting of the Knickerbocker tapestries, are the two Caesar ones that face each other from the east and west walls of the main dining room. Both are signed in the bottom selvage with the Brussels mark, and one G. V. LEEFDAEL, the other G. V. D. STREECKEN, Brussels weavers of the middle of the seventeenth century. Van Den Strecken often collaborated, not only with G. Van Leefdael, but also with his father Jan Van Leefdael,, notably on the Antony and Cleopatra set at the Metropolitan Museum. Both of the Caesar tapestries also resemble the Antony and Cleopatra set in having tiny landscapes woven into the middle of the bottom border, and cartouches in the top border carrying descriptive captions in Latin. That of the first *Caesar* tapestry reads POMPEIVS. A. CAESARE. VICTVS. FVGIT., and translated, "Pompey, con-quered by Caesar, flees." The captions of the second Caesar tapestry reads, IN. PVGNA. GAVLENSI, DIMICANTIBVS. FEMI-

NEIS. ET. PVERIS. SEMPER. EST. PEDES. CAESAR, and translated, "Throughout the battle in which women and boys fought, Caesar remained always on foot."

To return to the Biltmore, where we started. The nine tapestries hanging on the walls of the main floor are agreed by all to be the most significant and interesting decorative feature of the hotel. They lift it from the ruck of hostleries that are furnished en masse, with dollars wasted here and pennies saved there, and details and execution skimped everywhere, in the mad rush to get the establishment open on time. Without being brilliantly in the foreground as at the Knickerbocker, they present themselves on every avenue, and at every turn, on the main corridor east, at the west end of the main corridor, on the south corridor east, in the north-andsouth corridor that connects these two. and at the entrance to the main dining room

Of course the two that I like best are the Renaissance tapestries in the main corridor east, tapestries of the regular Brussels types with their wide compartment borders that were inspired by the Raphael borders of the Acts of the Apostles Set in the Vatican, but that in the course of the sixteenth century, under the influence of Flemish cartoonists and weavers, assimilated a wealth of floriation, as here. In the same Flemish Renaissance style are the panels of both of these tapestries, one showing Warriors, the other a Court Scene, with the monarch on his throne, beneath a rectangular canopy, while an aged and presumably wise counselor or prime minister occupies the seat of dignity in the council in the foreground. As in most tapestries of this type, the sky line is high, with woods, mountains and Gothic castles in the far distance. Even the allegorical figures in the borders are backgrounded similarly, each in its own little compartment.

The *Marriage Procession* at the west end of the main corridor speaks for itself. It is wonderfully effective there, and is of the Louis XIV type woven in Lille and Brussels.

To the same period belongs the Fire



"CAPTAIN WILLIAM KIDD." Twentieth Century New York Tapestry at the Hotel McAlpin.

As the Source of Abundance at the entrance to the main dining room. It was made in Brussels after the design of L. Van Schoor, an Antwerp painter, who is responsible for many Louis XIV tapestries picturing *Abundance* in various guises, always with the same female figures as models, and woven usually by Auwerx or Van Den Hecke.

Also to the period of Louis XIV belongs the pair of panels with wovengilt-frame borders, in the north-andsouth corridor. One of them pictures *Venus Rising from the Sea*, very properly clad in Flemish fashion, altogether unlike the shocking nudities perpetrated by the Italians of the Renaissance and later, with attendant dolphins of the Baroque type, and with Arion in the distance mounted on one, making sweet music with his lyre. The other tapestry pictures the *Marriage of Cupid and Psyche*, with Jupiter and Juno approvingly present, she with her peacock and



"DISCOVERY OF THE HUDSON" AND "PURCHASE OF MANHATTAN"---TWENTIETH CENTURY NEW YORK TAPESTRY AT THE HOTEL MCALPIN.

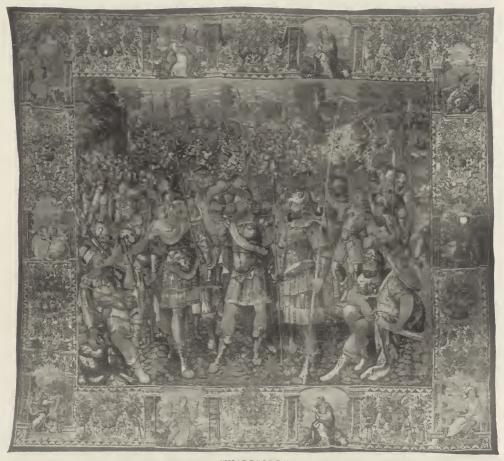


TWO SEVENTEENTH CENTURY ITALIAN TAPESTRIES—SCENES FROM THE AENEID. Tapestries at the Hotel Biltmore.

sceptre, he with his eagle and bunch of thunderbolts, while in the distance Neptune and his trident come hurrying hither. Both of the tapestries are signed near the bottom of the panel with a fleur-de-lis between two B's. I agree with Mr. Ffoulke that the signature does not stand for Beauvais, but would suggest the possibility of its being the mark of a French weaver working in Brussels.

In the south corridor facing the office are three Medici tapestries, which, like the two just described, come from the Ffoulke collection and are described in the *de luxe* catalogue of that collection. The second of the series is signed in the bottom selvage with a red ball emblematic of the Medici, and *P. FEVRE*, which was the way the French weaver Pierre Lefevre, father of Jean Lefevre, who later had a high warp shop at the Gobelins, often signed his name after he became director in 1630 of the Medici tapestry works in Florence. The subjects of the three tapestries are: Venus escorting Aeneas from Troy, Interview of Venus and Jupiter, Departure of Aeneas from Carthage. The first shows Aeneas with drawn sword and Vandyke hat being led by Venus from burning Troy, the devouring flames being prominent in the background; the second shows Jupiter on the left, thunderbolts in hand, accompanied by Mars and Mercury, informing Venus and Flora who stand on the right, that if Aeneas leaves. Troy for Italy, his life will be spared; the third shows Aeneas and his followers embarking on the ship that is to carry them away from Carthage, while high above, over the parapet of a castle leans Dido, dagger pressing to her heart.

The borders of all the tapestries are composed of martial objects and emblems emphatically Baroque in character. In the border of the first, on the left near the top, is the open crown with sceptre of the Duke of Tuscany. All three tapestries are pronouncedly Italiar-



"WARRIORS." Flemish Renaissance Tapestry at the Hotel Biltmore.

in style of design and execution, and for that reason fit well into their present architectural background, though perhaps less interesting from the texture point of view than Flemish tapestries of the same period. From the historical point of view these tapestries are also very important, as few tapestries woven on the Medici looms are to be seen or had outside of Italy, where the most important collection is in the Tapestry Gallery of Florence. The Medici tapestry works, I might add here, were established in Florence in 1546 and flourished for two hundred years, till 1737. It was one of the Medici, Pope Leo X, who gained fame by commissioning Raphael to paint the designs for the immortal Acts of the Apostles series.

A few years ago, as I remarked at the beginning of the Metropolitan Museum chapter of my book on Tapestries, that museum had few of these wonderful woven pictures. So it was with New York hotels and restaurants, only more so.

The change has been as marked in the one case as in the other. Both museum and hotels are now feasting and educating the eyes of the public with what could formerly be seen only in Europe, and there sometimes with difficulty.

Let us hope that the good work will go on and that as the supply of tapestries from ancient looms is exhausted, worthy modern ones may be created to fill the gap.



"MARRIAGE PROCESSION," LOUIS XIV FLEMISH TAPESTRY AT THE HOTEL BILTMORE.





MINIATURE PLASTIC STUDY FOR A COUNTRY HOUSE. Designed and Modelled by H. E. Woodsend.



ARCHITECTVRE IN MINIATVRE THE PLASTIC MODEL STVDIES OF AN ENC-LISH ARTIST

BY ALWYN T. COVELL



HE architect who specializes in the design of country houses may be said to find one of his greatest difficulties in so presenting the preliminary studies for a proposed dwelling in such a manner as to be perfectly clear to his client.

It is no disparage-

ment to the lay mind to say that the average person cannot "read" architectural drawings, any more than to assume lack of intelligence in failure to be versed in law or medicine. It is for the elucidation and practice of these things that the professional man exists, and he can only be expected or required of the layman to make himself as clear as possible in the presentation of the various steps of his work.

While there are a good many people who cannot "read" a plan-who cannot visualize the lines thereon as partitions, doors, windows and stairs-there are more who can "read" an architectural elevation, and anyone can understand a perspective, which is a picture. Now obviously an elevation should not be considered in any other way than as a working drawing. It is in no sense a "picture" of the proposed building. The roof seems high, chimneys appear in a manner in which they could never be seen in the executed building, and the entire design seems hard and uncompromising, and if blue-printed, presents, to the average lay mind, an aspect so fearsome that the client has serious qualms of regret that he ever decided to build a house.

Hence the perspective drawing, which, while it usually helps, quite as often deceives the client. He has given up attempting to visualize the house of his dreams from the roll of working drawings, and turns back to the perspective to reassure himself. Here is his house as he pictured it in his mind, or as his architect pictured it for him—yet the house may be very different when it is built. It is not the purpose or intention of this article to discourage the practice of making perspectives. By all means a perspective is of importance—but more accurate perspective in his mind's eye. The keenness and accuracy of this visualizing process is one of the principal qualities making a real architect. Regarding the perspective itself, there may be said to be two kinds—the true perspective and (alas) the "faked" perspective. Speaking of the latter first, its origin cannot be said to lie in any dishonesty or intent to deceive, but rather in the mechanical difficulty of the problem and the optimism of the draughtsman. Very often a perspective accurately laid out according to the elaborate system of some of



MINIATURE PLASTIC STUDY FOR A COUNTRY HOUSE. Designed and Modelled by H. E. Woodsend.

so to the client than the architect. Very iew architects study a project in perspective *on paper*. They study it in perspective *mentally*, and put this study on paper to aid the client's imagination, for the reason that the architect's faculty for *visualizing* in three dimensions is more accurately trained than that of the layman.

Before dismissing the subject of perspective drawings it might be well to briefly discuss their advantages and limitations. As said before, a perspective aids the client, even if it does not aid the architect, who has, or should have, an the many authorities would be a base libel on the finished building, and might even cause the architect's failure to secure the work if presented as a preliminary. Like anything of rule, most systems of constructing a perspective drawing are very arbitrary, and distort certain members or proportions in a manner at once entirely untrue to life, yet entirely true to rule. To offset this, the draughtsman takes certain liberties which seem to him not only permissible, but necessary. He modifies certain heights or certain profiles, and while he gets a drawing of what the building should look



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like it is not always accurate. Some draughtsmen even work up their perspectives free-hand, in which case they should be called "perspective sketches" rather than "perspective drawings." At any rate, while the average perspective drawing is a very useful instrument, it is rarely conclusive, and the finished building often is at considerable variance from it. The writer has seen many instances, however, in which it would be impossible to say whether or not the original preliminary perspective might have been sketched from the building it represented, so accurate was every proportion and detail.

Even assuming, however, that the perspective is not only convincing in its appearance, but absolutely accurate in its proportions and lay-out, it leaves much to be desired for the reason that it can show but one of the many aspects of the house. And obviously the aspect chosen as the basis of the perspective is the most pleasing one. What of the others? What does the rear look like? How will the house look on its elevated site, as you drive up to it? How will its gables mass as you walk around the terrace? Will a chimney which interestingly breaks the roof-line in the perspective be entirely invisible in the finished house? Will some unfortunate shadow spoil the effect? Upon these and a thousand other like questions the perspective drawing must remain silent. Even if the hurry of practice in this country permitted of the making of ten or a dozen elaborate perspective drawings from as many viewpoints, as is done in English practice, it is obvious that even these must omit the showing of some important aspect of the building.

The use of a scale model seems so logical and so desirable that it is remarkable that its use has been restricted almost entirely to large public buildings.

In discussing the perspective drawing it was shown that its use is more directly beneficial to the client than to the architect. The architect rarely, if ever, learns anything from his perspective, for it is not a study for the visualizing of his conception, but a purely pictorial presentation of that conception, intended to aid the client in sharing his vision. I do not think, for illustration, that an architect would make a perspective drawing as a preliminary for his own house.

The model, on the other hand, if it be a plastic study, and not mechanically constructed from stern lines and figures,



MINIATURE PLASTIC STUDY FOR A COUNTRY HOUSE. Designed and Modelled by H. E. Woodsend.

can be of no less aid and service to the architect than to his client.

Generally speaking, models of important public buildings have been made in plaster-of-Paris, the proportions taken accurately from line-drawings, and such models have been required by building committees in order to insure the creation of similar impressions in the minds of all the committee members. Mr. Brunner, in his studies for the Cleveland Post Office, modelled for study purposes not only at scale, but at full size —but such procedure is rare.

Another type of architectural model is that employed by certain real estate firms who have been clever enough to discover that neither drawings or photographs will appeal to the passerby so vitally as an actual miniature reproduction of an "ideal home," in all its charm of line and color. These models, often out of scale, and often crude in other respects, appeal to the average lay mind because they do not make imagination necessary, and for the same reason they are not works of art. Being perfectly literal, they fail to be inspiring, no matter how much they may stimulate a desire to own a little place in the country. Their success in this particular lies in the fact (keenly appreciated by the real estate dealers) that the home-building proposition has been brought just that much nearer to a prospective property-buyer. It has been taken off paper and put bodily into your thoughts. Incidentally, this stimulus of desire effected by house-models is not to be entirely overlooked by the architect, who may be supposed to be no less interested in the promotion of building projects, from a purely business point of view, than the real-estate man.

We have now to consider a different sort of model—the plastic model, as contrived and fashioned by Mr. H. E. Woodsend, an English artist-architect with a studio in New York City.

Mr. Woodsend's manner of dealing with architectural models is distinctly interesting and individual, and is developed along lines which might well be followed by architects.

He maintains that the most important thing is to interpret the design in the true spirit of the style and country from which it is adapted, and to express as much as possible by means of softness of line, irregularity of surface, and depth and variety of color. A very important function of this sort of model is the opportunity it offers to study the different grades and levels of the site, so that the finished building will present the appearance of having grown from its surroundings. Apart from its value to architect



MINIATURE PLASTIC STUDY FOR A COUNTRY HOUSE. Designed and Modelled by H. E. Woodsend.

and client, Mr. Woodsend believes that the model is necessary to aid the builder in producing a sympathetic rendering of the architect's working drawings.

For the architect, this method should prove most valuable as an aid in studying the masses of his design, as well as the proportions of its members. The model should be in its final state of studied completion before the working drawings are made, instead of being constructed *from* already finished drawings, which is the usual procedure.

Here is the house as it will appear, and with its immediate grounds and approaches closely approximating the appearance of the finished whole when the grading and landscape work has been done.

And the model, after serving its more important function as a means of study for the architect, may be presented to the client instead of a perspective drawing. If the client is pleased with this presentation of his proposed house in miniature, it must naturally follow that he will be pleased with the house itself. for there will be in it nothing unexpected or unforeseen.

The illustrations show typical examples of Mr. Woodsend's work, including a photograph of the ambitious and pleasing project on exhibition in the current show of the Architectural League of New York. There is an engagingly convincing air to the sort of model advocated by Mr. Woodsend, and the examples shown here indicate that he believes rather in bringing out the character of his subject in terms at once subtle and artistic than in presenting a literal and unimaginative three-dimensional transcript of a design already studied in but two dimensions. In the matter of dimensions, it is easier to go backward than forward-easier to think of two dimensions if we have three before us, or to think of one when we have two. In other words, it is difficult, in the abstract, to conceive of a line when we have given us only a point, and difficult to conceive of a solid when we have given us only a plane; but relatively easy to reverse the process. We can translate a three-dimensional design into a two-di-

mensional one without any loss of fundamental values, but to construct a threedimensional design from data existing only in two dimensions involves constant danger of the loss of many important values, especially those of a nature in any way subtle. The idea might perhaps be more clearly stated by submitting that it is easier to take a photograph of a building than to construct the building from a photograph.

Much might be said about studying all ornamental detail at full size in the draughting room, by means of plastic models, before committing them to paper. A few architects indulge themselves and their clients in this nicety of practice, but the custom should be general rather than exceptional. The consideration in hand, however, is of the sort of model developed by Mr. Woodsend, and though it may be a little too "sketchy" for some purposes, it unquestionably places scale modelling among the fine arts, and more than makes úp in qualities of imagination and character for what it may lack in qualities of purely mechanical accuracy.



MINIATURE PLASTIC STUDY FOR A COUNTRY HOUSE INTERIOR. Designed and Modelled by H. E. Woodsend.



The Truth About the Cathedral Plans. Certain peculiar difficulties seem to be retarding the progress of two very important building projects in New York City—the projects of the Cathedral of St. John the Di-

ral of St. John the Divine and the County Court House. The questions in the case of the latter are, at the present writing, still being threshed out, and the outcome cannot fail to hold much significance for architects and municipalities alike. Of the final denouement more later.

We are glad to have information from a reliable source, however, which dispel uneasiness regarding the Cathedral plans. The daily papers would have had us believe that the Trustees, having engaged Mr. Ralph Adams Cram to present revised schemes for the continuation of the work on the Cathedral, subsequently put the plans forward for popular vote or suggestion.

We are advised that such action was never taken, that the Trustees never intended such a course, and never contemplated bringing Mr. Cram's revised schemes into competition with the old rejected schemes. Mr. Cram put the drawings forward himself (with the reluctant consent of the Trustees), with an idea of drawing the fire of the public, and this action the excitement manifested by the daily press would seem to have misunderstood, wilfully or unwittingly. Mr. Cram's device succeeded, for instead of the Bishop receiving "hundreds of letters protesting against the projects of the consulting architects," he received (up to date of January 9th) just twelve communications, practically all of which were favorable to the revised plans. This makes it appear that Mr. Cram has been the victim of some inexplicable newspaper plot, for the facts, as we understand them, are that no serious objections have

been made to the revised Cathedral plans, and that the canards of the press to the effect that the schemes have been rejected can only have had their origin in some rumor that certain differences of opinion on the matter existed—a condition inevitably obtaining in any large or important architectural project.

Medals for Industrial Housing. An interesting movement is being set afoot by Mr. Frank E. Wallis, of Wallis & Goodwillie, with a view to stimulating interest in this country on the part of both architects and corpora-

tions, in developing the housing of employees of large industrial plants. The first meeting was called under the auspices of the Architectural League of New York on the 17th of February. At this initial meeting it was proposed to initiate cooperation with professional and semi-professional societies which are working for the common good, and delegates will be present as guests from the Society of Electrical Development, The Jovian Order, The Society of Illuminating Engineers, and the American Museum of Safety.

By way of creating interest in the housing problem it is suggested that a committee of the League aid the American Museum of Safety in the creation and awarding of medals of gold, silver and bronze for the successful housing of industrial plants and those employed in the industries.

The better to exploit new ideas of common interest and that those in related scientific work may have a better insight into its relation to the arts and vice-versa; the idea of interchanging speakers will be developed, and as an illustration, at this meeting there was a brief talk on "Light. Shade and Color in Illumination." This talk was given at the instance of Dr. E. P. Hyde, (of the Physical Laboratory of the National Division of the General Electric Co.), who delegated Mr. M. Luckiesh to set forth with a novel apparatus, the result of much serious study of the proper artificial lighting of painting and sculpture to maintain the artist's intention as to color and form.

Architects, painters and sculptors were asked to participate in the discussion. It is established that the Allied Arts have made good their affiliation with Architecture, and it is Mr. Wallis' idea and hope that the Allied Sciences will also come to take a similar and no less significant place.

The Rome Fellowship. The following announcement has been issued by the Secretary of the American Academy in Rome, with the additional important information that all applications for the com-

petition (Architecture, Sculpture and Painting) must be received before the first of March, 1914.

Announcement—The following fellowships will be awarded in 1914 by the Academy, viz.: A fellowship of the value of \$1,000 a year for one year; a fellowship of the value of \$1,000 a year for two years. The awards are made on competitions which are open to all unmarried citizens of the United States, who comply with the regulations of the Academy. Information as to the terms and conditions of the competitions may be obtained from the Secretary of the Academy.

General Regulations.—Section 1. All persons desiring to compete for a fellowship must fill in a form of application, which will be furnished by the Secretary of the Academy upon request, and file the same with the Secretary not later than March 1st, together with such letters of reference and other documents or evidence as they may desire to submit.

Sec. 2. They must submit evidence of attainment in Latin literature, Greek literature. Greek and Roman history and archaeology, also an ability to use German and French. They will be required to present published or unpublished papers so as to indicate their fitness to undertake special work in Rome.

The fellows will be selected without examination, other than the submission of the required papers, by the Fellowship Jury.

Sec. 3. The competition in Classical Studies will consist of the submission of evidence of special fitness for advanced work, and Academy Fellowships will be awarded to the successful competitors.

Fellows in Classical Studies will be required to engage in some piece of special research work during the term of their Fellowship, and to publish the result of their investigation, as the Academy may direct.

Sec. 4. The stipend of each Fellow will be paid as follows:

(a) Immediately prior to departure for Rome, one hundred (\$100) dollars for traveling expenses to that city.

(b) Subsequent to October first, following the award, a monthly allowance of seventy-five (\$75) dollars, less the following deductions: the actual cost of subsistence, which will be retained monthly by the director while the Fellow is in residence, in payment for board; and a sum of ten (\$10) dollars per month, for eight months of each year, which will be temporarily withheld by the director and will be paid to the Fellow when he enters upon his term of travel.

(c) Upon the completion of the full term of the Fellowship, the balance of the stipend to cover traveling expenses on returning home.

Sec. 5. Fellows are required to report at the Academy in Rome on the first day of October following their appointment. Men will be required to reside in the Academy, where sleeping rooms and studios will be provided without charge, and such residence is expected to be continuous, except during absence for travel, approved by the director as to route and duration.

Sec. 6. Any Fellow who shall marry during the period of his Fellowship, who shall resign or retire before the conclusion of the term of his appointment, without the consent of the Trustees, or who shall be dismissed, will forfeit all privileges and emoluments of his Fellowship and will have no claim for moneys withheld on his account or for traveling expenses.

Sec. 7. Fellows are expected to co-operate with the Board of Trustees and the director, in maintaining the high standard of excellence established by the Academy, and the board reserves the right to withhold or withdraw at any time any or all privileges from any Fellow whose work, acts or conduct are, in its judgment, unsatisfactory or detrimental to the best interests of the Academy.

For further particulars, please address C. Grant La Farge,

Secretary American Academy in Rome, 101 Park Avenue, New York City.



THE CHILDREN'S THEATRE, NEW YORK CITY. V. Hugo Koehler, Architect.

The Children's Theatre

The first playhouse in the world to be devoted exclusively to children has provided a specimen of theatrical architecture that is unique. The Children's Theatre i.1 New York—for that is the playhouse—is really built within a the-

atre, being constructed in the upper part of the Century, formerly the New Theatre. It is really, as it has been cleverly advertised, "atop the Century." V. Hugo Koehler, well known as a theatre architect, drew the plans.

When George C. Tyler, managing director of the Liebler Co., which holds the Century, first discussed with W. K. Vanderbilt, who financed the scheme, plans for the Children's Theatre, they agreed that it should be in a large rehearsal room beneath the dome. This has French windows opening out on to a wide promenade on the roof, so that it overlooks the city, and between acts in moderate weather the children can run about in the open air.

This was one desideratum in the conception of Mr. Tyler and Mr. Vanderbilt. They agreed that the building was to be intimate yet spacious, open-aired, yet enclosed, a nursery, yet a parlor. To speak of the new theatre as a "miniature" is in some respects misleading, for while it has but one floor, surrounded by twelve covelike boxes, it has a seating capacity of 800, And still it is intimate.

The manner in which this effect is obtained is what makes the Children's Theatre a novelty. The roof is arched and groined, the stage is low, and has the general appearance of the stage of a toy theatre, and the seats are somewhat lower than those of the ordinary play house. The frame of the proscenium arch, always a puzzle for the architect, is decorated in this case with a frieze, a playful adaptation of the Italian art of the middle of the sixteenth century, modeled by Philip Martiny, one of the foremost sculptors of the day, who finds special inspiration in children's subjects. The base of this frieze is supported with bits of animal life illustrative of the fables of Aesop and La Fontaine. This idea is carried through the whole interior of the building through eight pictures in cameo relief spandrels of the arches to the boxes. The general color scheme is French grey and subdued white, given play by light tints and suggestive coloring.

The Children's Theatre is reached by four spacious elevators and four large independent stair cases. It is the purpose of the Liebler Co. to use it only in the afternoons, for performances at 4 o'clock, so that school children can attend, and on Saturday mornings.

1915 Estimating Congress

In a recent monthly bulletin of "The Quantity Surveyor," the organ of G. Alexander Wright's new and promising "American Institute of Quantity Surveyors," contains, besides encourag-

ing data as to the favorable reception of "Better Estimating" propaganda throughout the country, the following interesting paragraph:

"It is suggested that a congress of architects, engineers, contractors, quantity sur-



SECTION OF THE GREAT CENTRAL COURT, THE COURT OF THE SUN AND STARS.

Panama-Pacific International Exposition, San Francisco, 1915. This court, approximately 750x900 feet, will divide the main rectangle of exposition buildings from north to south. Upon the east of the court figures—elephants, camels, Arab warriors—symbolical of the Orient, will surmount a huge arch, the Arch of the Rising Sun, larger than the Arc de Triomphe; upon the west of the court the story of the setting sun will be depicted; surmounting the arch upon the west prairie schooners and figures of pioneers who pushed across the western plains will be shown. The court is designed by Messrs. McKim, Mead and White.



THE PALACE OF FINE ARTS. The Panama-Pacific International Exposition, San Francisco, 1915. This building will describe an arc of 1,100 feet in its outside circumference.

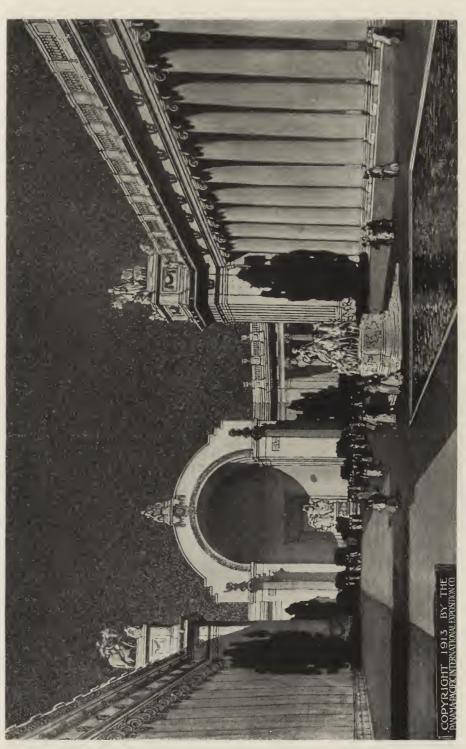


THE COURT OF PALMS LOOKING SOUTH TOWARD THE HORTICULTURAL BUILDING AT THE PANAMA-PACIFIC INTERNATIONAL EXPOSITION, SAN FRANCISCO, 1915. The Italian towers at the entrance of this court will be forty feet square and two hundred feet in height. There will be two towers, at each side of the entrance of the court, and they will be identical in architecture. One of the towers is seen in the center of the illustration.



Looking toward the hills of Marin County through the entrance of the great Court of Sun and Stars upon the harbor. In the center is seen a colossal column whose spiral represents man's climb towards fame. At the summit of the column the huge symbolical figure is designed to convey the spirit of Panama-Pacific International Exposition, San Francisco, 1915. THE GREAT COURT OF THE SUN AND STARS.

uccess



NICHE IN THE COURT OF FOUR SEASONS OR GREAT WEST COURT AT THE PANAMA-PACIFIC INTERNATIONAL EXPOSITION, SAN

FRANCISCO, 1915.

In each of the four corners of this court, which is designed by Mr. Henry Bacon, creator of the Lincoln Memorial at Washington, there will be a great niche containing statuary typifying the four seasons, spring, summer, autumn and winter. The court will be luxuriant with tropical growths. Behind the columns of the colonnade, encircling the court, will be mural paintings expressive of the theme of the court and designed by Mr. Jules Guerin,

veyors and others interested in the 'cost' of construction work be held at the International Panama-Pacific Exposition in 1915. It will, we suppose, be admitted that 'cost is a sufficiently important factor to justify the best methods of ascertaining what it amounts to, whether for a factory or a cathedral. Usually the first thing the owner wants to know is, What will it cost? The contractor, and the architect, too, are both interested in the answer, the former vitally so; and yet it is well known to be one of the greatest gambles of modern times. It is a question, in the writer's mind, whether we ought not all to be indicted for conducting a lottery!"

> The name of Ebenezer Howard, the father of the garden city movement, was published this Summer in the lists of English Civil List Pensions. He is to receive £75 a year. The event

is interesting as official recognition of the value of the garden cities, in its indication of the English government's appreciation of the propaganda which made them pos-sible. The monetary value of the gift is

Pension for

Mr. Howard.

small; but it counts for more in England than it would with us, and Mr. Howard is sixty-five years old and is still hard at work in his profession-of stenography. As a man with a vision, his greatest reward is in seeing his vision realized; yet, the government recognition must be gratifying.

Practical City Planning.

The increasingly practical character of city planning in the United States has been emphasized during the last few weeks by the list of committees appointed by the City Planning Commis-

sion of St. Paul, and by the composition of a proposed City Planning Commission in Bridgeport, Conn. The St. Paul committees have to do with street planning; traction lines, railroads and docks; public buildings, open spaces and water ways; housing; legal administrative methods; municipal real estate policies and taxation. It is proposed that the Bridgeport Commission be composed of eight citizens, of whom these four shall be ex-officio: The presidents of the Board of Trade, of the Manufacturers' Association, and of the Business Men's Association, and the Mayor of the City.



THE MACHINERY HALL, PANAMA-PACIFIC EXPOSITION, 1915.

The MACHINERT HALL, PANAMA-PACIFIC EXPOSITION, 1915. This will be the largest building at the Panama-Pacific International Exposition, San Francisco, 1915, now two-thirds completed. The structure will be 968x368 feet. The design of the building is based upon the Roman arch motif, prototypes of which may be found in the big Roman baths of Hadrian and Caracalla. The interior arrangement consists of three naves, 75 feet in width and 126 feet in height, running the length of the building, with three cross naves 135 feet in height running east and west. The area of the building is 7.94 acres.



GARDENS FOR W. M. SALISBURY, ESQ., PITTSFIELD, MASS. Walker & Gillette, Architects.

VOL. XXXV. No. 4.	CO	NTENT	S					SERIAL NO. 187
	API	RIL, 1914.						Page
COVER-ARCHITECTS' SIGN BOARD-Painted by Everitt Shinn.								1 age
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VARIETY IN ARCHI By Alwyn T. Covell. Works of Walker &		ACTICE	-	-	-	-	-	277-355
THE CHAPEL OF T Reiley & Steinback,		F ALL SA	INTS,	Broo	klyn,	N.	Υ.	356-374
WHAT DO WE KNC By F. Laurent Godin The Lighting of the D	ez.			-	-	-	-	375-383
NOTES AND COMM	ENTS -		-	-	-	-	-	384-388
WORKING DETAIL Gregory B. Webb, A		RN -	-	-	-	-	-	Facing 388
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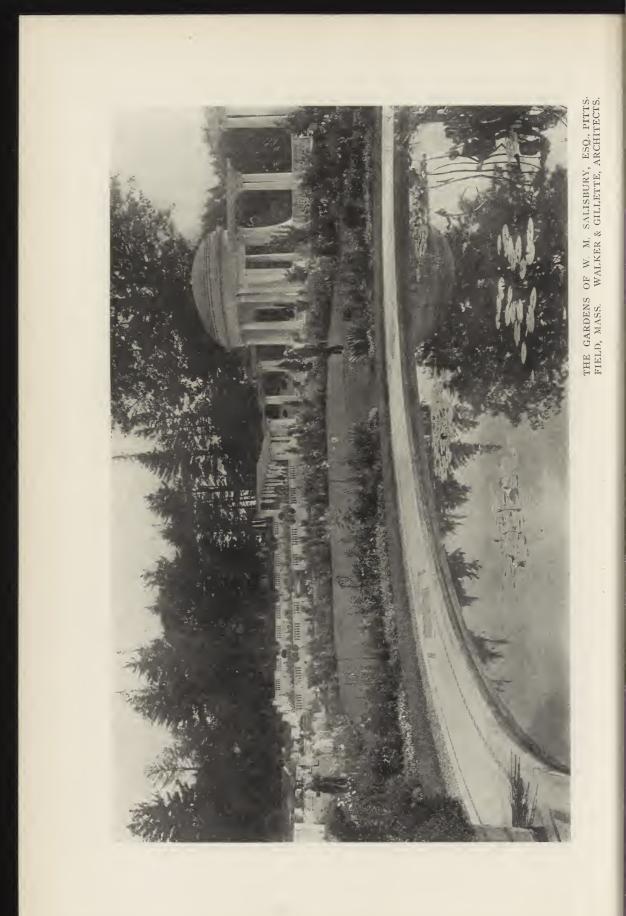
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Volume XXXV



PRELIMINARY STUDY FOR A COUNTRY HOUSE. Walker & Gillette, Architects.

VARIETY IN ARCHITECTURAL PRACTICE SOME WORKS OF WALKER & GILLETTE By Alwyn T. Covell

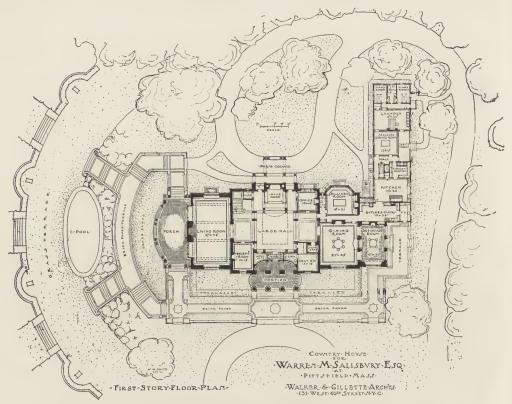


the criticism of architecture in this country to-day, it might be said that the premises of a great many critics are not entirely fairly taken. No estimate of achievement can be a complete one unless it

includes causes and conditions as well as superficial appearances. A great deal has been written and a good many addresses have been given by prominent architects and by able critics upon the subject of "American Architecture," and for the most part the story has been one of deri-5

vation, or of adaptation from foreign sources. Such a tendency in outlining the developments of architecture in this country is not entirely illogical, but it would be more reasonable if as much were said about causes and conditions as is said about the finished product:

When an architect who is also a thinker and a philosopher discusses the growth of a new architecture in this country-one alludes to Frank Lloyd Wright-the case is different. Mr. Wright is neither an amateur nor a theorist, but a master-designer of very clear vision and a very good idea of what he is about, and the only evidence necessary to establish the significance of his premises lies in his executed work.



PLAN OF HOUSE AND LAYOUT OF GROUNDS IMMEDIATELY ADJACENT-RESIDENCE OF W. M. SALISBURY, ESQ., PITTSFIELD, MASS. Walker & Gillette, Architects.

It is not the intention here to speak of the exception, but rather of certain broad facts which underly architectural development in this country, and which may be taken as the causes not only of the retard but of the advance of this development.

Many essays have ably and clearly outlined the development of our architecture—the sincerity of early Colonial, the refinement of the Georgian and the Classic Revival, the "Dark Ages" of ignorance, banality and actual depravity, all in historic sequence. Then the dawn of architectural sanity and nobility under such powerful men as Richardson and the elder Hunt, the Renaissance revival of McKim, Mead and White, the Gothic achievements of Cram, Goodhue and Ferguson, and the scholarly and refined attainments of Platt and Pope phases, all, in the evolution or development of architectural ideals rather than of architectural ideas. But even a study of these important phases or expressions of architectural belief do not shed much light on the more general aspects of architectural development in this country. Some were Beaux-Arts men, some were Classicists, some Mediaevalists, while others sought inspiration from different periods of the architecture of France, Italy or England.

It is small wonder that the lay observer has long since abandoned any attempt to construct from such varied manifestations a clear visualization of an American Architecture. The task, however, were better begun by seeking the causes for this variety, rather than by skipping this important step and puzzling over the conglomerate whole.

Speaking of the superficial question of style, and not of the basic questions of



RESIDENCE OF W. M. SALISBURY, ESQ., PITTSFIELD, MASS. WALKER & GILLETTE, ARCHITECTS.



THE CENTRAL HALL-RESIDENCE OF W. M. SALISBURY, ESQ., PITTSFIELD, MASS. Walker & Gillette, Architects.

plan and structure, the architect in this country is obviously impelled by two factors: one his inherent tastes, the other the restrictions or personal preferences inevitably imposed upon him by his client.

In early times, the architect, in common with the doctor or barrister, or astrologer, enjoyed a reputation with the public which the increase and dissemination of knowledge today makes impossible for the man of learning. Once the architect, in common with such of his brothers as were versed in any arts or sciences, was reckoned infallible-one dared not make a suggestion: ignorance and the hesitancy bred by it allowed the trained architect, or sculptor, or painter, a free rein in the expression of his personal convictions in art. Hence the inception and growth of the great historic styles, unhampered by varied influences. Nor was there choice of "style"

in earlier days—one set of ideas was paramount, and the general character was prescribed as a matter of course.

Today these conditions do not exist. Virtually everyone intending to build has acquired some knowledge of architecture -too often only a smattering—and the architect is no longer the final word, as he should be, in the matters of design. The veriest novice feels that he is in a position to give "advice" to the architect, and any personal convictions which the architect may possess in the matter of style too often gives place to the client's personal preference or fancy. Obviously the client is to be considered, but as no two men are likely to have had their ideals centered in a certain type of architecture, one reason for diversity is already apparent.

Certain real estate companies impose "restrictions" upon the sort of houses which may be erected on their proper-



RESIDENCE OF W. M. SALISBURY, ESQ., PITTSFIELD, MASS. WALKER & GILLETTE, ARCHITECTS.



DINING ROOM-RESIDENCE OF W. M. SALISBURY, ESQ., PITTSFIELD, MASS. Walker & Gillette, Architects.

ties, but for the country at large no "restriction" ever existed and here is the second reason for architectural diversity, and one which has conspired actively with the naturally diverse whim of the individual client to effect our chaos of styles.

The most the architect may hope to maintain is an even standard of merit in the work he performs—if conditions do not allow him to be consistent in material forms, the significance of his attainment must be made to depend upon the individual merits and the general *character* of his works.

Allowing that many architects specialize either in certain types of building, or in certain styles of design, even the most specialized of the architects of this country constantly surprise us with evidences of able versatility. Cram, Goodhue and Ferguson designed a thoroughly successful and admirable SpanishAmerican villa and gardens in California, and an equally meritorious French château in Newport, for all that their work had always been characterized, above all, by its consistent adherence to Gothic.

It would be quite useless to discuss the desirability of an absolute uniformity and consistency of architectural style in this country, even if such a thing were possible under existing conditions, and certainly we cannot expect all our architects to work in the same vein, when even the individual so often elects to express himself in several, making diversity thrice diversified, or variety within variety.

It seems apparent that the widely differing ideas of expression in architecture in this country can be unified, at present, only through a uniformity of *ideal*—and even this is still far away. Perhaps our most pertinent criticism of



END OF THE BREAKFAST ROOM—RESIDENCE OF W. M. SALISBURY, ESQ., PITTSFIELD, MASS. WALKER & GILLETTE, ARCHITECTS.



ONE OF THE DECORATIVE PANELS IN THE CENTRAL HALL, RESIDENCE OF W. M. SALISBURY, ESQ. Painted in "Grisaille" by Everitt Shinn.

a given building can be attained only by considering it as an entity in itself, and by determining certain essential points. If the plan is well considered, the structure ably expressed, the detail conscientiously studied and properly applied, and the style selected with reasonable appropriateness, there is a building which must possess more or less architectural significance in itself, entirely apart from any considerations so broad or so vaguely defined as to be called national.

In view of the present varied aspects of our architectural predilections and tastes, in other words, a given building can be judged only as being successful or otherwise of its kind. It would be merely idiotic to say that a church was poorly designed because it was unlike a welldesigned museum—and only a little less absurd to say that a Spanish-American country-house was poorly designed because it was unlike a well-designed Georgian country-house.

There has been too general a tendency in criticism to go wide of the mark because of its failure to classify, though very little thought must show that classification is the first essential of intelligent criticism, and that comparisons or judgments can be made only among things of a like or similar nature. An attorney studies points and decisions only in parallel cases, and critics, or even students, should exercise the same selective method, if only for their own enlightenment.

Lastly, personal bias too often enters into criticism, in spite of the manifest unfairness and stupidity of condemning an exquisitely designed villa of the Italian type because the critic happens to fancy an English country-house.

So much, then, for diversity, a dis-



ONE OF THE DECORATIVE PANELS IN THE CENTRAL HALL, RESIDENCE OF W. M. SALISBURY, ESQ. Painted 'n "Grisaille' by Everitt Shinn.



VISIA ACROSS ONE OF THE POOLS, GARDENS OF W. M. SALISBURY, ESQ., PITTSFIELD, MASS. Walker & Gillette, Architects.

sertation which is not so irrelevant as it might seem, in that the appreciation of certain points brought out therein is necessary in forming any valuable sort of estimate of the work of the general practitioner among architects, either a firm or an individual. Each building should be considered separately, on its own merits, before it is possible to intelligently arrive at any conclusion as to the character of the work as a whole.

Given architectural ability and taste, a very important qualification of the architect of this country today is his ability to give individual satisfaction to his clients, and this ability, as was said in an appreciation of the work of Howard Shaw, is proportional to the architect's faculty of creating for each of his clients an appropriate and pleasing architectural background. Perhaps this is the most that can reasonably be expected of our architect in general practice, in addition to more general qualities of sincerity and more particular qualities of ingenuity in the solution of specific problems. For superficial variety, it has been shown that we cannot blame the architect. Considered in the abstract, variety is not a highly commendable feature of American architecture, albeit we may be forced to accept it as virtually inevitable, but where conditions oblige the architect to work in several styles he is to be commended to the extent that he brings to each problem his best efforts, studies, invention and abilities.

Our architects are most to blame when they have failed to make the most of a specific opportunity, and it has often seemed, indeed, as though the greater versatility demanded of them, the greater their distinction in proving themselves equal to the demand. They must not know how to do one thing well, but many things.





THE GARDENS OF W. M. SALISBURY, ESQ., PITTSFIELD, MASS. WALKER & GILLETTE, ARCHITECTS.



VERANDA-RESIDENCE OF W. M. SALISBURY, ESQ., PITTSFIELD, MASS. Walker & Gillette, Architects.

In the foregoing text it was stated that variety of architectural style has been forced upon our architects, and the accompanying illustrations of the works of Walker & Gillette must go far to prove this, and to bring out as well another condition of no less importance. In addition to variety of form, the architect is confronted also with variety of problem—he must direct his ingenuity to the careful planning, construction and equipment of churches, banks, schools, libraries, clubs, hospitals, residences (city or country), garages, stables, apartment houses and as many other types of building, and in the instance of Walker & Gillette, the architects have to their credit the arrangement of the interiors of two luxurious private yachts, certainly a highly specialized sort of architectural design.

The work of most architectural firms can be said to lend itself to a rough classification, and this will be found the easiest road to clear criticism.

The illustrations show a number of country houses, some gardens, several town houses, an array of interesting interiors, and scattered examples of various other sorts of architectural design, to be separately considered.

In point of importance, if not of actual interest, perhaps the W. M. Salisbury residence, near Lenox, Mass., ranks the country houses—certainly its gardens form one of the architects' very finest achievements.

The house itself, set in superb grounds, is by all means dignified and well-proportioned, its colonnaded portico suggesting the old Southern "mansion."

The house is built entirely of concrete blocks, which were made on the spot, and is an interesting example of this type of construction. The plan is char-



PORTICO-RESIDENCE OF W. M. SALISBURY, ESQ., PITTSFIELD, MASS. Walker & Gillette, Architects.

acteristic of the large country-house of America, though with several interesting variations. It will be noted that an "office" is located in one corner of the great hall, with access from a small door at the rear of the house—an idea aptly borrowed from English country-house planning, and an excellent consideration where a large estate is concerned. Here the superintendent, gardener, chauffeurs, stable men and other people about the place may be seen at specified hours, and paid or interviewed without disturbing the privacy of the house itself. An interesting and unique feature of the great hall is the set of decorative panels, in grey, or "grisaille," painted by Everitt Shinn, who has done some other interesting work for the architects. Mr. Shinn is the only painter of to-day who seems able to revive the gay, decorative fantasies of such French painters as Watteau and Fragonard, and in these charming panels he has happily echoed the French spirit of the gardens which surround the house. As the hall itself is in white, these grey panels preserve its dignity while lending enough incident



GARDENS OF W. M. SALISBURY, ESQ., PITTSFIELD, MASS. Walker & Gillette, Architects.

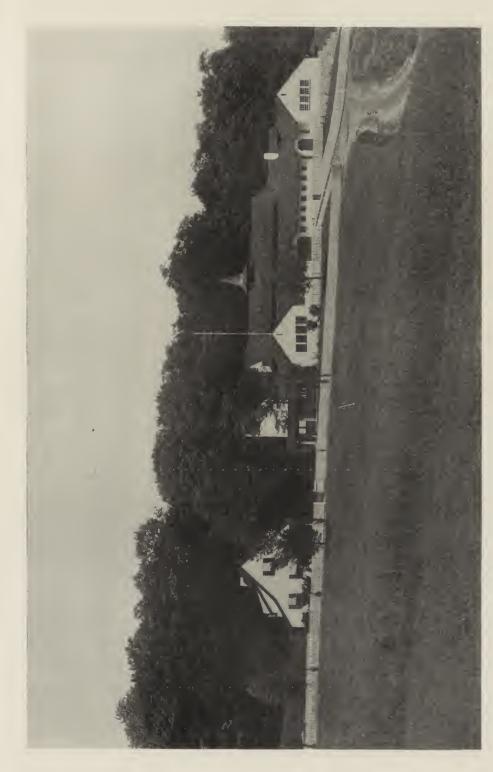
and "color" to correct any tendency toward too great severity.

Possibly the most interesting interior in the Salisbury house is the breakfast room, wherein distinct originality has been governed by good taste to produce a cheerful impression—and no breakfast room can be said to be successful if it lacks the quality of cheerfulness.

The architects have been unusually successful in their selection of furniture and other accessories in the various interiors which they have designed—an essential detail which is pleasantly conspicuous in the breakfast room illustrated.

The gardens, fortunately situated on grounds which command many splendid vistas of the surrounding country, are happily designed in the vein of Versailles. This impression of a French garden treatment of the finest period makes itself felt even when closer study discloses the distinctly Italian caryatid sup-

ports of the pergola, and the replica of the Boboli balustrade and tree-pots. This furnishes interesting material for a study in derivations, or rather in adaptation, and it almost seems as though the domed shelter, or "Temple d'Amour," is the single really French element in the design, yet so distinctively French as to dominate even the no-less distinctively Italian elements. Certainly the vista across the pool with the fountain is a remarkable achievement of garden design for this country, and an excellent illustration of the importance in garden layouts of designing pictures, by opening up prospects of distant bits of surrounding country. This photograph of the pool and fountain is comparable with the compositions of Maxfield Parrish, and, from a practical designing viewpoint, illustrative of the too-often neglected value of opening up vistas in garden design. By clever and wellstudied manipulation of planting or cut-



FARM BUILDINGS FOR W. M. SALISBURY, ESQ., PITTS-FIELD, MASS. WALKER & GILLETTE, ARCHITECTS.



FARM BUILDINGS FOR W. M. SALISBURY, ESQ., PITTSFIELD, MASS. Walker & Gillette, Architects.

ting, distant buildings which might be objectionable may be screened, and while results as remarkable as those shown in the Salisbury gardens cannot always be attained, the theory is worthy of no little practical consuderation by garden designers.

One of the most interesting large country houses designed by Walker & Gillette is that for Joseph E. Stevens, Esq., at Tuxedo Park, N. Y. Here the architects achieved an unusually successful rendering of the Spanish type, usually called "Mission," though in this instance more closely resembling the styles of which the Spanish Mission was a colonial development.

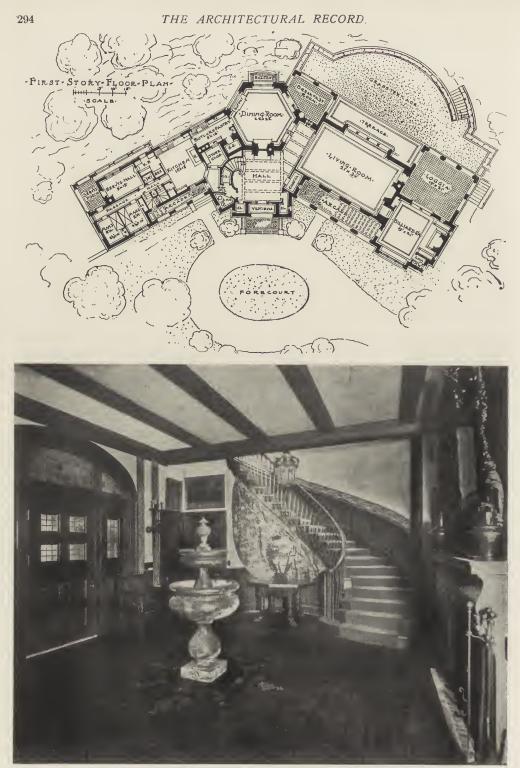
Not only is the plan an interesting and well-considered one, but the problem of grade has been most skillfully handled here. The aspect of the house from the lowest level is distinctly impressive and dignified, with enough restraint to make this quality strongly felt, yet with enough variety to eliminate any tendency toward monotony or undue severity.

The construction, above the massive rough stone terrace, is of hollow tile covered with stucco, and in this sort of design, where values of "texture" in brickwork or fieldstone do not exist. The success of the building is dependent entirely on the mass or proportions of the whole, and on the diversity of the fenestration and the introduction of occasional iron balconies and the like.

The mass of the Stevens house is in good conformity with its site, and the central tower is a successfully dominating note, while windows and balconies and loggias pleasantly break up the great expanses- of the wings. The- Spanish type of architecture is by no means an easy one to work in, by reason of its elusive qualities- of simplicity, as well as its strong native character. Few styles more often become a stupid affection in



TERRACE STAIR DETAIL, RESIDENCE OF JOSEPH E. STEVENS, ESQ., TUXEDO PARK, N. Y. WALKER & GILLETTE, ARCHITECTS.



THE ENTRANCE HALL—RESIDENCE OF JOSEPH E. STEPHENS, ESQ., TUXEDO PARK, N. Y. Walker & Gillette, Architects.



RESIDENCE OF JOSEPH E. STEVENS, ESQ., TUXEDO PARK, N. Y. WALKER & GILLETTE, ARCHITECTS.



DINING-ROOM, RESIDENCE OF JOSEPH E. STEVENS, ESQ., TUXEDO PARK, N. Y. WALKER & GILLETTE, ARCHITECTS.



PRELIMINARY STUDY FOR A COUNTRY HOUSE. Walker & Gillette, Architects.

the hands of unsympathetic designers, and few are more pleasing when skillfully done.

The interiors of this house are by no means without interest, especially those in which the treatment or furnishing has struck a note suggestive of Spanish character, such as the dining room. The unusual character of this room is

The unusual character of this room is a result of the detailed treatment, wherein furniture, lighting-fixtures and other accessories have been called into play in such a manner as to combine consistency with interest. The same note of the unusual is carried into the hall, with its iron stair-rail—in all the Stevens house is one in which the exterior and interior seem in excellent accord.

The Spanish, or Spanish-Italian character of the Stevens house is recalled in the preliminary studies for the "Villa Rogers," which promises to present a nice balance of consistency and originality in its design. The disposition of the grounds necessitates entrance from the end of the house, appearing in the pensketch on this page, while the long facade, shown in the study on page 277 will be of unbroken symmetry.

The house for Henry F. Godfrey, Esq., at Roslyn, L. I., is of a restrained

type of design characteristic of much modern English domestic architecture. While it does not show as much spirit or imagination as the Stevens house, it is far removed from the commonplace, and it is successful rather in proportion to its qualities of domesticity rather than to its qualities strictly architectural. It is not so colloquial or idiomatic as the Scofield house at Tuxedo Park, but the two are pleasantly similar in their expression as places of abode. Neither is in any sense the "show place" which, thanks to the nouveaux riches is the abomination of much otherwise important domestic architecture in this country. Many of such stop short only of planting a large sign-board on the front lawn, displaying the figures of the cost, where all who run may read.

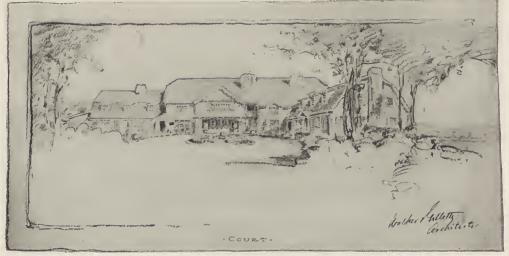
The architects have attained marked qualities of the "picturesque" in the Scofield House, and if it might be considered more "extreme" in its informality, it is proportionally more interesting. By all means it should appeal to the lover of "texture" in building materials, for stone and wood and roughcast stucco have been vigorously treated as the materials of which the house is built, rather than media used to disguise



FIRST PRELIMINARY STUDY FOR THE GOSHEN INN, GOSHEN, N. Y. Walker & Gillette, Architects.

its construction. A French wit evolved the clever epigram that "words have been used for the purpose of concealing thoughts"—and it can be said of much half-hearted architecture that building materials have been used for the purpose of concealing designs. The commendable frankness with which the structure of the Scofield house has been expressed, both in material and design, is one of its most appealing features, and is a quality in which it far surpasses the ultra-formal Lorrilard House. Obviously the two houses are of distinctly different types—the informal and the formal—and the comparison is valid only in that the Scofield house is better of its kind than the Lorrilard house.

The Ralph Pulitzer residence at Manhasset, L. I., must appeal through its pleasant simplicity and its opposition to any expression of ostentation. Its charm is due entirely to its lack of architectural pretense, rather than to any attempts which it makes to such, and although this may appear to be easily achieved, the



PRELIMINARY STUDY FOR A COUNTRY HOUSE. Walker & Gillette, Architects.

appearance is deceptive. Dealing in such extremely simple forms of architectural design as were called into play here, a result as happy is very rare. The plan is distinctly unique and illustrates an unusual device in dividing the house, its service wing and "bachelor's wing" into actual units, entirely detached at their second floor levels and semi-detached on the first floor. The treatment of the dining-room shows that the simplicity of the general scheme has been consistently carried through the interiors, to effect an expression of nothing more nor less than what the whole actually is—an American country dwelling.

A considerable degree of charm and a delightful expression of domesticity appears in the A. H. W. Johnson house at Larchmont, N. Y., wherein again the lack of architectural pretense is the significant fact of its design. The house is fortunate in the quaint profusion of its surrounding planting, which, in spite of the "Dutch Colonial" character of the house itself, suggests the charm of the English road-side cottage. Although the country house of this type and size is distinctly a part of the practice of nearly all architects, its solution is too seldom as happily achieved as in this instance.

The architects must be conceded to have produced a cheerful bit of semiformal design in the casino and boathouse on the country estate of H. P. Davison, Esq., for the little building effects a happy compromise between that formality which is required of garden architecture and the informality desirable in a structure of this type. Its every aspect, from all viewpoints, suggests a certain air of festivity, although in the attainment of this there is no suggestion of triviality. It should be a recognized fact that architects are more to be commended for such a successful handling of an unusual sort of building than for their handling of a stereotyped problem in which a given set of requirements and conditions inevitably governs



PRELIMINARY SKETCH FOR A COUNTRY HOUSE. Walker & Gillette, Architects.



INTERIOR-RESIDENCE OF JOSEPH E. STEVENS, ESQ., TUXEDO PARK, N. Y. Walker & Gillette, Architects.

the design. And here, too, is an apt illustration of the ready versatility which is demanded of the architect in general practice in this country.

Completely differing in all conditions and requirements of residential work in the country, there is city residential work, to the design of which the architect must bring his greatest abilities of invention and ingenuity, in addition to his ability as a designer. Presenting but one front calling for architectural embellishment, this must be so devised as to strike the keynote of the whole house, as well as to achieve a certain urbane manner, with dignity and general poise. With no prevalent style in city architecture, yet without the isolation which makes diversity in country house design possible, it seems that our best city houses are those that dwell in the best architectural harmony with their neighbors. The architect, of course, ignores the old "brownstone front" type, on the assumption that all these will be either demolished, or remodelled, and the consistency in design is to be reached rather through general adherence to a *type* than to any specific style.

For this reason four city houses illustrated here are good New York houses, being neither extreme because of originality or negligible because of stupidity. They express excellently the better type of New York city dwelling and represent exactly what the general problem of their design calls for.

To indulge in a little retrospect, one of the most marked phases in the development of American architecture is to be read, perhaps, in the evolution of the city residence. The reasons for this evolution are many, and though the intention of this article is rather to discuss some details of interior decoration, an appreciation of the value attained in this particular by Walker & Gillette may best be reached by a brief outline of the



BED-ROOM IN THE TOWER-RESIDENCE OF JOSEPH E. STEVENS, ESQ., TUXEDO PARK, N. Y. Walker & Gillette, Architects.

changes which have made possible the house of the type of the Mr. W. G. Loew residence, in New York City.

After the rather primitive, but at least dignified house of the earliest days the type still to be seen in New York in certain downtown side streets, and on the north of Washington Square—there came the amazing and all-obliterating popularity of the famous (or infamous) "brown-stone front." Apart from the mournful stupidity of its exterior appearance, it possessed as well an interior arrangement no less stupid. "Individuality" was an element unknown, for the highest qualification of this type of house was that it should be precisely like its neighbors.

The high "stoop" (derived from the Dutch *stoep*) was a relic of an entirely different social system than that demanded by later years, and was made to accommodate the family dining-room below the main, or "parlor" floor, to place it, in fact, on the kitchen floor, where a

minimum of light, head-room and ventilation existed. Gradually the civilized began to dine upstairs, on the "parlor" floor, and to arrange communications with the lower regions by means of the dumbwaiter. From that change to the development of the front part of the basement floor into an entrance-hall or "foyer" was a simple enough matter, but was an innovation which took over a generation to evolve.

The city dweller was slow to accept the new idea and to relinquish the type of house to which he had been so long accustomed. It would have been bad enough had only the exteriors of the brown-stone type of house been of a depressing similarity, but the planning, arrangement and decoration were also identical in all—the gloomy, highstudded "parlor-floor" rooms, with their cheap plaster imitations of a debased form of French ornament, their narrow halls and steep stairs with a niche at the turn and a wretched little closet called



THE ENTRANCE FRONT—RESIDENCE OF JOSEPH E. STEVENS, ESQ., TUXEDO PARK, N. Y. Walker & Gillette, Architects.



DETAIL—RESIDENCE OF JOSEPH E. STEVENS, ESQ., TUXEDO PARK, N. Y. Walker & Gillette, Architects.

a "hall bed-room" at the end. It was a stupid plan stupidly executed and blindly followed for many years. It reflects, however, the general lack of taste and imagination which obtained at the time, and these houses are found when the builder of to-day demolishes them to make place for better buildings, to have been cheaply and parsimoniously constructed to fill a bourgeois and undiscriminating demand. Perhaps, after all, they are only a posthumous monument of the times, for every age leaves some architectural trace of its ideals and attainments and the age of the "brownstone front" was an age most conspicuously lacking in any ideal or attainment of culture.

The first gain of the city architect upon abandoning this type of house was the obvious opportunity to save waste building space, of which every fraction of a foot counts in urban house-planning, by abolishing the high stoop. The elevation of this often calling for ten or twelve steps necessitated the placing of the actual front of his building from seven to ten feet back of the building line allowed by city ordinances.

This space constituted the "area-way," and admitted of the basement door under the stoop—a dismal little enclosure in which it was often endeavored (and always unsuccessfully) to grow grass or flowers.

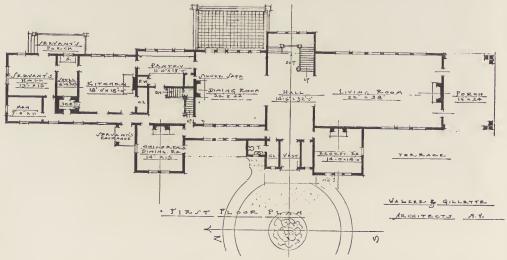
The first gain then was one of from seven to ten feet of actual floor space on each floor, the entire width of the lot. Further advantage was also taken as the acceptance of the wide "foyer-hall" at the street level became general. Another factor conspired to improve city architecture—a factor even more significant.



THE LIVING ROOM—RESIDENCE OF JOSEPH E. STEVENS, ESQ, TUXEDO PARK, N. Y. WALKER & GILLETTE, ARCHITECTS.



DETAIL OF THE GARDEN FRONT-RESIDENCE OF H. F. GODFREY, ESQ., ROSLYN, L. I. Walker & Gillette, Architects.



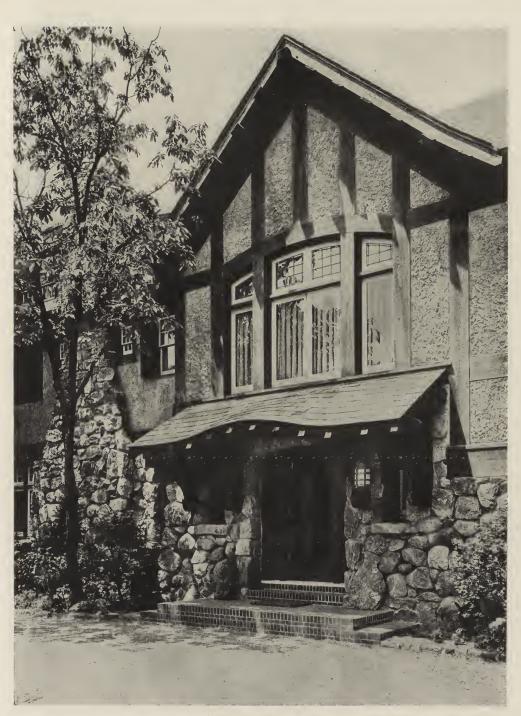
FIRST FLOOR PLAN—RESIDENCE OF H. F. GODFREY, ESQ., ROSLYN, L. I. Walker & Gillette, Architects.



ENTRANCE FRONT DETAIL, RESIDENCE OF HENRY F. GODFREY, ESQ., ROSLYN, L. I. WALKER AND GILLETTE, ARCHITECTS.



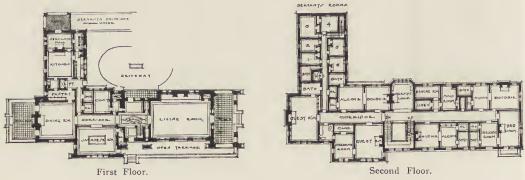
RESIDENCE OF MISSES SCOFIELD, TUXEDO PARK, N. Y. WALKER & GILLETTE, ARCHITECTS.



ENTRANCE DETAIL, RESIDENCE OF MISSES SCOFIELD, TUXEDO PARK, N. Y., WALKER & GILLETTE, ARCHITECTS.



JAPANESE INTERIOR-RESIDENCE OF MISSES SCOFIELD, TUXEDO PARK, N. Y. Walker & Gillette, Architects.



FLOOR PLANS OF THE RESIDENCE OF MISSES SCOFIELD, TUXEDO PARK, N. Y. Walker & Gillette, Architects.



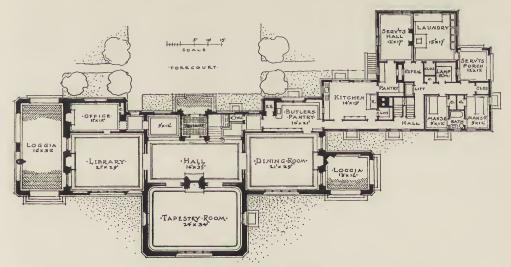
RESIDENCE OF MRS. PIERRE LORILLARD, TUXEDO, N. Y. Walker & Gillette, Architects.

if possible, than the marked growth of personal taste on the part of the owners. Real estate values in New York became so high that residence in apartments soon became compulsory to persons of moderate means and apartment houses sprung up by hundreds in uptown New York. The private house, in consequence, became a more individual affair and being now the perquisite of only the more wealthy, became the subject of study and improvement for the trained architect instead as was formerly its fate

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being left to the incompetence of the speculative or contracting builder. With architects in all the cities giving the problem their most careful study, with the perfection of the small self-operative electric elevator and all the new possibilities which its installation opened up, the city house soon became a thing of architectural beauty as well as comfortable utility.

Traveling and the collection of works of art became the more general interest of the house-owner, and it was only nat-



FIRST FLOOR PLAN-RESIDENCE OF MRS. PIERRE LORILLARD, TUXEDO, N. Y. Walker & Gillette. Architects.



PHOTOGRAPHS AND FLOOR PLANS, RESIDENCE OF RALPH PULITZER, ESQ., MANHASSET, L. I. Walker & Gillette, Architects.



DINING-ROOM, RESIDENCE OF RALPH PULITZER, ESQ., MANHASSET, L. I. WALKER & GILLETTE, ARCHITECTS.





ural that he should feel that his house should be an appropriate and fit setting for his acquisitions of beautiful furniture, rare tapestries and the like. Interior decoration, removing itself far from its old status of the mere artisanship of paper-hanging and painting, became at once an art and a science.

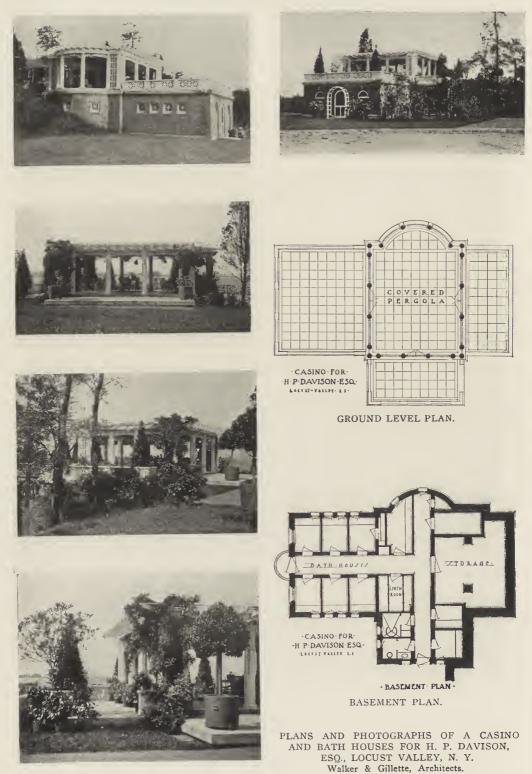
Intelligent and profound study was made of the historic periods of European art and decoration, and it became possible to change the ugly and hybrid interiors of the previous generation to wonderfully studied adaptations of English or French originals, carried out in every detail of wood-work, furniture and hangings.

In the Loew house the first and most impressive feature which strikes one is the architect's bold and effective use of the entire width of the lot-of average city dimensions-for the disposition of a magnificent monumental stairway. Such a scheme would have been dismissed by the builder of thirty years ago as utterly impossible, though it was no more impossible then than now. There is an imposing formality in the tall colonnade of figured marble, while the tapestry curtains and the ornate bronze railings relieve any impression of severity which might otherwise exist. Everything has been done to effect perfect symmetry in the design of this great entrance-hall,

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GATEWAY, RESIDENCE OF A. H. W. JOHNSON, ESQ., LARCHMONT, N. Y. WALKER & GILLETTE, ARCHITECTS.







TWO NEW YORK CITY RESIDENCES. Walker & Gillette, Architects.



RESIDENCE OF W. G. LOEW, ESQ., NEW YORK CITY. Walker & Gillette, Architects.

and the sacrifice of space is made up for by the quality of stateliness achieved by the arrangement.

Every point in the city house of today seems to evidence taste and appreciation in design. The details of the bronze railings are not a half-hearted and ill-studied imitation of a poorly de-

signed original-it is as intrinsically beautiful as anything in the Grand Trianon. The great chandelier and the twin candelabra are more than mere lighting fixtures, they are a part of the entire design. Nor is it the practice today, as once it was, to consider furniture merely as "furniture" as good (or as bad) in one place as another. To-day we appreciate that certain types of furniture will not conform with certain interiors, while certain other types will lend distinction and further the scheme entire in its perfection. A great hall in Caen stone or a lofty paneled room makes possible the use of tapestries as a keynote of decoration, nor would it be easy to name any one decorative accessory which imparts such an interesting character or "atmosphere" to an interior. In former days we traveled to Italy or to France, there to find an inspirational atmosphere in the palaces and villas, or at Versailles, which we may now create to our own liking in our own houses.

The principal bed-room suite in this house shows with what remarkable cleverness the spirit of an historic period may be carried out in every detail today. There are few styles, with the exception of that which takes its name from the Brothers Adam, that are more difficult to reproduce than that delicate style which grew up in France from the reign of Louis XIV to that of Louis XVI. There was so much of ill-studied fantasy in much of the work of that period that only the keenest sense for what is good will enable the designer to make a selective composite, as it were, of the best motives from the three reigns. Yet there was so much graceful and delicate design that its skilful adaptation will find no rival for beauty and appropriateness, especially for the design of a bed-room or boudoir.

In this instance the style has been carried out with an excellent appreciation of both its possibilities and its limitations. The decoration of the paneling, the design of the furniture and of the lighting fixtures are all in excellent conformity with the best expression of the style.

Throughout the house, could each room be illustrated, evidences would be



THE ENTRANCE HALL-RESIDENCE OF W. G. LOEW, ESQ., NEW YORK CITY. Walker & Gillette, Architects.

apparent even to the most casual observer that the American city house of to-day is nearly as far removed from its brown-stone prototype as the modern country house is from a log cabin. On every side are the signs of a new era in architecture and decoration—are appointments of beauty, elegance and convenience in place of ugliness, oppressiveness and discomfort.

Where the designers of a generation ago, and, unfortunately, their clients as well, seemed moved by an idea of showing as little taste and ingenuity as possible, the designers of to-day seem no less determined to show in their work the highest expression of contemporary culture and sophistication. We are not leaving monuments to posterity to show how little we know or how limited are our capabilities—we are achieving, rather, a consistent demonstration of the height of our present development in architecture, building and decoration. A very important note in the work of Walker & Gillette is the fact that these architects avail themselves of every possible opportunity to design or select the furniture and accessories of their buildings themselves. Such solicitude for the finished appearance of work should exist on the part of every architect, though unfortunately many have not as yet recognized the great importance of carrying out these details. That remarkable results of intrinsic character may be obtained in this way is very manifest in the unusually interesting treatment of the interiors of the city house at No. 38 East 67th street.

Leaving the city house, and turning to other city work by Walker & Gillette, there are marked qualities of larger architectural significance shown in the competitive design for the New York Court House. Though unsuccessful in



THE ENTRANCE HALL—RESIDENCE OF W. G. LOEW, ESQ., NEW YORK CITY. Walker & Gillette, Architects.

winning the award, this design is architecturally successful in its attainment of pronounced elements of general dignity and well-studied proportion.

An approach to the monumental type is shown in the accepted bank design, which brings out another set of architectural requirements, and again calls into play the versatility of the architect of to-day.

The Apartment House Medal, awarded annually by the Architectural League of New York, went in 1907 to Walker & Gillette for a small apartment of 144



THE DRAWING-ROOM, RESIDENCE OF W. G. LOEW, ESQ., NEW YORK CITY, WALKER & GILLETTE, ARCHITECTS.



BEDROOM IN THE STYLE OF LOUIS XVI.—RESIDENCE OF W. G. LOEW, ESQ., NEW YORK CITY. Walker & Gillette, Architects.



BOUDOIR IN A NEW YORK CITY HOUSE. Walker & Gillette, Architects.



FOYER ON THE STAIRS, RESIDENCE OF W. G. LOEW, ESQ. WALKER & GILLETTE, ARCHITECTS.



ENTRANCE DETAIL—NEW YORK CITY RESI-DENCE. WALKER & GILLETTE, ARCHITECTS.



SKETCH FOR AN INTERIOR IN A NEW YORK CITY HOUSE. WALKER & GILLETTE, ARCHITECTS.



DINING-ROOM IN A NEW YORK CITY HOUSE. Walker & Gillette, Architects.

East 40th street, in New York City the award being made for the ingenuity of the plan rather more than for the aspect of the exterior. While this is by no means unpleasing, it is not very impressive, even considering that there existed little opportunity for expression. The most unusual feature of the plan is the location of the elevators and stairs in different parts of the building.

One of the illustrations shows an interesting sketch of a project which never materialized—an amusement building to be called the "Broadway Garden," designed to take the place of Madison Square Garden, when it was proposed to tear down that beautiful monument of McKim, Mead & White. "The Broadway Garden," six stories in height, and built of steel, brick and glass, was to occupy an area of about 100,000 square feet, and was designed to contain a great oval arena, 126 by 250 feet in dimension, surrounded by seats for 20,000 people. The plans also called for a roof garden, a "Winter garden," a restaurant, a rathskellar and other features, but at the present writing the project is still on paper, with no apparent indication that the scheme will be realized.

The "Professional Building," on Madison avenue at 38th street, in New York City, is a special building for a special purpose, being designed to provide offices for doctors, surgeons and dentists, and while there is no pretense in its treatment, it is adequate and appropriate, depending for such architectural merit as it possesses upon its proportions rather than its detail.

Departing from secular buildings, Walker and Gillette have to their credit a very successful little excursion in the field of ecclesiastical work, shown in the design of St. George's-by-the-River, at Seabright, N. J. The type of church



DINING ROOM IN A NEW YORK CITY HOUSE. Walker & Gillette, Architects.

chosen as a basis for the general character of the design was the small English parish church, of which this charming little building is a very pleasing and successful adaptation. There are fewer well-designed small churches in this country than well-designed large churches a respect in which American church architecture differs from that of England, where the small parish churches are noted for their picturesque charm. The simplicity of the interior of this little church of St. George's is in keeping with its unostentatious exterior, the frankness of expression in the whole being distinctly unusual in this sort of a building. The

8



INTERIOR IN A NEW YORK CITY HOUSE. Walker & Gillette, Architects.

walls are of granite, the exterior trim is of slate, supported by plain wooden trusses. The rendering of this almost rustic type of English parish church was a happy selection for a country church, even in America, for it has been colloquially expressed, and with a commendable amount of freedom.

The altar and reredos are developed from the church at Great Waltham in England, and were modelled by the sculptor Martiny. A great deal of the character of St. George's church, apart from its pleasing and appropriate design, is to be found in the sort of craftsmanship which embellishes it throughout. All its carved wood-work was carried out by the most noted ecclesiastical woodworkers of the country, and the glass by equally good craftsmen. The design of the west window is based on a figure of St. George after the famous statue by Donatello.

For a firm of architects not in

any sense specialists in church design, St. George's-by-the-River is remarkably successful, and is worthy of a place among the best achievements in this kind of building in this country.

Returning again to the secular design, we find an unusually interesting treatment in the Goshen Inn, a country hotel in Orange County, New York. In the matter of exteriors the architects have declared themselves to be believers in "texture" in brick-work to a marked degree, and if the aspect of the Goshen Inn is a little startling at the first glance, one may find a good deal of interest in the decorative value obtained by the protruding brick-ends. Gone are the days of dull monotony in brick-work, when the wall-surface entirely without incident was the desideratum, and from a conception of the value of texture in brick-work comes the idea of pattern in brick-work. Considered as a pattern, the technique of the Goshen Inn brick-work



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INTERIOR IN A NEW YORK CITY HOUSE. WALKER & GILLETTE, ARCHITECTS.



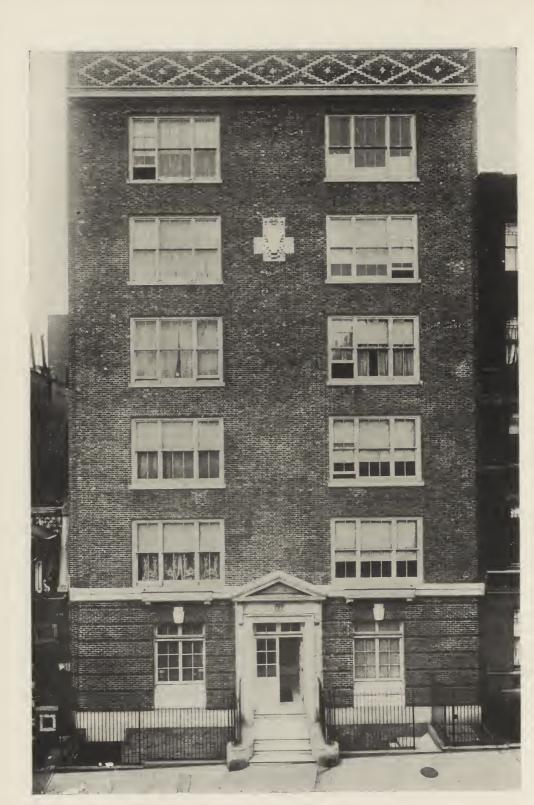
INTERIOR IN A NEW YORK CITY HOUSE. Walker & Gillette, Architects.

is very successful, for there is incident and "local color throughout.

It is a little hard to say—before we are quite used to it—if this innovation in brick-building is going to become a prevalent custom. When Stanford White had the façade of the Colony Club in New York City laid up with only the headers of the bricks exposed, and these without "breaking joints," the architectural world rose in protest and derision at such an apparent vagary. The treatment of the Colony Club façade, however, proved to be a good deal more than merely a clever *tour de force*, for it has come to be regarded not only as one of the salient details of one of Mr. White's most beautiful buildings, but also as a perfectly legitimate *decorative* use of brick. And so the time may come when we are so accustomed to pronounced "texture" in brick-work



ENTRANCE HALL IN A NEW YORK CITY HOUSE. WALKER & GILLETTE, ARCHITECTS.

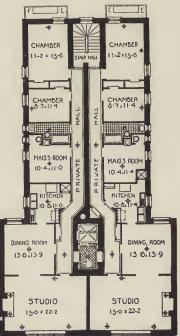


APARTMENT HOUSE AT 144 EAST 40TH STREET, NEW YORK CITY. WALKER & GILLETTE, ARCHITECTS.

that the Goshen Inn will be reckoned a classic, and the architects as courageous pioneers in still further advancing the art and crafts of building in brick.

For the purpose for which the Goshen Inn was designed—a very modern and even "smart" version of the English roadside inn-the building cannot be denied to possess in a marked degree the two qualities most to be desired in this sort of a building-an appearance at one picturesque and cheerful. The terrace and porch, for al fresco meals, is most inviting, and the interiors are all carried out with a great deal of quaintness and charm. All the furniture and hangings were selected with a view of expressing the character of the inn, and of reflecting the informal vein of the architectural treatment.

By way of carrying out in smaller superficial details the aspect of the English country inn the architects had a quaint swinging signboard painted by Mr. Everett Shinn. In mentioning this signboard comment should be made upon the interesting sign which Mr. Shinn painted for the architects to proclaim



TYPICAL FLOOR PLAN OF APARTMENT HOUSE, 144 EAST 40TH ST., N. Y. CITY. Walker & Gillette, Architects.



NEW YORK CITY HOUSE, 53 EAST 61ST STREET. Walker & Gillette, Architects.

their own office. The sign is reproduced in color on the cover of this issue, and shows the painter in his happiest vein, depicting the spirit of the gay French painters of the time of the last three

PERSPECTIVE DRAWING SUBMITTED IN THE COM-PETITION FOR THE NEW YORK COUNTY COURT-HOUSE. Unther Kullett Ser Bin AND STREET Martin Martin Marting 11111111111111 HIMPER ? And a Engle



ACCEPTED DESIGN OF BANK BUILDING FOR THE UNION TRUST COMPANY, NEW YORK CITY. Walker & Gillette, Architects.

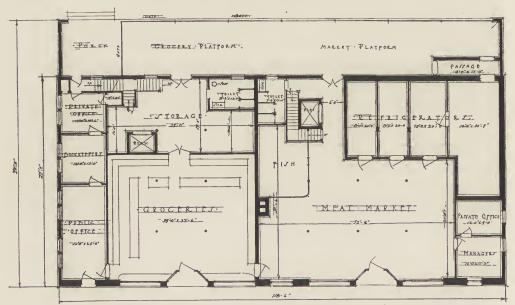
reigning kings of France. Few of Mr. Shinn's achievements have been as successful as his revival of this epoch of art—not only in painting, but in his facile sketches in *sanguine*.

At the time when Mr. Shinn painted the signboard for Walker & Gillette it was discussed in the daily papers as a protest against snobbishness in art, which, in a sense, it was. One side presents a picture of a nobleman of the time of Louis XVI. inspecting (accompanied by *Madame la Marquise*) a blue-print of a chateau, displayed by a businesslike, but rather apprehensive-looking, architect of the period. As a matter of historic fact, we do not recollect that reproduction by means of blue-printing was known at the time depicted by the costumes, but the whole conceit is so *naive* and joyous that we are not at all disposer to require literal details. After all, the blue-print is used here only as a symbol, and the "story" is very successfully told in graphic terms. The other side of the sign, which was painted as a hanging sign-board, to be viewed from either side, depicts the happy sequel of the first picture, and the culmination of the architect's labors, wherein he en-

333:



BUILDING FOR THE TUXEDO STORES COMPANY, TUXEDO, N. Y. Walker & Gillette, Architects.



PLAN OF BUILDING FOR THE TUXEDO STORES COMPANY, TUXEDO, N. Y. Walker & Gillette, Architects.

joys the approval of his noble client's in inspecting the finished château. This side of the sign is more or less lost to the world, since the unreasoning prejudice of some neighbors compelled the architects to take it from its outdoor setting, for now it hangs against the wall and displays but one of its charming pictures.

It is said that Mr. Shinn was inspired to

paint this sign after hearing a lecture by Mr. George De Forest Brush, wherein that noted painter belittled commercialism, which he maintained was incompatible with art. Mr. Shinn, with quaint perversity, decided to do the most commercial piece of painting which he could think of—to paint a sign. To a newspaper reporter he said: "It will have a



RANCH HOUSE IN WYOMING. Walker & Gillette, Architects.

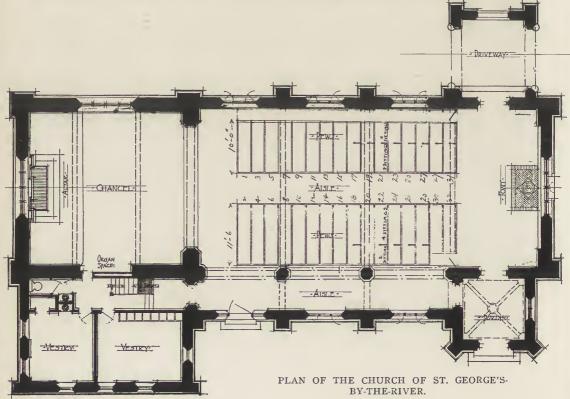


PERSPECTIVE DRAWING FOR THE PROPOSED "BROADWAY GARDENS." Walker & Gillette, Architects. (The sky and figures in this interesting drawing were done by Everitt Shinn.)

335



INTERIOR FROM THE CHANCEL—CHURCH OF ST. GEORGES-BY-THE-RIVER, SEABRIGHT, N. J. Walker & Gillette, Architects.



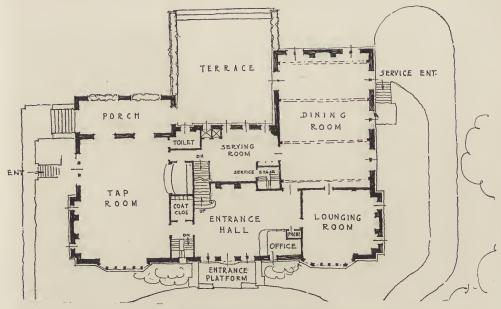
Walker & Gillette, Architects.

336



INTERIOR TOWARD THE CHANCEL—CHURCH OF ST. GEORGE'S-BY-THE-RIVER, SEABRIGHT, N. J. WALKER & GILLETTE, ARCHITECTS





GROUND FLOOR PLAN OF THE GOSHEN INN, GOSHEN, N. Y. Walker & Gillette, Architects.



PORCH, THE GOSHEN INN, GOSHEN, N. Y. Walker & Gillette, Architects.

339



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9

ENTRANCE DETAIL—THE GOSHEN INN, GOSHEN, N. Y. WALKER & GILLETTE, ARCHITECTS.



THE HALL OF THE GOSHEN INN, GOSHEN, N. Y. Walker & Gillette, Architects.

carved frame, with flowers at the bottom and garlands of fruit spun all around it, and on the top there will be one of those pediment things, with a T-square in a cartouche. Certainly it is commercial and I'm proud of doing it. Art belongs to everything in life, and I am tired of hearing this nonsense about 'art for art alone.'" For all that the sign was much talked of as an innovation in art, its painter had the best precedent behind him, and even so great a conservative as the late Mr. John La Farge complimented him on his achievement.

The great Watteau painted a sign for Gersaint, a picture dealer, and it now hangs, priceless, in the old Palace of Berlin, while a shoe dealer's sign by the same artist recently sold for \$42,000. Several other 18th century French painters, such as Boilly and Chardin, did signs, as well, and Mr. Shinn, who has entered so wonderfully into the spirit of Watteau and Fragonard, has done this architect's sign with the success which he has attained in his other revivals of this school of painting.

For all time this sign will be a peculiarly interesting document for architects and connoisseurs of painting alike. Its color, and the quaint *naivete* of its conception and execution make this signboard quite unique, in that it is a commercial undertaking carried out in a vein thoroughly artistic.

In the Greenwich Country Club, Walker and Gillette have carried out an essentially local rendering of an essentially American type of building, and the result is a successful expression of the problem. The design was selected from six competitive schemes, and while the exterior does not show any architectural affectations, the interior is designed to comprise many elaborate conveniences and country club facilities.

The first story is of local Greenwich stone, the roof a great gambrel evolved



DETAIL — TERRACE AND PORCH, THE GOSHEN INN, GOSHEN, N. Y. WALKER & GILLETTE, ARCHITECTS.



THE TAP ROOM—THE GOSHEN INN, GOSHEN, N. Y. Walker & Gillette, Architects.



DINING-ROOM—THE GOSHEN INN, GOSHEN, N. Y. Walker & Gillette, Architects.



A SITTING-ROOM-THE GOSHEN INN, GOSHEN, N. Y. Walker & Gillette, Architects.



TWO BEDROOMS-THE GOSHEN INN, GOSHEN, N. Y. Walker & Gillette, Architects.



DETAIL—THE GREENWICH COUN-TRY CLUB, GREENWICH, CONN. WALKER & GILLETTE, ARCHITECTS.





THE GREENWICH COUNTRY CLUB, GREENWICH, CONN. WALKER & GILLETTE, ARCHITECTS.



INTERIOR OF PRIVATE TRAINING RING FOR REGINALD C. VANDERBILT ESQ., NEWPORT, R. I. WALKER & GILLETTE, ARCHITECTS.



THE LOUNGING ROOM-PRIVATE TRAINING RING FOR REGINALD C. VANDERBILT ESQ., NEWPORT, R. I. WALKER & GILLETTE,



A PROFESSIONAL BUILDING FOR PHYSICIANS AND SURGEONS, MADISON AVENUE. NEW YORK CITY. Walker & Gillette, Architects.

from the Dutch type, and though the portico overlooking Long Island Sound suggests the South by its "gallery," the increase in outdoor living space atones for any anachronism in local accuracy. The north or entrance front, as in the plans of many recent country houses, is frankly arranged to facilitate arriving and departing traffic, and is flanked on one side by the service wing, while the south front corresponds to the "garden front" of a country home, and is free of any proximity with the service wing. The plan includes lounging rooms, dining rooms, café, card rooms, locker rooms, bowling alley and swimming pool, as well as an innovation in the form of private dressing rooms with showers, which are designed for rental by the year.

The solarium of the city residence of H. P. Davison, Esq., shows in an excep-

tional way the livable qualities which may be attained in this new adjunct to the city house. In this case the house is not a new house throughout and this addition has ingeniously been placed over an extension at the rear. The roofing is of glass on open timber trusses, the flooring is of tile, and while this solarium partakes of the nature of a conservatory in its housing of plants, it holds a great advantage over the old idea of a "conservatory" in that it is designed also to live in. Informal furniture has been appropriately chosen for its conformity with the treatment of the whole sun-parlor-it is almost like garden furniture, for the room is a garden.

If there were no other feature to differentiate the solarium from the oldfashioned "conservatory," the fireplace alone would do so. This fireplace, as well as the lower walls and the fountain,



SOLARIUM IN THE RESIDENCE OF H. P. DAVISON, ESQ., NEW YORK CITY. Walker & Gillette, Architects.



SOLARIUM IN THE RESIDENCE OF H. P. DAVISON, ESQ., NEW YORK CITY. Walker & Gillette, Architects.

have been happily carried out in that type of tile which is known as "Moravian" tile. The colors are at once rich and subdued, with a great range of dull, harmonious colors, with interesting variety of shapes and designs. For this sort of use it is hard to find any accessory building material which affords such extremely interesting possibilities in texture and color, while its quaint informality seems peculiarly appropriate to a part of the house which is neither exterior nor interior, yet essentially to be used as a garden.

It is curious that the idea of the solarium has not been evolved from the conservatory long before the present, for the conservatory in itself was a distinctly limited affair. One entered only to look at the flowers, if at all. It was little more than a small attached greenhouse, and was often shut off to make possible an artificial (and uncomfortably high) temperature for exotic plants.

The solarium, on the other hand, is

obviously a livable part of the house, and in the case of the example illustrated a very livable part. It has, indeed, overshadowed in popularity all the rest of the house put together, being regularly sought for the morning sunbath, the afternoon siesta, the five-o'clock tea and the after-dinner coffee. It is by no means a formidable undertaking to plan and carry out the building of the solarium, especially in cases where the dining-room (from which it is most desirable to have it open) is situated a full story above the level of the back yard. If there is no existing kitchen extension on which to build it, it is no very great undertaking to add one. It will add a spacious laundry or servants' dining-room downstairs, and necessitates only a brick or hollowtile wall built out to the size desired for the proposed solarium. The roof of this, in order to hold the tile floor of the sunparlor, may be constructed of light structural steel, hollow tile and two inches or so of cinder concrete, or may even consist of heavy timbers, fireproofed and prepared to take the finished tile floor.

The superstructure of the solarium must be designed, obviously, as nearly as possible entirely of glass, such happy features as the introduction of Moravian tile, or of fireplaces, fountains, aquaria or other embellishments being resultant from the taste and ingenuity of architect or owner, or both.

There is a good deal of architectural ingenuity from the structural standpoint in the design of the great wooden trusses supporting the roof of the private training ring for Mr. Vanderbilt—and an illustration, if additional illustrations could be said to be necessary, of the qualities of diversity and invention which the architects in general practice to-day must possess.

Perhaps the most noteworthy point in the varied work of Walker & Gillette is the fact that they have not attempted to impose a previous set of conditions upon a problem governed by a different set of conditions.

In each case they have allowed the problem in hand to dictate certain important points in its solution, and have expressed in a number of different kinds of buildings a quality of selective architectural judgment which is at once a cause and a result of our very diverse architecture in this country.



INTERIOR OF THE OFFICE, RECEPTION ROOM OF WALKER & GILLETTE, ARCHITECTS, NEW YORK CITY.



THE CHAPEL OF THE QUEEN OF ALL SAINTS, BROOKLYN, N. Y. REILEY & STEINBACK, ARCHITECTS.



DETAIL OF GARGOYLE, QUEEN OF ALL SAINTS CHAPEL, BROOKLYN, N. Y. Reiley & Steinback, Architects.

THE GHAPEL OF THE QUEEN OF ALL SAINTS, BROOKLYN, N. Y.

Reiley & Steinback, Architects



HURCH ARCHITECTURE in its most recent acquisitions is the richer by the addition of an interesting study in a certain type of French Gothic designed by the firm of Reiley & Steinback for the Chapel of the Queen of All Saints in Brooklyn, N. Y.

This chapel, which is part of the longabandoned Roman Catholic Cathedral project, occupies a plot of ground 100 feet by 220 feet, at the corner of Lafayette and Vanderbilt Avenues, with the long side on the latter, where a plot 25 feet by 100 feet will be taken up by the future part of the rectory. A portion of this rectory forms part of the present building, which comprises a chapel, a parochial school and a parochial hall.

The school, which contains five classrooms on a floor, excepting the first and second floors, faces Lafayette Avenue, with the girls' entrance on the Vanderbilt Avenue side and the boys' en-

trance on a court on the opposite end of the building. This leaves the central portion of the Lafayette Avenue façade available for the main entrance of the chapel and of the hall below, both of which are reached through a vaulted vestibule, running through two stories of the central portion of the school. This vestibule also affords communication to the school entrances and stairways on either side, by means of bronze and glass grilles. The upper portion of the school is reached by these two stairways. Beneath the roof of the school there is a gymnasium, with locker rooms and showers, and from the gymnasium steps lead to the tower.

The boiler rooms and coal bunkers for the school, chapel and hall are located beneath the main vestibule, and on either side of this plant are located play-rooms, one for boys and one for girls.

Entering the main vestibule, from which a broad stairway leads into the chapel, a striking effect of depth is produced by the vaulting of the sanctuary. The hall below the chapel is reached from the vestibule by two short stair-



THE BISHOP'S CHAIR—CHAPEL OF THE QUEEN OF ALL SAINTS, BROOKLYN, N. Y., Carved by the Instructor in Wood-Carving, Pratt Institute, Brooklyn, N. Y.

runs, and at its four corners, at each end of the two side aisles, are small vestibules leading out to court-yards. The ceiling of the hall is tile-vaulted, and the spaces between its limestone piers are entirely occupied by windows, carried out in a simple design in beaded glass, yellow in tone, with a more pronounced yellow border, effecting a warm amber tone in the interior. There are no flat wall-spaces in the hall, except those under the windows, and here the walls contain the heating and ventilating ducts, with registers located in the window-sills. The far end of the hall is a raised platform, or stage, with dressing-rooms on either side, these being reached from the two vestibules of the rear corners of the hall, as well as from a separate entrance on Vanderbilt Avenue.

The chapel itself, above the hall, is 62 feet in height from the floor to the apex



DETAIL OF FINIAL—EMBLEM OF ONE OF THE FOUR EVANGELISTS, CHAPEL OF THE QUEEN OF ALL SAINTS, BROOKLYN, N. Y. Reiley & Steinback, Architects.



ENTRANCE DETAIL—QUEEN OF ALL SAINTS CHAPEL, BROOKLYN, N. Y. REILEY & STEINBACK, ARCHITECTS.

of the vaulting, and consists of seven 16-foot bays, containing windows which reach from pier to pier. Over a portion of the main entrance vestibule is the organ loft, which utilizes the dark area of the school building, and at the other end of the chapel is the sanctuary, which utilizes a similar dark area of the rectory. On either side of the sanctuary are located the sacristies, which will form a portion of the future rectory.

Besides the main entrance to the chapel, there are exits at the four end bays, the two in the rear opening upon an exterior balcony with outside stairways.

As in the hall below, the chapel is heated and ventilated by means of ducts leading through the walls beneath the windows, but here, instead of registers, circulation is had through a band of carved stone tracery directly under the window sills, about fifteen feet above the floor.

The gallery rail and the altar rail, as well as the pulpit and its spiral stairs and the tracery of the windows are of carved limestone, the same material being used for the columns and for the ribs of the vaulting. The vaulting itself is of tile, and thus the interior depends for its color effect almost entirely upon the stained glass windows and the rich vestments used, the windows being carried out in a vein somewhat similar to those of Sainte-Chapelle in Paris.

The interestingly designed sanctuary rail gates are of bronze, left in its natural color for harmonizing with the limestone rail, and the altar is built of Caen stone, warmer in tone than the stone walls of the sanctuary walls which surround it.

A simple Gothic treatment was adhered to for the pews, greater elaboration being shown in the richly carved Bishop's chair, emblazoned with a polychrome coat of arms on the back.

The space above the vaulting of the chapel is to be used in future development for a library, with alcoves between the steel roof-trusses and access from the school at one end and from the future rectory at the other.

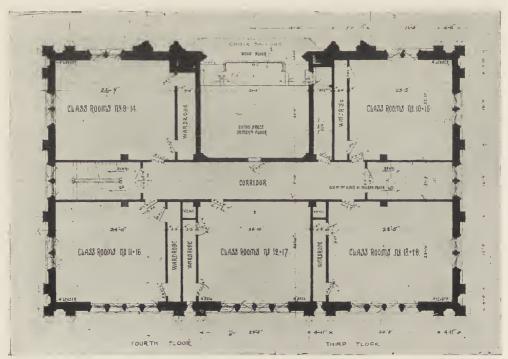
The exterior sculpture of the building is well-placed and adequately carried out, the figures at the entrance and before



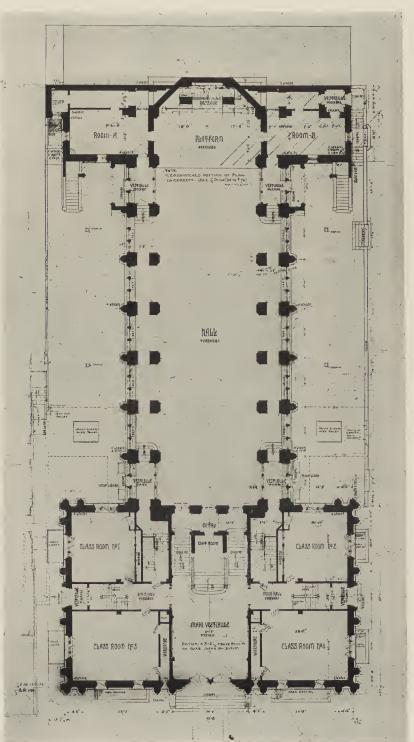
ELEVATION — QUEEN OF ALL SAINTS CHAPEL, BROOKLYN, N. Y. REILEY & STEINBACK, ARCHITECTS.



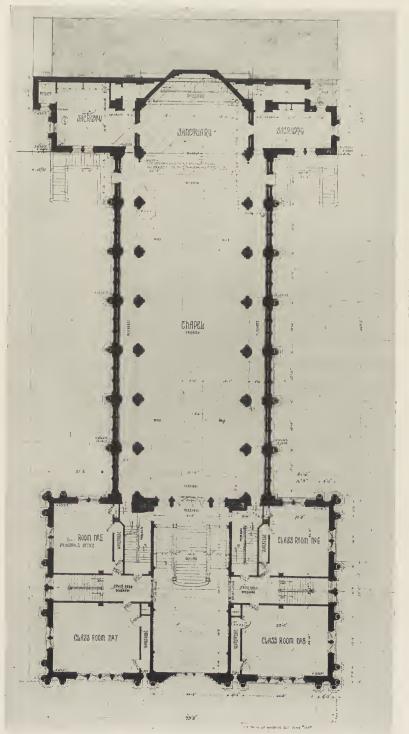
DETAIL-BRONZE GATES IN THE ALTAR RAIL-CHAPEL OF THE QUEEN OF ALL SAINTS, BROOKLYN, N. Y. Reiley & Steinback, Architects.



PLAN (ENLARGED) OF THE UPPER PORTION OF THE SCHOOL BUILDING, CHAPEL OF THE QUEEN OF ALL SAINTS, BROOKLYN, N. Y. Reiley & Steinback, Architects.



BASEMENT PLAN-CHAPEL OF THE QUEEN OF ALL SAINTS, BROOKLYN, N. Y. REILEY & STEINBACK, ARCHITECTS.



PLAN OF THE CHAPEL OF THE QUEEN OF ALL SAINTS, BROOKLYN, N. Y. REILEY & STEINBACK, ARCHITECTS.



INTERIOR-CHAPEL OF THE QUEEN OF ALL SAINTS, BROOKLYN, N. Y. Reiley & Steinback, Architects.

the buttresses being gifts of parishioners. Near the top of the building over the the rail of which caps the walls, and boys' and girls' school entrances, are carved the arms of Bishop McDonnell here the buttresses end in pinnacles, from some of which the gallery is spanned by and Bishop Mundelein, in strong basrelief. Around part of the fifth floor of

the school there is an exterior gallery, flying buttresses to the dormers. Four of the pinnacles are topped by the sym-

365



STAIR DETAIL-QUEEN OF ALL SAINTS CHAPEL, BROOKLYN, N. Y. Reiley & Steinback, Architects.

bolic figures of the Four Evangelists, strongly carved in stone, while numerous gargoyles lend interesting incident to the detail.

Most marked of all French characteristics of the Queen of All Saints chapel is the copper *flèche*, or spire, in wellstudied scale not only in proportion but

in detail, with the building. The building as a whole is distinctly a significant addition to church architecture, but should not be compared with similar buildings designed in more florid styles of Gothic.

The principal characteristic of the style which inspired the architects



DETAIL-QUEEN OF ALL SAINTS CHAPEL, BROOKLYN, N. Y. Reiley & Steinback, Architects.

of the Queen of All Saints is its precision and the finesse and attenuation of its in a style within a style—a specific type of Gothic—the architects are to be con-

attaining architectural expression today the French sum up in the term *sec*, or gratulated upon the success with which dry. In view of the extreme difficulty of they have attained such expression.



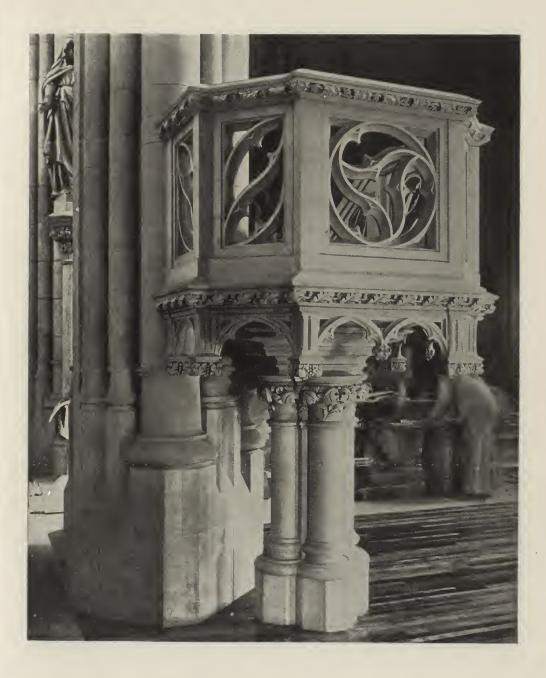
DETAIL—QUEEN OF ALL SAINTS CHAPEL, BROOKLYN. N. Y. REILEY & STEINBACK, ARCHITECTS.



INTERIOR—QUEEN OF ALL SAINTS CHAPEL, BROOKLYN, N. Y. REILEY & STEINBACK, ARCHITECTS.



DETAIL OF PULPIT—QUEEN OF ALL SAINTS CHAPEL, BROOKLYN, N. Y. REILEY & STEINBACK, ARCHITECTS.



DETAIL OF PULPIT—QUEEN OF ALL SAINTS CHAPEL, BROOKLYN, N. Y. REILEY & STEINBACK, ARCHITECTS.



DETAIL—QUEEN OF ALL SAINTS CHAPEL, BROOKLYN. N. Y. REILEY & STEINBACK, ARCHITECTS.



DETAIL—QUEEN OF ALL SAINTS CHAPEL, BROOKLYN. N. Y. REILEY & STEINBACK, ARCHITECTS.



DETAIL—QUEEN OF ALL SAINTS CHAPEL, BROOKLYN. N. Y. REILEY & STEINBACK, ARCHITECTS.

WHAT DO WE KNOW ABOUT LIGETING A STUDY THEORETICAL. SCIENTIFIC & PRACTICAL BY F. LAVR.ENT GODINEZ. CONSULTING LIGHTING SPECIALIST

VIII.--The Lighting of the Home

Note.—Residence lighting is a matter with which, as a rule, the resident has little or nothing to say, the lighting arrangements being definitely made prior to his occupancy of the premises. In a discussion of appropriate lighting for the home, it is not glittering generalities which are desired. The subject requires practical suggestions, of sufficient breadth to cover the extreme as well as the average condition. In this issue, the author presents the results of his work, accompanied by night photographs and sketches. Samples of the glassmakers' art are also shown. The subject will be continued in the next article.—Editor.



HE problem of home lighting resolves itself into a discussion of those conditions which can best satisfied by the he application of a few basic principles. It indeed a wide is gap between the city house and the threeroom flat-and the

interval separating the city house and country house is equally hard to span. The tendency has been to limit lighting discussions to a consideration of isolated cases which are not representative because they are extremes, excepting the writings of manufacturers' press agents, which unfailingly prescribe one remedy for all lighting ills. The mind of the reader has been confused in attempting to differentiate between various forms of lighting equipment, whereas the real issue involves a co-relation of fundamentally important factors, without which the equation of light cannot be solved.

It is, of course, necessary to consider extremes where thousands of dollars are expended upon the lighting of a single room, but it is more important to consider the other extreme where the entire lighting equipment of the small flat must be restricted within the sum of one hundred dollars, including wiring, gas piping and fixtures.

In Germany the tenant is expected to bring his lighting fixtures with him, only the outlets being provided, which at least gives him the opportunity of satisfying individual requirements, and not being obliged to put up with lighting fixtures which do not illuminate in the implied sense. In discussing this subject, my object is to present a critique of residence lighting which includes an fundamental principles. analysis of which are violated in either the extremes or average condition, and first amongst these is the question of color of light involving a consideration of physiological and psychological phenomena.

"Technically, the human eye must not be exposed to light sources having an apparent brightness greater than 5 candle power per square inch. The following table shows how we have exceeded the danger mark in the past few years:

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	Apparen	
E	Brightne	ess
	in candl	
p	ower pe	er Color of
Source of Light. so	juare in	ch). Light.
Candle	. 4	Yellow
Oil lamp	4 8	Yellow
Edison electric		
lamps, carbon.		
3.5 watts per		
candle	375	Yellow
Mazda (tungsten),		
1.15 watts per		
candle	1,000	White
Welsbach gas		
mantle	50	White or Yellow
Sun on horizon	2,000	
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"From the above it is apparent that

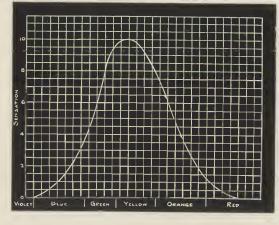


FIG. 1.

"Sensibility" curve, showing how hereditary influence through centuries has shaped the human eye to be more accustomed and agreeably sensitive to yellow than to white light.

the increase in source brilliancy of our illuminants has been gradual, and the color of their light *yellow* up to the advent of the tungsten lamp, when an abrupt increase in apparent brightness and an equally abrupt change in color (from yellow to white) took place.

"This change affected the lighting of the home in that the advertised economy of the new electric lamp (at that time discounted by its fragility) persuaded its adoption, under the impression that the *white* quality of light was desirable, being so advertised."*

Considering first the effect of white vs. yellow light on the eye, we find that for centuries humanity has been accustomed to a white reading page (Fig. 1), made yellow by the color of artificial light, and that with each successive illuminant improvement the relative increase in brightness was offset by the color permanence of the light, which remained yellow. With the advent of the Welsbach mantle in 1887, following the first electric lamp in 1880, the eye was subjected to a change of color from the yellow gas flame to the (then) greenish-white incandescent gas mantle. The Welsbach makers, however, soon real-

ized that a *white* light while suitable for color matching and other industrial occupations, where true color values are important, was unsuitable for lighting of the home, and therefore perfected a gas mantle which appears to the eye as agreeable and mellow as the oil lamp. With the advent of the tungsten lamp, however, no word of warning as to its dangerous intrinsic brilliancy or the unsuitability of its white light was forthcoming, and as a result, its adoption over the carbon filament type, for economic reasons, transformed the reading page from yellow to white (Fig. 2), thereby making reading more difficult, owing to the abrupt contrast of the small black type against the glaring white page (Fig. 2). While glazed paper causes sharp reflections of light, which blurs and obscures one's sight, an unglazed paper diffuses light without glare. It is too much to ask or expect of publishers that they immediately change their methods to compensate for the negligence of the illuminant manufacturer, who should print some few words of warning upon the boxes in which his lamps are sold, thereby having a far-reaching effect. It is equally unfortunate that there is no society organized for the purpose of discriminating between lighting equipment which is conducive to eye comfort, or absolutely unphysiologic. Regarding this question of white or yellow light, Mr. Wm. J. Beardsley, an architect, who is responsible for the New York State Penitentiary buildings, informed the writer that his draughtsmen (over fifty in all), who are employed from all sections of the country, are continually taking the tungsten lamps out of the sockets in the draughting room and substituting lamps of the carbon filament type, owing to their decided preference for a working light of a yellow amber tint, not causing too decided a contrast between the black ink and the tracing cloth or white paper. Thousands of letters have been received from those who have tried the experiment of reading with a white, or amber light, as suggested by the writer (through the medium of leading magazines and newspapers) and the expression of opinion is unanimous in favor

^{*}Abstract from paper by F. Laurent Godinez on the Physiological and Psychological Functions of Artificial Light, read before the Hudson County Medical Society of the State of New Jersey.



FIG. 2. The abrupt change from a yellow to a white reading page, with the advent of the tungsten filament lamp subjected the eye to a radical change from what it had been accustomed to by usage through centuries.

of a *vellow* over a *white* as a reading light. It is a simple matter to satisfy one's self regarding this by substituting an amber light gas mantle for a white light gas mantle, or by placing over а tungsten lamp some translucent material, such as yellow silk, paper or gelatine film. One trial will convincingly demonstrate my contention, which applies equally to installations of indirect lighting, where the remedy lies in placing a film of yellow gelatine over the silver-plated reflectors, so that a white ceiling becomes a diffuser of yellow instead of white light, after which the ceiling can be permanently tinted the proper color. Up to this point I have discussed the physiological aspect with reference to the reading page alone, my object being to indicate one physiological requirement of good lighting, which applies with equal force to the opposite extremes represented by the plebeian's tenement or the patrician's mansion. There is another very good reason why a yellow light is more desirable for the home, and that has to do with the actual appearance of a room's occupant as influenced by the color of light therein.

The idea of considering the effect of light, as it looks to the eye, is new and quite opposed to the "efficiencye c o nomy - utility" doctrine of most illuminating engineers, but when all has been said it is the eye alone tells the which story to the mind, and there is no reason why the "economy" of modern illuminants should not be utilized gracefully, in lighting which appeals to both the a n d physiologic aesthetic. The home is presumably a haven of rest. Repose is the one ele-

ment which should predominate in its atmosphere. All reasoning is by comparison, whether by conscious or subconscious mental activity. The predominance of what may be termed the "white light effect" in office buildings, where thousands of workers engaged in clerical labor are obliged to ruin their eyesight by unnatural lighting which is unphysiologic to the degree superlative, has impressed the subconscious mind forcibly with an association of white light with working conditions. But the light in the home should not suggest to the tired mind of the business man the glaring lighting of the office, subway or shop window. A prominent opthalmologist states:

"So many of my patients suffer whenever they go out at night, that it has become necessary to prescribe auxiliary glasses opaque to ultra-violet light (amber in tint) to be worn over their refracting lenses, in order to subdue the excessive glare which the eye is exposed to from all sides in these days of unphysiologic lighting."

The engineering element seems utterly at a loss to comprehend why a light ap-



FIG. 3.

The general lighting of an interior representing the typical apartment. Indirect lighting from a reflector concealed within the shade of the table lamp causes light to be reflected from the outer surface of the bowl hanging from the ceiling.

proximating the harsh white day-light effect is not desirable for the home at night. In their endeavor to imitate Nature so closely, they have evidently forgotten that the setting sun indicates a period of rest—in the Creator's plan and that an attempt to turn night into day is diametrically opposed to Nature's teachings. But it is entirely natural to emphasize the peace and quiet of eventide in the home by lighting which is subdued yet harmonious—in itself a symbol of repose to the eye.

It is amazing to note the transformation of an interior effected by changing from white to amber light—for the white light, which is so unkind to the features, creates likewise a garish atmosphere, showing everything to its worst advantage. The rich brown, yellow, gold and red tones, which predominate in furniture and decoration, are rendered flat and lose all their warmth and feeling. Architectural draftsmen should try this experiment of changing a $\pi hite$ to an *amber* light and observe the pleasing modification.

As to the design of lighting by the architect, providing for this subject of color, the question naturally arises as



FIG. 4.

Effect of local lighting in the same room, from the same lamp with three small lamps lighted within the lower portion of the outer silk shade. Variety in lighting, as in other things, is desirable.

to the advisability of modifying the color of the source itself, or accomplishing the desired effect by enclosing the source within some color-modifying device. Maintenance is always an important subject to be considered, and very often through negligence a lighting arrangement, which was quite effective when first installed, becomes entirely unsatisfactory by substitution of wrong sized lamps. Assuming that amber light gas mantles, or tungsten lamps with ambertinted bulbs, were specified by the architect, what assurance could he have that these would not be replaced by white light lamps, as renewals?

The better plan is for the architect to

design equipment for residential use, which is constructed to insure the proper color effect, based upon the use of a white light source. With indirect lighting, as previously mentioned, the ceilings can be tinted, unless such procedure is opposed to the color scheme of the room. In such instances, color screens must be placed over the reflectors used for indirect lighting, and these can be also used as dust collectors, it being much easier to clean a flat surface than a reflector cavity partially filled by a lamp. At this stage our analysis will be facilitated by a discussion of the lighting of various rooms in homes of different magnitude-first considering Fig. 3,

379



FIG. 5.

a room designed to be typical of what may be termed a "living room," in a sense that a vast majority of the public are literally condemned to "live" within even less commodious quarters. The room is typical of the average apartment, being inflicted with the inevitable plate glass mirror with all its horrid ap-purtenances. With the furniture ar-ranged in the all but designated locations (there being little choice as to the placement of piano and book cases), a center table is generally used as a repository for books, magazines, pianola rolls, or Victrola records, as the case may be, the dining-room serving as a sitting room, only in the sense of accommodating those over-flow meetings, which occur even amongst the bourgeoise. We have reached a stage of 'economy" in the development of illuminants which enables us to take a step from out of the beaten path and use artificial light so that the occupants of an interior, like Fig. 3, can derive something more than the wherewithal to see

by; and even such a modest interior as this should have preferably three, but at least two, different lighting arrangements. There are occasions when such a room must be generally and cheerfully lighted (assuming that the furniture is in a tolerable state of preservation, and that the book shelves are filled with those books which are bought for such purposes) so that guests look well, feel at their ease, and the surroundings are revealed in as complimentary a manner as is possible with respect to modern conventions. On other occasions a subdued light in the room is delightful, giving that variety which should be a feature of every room lighted with intelligence and aesthetic taste. One is relieved to become less conscious, as it were, of side wall ornament (most no-



FIG. 5A.

Examples of the glass maker's art in this country, a type of glassware of which the pictorial effect is often marred by too much light within.

ticeable in small rooms) and with a moderately dark wall of any color, and such lighting as is indicated by Fig. 4, the desired effect "c'est un fait artistement accompli" with a sense of increased perspective, and an element of inystery and charm, which is psychologically due to traditional influence, and the mental picture which every one carries subconsciously of gathering about a soft light—a memory, perhaps, of a family circle. As a rule the tenant of such premises, as shown in Fig. 3 and Fig. 4, is obliged to see at night by what has been termed a "fixture," the same being an extension from the ceiling, downward into the room, very much as if a steam pipe had been allowed to drop through by mistake. Dangling from two or more cross arms, directly before the eyes, hang glaring lamps, in thinly etched "shades" which, if anything, exaggerate one's ocular discomfort, by advertising the source of the annoyance with a series of spots. And this is called a "lighting fixture" in the polite termology of modern lighting nomenclature. Fortunately, no such atrocity appears in Fig. 3 or Fig. 4-the hanging bowl from the ceiling representing the appearance of lighting equipment, which is being used to-day in apartments where rentals start at \$200 per month and soar upwards. The only change in the appearance of the fixture being that the chains are, if possible, more "gilt" and the "imitation" bowl of alabaster gives way to one of a much more "veiny" appearance-presumably imported, but more often exported-direct from the glassmaker's factory on this side of the water.

Up until quite recently, tenants afflicted with the lighting fixture of the

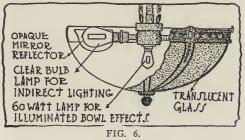
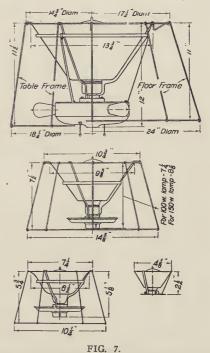


Diagram showing correct placement of equipment for most effectively illuminating such glassware as shown in Figs. 5 and 5A.



Detail showing the mechanism of the portable indirect lamp illustrated in Figs. 3 and 4.

steam pipe cross-arm variety were obliged to get along as best they could, modifying the harsh white light by home-made devices of cloth or silk (sometimes purchased in the 5 and 10 cent stores) and depending upon such a fixture for their general illumination—their local requirements being effected by attaching a drop cord from a table to the fixture above, by removing a lamp, the entire arrangement being untidy and slovenly.

The illuminating bowl from the ceiling is, of course, preferable to such an arrangement, the criticism being that as these bowls are used with a cluster of bare lamps inside, they are in effect a miserable compromise between direct and indirect lighting, being wasteful and inefficient, owing to the loss of light which reaches the diffusing and redirecting surface of the ceiling. My principal objection to the improper placement of bare lamps within these glass bowls, is that owing to the density of the glass (necessary for its expression) it is necessary to use a wasteful amount of light for utilitarian purposes, and this excessive quantity destroys the pictorial value of the glass, making it appear as glaring as an ordinary glass globe, and obliterating all detail and character of design. (Fig. 9, Architectural Record, May, 1913.)

The glass makers of this country have produced some excellent bowls (Fig. 5, 5A) which are adaptable to indirect lighting applications, where the small lamp below the opaque reflectors is just adequate to bring out the beauty of the enclosing globe (Fig. 6). As a means of obtaining local or general illumination from one source, and with due regard for the aesthetic, the portable lamp illustrated in Fig. 3 and Fig. 4 represents a real



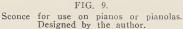




FIG. 8.

Light used as a decorative symbol for utilitarian purposes. The metrostyle line of the pianola roll is distinctly visible, yet the lights are subdued, and pleasing to the eye.

achievement on the manufacturers' part. The lower portion of this lamp, or pedestal, simply acts as a base, or standard, treated in a decorative way to conform with period expression. The modus operandi is disclosed by an inspection of the detail drawing (Fig. 7), showing lamps of various sizes. Standard silverplated indirect lighting reflectors are placed so that the outer silk shade of the lamp hangs from their rim. This reflector allows sufficient light to escape below (near the lamp base) to impinge upon a white diffusing disk, which in turn gives to the exterior silk shade a luminous effect, as shown in Fig. 3.

When the subdued light is desired, the small individual lamps (Fig. 7) at the base of the large lamp, are lighted and give the effect shown in Fig. 4. The manufacturers have neglected to place a circular rim at the top of the silk shade. as a frame for gelatine amber film, but we trust they will be guided by good taste and not engineering advice in this relation.

There are times when even a greater variety than is afforded by general or local lighting, in any form, is an agreeable change, and in order to make possible such lighting, the architect can assist by specifying an adequate number of base-board outlets. The lighting of the pianola-piano (Fig. 8), where silk candle shades are placed so as to compliment the players' or soloists' features, yet give sufficient light for reading (evidenced by clearness of the metrostyle line on the pianola roll) would have been difficult to accomplish had not the architect placed a base-board outlet below the lamp, on the side wall. Lights like these must always be subordinated-and predominance on their part unbalances the ensemble. The charm and appeal of

these small lights is very great, and it is to be regretted that manufacturers in this country have ignored the possibilities lighting affords.

A piano lamp in period format designed by the author (Fig. 9) is offered as a suggestion.

Undoubtedly the day will come when lighting equipment, comprising fixtures. glassware and lamps, will be designed and manufactured with a view not only to conform with architectural requirements, but with living requirements as well. If the next five years witnesses progress corresponding to that of the last three years, we may then say, paradoxically, that in the days of too much ill-considered and harmful light, we were in the "Dark Ages of Lighting."



"Whatever is good in decoration expresses a consistent relationship between light and color. The architect modifies the harshness of natural light to give warmth and feeling to such an interior. At night such a room may be even uncomfortable to sit in, if unmodified glaring artificial lights are used."

A N D COMMENT

NOTES

THE FUNCTIONS OF ART COMMISSIONS.

Appreciation of the necessity of exercising competent artistic censorship over buildings, monuments and other objects intended for public places has led to the creation of municipal,

State and Federal art commissions. As yet, the number of such commissions is anything but large, and most of them are of very recent origin. With a view to bringing about a consensus of opinion respecting the proper organization and functions of bodies of this sort, a conference was held in New York last May. The attendance comprised representatives of art commissions of sixteen cities, two States and the Federal Government. At the conclusion of the conference resolutions were adopted, pursuant to which a committee was appointed by the chairman, Robert W. de Forest, to draft forms of statutes providing for establishing city and State art commissions and defining their powers. The formulation of model statutes, it was hoped, would further the art commission movement throughout the country. The report of the committee, which consisted of John B. Pine, Arnold W. Brunner, Andrew Wright Crawford, James G. Cutler and Frederick Law Olmstead, has appeared in a pamphlet, entitled "Art Commissions, City and State: Suggestions as to Their Organization and Scope." In it are presented three model statutes, one establishing an art commission in a city of the first class, another doing the same thing for a city of the second class, and still another creating a State art commission. The forms are so drawn as to be available for use in any legislature and are accompanied by valuable explanatory matter. There is also an appendix, containing a form of "Circular of Information" and a form of "Submission" which have been in use in New York.

One of the chief merits of the report is

that it draws a clear distinction between the proper functions of art commissions and those of city planning commissions; the former should preserve a judicial and critical attitude, while co-operating in every way possible with other officials, and should leave to the latter the actual work of planning and promoting municipal or State improvements. Other conclusions are:

ensera.

1. The desirability of including the mayor, or, in case of a State commission, the Governor, as a member of the board.

2. The desirability of including in the commission both professional men, architects, landscape architects, painters and sculptors, and laymen.

3. The desirability of limiting the commission to a small number, say five to nine members.

4. The importance of conferring upon city commissions the veto power, though it was felt that in the case of State commissions the power should be advisory only.

5. The necessity of adapting the form of organization to the local conditions existing in each case, and the importance of subordinating matters of form and detail to the accomplishment of the main purpose of effecting the establishment of a commission, where none exists, however limited its powers.

It is necessary that the decision of the art commission, when rendered, shall be made effective. It is not sufficient protection to the city or State that its art commission shall have approved a certain design, unless the commission is able to assure itself that the work as actually executed is in substantial accordance with the design so approved. It is therefore desirable that all public contracts for the erection of works of art, buildings or other structures, approved by the commission, shall contain a clause which shall give notice to the contractor of the requirements of the statute and which shall make his final payment conditional upon the certificate of the commission that the work has been proper-



Photograph by Frank Cousins.

VALUABLE

ARCHITECTURAL

RECORDS.

AN EARLY NEW YORK RESIDENCE.

Number One State Street was built during the latter part of the 18th century by John McComb for John Coles, a famous merchant of old New York. It is interesting to note that the work of wrecking this house had already been started when this photograph was taken.

ly executed. A form of such clause, approved by the Corporation Counsel of the City of New York and printed in contracts for the erection of public structures approved by the art commission of that city, is given in the report.

> A number of subscribers have written most appreciative letters to the editor with regard to the interest which this magazine takes in preserving photographic records of the

early architecture of Pennsylvania, New England and New York. Those of our

readers, therefore, who are interested in this valuable sort of architectural document will be pleased to learn that we have secured a most unusual feature in the form of a large and important collection of photographs of the early architecture of New York City. These photographs, hitherto unpublished, were made during the past summer by Mr. Frank Cousins, of Salem, Mass., at the request of the Art Commission of the City of New York.

Architects are familiar with Mr. Cousins' work in photographically recording the early architectural beauties of Salem, and will be glad to know that he has extended his activities to New York, where the in-

385



Photograph by Frenk Cousins.

THE LAKE TYSEN HOUSE, NEW DORP, STATEN ISLAND.

terest in new buildings so eclipses that in old buildings, that the wrecker too often anticipates the antiquarian, and leaves him no vestige from which to reconstruct on paper the forms of our fast-vanishing landmarks.

The historic value of the New York photographs to appear in THE ARCHITECTURAL RECORD, and their value as architectural records of a rapidly passing city are inestimable. Of the examples chosen for reproduction in advance here, two the Old Astor House, and Number One State Street, have already been torn down, and the Assay Office will probably be demolished during the present year. Through the kindness of Mr. I. N. Phelps Stokes, of New York, we are able to supplement the photograph of this building by another equally valuable record—an accurate measured drawing.

The collection of photographs of Old New York will be divided into groups showing old doorways, old iron-work, early city houses, early country houses, etc., and will be accompanied by measured drawings, made by Mr. F. L. Finlayson and critical and historical text by Mr. Rawson W. Haddon, who has pursued extensive antiquarian studies in the history of Manhattan.

The photographs which were made, as stated above, for the Art Commission of the City of New York, have been secured for publication in THE ARCHITECTURAL RECORD, through the interest of Mr. Cousins, even before they have been used by the commission in its annual report.

The reports of the Art Commission, by the way, are fortunately coming to occupy the place left vacant when the "Manuals of the Common Council" were discontinued. The price of a complete series of "Valentine's Manuals" is now beyond the reach of most students, and, besides, there is a great deal of antiquarian material belonging to the latter half of the last century which should be preserved.

An important loan collection of Gothic, Relection of Gothic, Re-DOF OLD TAPESTRIES. TAPESTRIES. An important loan collection of Gothic, Re-Eighteenth Century tapestrics is to be on view at the Brooklyn Museum from Wednesday, April 8, to Monday, April 20,

inclusive. It will be the most notable and interesting tapestry exhibition ever held in this country, except at the Metropolitan Museum, in many respects surpassing even the remarkable collection, so rich in masterpieces, lent to the Metropolitan by Mr. Morgan. During the course of the Brooklyn exhibition there will be a number of lecture-promenades and two illustrated talks on tapestries by George Leland Hunter, author of "Tapestries, Their Origin, History and Renaissance," under whose direction the collection is being assembled and arranged. The Brooklyn exhibition will supplement admirably the one at the Metropolitan, where Mr. Hunter gave three lectures last month. Communications relating to his Brooklyn talks may be addressed to Mr. Hunter, at 122 East 82d Street, New York City.



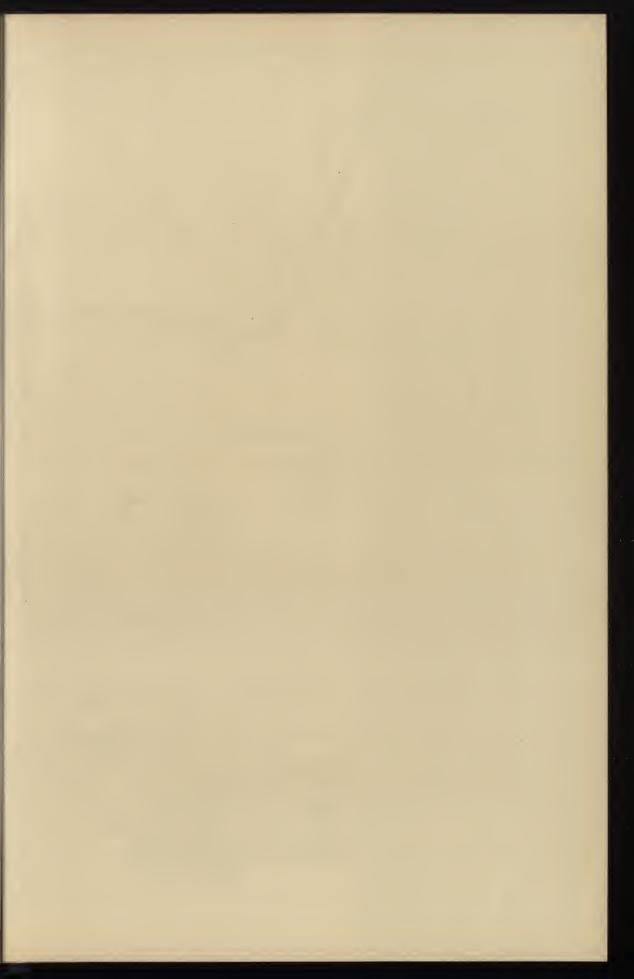
Photograph by Frank Cousins.

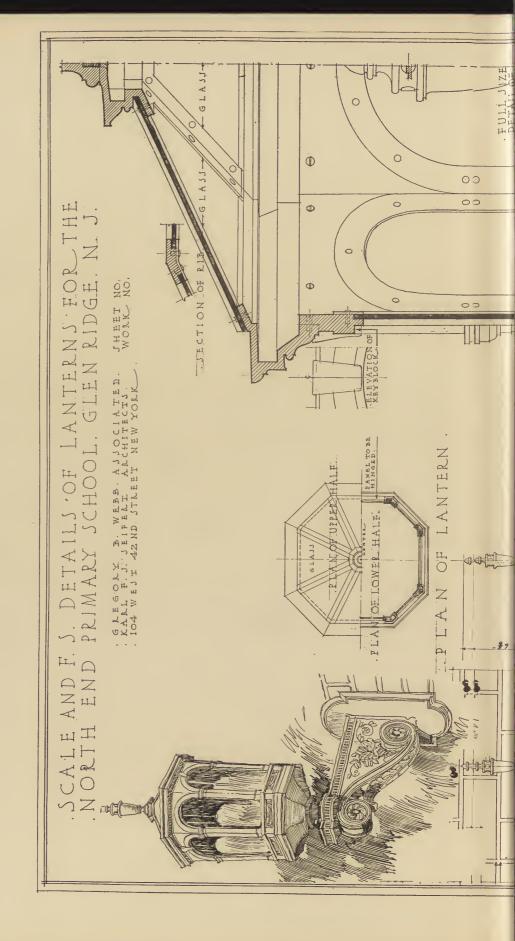
THE ASTOR HOUSE, LOWER BROADWAY, NEW YORK CITY. One of New York's earliest hotels, defaced in the photograph, by signs announcing its demolition. To the right, behind it, towers the mass of the new Woolworth Building.

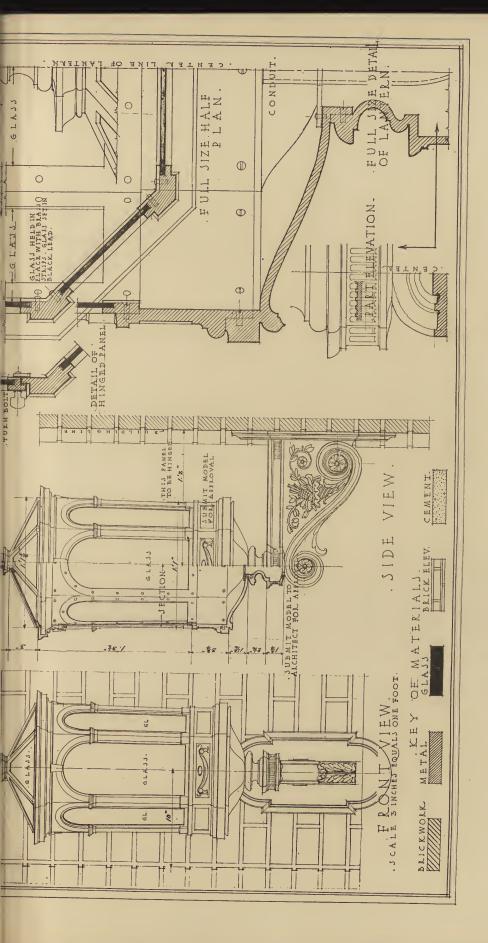


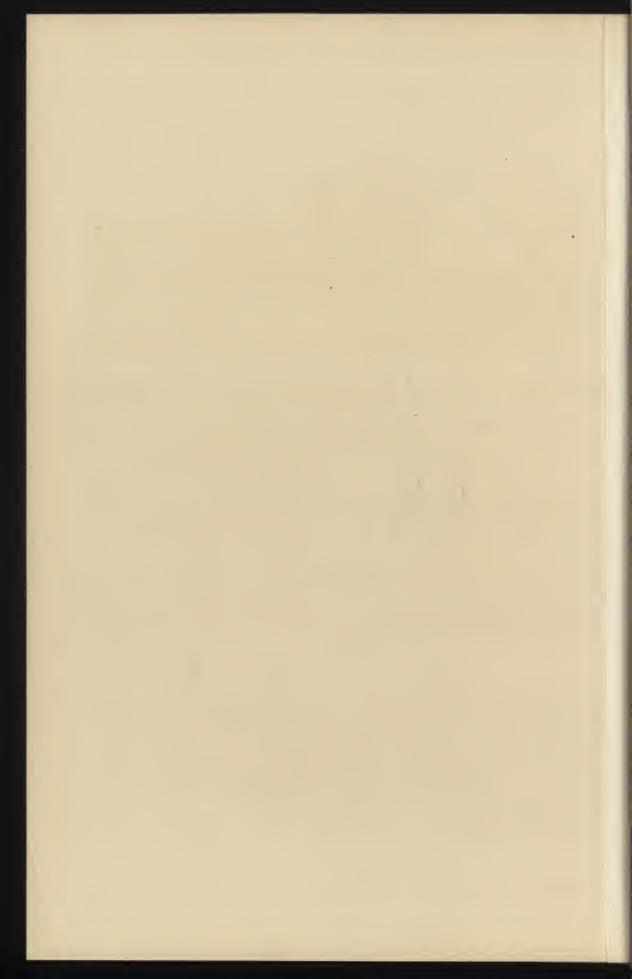
RENDERED DRAWING OF A LANTERN FOR THE NORTH AND PRIMARY SCHOOL, GLEN RIDGE, N. J. GREGORY B. WEBB, ARCHITECT.

(See accompanying working detail.)











A STREET IN BAGUIO, THE AMERICAN SUMMER CAPITAL OF THE PHILIPPINE ISLANDS

VOL. XXXV. No. 5.

CONTENTS

MAY, 1914.

Page

- COVER-St. Paul's Chapel, New York City. Color reproduction from photograph by Frank Cousins.
- FRONTISPIECE-"Women of the Confederacy." Bronze Figure by Augustus Lukeman.
- ST. JOHN'S CHAPEL, New York City. By Rawson W. Haddon. Photographs by Frank Cousins. Measured Drawings by F. L. Finlayson 389-404
- IN THE CAUSE OF ARCHITEC-TURE. By Frank Lloyd Wright - - 405-413
- AUGUSTUS LUKEMAN-A Representative American Sculptor. By B MacDonald Furniss
- THE ARCHITECT. By Wilfred Beach 425-434 FURNITURE FROM THE ARCHI-TECTURAL VIEWPOINT. By
- H. D. Eberlein and Abbot McClure. The Cromwellian and Carolean Periods 435-442

Page WHAT DO WE KNOW ABOUT LIGHTING? By F. Laurent Godinez. IX-The Lighting of the Home (Continued) - - -- - - 443-449

SERIAL NO.

188

PROF. MARTIN DÜLFER'S DESIGN FOR THE PROPOSED OPERA HOUSE AT BERLIN. By Robert Grimshaw - - - -- - - - 450-454

PORTFOLIO OF CURRENT AR-CHITECTURE-A Group of Interesting Houses at "Fieldston," New York City - - - - - - - - - 455-462

BOOK REVIEWS-Alfred Hoyt Granger's Memoir on Charles F. McKim - 463-465

NOTES AND COMMENTS -- 466-468

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"WOMEN OF THE CONFEDERACY

BRONZE GROUP FOR MONUMENT ON THE CAPITOL GROUNDS AT RALEIGH, N. C., TO BE UNVEILED JUNE 10. AUGUSTUS LUKEMAN, SCULPTOR. HENRY BACON, ARCHITECT

THE ARCHITECTVRAL RECORD

VOLVME XXXV



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ST JOHN'S CHAPEL VARICK STREET NEW YORK CITY

MEASVRED DRAWINCS BY F L.FINLAYSON TEXT BY RAWSON W. HADDON

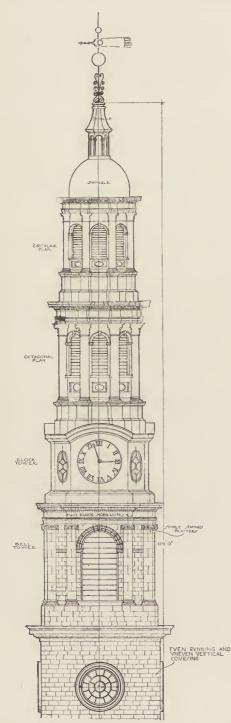


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ERY MAGNIFICENT and genteel and designed and built after the most genteel and approved manner of the Ancient Roman temples" was the opinion of one young lady after she had "seen S t. J o h n 's Chappel & Squaire"

a few years after St. John's was erected. Even if she was a rather frivolous young person and added almost in the same breath that she would "need many more Cloathes than I have at present to hold my Scituation amont the Polite Society of Varrick Street, for there is Great ryvallery between us & the misses of Cannal St. w^{ch} can Dress the most mag^{nt} & genteel especially in Bonnets and Cloakes," one must agree that her opinion of the Chapel is the one that has been held, in rather more up-to-date English perhaps, by everyone who has visited it since the day in June of 1807 when St. John's was first opened for inspection by the public.

All the popularity that it enjoyed during the first half century or more of its existence St. John's Chapel certainly deserved, for at the time of its erection it was a wonderful and unique building in many ways. One notices, among other things, that it is much larger than any of the other old churches of New York; that it is certainly "in an architectural point of view," as one of its designers used to say, a more pronounced success as a city church than either St. Mark's or the older St. Paul's Chapels-both relics of the days when New York was little more than a country town-and that the architects made here a copy as nearly as the changed condition of custom and climate in New York would allow, of St. Martin's-in-the-Fields, London.



THE SPIRE OF ST. JOHN'S CHAPEL, VARICK STREET, NEW YORK CITY. From the measured drawing by F. L. Finlayson.

This "magnificent and genteel" building was one of the most expensive of its times and early visitors, among whom the fashionable young lady already quoted should be included, marveled at and never failed to mention the fact that it had "cost to build nearly \$200,000." While the modern visitor, be he a seeker of the historic landmarks of days long gone by, or the most exacting hunter for all that is best in the arts of long ago, is more interested in noting the fine proportions of the building, the skill with which the various parts are assembled, and the pleasant little architectural conceits made use of by the builders; or in visiting-this is the historic landmark visitor-the tiny parks on either side of the building, where the soldiers from the nearby Red Fort were accustomed to sun and rest themselves during the War of 1812; in having pointed out to them the pews that were occupied by hundreds of famous parishioners; or in visiting the Sunday School made famous by Felix Oldboy in his "Walks in Our Churchvards," still the cost of the building, considering that the people of New York may have to purchase it in order that it may be put beyond danger of destruction at the hands of the owners, is of importance. And it shows that the tradition that Trinity Church set out to make St. John's the very finest church ever erected in the city, is undoubtedly true. In this, as a visit to the building, or an examination of Mr. Finlayson's measured drawings all show, Trinity was most successful, but not at a cost of \$200,000, nor, as a newspaper stated not long ago, \$2,000,000 (!), but, according to the records of Trinity Church, to be exact, \$172,833.49.

It was only a few years ago that St. John's had to be defended from what appeared to be a threat of its owners, not only to abandon, but to destroy it. Little more than a year ago, when the city decided to widen Varick Street on its easterly side, where the Chapel stands, various plans were presented by which the widening could be carried out without necessitating the destruction of the entire porch and steeple of the building, which, according to the original plan for

widening, were threatened with immediate destruction. The most practical suggestion was to let the new sidewalk run under the portico, the floor of which would then be lowered to the sidewalk Two examples of this solution level. were pointed to in Charleston, S. C. The Borough President entered into the scheme most enthusiastically and promised (and lived up to his promise to the perfect satisfaction of every one interested) to do all that he possibly could to carry it into effect.

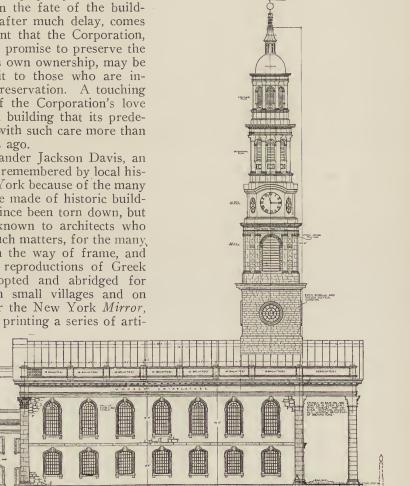
Unfortunately, though, Trinity Corporation manifested no such enthusiasm; neither did they display any undue haste in deciding upon the fate of the building. But now, after much delay, comes the announcement that the Corporation, while it will not promise to preserve the Chapel under its own ownership, may be willing to sell it to those who are interested in its preservation. A touching example this, of the Corporation's love for this fine old building that its predecessors erected with such care more than a hundred years ago.

In 1830 Alexander Jackson Davis, an architect who is remembered by local historians of New York because of the many drawings that he made of historic buildings that have since been torn down, but who is chiefly known to architects who are curious in such matters, for the many, monstrosities, in the way of frame, and lath-and-plaster reproductions of Greek architecture adopted and abridged for domestic use in small villages and on farms, made for the New York Mirror, which was then printing a series of arti-

In

cles on the old buildings of New York, a view of St. John's Chapel, that has since become quite rare and much sought after by collectors. Accompanying this view was printed a description of the chapel, which was undoubtedly considered at that time a model of faultless journalism. It was frequently made use of by other periodicals when they needed something to fill up space, and the following copy of it is taken from a magazine printed in Philadelphia that bore the charming name of The Casket.

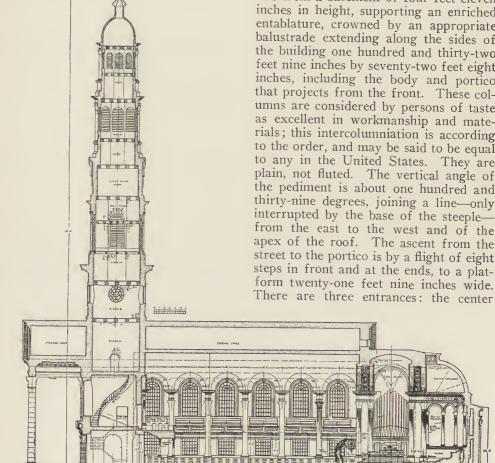
"This large and magnificent temple,



SIDE ELEVATION-ST. JOHN'S CHAPEL, VARICK STREET, NEW YORK CITY. From the measured drawing by F. L. Finlayson.

which has recently been materially altered and enlarged in the interior," says this description, "is situated on the east side of Varick Street, in the fifth ward of the city of New York, and in front of that spacious and ornamental plot of ground known by the name of Hudson Square, which is bounded by Varick, Laight, Hudson and Beach Streets, and contains about one hundred and seventysix thousand square feet, and was granted by the Corporation of Trinity Church, New York, to the proprietors of the lots on the streets facing on the square, and their heirs forever.

"The building was erected under the direction of the rector, church-wardens,

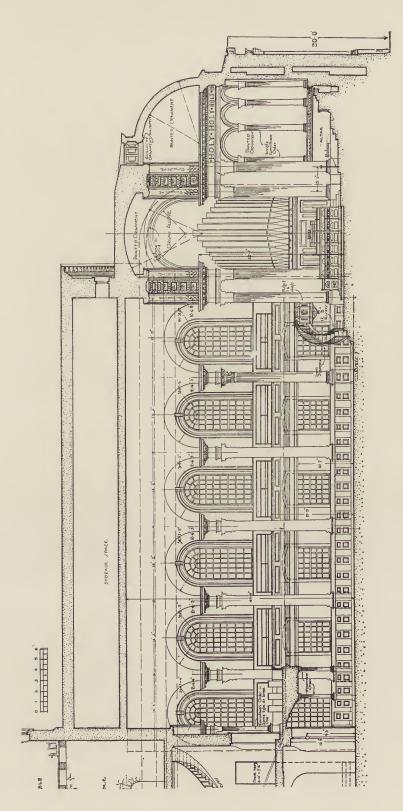


chapel of said church. Including its recent improvements, the cost has been upwards of two hundred thousand dollars. The cornerstone of the building was laid on the eighth day of September, in the year 1803, by the bishop of the diocese, the Right Reverend Benjamin Moore, D.D., and consecrated to the service of Almighty God on the sixth day of January, in the year 1807, by the same venerable and reverend prelate. It is of the Corinthian order, built of stone, having four columns, three feet four inches each in diameter, embracing sixty-four feet eight inches of the front; the columns rise from a basement of four feet eleven inches in height, supporting an enriched entablature, crowned by an appropriate balustrade extending along the sides of the building one hundred and thirty-two feet nine inches by seventy-two feet eight inches, including the body and portico that projects from the front. These columns are considered by persons of taste as excellent in workmanship and materials; this intercolumniation is according to the order, and may be said to be equal to any in the United States. They are plain, not fluted. The vertical angle of the pediment is about one hundred and thirty-nine degrees, joining a line-only interrupted by the base of the steeplefrom the east to the west and of the apex of the roof. The ascent from the street to the portico is by a flight of eight steps in front and at the ends, to a platform twenty-one feet nine inches wide.

and vestrymen of Trinity Church, and at

the expense of that corporation, and is a

LATERAL SECTION OF ST. JOHN'S CHAPEL, VARICK STREET, NEW YORK CITY. From the measured drawing by F. L. Finlayson.



SECTION THROUGH NAVE AND CHANCEL, ST. JOHN'S CHAPEL, VARICK STREET, NEW YORK CITY. PORTION OF A COMPLETE MEAS-URED DRAWING BY F. L. FINLAYSON. door opens into a large octagon vestibule with folding doors to the body of the church; above which springs the lofty spire forming an elevation equally striking and beautiful; from the ground it is two hundred and fourteen feet six inches in height, composed of the Ionic, Corinthian, and Composite orders, with appropriate vases on the entablature over each column. The steeple is neatly finished with a copper ball, whose diameters are thirty by thirty-three inches, iron ornaments, and vane richly gilt. The proportions are considered correct, and the appearance is perfectly light and elegant. At the east end of the church there has recently been added a building corresponding, two stories in height, sufficiently large for the purpose of a vestry-room and accommodations for the instructions of the Sunday scholars attached to the church.

"In the cellar beneath is constructed a furnace, lined with firebrick; being simply erected within an air-chamber, through which the external air passes, and becomes heated by the furnace; it then passes through flues to the church, which, together with the large stoves of the west end, amply warm it. The ground floor of the church has two double and two single ranges of pews, separated by a centre aisle, two side aisles, and a cross aisle at each end, paved with marble, and extending the whole depth of the church, terminating by a platform passing around the chancel, which is of a serpentine form, and elevated three steps; behind and above which are the reading desk and pulpit. The desk is of the Corinthian order, having a frieze and cornice, supported by four fluted pilasters, with sunken panels intervening, and is entered by a door at the north end side. The pulpit rests upon a base, uniting with the end of the church; the post and angles are circular; the frieze and cornice are supported by six fluted columns, surmounted by acroters. The doorway at the back of the pulpit is a carved and richly ornamented screen. At each side of the pulpit is a three-quarter column and pilaster, with a full entablature. forming two recesses, and a centre circular-headed space. in which is a niche, in-

tended for some appropriate emblem. By a projection of the wall, an arch is formed over the whole. On this surface, on each side, are two lofty fluted pilasters with their entablatures, the termination of the lofty ceiling on the one, and on the other an architrave, in form of an arch, with the members enriched, the keystone of which forms an ornamental shield, supported at the sides by two cherubs, and having on the centre surface IHS; the whole is covered by a mitre. On each side of the churchconstituting the principal feature-are ranges of fine fluted columns, and corresponding pilasters at each end against the walls, with their full entablatures, upon which rests the beautifully arched and highly ornamental ceiling, supported at the same time by brackets or trusses, with architrave, frieze and cornice against the side walls, and between the windows, which are seven in number on each side, having green Venetian blinds on the south. The front pews in the galleries are mostly square, with slips behind and against the walls. A number of seats are elevated for the accommodation of the Sunday School scholars, on each side of the spacious organ occupying the centre of the west end gallery, which is allowed to be a superior instrument. The entrance to the galleries is by the flight of stairs from the side doors of the portico. The capitals and carvings altogether of the exterior, as well as the interior, are of exquisite workmanship, and the whole maintains simple elegance which is agreeable to the eye, and consistent with true taste.

"It is considered to be inferior to no building in the United States, either in elegance of workmanship or durability of materials. At the east end there are stone steps, and an ornamental iron railing in front encloses the portico. On each side of the church is a space of fifty-three feet, adjoining to which on the north is the rector's—Bishop Hobart's—residence; and on the south side is a handsome range of buildings, which adds much to the appearance of the whole."

Early in its history, Trinity Church acquired from one source and another a great deal of property in New York. To be sure the title to some of it has been questioned, but the Corporation has successfully defended its ownership. Part of this property was a great "farm,' of which it seems Trinity never had been able to make what real estate people would call a "paying proposition." At last Trinity grew tired of the small rents received from the land, and decided that if the poor people would not move there, it would improve the property and make of it a fashionable neighborhood. One result of this was Varick Street and the charming houses that have already been referred to in the Record and the other was St. John's Chapel. Opposite the chapel in early days was what people always referred to as "a charming pleasure park." This was Hudson Square, which was known in later years as St. John's Park.

In his history of Trinity Church, Dr. Dix says: "It is pleasant to make a brief digression into the region of trees, flowers and song birds, and so lighten the dullness of parish annals." "St. John's Chapel," he continues, "a stately and noble edifice, faced a great garden spot, known to church people as St. John's Park, but called by common folk Hudson Square. The Park was one of the finest, if not the finest in the city," and for many years it was considered to be one of the greatest sights of the town.

On April, 1823, a resolution was passed "That said Square shall remain hereafter an ornamental Square without any buildings being erected therein, and in case all the Lessees of the lots fronting on said Square shall agree to maintain the same at their own expense as a private Square in proportion to the ground which they possess fronting on the Square, that it shall remain as a private Square, but otherwise if the proprietors of the lots do not maintain the said Square, then it is to be ceded to the City Corporation as a public Square."

Just what the cause of this generous resolution was is not recorded, but it has never been forgotten that in later years Trinity gave the necessary permission and the park, in spite of the resolution declaring "that said Square shall remain hereafter an ornamental Square without any buildings being erected therein" and promising "that it be ceded to the City Corporation as a public Square," was sold to a railroad for just a million dollars, and it is equally well known that the railroad immediately built upon it one of the ugliest of freight depots. And so —quoting again from Dr. Dix—before the rolling car of the Business-Juggernaut, the grace and beauty passed away forever.

From any point of view, financial, scenic or historic, the sale of the park was a most lamentable mistake, and it was really the "beginning of the end" of the chapel which the "Rector, churchwardens and vestrymen of Trinity Church" had so generously built in 1807 at a cost of \$172,833.49.

Any account of St. John's is incomplete if it fails to mention old Trinity Church—the "mother in Israel" from which went forth various chapels from time to time as the original family became too large and numerous to meet in the old church—and a word or two should be said of old St. Paul's Chapel, now the oldest church building on Manhattan Island, which is also, like St. John's, a Trinity Chapel, and is illustrated on the cover of this month's *Record*.

The original Trinity Church, which, although it was but a small square edifice, took over ten months to build, was first occupied on March 13, 1698. For it there seems to have been no architect. At any rate, no plan or any definite description of it has been preserved; but the building contract, which is dated June 3, 1697, and is as follows, is still, fortunately, on record:

"Articles of Agreement, made agreed and concluded on between Wm. Merritt, Jeremiah Tothill, Wm. Morris, Thomas Clark managers for Trinity Church & Derrick Van d burgh viz. It is agreed yt said Derick shall furnish said managers with four good and sufficient masons such as said managrs shall like two thereof shall be Abra—& Petter Rissio for which said manags are to pay four shill and six pence per diem also said van de burgh is to furnish sd managrs for Trinity Church three labourers, viz Jack his own negro, Jack Jame's negro & ye negro belonging to ye french minister at three shills per diem and said Derrick to receive his money every Saturday night. Two masons must begin next Monday to work and all said masons & labourers from the time they enter upon the work shall not desert ye same without ye leave of said manags and shall faith fully perform the several duties. In testimony of which said agreement we have sett our hands this third day of June, 1697, in the ninth year of the reign of Wm. the Third of England, Scotland, France & Ireland King etc.

Will Merrett Jeremiah Tothill Will Morris Thos Clarke D. Burgh."

Such was the contract of three centuries ago. Undoubtedly it served its purpose well enough, but it seems ridiculously primitive when compared with the contracts of the present day. Contracts of this sort are not often found, but when one does occasionally come to light it is sure to be of unusual interest if for no other reason than as an illustration of how building "operations" were carried on in the "good old days gone by."

In this connection it may not be out of place to reprint another old contract, which relates to a house that was built in 1655, more than thirty years before the Trinity contract was written. It reads as follows:

"We, Carpenters, Jan Cornelisen, Abram Jacobsen and Jan Hendricksen, have contracted to construct a house over the ferry of Egbert Van Borsum, ferry-man, thirty feet long and eighteen feet wide, with an outlet of four feet, to place in it seven girders, with three transome windows and one door in the front, the front to be planed and grooved, and the rear front to have boards overlapping in order to be tight, with

door and windows therein; and a floor and garret grooved and plained beneath (i. e. on the under side); to saw the roof thereon, and moreover to set a window-frame with a glass light in the front side; to make a chimney mantel and to wainscot the foreroom below, and divide it in the center across with a door in the partition; to set a window frame with two glass lights. therein; further to wainscot the east side of the whole length of the house, and in the recess two bedsteads, one in the front room and one in the inside room, with a pan-try at the end of the bedstead; a winding staircase in the foreroom. Furthermore we, the carpenters are bound to deliver all the square timber—to wit, beams, posts and frame timber, with the pillar for the winding staircase, spars and worm and girders, and foundation timbers required for the work; also the spikes and nails for the interior work; also nails for the wainscot are to be delivered by us.

For which work Egbert van Borsum is to pay five hundred and fifty guilders, one-third in beavers, onethird in good merchantable wampum, one-third in good silver coin, and free passage over the ferry so long as the work continues, and small beer to be drunk during the work."

The clause relating to the "small beer to be drunk during the work" was apparently not an unusual one in early days in spite of its strangeness to modern ears. The Dutch were great drinkers and Mrs. Alice Morse Earle in her "Colonial Days in Old New York" says that "a libation was poured on every transaction, every action, at every happening in the community, in public life as well as in private. John Barleycorn was ever a witness at the drawing up of a contract, the signing of a deed, the selling of a farm, the purchase of goods, or the arbitration of a suit."

A detailed account is found in the contracts and bills for building the first stone house in Albany, in 1656, of how



ST. MARTIN'S-IN-THE-FIELDS, LONDON, FROM WHICH ST. JOHN'S WAS EVIDENTLY "COPIED."

general and how extensive the habit of furnishing liquor to the workmen on a building was. This house cost to build, 12,213 guilders, or about \$3,500. "Every step in the erection of this building was taken knee-deep in liquor" says Mrs. Earle. "The dispensing of drink began when the old wooden fort was levelled; a tun of strong beer was furnished to the pullers-down. At the laying of the first stones of the wall a case of brandy, an anker (thirty-three quarts) of brandy, and thirty-two guilders' worth of other liquor wet the thirty whistles of the masons. When the cellar beams were laid, the carpenters had their turn. Two barrels of strong beer, three cases of brandy, and seventy-two florins' worth of small beer rested them temporarily from their labors. When the second tier of beams was successfully in place, the carpenters had two more cases of brandy and a barrel of beer." In this way the treating went to the very end of the work. All the laborers, wood-carriers, teamsters, carpenters, stone-cutters and masons had besides these special treats, a daily dram of a gill of brandy each, and three quarts of beer at dinner. According to this way of doing, the house of Egbert Van Borsum must have cost him considerably more than five hundred and fifty guilders.

But—to get back to Trinity Church— "The Church-wardens & Vestry-men" met on July 31, 1697, and it was ordered "That Mr. James Evets take care to Speake for Timber for the second floor of the Steeple" while "the Church wardens take care for Scaffold Poles" and also that "noe Carmen shall after notice given Digg or carry away any ground or Earth behind the English Church & burying ground." By this time the church must have been well under way. It was to be all completed and ready for occupancy in March of the "nexte vearre."

For a number of years following, this primitive church served its purpose admirably, but the congregation grew so rapidly that by 1737 it had to be enlarged. This work went along in so hesitating a manner that the alterations were not completed until 1739. In 1704 a traveler wrote of New Yorkers:

"They are Generally of the Church of England, and have a New England Gentleman for their minister, and a very fine church, set out with all customary requisites."

Early travelers all agreed that New York was a "cittie yt is boundde to grow" and grow it did-or at least the Episcopalian part of it did—so that by 1763 the need of another church in the city, besides Trinity and the *first* chapel -St. George's (erected between 1744 and 1752), which, however, has long since been torn down-became so evident that on April 5, 1763, a committee was authorized "to enquire and look out for a proper and convenient Loth of Ground in this city whereon to erect a New church." This, when erected, was known as St. Paul's Chapel, and it is still to be seen on Broadway, facing long gone meadows that once stretched away to the west, between the church and the Hudson River, with only its rear or "back front" facing Broadway.

Soon after this resolution was passed work was commenced and the chapel, which was later "esteemed one of the most elegant Edifices on the Continent" was completed in 1766. On October 23, of that year, it was announced in the columns of the *New York Journal* or *General Advertiser* that "On Thursday the 30th Instant, St. Paul's Chapel, will be opened, and a suitable sermon will be preached by the Rev. Doct. *Auchmuty;* the Pews will be Let at Auction, in Said Chapel, the Tuesday before, at ten o'clock in the Forenoon."

After the completion of St. Pauls, Trinity was popularly known as the "Old English Church" and so generally was it called by that name that we find, in the New York Chronicle that "Anthony Dodane, Marble-Cutter, At the back of the Old English Church," betwixt Marston's and Leffart's Distileries, Begs Leave to inform the Public, that he makes all Sorts of Chimney Pieces in the most Elegant Manner, both

^{*}When St. George's Church was new the street upon which it stood was mentioned in the newspapers as "The New English Church Street."

White and Vein'd (Italian and American) Marble and Red Stone, he also cuts Tomb and Head Stones."

Old Trinity remained for many years, totally eclipsed by the beauty of her two daughters, St. Paul's and St. George's Chapels, but "the old English Church" lingered on until the "great fire" of 1776 in which it was totally destroyed. "Poor Trinity" said one newspaper while commenting on the fire, "a principal object of Republican, Independent Malice was set on fire in three places," and in a letter dated August 7, 1776, the writer adds, rather surprisingly, that "It is now the Puritan's high holiday season and they enjoy it (the burning of Trinity?) with rapture."

For many years after this the blackened walls of the old church were left standing-to the distress of all who had to pass that way, for they were expected to fall any minute-though as a matter of fact when at last they were taken down it was found to be no easy matter to dislodge them, and during these years New York had its "Burnt English Church."

Toward the close of 1784 the corporation came to the following resolutions:

"Resolved, unanimously; That measures be forthwith taken for the

rebuilding of Trinity Church," and "Resolved, That three commissioners be appointed to manage and superintend the work and that they propose a plan of the building and report the same to this board for approbation."

In June, 1788, the following notice appeared in the public press:

PROPOSALS IN WRITING

Will be received on or before the 20th inst. for workmanship only.

For digging a Trench for a new foundation for Trinity Church:

Taking up the old foundation from the surface of the ground

downwards:

Cleaning the Stones, Laying a new foundation, and carrying up the walls as high as the sills

of the windows.

In August, this notice for carpenter's work appeared:

TO ALL CARPENTERS

PROPOSALS in writing will be received for the carpenter's work and materials.

FOR bringing under cover, inclosing and finishing the outside of Trinity

Church, compleat, including the porch, in front, the columns

and arch within the Church.

ALSO

FOR building a steeple, on a base of twenty-four feet square, as de-

scribed in the Plan. Considered as a separate article,

ALSO

For cutting the stone that may be wanting for the above building.

> R. Watts M. Rogers

Commissioners

 \geq for rebuilding

N. Cruger N. Carmer Trinity Church.

G. Dominick

A PLAN of the Church, &c., may be seen by applying to Mr. Rogers,

No. 35 Queen Street."

In the issue of the Daily Advertiser for the 23d, appeared a long account of the laying of the foundation stone. "The New Church, lately built in Broadway," was opened on February 15, 1797. According to an account of it accompanying a view of the building, printed in the New York Magazine for 1790, the church was 104 feet long and 72 feet wide, the steeple was 200 feet high. It was built by "Mr. J. Robinson, carpen-ter, and Messrs. Moore and Smith, masons," and there is reason to believe that "Mr. J. Robinson, carpenter," ' was the designer, just as he was the "architect" of many old Colonial residences in New York City.

perhaps Unfortunately-or fortunately-this building was not well built. It was a sort of "builder's gothic" thing with a hideous porch, the roof of which was supported by a desperate attempt at Gothic columns, and the windows were equally hideous "pointed" ones. The porch was semi-circular, and the whole design would have been decidedly good Colonial had it not been for the windows and for some comical little obelisks that were placed—as a part of the "Gothic" design-on the four corners of the roof and on top of the tower. As it was the church was simply a good example of Colonial design in the "Gothic Taste."

But, being frame, extensive repairs had to be made from time to time until, in the spring of 1839, a great deal of alarm was felt by members of the congregation when it was noticed that the weight of the snow had caused the roof to sink several inches, and that this had caused the rafters to expand the side walls to such an extent that the church was no longer considered safe.

The outcome of the whole matter was that it was at last decided to build a new -the present-church, and the work was given to "a rising young draughtsman who had then recently come to New York." His name was Richard Upjohn. The old church was not a handsome building but it was "hallowed by many memories of a long gone day," and people used to enjoy telling that Washington had witnessed the consecration of it. Mr. Montgomery Schuyler says that "there was not a dog to bark at its going," but in this he is mistaken. To be sure he is right in suggesting that if such there was he was no architectural critic, but there were plenty of old New Yorkers who bewailed the loss of the city's "grand old building" just as, it seems, the citizens of today may soon have to mourn the loss of old St. John's which is also "dear to the heart of many thousands of old New Yorkers," and around which also hover many memories of a long gone day.

The history of St. John's, excepting where it concerns itself with the various threats of destruction and the demands for its preservation that have always followed, is by no means an exciting or, "in an architectural point of view," an important one.

The actual work of the building was commenced in the Spring of 1803, but its history really goes back as far as 1792, when a committee on leases was instructed to consider where a new church should be built by Trinity Parish. Nothing of any practical value was suggested by the Committee, though, until 1803, when the scheme was then revived by a resolution: "That a room be hired by the Rector for the assembling of Persons to attend Public Worship in the neighborhood of Brannan Street and that benches be provided for the accommodation of such assembly."

Such was the first intimation of the movement that finally led to the erection of one of the finest and "grandest and most genteel" of all the churches of old New York. The idea of renting a room was soon dropped in favor of the erection of a new chapel by Trinity.

Many histories of the building have been written by persons who have had access to the records of the church. Of these, the one written by Dr. Dix certainly boasts the most imposing number of dates and figures, but Dr. William Berrian wrote a history in 1847 that is by far the most charming of them all. There is a leisurely and mellow feeling about it that makes up for its absence of historical data and it is after all as accurate as any other history that has been written.

From the rapid growth of the city, says Dr. Berrian, as well as from a regard to the advantage of this corporation, the committee of leases was instructed, so early as 1792, to examine and report what part of the land belonging to it ought to be reserved for another Church, Parsonage, School House, Burial-ground, and other public purposes; and also to report a plan for widening the streets laid out in the Church Farm to the northward of Warren Street, and making such other improvements in that part of the Church's estate as might conduce to the interests of this corporation and the ornament of the city.

So far as the building of the new church was concerned, the further consideration of the subject seems to have slumbered for several years. In 1802, however, it was once more revived; for a resolution was passed by the vestry that a room be hired by the Rector for the assembling of persons to attend public worship, in the neighborhood of Brannan Street, and that benches be provided for such assembly. The many respectable applicants for pews, who could



Photograph by Frank Cousins.

THE REAR OF ST. JOHN'S CHAPEL, IN 1857, WHEN EXTENSIVE ALTERATIONS WERE MADE TO ST. JOHN'S. THE PORTION OF THE BUILDING SHOWN IN THIS PHOTO-GRAPH WAS ADDED BY "R. M. UPJOHN & CO." not be furnished with them in the existing churches, made it expedient that another one should be built, and a committee was therefore appointed in reference to it, and authorized to inquire and select a suitable site for the same.

The first situation proposed by the committee of leases was the square formed by Duane, Greenwich, Hudson and Jay Streets. It was intended that the church should face Duane Street, and it was ordered that a plan of the same should be drawn and reported at the meeting of the vestry on the 7th of April, 1803, in order to commence the building of it immediately. At this meeting several plans were laid before the Board for their consideration and the one recommended by the committee, drawn by John and Isaac McComb, was that which was approved. It having been suggested, however, to the committee, that a part of the ground upon which it was intended to build the new church might require the driving of piles to render it safe, they were requested to examine it, and if they should find that the representation was correct, they were to desist from the work until the sense of the Board should be taken.

The examination having been made and the result found unsatisfactory, the committee reported that it would be improper, from the nature of the ground, to erect a church on the spot contemplated. It was therefore resolved that it should be built on the east side of Hudson Square, the site on which St. John's now stands, and that they should proceed forthwith to lay the foundation there.

Dr. Berrian had many good stories to tell about the locality that was selected for the new church. "It seems that this was on the very verge of a place as unsuitable as possible for a substantial edifice. It was probably in view of this difficulty that the Vestry made an order in the following year that the committee on leases should have the pond filled up on the east side of Lispenard's garden, which was in the immediate neighborhood of the situation proposed for St. John's Church."

"Indeed, it would be almost incredible to the persons of the present generation," he adds; "to hear from those who are older, their recollections of the past in regard to this quarter of the city. It was a wild and marshy spot of no inconconsiderable extent, surrounded with bushes and bulrushes, which in winter was a favorable place for skaters, and at certain seasons for gunners, and where in my boyhood I have seen snakes that were killed in its borders. Indeed, even so late as 1808 it was only so partially filled up and reclaimed by the elevation of the grounds for the course of streets and the consequent multiplication of ponds in various directions, as to have been the occasion at night of many a sad disaster and a frequent loss of human life.'

Another story about that locality was related to him "by an old and respectable parishioner of Trinity Church, with respect to the estimation in which the land was held. An uncle of his, who was a trustee of one of the Lutheran churches in this city, and who was remarkably fond of antiquarian research, in looking over the former minutes of the Board, found an entry to the following effect. Some well disposed individual had offered to the trustees of the church a present of a plot of ground, containing about six acres, near to the present head of Canal Street and Broadway. They passed a resolution, however, that it was inexpedient to accept the gift, inasmuch as the land was not worth the fencing in.'

There is nothing in the records of Trinity Church to show that any thought had been given to the selection of an architect till after all other arrangements had been completed, and even then one finds but a vague reference to the fact that "several plans" were submitted, by whom or at whose invitation, we are not told, but it is certain that they were sent in by builders and masons rather than by architects.

In the early part of the last century building committees had a most convenient and economical way of getting designs for the buildings in which they were interested. The usual way was to announce the plans would be looked at and any one who chose to send in a design was very kindly allowed to do so. After that the work was given out or at least some unsuccessful competitors used to whisper that it was to some fortunate brother-in-law after a surprisingly modern manner.

There is no record of any such request by Trinity, but this method of procedure was so common that the case of St. John's Chapel was probably no exception to the rule. In the absence of any record in this particular case, it is safe to take the records of another church as an example of what happened in the present instance. St. Peter's Church on Barclay Street is a good example to take, both because John McComb was concerned with it, and because the record is readily available.

St. Peter's was built in 1785. It was the first Catholic Church in New York, but the name of the designer of the original building has not been preserved. By 1792 the congregation had just about managed to pay off the original debt on the building and began to think how they could get into debt all over again by enlarging and beautifying their church. On November 20, 1792, we find the following resolution in the records:

"Resolved, That two or three able workmen, good master carpenters, be called upon as soon as possible, with verbal notification, to meet in St. Peter's Church, to take measurements in order to make plans and estimates" for the contemplated alterations.

Among the "two or three able workmen" was included John McComb, but he was an unsuccessful competitor. One Joseph Newton bore off the prize, and John McComb had to be satisfied with the "verbal" thanks of the committee. The request for plans for St. John's was also "verbal," but here he had better luck. One reason for this may have been that in the St. John's competition he had as a partner his brother, Isaac. Or, again, it may have been Isaac who was fortunate in having brother John as a partner, because John McComb's name would have been a great inducement to any building committee in 1803, for it must be remembered that the John McComb of that date was a far more important man in the community than he had been at the time of the competition for St. Peter's. Since then he had become one of the most successful and best known builders in New York.

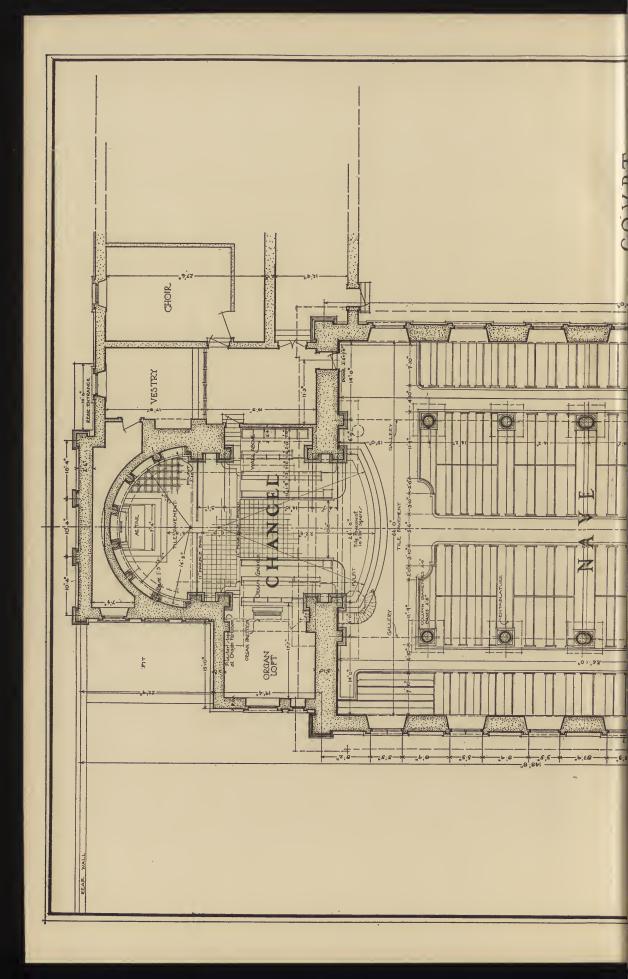
John McComb was undoubtedly the most important man, excepting perhaps Major L'Enfant, who seems to have lived in New York for some time prior to the Revolution and who designed our Federal Hall, in our own local architectural history in New York. It has been the fashion for the last few years to deny that he did much of the work with which he has been credited, but little evidence has been brought to light that shows McComb to have been anything but a designer of considerable talent and a builder of the very first order. In later years he gave up building entirely and devoted himself to what he considered the best interests of art and architecture in the city.

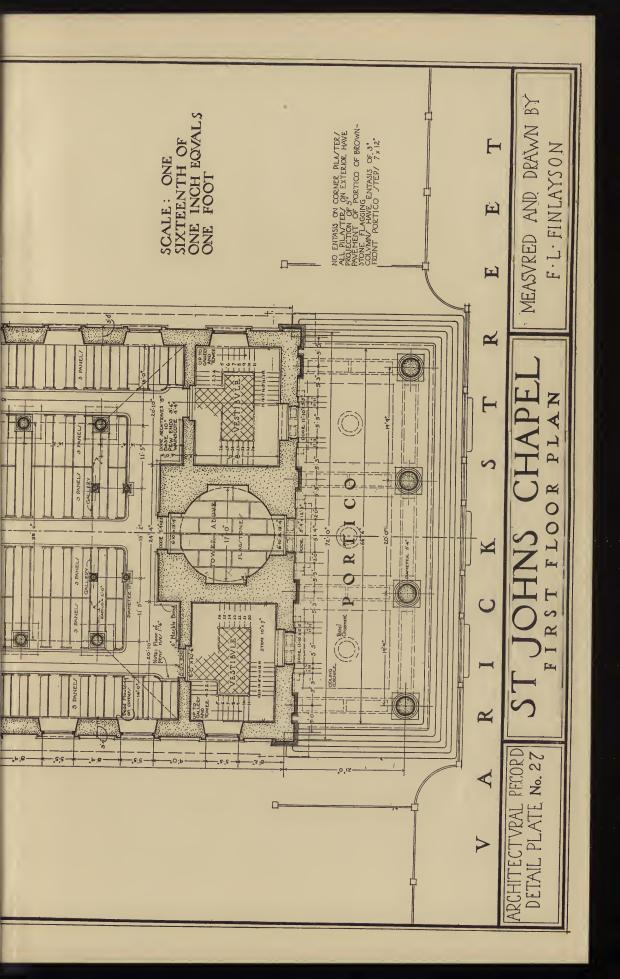
At the time that St. John's was built McComb was building the City Hall. And this building, even if the design was by the French architect Mangin, instead of his own, he at least carried out in a way that proved him to be more than an unusually good builder, and about all that any man could handle at one time and the consequence was that after the competitive design had been accepted, John McComb dropped all connection with, and left the design and execution of the Chapel, entirely to his brother Isaac, to whom let us hope, Old St. John's will be left standing, for all time, as a monument—architectural as well as scenic and historic.



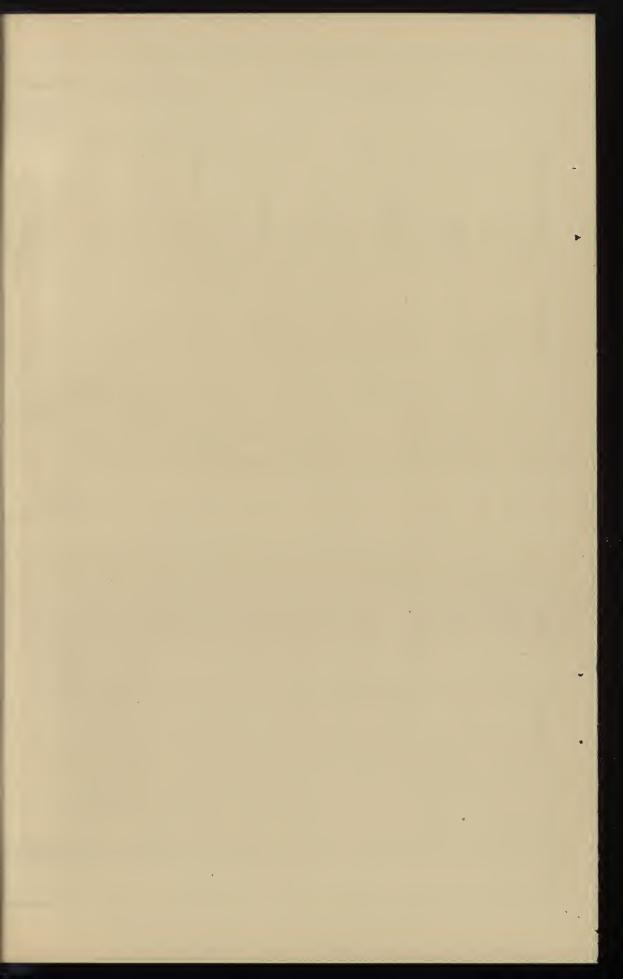
From a Photograph by Frank Cousins.

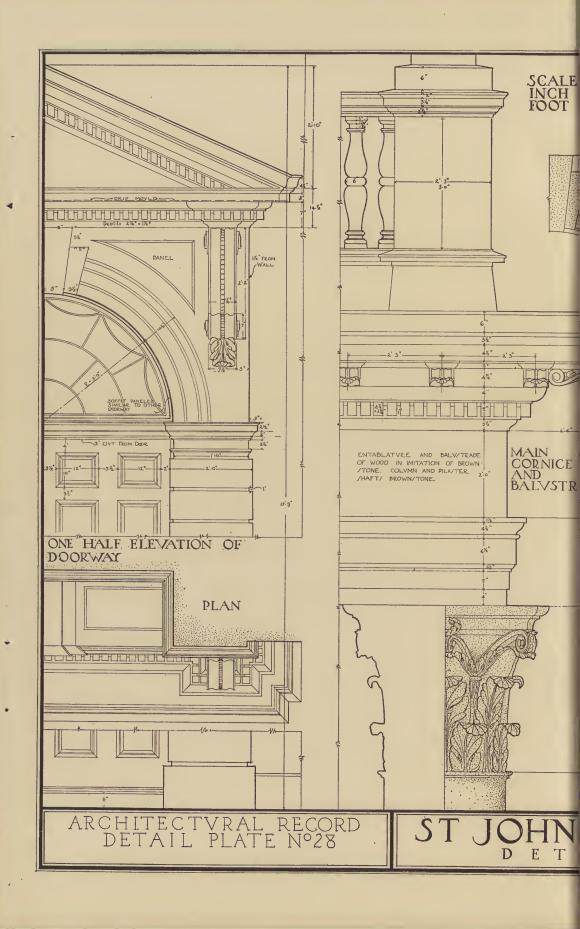
ST. JOHN'S CHAPEL, 46 VARICK STREET, NEW YORK, BUILT 1803-07. (See Accompanying Measured Drawings.)

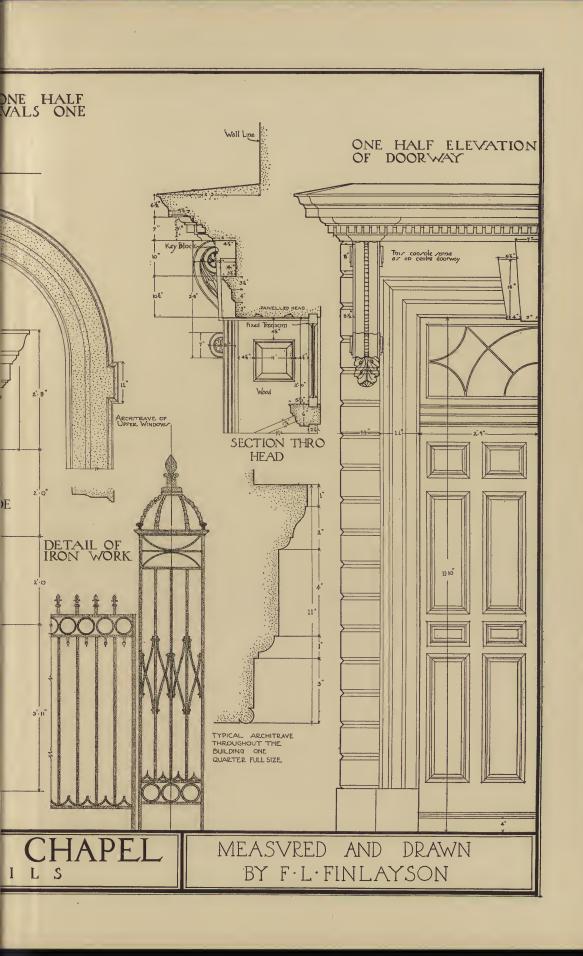














IN THE CAVSE OF \sim \sim ARCHITECTVRE

SECOND PAPER

"STYLE, THEREFORE, WILL BE THE MAN, IT IS HIS. LET HIS FORMS ALONE"

BY FRANK LLOYD WRICHT

Note.—In connection with the exhibition at the Chicago Art Institute of the Chicago Architectural Club during April and May, there will be an individual exhibit by Frank Lloyd Wright of the work done by him since his return from Europe. Some of the subjects shown will be the drawings of the New Imperial Hotel at Tokio, the Midway Gardens at Chicago, Lake Geneva Hotel, The Coonley Kindergartens, about fifteen residences, also models and plates of the twenty-five story building in San Francisco, The Coonley Play House and the Midway Gardens and details of furniture and special features of the building. The exhibit itself is to be in a separate room and installed in a characteristic manner. This second paper by Mr. Wright is a timely supplement to the very notable exposition of the artist motives actuating his work, which appeared in the Architectural Record in March, 1908.—Editor.



ATURE has made creatures only; Art has made men." Nevertheless, or perhaps for that very reason, every struggle for truth in the arts and for the freedom that should go with the truth has always had its own peculiar load of disciples, neophytes

and quacks. The young work in architecture here in the Middle West, owing to a measure of premature success, has for some time past been daily rediscovered, heralded and drowned in noise by this new characteristic feature of its struggle. The so-called "movement" threatens to explode soon in foolish exploitation of unripe performances or topple over in pretentious attempts to "speak the language." The broker, too, has made his appearance to deal in its slender stock in trade, not a wholly new form of artistic activity certainly, but one serving to indicate how profitable this intensive rush for a place in the "new school" has become.

Just at this time it may be well to remember that "every form of artistic activity is not Art."

Obviously this stage of development

was to be expected and has its humorous side. It has also unexpected and dangerous effects, astonishingly in line with certain prophetic letters written by honest "conservatives" upon the publication of the former paper of 1908.

Although an utterance from me of a critical nature is painful, because it must be a personal matter, perhaps a seeming retraction on my part, still all that ever really happens is "personal matter" and the time has come when forbearance ceases to be either virtue or convenience. A promising garden seems to be rapidly overgrown with weeds, notwithstanding the fact that "all may raise the flowers now, for all have got the seed." But the seed has not been planted—transplanting is preferred, but it cannot raise the needed flowers.

To stultify or corrupt our architectural possibilities is to corrupt our aesthetic life at the fountain head. Her Architecture is the most precious of the susceptibilities of a young, constructive country in this constructive stage of development; and maintaining its integrity in this respect, therefore, distinctly a cause.

When, twenty-one years ago, I took my stand, alone in my field, the cause was unprofitable, seemingly impossible, almost unknown, or, if known, was, as

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a rule, unhonored and ridiculed-Montgomery Schuyler was the one notable exception to the rule. So swiftly do things "come on" in this vigorous and invigorating age that although the cause itself has had little or no recognition, the work has more than its share of attention and has attracted to itself abuses seldom described-never openly attacked-but which a perspective of the past six years will enable me to describe, as I feel they must render the finer values in this work abortive for the time being, if they do not wholly defeat its aim. Many a similar work in the past has gone prematurely to ruin owing to similar abusesto rise again, it is true, but retarded generations in time.

I still believe that the ideal of an organic* architecture forms the origin and source, the strength and, fundamentally, the significance of everything ever worthy the name of architecture.

And I know that the sense of an organic architecture, once grasped, carries with it in its very nature the discipline of an ideal at whatever cost to self interest or the established order.

It is itself a standard and an ideal.

And I maintain that only earnest artist integrity, both of instinct and of intelligence, can make any forward movement of this nature in architecture of lasting value.

The ideal of an organic architecture for America is no mere license for doing the thing that you please to do as you please to do it in order to hold up the strange thing when done with the "seewhat-I-have-made" of . childish pride. Nor is it achieved by speaking the fancied language of "form and function"cant terms learned by rote-or prating foolishly of "Progress before Preceunthinking, dent"-that unthinkable thing! In fact, it is precisely the total absence of any conception of this ideal standard that is made conspicuous by this folly and the practices that go with it. To reiterate the statement made in 1908:

This ideal of an organic architecture

for America was touched by Richardson and Root, and perhaps other men, but was developing consciously twenty-eight years ago in the practice of Adler & Sullivan, when I went to work in their office. This ideal combination of Adler & Sullivan was then working to produce what no other combination of architects nor any individual architect at that time dared even preach-a sentient, rational building that would owe its "style" to the integrity with which it was individually fashioned to serve its particular purpose—a "thinking" as well as "feeling" process, requiring the independent work of true artist imagination—an ideal that is dynamite, cap and fuse, in selfish, insensible hands-personal ambition, the lighted match.

At the expiration of a six year apprenticeship, during which time Louis Sullivan was my master and inspiration, twenty-one years ago, I entered a field he had not, in any new spirit, touched the field of domestic architecture—and began to break ground and make the forms I needed, alone—absolutely alone.

These forms were the result of a conscientious study of materials and of the machine which is the real tool, whether we like it or not, that we must use to give shape to our ideals—a tool which at that time had received no such artistic consideration from artist or architect. And that my work now has individuality, the strength to stand by itself, honors Mr. Sullivan the more. The prin-ciples, however, underlying the fundamental ideal of an organic architecture, common to his work and to mine, are common to all work that ever rang true in the architecture of the world, and free as air to any pair of honest young lungs that will breathe deeply enough. But I have occasion to refer here only to that element in this so-called "new movement" which I have characterized by my own work and which should and, in a more advanced stage of culture, would be responsible to me for use or abuse of the forms and privileges of that work. Specifically, I speak only to that element within this element, now beyond private reach or control, ruthlessly characterizing and publicly exploiting the cause it

^{*}By organic architecture I mean an architecture that develops from within outward in harmony with the conditions of its being as distinguished from one that is applied from without.

does not comprehend or else that it cannot serve.

Some one for the sake of that cause must have some conscience in the matter and tell the truth. Since disciples, neophytes and brokers will not, critics do not, and the public cannot-I will. I will be suspected of the unbecoming motives usually ascribed to any man who comes to the front in behalf of an ideal, or his own; nevertheless, somehow, this incipient movement, which it has been my life work to help outfit and launch, must be protected or directed in its course. An enlightened public opinion would take care of this, but there is no such opinion. In time there will be; meantime good work is being wasted, opportunities destroyed or worse, architectural mortgages on future generations forged wholesale: and in architecture they must be paid with usurious interest.

The sins of the Architect are permanent sins.

To promote good work it is necessary to characterize bad work as bad.

Half-baked, imitative designs-fictitious semblances-pretentiously put forward in the name of a movement or a cause, particularly while novelty is the chief popular standard, endanger the cause, weaken the efficiency of genuine work, for the time being at least; lower the standard of artistic integrity permanently; demoralize all values artistically; until utter prostitution results. This prostitution has resulted in the new work partly, I have now to confess, as a byproduct of an intimate, personal touch with the work, hitherto untried in the office of an American architect; and partly, too, perhaps, as one result of an ideal of individuality in architecture, administered in doses too strong, too soon, for architectural babes and sucklings; but chiefly, I believe, owing to almost total lack of any standard of artist integrity among architects, as a class, in this region at least. Of ethics we hear something occasionally, but only in regard to the relation of architects to each other when a client is in questionnever in relation to sources of inspiration, the finer material the architect uses in shaping the thing he gives to his

client. Ethics that promote integrity in this respect are as yet unformed and the young man in architecture is adrift in the most vitally important of his experiences, he cannot know where he stands in the absence of any well-defined principles on the part of his confreres or his elders.

If I had a right to project myself in the direction of an organic architecture twenty-one years ago, it entailed the right to my work and, so far as I am able, a right to defend my aim. Also ---yet not so clearly-I am bound to do what I can to save the public from untoward effects that follow in the wake of my own break with traditions. I deliberately chose to break with traditions in order to be more true to Tradition than current conventions and ideals in architecture would permit. The more vital course is usually the rougher one and lies through conventions oftentimes settled into laws that must be broken, with consequent liberation of other forces that cannot stand freedom. So a break of this nature is a thing dangerous, nevertheless indispensable, to society. Society recognizes the danger and makes the break usually fatal to the man who makes it. It should not be made without reckoning the danger and sacrifice, without ability to stand severe punishment, nor without sincere faith that the end will justify the means; nor do I believe it can be effectively made without all these. But who can reckon with the folly bred by temporal success in a country that has as yet no artistic standards, no other god so potent as that same Success? For every thousand men nature enables to stand adversity, she, perhaps, makes one man capable of surviving success. An unenlightened public is at its mercy always-the "success" of the one thousand as well as of the one in a thousand; were it not for the resistance of honest enmity. society, nature herself even, would soon cycle madly to disaster. So reaction is essential to progress, and enemies as valuable an asset in any forward movement as friends, provided only they be honest; if intelligent as well as honest, they are invaluable. Some time ago this work reached the stage where it sorely needed honest enemies if it was to survive. It has had some honest enemies whose honest fears were expressed in the prophetic letters I have mentioned.

But the enemies of this work, with an exception or two, have not served it well. They have been either unintelligent or careless of the gist of the whole matter. It fact, its avowed enemies have generally been of the same superficial, time serving spirit as many of its present load of disciples and neophytes. Nowhere even now, save in Europe, with some few notable exceptions in this country, has the organic character of the work been fairly recognized and valued—the character that is perhaps the only feature of lasting vital consequence.

As for its peculiarities—if my own share in this work has a distinguished trait, it has individuality undefiled. It has gone forward unswerving from the beginning, unchanging, yet developing, in this quality of individuality, and stands, as it has stood for nineteen years at least, an individual entity, clearly defined. Such as it is, its "individuality" is as irrevocably mine as the work of any painter, sculptor or poet who ever lived was irrevocably his. The form of a work that has this quality of individuality is never the product of a composite. An artist knows this; but the general public, nearartist and perhaps "critic," too, may have to be reminded or informed. To grant a work this quality is to absolve it without further argument from anything like composite origin, and to fix its limitations.

There are enough types and forms in my work to characterize the work of an architect, but certainly not enough to characterize an architecture. Nothing to my mind could be worse imposition than to have some individual, even temporarily, deliberately fix the outward forms of his concept of beauty upon the future of a free people or even of a growing A tentative, advantageous forecity. cast of probable future utilitarian development goes far enough in this direction. Any individual willing to undertake more would thereby only prove his unfitness for the task, assuming the task

possible or desirable. A socialist might shut out the sunlight from a free and developing people with his own shadow, in this way. An artist is too true an individualist to suffer such an imposition, much less perpetrate it; his problems are quite other. The manner of any work (and all work of any quality has its manner) may be for the time being a strength, but finally it is a weakness; and as the returns come in, it seems as though not only the manner of this work or its "clothes," but also its strength in this very quality of individuality, which is a matter of its soul as well as of its forms, would soon prove its undoing, to be worn to shreds and tatters by foolish, conscienceless imitation. As for the vital principle of the work-the quality of an organic architecture-that has been lost to sight, even by pupils. But I still believe as firmly as ever that without artist integrity and this consequent individuality manifesting itself in multifarious forms, there can be no great architecture, no great artists, no great civilization, no worthy life. Is, then, the very strength of such a work as this is its weakness? Is it so because of a false democratic system naturally inimical to art? or is it so because the commercialization of art leaves no noble standards? Is it because architects have less personal honor than sculptors, painters or poets? Or is it because fine buildings are less important now than fine pictures and good books?

In any case, judging from what is exploited as such, most of what is beginning to be called the "New School of the Middle West" is not only far from the ideal of an organic architecture, but getting farther away from it every day.

A study of similar situations in the past will show that any departure from beaten paths must stand and grow in organic character or soon fall, leaving permanent waste and desolation in final ruin; *it dare not trade long on mere forms*, no matter how inevitable they seem. Trading in the letter has cursed art for centuries past, but in architecture it has usually been rather an impersonal letter of those decently cold in their graves for some time.

One may submit to the flattery of imitation or to caricature personally; every one who marches or strays from beaten paths must submit to one or to both, but never will one submit tamely to caricature of that which one loves. Person-ally, I, too, am heartily sick of being commercialized and traded in and upon; but most of all I dread to see the types I have worked with so long and patiently drifting toward speculative builders, cheapened or befooled by senseless changes, robbed of quality and distinction, dead forms or grinning originalities for the sake of originality, an endless string of hacked carcasses, to encumber democratic front yards for five decades or more. This, however, is only the personal side of the matter and to be endured in silence were there any profit in it to come to the future architecture of the "melting pot."

The more serious side and the occasion for this second paper is the fact that emboldened or befooled by its measure of "Success," the new work has been showing weaknesses instead of the character it might have shown some years hence were it more enlightened and discreet, more sincere and modest, prepared to wait, to wait to prepare.

The average American man or woman who wants to build a house wants something different-"something different" is what they say they want, and most of them want it in a hurry. That this is the fertile soil upon which an undisciplined "language speaking" neophyte may grow his crop to the top of his ambition is deplorable in one sense, but none the less hopeful in another and more vital sense. The average man of business in America has truer intuition, and so a more nearly just estimate of artistic values, when he has a chance to judge between good and bad, than a man of similar class in any other country. But he is prone to take that "something different" anyhow; if not good, then bad. He is rapidly outgrowing the provincialism that needs a foreign-made label upon "Art," and so, at the present moment, not only is he in danger of being swindled, but likely to find something peculiarly his own, in time, and valuable to

him, if he can last. I hope and believe he can last. At any rate, there is no way of preventing him from getting either swindled or something merely "different"; nor do I believe it would be desirable if he could be, until the inorganic thing he usually gets in the form of this "something different" is put forward and publicly advertised as of that character of the young work for which I must feel myself responsible.

I do not admit that my disciples or pupils, be they artists, neophytes or brokers, are responsible for worse buildings than nine-tenths of the work done by average architects who are "good school"-in fact, I think the worst of them do better-although they sometimes justify themselves in equivocal positions by reference to this fact. Were no more to come of my work than is evident at present, the architecture of the country would have received an impetus that will finally resolve itself into good. But to me the exasperating fact is that it might aid vitally the great things we all desire, if it were treated on its merits, used and not abused. Selling even good versions of an original at second hand is in the circumstances not good enough. It is cheap and bad-demoralizing in every sense. But, unhappily, I have to confess that the situation seems worse where originality, as such, has thus far been attempted, because it seems to have been attempted chiefly for its own sake, and the results bear about the same resemblance to an organic architecture as might be shown were one to take a classic column and, breaking it, let the upper half lie carelessly at the foot of the lower, then setting the capital picturesquely askew against the half thus prostrate, one were to settle the whole arrangement as some structural feature of street or garden.

For worker or broker to exhibit such "designs" as efforts of creative architects, before the ink is yet dry on either work or worker, is easily done under present standards with "success," but the exploit finally reflects a poor sort of credit upon the exploited architect and the cause. As for the cause, any growth that comes to it in a "spread" of this kind is unwholesome. I insist that this sort of thing is not "new school," nor this the way to develop one. This is piracy, lunacy, plunder, imitation, adulation, or what you will; it is not a developing architecture when worked in this fashion, nor will it ever become one until purged of this spirit; least of all is it an organic architecture. Its practices belie any such character.

"Disciples" aside, some fifteen young people, all entirely inexperienced and unformed—but few had even college educations—attracted by the character of my work, sought me as their employer. I am no teacher; I am a worker—but I gave to all, impartially, the freedom of my work room, my work and myself, to imbue them with the spirit of the performances for their own sakes, and with the letter for my sake, so that they might become useful to me; because the nature of my endeavor was such that I had to train my own help and pay current wages while I trained them.

The nature of the profession these young people were to make when they assumed to practice architecture entails much more careful preparation than that of the "good school" architect; theirs is a far more difficult thing to do technically and artistically, if they would do something of their own. To my chagrin, too many are content to take it "ready made," and with no further preparation hasten to compete for clients of their own. Now fifteen good, bad and indifferent are practicing architecture in the Middle West, South and Far West, and with considerable "success." In common with the work of numerous disciples (judging from such work as has been put forward publicly), there is a restless jockeying with members, one left off here, another added there, with varying intent-in some a vain endeavor to reindividualize the old types; in others an attempt to conceal their origin, but always-ad nauseam-the inevitable reiteration of the features that gave the original work its style and individuality. To find fault with this were unfair. It is not unexpected nor unpromising except in those unbearable cases where badly modified inorganic results seem to

satisfy their authors' conception of originality; and banalities of form and proportion are accordingly advertised in haste as work of creative architects of a "new school." That some uniformity in performance should have obtained for some years is natural; it could not be otherwise, unless unaware I had harbored marked geniuses. But when the genius arrives nobody will take his work for mine—least of all will he mistake my work for his.

"The letter killeth." In this young work at this time, still it is the letter that killeth, and emulation of the "letter" that gives the illusion or delusion of "movement." There is no doubt, however, but that the sentiment is awakened which will mean progressive movement in time. And there are many working quietly who, I am sure, will give a good account of themselves.

Meanwhile, the spirit in which this use of the letter has its rise is important to any noble future still left to the cause. If the practices that disgrace and demoralize the soul of the young man in architecture could be made plain to him; if he could be shown that inevitably equivocation dwarfs and eventually destroys what creative faculty he may possessthat designing lies, in design to deceive himself or others, shuts him out absolutely from realizing upon his own gifts-no matter how flattering his opportunities may be—if he could realize that the artist heart is one uncompromising core of truth in seeking, in giving or in taking—a precious service could be rendered him. The young architect who is artist enough to know where he stands and man enough to use honestly his parent forms as such, conservatively, until he feels his own strength within him, is only exercising an artistic birthright in the interest of a good cause—he has the character at least from which great things may come. But the boy who steals his forms—"steals" them because he sells them as his own for the moment of superficial distinction he gains by trading on the results—is no artist, has not the sense of the first principles of the ideal that he poses and the forms that he abuses. He denies his birthright, an act characteristic and unimportant; but for a mess of pottage, he endangers the chances of a genuine forward movement, insults both cause and precedent with an astounding insolence quite peculiar to these matters in the United States, ruthlessly sucks what blood may be left in the tortured and abused forms he caricatures and exploits—like the parasite he is.

Another conditions as far removed from creative work is the state of mind of those who, having in the course of their day's labor put some stitches into the "clothes" of the work, assume, therefore, that style and pattern are rightfully theirs and wear them defiantly unregenerate. The gist of the whole matter artistically has entirely eluded them. This may be the so-called "democratic" point of view; at any rate it is the immemorial error of the rabble. No great artist nor work of art ever proceeded from that conception, nor ever will.

Then there is the soiled and soiling fringe of all creative effort, a type common to all work everywhere that meets with any degree of success, although it may be more virulent here because of low standards; those who benefit by the use of another's work and to justify themselves depreciate both the work and worker they took it from—the type that will declare, "In the first place, I never had your shovel; in the second place, I never broke your shovel; and in the third place, it was broken when I got it, anyway"-the type that with more crafty intelligence develops into the worm." One of Whistler's "coffin "coffin worms" has just wriggled in and out.

But underneath all, I am constrained to believe, lies the feverish ambition to get fame or fortune "quick," characteristic of the rush of commercial standards that rule in place of artist standards, and consequent unwillingness to wait to prepare thoroughly.

"Art to one is high as a heavenly goddess: to another only the thrifty cow that gives him his butter," said Schiller; and who will deny that our profession is prostitute to the cow, meager in ideals, cheap in performance, commercial in spirit; demoralized by ignoble ambition? A foolish optimism regarding this only serves to perpetuate it. Foolish optimism and the vanity of fear of ridicule or "failure" are both friends of ignorance.

In no country in the world do disciples, neophytes or brokers pass artist counterfeit so easily as in these United States. Art is commercialized here rather more than anything else, although the arts should be as free from this taint as religion. But has religion escaped?

So the standard of criticism is not only low-it is often dishonest or faked somewhere between the two, largely manufactured to order for profit or bias. Criticism is worked as an advertising game, traders' instincts subject to the prevailing commercial taint. Therein lies a radically evil imposition that harms the public; that also further distorts, confuses and injures values and promotes bad work; that tends to render the integrity of artist and commerce alike a stale and unprofitable joke, and to make honest enemies even harder to find than honest friends. The spirit of fair play, the endeavor to preserve the integrity of values, intelligently, on a high plane in order to help in raising the level of the standard of achievement in the country, and to refrain from throwing the senseless weight of the mediocre and bad upon it—all this is unhappily too rare among editors. The average editor has a "con-stituency," not a standard. This constituency is largely the average architect who has bought the "artistic" in his architecture as one of its dubious and minor aspects, or the sophisticated neophyte, the broker and the quack, to whom printers' ink is ego-balm and fortune.

So until the standard is raised any plea for artist integrity is like a cry for water in the Painted Desert. As for competent criticism, the honest word of illuminating insight, where is it? Nothing is more precious or essential to progress. Where is the editor or critic not narrow or provincial? Or loose and ignorant? Or cleverly or superficially or cowardly commercial? Let him raise this standard! Friend or foe, there is still a demand for him even here; but if he did, he would fail—gloriously fail—of "success." Is architecture, then, no longer to be practiced as an art? Has its practice permanently descended to a form of mere "artistic activity"?

The art of architecture has fallen from a high estate-lower steadily since the Men of Florence patched together fragments of the art of Greece and Rome and in vain endeavor to re-establish its eminence manufactured the Renaissance. It has fallen-from the heavenly Goddess of Antiquity and the Middle Ages to the thrifty cow of the present day. To touch upon these matters in this country is doubly unkind, for it is to touch upon the question of "bread and butter" chiefly. Aside from the conscienceless ambition of the near artistmore sordid than any greed of goldand beneath this thin pretense of the ideal that veneers the curious compound of broker and neophyte there lurks, I know, for any young architect an ever present dread of the kind of "failure" that is the obverse of the kind of "success" that commercialized standards demand of him if he is to survive. Whosoever would worship his heavenly goddess has small choice-he must keep his eye on the thrifty cow or give up his dream of "success"; and the power of discrimination possessed by the cow promises ill for the future integrity of an organic architecture. The net result of present standards is likely to be a poor wretch, a coward who aspires pretentiously or theoretically, advertises cleverly and milks surreptitiously. There is no real connection between aspiration and practice except a tissue of lies and deceit: there never can be. The young architect before he ventures to practice architecture with an ideal, today, should first be sure of his goddess and then, somehow, be connected with a base of supplies from which he cannot be cut off, or else fall in with the rank and file of the "good school" of the hour. Any one who has tried it knows this; that is, if he is honest and is going to use his own material as soon as he is able. So the ever present economic question underlies this question of artist integrity, at this stage of our development, like quicksand beneath the footing of a needed

foundation, and the structure itself seems doomed to shreds and cracks and shores and patches, the deadening compromises and pitiful makeshifts of the struggle to "succeed!" Even the cry for this integrity will bind the legion together, as one man, against the crier and the cry.

This is Art, then, in a sentimental Democracy, which seems to be only another form of self-same hypocrisy? Show me a man who prates of such "Democracy" as a basis for artist endeavor, and I will show you an inordinately foolish egotist or a quack. The "Democracy" of the man in the American street is no more than the Gospel of Mediocrity. When it is understood that a great Democracy is the highest form of Aristocracy conceivable, not of birth or place or wealth, but of those qualities that give distinction to the man as a man, and that as a social state it must be characterized by the honesty and responsibility of the absolute individualist as the unit of its structure, then only can we have an Art worthy the name. The rule of mankind by mankind is one thing; but false "Democracy"the hypocritical sentimentality politically practiced and preached here, usually the sheep's clothing of the proverbial wolf, or the egotistic dream of self-constituted patron saints—is quite another thing. "The letter killeth"; yes, but more deadly still is the undertow of false democracy that poses the man as a creative artist and starves him to death unless he fakes his goddess or persuades himself, with "language," that the cow is really she. Is the lack of an artist-conscience, then, simply the helpless surrender of the would-be artist to this wherewithal Democracy with which a nation soothes itself into subjection? Is the integrity for which I plead here no part of this time and place? And is no young aspirant or hardened sinner to blame for lacking it? It may be so. If it is, we can at least be honest about that, too. But what aspiring artist could knowingly face such a condition? He would choose to dig in the ditch and trace his dreams by lamplight, on scrap paper, for the good of his own soul-a sweet and honorable, if commercially futile, occupation.

It has been my hope to have inspired among my pupils a personality or two to contribute to this work, some day, forms of their own devising, with an artistic integrity that will help to establish upon a firmer basis the efforts that have gone before them and enable them in more propitious times to carry on their practice with a personal gentleness, wisdom and reverence denied to the pioneers who broke rough ground for them, with a wistful eye to better conditions for their future.

And I believe that, cleared of the superficial pose and push that is the inevitable abuse of its opportunity and its nature, and against which I ungraciously urge myself here, there will be found good work in a cause that deserves honest friends and honest enemies among the better architects of the country. Let us have done with "language" and unfair use of borrowed forms; understand that such practices or products are not of the character of this young work. This work is a sincere endeavor to establish the ideal of an organic architecture in a new country; a type of endeavor that alone can give lasting value to any architecture and that is in line with the spirit of every great and noble precedent in the world of forms that has come to us as the heritage of the great life that has been lived, and in the spirit of which all great life to be will still be lived.

And this thing that eludes the disciple, remains in hiding from the neophyte, and in the name of which the broker seduces his client-what is it? This mystery requiring the catch phrases of a new language to abate the agonies of the convert and in the name of which ubiquitous atrocities have been and will continue to be committed, with the deadly enthusiasm of the ego-mania that is its plague? First, a study of the nature of materials you elect to use and the tools you must use with them, searching to find the characteristic qualities in both that are suited to your purpose. Second, with an ideal of organic nature as a guide, so to unite

these qualities to serve that purpose, that the fashion of what you do has integrity or is *natively fit*, regardless of preconceived notions of style. *Style* is a byproduct of the process and comes of the man or the mind in the process. The style of the thing, therefore, will be the man—it is his. *Let his forms alone*. To adopt a "style" as a motive is to

To adopt a "style" as a motive is to put the cart before the horse and get nowhere beyond the "Styles"—never to reach *Style*.

It is obvious that this is neither ideal nor work for fakirs or tyros; for unless this process is finally so imbued, informed, with a feeling for the beautiful that grace and proportion are inevitable, the result cannot get beyond good engineering.

A light matter this, altogether? And yet an organic architecture must take this course and belie nothing, shirk nothing. Discipline! The architect who undertakes his work seriously on these lines is emancipated and imprisoned at the same time. His work may be severe; it cannot be foolish. It may lack grace; it cannot lack fitness altogether. It may seem ugly; it will not be false. No wonder, however, that the practice of architecture in this sense is the height of ambition and the depth of poverty!

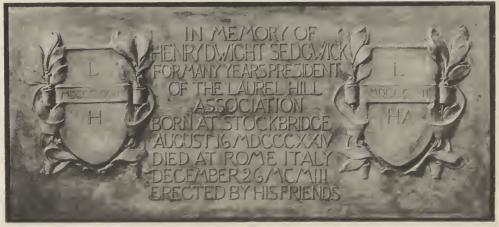
Nothing is more difficult to achieve than the integral simplicity of organic nature, amid the tangled confusions of the innumerable relics of form that encumber life for us. To achieve it in any degree means a serious devotion to the "underneath" in an attempt to grasp the *nature* of building a beautiful building beautifully, as organically true in itself, to itself and to its purpose, as any tree or flower.

That is the need, and the need is demoralized, not served, by the same superficial emulation of the letter in the new work that has heretofore characterized the performances of those who start out to practice architecture by selecting and electing to work in a ready-made "style."



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THE FESTIVAL HALL, ST. LOUIS EXPOSITION. SCULPTURE BY AUGUSTUS LUKEMAN.



Stockbridge, Mass.

A MEMORIAL TABLET. Augustus Lukeman and D. C. French, Sculptors.



AVGVSTVS LVKEMAN A REPRESENTATIVE A MERICAN SCVLPTOR

BY R. MAC DONALD FVRNISS



MERICAN sculpture, as an expression of national individuality, is admitted even by the unprofessionally optimistic, to have at last achieved a definite place in the world's art. Until the last generation it was lamentably retarded by an almost slavish depend-

ence upon old world ideals. When the vision of such men as J. Q. A. Ward, Saint Gaudens and Daniel Chester French began to claim expression they found the conditions imposed by public taste and demand intolerably cramping. Earlier workers had been for the most part content with sentimental stories in marble and the apologetic consideration they justly merited.

It requires something of heroism for a man who sees life in great flashes of virile beauty and to contend for the veracity of his vision against such odds of mediocrity and placid blindness as these men had to face. And it is to the sheer force of their individual sincerity, their vigorous creative imagination and sound technical skill, that American sculpture is enabled at last to stand on its own feet.

A lineal descendant, artistically speaking, of these courageous pioneers, a pupil of one of them, but from the first arrestingly original in conception and methods, is Augustus Lukeman, who recently won, in open competition, the honor of designing the Straus memorial fountain to be erected in Straus Square, New York City.

Mr. Lukeman's fundamental faith in the artistic future of America is part and parcel of the enthusiasm he puts into every detail of his individual work, from the thorough knowledge he has taken the pains to acquire of even the mechanics of its humbler phases to the devotion with which he pursues the most elusive of his ideals. In fact the combination of conscientiousness in the so-called "little things," with a whole-souled loyalty to his vision in its entirety in whatever untravelled paths it may beckon him, is the secret of the distinction that characterizes Mr. Lukeman's versatile work.

THE ARCHITECTURAL RECORD.

SPANDRIL OF THE UNION TRUST COMPANY, PROVIDENCE, R. I. Augustus Lukeman, Sculptor.

The virility, breadth and individuality of both his conceptions and his treatment of these contribute to the definition of a certain coordinate element noticeable in everything Lukeman does, a phase of his genius that exceptionally qualifies him to

collaborate with architects in producing an harmonious whole. An interesting example is found in the four heroic figures he designed for the Brooklyn Institute of Arts and Sciences. Taken as a whole, this symbolic group (thirty in all, the work of a number of artists) form perhaps the most successful collaborative effort of this kind in America, if not in the world. Mr. Lukeman's share of the work comprised four Hebrew figures representing eloquence of Hebrew law, the conviction of the nation's prophecy, the sensuous splendor of its poetry and the combination of Semitic traits with Christian idealism, characterized in St. Paul.

Each of these statues, twelve feet in height, is impressive and satisfying, complete in its individual strength and its artistic and symbolic dignity, but each is at the same time conceived in every detail in relation to its primary character as a decorative accessory in the whole architectural scheme. That Mr. Lukeman studied architecture for the express purpose of facilitating such collaboration is but another instance of his passion for thoroughness. Although these four figures are modelled in the round, they seem to emerge from their backgrounds as integral parts of it. They are only a factor in the decoration of the building; they are at the same time component elements of the structure itself.

Lukeman's "Genoa," on the attic above the architrave of the main facade of the United States Custom House, is another instance of his rare ability in this respect. The ripe culture and splendid spirit of adventure which produced a discoverer of worlds is symbolized in a figure that is a notable contribution to the edifice to which every quarter of the globe pays tribute.

The heroic figure of Manu, mythical law giver of India, as an impersonation of Eastern law, on the balustrade of the Appellate Court Building in New York City; the four statues representing "Agriculture," "Fisheries," "Mining" and "Railroads" just above the architrave on the Royal Bank of Canada, in Montreal, are further examples of Lukeman's ability to do work of this kind. Well defined in detail, though massive in effect, these are well in scale with the scope of the design and are distinctly architectural in spirit.

It may seem trivial to mention the detail of "scaling in" in this connection, since a sculptor would naturally be expected to consider relative proportions at the outset, but the fact remains, nevertheless, many do not so consider, as witness a number of the groups in St. Patrick's Cathedral, New York City, where many of the seated figures would by actual measurement, exceed by several feet the height of the niches assigned to them if they should be placed in upright positions. Lukeman's earliest work in architectural collaborations were the groups "Peace" and "Power," for the pylons of the Memorial Bridge at the Pan-American Exposition, and designing the group "Music" for the Festival Hall, and for the Electrical Building four fig-



FIGURE OF "MOSAIC LAW," BROOKLYN INSTITUTE OF ARTS AND SCIENCES. Augustus Lukeman, Sculptor. McKim, Mead and White, Architects.



"GENOA," THE FIGURE OF COLUMBUS ON THE U. S. CUSTOM HOUSE, NEW YORK CITY. Augustus Lukeman, Sculptor. Cass Gilbert, Architect.

ures, "Speed," "Heat," "Light" and "Power," at the St. Louis Exposition. The admirable conformity of these colossal groups in the matter of light and shade with the striking features of the structure as a whole, won for Mr. Lukeman a medal and many subsequent commissions. This is also true of the Soldiers' Monument at Somerville, Massachusetts, which was erected in 1909.

As a matter of fact a sculptor has to be something of an architect whether his work is directly related to that of the latter or not. In his Soldiers' Monument, for instance, the conception of the whole builds up solidly from the finely



SOLDIERS' MONUMENT AT SOMERVILLE, MASS. Augustus Lukeman, Sculptor. George B. Howe, Architect.

proportioned base to the exquisitely modelled eagle that surmounts the furled flag, and one feels that the exedra is as much a part of the whole as the pedestal. The eye is carried up naturally, by means of the masterly treatment of light and shade, from the massiveness and simplicity to a fine idealization of the spirit of freedom and exaltation in the face of the angel, who does not lead but inspires the

symbolized rank and file who in reality bear the brunt of every conflict. Notwithstanding the forward action of the groups as a whole the sculptor has admirably succeeded in embodying also the suggestion of repose which is the essential in any modelled work.

There is clever handling in the folds of the flag that breaks the monotony of the high lights on the wings with a deep shadow, which accentuates at once the dignity, strength and vitality of the whole idea. Despite the rigidity of the medium the sculptor's skill has actually contrived a suggestion of softness and pliability in the texture of these folds.

Following this in order of completion was the symbolic "Spirit of the Lotus," the memorial of the late Mrs. U. S. Grant, Jr., in San Diego—a draped female figure seated with wings outspread, a lotus in the right hand, the lotus as a symbol



DECORATIVE GROUP, "POWER," ON ONE OF THE PYLONS. PAN-AMERICAN EXPOSITION. Augustus Lukeman, Sculptor.



SOLDIERS' MONUMENT, SOMERVILLE, MASS.

Augustus Lukeman, Sculptor.

of eternity and interpretation of the passivity of nature, hints of the vast solemn quietude of the Beyond, the silence that obliviates despair and hope alike. There is a notable simplicity of line and dignity of pose in the figure and the background, formed chiefly of its own enormous wings, rich in fine symbolic suggestion. The pose is one of passive remembrance but the expression of the face is of wistful reminiscent sadness tinged, as it were, with a vague gleam of hope. The whole is an impressive triumph of virility, subtlety of conception and delicacy of execution. Mr. Lukeman is now at work on "The Women of the Confederacy," a

group which will be presented to the city of Raleigh, North Carolina, by Colonel Ashley Horn, to be placed on the Capitol grounds in that city. His conception of the spirit of his own people (Mr. Lukeman is a Virginian by birth) as embodied in this, is in refreshing contrast to the hackneyed wounded soldier presided over by a weeping relative or even commiserating angel. At the knee of a noble figure-a patrician of the passing generation-a young boy, sword in hand, half kneels, half leans against the knees of the seated woman, on whose lap rests an open book. The eyes of both are fixed on the past, the boy thinks of the heroic

George B. Howe, Architect.



SYMBOLIC GROUP, "MUSIC," FESTIVAL HALL, ST. LOUIS EXPOSITION. Augustus Lukeman, Sculptor.

deeds he will do in the future and the woman, in proud resignation, is unmarred by any touch of rancor.

Lukeman brings the same enthusiasm and originality of expression to the execution of every phase of his work. He is particularly happy in designing bas-reliefs of architectural character, a field in which fertility of imagination and freshness of treatment are often lacking.

His portrait work in relief and in the round, both busts and life-sized statues, has the subtle distinction of a keen critical ability combined with sympathetic insight and that form of genius which has been described as an infinite capacity for taking pains. Of the many examples of this phase of Mr. Lukeman's work, his statue of McKinley in Adams, Massachusetts, and the replica of this in Dayton, Ohio, are perhaps among the best known, but that of Professor Henry, in the Hall of Physics at Princeton University, though necessarily formal in design, is strikingly effective in the dignified simplicity and fine appreciation of the noted scientist's more subtle characteristics. The adroitness of the treatment in the difficult problem of drapery in this subject also shows no mean skill in execution, in which so many otherwise able artists are plainly careless.

The picturesque original of the recently-unveiled equestrian statue to Kit Carson, in the Kit Carson Park, Trinidad, Colorado (a collaborative work of Augustus Lukeman and F. G. R. Roth, the animal painter), has permitted of a freer and more realistic treatment. In the prime of life and in the fullness of manhood, the figure graphically emphasizes the vital characteristics of a dauntless scout. His face reflects the calm repose of conscious strength and the serenity of a certainty of purpose. Standing, as it does, on a slight elevation, it seems to beckon onward to kindred spirits everywhere and sound the reveillé for



A TOMBSTONE IN PINK TENNESSEE MARBLE, WORCESTER, MASS.



SYMBOLIC FIGURE—"THE SPIRIT OF THE LOTUS"—U. S. GRANT MEMORIAL MONUMENT, SAN DIEGO, CAL. Augustus Lukeman, Sculptor.

young America, undaunted in the face of obstacles.

That Mr. Lukeman does not feel it necessary to confine himself in his expression of realism to rough hewn blocks or clumsy peasants but that he is at the same time true to life, is evinced in the modelling of that exquisitely imagined group "The Finding of Moses," in which

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admirable structure and proportion are combined with fine lyric beauty of line. In his "Arethusa," the single figure of a nymph, the same happy union of accuracy, rhythm and poetry of idea is found. In fact Mr. Lukeman puts himself into his work to a great degree, combining as he does singularly sensitive powers of perception, and keen penetration of



"HEBREW PSALMS"—FIGURE FOR THE BROOKLYN INSTITUTE OF ARTS AND SCIENCES. Augustus Lukeman, Sculptor. McKim, Mead & White, Architects.

the Southern temperament, with the concentration of one who has a limitless capacity for plain plodding.

Born in Richmond during the first decade of that time of desolation known as the Reconstruction period, and while still a boy, his parents settled in New York where Lukeman has since then made his home. His first artistic instruction was received at the Academy of Design. He perfected his knowledge of anatomy by two years of study at Bellevue Hospital, then had the good fortune to become a pupil of Daniel Chester French and later one of his assistants. In 1893 Mr. French showed his great confidence in the young sculptor's artistic and executive ability by empowering him to direct the enlargement of a number of groups as well as his statue of the Republic that stood in the Court of Honor at the World's Fair in Chicago. As soon as these studies were completed Lukeman spent a year in Paris, at the Ecole des Beaux Arts, studying under Falguiere and devoting every energy to the perfection of his technique.

It is a habit of Mr. Lukeman to concentrate on a single conception and do no creative work on anything else until that one is practically completed. This perhaps accounts for some part of his ability to get an original expression of even the trivial and commonplace details of his design. He is "all there" in every stroke of his work and is adamant in the face of the sculptor's chief temptation, insidiously augmented by the medium in which he works, to sacrifice the vital spirit of his work to a tootechnical surface dexterity which is often the mere substitution of craftsmanship for inspiration. It is the gift of the "seers in marble" to seize the moment of poise embodying both repose and action the "moment eternal that is life."

Mr. Lukeman has practically mastered the sculptor's chief problem of distributing broad, simple masses in their true relation to the smaller and more decorative parts in colorful harmony, one part accentuating as in a symphony, a big motif richly detailed in tone and rhythm, and breaking broad planes and simple suave surfaces with passages of perfectly modelled details.

Mr. Lukeman believes that the principles of art are simply the basic principles of life itself. Each individual soul has its vision and is "straightened until it be accomplished." Whistler called the genius of the artist a disease which can be relieved only by the production of a masterpiece.

The principles of elimination and organization that underlie all artistic expression, underlie also all purposeful living of life, the modification to conform to the ideal, the seeing of the perfected ideal in the rough hewn or unwrought actual. This is the work of the artist, this his contribution to life, as a whole, as well as contemporary everyday life to his fellows. Nature organizes slowly, painfully, by reiteration, experience; the artist in the fusing joy of his vision does the same thing joyfully. The sincere



FIGURE OF A HEBREW PROPHET FOR THE BROOKLYN INSTITUTE OF ARTS AND SCIENCES. Augustus Lukeman, Sculptor.



"MANU," LAW-GIVER, APPELLATE DIVISION OF SUPREME COURT, NEW YORK. Augustus Lukeman, Sculptor.

artist is of necessity a seer: it is through his eyes that other men see, in his realized vision that they themselves re-create.

Mr. Lukeman believes that realism is not necessarily literalism, and that just because the immature (and in that sense the ugly) seems in the preponderance in the every-day world, the artist is merely true to his sense of proportion in choosing to portray the beautiful beautifully, and even to insist upon the traces of beauty that can be found in such forms as, for the untrained eyes, are wholly devoid of it.

His continual insistence upon the educational value of good statuary as the



BAS-RELIEF LUNETTE FOR THE PEOPLE'S SAVINGS BANK. Augustus Lukeman, Sculptor.

component part of all architecture of the every day environment of plastic minds is part and parcel of his inherent enthusiasm. Pathetically little has been done here in America for the encouragement of art in this field and that little has usually been on the initiative of some individual, rather than through any governmental movement. Probably the decoration of the Congressional Library at Washington gave us the first really big impetus, but this was due largely to the insistence of Edward Pierce Casey who had lately returned from the old world where a nation's art treasures are a definite financial asset.

America is called a practical nation, but probably not one advocate of Big Business in a thousand has ever paused to consider that Italy, for instance, derives an income of some fifty million dollars annually from sightseers in pursuit of its works of art. So elusive and vague a thing as mere taste is a big national asset for France.

The artists who plead for fine mural decorations and good proportions and color in all public buildings of course see the subject only from the artistic, the educational point of view, but it should appeal equally to the hard-headed "penny piler" from another. This would be a phase of business which even prosperity would appreciate.

As Mr. Lukeman says, "If our artists in color and form and our artists in the creating of great fortunes and great world finances could only get together in this matter on their common ground of the principles of elimination and organization which all use equally, though now for divergent ends, the art future of America would be assured—it is now in but the dawn of its day; it has achieved recognition, it must make good its promise."



Mr. Wilfred Beach, a practicing architect of long experience, has prepared a discussion of the architect—his origin, evolution, functions and his troubles. Mr. Beach has handled his subject vigorously and with knowledge of the facts, which he does not hesitate to state in plain terms. Subsequent installments of the article will deal with "Bargains In Architectural Service," "Getting Business," "Competition."





UCH is written on the subject of "Architecture," but too little about the architect. Architects themselves differ widely in their opinions of what an architect really is. Each has his own views on the subject. based somewhat on the manner in which he

conducts his individual practice.

But, though it may not be agreed within the profession as to how "Architect" should be defined, yet there seems to be among those engaged therein a perfect consensus of opinion that the "public" (meaning all persons who are not architects) does not understand the architect *at all*, and that therein lies most of the trouble and vicissitudes incident to the practice of architecture.

If the members of the profession themselves cannot agree, how then can they expect the public to know? Is it a science, business, art, craft, profession, or *what* is it?

Architects habitually assert that, among other things, it is a profession no less than medicine and law. They defend their fees by comparing those of the doctor and lawyer and prove that those of the architect are no larger when, actually, they are very much smaller,

on the average, because the fees of the doctor and the lawyer are practically net, while the architect pays out half or more of his for salaries, rent, supplies, The public appreciates the heavy etc. expenses connected with the carrying-on of a commercial business, but absolutely refuses to make allowance for it in a profession. But how can the public be expected to adjudge the propriety of a fee when that public has no standard by which to gauge it and when there are so many charlatans (and some who are not charlatans) competing for business by offering reduced fees? How is a standard to be found?

Coexistent with the general social unrest of the present day, we observe a prevalent feeling of dissatisfaction among members of the architectural profession. This is an era of apparent prosperity and of almost unparalleled high prices. But close observation discloses the fact that the benefit of this prosperity converges to the few, chiefly those whose incomes are influenced, directly or indirectly, by trusts or combinations controlling wholly, or in part, some commercial commodity. Whether such combinations be of capital or labor, they are reaping rich harvests while they may.

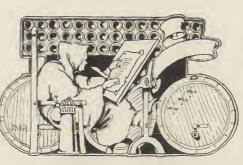
In the business of building we find, outside the field of manual labor, small opportunity for successful combination of effort. True, contractors and supply dealers have tried it at times, but with indifferent success (barring a few notorious exceptions). They appear to be unable to hold tog e t h e r—to withstand the temptation to strenuous competition, at least for any length of time.

But what of the architect? A favored few there be whose clientele are the fabulously rich individuals or corporations who appear to care not what a building costs, nor how large a commission the architect derives. Such architects are riding the crest of the wave of prosperity. Both by opportunity and by the process of natural selection, they are of the best of the day-the leaders of the profession. Small need have they to wish for or to seek a change in conditions. But what of that large company of, perhaps, equally skilled, but less fortunate, individuals? Those whose practice has been in small cities or along utilitarian lines have frequently found it impossible to meet the increased cost of living. In many cases-in far too many cases-they have found no increment adding to their incomes to offset the increased output. Those who were enjoying practices netting five to ten thousand dollars annually a few years ago, and perhaps saving a third of it, now find that saving being eaten up. They have been moving in leading social and business circles-in company which they now find grown too expensive.

In vain they struggle to increase their practices—to get nearer the top of the wave by annexing a few more wealthy

clients. Mayhap fortune favors them, but the odds are against them. The opportunities are few and competition keen.

What are the causes which have operated to bring about a condition so paradoxical a state in which the members of an honorable profession are conscienciously



striving to improve themselves, their work and their condition as well as the value of the service they render, and are yet finding themselves continually beaten by influences at once so subtle and so sinister?

Probably some of our friends among the laity will affect surprise at any complaint that architects are underpaid. It is not unusual to hear the serious query, "Why do architects charge so much?" There may be a few brilliantly successful practitioners who are seriously concerned with the high price of gasoline and champagne, but it is greatly to be feared that ninety-nine per cent. of those in practice have many times wondered "Why architects charge so little?" Is it because many are fools or knaves?

A gentleman of wide experience in building, commenting on the unwillingness of people in general to pay a proper price for anything so intangible as service of a professional nature, observed that the art and business of building are things too diverse to be developed in high degree in a single individual. Art is temperamental, business practical. The artist is generous, altruistic and full of confidence. The soul of business is the reverse of these attributes. When the artist, be he poet, painter or architect, attempts to sell his services, he is at a disadvantage, being averse to bargaining. Thus many are led to accept a low and insufficient commission when they could easily receive an ample fee, did they but know it.

> A prospective client, in "dickering" with an architect, will bare-facedly tell him that he will positively not be employed except at a certain price, though the statement may be merely invented as a means to an end. Wise as owl and smooth as serpent is that needy architect who can "stand pat."





DEFINITION

Like any other art, craft, science, business or profestion, the architect-

ural practice of the present day is a product of evolution. But, more than any other form of human endeavor, architecture is an anomaly in that it is almost equally art, craft, science, business and profession.

Its very diversification

makes it difficult to formulate satisfactory definitions of the words "architect" and "architecture," that is, at least, satisfactory to everyone. There are many good definitions of the ideal architect.

The late Mr. John M. Carrère said, "An architect is a gentleman, an artist and a man of affairs"—a genial conception, indeed, but hardly a definition that will stand the test of universal application.

The Century dictionary defines him as "a person skilled in the art of building; one who understands architecture, or whose profession it is to form plans and designs of buildings and superintend the execution of them."

The definitions given by Webster, Worcester and the Standard dictionaries are very similar to that of the Century. Murray differs by calling him a "masterbuilder," but describing his functions about as above. Sturgis states that he is simply a "man" who executes these duties, which he describes in greater detail.

Fergusson, writing in 1865, declared that "Architecture is nothing more or less than the art of ornamental and ornamented construction," and proves (?) it. All plain building he classes as civil engineering. But we are accustomed to take Fergusson, like Ruskin, with a grain of salt.

Vitruvius, in order that Cæsar may not, by any chance, underestimate the attributes of the fully-rounded architect, takes pains to assure his master that "Ar-



chitecture is a science arising out of many other sciences, and adorned with much and varied learning; by the help of which a judgment is formed of those works which are the result of other arts. . . An architect should be ingenious, and apt in the acquisition of knowledge. . . He should be a good writer, a skilful draftsman, versed in ge-

ometry and the optics, expert at figures, acquainted with history, informed on the principles of natural and moral philosophy, somewhat of a musician, not ignorant of the sciences both of law and physics, nor of the motions, laws and relations to each other of the heavenly bodies."

Mr. Robert Kerr, Fellow of the Royal Institute of British Architects and Professor of Architecture in King's College, London, finds fully as much versatility in the profession of the present day, but distributed among different individ-He is quoted as saying: "Some uals. enthusiastic artists or exquisite are draftsmen, while others make no such pretension. Some are careful scientific constructors, and others nothing of the kind. Some are the most prosaic of building directors in the beaten track of commercial agency, and no more. Others are surveyors, valuers, negotiators, advocates, property agents, accountants, financiers, managers of estates, collectors of rents, and what not, in the greatest variety, and yet architects by education and members of the Institute or other architectural societies."

Mr. J. T. Micklethwaite, another English architect, takes violent issue with Professor Kerr and insists, like Fergusson, that architecture is "building beautifully." He adds that even the public appreciates this and regards architecture "not as an essential part of a building, but an ornament."

This conception of architecture as more properly a fine art, distinguished from architectural engineering, seems to prevail somewhat more in England than in America. Mr. R. Phene Spiers, defining architecture in the *Encyclopedia Britannica*, says it is "the art of building in such a way as to accord with principles determined not merely by the ends the edifice is intended to serve, but by high considerations of beauty and harmony."

The American Institute of Architects has offered the following, officially, as its definition:

"An architect is a professional person whose occupation consists in originating and supplying artistic and scientific data preliminary to and in connection with the construction of buildings, their appurtenances and decorations; in supervising the operations of contractors therefor; and in preparing contracts between the proprietors and contractors thereof."

This appears to be the best definition of all; but note the expression "supervising the operations of contractors" instead of "supervising the construction," as if the contractor was an absolute necessity in building operations.

A few of our states, notably Illinois, New Jersey and California, have attempted to define the duties of the architect and regulate his practice. A bill to the same purport has also been framed for New York. But, in general, the public with careless indifference assumes that an architect is any man or woman who uses an architect's sign, and the public lets it go at that. As usual, the public is very nearly right in this, as conditions are to-day.



FVNCTIONS OF AN ARCHITECT

The writer believes that an architect is simply a creator of structures, with duties so many and varied as to be nearly impossible of complete enumeration. Let us say that, in presentday practice, the more important of these functions, somewhat in the order of their relation to a structure, are after this wise:

1. Getting business.

2. Corresponding.

3. Interviewing clients.

4. Selecting a site.

5. Preparing a mental or verbal prospectus.

6. Evolving a schematic problem.

7. Executing preliminary sketches.

8. Perspective drawing.

9. Rendering in water color.

10. Rendering in pen and ink.

11. Developing the problem.

12. Computation and design of supporting materials.

13. Computation of footings and sustaining powers.



14. Investigating and selecting materials of construction, both concealed and exposed.

15. Organizing and managing an office force.

16. Preparing working drawings in detail.

17. Writing specifications.

18. Surveying quantities (for estimating purposes).

19. Estimating costs.

20. Selecting and arranging sanitary equipment.

21. Designing the heating system.

22. Designing the ventilating installation.

23. Mastering the acoustic problems.

24. Arranging and engineering the artificial lighting.

25. Designing the power plant.

26. Designing the refrigerating equipment.

27. Arranging the bell and telephone wiring.

28. Experting the fire-fighting equipment.

29. Designing and selecting fixed and movable furniture.

30. Laying out special equipment.

31. Experting ecclesiastic and fraternal ritual.

32. Designing ornamentation and embellishment.

33. Interpreting building law.

34. Drawing up contracts.

35. Superintending construction.

36. Auditing accounts.

37. Arbitrating disputes pertaining to building.

38. Supervising decorating, landscaping and other accessories.

39. Collecting accounts.

To the lay mind the list is formidable indeed, yet it is far from complete.

There is obviously a considerable variance in the relative importance of the different functions. Probably no two architects would agree as to which are the more important, though it may be safely said that, in any work of magnitude, nothing is of greater import, architecturally, than the evolving of the general scheme; yet this is too often definitely decided before the architect is first consulted, to the great detriment of the project.

Many architects give much of their time to preliminary sketching and rendering; others leave these features to their assistants and themselves specialize on this or that other phase of their practice. No architect of any large practice executes the working drawings which bear his name, and yet it is by these and his sketches that he is often judged by the public, which seemingly cannot

understand that such work is the most easily relegated of any of his duties that an architect can only be properly estimated by his buildings.

It goes without saying that one who personally exercises



even a major portion of such numerous duties as those listed is, of necessity, a man of comparatively small practice. As that practice increases he assigns certain tasks to his subordinates, reserving for his own endeavor those occupations which he deems most suitable, convenient or attractive. It is conceivable that the head of a considerable or-

ganization might find time for naught but its management or, delegating that, confine his energies to consultations with clients, actual and prospective. He is none the less an architect.

Probably no one man could unite, with any great degree of excellence, all the attributes which could be alleged as essential to the complete architect. This ideal state is most nearly attained in the association on equal terms of two or more individuals, the complements of each other; or it is achieved similarly through the acquisition by a single person of an organization of several specialists in the various subjects appertaining to building.

This specializing has become so intensified that many of the proclivities of the average architect have, in the development of the larger offices, been assigned to so-called engineers of construction. Thus we have the foundation engineer, the structural engineer (for steel work), the fireproof engineer, the reinforced concrete engineer, the sanitary engineer (for plumbing and sewerage), the heating engineer, the ventilating engineer, the electrical engineer, the mechanical (or power) engineer and others.

Among all these, what, then, is the architect?

Perhaps a brief reference to the evolutionary history of the chief functions which he performs may help us to a reasonably accurate answer; sufficiently accurate, that is, to b e of suggestive value.







EVOLVTION OF THE ARCHITECT



In very early times, the architect was, no doubt, of two rather distinct

types: the one a chief artisan or graduate craftsman, whose ambition or superior intelligence made him a leader of his fellows; the other an artist or dilletante who, either as a professional or amateur, interposed between the chief artisan and his feudal lord, or employer, the

"Owner." These two characters, either of them more or less architect, more or less master builder, have continued in varying status through all the ages and even down to the present day; for we often find the prospective builder dealing directly with his contractor, expecting the latter to furnish such drawings as are needed for the work without recourse being made to an architect. Thus we have the "architect-and-builder" of our smaller communities, called contemptuously by his more professional confreres an "artchitect" to indicate the lack of education he is supposed to have enjoyed. We even see contractors, who have thus taken commissions directly from the owner, later employing some needy architect to make the drawings.

Just prior to the Renaissance, the artist-architect had almost disappeared and the artisan-architect was in the ascendency. We have observed that these were close-bound to precedent; that each

worked with little or no initiative, much as the European stone cutter of the present day lays out his broken ashlar wall—just as his father and grandfather and great-grandfather did. What artistic ability and aspiration existed during that time was in the keeping of the monastic orders, which had, as we know,



practically a monopoly of all book learning. Certain monks, with a bent

in that direction, worked with the chief artisans, made drawings and were, in fact, supervising architects, much as we find them in the Jesuit order to-day.

Gradually came the Renaissance and the appropriation of the title "architect" to the exclusive

use of the man of learning and artistic instincts; and the relegation to second place of the master craftsman.

In tracing the evolution of the practice of architecture during the last four to five hundred years, we note a considerable change in the relation between architect and client. The artisan-architect was a *de facto* builder, both a designer and foreman of construction, responsible for the character and quality of labor secured and with a personal experience in such labor, gained through a rigid apprenticeship. Then came in contract labor, the head of a guild undertaking to furnish certain workmen at a given price. Gradually out of this resulted a new function for the architect—that of keeping the builder honest.

As the business of the "undertaker" of the eighteenth century developed into that of the general contractor of the nineteenth century, sharp practice probably increased with closer competition. The new function of the architect gained

> added importance until, in the eye of his client, it was scarcely second to the preparation of drawings and specifications. The owner considered the architect more in the light of a building spy than as a superintendent. Undoubtedly many architects performed this duty much after the manner of a detective.





EFFECT OF THE DARK AGES

Perhaps the evils of all kinds of contracting reached their lowest level about the time of our Civil War, when the terms "contractor" and "crook" became almost synonymous. And, too often, as sometimes happens with the paid spy, the so-called architect found it vastly to his financial advantage to favor the other side; and

the spy became a crook also. Largely the public was to blame, for is it not a truism in our human economy that the public is no better than its servants, and they no worse than their masters?

Architects, as well as contractors, were strenuously competing for business. Standards were not high. There were practically no architectural schools available. The English system of architects' apprentices prevailed in a measure, but without the essential bond-servant tie. The French system of academic education and ateliers came in subsequently. These years prior to the Philadelphia Centennial, and even somewhat later, have been called the "Dark Ages" of American architecture. There were few shining lights.

The majority of self-styled architects of that time were merely graduate builders, carpenters mostly, who had learned to draw their plans on shingles. Owners deliberately sought to take advantage of these ignorant but ambitious individuals and beat down their fees to the lowest possible figures. Small wonder that these

men, with their acquired knowledge of the "tricks of the trade," made up their deficiencies in ways secret and devious, sharing extras with contractors and accepting bribes for passing faulty materials.

It is related of a certain contractor that, when he submitted a price on an



extra to a court house building committee, which demurred at the amount and were sustained by the architect, the contractor exclaimed: "Then I'll deduct the hundred dollars the architect told me to put in for him." And he did.

Material supply houses learned to introduce their wares or increase their sales by paying underhand

commissions to architects for recommending or specifying their products, or for acting as agents, *sub rosa*. Sometimes, more subtly, they paid for "advertising" space (which they considered absolutely worthless otherwise) on architects' specification covers; or they made architects substantial "presents." To this day there are material concerns who openly insult the entire architectural profession by writing letters and even sending out printed matter to architects offering bribes; an indication that the evil has not, by any means, been eradicated.

One of the largest manufacturers of building equipment in the United States, when censured on account of the "commissions" offered architects by his representatives, excused them on the ground of simple business necessity. Said he, "I was never knowingly responsible for such a payment, but I employ my salesmen to get business. A large share of our dealings are in public work, where we have to do with politicians as well as architects. I assume that my agents make these sales in the most advantageous man-

ner possible. They know that, if they get profitable orders, their jobs with us continue and their expense accounts are not too closely scrutinized; without such orders, they will be seeking other employment very shortly. Naturally, if a man must be bought, they buy him, I suppose, and add the

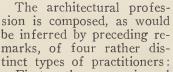
expense to the cost of making the sale; but, personally, I know nothing whatever of the matter and prefer not to know. Even my sales manager does not investigate. But of this I am confident: that, if I were to issue positive orders that no more contracts for this concern were to be secured by unethical means, I might as well shut up shop at once. The sheriff would put a padlock on the works if I didn't."

This was said nine years ago, but is probably too nearly true to-day. The stink of the Pennsylvania State Capitol scandal is still too fresh in our nostrils.

It is a peculiar characteristic of this form of dishonesty that the bribe-giver considers himself less reprehensible than the one who accepts; thus the elastic consciences of some individuals will persuade their masters that, though the architect or other purchasing agent who has been subsidized is a contemptible thief, yet he who contaminates him is a perfectly proper and upright gentleman of business.

63

ATTITVDE OF THE PVBLIC TOWARD THE ARCHITECT



First, the experienced ethical man.

Second, the novice of proper education and training, lacking only experience.

Third, the "artchitect."

Fourth, the shyster.

We will arbitrarily allude

to the first only as architect, calling the others for convenience by their more descriptive titles.

It does not appear difficult on the face of the matter for the public to discriminate between the different types, if it would; but there is just the trouble: it wont.

A prospective builder seeking his first experience does not, ofttimes, appear to care who makes his drawings, just so he obtains them cheaply.

Having no particular respect for the building he is about to erect, he has even less for the architect who appears to be a necessary evil in the affair. The architect himself, if he be of the first class, is probably not lacking in self-esteem and is far from relishing the patronizing attitude of the prospective client. He neither kotows or cringes; and the man with money to spend is too likely to resent what he considers "high and mightiness" in one who is only a servant after all. And, if the client be a

woman with a house to build, the kind of woman who has already made her own plans and only needs an architect "to kind o' put on the finishing touches." ("You know, if I were a man, I should just love to be an architect. It's such nice, clean work. And everybody says I'm so artistic. You know I've

says I'm so artistic. You know I've studied china painting. I'm sure I could succeed at this without half trying. Of course, *these* are only rough sketches and my husband says they are not to scale, whatever that is. But I planned a real model house once for our settlement work club and all the other ladies thought, etc., etc.") If she be that kind of woman, she will be very easily offended by any lack of tact on the part of the architect.

You can hear her a year or so later saying: "I know the house isn't just what it should be, although I had it all worked out exactly as we wanted it; but the architect just simply spoiled it; and I had it designed so artistically, too."

"I always wondered why you didn't go to Mr. Blank. He has built some beautiful homes out on the Drive."

"Well, I did go to see him first. But he was so horrid and dictatorial, I sim-



ply couldn't stand him. I just felt like a little child when he talked to me. He said he wouldn't do this and I couldn't have that, and anyway it would cost a lot more than we had figured on. I just made up my mind I wouldn't have any house at all if I had to have him plan it. So I went to Mr. Brown.

I know he is only a carpenter, really, but he could at least do as he was told, though he deceived me dreadfully about the cost."

"Oh, they all do that. It's proverbial that you never can depend on an architect's estimates, you know."

"Of course, you can't. We found that out to our sorrow. But we feel worse about the outside. We only told Mr. Brown what we wanted in a general way and gave him a kodak of the Smith house to follow and he simply butchered it."

to follow and he simply butchered it." "Yes. I know the Smith house. Mr. Blank planned that, didn't he? But I didn't suppose yours was modeled after it."

"Of course, you'd never suspect it. The next time we build, we're going to send away for plans of one of those perfectly charming bungalows you see so many pictures of in the magazines nowadays; one with a 'patcho' in the center, real Spanish you know, like the Grays have down in Florida."

It is thus greatly to be feared that the dignity of the real architect does not command the respect of the uninformed and careless public.

The building supply trade constitutes a considerable factor of that public which architects desire to see enlightened. The attitude of these people to-

ward the architect is of great importance because of its reflexive influence. If a large portion of the material men of the country believe that architects in general are "looking for something on the side," they



probably believe also that those who will not accept it are either supremely foolish or are getting it elsewhere. This opinion of architects is easily passed on into too credulous ears. We know that there still exists in the business world a large number of financially successful men who believe that "every

man has his price." Perhaps they also know that if it were less true, they themselves would not have arrived. Such men will not hesitate to impute improper motives to the most upright character, and it would be an exceptional reputation that would be absolutely impregnable to such slander.

Thus we have heard that this architect owns stock in factories from which he insists upon contractors making purchases of material for use in his buildings; another is said to furnish a very limited number of blue prints to contractors and to charge many times the value of others that are found necessary; or we are told that still another habitually favors certain manufacturers who have done much for him-their competitors cannot even get a hearing with him. And the tra-ducer will add, "But I don't really blame the architect. I'd get all I could in his place, and so would you. See how the owner cuts him down when he gives him a job-makes him take the work for almost nothing."

In such manner is the whole profession besmirched by the remissness of the quacks and those who profit by their machinations. The evils are plainly the direct fault of the public, because the public does not attempt to discriminate between the ethical architect and the

> charlatan. It would appear that it really prefers to be humbugged.

We find this indifference sometimes so marked as to be well nigh inconceivable.

The common council of a small city



met to select an architect for their proposed city hall. They had taken no trouble to advertise the matter and had only six candidates, one of whom, a member of the Institute, happened to be in the town on other business. Hearing of the work to be assigned, he called upon the mayor, who assured him

that, there being no local practitioner, all comers would be treated alike. At the solicitation of the architect, the mayor requested the city attorney to wire certain parties for information as to the professional standing of this particular candidate. Nine such telegrams were sent (at the expense of the architect). The town council met in the evening and listened to each applicant in turn, asking but few questions, and these briefly touching upon the fee to be charged. When the stranger appeared before them without pictures or other paraphernalia of his "trade," he found himself at a considerable disadvantage. He requested the attorney to read the answers to the telegrams, which were accordingly produced, but, before they could be read, the mayor interposed, saying: "Never mind the telegrams. We are quite willing to assume that you are all right. What we would like is for you to show us what kind of a city hall you could build for us."

The telegrams remained unread and the work was given to the *lowest bidder*, an "artchitect" who boasted that he had been a "practical man" until he was forty years old and then took up architecture because he knew building so much better than these "fancy fellows"

who had never in their lives worked at a bench. His charge was two hundred and fifty dollars (one per cent.) for full services.

Owners continue to employ these shysters, even when they know them to be such, but thinking to take advantage of their low rates and deeming themselves



clever enough, forsooth, to beat them at their own game. Fatuous fallacy! Such owners only connive at the evils and help them along.

The business section of a small town burned. The business men got together and agreed to build their new stores much better, even going so far in the

right direction as to adopt a building code with certain fire preventative Then some one suggested restrictions. that, having gotten together, they might save considerable money by agreeing to employ an architect jointly and getting a combination rate. A man was found who had "ARCHITECT" printed on his stationery and who was willing to sell them plans and specifications for twentyfive dollars per building. The offer was accepted, in spite of the protest of a real architect who attempted to show them that buildings could not be properly designed that way.

Strange as it may seem, although they wanted fairly good buildings, as was evidenced by their previous action, yet they all went into the deal.

Their "plans" came by express, C. O. D. The buildings were started under hastily prepared contracts. The contractors never told that they were able to do about as they pleased from start to finish, that the details did not fit the plans nor the plans fit the elevations, and that the sub-contractors furnished their own drawings and could also do as they pleased. The owners had saved a lot of money (they supposed) by refraining from employing an "expensive" architect and by not wasting good cash in having

a useless superintendent on the work. It would have been hard to convince them that they spent their savings several times over in paying for things they didn't get.

The real extravagance was in not employing an "expensive" architect and paying him to supervise as well as to design the work.





DAYBED OF CAROLEAN PERIOD SHOWING STRONG FLEMISH INFLUENCE IN STRETCHERS.

FVRNITVRE FROM THE ARCHITECTVRAL VIEWPOINT

By H.Donaldson & berlein — ⁹⁴⁴ Abbot M^cClure

Cromwellian and Carolean Periods



XTREMES meet. They always have met. Doubtless they always will, so long as human nature remains unchanged and joy and sorrow, love, hate and all other passions in the gamut of emotions are separated each from its opposite by merely a hair's

breadth. The arrested pendulum, once released, swings in a trice to the farthest end of its arc. So, too, is it in matters of artistic taste, political adherence or any of the sundry social, intellectual or moral tendencies and principles by which our conduct is swayed.

The story of English furniture evolu-

tion presents no exception to the usual phenomenon of meeting extremes. During most of the doleful and dour Commonwealth period, as might be expected, there was little of note in the way of artistic development, either architectural or mobiliary. The times were too troublous and depressingly austere and the people of artistic susceptibilities were either in exile on the Continent, or else laboring under a cloud of disabilities at home.

Three important influences, however, that were plainly to be recognized in furniture forms, must be taken account of. In the first place, the prevalent social austerity of the day demanded simpler furniture designs and checked the exuberant profusion of carven ornamentation that had characterized the epoch im-



PANELED AND INLAID CABINET OF CAROLEAN PERIOD SHOWING GEOMETRICAL PANEL ORNAMENT AND INCREASING TEND-ENCY TO INTRICATE INLAY.

mediately preceding. Although the contour of carcase work and tables and chairs remained much the same, the rich and somewhat oppresive elaboration of carved detail gave place to a far more general use of turning. Table legs, pil-lars of court cupboards and chair legs, stretchers and backs now exhibited turning where hitherto various carved decorative motifs had been the rule. In many instances the turning was exceedingly beautiful and graceful and possessed of a more convincing character than the rich but often ill-judged conglomeration of carved patterns reflecting a debased and mixed Renaissance and Mediaeval conception of adornment. The note of simplicity in some of this Commonwealth furniture is highly agreeable by way of contrast.

In the second place, we find what can only be expressed by the term "democratization" of furniture. This influence was politically significant, and we find the strongest evidence of its presence in the greater number of chairs that came into use. Before the Commonwealth era, chairs had been comparatively few in number and were regarded with great reverence as indicative of the personal dignity of those occupying them. They were meant for use by the heads of fam-

ilies, honored guests and persons of note, while children and servants customarily occupied stools. With the rapid increase of levelling democratic notions that marked the overthrow of the Royal Government, it was no uncommon thing for servitors to consider themselves quite the equals of those whom they had erstwhile looked up to as their betters. Conse-quently, they felt at liberty to occupy chairs, indicative of distinction and, accordingly, chairs increased prodigiously in popular use. The old carved wainscot or panel-backed chairs were altogether too elaborate to meet the demand of increased requirements, and a new type was evolved in response to present needs. having a low, square, padded back. These Commonwealth chairs, as they are commonly called, had considerable merit, both because of their simplicity and the goodness of their lines. At first they were usually upholstered in leather, but after the Restoration, when the taste for luxury was again unrestricted, both seat and back were often covered with "turkey-work" or with velvets and brocades. The settles with plain panelled backs that were made in considerable numbers at this time had no little grace of line.



DETAIL OF CABINET SHOWN ABOVE.

The third important influence, or rather set of influences, that made a deep impress upon the furniture development of the middle of the Seventeenth Century came from the Continent and more especially from Holland. Although Continental influences had not been without their effect previously, they had usually been tempered and modified. Now they exerted a more direct stress and one instance of their potency was evident in the taste for applied panelling in geometrical designs as a favorite form of embellishment in lieu of carving.

This panelling, which came into vogue just about the Cromwellian period, and enjoyed considerable popularity till the end of the Carolean epoch, was achieved by applying moulding and sometimes, also, bevelled embossings of the required shape, on the flat surface of the cabinet, cupboard, chest, sideboard or whatever the piece of furniture might be, and was remarkable for the great variety of forms the makers seemed able to devise. While much of this applied panelling was extremely fantastic, a good deal possessed very real merit.

When we consider the history of the times, it is not at all surprising that contemporary English furniture should have betrayed a lack of invention nor that any simple and easily executed form of embellishment should have been welcomed from an outside source. Some of the Cromwellian pieces, because of their wholesome simplicity, were unquestionably in better taste than what preceded or followed and, for the same reason, they are often more agreeable to the liking of the present day.

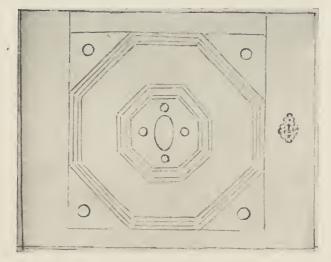
Even before Cromwell's death, certain manifest evidences plainly indicated that the people were growing weary of the rigid severity of Puritan forms and when the Restoration happily brought the king back "to enjoy his own again," the pendulum bounded off to the other end of its course and we find the utmost elaboration of adornment eagerly welcomed on all hands with a sense of vast relief. In no single instance, perhaps, is this natural revulsion of feeling more faithfully reflected than in the form of chairs, especially the sort known as "Restoration" chairs, whose makers not only lavished



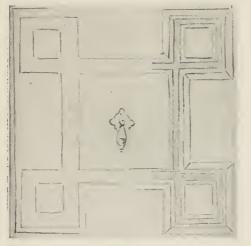
RESTORATION CHAIR WITH CROWN CREST-ING AND BAROQUE INFLUENCE IN LEGS AND STRETCHER.

a wealth of carving upon the ornamentation of legs, stretchers and backs, but lost no opportunity to work in the royal crown as a frequent decorative *motif* to attest their ardent loyalty.

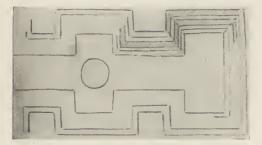
We must not, however, confound the exuberance of carving and the rich profusion of adornment that obtained in the Carolean period with the styles that prevailed before the day of the Commonwealth. The Great Rebellion gave the last blow to English mediævalism as a force to be reckoned with. At the Restoration a wave of foreign influences del-



DETAIL OF LATE CROMWELLIAN OR EARLY CARO-LEAN GEOMETRICAL PANELLING SHOWING FLEMISH INFLUENCE.



DETAIL OF PANELLING AND CHARACTER-ISTIC DROP PULL.



DETAIL SHOWING DIVERSITY OF PANEL SHAPES.

uged the land, and England ceased to be either mediæval or insular. Where, aforetime, foreign tastes and tendencies had filtered in gradually through various modifying media, they now poured in freely from overseas in a veritable torrent. The French influence, quite naturally, was most direct and powerful, then came the Dutch and Flemish, while the Portuguese, Spanish and Italian lagged not far behind. London-and we must regard London as the standard by which to set the chronometers of our historical judgmentwas the crucible in which all these influences were fused into one congruous whole, and

an event was soon to befall London that would blot out nearly all its architectural past. In 1665 came the Great Fire, and when the city arose from her ashes it was a new London, dominated by a vigorous Renaissance spirit, flourishing and growing rapidly into modern manifestations.

With this wiping out of old traditions, architectural and mobiliary, came an access of grace and elegance plainly appreciable in both design and execution. The older modes of adornment, of course, persisted vigorously in provincial districts, but in London-and London set the fashions-we find the old semi-barbarous forms, geometrical and other-wise, supplanted by foliage, flowers and figures carved in a more natural and skillful manner. Not only does the skill of the craftsmen seem to have increased greatly, but freed from the rigidity of old, conventional trammels, there is everywhere apparent a broader treatment and a large liberty of interpretation, even where some of the old motifs were employed or slightly altered and adapted.

It is important for us to note two especially significant events if we would trace the intimate connection between architecture and furniture at this time the rise of Grinling Gibbon and his school of wood carvers and the coming of the



CABINET OF LATE CROMWELLIAN OR EARLY CAROLEAN PERIOD SHOWING INLAY, SPLIT BALUSTER ORNAMENT, GEOMETRICAL PANELLING AND STRAPWORK WITH OVAL BOSSES ALL COMBINED.

Baroque influence into England. Some years were to elapse between the Restoration and the architectural manifestation of a strong Baroque feeling, but, in diciously used, is a good thing and goes this respect, as was so frequently the case, furniture was the first to show a change of tendency and presage later architectural development.

It does not particularly concern us at this point to enquire into the origin of Baroque motifs nor to follow the evolution of the style through its varied contortions and geographical progress until it took root in British soil. Suffice it to say that, for us, the Flemish scroll is the visible symbol of its existence, the very epitome of its essence, both in English

furniture and architecture. The Baroque tendency is much like a highly spiced and fiery sauce—a little of it, jua great way, but, too freely used, it is both deadly and ridiculous.

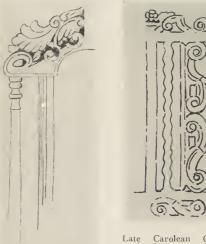
Fortunately, kind Providence arrested its course before it reached the danger point in English architecture and furniture. Its ear-mark, in the shape of the Flemish scroll, we find architecturally displayed in door trims, both exterior and interior, devices of pretentious overmantel embellishment, and at the sides of windows. Breaking out late as it did in English buildings, it persisted with a degree of stubborn vitality into the



FLEMISH SCROLL CRESTING OF CAROLEAN CHAIR.



DETAIL OF LATE CAROLEAN CHAIR STRETCHER EXHIBITING GRINLING GIBBON INFLUENCE.

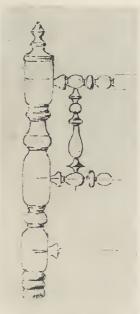


Late Carolean Chair showing recurrence of Flemish Scrolls and Baluster Turning.

Late Carolean Cresting showing Gibbon Influence and Architectural Columns.

Queen Anne period, and even showed traces in Georgian work.

In furniture we find the self-same Flemish scroll appearing not a great many years after the Restoration. It was plainly visible in the legs and stretchers of chairs, likewise in the arms,



LATE CROMWELLIAN CHAIR BACK DETAIL WITH VARIED BALUSTER TURNINGS.

and not a few of the chair backs exhibited the same *motif* ingeniously incorporated in their designs. In the hands of intelligent craftsmen it was susceptible of most graceful and agreeable treatment, and, long after the close of the period to which its advent belonged, a slight modification of its curves gave us some of the most beautiful chair backs of the William and Mary and Queen Anne periods.

The mutual interaction between architectural and mobiliary forms was more visibly synchronous in the case of Grinling Gibbon, the father of English wood carving, and the followers whom he inspired. During the reign of the Merry Monarch they wrought marvelously, and with such consummate skill and delicacy that their work has never been surpassed. Nearly all of Gibbon's own work was architectural, and not a little of it was done in situ. Indeed, it is doubtful whether he ever turned his hand to the carving of any pieces of furniture other than mirror frames. Nevertheless, his influence upon furniture was most potent, and the sort of carving that Gibbon himself lavished upon screens,

overmantels, cornices, balustrades and over-door embellishments the school of carvers, whom he had inspired, imitated, so far as conditions would permit, in the adornment of furniture.

The character of carving, beginning with the Restoration, was greatly modified by another cause also. Up to that time oak had been the staple wood for all furniture construc-tion. While other sorts of wood had occasionally been used, oak was the rule, the "standby" for all cabinet making purposes.

From the Restoration onward, however, walnut rose rapidly into favor and popular use, and the difference in the character of the wood, which lent itself more readily to carving in the round as well

the Flemish scrolls, which came back with the Royalist refugees from the Continent, dominating much of the furniture design and reflected a few years later under more rigid architectural forms. These

as to greater delicacy of workmanship, inevitably exerted a farreaching influence which made itself felt in both the design and adornment of furniture.

For the more elaborate carving, where all manner of intricate devices had to be wrought with the most scrupulous nicety and precision, pine or lime wood afforded the best medium and made possible the execution of work that would have been

CHEST OF DRAWERS, LATE CROMWELLIAN, DECORATED WITH ELABORATE AND MUL-TIFORM GEOMETRICAL PANELS. THE BUN FEET ARE CHARACTERISTICALLY FLEMISH.

two points of contact and relationship between the

furniture and the architecture of the period are the most significant and furnish the key to the whole situation when one is seeking a foundation upon which to establish a standard of historically accurate, decorative congruity for the period under con-

Bun feet, Spanfeet, spiral ish turnings and various other furniture details ordi-

sideration.

MIRROR FRAME CARVED IN MANNER OF GRINLING GIBBON SCHOOL. LATE CHARLES II.



To sum up, then, briefly, we find the rich and wonderful carvings of fruit, flowers, foliage and figures used for architectural embellishment, reflected in the better sort of furniture and



LATE CAROLEAN SOFA SHOWING VARI-COLORED PETIT-POINT UPHOLSTERY.

narily met with in the chairs, tables and cabinet work of the Cromwellian and Carolean periods are clearly traceable to definite foreign influences, which all combined to impart an heterogeneous and cosmopolitan character to the household gear of the latter part of the Seventeenth Century. Some of these details, if one is possessed of antiquarian tastes and a sufficient amount of curiosity, would be found, upon enquiry, to have originated in various parts of the Far East, and to have traveled westward in the wake of the nations who affected trade with the particular localities to which they were peculiar.

In addition to carving, many other decorative processes were finding more and more favor. With the refugees and the courtiers who attended the king, when he returned from exile, came a taste and demand for rich upholstery stuffs and hangings. Luxury was everywhere rampant, and the materials to gratify each latest fancy were eagerly sought for and imported, often at great price. Full account must be taken of the gorgeously colored and deftly woven fabrics to be found in the houses of the great and wealthy if we would thoroughly understand the mobiliary history of the period in all its bearings.

Besides the gorgeous hued fabrics which delighted the eye, we find another polychrome element to reckon with in the marqueterie and inlay now so extensively applied to the adornment of furniture. Much of it was exceedingly delicate in execution, and its decorative value was of an high order.

It was during the latter part of this period, too, that the taste for lacquer amounted to a positive mania. It was impossible to supply the demand with importations, and so, perforce, the people fell to doing their own "Japanning" as they termed it. Indeed it became a fash-

ionable pastime and polite accomplishment.

In a careful and critical consideration of the furniture resources in the reigns of Charles II. and James II. one cannot fail to be impressed with the fact that decorative possibilities were vastly increased. Both variety and elegance marked the mobiliary development and gave brilliant promise of the achievements of the Eighteenth Century.



CHARLES II. CHAIR SHOWING TYPICAL SPIRAL TURNING.



IX.--Lighting of the Home.--Continued

Note.—The subject of local and general lighting is discussed with reference to the location of outlets and to reducing the initial installation expense. A discussion of the lighting of various interiors follows. The purpose of the room is determined, and lighting to satisfy its purpose defined. The results of the author's work are represented by night photographs. The decorative possibilities of lighting in the home are indicated. The next article includes the subject of display window lighting.—Editor.



NSTALLATION cost can be greatly reduced by a thorough analysis of the lighting requirements of an interior. Every room has an object—some definite purpose. In the last article a discussion of average conditions, typical of those encountered by the average architect in his practice, began with an analysis of the lighting requirements of a

living room, which represented strictly average living conditions. These demand the following observances:

1. Elimination of glare by concealment or modification of light source, and selection of source with respect to maintenance.

2. Elimination of white light by color modification through amber glass, or by staining bulbs or tinting ceiling (indirect lighting), giving restful amber light.

3. Meeting both general and local requirements by specifying a sufficient number of outlets, particularly on floor and baseboards.

4. In behalf of art as well as utility, refusing to specify lighting equipment for residence lighting which is in the least suggestive of commonplace equipment typical of commercial lighting.

An application of these four rules, based upon the information contained in my previous articles, will enable any person to design lighting which is at once satisfying from the physiological, psychological and esthetic viewpoints. In response to numerous inquiries from architects, I am reviewing *en passant* several points which are germane to the above classifications, and take the opportunity herewith to thank these contributors for their valued comment.

As to outlets for gas and electricity, it is well to realize that all of our illuminants, even those of mediæval times are in use today, and each and every one has found its individual field, where it shines supreme. Thus the candle and oil lamp are still popular, while gasoline, blaugas and acetylene illuminate a wide field unlighted by the leading illuminants-gas and electricity. One acetylene manufacturer alone has 188,000 installations, and there are 206 acetylene manufacturers in this country and 119 concerns making gasoline equipment. There are 1,102 natural gas distributors in the United States and 116 syndicates, some controlling at least 200 individual distributors of gas. There are 135,780 towns and villages in the United States, but only 7,615 are supplied with gas or electric light, leaving 128,165 dependant upon other il-There are approximately luminants. 8,500,000 "houses" in this country or "occupied dwellings," not counting those which are mere shacks or huts, and of this number 700,000, or less than 9 per cent., are using electric light. From these figures it is evident that no one illuminant predominates, and that it is well to view the question of "lighting" from



FIG. 1. THE ABSENCE OF CEILING FIXTURES IS SOMETIMES A RELIEF. GENERAL LIGHTING CAN BE OBTAINED BY PLACING ONE OR TWO LIGHTS WITHIN ARCHITECTURAL PROJECTIONS.

as wide an angle as possible, in order to discuss the subject intelligently and without prejudice.

Outside the large cities electric service is not absolutely dependable, there being frequent interruptions caused by storms which temporarily disable the generating system until wires are restrung or dynamos repaired. During these intervals the consumer, who has been thoughtfully provided with gas outlets by the architect, is indeed fortunate. Architects should consider this question of continuity of service, and familiarize themselves with local conditions before restricting their design of lighting to one illuminant.

A word regarding the brilliancy of illuminants. Fortunately, the latest development of electric lamps (the nitrogentungsten) has been attended by such an enormous increase in intrinsic brilliancy that absolute concealment of source is necessary. While these lamps have been made in 100 watt sizes, it will be some

time before the smaller sizes suitable for residence lighting will be practical, owing to the tremendous amount of heat generated. As regards local versus general illumination, Article VIII explained a method of obtaining both general and local lighting from the same source-a portable table lamp. The same effect can be accomplished, of course, by ordinary portable lamps in connection with a ceiling fixture, but while the ceiling fixture in some form is always provided for the tenant, there is no provision for the accommodation of his portable lamp. Many persons do not like a table placed in the centre of a small living room. However, if base board outlets are not specified and if there is no center-flush floor receptacle, there is nothing left for the tenant to do but place his portable lamp on a centre table beneath the fixture and to attach the electric wires or flexible gas tube to the fixture, usually displacing a lamp in so doing and thereby destroying the symmetry of the fixture.

The least we could reasonably expect from the fixture manufacturer in this relation would be a detachable or a hinged cone at the extreme lower portion of the fixture, concealing a receptacle for an attachment cord or tube, but the architect can overcome the negligence of manufacturers in this particular by specifying a flush-floor receptacle. Architects are beginning to regard the ceiling as an undesirable locale for an outlet for an indirect lighting unit, and have exercised their ingenuity by placing indirect lighting reflectors above pier glasses or over doors, one outlet serving the purpose and saving wiring in many instances by its proximity to the point of control. The side wall can not be regarded as a desirable locale for general lighting, unless the greatest discrimination is exercised in reducing the brightness of the individual lights. A very undesirable arrangement is illustrated by Fig. 1. A globe or shade must possess the same pictorial value by night as by day, yet the eyesight must be protected from glaring lights, which when on the side wall are directly within the visual field. As I have emphasized in my lectures before the Art in Trades Club, it is only when treated in the most delicate manner that the side wall light will contribute anything of value to the decorative ensemble.

From a utilitarian viewpoint, referred to average conditions, light should be treated in such a manner as to insure eyecomfort and to facilitate the use of some gas or electric appliance associated with domestic service, in cases where baseboard outlets can not be considered. By utilizing some architectural formation as a locale for concealed indirect lighting it will be found possible to introduce many conveniences in the form of base-board outlets and remote control switches, owing to the saving in fixture expense.

The annoying effect of a side wall light is shown by Fig. 2. Such a blot of light



FIG. 9. BEDROOM LIGHTING WHERE BOTH DIRECT AND INDIRECT LIGHTING ARE REPRESENTED.

will ruin the fairest decorative perspective and one's eyesight as well.

The interior represented in Fig. 3 is rather an abrupt departure from the living room of the simple apartment or flat, but it will serve to direct our attention to a very important phase of applied lighting. Architecture or decoration to be appreciated must be seen. This interior is marred at night by the splotches of light thrown on the side walls. True, the fixtures are exquisitely rendered, and by

day are of charming appeal, as revealed by the carefully modulated daylight; but at night-what a difference. And the wonderful ceiling? -quite obscured in gloom. Now, here is where the economy and efficiency of modern illuminants can be utilized to advantage -not in attempting to illuminate brilliantly every nook and cranny with a searching glare, but in delicately revealing the feeling and expression of the ceiling, catching and imprisoning the very mood of the architect. Lights above the doors and mantles do the trick, modified with color screens to give the adjacent wall, which is a vulgarity opposed to what is good in decoration. The dome illustrated is of silk, almost opaque. Many persons of discriminating taste disapprove of the dome and prefer table candelabra or wall backets. Nevertheless, domes are still popular, and it will be many years before they are out of vogue.

The dining room illustrated in Fig. 5 shows the effect of a dome properly placed above a table. Fully 95 per cent.



Fig. 10. Some samples of the glassmaker's art suitable for indirect lighting applications.

the adequate warmth to the wood-work.

Passing on to the dining room, Fig. 4 shows an arrangement which offers another illustration of the ugly, distortive effect produced by over bright side wall lights. Here shades of silk allow light to pass above and below. This upward light is of no actual value for utility, and is positively offensive to esthetic taste. Similarly the light which passes below the shade causes an uneven blur of light on or extinguishes the gas. The tube can be "fished" through the wall with the same facility as electric wires.

Fig. 6 illustrates a fault common to gas and electric domes. The placement of a cluster of electric bulbs in a dome or portable lamp is inexcusable, owing to the waste of light between bulbs, and visibility of source, which is usually characteristic of such devices. In some instances the fault can be corrected by

of all domes placed in apartments are hung too high, due to the fact that no care is exercised in making compensations for varying ceiling heights. The dome illustrated shows the possibilities of modern gas lighting. The chain to all intents and purposes is a solid metal chain. In reality the links are alternately hollowed so as to make a continuous channel which conducts gas to an inverted Welsbach lamp placed well up within the dome.

A fine hair-like copper tube, hollow, connects with a pneumatic push button on the wall, and a touch lights

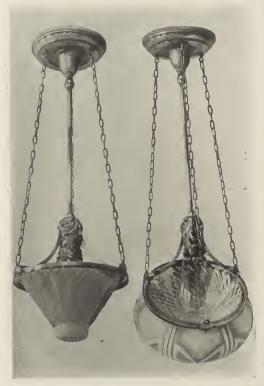


Fig. 11. Correct method of adapting glassware illustrated in Fig. 10 to standard indirect lighting equipment.

placing one lamp within a dense shade of opal with an inner depolished surface, a frosted tip lamp being used and placed so far up in the shade as to be invisible to any person seated. Most domes have a sufficient opening within their crown to permit the placement of a single lamp and shade so high up as to be entirely concealed from view. Such an arrangement is most desirable and should be specified by architects whenever domes are used.

Receptacles should be specified within domes, permitting the attachment of gas or electric chafing dishes or coffee percolators (Fig. 7), and, in higher grade apartments, flush-floor receptacles beneath the dining room table.

A word as to these base-board receptacles and switch plates. At best these flat plates are of no decorative value. It is desirable therefore to render them inconspicuous. Instead of specifying plates of a finish to correspond with the fixtures, it is best to order them flush with the wall and woodwork, to be papered or painted over.

The bedroom shown in Fig. 8 is selected from several thousand as most typical of present day methods in placing bedroom outlets. There are only two outlets provided, and these are entirely inadequate for general illumination. Furthermore, the only local lighting requirement which is satisfied is the lighting of the dresser. Present day rentals necessitate the utilization of every inch of: available space, and the architect should administer to the comfort of tenants by, placing base-board outlets so that desk and other individual lights can be provided, together with a good arrangement for general illumination. The unfortunate occupants of this interior could obtain excellent indirect illumination by utilizing their gas outlets, but we have no right to assume that tenants are capable of modifying unsatisfactory lighting, and there is no reason why it should be unsatisfactory if the architect will take the initiative



Fig. 7. The architect should insist upon receptacles being attached to domes to accommodate domestic appliances.



Fig. 3. Why not utilize modern light sources so as to reveal rather than conceal architectural expression?

in specifying suitable arrangements. The photograph (Fig. 8) is of further interest in that it illustrates an experimental effort to illuminate the interior at night by lights placed outside the window and directed against a white curtain which in turn diffuses the light through the window curtains into the room. With light modified to give a warm amber tone the atmosphere created was akin to that of the late afternoon sun, produced at a cost approximately four times in excess of the ordinary arrangement for one hour's use. Base-board outlets for a fan and a portable lamp on a somneau between the spaces alloted by the architect for beds would render this room convenient and comfortable at night-a condition foreign to the present arrangement.

Of course, the general illumination is important, and Fig. 9 shows an interior



Fig. 4. Candle shades should be treated so as to give uniform color distribution. The white light which streams from the top and bottom of the shade is a vulgarity opposed to good decoration.

where both general and local requirements have been satisfied. The lights over the dresser and on the side wall between the beds are useful, as is the little portable lamp with its silk shade on the somneau. The indirect lighting arrangement is of the opaque bowl type, which Visibility, of does not appeal to all. course, is desirable when the source is pleasing and agreeable to look upon, and thanks to the untiring efforts of our glassmakers it is possible to obtain at moderate cost beautiful globes which when not overlighted are a treat to the eye.

Obviously the charm of such glassware as that illustrated in Fig. 10, to be appreciated, must be seen; and in order to "see it" care must be exercised in placing illuminants within. Fig. 11, indicates the correct application to standard



Fig. 8. An interior selected from many as typical of insufficient and incorrect placement of outlets in bedrooms of average apartment house type.

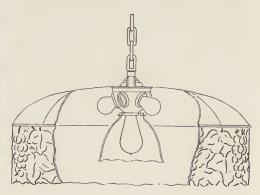


Fig. 6. Clusters of lamps are to be avoided. A single lamp pendant, concealed within a dense opal shade, is the right thing.



Fig. 2. The side wall is not a desirable *locale* for a lamp, unless its light is carefully modified. Such as the above is neither useful nor ornamental.



Fig. 5. When a dome is used it should be properly hung and illuminated—like the above.

indirect lighting equipment, with due regard for the "appearance" and "effect" of the lighted product.

Unquestionably indirect lighting, with or without visibility of source, affords the best modern means of solving all problems of general illumination. In the



Fig. 12. "Looking backwards"—an oil lamp designed by Jean Giardin long ago. Centuries have passed, but thousands of oil lamps are still in use.

bathroom of the average apartment its use means one outlet instead of two or three, with their extra wiring expense. In the kitchen the sink light can be dispensed with, and the ceiling, as a secondary diffusing surface, will clearly illuminate the innermost recess of the oven through its glass door. Perfect general illumination, such as is obtained with properly designed indirect lighting, obviates the necessity of closet lights with their uncertain mechanisms, the ceiling redirecting light into the closet and revealing its contents perfectly, just as the indirect porch light penetrates the vestibule, disclosing obscure keyholes. If there is any one feature which ought to commend indirect lighting to the architect as the ideal means of general illumination, it is the infinite variety of expression which can be given to such lighting. The day has passed when the globes of the store, office or barroom can be specified for apartments or other interiors which can be designated as homes.





VIEW OF OPERA HOUSE, ON THE KÖNIGSPLATZ, BERLIN Competitive design of Prof. Martin Dülfer.

PROPOSED NEW OPERA HOUSE FOR BERLIN

PROF. DÜLFER'S NOTABLE DESIGN By Robert Grimshaw



HE "Spree Athens" has a Royal Opera House which Kaiser Wilhelm in his capacity as King of Prussia supports by a subsidy, but does not think worthy of the German Imperial and Prussian Royal capital. So he has called for designs which will

not only replace the present building but modify the Königsplatz, at the other end of which stands Wallott's Imperial Parliament Building.

A magnificent solution, both artistic and practical, of this problem, is offered by Prof. Martin Dülfer, of the Royal Saxon Technical High School, Dresden, who proposes to close the square with arcades, instead of providing for fine residences, public halls, museums, etc. But instead of those which were suggested as proper to form a part of the framing of the Platz, he proposes to add a scenery storage building of good proportions in connection with the stage, so that all articles which are necessary to keep on hand or to make, for firstclass opera, can be kept there.

The form chosen for the opera house itself is one which is dignified and beautiful, yet gives the great height and lateral space necessary for the stage building.

One difficulty in the solution is, that as his Imperial and Royal Majesty has the privilege of paying the bills, and is not exactly addicted to republican or democratic simplicity, an immense amount of space—and the best space—must be devoted to boxes, reception-rooms, kitchens, etc., for court performances, balls, etc. The grand court box, for instance, contains 80 seats, and beside this come four other royal boxes with eight seats each, approachable from the salon of the larger box.

The seating called for by these plans embraces:

In the first parquet, 264 seats; in the upper parquet, 759 seats, including 22 in boxes; in the first balcony, 312 seats, including 132 in boxes; in the second balcony, 207; in the third balcony, 282; in the fourth balcony, 272; in the fifth balcony, 228; in the gallery, 144; total, 2,468 seats.

As one of the requirements of the design is, that the occupants of the royal and court boxes shall not have to meet the public in coming or going, or be stared at by them other than through the framing of the boxes, the passage ways for these chosen places interfere a great deal with the planning. This is especially the case with these to the front parquet. Here, in case of court representations, the common or garden public would have to use the emergency exits as entrances as well as for exits. For New York, Prof. Dülfer would have been able to use the space-and the money-much more satisfactorily to management and public.

The passages are very long, but in comparison with the size of the stage building not so dangerous in case of fire —the stage having a floor space of 105x 98.4 feet and a height of 108.5 feet to the flies, and above these 6.56 feet to the floor of the loft, which is about 23 feet high in the center. The depth under the stage is about 30 feet; stage opening $44\frac{1}{2}$ feet, with passages each side nearly 10 feet wide and 100 feet deep.

The storage house for scenery and properties is to be supplied with elevators and trolleys large enough to handle the heaviest articles called for. The artists and employees have their rooms in lateral buildings, about two large courts, and easily reached from the stage.

As to what the Kaiser-King calls for in the way of conveniences we have the following specifications:

1. An entrance structure with covered passages, stairway and elevator for five persons to the proscenium boxes.

2. A *porte cochère* with covered passages, stairway and elevator for five persons to the great royal box.

3. A disrobing room on the ground floor, near this latter.

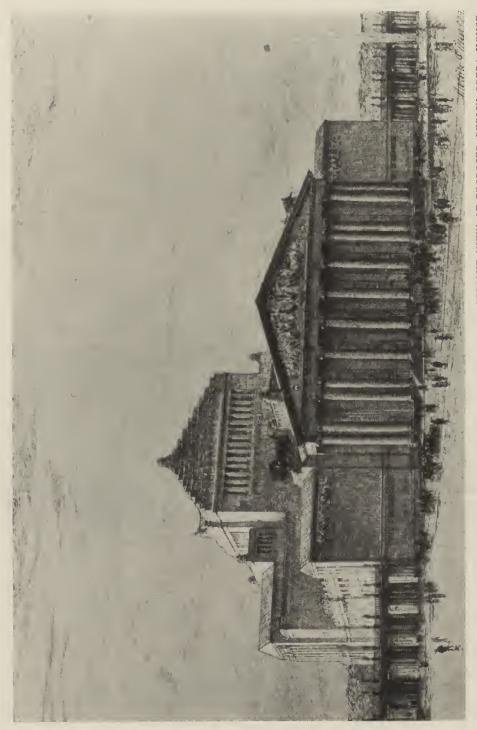
4. Rooms for the suite and servants, on the ground floor, 861 sq. ft.

5. An antechamber and a tea-room next the proscenium, on the parquet level, 1,076.4 sq. ft.

6. An antechamber and a tea-room, next the proscenium, on the first balcony level, 1,076.4 sq. ft.



A NEAR VIEW FROM THE KONIGSPLATZ—DESIGN FOR OPERA HOUSE AT BERLIN BY PROF. MARTIN DÜLFER.



9

OBLIQUE VIEW OF PROPOSED BERLIN OPERA HOUSE. COMPETITIVE DESIGN OF PROF. MARTIN DULFER. 7. A reception room for the principal royal box, 2,153 sq. ft.

8. A dining room on the first balcony level, 992 sq. ft.

9. Toilet rooms.

10. Butler's pantry.

11. Royal kitchen.

12. Scullery.

A New York—or even a London manager would tear his hair at the prospect of taking out so much of the best space for occasional use—gratis!

As far as the auditorium is concerned, the specifications call for:

1. A *porte cochère* and ticket room with four ticket windows.

2. Main stairway to parquet and first balcony.

3. Dressing rooms for parquet and balconies.

4. Toilet rooms for the above—each with a vestibule.

5. Elevators corresponding to the stairways.

6. Main foyer for the rest of the balconies and the gallery.

7. Seats for 2,500 persons, giving all opportunity to see and hear. Orchestra chairs 25.2 inches wide; other chairs 22.4 inches; cheaper seats down to 20.8 inches wide. Chairs in boxes 26 inches wide.

Three living rooms and a waiting room for the concierge's family take up 1,346 sq. ft.

The orchestra has at its disposal the following space:

1. Room for the instruments, reachable from the stage level, with dressing room, 861 sq. ft.

2. Two tuning rooms, communicating both with the latter-named room and with the orchestra, total 1,615 sq. ft.

3. Four rooms for three orchestra leaders and a concert master, total 861 sq. ft.

4. Two rooms for the orchestra inspector and orchestra servant, total 323 sq. ft.

5. Assembly room and restaurant for the musicians, together, 1,345 sq. ft.

6. Orchestra space for 120 musicians (in the auditorium).

Then for the police (without which nothing may be done or undone in Germany) and the theatre employees:

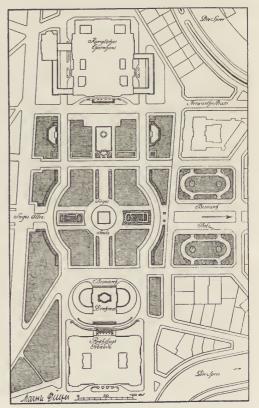
1. Rooms for the principal inspectors, total, 1,346 sq. ft.

2. Eight rooms for concierge, housemaster, watchman, scrubwomen and ticket collectors, 1,615 sq. ft. in all.

3. Six rooms for police captain, policemen, "ventilator," assistant "ventilator" and engine and machinery inspector, total, 1,076 sq. ft.

The stage is about 10 feet above the general street level; is 97.6 feet wide and 91.5 feet deep, with 41.2 feet opening, side passages 9.15 feet wide, of the full stage depth.

Prof. Dülfer's design is the most strikingly original among those presented by the ten leading architects of Germany who were invited to submit competitive sketches in 1912. None of the designs then offered was accepted and at this writing the question of the new Royal Opera House is still under consideration.



THE KONIGSPLATZ, BERLIN. Remodeling proposed by Prof. Martin Dülfer.

454



RESIDENCE OF V. SUTRO, ESQ., AT "FIELDSTON," NEW YORK CITY. MANN & MACNEILLE, ARCHITECTS.



RESIDENCE OF DWIGHT J. BAUM, ESQ., AT "FIELDSTON," NEW YORK CITY. Dwight J. Baum, Architect.



RESIDENCE OF PROF. GEORGE B. PEGRAM AT "FIELDSTON," NEW YORK CITY. Mann & MacNeille, Architects.

456



A WOODLAND POND AT "FIELDSTON." HIGHEST NATURAL WATER IN NEW YORK CITY.

6



RESIDENCE OF FREDERICK R. A. CAMP, ESQ., AT "FIELDSTON," NEW YORK CITY. Nathaniel Vickers, Architect.



RESIDENCE OF CHARLES E. NILES, ESQ., AT "FIELDSTON," New York City. George H. Chichester, Architect.



459



RESIDENCE OF NICHOLAS KELLEY, ESQ., AT "FIELDSTON," NEW YORK CITY. Harrie T. Lindeberg, Architect.



OFFICE OF THE DELAFIELD ESTATE AT "FIELDSTON," NEW YORK CITY. Carlton Van Valkenburg, Architect.



RESIDENCE OF DR. H. H. JANEWAY AT "FIELDSTON," NEW YORK CITY. William Emerson, Architect.



RESIDENCE OF PROF. ASHLEY H. THORNDIKE AT "FIELDSTON," NEW YORK CITY. Davis, McGrath & Kiessling, Architects.



BARNARD SCHOOL AT "FIELDSTON," NEW YORK CITY. Mann & MacNeille, Architects.



RESIDENCE OF CLAYTON S. COOPER, ESQ., AT "FIELDSTON," NEW YORK CITY. Harrie T. Lindeberg, Architect.



A Great Imaginative Interpreter of Renaissance Traditions.

Charles Follen McKim: A Study of His Life and Work. By Alfred Hoyt Granger. With illustrations. Houghton Mifflin Co.

Every American interested in architecture, who properly values the work and example of Charles Follen McKim, should buy and read the study of his life and work, recently published by Alfred Hoyt Granger. It is a sincere and enthusiastic appreciation of Mr. McKim's contribution to American architecture, written by a personal friend and a warm admirer. Mr. Granger worked in the office of Mr. McKim during his own early career. He watched the work of McKim, Mead & White closely throughout the period of its great and enduring achievements. He brings to his task at once a lively personal attachment to the man, a sensitive feeling for the finer qualities of the work and a clear general understanding of the scope and the value of McKim, Mead & White's influence upon their contemporaries and successors. It constitutes a general contribution to the ultimate valuation of Charles McKim as an architect and as an individual.

The reader must not infer that Mr. Granger's study constitutes a final or a comprehensive examination and discussion of its subject. Mr. Granger makes no such claim for his book. "The preparing of this short memoir," he says, "has been inspired by the desire to set before the younger members of the architectural profession, and particularly the draughtsmen in offices, something of the personality of a very great man. It must remain for some other pen than mine to

write a complete analytic life of Chas. F. McKim." The complete biography mentioned by Mr. Granger ought certainly to be written. The great majority of American art critics would agree in asserting that the four greatest American artists of the past generation were McKim, La Farge, St. Gaudens and Sargent. Of them Mr. Sargent is still alive, and the biographies of St. Gaudens and La Farge have already been written. That of Mr. McKim has not been written; but it certainly should be. Or if for any reason a complete biography is impossible, an exact and exhaustive acount of the work of the firm until 1909 should certainly be prepared. A serious difficulty exists in attempting to criticise the work of one member of a firm of three architects. It is well known that particular buildings are attributable for the most part to a particular member of the partnership, but such attributions, even if they can be authentically established, are of doubtful value. The work of this firm was prompted by an essential unity of purpose. Its members were constantly criticising and assisting one an-Thus McKim's contribution to other. American architecture can never be individualized as can St. Gaudens' contribution to American sculpture. It must be merged with the work of his partners.

Mr. Granger makes no attempt to add anything of importance to the public knowledge of Charles McKim as a man. He gives but very little space to the account of Mr. McKim's life or to a descriptive analysis of his disposition. None of the architect's letters are quoted and only one of his public utterances—the only one of which McKim was ever guilty. He was



SKETCH OF CHARLES F. McKIM. By Jane Emmet von Glehn,

a modest and reticent man, to whom public appearance and expression, except in his chosen art, was repugnant. He was so completely absorbed in his work that he may almost be said to have had no private lif. Among friends of his own age Mr. Mc-Kim was always the genial urbane gentleman, but the natural reserve of his temperament, which seemed to increase with the years, made his conversation, even among intimates, somewhat formal. He was less reserved with younger men than with his own contemporaries. In dealing with McKim's work Mr. Granger practically ignores the first phase of the master's architectural expression the one which preceeded the designing of the Boston Public Library. All he says is that "in the earlier commercial and residential buildings one can see traces of that romantic spirit which so dominated the work of H. H. Richardson." He very properly disagrees with the assertion of Mr. Russell Sturgis that "the picturesque side is the best side, after all, of the work of McKim, Mead & White," but he does not attach sufficient importance to the fact that the "Renaissances of McKim, Mead & White" was the result of a conscious reaction against the architecturally picturesque. In this relation the following quotation from some personal reminiscences of Mr. McKim by Mr. Robert Peabody, one of his close friends, is of the utmost interest. "In view of his later career it doubtless sounds strange to say that for a long time it was harder for McKim than for most foreigners (in Paris) to find himself in sympathy with the atelier and the Ecole des Beaux Arts. What little experience he brought with him (that is, when he went to Paris) had been obtained with Mr. Russell Sturgis of New York. That Mr. Russell Sturgis of New York. master and Mr. Babb were his ultimate arbiters. Mr. Ruskin was the prophet of all that was good and true in art. Plunged into a world that did not know these masters even by name, and which looked on Victorian Gothic as romantic archeology, but in no possible sense as architecture, McKim's inflexible nature had some hard rebuffs and conflicts. It required time and other influences to bring him to a sense of the great worth of the underlying principles of the Parisian training, but his sympathies were always more with the earlier than the later French masters. He was, in fact, more close to Rome than to Paris."

Mr. Granger approaches the criticism of Mr. McKim's work from precisely the right point of view, when he states that "McKim seems to have been the first man in his profession to recognize the peculiar analogy between the conditions in Europe at the time of the Renaissance and the conditions in this country immediately after the Civil War. Both periods were times of awakening. * * * All around them was architectural chaos. Richardson had not succeeded in implanting his rich, beautiful and romantic Romanesque style upon this soil because it could not take root; what his style became in the hands of his followers we all know. There was no real place in a nation expanding by leaps and bounds, and demanding light, air and sunshine, in which to expand still more for an architecture born in the silence and shadows of Mediaevalism. McKim saw in his dreams a realization of law and order, cities rich, spacious and necessarily conventional. He quickly grasped the adaptability of the architecture of Rome, Florence and Tuscany,

as well as the Louis XIV. period of France to the needs of America."

The experience of the past generation has sufficiently proved that he made the right selection. What American architecture needed was a stylistic tradition which would express the social, worldly, somewhat showy, but essentially practical and human purposes of contemporary America; and of all the traditional styles the only one of which could answer to their needs was the early Italian Renaissance and its nearest ancient and French analogues. McKim's judgment has been vindicated by the event. The Renaissance forms were elastic, urbane and essentially imitable. They could become conventional in the better meaning of the word. Indeed, as Mr. Granger says: "Throughout the whole of McKim's career his ideal seems to have been to establish a tradition capable of continuous development rather than to attempt anything daringly original, to produce buildings which should compel the observation and admiration of the passerby by their quiet, yet sufficiently essential, beauty."

Although the most desirable effect of the work of McKim has been to do away with the anarchy of thirty years ago and to establish a comparatively authentic tradition in American architecture, the reader must not draw the wrong inference from this success. He and his partners succeeded, not merely because they started with a sound formulated idea, but because they themselves gave to the embodiment of that idea so much fresh pursuasiveness, such rare and compelling distinction. They were as far as possible from being the lifeless copyists which some of their more superficial critics accused them of being. Both McKim and White possessed in different ways something of the spirit of the Renaissance and they both were capable of giving a sympathetic and imaginative interpretation to the Renaissance traditions. It was they who first made it live and glow for their contemporaries; and their example was sufficient to encourage others to continue and, even in some ways, to improve upon the attempt. Beauty is always profoundly original, even when embodied in conventional form. The great achievement of McKim was that he made certain phases of early Renaissance and the Roman architecture look beautiful to his fellow Americans.



PHASE OF A PHILIPPINE

Manila has long been a city of clubs, or "casinos," but the provinces have rarely gone in for club life. In ARCHITECTURE olden days each provincial capital might have

ΝΟΤΕ AND

OMMENT

had a Spanish-Filipino casino, but these were not very inviting affairs as we know them. With the coming of our civil government officials and other Americans, club buildings began to spring into existence in the large centers in the The school teachers, especially, interior. have made the most of this medium for social intercourse and recreation. These buildings are invariably of the one-story bungalow type.

Americans have introduced a few homes of the bungalow type in Manila, but at no point in the island is there such a collection of this style of construction as at Baguio.

Baguio is the beautiful little summer capital of the islands, whither the government forces move during the hot wet season. It was founded by our government to enable Americans to find relief from the heat of Manila during the warmer period, and is reached by a beautiful automobile road, a model of engineering skill.

Nothing in this, as in other Philippine sections, is built without taking into consideration the warm climate, which demands much of outdoor living; the dampness, and, last but not least, the inevitable and well nigh formidable annai.

The latter is a variety of white ant, which finds nearly every kind of wood a welcome addition to its menu card. It presents, in fact, one of the most annoying problems of the Philippine builder. Every effort has been made to halt his voracious-He eats into the vitals of the most ness. dignified wooden pillar, and has no respect for even the most carefully calculated joist or roof timber. Varnishing the wood, or coating it with poisonous paints have been tried, but to no avail. He is a sworn enemy of "constructive civilization."

The annai has, however, his preferences, and so, whether out of regard for the high cost of living, or some other reason best known to himself, he neglects the more expensive hard woods, such as mahogany, teak, ebony, etc. To bamboo he seems indifferent, and this wood is, therefore, very largely used.

Because of these ants, and also because of the usual moisture of foundations, stone, concrete, brick or stucco construction is preferably adopted, wherever financially feasible, and floor and other necessarily wood members are made of the hardest wood that can be afforded.

The call for much outdoor living in this climate, naturally, has its reflection in the design of the buildings, resulting in verandas (as many as possible), outdoor bedrooms and every possible means of ventilation for the interiors.

The windows are sliding panels made of oyster shells, which admit the light and temper the heat.

The American women, as a rule, do very little of the housework, and it is not unusual to have from three to eight servants. So ample servants quarters must not be overlooked.

The men, as well as the women, wear a great deal of white, which requires frequent changing. Therefore, a laundry is a very valuable and essential feature in all homes.

A few other items of note in Philippine architecture are:

(1) Cellars are almost a nonentity in modern Philippine rural construction, because of the moistness of the ground during the wet season, an element which must be taken into consideration even in the upper wall construction.



BUILDINGS TYPICAL OF THE HOMES OF GOVERNMENT CIVIL EMPLOYEES OF BAGUIO.

(2) In Baguio, fire-places are occasion-ally called into action, but in the lowlands, like Manila, Iloilo, Cebú, Zamboango, etc., fire-places are never required.

frequent airing and drying, are therefore adopted.

(4) No illuminating gas plants are on the islands, and so electric light is used



TYPE OF HOME ADOPTED BY THE COMMISSIONERS OF THE GOVERNMENT.

(3) Closets are, as a rule, omitted, as entirely in the larger cities, the smaller mildew and various kinds of bugs must be town and barrios depending on oil lamps. guarded against. Wardrobes, subject to

(5) Partitions within are often of a



A TEACHERS' CLUB HOUSE OR "CAMP" AT BAGUIO. The center for evening recreation and for entertainments and balls.

467

braided grass called suale. Paint is the usual finish for solid walls; wall paper cannot be used on account of the dampness.

With all its architectural difficulties, Baguio is a happy little town, beautiful in its rich verdure. Nearly every building is half covered with vines and creepers and flowers, which spring from the soil on every hand, and climb over every facade. Its architectural ideals are high, and every building, whether for residence, offices, or club, is in keeping with this spirit. Baguio, the bungalow town, is an illustraton of American spirit, and a development to be sincerely proud of.

AN INTEREST-PANAMA-PACIFIC EXPOSITION.

This sketch is of a model for the "Nations of the East" group to ING COLLABOR- surmount the Arch of ATION AT THE the Rising Sun at the Panama-Pacific Exposition at San Francisco. The figures being read from left to right include

an Arab sheikh, negro servitor, Mohammedan, Arab falconer, the elephant typifying India, the Buddha, Oriental mystics, Tibetan lama, African, and Tibetan warrior.

An idea of the massiveness of the pediment is given in the fact that the top of the elephant's howdah will be 188 feet from the floor of the court, with the group itself 42 feet high. This arch, typical of the East, is set as a foil against a similar structure at the west end of the court, which tells the story of the nations amalgamated into Occidental civilization.

A. Sterling Calder, acting director of sculpture, conceived the general scheme and composition. Frederick G. R. Roth of New York modelled the elephant, howdah and the camels. The horsemen are by Leo Lentelli.

The three figures, the Arab falconer, Tibetan lama, and Negro slaves, are to be thirteen feet and a half high. The whole pediment will stand on a pedestal which will be 38 by 52 feet square.

Although the composition includes so many ethnic divergences, it amalgamates the basic characteristics of Indo-European, Semitic and Turanian root-stocks into an architectural synthesis in a masterly manner, which will make the group stand out as one of the interesting features of the exhibition.



SKETCH MODEL OF THE GROUP "NATIONS OF THE EAST," TO SURMOUNT THE "ARCH OF THE RISING SUN" IN "THE COURT OF THE SUN AND STARS" AT THE PANAMA-PACIFIC EXPOSITION, 1915. A. Stirling Calder, F. G. R. Roth and Leo Lentelli, Sculptors. Copyright by the Panama-Pacific International Exposition Co.



View at the "Bauernhof" on the Estate of August A. Busch, near St. Louis, Mo. Klipstein & Rathmann, Architects.

VOL. XXXV. No. 6.

CONTENTS JUNE, 1914.

Page

COVER-The Sales Building at Nela Park.

- FRONTISPIECE-Entrance to the Administration Building at Nela Park, Cleveland, Ohio.
- NELA PARK: A Novelty in the Architectural Grouping of Industrial Build-ings. Wallis & Goodwillie, Architects. By Florence Dempsey. - 469-504
- Photographs by Harry E. Steffens. A NEW DEPARTURE IN "BIG BUS-INESS" (Nela Park). By Montgomery 505-507
- Schuyler. BELA L. PRATT-An Eminent New England Sculptor. By Charles Henry
- - - 508-518 Dorr. THE ARCHITECT. By Wilfred Beach.
- 519-525 Second Article. _ _ _ _ _
- THE CHAPEL OF THE INTERCES-SION, New York City. Architect, Bertram Grosvenor Goodhue (Cram, Goodhue & Ferguson). By C. Matlack Price. Photographs by Julian Buckly. 526-543

THE "BAUERNHOF" ON THE ESTATE OF AUGUST A. BUSCH, near St. Louis, Mo. Klipstein & Rath-mann, Architects. By Ernest C. Klip-- 544-557 stein. - -KILLENWORTH, THE RESIDENCE OF GEORGE D. PRATT, AT GLEN COVE, L. I. By Harriet T. Bottomley. Photographs by Julian 558-573 Buckly.

SERIAL NO.

Page

189

AN OLD ARCHITECTURAL PRIN-CIPLE REAFFIRMED. By W. A. Nichols. - 574

BOOK REVIEWS-The Domestic Work of E. L. Lutyens. - - - - - - - 575-576

NOTES AND COMMENTS. - - - 577-580

THE ASSAY OFFICE, New York City. Measured Drawings by Howells & Stokes. Insert Opposite Page 580

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ENTRANCE TO ADMINISTRATION BUILD-ING, NELA PARK, CLEVELAND, OHIO. WALLIS & GOODWILLIE, ARCHITECTS.

THE ARCHITECTVRAL RECORD

VOLVME XXXV



NVMBER VI

A NOVELTY IN THE ARCHITECTVRAL GROVPING OF INDVSTRIAL BVILDINGS

WALLIS & COODWILLIE, ARCHITECTS

By FLORENCE DEMPSEY



4

HERE was a group of men who were big enough to say: "We hire people; therefore we are responsible for the conditions under which they work," and who were wise enough to say: "The nearer we approach the 100 per cent. mark in ideal conditions for our

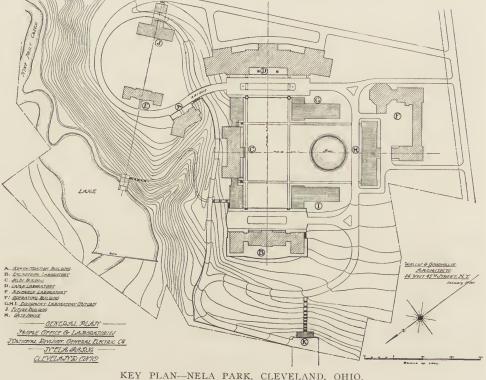
people, the nearer they will approach the 100 per cent. mark of efficiency, not only for us, but for themselves." As a result of these cogitations there finally evolved Nela Park, which is the name the National Division of the General Electric Company has given its group of home office buildings in East Cleveland.

The story of the relationship between the client and the architects in this undertaking should be of interest to the architectural profession, as the form of the commission and contract was one of the most unusual ever given to a firm of architects.

As we said before, the originators of this scheme were wise men; so they made the deduction, self-evident to themselves, but less lucid to the vast majority, namely, that it is the business of an architect to plan and build and, therefore, he is apt to know more about planning and building than the layman. So they concluded, "We will use our energy in selection rather than in interference."

At the making of the contract, the managers of the enterprise requested that the architects become a part of the organization, with a specific department under the title of "Architects of Nela."

There was a subtle significance in the creation of such a department with such



Wallis & Goodwillie, Architects.

a name, which augured well for all parties concerned.

It meant, in fact, that now the architects were not merely hirelings, but were part and parcel of an organization whose slogans are "Co-operation" and "Efficiency." It meant, also, the difference between working "for you" and "with you."

This sounds new and utopian, when it is in fact an echo of the old guild spirit under the predominance of which each artisan worked in harmony and co-operation with every other, thinking not of his little part as a thing to be considered by itself, but of how his little part would best help the ideal completion of the whole.

It is an undisputed fact, and was so recognized by both clients and architects, that the atmosphere and subtleties of old architecture, which have been analyzed and studied to an extreme by architects and scientists alike, are a direct result of this guild spirit.

Recognizing this fact and wishing to amalgamate architecture with human needs and business necessities, both owners and architects aimed to inspire the interest of every man in the organization, for the organization, so that as he gave his information to his associates, the architects, a feeling of personal and creative ownership would be engendered and that when the work was completed no one person could say "I did it"; but on the theory that "He also serves who only stands and waits," the entire force from the office boy up could honestly and conscientiously point a collective finger and say "We built Nela."

The architects were engaged to carry out a scheme which Mr. Terry and Mr. Tremaine, the managers and directors, had conceived as being suitable to their needs and which would meet the responsibilities they owed their employees or, as they prefer to think of them, their co-workers.

As the old offices were scattered throughout a number of downtown buildings in the city of Cleveland, it became evident that the efficiency of their



GENERAL BIRD'S-EYE VIEW OF NELA PARK, CLEVELAND, OHIO. WALLIS & GOODWILLIE, ARCHITECTS.



GENERAL VIEW OF QUADRANGLE, FROM THE SOUTH, NELA PARK, CLEVELAND, OHIO. Wallis & Goodwillie, Architects.

organization required concentration. It occurred to the clients that an office building in the center of the city might give them sufficient floor space.

After some calculation, it was discovered that a lot 100 by 100 feet, with a building forty-five stories high, would be necessary to house the various departments. A building of this size, with its perpendicular railways, in the center of a smoky and noisy city, did not appeal.

They, therefore, considered the advisability of purchasing a site outside of the city proper, and after some investigation decided upon a property of about forty acres in East Cleveland, which they purchased after consultation with the architects.

Lawns, flowers and trees are good to look upon. Light and airy offices are pleasant to work in. An atmosphere created by wholesome natural conditions is conducive to cheery dispositions, and cheery dispositions are conducive to topnotch work.

As a result of this truism, the home office of the National Division has a group of two-story office buildings co-ordinated, harmonious and unostentatious —horizontal office buildings carpeted with the green carpet of the earth, shaded and cooled by the health giving foliage of the forest ravine, with each office better than the other, housing men and women whose standard of efficiency proves that cheery dispositions are conducive to top notch work.

It was decided that the architects were to have an absolutely free hand; but it was assumed that they, being alone responsible for the scheme as a whole, as well as for the fitness and efficiency of the laboratories and offices, would consult with the managers of the various departments.

In order that the managers and the others interested in the development of this office group should be properly housed, each with his logical neighbor, and with an efficient ease of communication and association, the architects spent several months in consultation, asking advice, and studying the needs of every department and of every individual in the department.

Both men and methods were studied. The departments which supplemented one another were considered as essential parts of the architectural problem.

A plot plan of the entire forty acres with contour lines and essential information on adjoining sewers and public service supplies was developed.

This landscape work, along with the scheme for separation of departments or groups of departments with allowance for the natural growth of each and the future expansion of business, was considered of equal importance with the architectural style selected, the orienta-



CENTER PAVILION, SOUTH SIDE OF ENGINEERING LABORATORY, NELA PARK, CLEVELAND, OHIO. WALLIS & GOODWILLIE, ARCHITECTS.



SALES BUILDING, NELA PARK, CLEVELAND, OHIO. Wallis & Goodwillie, Architects.

tion of the buildings, and the structural methods used.

During the preliminary study, the architects were neither consulted in regard to the progress, nor were they insulted with interferences or unskilled criticism. This was their job, and the entire organization assisted them in the preparation of a report to the committee of the whole, which explained the developed scheme and the reason therefor.

This committee of the whole was called together to receive the architects' report, which was illustrated with lantern slides of two large, carefully laid out drawings, a bird's-eye view of Birch Long's, and a general scheme of the entire layout colored to show the ravine, the creek and the modelling of the entire plot.

An explanation of grades, of location, and of the future development of the various departments, the architectural and structural story, and a style story of Colonial, English, French and Italian Renaissance were given.

At this meeting, where the human interest expressed itself, the entire company from managing directors to office boy was present. Both plan and ideal were approved, and the architects as members of Nela were authorized to proceed with the working drawings.

It was now "up to the architects." This meant that they must study the business with a view to determining the particular kind of building, architecture and details suited to the needs of each of the different departments and in harmony with the location and general surroundings. Tentative sketches of the offices were made and submitted to the various managers for their criticism and approval.

Through experiment it was found that the most efficient and least wasteful single office would require a depth of 17 feet, and a width of 15 feet—a floor area of 250 square feet, with a glass area of 48 square feet. Light, intercommunication, standard desks and filing cabinets were the factors which determined this module of size and with this module as a unit a skeleton plan was laid out.

From this skeleton plan, with the necessary modifications for strengthening corners and accenting center points, the exterior of the various buildings was developed.



CENTER PAVILION OF SALES BUILD-ING, NELA PARK, CLEVELAND, OHIO. WALLIS & GOODWILLIE, ARCHITECTS.



NORTH ELEVATION OF ENGINEERING LABORATORY, NELA PARK, CLEVELAND, OHIO. Wallis & Goodwillie, Architects.

The general scheme of the group of buildings shown in the plot plan was laid out with the idea of conforming to the general lines and atmosphere of a university, with its quadrangle and forecourts; and because of this arrangement, Nela Park has been referred to as a University of Industry.

The contour of the ground allowed this to be done with a consequent privacy for the Administration Building and Research Laboratory, beyond a ravine, which fortunately breaks the ground into two unequal parts.

Need, purpose, environment, all being duly considered, the architecture of the Georgian period of the latter part of the eighteenth century was selected as more nearly fulfilling the requirements than any other style.

Through the medium of brick and terra cotta, of steel and reinforced concrete, and the artistic and technical skill of the architects, this style has been made the natural and logical one for expressing the need of the client.

An atmosphere and general effect has been obtained which suggests the old environment so much admired both by architect and tourist, in the various cities of the south of England, where Wren and the other great architects of the eighteenth century left the results of their ability and genius, especially in Salisbury and Bath.

After the general scheme had been settled, Mr. Wallis, of the firm of Wallis & Goodwillie, the architects engaged to create these buildings, sailed for England in order to get the texture, color and "smell" of the period which was to be used as the basis in the creation of this office city.

The beautiful work done by the eighteenth century architects in Salisbury, Bath, Wells and numerous other towns in the south of England gave the greatest inspiration to the architects, and while in no case were buildings copied or transformed, the architects endeavored to put themselves in the same mental position as these earlier architects, in order to translate in the spirit of the style, subject to the requirements which were distinct and local.

For example, Pulteney Bridge was the inspiration for the façade of the Research Laboratory, though, search as you may, you can find no reproduction of a part or of the whole in this latter building. Indeed, it might be said with truthfulness that the architects have created a new composition of beauty and well designed parts which might recall to your mind in some subtle manner the plain wall surface, the palladian window motives and the simple cornice of their older professional brothers.

Additional inspiration came from the façade of the City Hall of Bath with its arched openings, ornamented panels and pilaster and column composition. There can be no doubt but that these architects have solved, by the use of a medium which we must call style, the problem of color, texture and proportion.



CENTER PAVILION, NORTH SIDE OF ENGINEERING LABORATORY, NELA PARK, CLEVELAND, OHIO. WALLIS & GOODWILLIE, ARCHITECTS.



SOUTH SIDE OF ENGINEERING LABORATORY, NELA PARK, CLEVELAND, OHIO. Wallis & Goodwillie, Architects.

Nor can the composition of the entrances to the various buildings be considered other than comparable with the beautiful composition of those simple framed doorways with moulded trim or with pilaster sides, and pediment capped openings of the Judges' House in the Close at Salisbury, or of the many other examples of this type.

The entrance to the Engineering Laboratory has this basic composition, suggestive only in its general treatment of the doorways of the eighteenth century architects. Emulating the earlier architects, these men of Nela told the story of the use to which the buildings were to be put, by means of an allegory in the pediment.

These decorative bits were modelled for the terra cotta by Mr. Wallis himself so that the style character might be retained.

There is no style which adapts itself to this need more successfully than does this Renaissance of our English cousins, which has been made our birthright.

Georgian or Colonial examples are scattered throughout the eastern portion of our own country. They have been designed and redesigned, never losing the atmosphere of the earlier creations of Wren, of Gibbs, Chambers and Wood, but modelled to tell the present story, to fit the present conditions.

It has been customary in commissions of this sort to divide the work among a number of men, one firm of architects taking one building, another firm another building, and so on. As a result of this method, each building becomes the child of its particular creator, but the group does not constitute a family. At Nela Park the entire scheme was carried out by one firm, who had decided and definite ideas in regard to style, color and texture, and who had also given a deal of time to the study of the period which they adopted.



ENTRANCE TO ENGINEERING LABORA-TORY, NELA PARK, CLEVELAND, OHIO. WALLIS & GOODWILLIE, ARCHITECTS.



GENERAL VIEW OF OPERATING BUILDING, NELA PARK, CLEVELAND, OHIO. Wallis & Goodwillie, Architects.

The result is a unit. Each building is separate and distinct in its details from the others, but all show the result of the same thought. Each building was planned and placed with regard to the general scheme, and not merely as an isolated structure. Hence, cohesion, unity, balance.

The buildings are not monumental; why should they be? They are office buildings, and one would never mistake them for a city hall or a court house. There is not a single colonnade, not even the customary crouching lion; not a vase nor an urn, nor a forty-foot stairway for a four-foot entrance. The architects have realized that architectonics, design, style, are merely servants and that fitness is the master, the determining factor.

There are completed and occupied at the present time the Administration Building, the Research Laboratory, the central portion of the Sales Building, the Engineering Laboratory, the Lamp Laboratory, and the Nela Operating Building, with provision for expansion as the business necessity requires.

The quadrangle dominates the entire scheme and is laid out on the main axis, which runs northwest to southeast. The orientation of this axis was carefully considered, in order that each building could have sunlight on all sides, one of the prime reasons for the entire layout. This also takes into consideration the prevailing summer breeze, which plays in such a general direction that no one building benefits at the expense of any other.

At the northerly end of the quadrangle, which is also the brow of the hill, facing Lake Erie, was placed the Engineering Laboratory. This building dominates the public view, thus becoming a focus point. For this reason it was given greater architectural value.

At the southerly end of the quadrangle is the large Lamp Laboratory, which acts as a counterpoise to the Engineering Laboratory and as a background for the entire scheme.

Through the center of the quadrangle, at right angles to the main axis, is the sub or secondary axis. This axis crosses the quadrangle at the center of the Sales Building. On the secondary axis has been located a pool of a million gallons.

Ordinarily this pool would have been a storage tank and a storage tank only, set off in some remote corner of the grounds, covered by a wooden shed, and more or less of a blot, and an interference with future buildings. The architects, being also the landscape architects, took advantage of this storage necessity to add to the beauty of the general scheme, and designed a pool 120 feet in diameter and placed it so that when the entire group of buildings is complete, this circular sheet of water will be in the center of a secondary court opening from the westerly side of the quadrangle.

The clear water of this Pool of Reflections makes a beautiful foreground for the building when seen across the sur-face. The finished plan calls for a double row of poplars on the outer, or road, side of the pool, which will, as a huge exedra, form a counterpoise for the Sales Building.

Advantage has been taken of the general contour of the ground, with its wooded ravine and shaded paths, to make it serve as an informal setting for the more formal composition of the quadrangle, with its flat, simple grass plots, and the brick paved forecourts.

it was necessary to move the brow of the hill from its original position so that the main axis and the dominating Engineering Laboratory could be situated in a position which would allow the roadways to rise with an easy grade from the entrance level of Nela Avenue.

There was a difference of 75 feet to be overcome between the entrance level at the loggia and the forecourt of the Engineering Laboratory.

A winding road was designed with a grade fitted for automobiles and with proper arrangements for pedestrians.

The design of the road necessitated the



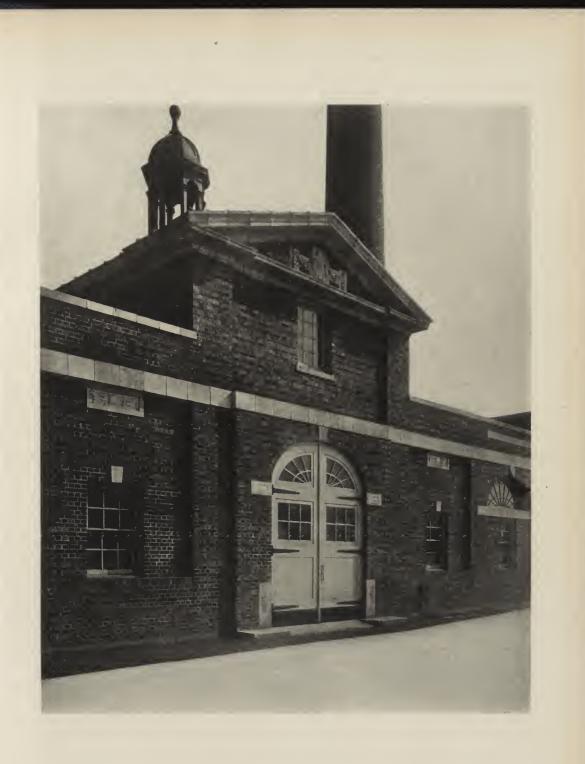
OPERATING BUILDING, FROM NOBLE ROAD, NELA PARK, CLEVELAND, OHIO. Wallis & Goodwillie, Architects.



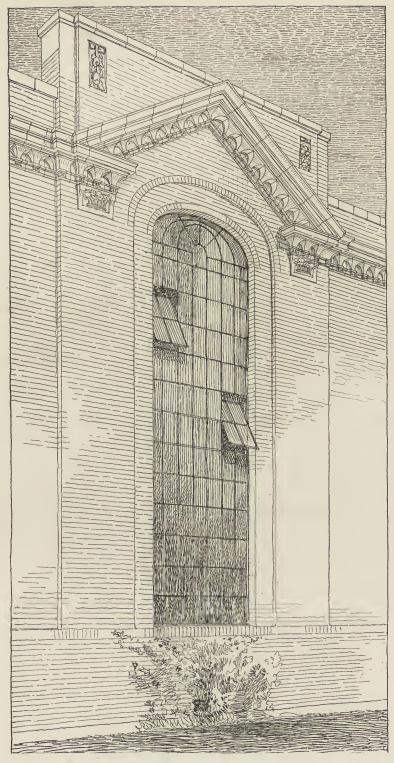
OPERATING BUILDING, FROM POOL, NELA PARK, CLEVELAND, OHIO. Wallis & Goodwillie, Architects.



OPERATING BUILDING, FROM COURT, NELA PARK, CLEVELAND, OHIO. Wallis & Goodwillie, Architects.



CENTER PAVILION OF OPERATING BUILD-ING, NELA PARK, CLEVELAND, OHIO. WALLIS & GOODWILLIE, ARCHITECTS.



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STUDY FOR POWER HOUSE WINDOW— NELA PARK, CLEVELAND, OHIO. WALLIS & GOODWILLIE, ARCHITECTS.



DETAIL-SALES BUILDING, NELA PARK, CLEVELAND, OHIO. Wallis & Goodwillie, Architects.



DETAIL-SALES BUILDING, NELA PARK, CLEVELAND, OHIO. Wallis & Goodwillie, Architects.



ENTRANCE TO ADMINISTRATION BUILDING, NELA PARK, CLEVELAND, OHIO. Wallis & Goodwillie, Architects.



RESEARCH LABORATORY PEDIMENT, NELA PARK, CLEVELAND, OHIO. Wallis & Goodwillie, Architects.



ADMINISTRATION BUILDING, NELA PARK, CLEVELAND, OHIO. Wallis & Goodwillie, Architects.

building of a huge reinforced retaining wall to support the same.

The fill back of the retaining wall utilized the dirt removed from the brow of the hill. Curiously enough this was the only serious piece of landscape modelling that was necessary.

A gate lodge, so called, or more properly a loggia is built at the end of Nela Avenue. This is the real entrance to Nela Park.

Through the loggia, by the way of a tunnel, one may enter the ground floor

of the Engineering Laboratory, and from there other buildings by the way of tunnels and staircases. This means of entering the offices was provided for severe or inclement weather.

The main road winds slowly up the ramp, turning in quiet slow curves and easy grade by the Pool of Reflections, and the giant Lamp Laboratory, over the single arched stone bridge, and close to the garden wall of the quiet and gentle Administration Building and its more formal neighbor, the Research Labora-



ADMINISTRATION BUILDING AND LAMP LABORATORY, NELA PARK, CLEVELAND, OHIO, Wallis & Goodwillie, Architects.



LAMP LABORATORY, NELA PARK, CLEVELAND, OHIO. Wallis & Goodwillie, Architects.

tory, continuing on the cliff edge under the shade of the overhanging foliage of the small forest which lines the banks of a most beautiful ravine, leaving the ground proper by a road to the south of the Lamp Laboratory, as well as by the way of a continuation of the curved road of the Park, passing under the bridge with its rhododendrons and flowering shrubs, through the woods of the ravine at the rear of the Sales Building and joining the main road at the head of the ramp near the Gate Lodge and entrance to the Park.

The Power House and Garage has its own entrance to the public street, and by the way of a large paved court is connected with the main drive of the Park. This scheme ensures eomplete circulation and ease of communication, and all of this work has been designed and laid out with due regard for the approaches to the various buildings.

In the south of England, where the manor house flourishes and beautifies the land, the driveways and the turf are separated by a slight cut in the grass, giving an effect, of quietness and gentleness. There are no wide granite curbs, and no accent on either road or grass.

At Nela the architects have considered this as an essential, and the flat gray brick driveways have an appearance of the top soil with the overgrowing sod cut away and rolled aside. The curbs are inconspicuous, and the great grass quadrangle with the attending forecourts are restful to the eye and pleasant to walk upon.

The two flagpoles at the upper forecourt are old fashioned, with a ball and spread eagle; pedestals, and base ornaments are omitted, as the architects wished to have as little restlessness as possible in the horizontal treatment of the ground.

Fortunately, the nature of the plot is such that very little planting will be necessary. The little that is necessary is to be of the old fashioned New England variety, and this is in no sense to be featured.

As the Company had employed Wallis & Goodwillie for the entire commission, including buildings, bridges, roads and landscape work, it was possible to arrive at a harmonious conclusion without fear of balustrades or fountain, Italian sunken gardens or elaborate formality.

The architects have been notably successful in scale, in color and in comparative value. The formality of the quiet quadrangle offsets the charming informality of the two isolated buildings beyond the bridge. The gentleness of the grass plots add to the value of the architecture in the facades, which in turn, combined with the green sward, lend



LAMP LABORATORY, NELA PARK, CLEVELAND, OHIO. Wallis & Goodwillie, Architects.



DETAIL—ENGINEERING LABORATORY, NELA PARK, CLEVELAND, OHIO. Wallis & Goodwillie, Architects.



ENTRANCE TO CHEMICAL ENGINE ROOM, NELA PARK, CLEVELAND, OHIO. Wallis & Goodwillie, Architects.



QUADRANGLE, LOOKING SOUTH, NELA PARK, CLEVELAND, OHIO. Wallis & Goodwillie, Architects.

themselves to the atmosphere of an old estate, simple in its pride and sure of itself.

There are two or possibly three methods of exterior treatment in the various buildings, though brick and terra cotta are used throughout.

The brickwork is a most beautiful example of what is rarely considered of much importance. The architects, in collaborating with brick manufacturers, studied color, texture, bonds and mortar joints until a quality of wall surface was finally arrived at which gave an atmosphere of the old work English bond with half-inch natural cement joints. The plain surfaces are very beautiful and the art of laying brick has its highest exposition in these walls.

In the use of terra cotta the architects have been restrained and conservative; for example, in the Administration Building, which has offices for the managing directors and their chief assistants, there is little if any embellishment. The simple front is accented only by the doorway and its window motif above; this, with a terra cotta cornice, adds a quiet beauty to the plain brick front.

The old fashioned garden, through which you must pass in order to discuss ponderous business policies, is enclosed with low brick walls and gate posts. There can be no doubt that the architects have here made the walks of the brain fagged business man lead on purpose by the way of a restful and pleasant path.

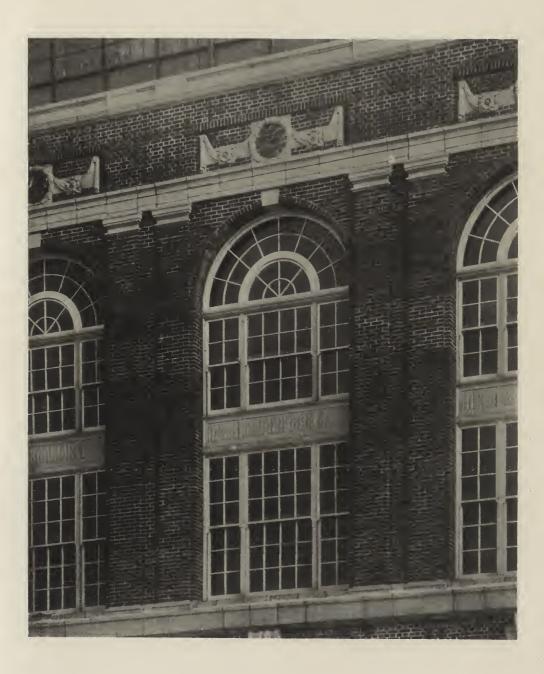
These architects have recognized the peculiar and insistent fact that architecture in its expression of style, detail and composition of façade has a purpose far beyond the physical planning of window opening and masonry.

They have shown in their designs that they appreciate the effect of color and form on the sub-conscious human eye



LAMP LABORATORY, NELA PARK, CLEVELAND, OHIO. Wallis & Goodwillie, Architects.

490



CENTER PAVILION OF LAMP LABORA-TORY, NELA PARK, CLEVELAND, OHIO. WALLIS & GOODWILLIE, ARCHITECTS.



ENTRANCE TO RESEARCH LABORATORY, NELA PARK, CLEVELAND, OHIO. Wallis & Goodwillie, Architects. Wallis & Goodwillie, Architects.





RESEARCH LABORATORY, NELA PARK, CLEVELAND, OHIO. Wallis & Goodwillie, Architects.

with a resultant uplift or depression of the nerves. Optimism, or pessimism, moral uplift or business assurance is affected by the environment, and this very human quality has been considered of importance in the layout of this modern hive of mental industry.

When the Research Laboratory was being considered, it was decided that a more pretentious building should be erected, as this is to be more or less a contribution to science.

And this Research Laboratory is a building fully equipped to study light, its effect on human tissues, on textiles and other materials. Its service is offered to the various scientific bodies of the country, to the colleges and to students of the science of light.

While the work here has no direct bearing on the manufacturing and sales departments of the company, it has an indirect influence, which is regarded as educational by the company; and according to their theory of service to the public, this is a giving back to science of a small portion of its power for investigation and for analyzing.

It was therefore necessary that a careful study should be made of other laboratories in order that mistakes should not be made.

It was found on investigation that laboratories in Washington, Baltimore, Princeton and Cambridge, designed by the professor man without the assistance of an architect were no better than that other type designed by the architect man divorced from the professor. To avoid the mistakes discovered, the architects and the directors, working in harmony, succeeded in planning a laboratory which must be accepted as a model of quiet dignity, a beautiful exterior with delicate detail carefully studied and placed.

The most elaborate building in the Park is the Engineering Laboratory, occupying the most conspicuous position on the brow of the hill and having for its balance on the south end of the quadrangle the huge four-story Lamp Laboratory.

A purely utilitarian building, the Lamp Laboratory, backs up against the rest of the world in the rear of the Park. It was of necessity planned as a factory is planned and according to the standard custom of the Company in its other factories: and on account of its location and bulk, it might easily have overpowered the other buildings. This bulk has been cleverly handled in the modelling of the front and in the treatment of the round arched bays, which, in the side wings, are subordinate and quietly squareheaded.

The cornice is omitted, and the general cornice line of the other buildings, which is carried on the same level



ENTRANCE TO RESEARCH LABORATORY, NELA PARK, CLEVELAND, OHIO. WALLIS & GOODWILLIE, ARCHITECTS.



RESEARCH LABORATORY, NELA PARK, CLEVELAND, OHIO. Wallis & Goodwillie, Architects.

throughout, is "picked up" in this building in the form of a heavy belt course, designed on the same level, so that, as the architects inform me, the scheme may be tied together with this horizontal motif in much the same fashion as in the case of main axis and secondary axis. In spite of the necessity of two additional stories above this dominating belt course, with the gross key-blocks below, the scale remains; and while there are four and five stories of this enormous bulk to be considered against the two stories of the Sales and Engineering Buildings, there is no loss of scale.

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Carefully considered in detail, always with complete knowledge of the motifs of the other buildings; consistently treated in its masses, and gently enfolding the general scheme, the building becomes an integral part of the whole.

The Lamp Laboratory and its near neighbor, the small and simple Administration Building, which constitute the Alpha and Omega of the business that is going on in this place, are in full harmony and in perfect scale.

The entire group of buildings, with the future extensions provided for, must have its own power plant, its own supply of electricity, of water, of compressed air and gas, and the other ordinary necessities usually supplied by private or municipal power plants. This private power plant at Nela, with its machine shops, repair shops, boiler houses, coal storage, and the other necessary machines and pumps, is comprised in a small group facing a public road, on the westerly side of the Park.

This collection of buildings tells its story plainly. They are unostentatious, designed on the lines of the coach houses and the offices of the old English estates, of plain brick, but with beautiful masonry of the curious texture of the old architecture.

The 200-foot stack has a delightful



DETAIL OF RESEARCH LABORATORY, NELA PARK, CLEVELAND, OHIO. Wallis & Goodwillie, Architects.

entasis and Doric cap. The paved court and the round house, which is a most economical and efficient garage, are used for the business trucks and the cars of the various members of the organization.

The designing of this group of buildings has evidently received as much consideration as has the designing of the building for other departments.

The boiler house looks its story. And the narrow wing which connects the pavilion with the office building on the north end of the court is surely the receiving department, where will be found the switchboard room and the repair shop.

A system of service tunnels furnish the means of communication between the power plant and each of the buildings in the Park, so planned that the roofs of the tunnels serve as sidewalks.

They are of sufficient size not only for the pipe lines and service mains, electric power and compressed air, but for any further need of expansion.

They serve also as passageways between the various buildings for the engineers and repair men.

The entire group of buildings are of fireproof construction. A specially devised system of reinforced concrete was employed wherein the usual reinforcing rod has been omitted, and standard steel forms are used for beams and girders with reinforced slabs for both floors and roofs.

In addition to this wise and economic precaution, a system of fire protection has been installed throughout the grounds and buildings.

No one can have any doubt as to the use of any building in the group. At Nela Park, architecture has been employed in its primal sense, to express the need of the times, to expedite the work of modern business, without transplanting the Greek, the Roman or the English of the eighteenth century.

Besides providing ideal working places for the office force, much thought was given to their comfort and recreation. In the Sales Building is a cafeteria carried on by the General Service Department of the Company. This department makes a study of food, realizing that properly nourished systems are more efficient than those improperly nourished. The cafeteria received first prize at the annual exhibit of the American Museum of Safety. Its efficiency has attracted the attention of the U. S. Government, and at the present time the service depart-



DETAIL—RESEARCH LABORATORY, NELA PARK, CLEVELAND, OHIO. Wallis & Goodwillie, Architects.

ment is installing one in the Postoffice Department at Washington.

In the Lamp Laboratory a second cafeteria is being equipped, which will accommodate from 500 to 1,000 persons, and which is to serve as a model for the Company's factories throughout the country.

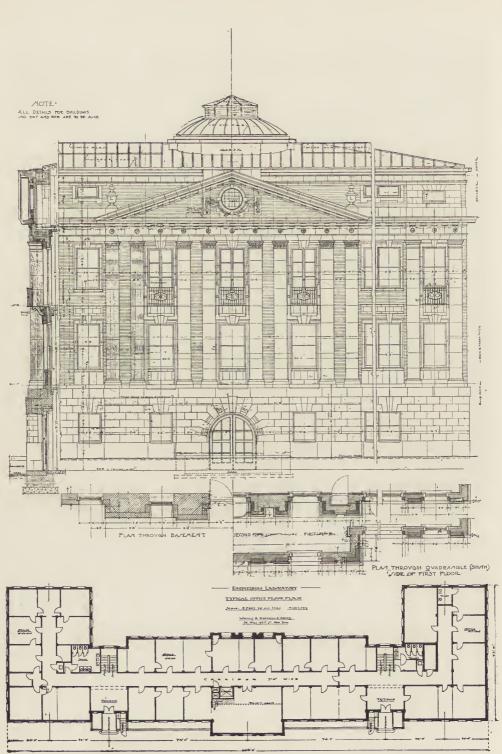
In connection with the cafeteria, the Service Department also maintains restrooms, libraries and music rooms.

Under the supervision of this department, tennis courts and baseball diamonds are being laid out for the benefit of those who wish to form clubs.

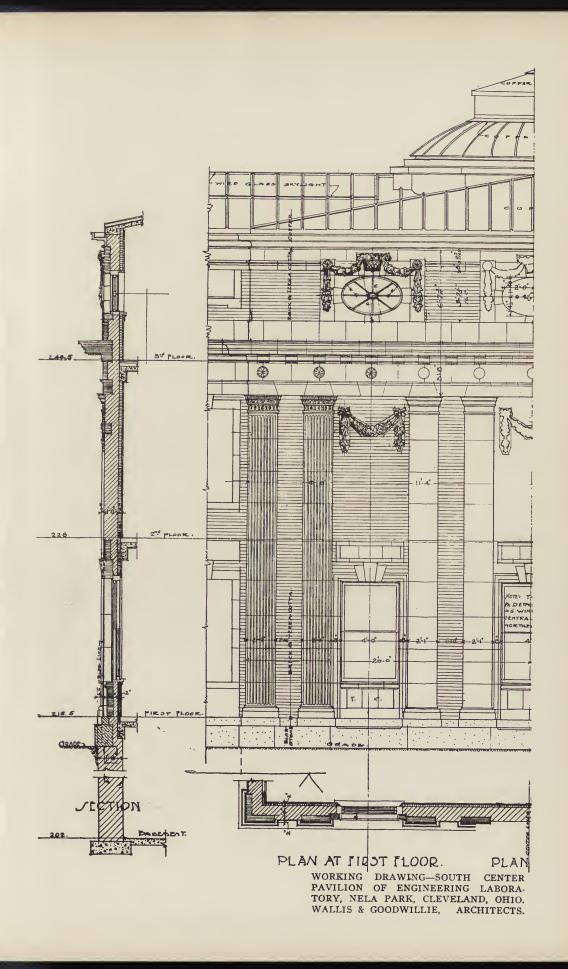
Has it all paid? Listen! It has been found since working under the Nela Park conditions and in the buildings described in this article that the force has been able to accomplish in an eight hour day the same amount of work that formerly required an eight and a half hour day. What was done with the extra half hour? It was given back to the men, the directors arguing that this was the only just thing to do.

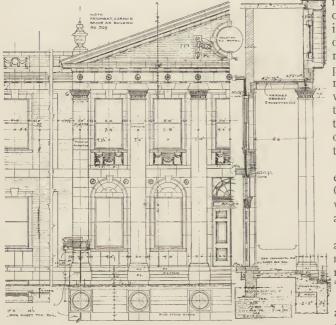
But it has already been mentioned that these were wise men; and, as a final proof, I may add that, as an architectural picture has been created, they insist it must not be changed without the consent of the architect. So Mr. Wallis has been made a permanent advisory member of the architectural committee of the organization.

His firm, his office force and library



FLOOR PLAN AND WORKING DRAWING OF THE NORTH CENTER PAVILION OF ENGINEERING LABORATORY, NELA PARK, CLEVELAND, OHIO. Wallis & Goodwillie, Architects.





WORKING DRAWING—CENTER OF SALES BUILDING, NELA PARK, CLEVELAND, OHIO. Wallis & Goodwillie, Architects.

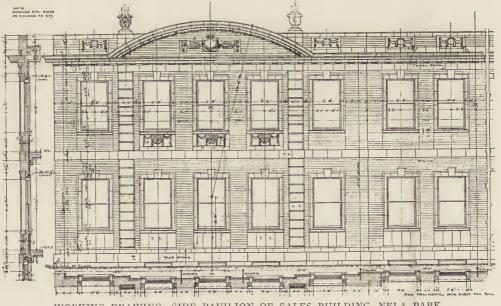
are at the disposal of these wise men, to be used when necessary, either to protest against unarchitectural encroachments or unwise additions, or for the purpose of making special suggestions or designs; in the selection of rugs for the offices, or photographs which may be required to ornament the walls; for special suggestions to the designers of the company, and influence on the design and composition of lighting fixtures.

There is nothing inherent either in Cleveland or the General Electric Company which produced Nela, and all that Nela stands for.

The producers of Nela are surely not the only wise men in the business world, nor the only ones with the "live and let live" spirit. And, mind you, it is not

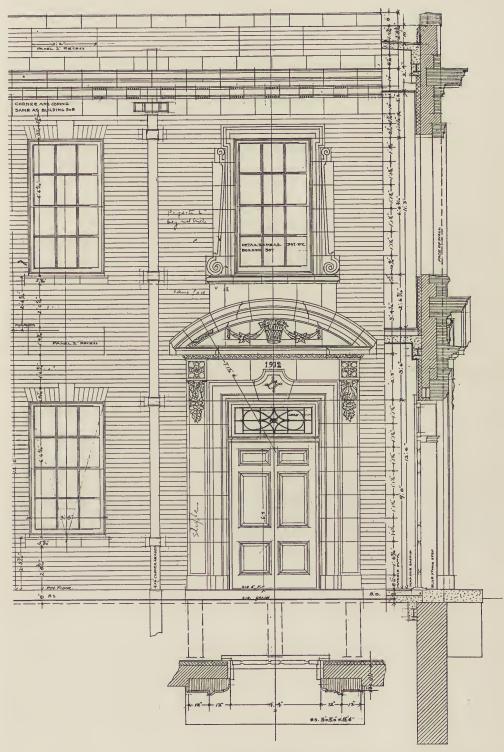
And, mind you, it is not as though "Big Business" were being asked to give something for nothing, but, as has been proven, it pays.

Business men are beginning to recognize the financial value of good architecture, and of business-like and logical



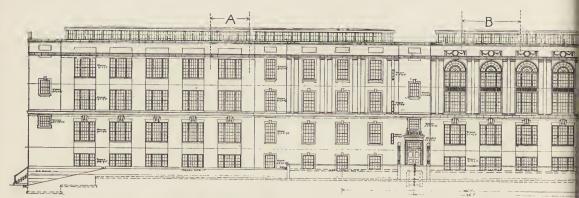
WORKING DRAWING-SIDE PAVILION OF SALES BUILDING, NELA PARK, CLEVELAND, OHIO. Wallis & Goodwillie, Architects.

500

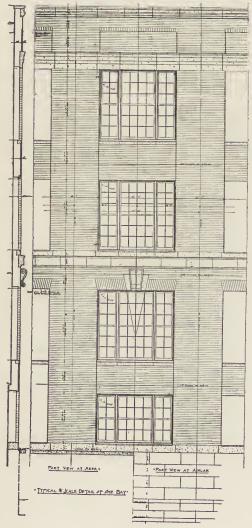


WORKING DRAWING—ENTRANCE TO ADMINISTRA-TION BUILDING, NELA PARK, CLEVELAND, OHIO, WALLIS & GOODWILLIE, ARCHITECTS.

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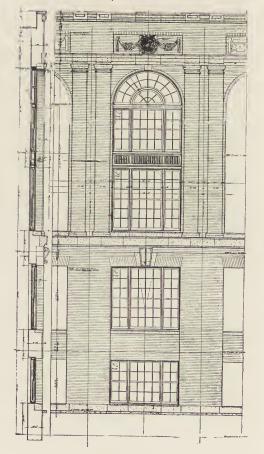
WORKING ELEVATION OF LAMP LABORATORY, THREE-QUARTER INCH SCAL



TYPICAL UNIT A.

study of requirements, such as has been carried on at Nela.

We are living in a new era. On the one side is business with its ever increasing problems, on the other side is the cap-



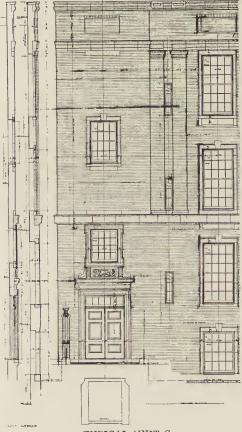
TYPICAL UNIT B.



VINGS OF TYPICAL UNITS A, B AND C MADE WORKING DETAILS UNNECESSARY.

tain of industry, who must become the practical sociologist, for he is his brother's keeper.

While the economics of business methods are being studied, the architectural necessity and careful consideration of



TYPICAL UNIT C.

plans are of more importance than ever before.

Neither office buildings nor factories may longer be built in a haphazard manner, and though it may add to the first cost, business men have awakened to the fact that good architecture is of economic value.

If there is any lesson to be learned from the foregoing, it seems to me it is the recognition of the new tack which the architects have taken and its relation to the modern policy and attitude of the business man.

Would you build for this, that, or the other business, then it would behoove you to learn something of the inner workings of that business.

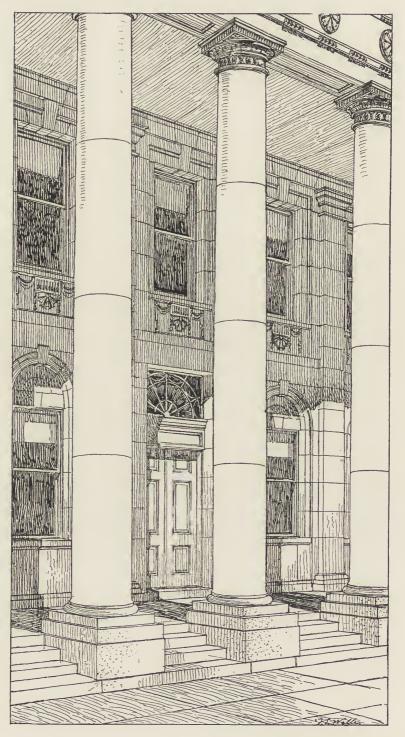
It too frequently happens that the architect is the professional rather than the business man.

He fails to recognize that with the business man, business spelled with a capital B is the main thing. The factory must first of all be a factory and an architectural study afterwards. It might rival Wren's St. Paul's so far as effect and construction are concerned and yet be next to useless as a factory, and to that extent be bad architecture.

To paraphrase Shakespeare, "The use is the thing."

With the development of the business Renaissance and the changes which it is bringing, the time has come for the architect, who would not only thrive, but survive, to get in the procession and watch the evolution of business and the needs of the business man.

503



STUDY FOR ENTRANCE TO SALES BUILD-ING, NELA PARK, CLEVELAND, OHIO. WALLIS & GOODWILLIE, ARCHITECTS.



BY MONTCOMERY SCHVYLER



T has seemed to those concerned that Miss Dempsey's excellent and thorough account of the architectural operations at Nela Park might advantageously be supplemented with some statement of the impressions made and the reflections sug-

gested by two visits to that most interesting place.

"Nela," it may be premised, is a luckily pretty word made out of the initial letters of the National Electric Lamp Association, the concern which makes rather more than half of the electric lamps in use in the United States, so that there is a shade of odds in favor of its product being that by which you are reading this article, if you are reading it by electric light, or that by which I am writing it. Though now a "division" of the General Electric Company, the association, as you speedily discover on the ground, enjoys the largest measure of autonomy.

Nela Park is at the eastern edge of the twelve-mile length of urban Cleveland, six miles to the eastward of the business centre, and just where the urban occupancy shades into the distinctly suburban, almost into the absolutely rural. It is reached through what even by trolley seems the interminable length of Euclid Avenue, and what would have been guite impracticable as a residence for a worker in the heart of Cleveland, in the days of the horse-car. Your swifter auto takes you to or from the business centre in half an hour or less, even with scrupulous observance of the speed regulations. But it is worth while to make your first visit to Nela by trolley, so as to observe what, at the time of the deponent's first visit to

Cleveland, just after the war, and when the now hopelessly antiquated and discredited Union Station was the lion of the place, was the fashionable and "brag" residential street of Cleveland. Why "Euclid" I know not, unless in celebration of the great man's promulgation of the immortal truth that a straight line is the shortest distance between two points, which does not, all the same, make this straight line seem very short to the wayfarer. Fashion has now grown quite away from its ancient haunt. The West side of Cleveland, then for social purposes undiscovered, has quite superseded the Eastern, which remains as a museum of old-fashioned domestic architecture, with irruptions and variegations of newfashioned commercial architecture. I think Richardsonian Romanesque is the latest fashion represented in the domestic part of the museum, though old Clevelanders continue to inhabit the mansions they or their forbears reared.

Just at the end, then, of the continuous building, and, as it seems, just at the "jumping-off place," the weary voyager sees, up at his right, occupying a plateau at the brow of a sharp acclivity, a group of buildings which is bound to arrest his attention. If it does not "advertise mystery" it assuredly "invites speculation." It is clearly "institutional," but what is the institution? Not a hospital, and not a reformatory, and not an asylum, observation forces him presently to conclude, even from what he sees from below. His conjecture would be apt to settle upon a college. It is not a bad guess. It is a college, and it has been enthusiastically but not absurdly described as "a university of industry." After he has familiarized himself with the several functions and purposes of the buildings which make up the group, he may recall Clarendon's description of Falkland's house near Oxford, where his friends "resorted and dwelt with him, as in a college, situated in a purer air: whither they came, not so much for repose as study, and to examine and refine those grosser propositions which laziness and consent make current in vulgar conversation."

For the purpose of this experiment in the promotion of efficiency, it is fortunate that fashion has deserted the East side of Cleveland and that the name of Euclid Avenue might be Ichabod Road. Had the city continued to expand on the original lines, the forty acres of this knoll, with this picturesque intersection of ravine and dell, as by far the most commanding site in its region, would either have been reserved for a public park, as to all intents and purposes they are now, or else have been impounded by some "magnate" for his private and exclusive demesne.

When you have climbed the steep, and the group detaches itself and spreads out before you on the level, you are, or you come to be, in a position to behold appreciatively and admire rightly the variety in unity of the architecture. Without doubt the architect's choice of the later Georgian for his particular purpose was justified. Almost he makes you say that his choice was Hobson's and he had no other. Even before you are apprised of the purpose of each particular building, any more than you are apprised of it by its specialization of design, you become aware in each of a high degree of specialization. The range and versatility of what you may have come to consider the somewhat sleepy and humdrum monotony of that Georgian building, still for the most part kept entirely within the limits of the style, will increasingly impress you. The style is doubtless prosaic, in comparison with some others. You might call it "businesslike" so clearly subordinated are the little touches of ornament and grace and beauty to the weightier matters of accessibility and convenience and illumination. It harks back, some of it, beyond the Georgian period, and smacks of Queen Anne, Wren's Orangery at Kensington, which served as the pattern for the English building at St. Louis in 1904, is somehow recalled in the design of the power

house and garage, though, indeed, there is little specific resemblance beyond the isolation of the white keystones in arches or fields of red brick. The powerhouse, which serves several other purposes, is nevertheless one of the most striking and successful of all the erections, recalling really some very extensive set of stables which the architect of some English nobleman of markedly equine tastes might have been well inspired to build during the eighteenth century, but for the unmistakably modern chimney shaft, in the similitude of a Doric column, with its most effective entasis, on which Miss Dempsey has remarked. In no other building more than in this is the charm and the bloom more pleasantly in evidence of the brickwork which has been so carefully brought to the exact nuance of texture and color and bonding of the best English examples until the mere expanse of a blank wall in brick becomes a delight to the sensitive eye. One is inclined to call it the best brickwork on this side of the water, and without any superior on the other. It fully deserves, as so few other American examples do, Tennyson's apt epithet of

A bulk of mellow brickwork on an isle of bowers.

But this charm pervades all the buildings of the place, although, as you perceive, it is most distinctly in evidence where the contrasting members of stone or terra cotta are least conspicuous and pretentious. The only really commerciallooking building in the group is the "Lamp Laboratory," so-called, which even carries a very commercial-looking and skylit storage loft. You are to know that Nela Park does not contain a fac-The factories of the association torv. are scattered all over the country, a new one being built whenever and wherever it appears that the cost of transportation makes it advisable to build it in closer proximity to its particular market. But the "laboratory" is near enough to a warehouse to justify it in looking commercial, as it does to a degree not approached in any other of the buildings. It may be a question whether it is justified in carrying the inflated consoles which do duty as keystones in flat arches,

506

and whether these do not incur the criticism which Mark Twain made upon the cabled report of his death as "much exaggerated." Miss Dempsey emphasizes the fact that the building project does not include a "colonnade," a mark of pretentiousness and monumentality which few architects could deny themselves "in the present state of the art," or at least of the Beaux Arts. That does not, as you see, mean that there are no "features" which have only an architectural function. The portico is as much such a feature as the colonnade, and the free standing hexastyle portico of the Sales Building is emphasized by the material of its shafts, a light bluish granite which has by no means the incongruity of effect you might apprehend from the description but helps to signalize the order and its pediment as a "monumental" feature. A like effect is produced by the engaged order of four doubled pilasters which distinguishes the Engineering Laboratory. It has already been explained how the Administration Building, which one would expect to be the most ornate of all, has, in fact, in deference to the wishes of its chief occupants, been made the plain-

From the point of view of architecture it is plain how such a scheme, on such a site, with the differentiation of the buildings required by practical or aesthetic considerations, is enough to make any architect's mouth water. It will not be disputed, either, that the actual architects have made a shining success of their work. For such a combination of the institutional and the domestic as has here been sought and found they have shown that the repertory of British Georgian is adequate, and the variety of pretty and quaint and fantastic detail by means of which every building is made to have its individual character and its individual interest, while contributing its share to the effectiveness of the whole, shows not only how faithfully the sources

have been explored, but how affectionately the work has been lived with from the beginning by the designer.

Some may question the propriety of the "domestic" element in the architecture of a group of buildings for the headquarters of a commercial corporation. But I think nobody will question its appropriateness who has had the opportunity of visiting Nela Park in circumstances which enabled him to see what goes on there. The establishment of a factory in the country is becoming common enough, merely as an economy in rent. But the notion of establishing the heads of departments, the men who plan and administer and investigate, in a group by themselves and with their own expressly provided surroundings, as it has been carried out in Nela Park, is quite a different matter. The social element is looked out for at every turn. The association, besides its own camping ground for its salesmen on its own premises, has an island in the St. Lawrence for the holiday recreation of its members. If "esprit de corps" is an element of efficiency, and nobody will dispute that it is, how could it be better promoted than by making every one of the thousand or twelve hundred persons who are ultimately to constitute the population of Nela Park feel that he or she is an organic part of the great machine? And how could that conception be better expressed than it is in the architecture of this "college situated in a purer air"? There is a placard one frequently encounters in the office, bearing words quoted from a former President of the Association: "I had rather make men than money." It is evidently still the motto of the concern.

Perhaps the clearest and deepest impression the observant visitor takes away from this scene of co-operative industry is that "big business" may be not only a very big, but a very beneficent thing.



SEARS MEMORIAL, CAMBRIDGE, MASS. BELA L. PRATT, SCULPTOR.



"MUSIC," BOSTON OPERA HOUSE. Bela L. Pratt, Sculptor.

BELA L. PRATT AN EMINENT NEW ENCLAND SCVLPTOR

BY CHARLES HENRY DORR



LTHOUGH the name of Bela L. Pratt is widely known in Boston, his art is international in scope and is familiar to visitors at the Paris Salon, the Library of Congress, Washington, D. C., and the annual expositions of the Pennsylvania Academy of Fine Arts,

Philadelphia, and the National Academy of Design, New York, or at public edifices and parks throughout the land.

Sculpture and architecture are allied arts; and the art of Bela Pratt, who was formerly a student in the Art League of New York, and a pupil in the atelier of the late Augustus Saint Gaudens, is associated with the imposing Public Library of Boston, designed by McKim, Mead and White, and the Boston Opera House, the latest temple dedicated to the muse of music in the metropolis of New England. Copley Square, in Boston, is apt to lure the visitor from abroad seeking the haunts of temples of architectural beauty; Trinity Church, for instance, with its lofty spires, and the marble shrine of literature, the classic building of the Public Library.

Here are the names of illustrious painters and sculptors allied with the art of architecture: Puvis de Chavannes, the French painter of decorative subjects, represented in the Library by his phantasy, "The Muses of Inspiration, Poetry, Philosophy, History and Science;" Edwin A. Abbey, the distinguished American artist, who contributed his series of lengendary panels, "The Quest of the Holy Grail," and John Singer Sargent, a brilliant member of the American school, who is represented by a series of paintings symbolical of religion.

The name of Louis Saint Gaudens is also included in the band of artists and sculptors who have contributed to the embellishment of Boston's Public Library. His art is recalled by the figures of two lions, which guard the approach to the stairway leading from the main entrance of the building to the floor above, where the nymphs of Puvis de Chavannes are revealed in the mural decorations. So art and literature join hand and hand within the portals of this imposing library



"NEW BEDFORD WHALEMAN." BELA L. PRATT, SCULPTOR.



"THE DANCE," BOSTON OPERA HOUSE. Bela L. Pratt, Sculptor.

and the example is worthy of emulation in any temple devoted to literature at home or abroad.

Flanking the entrance to the library erected by Bostonians in Copley Square are two large seated figures in bronze, dedicated to art and science and mounted on pedestals of granite, comparatively recent examples of the art of Bela Lyon Pratt.

Art is portrayed with a brush and pallette in hand, a figure of liberal proportions and characterized by a feeling of repose, and withal subtle in modelling. Here appears the names of some of the famous masters: Raphael, Titian, Rembrandt, and Velasquez, among the artists: and among the sculptors are Phidias, Praxiteles, and Michelangelo and Donatello.

The companion figure of "Science" faces the spectator, and the handling is similar to that revealed in "Art" "Science" is also a seated figure and is represented holding a sphere, and evidently she is in a contemplative frame of mind. These names in keeping with the theme appear near by: Newton, Darwin, Franklin, Morse, Pasteur, Cuvier, Helmholtz and Humboldt, certainly distinguished names affiliated with science.

Thus the sculptor pays homage to the muses of art and science at the portals of Boston's Public Library.

In lighter vein and imbued with a buoyant note throughout are the three decorative panels dedicated to music, the dance, and drama, which ornament the space between the large columns of the Boston Opera House, the new temple

of music in New England's capital. These graceful figures by Bela Pratt are in terra cotta and appear on blue ground. Unfortunately the placing of the trio of panels portraying music, drama and the dance is not advantageous, for they are removed far above the gaze of the "madding crowd," and at quite a lofty altitude, even for Bostonians.

The spirit of the poetry of motion is expressed in the lithe, slender figure of the dancing nymph, who is waving the folds of a filmy drapery as she lightly trips a measure, perchance through some sylvan glade of the sculptor's fancy. She is truly an exponent of the dance, this sprightly nymph, whose pose suggests movement and grace; and withal, the figure is freely modelled.

Highly decorative in design is the panel devoted to the muse of drama, with its notable central figure, and others suggesting the Bacchanalian revels, grim tragedy and comedy.

The sculptor has given free rein to his imagination in his art as expressed in the panel dedicated to the muse of music Here the youthful figures with their rhythmic lines recall the lines of the poet, "When Music, heavenly maid, was young," and they are indeed imbued with joyousness and exuberance of youth, these figures introduced into the composition, which forms the panel of music.

It is one of the most effective panels in the series, and is poetic in conception and subtle in modelling.

As decorative panels, imaginative and well composed, these are interesting examples of the art of Bela Pratt and highly



"SCIENCE," PUBLIC LIBRARY, BOSTON. BELA L. PRATT, SCULPTOR.



"ART," PUBLIC LIBRARY, BOSTON. BELA L. PRATT, SCULPTOR. ornamental for embellishment of a temple of music.

Spirit and action characterize the stalwart figure of a New Bedford whaleman, who is portrayed with long harpoon poised in the air, and standing in a whale boat dashing through the surf, in pursuit of some great leviathan of the deep.

This muscular figure of a New England toiler of the sea is in striking contrast to the classic types essayed by the sculptor and in its virility and rugged strength suggests the vigor of the late Winslow Homer, painter of the lure of the sea.

The design is a memorial to the whalemen of New Bedford and is a gift to that seaport town by W. W. Crapo. It typi-



HEAD OF "NEW BEDFORD WHALEMAN." Bela L. Pratt, Sculptor.

fies the whaling industry, long associated with this port on the Massachusetts coast; and it may be of interest to note that the harpoon observed in the hands of the athletic boatman was modelled after an original harpoon once used in whaling expeditions on a New Bedford whaler.

The figure of the boatman, the long harpoon, and the coil of rope attached to the spear, all are cast in bronze; and the whaling boat is mounted on a granite pedestal.

On the back of the memorial carved in granite appears the seal of New Bedford with this inscription:

"In honor of the whalemen, whose skill, hardihood, and daring brought fame and fortune to New Bedford and made its name known to every seaport on the globe."

On the reverse side are these lines, carved below several sea gulls darting through the air:

"A dead whale or a stove boat," the motto of all New Bedford whalemen.

It is eminently appropriate, this memorial rendered by Bela Pratt to the daring whalemen of New England, and a graphic tribute to their skill and prowess on the sea.

Associated with the early literature of New England, the name of Nathaniel Hawthorne is highly revered in Salem, where the author once lived and penned his absorbing romances.

Not long ago a heroic seated figure, nine feet and seven inches in height, of Nathaniel Hawthorne was completed in the atelier of Bela Pratt, in Boston; and in this statue the sculptor has succeeded admirably in his delineation of the character of the author of "Twice Told Tales."

Hawthorne's figure is cast in bronze; and according to those familiar with the novelist's life, he was accustomed to visit the sea shore on a moonlit night and gaze out upon the water.

Evidently this is the mood of the author the sculptor endeavored to portray in the statue. Hawthorne is seated on a rock; and absorbed in thought, perchance, he is engaged in some of the creations of his imagination. His coat

514

is buttoned closely around his neck and suggests the breezes wafting in shore from the ocean. He clasps his hat and cane in his left hand. The Hawthorne statue was unveiled recently in a public square at Salem.

Another heroic figure, of an eminent New England divine, Edward Everett Hale, author and preacher, of Boston, was added this year to the numerous historic statues in the Public Gardens of Boston. Imbued with a benign expression, and standing, one is reminded of the Russian Tolstoy, in this portrait of Dr. Hale, by Bela Pratt. It was presented to the city by Bostonians. The figure is in bronze and mounted on a granite pedestal.

Quite an original conceit of the sculptor, and founded on the famous "Barefoot Boy," celebrated in verse by John G. Whittier, the New England poet, is the bronze statue of a barefoot boy, presented to the town of Ashburnham, Mass., by Mr. Ivers Whitney Adams, once a school boy in that region, but now a millionaire. Wishing to preserve the traditions of the poet and the song of school days in which the barefoot boy. played an important role, Mr. Adams commissioned Bela Pratt to model the figure of a barefoot boy. This young New Englander is portrayed by the sculp-tor as a school boy, "with cheeks of tan" and on his way to school, carrying the student's outfit of books, slate and dinner-pail.

He wears a straw hat of New England fashion, and a touch of human nature is manifested by the red apple noted in the school boy's hand. "The Barefoot Boy" is mounted on a native boulder in the town of Ashburnham, Mass., which doubtless is the home of many barefoot boys.

As a sculptor, Mr. Pratt has made portraits of many eminent personages identified with the history of New England. His portrait bust of the Bishop Phillips Brooks, the noted Boston divine, whose eloquence resounded from the pulpit of Trinity Church in Copley Square, is a characteristic and remarkably life-like example. It is a wonderfully expressive likeness and modelled with authority, this portrait of the Boston preacher, which was executed by the sculptor for Brooks House, Cambridge, Mass.

Among other portraits may be mentioned the bust portrait in marble of Colonel Henry Lee, for Harvard University, Cambridge; and the portraits in relief of the Misses Lily and Phyllis Sears, daughters of Herbert Sears of Boston.

Two full length standing figures by the sculptor, "Peace and War," form the Butler Memorial at Lowell, Mass.

War is portrayed as a stalwart figure, stern and strong of limb, and suggestive of power; while peace is characterized by repose and is observed resting her left hand upon the muscular arm of the warrior, with symbolical significance, as



"PEACE AND WAR," BUTLER MEMORIAL, LOWELL, MASS. Bela L. Pratt, Sculptor.



HEAD OF "SCIENCE," PUBLIC LIBRARY, BOSTON. BELA L. PRATT, SCULPTOR.



HEAD OF "ART," PUBLIC LIBRARY, BOSTON. BELA L. PRATT, SCULPTOR. if to persuade him to cease from conflict. Another monument is the angelic figure of the Sears Memorial at Cambridge, Mass., which is effective in its simplicity of treatment. It is a memorial to two members of the Sears family, Philip Hewes Sears and Sarah Pratt Sears, names well known in the history of Boston.

The figure of Nathan Hale, the patriot, has always appealed to authors and artists, and several statues have been executed by sculptors of this historic character, who met death as a spy. Bela Pratt's statue of Nathan Hale, for Yale University, represents the full length figure of the patriot, standing defiant and bound hand and foot.

The sculptor is revealed at his best in the full length figure of "Youth." fraught with charm and the naiveté of tender years. This slender figure is the very apotheosis of youth, "standing where brook and river meet;" and in her right hand she clasps a tiny flower, with its symbol, perchance, of maidenhood. There is a note of spontaneity in the modelling of this youthful figure and withal the sculptor displays rare feeling. It is an unusually alluring type of figure work, this statue of "Youth" by Bela Pratt.

The artistic career of Bela Pratt dates almost from his early childhood. He entered the Yale School of Fine Arts at the age of sixteen, and later became a member of the Art Students' League, where he studied with the American master, Augustus Saint Gaudens, and William M. Chase. While a pupil in the Art League he also received instruction from Saint Gaudens in the studio of the famous American sculptor; and in 1890 the young artist joined the art colony in Paris, where he was enrolled in the Ecole National des Beaux Arts. He also studied with Falguiere, and while abroad received several medals and prizes. In summing up the work of Bela Pratt and his various examples of decorative sculpture, it may be said that his sculpture possesses the merit of the Classic type, but is far removed from the Academic. He is gifted with unusual feeling for his subjects, has imagination and is a subtle draughtsman. His art accords him a foremost place with the illustrious American sculptors of today.



"THE DRAMA," BOSTON OPERA HOUSE. Bela L. Pratt, Sculpter.





This is the second portion of Mr. Beach's vigorous discussion of actual conditions in the professional practice of architecture. Subsequent installments will deal with "Competitions," "Associate Architects," "Specialists," "The Consulting Architect." There surely was need of Mr. Beach's wholesale frankness.



BARCAINS IN ARCHITECTVRAL SERVICE



This is the age of the bargain counter as well as of the trust. If an architect will not shade the price first offered, will not meet the figure of his most disreputable competitor, it is supposed to be because he belongs to some hard and fast "Union" whose tenets are inimical to the public good. With a certain large class of clients, the ability of the practitioner does not appear to be in the least considered.

It is no uncommon occurrence for the committee in charge of a public building project to award the architectural service to the lowest bidder after the manner previously described, regardless of his education, general fitness or reputation. In total ignorance or careless disregard of what constitutes such service, they will entrust the expending of public funds and the erection of a monumental edifice to an unprincipled tyro who, having no respect for himself or for the profession which he fails to adorn, has no scruples about prostituting that profes-

sion. He possesses but two qualifications—he \cdot owns an architect's sign and he will work for a low fee. These are apparently sufficient for the committee.

These statements, though astounding, are *not* exaggerated.

It frequently happens that a committee, in supreme contempt for the methods of better class architectural practice, will, as soon as appointed, advertise an open competition, or scramble, free from all restrictions. Then, when they find no architect of repute entered, deliberately award the work to a man of known inefficiency, "just to show those conceited architects that they are not the whole thing."

Recently, when the Building Committee of a School Board found themselves subjected to considerable censure because of the character and work of the architect who had planned for them a two hundred thousand dollar high school building, they obtained a report on the drawings from a consulting architect. This report made sweeping criticism of the work of the other man, relating to the planning, construction, fire hazard and other features of the building, closing with the following generalizations:

"The drawings show an absolute lack of detail of several items, but it is ex-

tremely difficult to criticise these because of the involved manner in which the drawings and specifications are drawn up, there being no cross-indexing for the convenience of the contractor. Therefore, a review of the work which ought to be a matter of hours becomes instead a matter of several



days. Many details called for in the specifications are not to be found on the drawings. . . There are too many uncertainties encountered, too much questionable construction inadequately described. . .

"This overloading of the unessential items is so considerable that I believe I am not beside the mark in saying that the building as planned cannot be completed under \$250,000.00. . . . Of this amount, I believe that upwards of \$25,000.00 is actually wasted in poor construction, too-good construction, poor planning and useless items (such, for instance, as the one hundred or more fireproof windows opening into light courts from corridors). . . ." Did they discharge their incompetent "architect" and start over? Certainly not. It would have taken braver men than they to have done so. They pigeonholed the report of the expert and proceeded to let a contract.

But, with the better education and preparation of the architect, with the diffusion of information on the subject by magazines and by the American Institute of Architects, it is to be hoped that the public will come to understand (even though too slowly) that the true architect is a dependable agent insofar as conditions will permit. We look for such travesties as have been cited only in semi-provincial and somewhat benighted communities.



GETTING BVSINESS



Without question, the expression "Getting business" will jar outrageously the aesthetic sensibilities of many practitioners to whom the commercial side of their routine is so distasteful that all phases of it are left to their clerks.

Some others, however, will assuredly say that the getting of new business is indisputably their most requisite qualification because, without success in this

particular, none of their other ability would be called into service. Hence they aim to establish political, social and club connections, arrange to have notices and pictures of their work published in newspapers and magazines, cultivate business friendships, and seek to place under obligation persons of influence and authority. They enter all sorts of "competitions" and proffer free preliminary service on approval at the least possible provocation. They even employ "business getters" and do all that ethics will permit (and some things that strict ethics would not sanction) to procure new commissions.

Apparently an architect might devote



all his time to the acquisition of "jobs" and still be an architect. Nearly all architects must spend some portion of their time in the quest of new clients, though there be many who claim that commissions come as fast as they care to receive them without special personal effort. Fortunate individuals!

Even these, practicing on their high plane of dignified un-commercialism, will oft-

times enter competitions, which are almost as pernicious a means of getting business as any that could be evolved.

It is said that recently one of the leading members of the profession entered and won a competition for a city church, a competition which was to the last degree informal and in which there were several competitors, no program and no restrictions as to the solicitation of members of the committee by contestants. These members of the committee were the sole judges, having no professional or technical assistance.

Upon being questioned regarding so gross a lapse from his avowed policy of having naught to do with any but the

most formal of competitions, the successful architect



naively stated that he had been informed that no other architects had been *invited* to compete; he did not state whether he knew others were competing or if he had taken pains to ascertain if there were others in the field.

Knowing how keen is this scramble for business

it is hard to conceive how there could have been eight architects after the work and any one of them suppose himself to have been the sole candidate.

As will be told under the subject of "Competitions," the Institute has enacted a rather drastic "Code" on the subject and several members have been tried for violating its mandates. These trials bring out quite forcibly the fact that some members have been very undignified, to say the least, in their business getting, so much so as to lead one architect of prominence to plead against this "public washing of dirty linen." Another says, "Trials of members have and will inevitably become spectacles of guibbling, hair-splitting, and evasion (if nothing worse), usually terminated by whitewashing.'

Naturally, the opinion of representative men who compose building committees is that architects are a very hungry horde and that the profit in a single job is so great that the best men in the profession will go a long way and do a lot of free work with their chances only one in a good many of getting what they are after.

Such activity does not help in the

least to add to the dignity of the architectural profession in the eyes of the laity.

It would be unwise and unjust to say that all forms of business soliciting should be done away with. The novice must make some effort to get his practice started. But certainly there is no excuse for the outrageous



and unbusinesslike methods in vogue by the unethical—perhaps by some who pride themselves on being in many ways ethical. It is noticeable that, whenever criticism is directed at any one of the most notoriously unethical gentry, he will cite an instance of similar misconduct on the part of some confrere who pretends to higher standards—and

perhaps proves it. There are too many lapses of this kind.

In business getting itself there are all degrees of procedure, from the modest request to be considered a candidate, to the direct bribery of the power in control. The latter is generally a part of political jobbery and can always be known to exist in connection with such public building projects as are conducted by a dishonest political machine, large or small. Such a "gang" can "graft" a construction proposition much more successfully with the connivance of the ar-chitect. We believe the world is growing steadily better-that such dishonesty is decreasing, and yet it would be most enlightening for the public to know how few of its buildings, even to-day, are erected by architects of good repute.

In general such men are not numbered among the active candidates for such service. A few instances cited to show how the architect for an average court house or school house is selected may be added to the city hall case already described to afford sufficient reason for self-respecting architects keeping away from such work. It is true that some portions of the country, more enlightened than

others, are beginning to show discrimination; still the cases described are quite too typical.

A certain contractor was chairman of a County Commission charged with building a court house. The architect selected promised about two hundred thousand dollars' worth of building for seventy-five thousand. Later the contractor resigned from the Board and bid on the structure. It is stated on authority that he paid the other bidders and the architect fifteen hundred dollars each for the privilege of being lowest bidder.

Another court house was awarded to an architect who bought a "blooded" heifer from the chairman of the Board, paying seven hundred and fifty dollars for it. He is said to have disposed of it for thirty dollars.

The same man is reported to have arranged the low bid for the contractor on another court house much after the manner first cited. There were but three bids, the successful one being from a local citizen who had clamored most loudly for the employment of that particular architect because he was such a

"prominent court house specialist" and because he was "pledged to employ local talent as much as possible." The building cost about twelve thousand dollars more than necessary and needed eight thousand dollars repairs in its first decade.

Another court house commission sat in a remote county seat in the dead of

winter and summoned architects from cities five hundred miles distant to be before them on a certain day to exhibit "plans." In these contests it is customary for the competitors to draw lots to determine the order of their appearance before their august judges. It is supposed that, if the contest is fair, the last turn is the most desirable, because the judges by that time will have forgotten most of what has been said before. Perhaps one contest in ten is fair; probably not more than one in fifty is.

On this occasion one registered combatant had not arrived. The others insisted on his being eliminated, as they recognized an old trick in the game. But the chairman said, "No. Ay don't tank ve better leave heem out. Hay been over here two times yet and hay got some purty fine peectures he vant us should see. Ay tank ve see what all you fellers got and then ve meet again in a couple of veeks and maybe ve ask some of you to come back if ve lak the peectures vat you got."

It was so decided and the nine men said their say and departed in the assurance that the three best would be summoned back to a later session. The next day the absentee appeared and was awarded the work, as was originally intended.

An architect received a letter requesting him to meet with a School Board in a small town on a certain day to discuss plans for a new building. Arrived there he found, greatly to his surprise, six others who had been similarly invited. They were admitted before the Board one by one in the customary manner. The architect, who was quite out

of place among three shysters, two "architects" and a novice, told the Board, when his turn came, that he had supposed himself invited by them to be given the work or he would not have been there, as he had no relish for proceedings such as that. He said that, in any event, he would not consider a competition for a twelve thousand dollar

building warranted. They were vastly astonished at his displeasure and said they supposed that was the only way architects were selected and that those invited would be only too glad at being given a chance at the work. They asked him the inevitable question as to how much he charged and he in turn asked how much they would pay. They replied that two and a half per cent. was their limit and he thereupon took his leave.

Is it to be wondered that, after a few such experiences, respectable architects conclude that they are better off at home than chasing will o' the wisps? Education is slow and life is short.

But deliberate criminality on the part of the Building Committee is not the only bulwark of the dishonest architect. He finds great assistance also in those perfectly upright people, men and women



both, who compose school and library boards and church building committees. These generally want more building than their appropriation will supply and think to begin their saving by getting a low rate from the architect. Nearly always the man who offers such inducement is a rascal who will not hesitate to swear that he can get a building constructed ten to twenty or even fifty per cent. cheaper than is actually the case.

Herein we have the chief reason for the popular belief in architects' estimates. Such are not estimates at all, but merely a means to an end—getting the business. It is forced on the architect. If he be honest, he loses the work. Doubtless every architect has frequent proof of this in such experiences as the following:

The prospective client, a lifelong friend of the architect, inquired as to the probable cost of such a home as he desired.

"Six thousand to sixty-five hundred," was the reply.

"But this new fellow has been to see me and says he can do it for forty-five hundred."

"So he can, but not to satisfy you."

"Well, I don't know. He is very convincing—says he never misses an estimate more than ten per cent. Ten per cent. added to his estimate would still leave it under five thousand."

"But, don't you see, he may merely be trying to deceive you in order to get the work? Don't you think I can build as cheaply as he?"

"I should think you ought to be able to, but your figure is so much higher than I can afford to go. I'd rather have you do it, but I can't spend over five thousand."



"Well, doctor, you've known me for a long time and you know my word can be depended upon. I might encourage you to think that you can build within your price, but you would find out the truth later on. I could take a solemn oath that no architect can build that house the way you want it under six thousand dollars, and I can design it as eco-



nomically as any one—better for the price than the man you name. Can't you be convinced?"

But the good doctor wasn't convinced by the right man. His house cost him nearly eight thousand, much of which was ill spent.

Church committees appear to be the easiest prey for the disreputable mountebank, probably because they are so notoriously unbusinesslike as well as so accustomed to the receipt of charity. How they can suppose that a strange architect, member of no church (unless for commercial reasons) should come many miles to offer such charity is inconceivable; yet they do expect it.

Sometimes, too, we find that the leading men in the church, who naturally are on the building committee, really want more money spent than the congregation will sanction. Therefore they hit upon the expedient of finding an architect who is willing to be the "goat" and take the blame for the excessive cost. The committee thus escapes blame, for were they tot also deceived?

Such a committee selected their architect and sent him to look at a seventy-five thousand dollar building which was to be their prototype. He later prepared his sketches which were approved and first payment duly made. Then, to the astonishment of the committee, a surprising thing happened. The architect refused to say that the building could be erected for less than fifty thousand dollars, although he knew that the church had only voted for a forty thousand dollar building. Here was a pretty mess. Of course, they knew that they could not expect to build any cheaper than the other church, because they wanted to

523

seat more people. But a good contractor had looked at the sketches and had given his opinion that they could build under forty thousand. Now if that stubborn architect would only *say* the same thing, they could go ahead and later blame him for underestimating. But the architect was obdurate and would not lie to save the

job, so he was summarily dismissed and one employed who would say it could be built for about fifty thousand, which was the least even he would venture. It cost between eighty and ninety thousand, and very few besides the committee are satisfied with it.

Another church committee appointed an architect in spite of his insistence that their twenty thousand dollar project would run twenty-two to twenty-five thousand. They made proviso that his contract would not be signed until they had "checked up" his price of three and one-half per cent. (without superintendence) with the fees charged by other architects. They wrote two other firms. The first indifferently replied that they would do the work for two and one-half per cent., and thereby dismissed the mat-The other sent a representative ter. post-haste who closed a contract at two per cent. The church cost thirty-five thousand, so it is difficult to see wherein was the saving.

Unfortunately, such a committee builds but once and is loth to admit its mistakes. The next committee is allowed no way of profiting by the experience of its predecessors. It proceeds to make the same errors—and the business of the professional courtesan goes merrily on.

But, sneer at and deplore the "business getting" as we may, we cannot deny its necessity. Many a draftsman of good education, artistic instincts, marvelous facility of expression, and exceptional ability as a designer, is still not an architect simply because he cannot get business.

It is ever as it was in the



days of Vitruvius that "However an artist may promise to exert his talents, if he have not either plenty of money, or a good connection from his situation in life; or if he be not gifted with a good address or considerable eloquence, his study and application will go but little way to persuade persons that he is a competent artist."

An English architect, Mr. Edward S. Prior, puts it this way: "What with keeping in touch with possible clients, cajoling those that exist, doing the show work of surveyorships, and interviewing syndicates, little time can be left for even the directorate of that architectural 'designing,' which is the ostensible groundwork of all this business."

All of which points to business getting as a necessity.

There must be a beginning to the career of every architect. He must, in some way, gain his first commissions. Fortunately for him, a considerable amount of work is allotted for reasons of simple friendliness, which may be taken as further evidence of the fact that the owner concerns himself too little about the real ability of this to him unimportant factor in his building venture.

But, unfortunately for his more advanced confreres, the novice finds rather too many ways open to his endeavor. He is bound by no irksome "code," but may submit free preliminary sketches ad lib; offer complete service at a nominal price, or go to almost any length to get the desired award. It seems they will always find victims willing to pay for their experience. True, there are too many older men still making use of like tactics. Such

> waste energy cannot be too severely criticised—for it is wasted in many instances. There is in New York today a set of nearly complete working drawings recently submitted by a well-known western architect for a four hundred thousand dollar hospital, on the mere chance that it might be built. No



obligation whatever attaches to the owner to give the architect aught for the service performed. The public can have only the utmost contempt for the work of men who themselves place so slight a valuation thereon.

But business men generally recognize the value of straight-forward commercial solicitation. Its use in con-

nection with commercial building can hardly be considered unethical. It is certainly just as creditable for an architect to be given work by a stranger because of the convincing showing made of excellent work done as it is to be given a commission by a club friend only because of being a "good fellow."

The working out of the business getting by friendly influence is not always satisfactory. Many an architect, especially in the smaller cities, has too many friends who want to directly profit by that friendship—friends who are too likely to say "Why, hang it, old man, you surely can't ask me to pay such a price as that. Why, I'm a friend of yours. Of course, it's all right to gouge the other fellow, but why stick your friends?" Always the tiresome idea that an architect's commission is net, is practically earned when the job is secured, like that of a real estate agent.

Even the well-disposed booster friend, with too great officiousness, often fails of his purpose through lack of knowledge of the business methods of an architect. Such a friend is quite likely to "get it all fixed" for an architect to enter a competition not in the least attractive, and then be disappointed or even "sore" at finding his kindly offices undervalued.

A banker, proud of the work of his architect, boosted for him on all occasions, in season and out. One day he wrote him to come over and get the new school house work it was practically fixed for him. For



reasons already given, this architect was not crazy about school house designing, especially when the prospect was two hundred and fifty miles distant. But he knew of the influence of the banker, so made an appointment with the Board and went over, only to find a repetition of the old story—a lot of novices and shysters assembled

to see who could get the work the cheapest. After three days of effort by the architect and his friend, the former returned home, having spent most of his profits from the bank job.

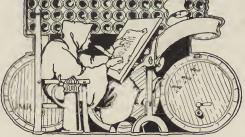
Getting an architect a "chance at a job" is worth about as much to him as securing him an opportunity to bet on a horse race or buy a ticket in a Danish lottery.

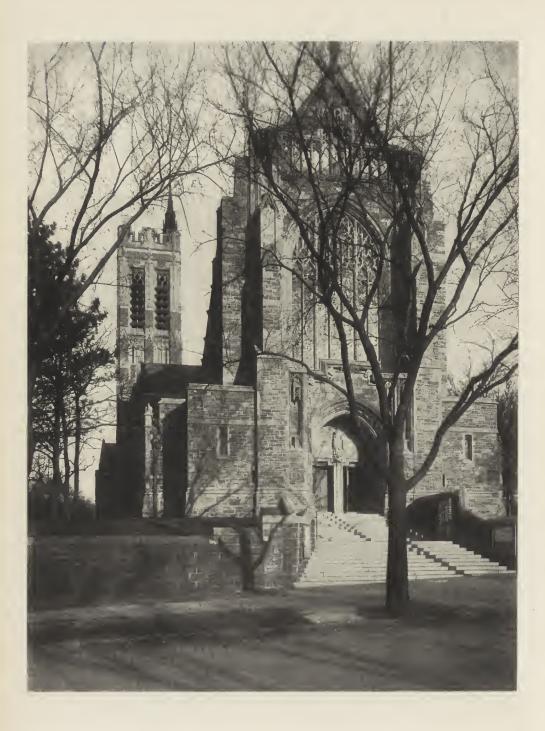
But the friend who can induce the prospective client to go and call on the architect—he is a friend indeed. It is an axiom of business that the customer who seeks a purchase is a much easier conquest than the one who must be sought.

There are many architects who, by exercising patience, could learn this to advantage and, incidentally, could exact more for their services. For, even though it may be true that a few good architects will offer a cut rate to get a given job, yet it is also true that the portion of the public which wants good service is being brought to understand that, other standards lacking, a client for architectural service can well be judged by the price he charges. If he is willing to cut that price, he is open to suspicion.

Like the cry against objectionable sensationalism in the daily press, or risque

any press, or fisque situations on the stage, this chicanery among shyster architects is in the hands of the public. When a client recognizes the architect as a member of a serious profession, the problem will at once be solved.





CHAPEL OF THE INTERCESSION, NEW YORK. ARCHITECT, BERTRAM GROSVENOR GOODHUE. Cram. Goodhue & Ferguson.)

THE CHAPEL OF THE INTERCESSION NEW YORK CITY BERTRAM CROSVENOR GOODHVE. ARCHITECT (CRAM. GOODHVE & FERCUSON) BY C. MATLACK PRICE



N ecclesiastical architecture, to a degree perhaps more deeply significant than in secular work, it may be said that an expression of character is important the most factor in the design. With this there are qualities of general conception, and of de-

tail. Considering the vast number of important church edifices which are erected yearly in this country, it is amazing, and (for the cause of architecture) a little discouraging, to record so few which are to be seriously considered as monuments either for present-day gratification or for the edification of posterity.

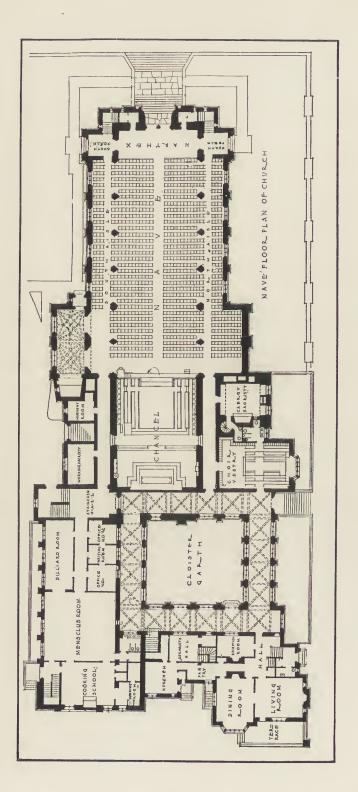
The reason for this is by no means so obscure as might be supposed, but has been overlooked perhaps by reason of its peculiarly obvious nature. It is not that the architect of today, as differing from the master church-builders of the past, are technically incapable of designing churches possessing the significance of those of the past, but rather that they are spiritually incapable of conceiving the spiritual element which must enter into ecclesiastical architecture. I have said elsewhere* that the training of the architect in expressing his thought in material forms, has rendered his task a difficult one when he is called upon to use these as a means and not as an end -when he must rely for success upon the significance of the building as a vehicle for the expression of certain ideas not at all architectural, although reached through architectural means. "Obviously no other type of building calls into

*"Symbolism in Modern Church Architecture": The Churchman, March 21, 1914.

play the necessity for expression of the spiritual as opposed to the material in architectural design to so great a degree as the church edifice, and it is, therefore, the more to be deplored that so few latter-day architects have failed to un-derstand the futility of seeking such architectural expression by means of form without feeling. A meaningless assemblage of pointed arches, crocketts, Gothic tracery and stained-glass windows, which are architectural forms, or tools, will not produce a well-designed church edifice with true architectural meaning any more than a meaningless assemblage of words, which are also forms, or tools, will produce a piece of literature with any true literary value. In none of the arts can expression signify anything of consequence unless the tools of that art have been directed by thought, which is the spiritual element, to the end that the finished fabric will express thought. No painting was great by technique alone, no literary masterpiece by virtue of the words contained in it; nor any architectural monument solely by reason of the accuracy in material form of its several parts.'

In this matter of attaining expression in church architecture, many have spoken of a lack of "idealism" in modern work. The lack is rather a lack of "symbolism," for ideals as tremendous and exalting as required by a church can be reached only by symbolism, literal expression failing entirely.

We have considered the monuments of the old master church builders of Europe but, in the main, have entirely failed to understand them. Having procured the brushes and pigments of Titian, we have attempted to duplicate one of his masterpieces, and failing, have accepted or deplored the result, according to the de-



PLAN OF THE CHAPEL OF THE INTER. CESSION, NEW YORK CITY. ARCHI-TECT, BERTRAM GROSVENOR GOODHUE. (Cram, Goodhue & Ferguson.)





WEST FRONT OF THE CHAPEL OF THE INTERCESSION, NEW YORK. ARCHI-TECT, BERTRAM GROSVENOR GOODHUE. (Cram, Goodhue & Ferguson.)



MAIN ENTRANCE TO THE CHAPEL OF THE INTERCESSION, NEW YORK. ARCHI-TECT, BERTRAM GROSVENOR GOODHUE. (Cram, Goodhue & Ferguson.) velopment of our perception. No amount of study of "the Gothic style" will enable an architect to re-create a cathedral of Rouen or Chartres any more than one is certain to write even a creditable letter by virtue of memorizing the dictionary. It is largely because the Gothic style has mistakenly been confused in architectural efforts, with the Gothic spirit that so few modern churches possess any qualities of that spiritual significance which should be their first essential. That style which the great church builders so masterfully bent to their uses proved adequate and appropriate because it was always reckoned a means of expression, and not an end-because it was then regarded in its true value as a living, growing organism, and not as an archaeological curiosity.

A homely simile is sometimes illuminating: the horse is useful only as a living organism, capable of performing certain works, and is so regarded, though the same beast, carefully stuffed and mounted in a museum, though for all purposes of superficial study, a perfectly good horse, is peculiarly useless. Notwithstanding this, our architectural styles are, more often than not, blamed for the failure of much of our architecture, when the blame lies rather with unintelligent use than with unintelligent We are acsuperficial acquaintance. quainted with many architectural styles, but know none, which is not entirely incomprehensible when we stop to think that any style was the outgrowth of certain contemporary ideals, forced and usually misapplied when transplanted to other lands and other times.

The foregoing remarks are designed entirely to establish a more or less vitally defined working viewpoint for the study of certain current manifestations of church architecture, and not with any implication that they constitute a new or remarkable discovery. It is intended to bring out a certain angle of critical vision attuned to those properties of architecture which may be called the "spiritual" as opposed to the "material"-to cultivate observation of what really constitutes rather than what superficially passes for architecture. Having taken an apse from this church, a spire from that, and a nave from another, but the *spirit* from none, the architect is painfully surprised when he senses the vague impression that the whole is a failure, since he has not perceived that church architecture cannot be dependent upon form alone, be that form never so beautiful or true in itself.

Throughout the above discussion, however, it has been assumed as understood that architectural technique should, by all means, be as finished and as scholarly as the most academic critic could wishit has been the intention only to lay heavy stress upon the idea that technique cannot, from its mere excellence as such, produce a lasting architectural monument, in ecclesiastical design less than in any other sort. Furthermore, in whatever architectural style may be selected as a medium for expression, and above all others, in the Gothic style, no significant success is to be expected unless that style be regarded, understood and developed as a living one. In this lies the difference between a lifeless archaeological restoration, and a work of creative genius, which will live beyond the lifetime of its author.

Undoubtedly the most notable achievements in recent ecclesiastical architecture in this country are St. Thomas' Church (Cram, Goodhue & Ferguson, architects) and the Chapel of the Intercession in New York City; the latter designed by Bertram Grosvenor Goodhue. In some respects the Chapel, which is one of Trinity's churches, is more unique than St. Thomas', though it is neither essential or in any way illuminating to say which is more to be admired, nor intelligent to wish or attempt to do so.*

A salient characteristic shared by each is the peculiar quality of Gothic employed for expression—a sort of Gothic at once rugged and refined; virile and massive without being heavy, and delicate without being trivial—and essentially scholarly without being archaeological.

In plan, the Chapel of the Intercession, which is really a group, is interestingly laid out in a partially symmetrical ar-

*St. Thomas' Church was described and illustrated in The Architectural Record for February, 1914, publication of the Chapel of the Intercession being deferred until the accompanying set of remarkable photographs was obtainable.



ENTRANCE TO RECTORY--CHAPEL OF THE INTERCESSION, NEW YORK. ARCHITECT, BERTRAM GROSVENOR GOODHUE. (Cram, Goodhue & Ferguson.)

SOUTH ENTRANCE--CHAPEL OF THE INTERCESSION, NEW YORK. ARCHITECT, BERTRAM GROSVENOR GOODHUE. (Cram, Goodhue & Ferguson.)



CHANCEL—CHAPEL OF THE INTER-CESSION, NEW YORK. ARCHITECT, BERTRAM GROSVENOR GOODHUE. (Cram, Goodhue & Ferguson.)



MORNING CHAPEL—CHAPEL OF THE IN-TERCESSION, NEW YORK. ARCHI-TECT, BERTRAM GROSVENOR GOODHUE. (Cram, Goodhue & Ferguson.)



DETAIL—CHAPEL OF THE INTERCESSION, NEW YORK.

rangement, the chapel itself naturally dominating, and a parish-house and rectory lying beyond, disposed about two sides of a charming cloister enclosing a green garth or lawn. The site, though terraced level, rises above the street to a noticeable elevation at the entrance front of the chapel on Broadway, while the up-grade of 155th Street brings the rectory to the street level. The group occupies the southwest corner of Broadway and 155th Street, in a part of the uptown cemetery long connected with Trinity, and the location and conditions are such that there is an unusually effective background of large trees of considerable age.

From its location there are three distinct aspects from which the group is to be studied, apart from its long direct elevation. From a point directly in front of the end of the chapel—the entrance on Broadway—there looms up a rugged mass, sitting solidly on its terrace, yet seeming also to mount upward. In some respects it recalls a similar aspect of the Pittsburg Baptist Church, of Cram. Goodhue & Ferguson,* though of a character even more virile and rugged. Apart from its mass, the detail is admirable in its disposition and strongly personal handling-a sort of Gothic not at all to be thought of as a "dead" style, but here seeming to be amazingly alive in its cursive freedom and robust fulness. Perhaps it is because Mr. Goodhue has handled it idiomatically-has not merely mastered the grammar, but the vital colloquialisms of his style that this detail of this Intercession Chapel is so buoyantly appropriate, so blythely graceful, and withal so masterfully adequate.

This aspect of the chapel from its entrance front does not disclose the tower, yet carries with its massive mounting buttresses a perfectly sufficient impression of height.

The interesting disposition of the group as a whole—the skilfully informal assemblement of the chapel, its tower and the rectory become apparent in the prospect to be had looking up 155th Street in a southwesterly direction, though the composition, from my personal point of view, has not seemed as happy as the aspect of the group from the up-hill vantage-point, looking down 155th Street in a southeasterly direction.

In the first there is, of course, the interest of the chapel-end, but a relation of the tower to the whole not quite so happy as in the second, and the *flèche* on the southwest corner of the tower does not entirely explain itself. The old retaining wall of this corner of the cemetery was kept as it was, and is somewhat in

*The Architectural Record, September, 1912.



VIEW OF PARISH HOUSE—CHAPEL OF THE INTERCESSION, NEW YORK. ARCHI-TECT, BERTRAM GROSVENOR GOODHUE. (Cram, Goodhue & Ferguson.)



NORTH TRANSEPT AND CHANCEL—CHAPEL OF THE INTERCESSION, NEW YORK. ARCHI-TECT, BERTRAM GROSVENOR GOODHUE. (Cram, Coodhue & Ferguson.)



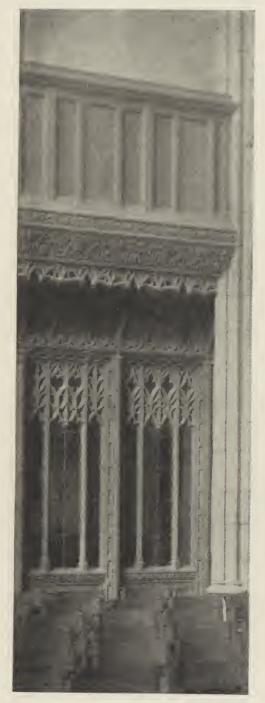
SOUTH AISLE—CHAPEL OF THE IN-TERCESSION, NEW YORK. ARCHI-TECT, BERTRAM GROSVENOR GOODHUE. (Cram, Goodhue & Ferguson.)



VIEW TOWARDS PULPIT AND NUNS' GALLERY—CHAPEL OF THE INTER-CESSION, NEW YORK. ARCHITECT, BERTRAM GROSVENOR GOODHUE. (Cram, Goodhue & Ferguson.)



DETAIL OF PULPIT—CHAPEL OF THE INTERCESSION, NEW YORK. ARCHI-TECT, BERTRAM GROSVENOR GOODHUE. (Cram, Goodhue & Ferguson.)



SCREEN BETWEEN NARTHEX AND NAVE— CHAPEL OF THE INTERCESSION, NEW YORK. ARCHITECT, BERTRAM GROS-VENOR GOODHUE.

(Cram, Goodhue & Ferguson.)

evidence on the north and west sides, with a breach on the west to admit the stairway to the main entrance.

In the prospect of the group from the up-hill end, there is an effect entirely charming and remarkably diverse and interesting. First there is the rectory, with all the dignified and mellow domesticity of a time-hallowed English countryhouse, and beyond it the higher gable of the Parish House. The rectory details are carried out with that careless informality that is the essence of art, and not only those parts which are beautifully carved, but the plain members as well. the leaded casements and quaint fenestration conspire to effect a delightful whole. In the wall connecting the rectory with the chapel, four traceried openings give glimpses of the cloister garth within, while the east end of the chapel rises impressively above it.

Here there seems to be a better massing than from the down-hill viewpointthe rectory takes its right relation with the chapel and parish house, and the tower seems more happily in tune with the group as a whole. There is no feeling that any part of it is disconnected from any other part. The wing at the base of the tower, occupied within by the choir vestry, seems to break any impression of too great length in the group, and its mullioned oriel window forms an ef-fective incident in detail. The tower, a great square, massive Norman affair, is distinctly unique in Mr. Goodhue's daring application of a French Gothic flèche, terminated in metal, and rising above the severe battlemented top of the tower itself. The tall bell-deck windows are as strong in contrasting effect as the design of the tower, and from this point of view there is an added merit in that the chapel appears to be in a relatively low position. From the front direct elevation, or front three-quarter aspect, the mass and height of the chapel nave seem to dwarf the tower in a rather irrational manner, considering that the tower is by no means lacking in proper actual relative altitude and strength.

Seen above the tree-tops from some distance further up 155th Street, the tower and its strange *flèche*, especially when silhouetted against a lurid sunset sky. take on a peculiar air of romance, stimulating the imagination as few buildings in New York may be said to do. And this romantic suggestion is amplified by the essentially picturesque grouping of the whole, with its seemingly infinite diversity of fenestration and its quaint *congérie* of roofs.

The chapel within does not belie the character of its exterior in points of individuality, and effects an expression, as well, of that spiritual side of architecture, the symbolism of an ecclesiastical ideal, which was brought out earlier in this ar-There is a good deal of color, ticle. especially in the painted wooden ceiling, but it is carefully studied "polychrome Gothic" conceived in ample knowledge not only of its possibilities but of its limitations. It is possible to apply so much color that an effect of monotony results, but here such color as was used has been very judiciously applied, and for the attainment of certain well-defined and thoroughly understood characteristics.

The woodwork, carved in a vein of true craftsmanship, and reflecting a craftsman's joy in the wood he used and the tool he plied, goes far toward the achievement of true architectural expression throughout the interior, wherein the architect has brought to bear those combined qualities of architect and artist which have enabled him to stamp his work as not only unique among others of its kind, but entirely personal and individual to him. In the entire design of the chapel the Gothic style has been handled with a cursive freedom betokening on the part of the architect that attribute of genius which knows no fear, and one feels, without pausing to define or analyze the impression, that Mr. Goodhue worked in the Gothic style, not with it-that he was inspired more by its spirit than its form, using it freely yet reverently, and simply because it was of all styles the most adapted to the expression of the ideas and the ideals which he wished to symbolize.



SOUTH VIEW FROM GRAVEYARD-CHAPEL OF THE INTERCESSION, NEW YORK. Architect, Bertram Grosvenor Goodhue. (Cram, Goodhue & Ferguson.)



ENTRANCE ARCHWAY TO THE "BAUERNHOF," ON THE ESTATE OF AUGUST A. BUSCH, NEAR ST. LOUIS, MO. KLIPSTEIN & RATHMANN, ARCHITECTS.



VIEW OF THE "BAUERNHOF," ON THE ESTATE OF AUGUST A. BUSCH, NEAR ST, LOUIS, MO. Klipstein & Rathmann, Architects.

THE "BAVER NHOF" ON THE ESTATE OF AVCVST A. BVSCH

KLIPSTEIN & RATHMANN. ARCHITECTS BY ERNEST C. KLIPSTEIN



T IS RARE in the practice of an architect that the completed result of a project which was conceived in an impulse of enthusiasm conforms so closely to the original sketch as was the case with the group of service buildings on the private estate of

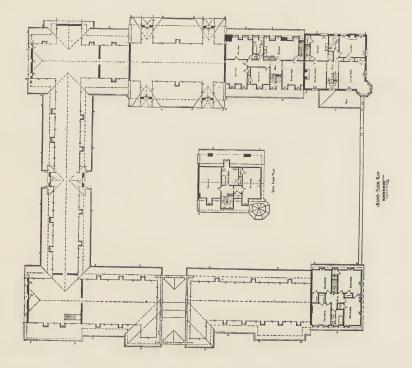
Mr. August A. Busch. A description of them would be incomplete without some reference to their conception and the manner in which the owner's brief instructions were given.

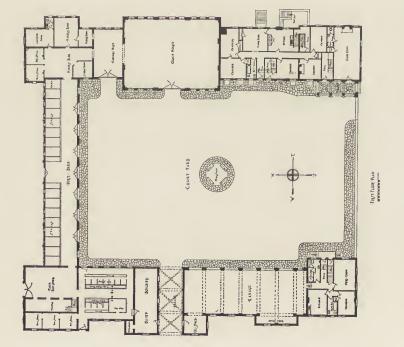
While in the architect's office, Mr. Busch, discussing other work, noticed some foreign photographs within his reach, and began looking at them without losing a jot of the business on hand. Suddenly, with characteristic enthusiasm, he held up a copy of one of the picturesque portals of the City of Rothenburg, exclaiming, "Here is something I like. I want you to build me a *Bauernhof* with a main entrance in this style." He explained that a *Bauernhof* was a group of farm buildings around an enclosure, very often seen in Germany, and that he wished to have all the service buildings for his estate built in this manner, providing for the housing of about eighteen cows and twenty horses.

A model dairy, a large coach-house, spacious garage and dwellings for at least five families and room for unmarried chauffeurs were also required. He further expressed the wish of being able to see his horses as soon as he entered the archway, which was achieved by the long line of doors in the stable facing the court.

With these instructions, the architects proceeded to study out a plan, borrowing freely from the quaint half-timber work of Nuremberg and Rothenburg and forwarded their first solution of the problem in the form of a main floor plan and a hastily prepared perspective to the owner at his summer home.

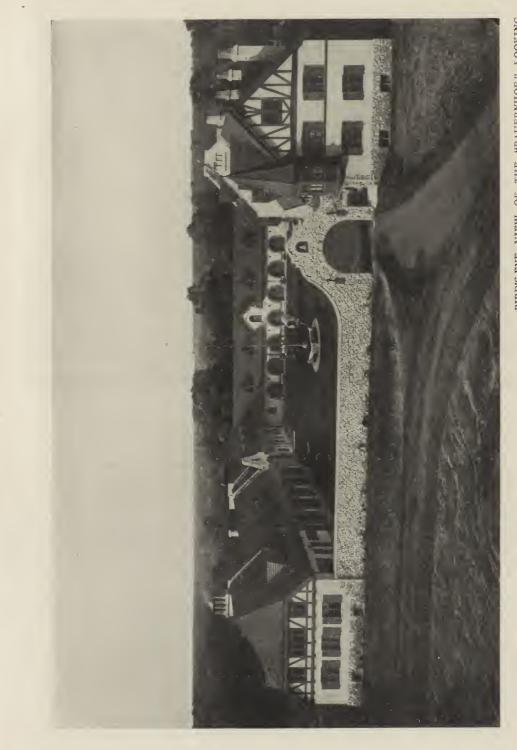
Much to their delight and somewhat to their surprise, the sketches were returned approved, the owner commenting that the perspective was a perfect portrayal of the picture he had in mind when giving his description of a real German *Bauernhof*.





SECOND FLOOR PLAN OF THE "BAUERNHOF," ON THE ESTATE OF AUGUST A. BUSCH, NEAR ST. LOUIS, MO. Klipstein & Rathmann, Architects,

FIRST FLOOR PLAN OF THE "BAUERNHOF," ON THE ESTATE OF AUGUST A. BUSCH, NEAR ST. LOUIS, MO. Klipstein & Rathmann, Architects.



BIRD'S-EYE VIEW OF THE "BAUERNHOF," LOOKING NORTH, ON THE ESTATE OF AUGUST A. BUSCH, NEAR ST. LOUIS, MO. KLIPSTEIN & RATHMANN, ARCHITECTS.

THE ARCHITECTURAL RECORD



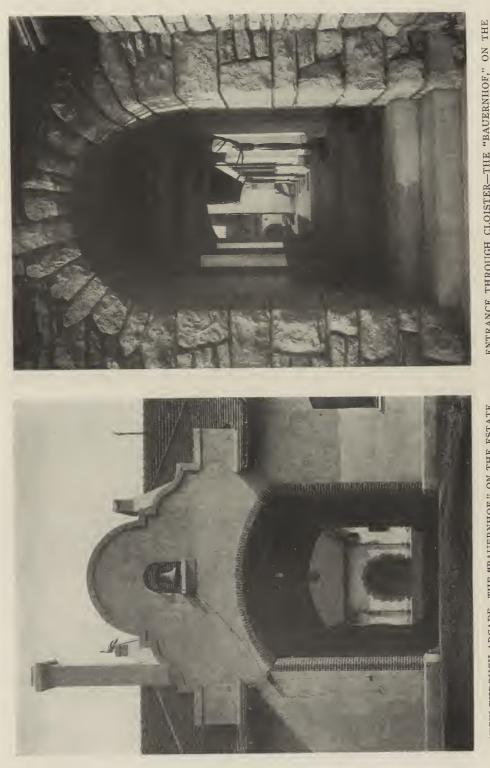
ENTRANCE ARCHWAY TO THE "BAUERNHOF," ON THE ESTATE OF AUGUST A. BUSCH, NEAR ST. LOUIS, MO. Klipstein & Rathmann, Architects.

The estate consists of about 200 acres of richly wooded land in the most picturesque section of St. Louis County, about twelve miles from the city of St. Louis, on the Gravois Road. This once formed the southern half of U. S. Grant's farm, from which he enlisted as Lieutenant in the Fourth Missouri at Jefferson Barracks, only a few miles distant in the direction of the Mississippi River. "Hardscrable," the old log cabin wherein the young Lieutenant and his bride began housekeeping, still stands on the premises as a memorial.

From a glance at this plan, the reader will see how the various buildings join for the convenience of operating, and where no connection is essential, the opportunity is always embraced to divide with a solid brick wall for fire protection. The walls are 13-inch and 18-inch brick walls, with Portland cement rough-cast on the outside. The roof is of a red shingle tile and the oak half timber is slightly stained and oiled. All projecting eaves have the soffits between the brackets painted a strong vermilion, which lends a bit of color in a foreshortened view and gives perceptible warmth to the shadows.

On entering by the small arch, at the right of the main gate, you pass the office, which has an attractive fire-place built of boulders taken from the premises, the ceiling being finished with crossbeams and the main beams terminating over grotesque bosses. This room, however, is not at present filling the functions for which is was built, for the owner's youngest son took immediate possession of it for his "Club," and the office is now found in one of the apartment rooms.

In the two floors above and in the adjoining building are four apartments, each having separate court and rear entrances, also stairs for each apartment to laundries in the basement. Each



VIEW THROUGH ARCADE—THE "BAUERNHOF," ON THE ESTATE OF AUGUST A. BUSCH, NEAR ST. LOUIS, MO. Klipstein & Rathmann, Architects.

ENTRANCE THROUGH CLOISTER—THE "BAUERNHOF," ON THE ESTATE OF AUGUST A. BUSCH, NEAR ST. LOUIS, MO. Klipstein & Rathmann, Architects.

9



BEDROOM ABOVE CLUBROOM—THE "BAUERNHOF," ON THE ESTATE OF AUGUST A. BUSCH, NEAR ST. LOUIS, MO. Klipstein & Rathmann, Architects.



CLUBROOM-THE "BAUERNHOF," ON THE ESTATE OF AUGUST A. BUSCH, NEAR ST. LOUIS, MO. Klipstein & Rathmann, Architects.

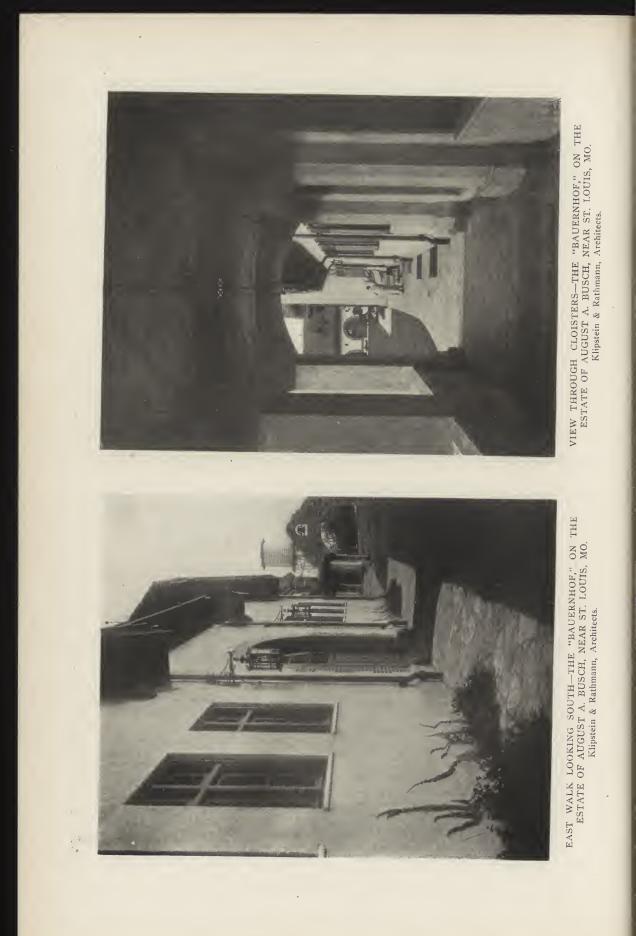
THE ARCHITECTURAL RECORD.



DWELLINGS—THE "BAUERNHOF," ON THE ESTATE OF AUGUST A. BUSCH, NEAR ST. LOUIS, MO. Klipstein & Rathmann, Architects.



DWELLINGS—THE "BAUERNHOF," ON THE ESTATE OF AUGUST A. BUSCH, NEAR ST. LOUIS, MO. Klipstein & Rathmann, Architects.





LOOKING NORTH ON EAST SIDE—THE "BAUERNHOF," ON THE ESTATE OF AUGUST A. BUSCH; NEAR ST. LOUIS, MO. KLIPSTEIN & RATHMANN, ARCHITECTS.

THE ARCHITECTURAL RECORD



VIEW THROUGH ARCADE FROM COURT—THE "BAUERNHOF," ON THE ESTATE OF AUGUST A. BUSCH, NEAR ST. LOUIS, MO. Klipstein & Rathmann, Architects.

apartment is complete, with kitchen, bath room, sitting rooms and one or more bed rooms. Under the last apartment is located a heating plant, which is entirely cut off by fire proof construction.

Continuing along the flag stone walk which surrounds the wood block paved, court, one reaches the main entrance of the coach house, which is flanked by large wrought-iron lamps. This room is 44 feet by 60 feet, and 42 feet high, with walls laid in two shades of mottled brown brick, the paneling laid in herring-bone design with a four foot dado of green enamel brick. The great height and size of this room and the ornamental brick wall treatment make it the most impressive of the group.

From this room you enter a spacious carriage wash and a smaller harness wash room, both lined with white enamel brick and equipped with the most modern plumbing. A harness room, a hostler's lounging room, a saddle room and two box stalls surround the harnessing space. All are provided with an abundance of light and so located that the harnessing or saddling of horses can be done most conveniently and with the fewest possible steps.

This gives into the main horse stable, which is 20 feet wide and 116 feet long, containing sixteen stalls. The troughs are provided with unique water supply de-vices, by which each horse is automatically supplied with fresh water every half hour, of any temperature desired by the stable master. The supply comes from the bottom of the drinking trough, and thus any dust or feed on top of the water is carried off by the over-flow. At the other end of the stable is found the farm building used for storing service carts and wagons. The feed room for the preparation of fodder for the cows is also located here. The cow barn adjoining as well as the horse stable has a buff enamel brick

THE ARCHITECTURAL RECORD.



CHAUFFEUR'S LODGE—THE "BAUERNHOF," ON THE ESTATE OF AUGUST A. BUSCH, NEAR ST, LOUIS, MO. Klipstein & Rathmann, Architects.



EAST WALK, LOOKING NORTH—THE "BAUERNHOF," ON THE ESTATE OF AUGUST A. BUSCH, NEAR ST. LOUIS, MO. Klipstein & Rathmann, Architects.



DWELLINGS-THE "BAUERNHOF," ON THE ESTATE OF AUGUST A. BUSCH, NEAR ST. LOUIS, MO. Klipstein & Rathmann, Architects.



COACH HOUSE—THE "BAUERNHOF," ON THE ESTATE OF AUGUST A. BUSCH, NEAR ST. LOUIS, MO. Klipstein & Rathmann, Architects.

dado with a green enamel belt course above, and the remaining walls to ceilings are faced with light brown brick. The single stalls, also the box stalls for cows with calves, are all paved with cork brick. The drinking water for the cows is also arranged to be supplied at any temperature in concrete troughs. Providing cows with warm drinking water in winter is recommended by experts, in preference to adopting the more common practice of having low ceilings in order to keep the cows warm during the cold spells.

Adjoining the cow barn, but with no door connecting, is a modern sanitary dairy. A small screened window is used to pour the milk through into a container from which it passes over the cooler into the milk cans. These, when full, are placed in the refrigerator. The dairy is provided with all the necessary modern dairy apparatus, the entire walls and window jambs are laid up in white enamel brick, and the corners and bases have sanitary coves.

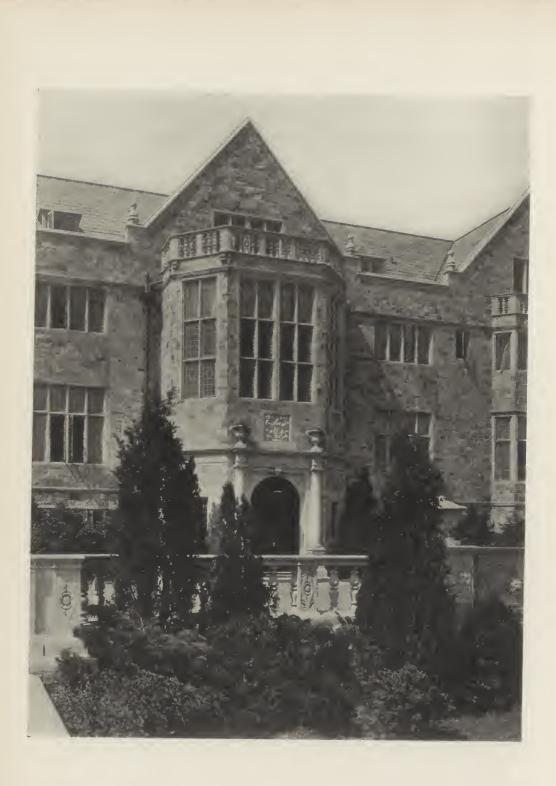
An interesting groin vaulted passage,

ornamented with grotesque carved bosses, separates this group from the garage which you next enter. The garage is 77 feet long by 27 feet wide with two spacious recesses, one used for oil room and the other provided with work The walls are laid in a light benches. brown brick with green enamel dado. The ornamental brick treatment of the end walls, the vaulted ceiling and the red tile floor make this one of the handsomest rooms of the group. In keeping with the completeness of all departments of this estate, the garage has an elaborate oil storage installation, a pressure tank equipment for inflating tires, washing devices, and capacious lockers, etc.

We now come to the last building of the group, a small half-timber dwelling containing a four-room apartment on each floor, where dwell the unmarried chauffers. The heavy stone wall connecting this building with the main entrance has considerable fissure stone in its outer face, the sienna coloring of which contributes greatly to its appearance of age.



DWELLINGS AND COACH HOUSE—THE "BAUERNHOF," ON THE ESTATE OF AUGUST A. BUSCH, NEAR ST, LOUIS, MO. Klipstein & Rathmann, Architects.



DETAIL OF ENTRANCE FRONT-RESIDENCE OF GEORGE D. PRATT, ESQ., AT GLEN COVE, L. I. TROWBRIDGE & ACKERMAN, ARCHITECTS.

THE RESIDENCE OF G. D. PRATT, Esq.

TROWBRIDGE & ACKERMAN, ARCHITECTS

By Harriet T. Bottomley

Photographs by Julian Buckly



NQUESTIONABLY, the hilly North Shore, overlooking the Sound and the highlands of Connecticut beyond, is the most beautiful part of Long Island. On the crest of a hill, commanding a series of views varying in

character from rolling lawns to the south to a panoramic expanse of blue water and hilly horizon line to the north is Killenworth, the new home of George D. Pratt, Esq., designed by Trowbridge and Ackerman.

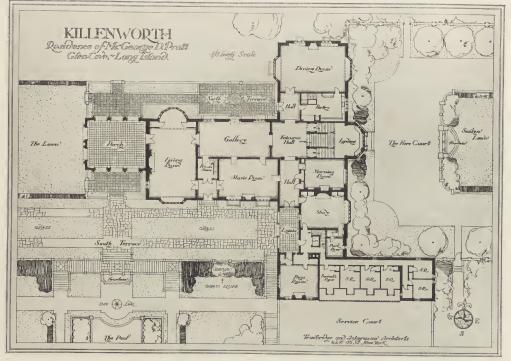
Country life on this part of the island has, in its development, followed lines very similar to country life in England. Here we have a fertile, well-cultivated land, with a moderate climate, where every form of outdoor sport is possible. Under like conditions the English have spent centuries in developing their homes for the enjoyment of country life, and their efforts have achieved for them the most comfortable and livable houses in the world. It was most natural, therefore, that the owners of Killenworth should have chosen for the style of their new house the informal early English Renaissance.

Killenworth is remarkable among American country houses because of the signal success its designers have achieved in the sympathetic interpretation of the style in which it is built. Both from the artistic and from the practical point of view the house is deserving of much admiration. Few early English dwellings in America, of any material, have been sincere and unaffected and suited to the life and tastes of their up-to-date Ameri-

can owners; fewer still of cut stone have been successful. American architects as a rule, have been more felicitous in their use of other styles and other materials. Yet where could we turn more logically to look for a prototype of the homelike country house than to England?

Entering the grounds of Killenworth one turns from the main road and passes through two fine gates of wrought iron. The house is visible from this point. An informal long, low gabled structure of gray stone, lying along and following the contour of the hill top. Proceeding up the "S"-shaped drive, one passes the house at some distance, and by a gradual incline returns around the side of the hill to the fore court. Driving along this lane through handsome trees, one catches now and then a glimpse of the water and, at the turn of the road, the rolling hills and lovely gardens spread out-an ideal setting for the house. If the approach is made by night, the way is lighted by lanterns placed along the edge of the drive. It is interesting to note that these charming lanterns, rather oriental in their design, have been set very low, so as not to shine in the eyes of the passerby, and reflectors have been placed beneath the Japanese hoods that send the light on to the road and prevent it from blinding the motorist or driver. This detail strikes the keynote of Killenworth, comfort. Comfort, simplicity and livableness form the chord upon which this harmonious dwelling has been built up

For many years Mr. Pratt had lived on this very hill-top. When he decided to build a permanent, fireproof dwelling, he knew the site and the exact requirements of his life there as few prospective owners do. Not wishing to lose a single THE ARCHITECTURAL RECORD



PLAN OF KILLENWORTH, RESIDENCE OF GEORGE D. PRATT, ESQ., AT GLEN COVE, L. I. Trowbridge & Ackerman, Architects.

opportunity of making the new house as perfect as might be, he invited his architects to occupy the old one during part of the summer before it was pulled down that they might become familiar with the special conditions of the site. This gave them an invaluable and most unusual opportunity of studying and actually experiencing the possibilities and limitations of their problem.

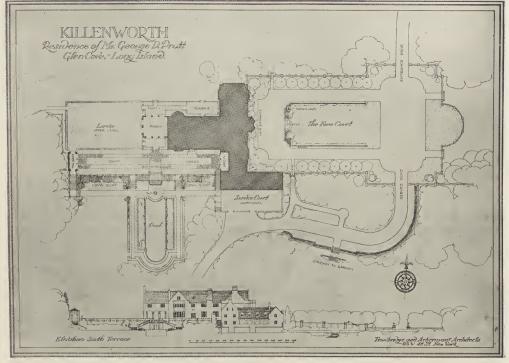
Certain difficulties and certain rare opportunities made the problem a very interesting one. The crest of the hill, because of the splendid panoramic view over the water and the hills beyond, as well as the cool breezes that swept over it in summer, was unquestionably the place for the house. The grade levels, the prevailing breezes and the water view were the three factors that determined the ground plan of the house. The land sloped steeply away to the south and east from the selected site, and the grades for the new house presented many difficulties. Under the circumstances, to build a large house on this particular spot would necessitate the use of different levels.

The shape of the plan is unusual and is the outgrowth of the intelligent consideration of what might be called the accidental features of the problem, the practical working out of the physical characteristics of the site. In the finished house the irregular plan, the delightful angles, the varying heights, and the play of light and shade are all the result of the happy blending of actual requirements and a real love of beauty. The picturesque quality is absolutely honest and free from affectation.

The house was designed for winter as well as summer use. It had to be as cool and inviting as possible when the thermometer was soaring at its highest, and warm and cozy in zero weather. The prevailing winds in Summer on Long Island come from the south. If the rooms were to be pleasant in Summer this wind must blow through the main ones, at least, especially through the en-



THE ARCHITECTURAL RECORD



PLAN OF GROUNDS AT KILLENWORTH, RESIDENCE OF GEORGE D. PRATT ESQ., AT GLEN COVE, L. 1. Trowbridge & Ackerman, Architects.

closed porch, the living room and the principal bedrooms. The superb view of the Sound to the north was also especially to be desired in the very same rooms where the south wind and the sunlight were most needed. The wing that contains the porch, living room, and principal bedrooms runs east and west, and these apartments opening through to the north and south, are cheerful, sunshiny and airy, and also command the full view of the water.

The treatment of the grade levels is hard to grasp from the plan. The service wing to the left of the entrance runs two stories below the main body of the house. The exposure of this wing permits the full benefit of sun and breeze. Its own blank north wall screens it from the house, and the high wall around the service court completely cuts it off from the garden. A third wing contains the dining-room. This room commands a superb water view through a lovely vista of trees.

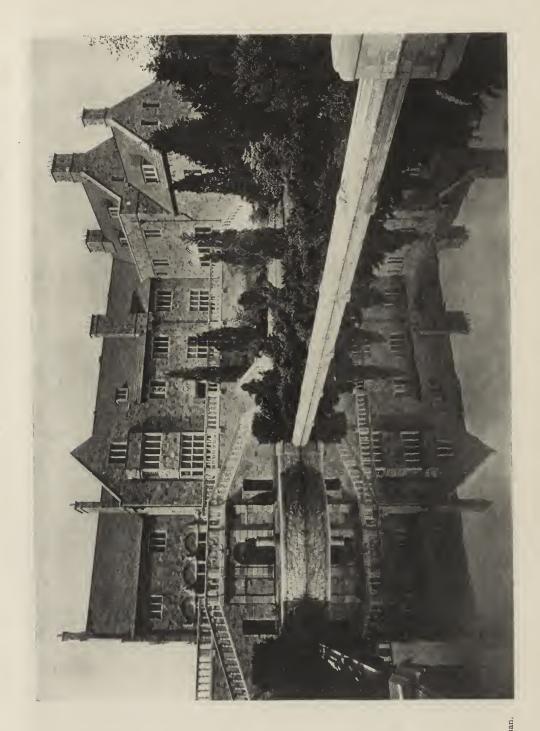
The servants' wing was not the only thing to be screened, nor the only bit of successful screening done on the place. On a hill near Killenworth, on the highest point on the Pratt Estate, is the water tower that supplies several houses. It could not, therefore, although utterly out of keeping with the new house, be pulled down or changed. To screen this from the main part of the house, a heavy planting of trees and shrubs was set out onthe side of the hill leading to the tower. In front of this planting was placed a small stone tea house, overlooking both the Sound and the rolling hills of the park, backing toward the water tower and facing the house. Along the ridge running between the house and the tea house runs a terrace, from both ends of which flights of sandstone steps lead down into a garden, where there is a lovely oblong pool. This pool is on axis with the porch above. Although the house is so irregular in plan the impression it gives is one of perfect unity.



FOUNTAIN AND DETAIL OF ENTRANCE FRONT—RESI-DENCE OF GEORGE D. PRATT, ESQ., AT GLEN COVE, L. I. TROWBRIDGE & ACKERMAN, ARCHITECTS.



TEA HOUSE AND TERRACE, KILLENWORTH Trowbridge & Ackerman,



THE SOUTH FRONT OF KILLENWORTH Trowbidge & Ackerman,



TERRACE STEPS TO SERVICE DRIVE—RESIDENCE OF GEORGE D. PRATT, ESQ., AT GLEN COVE, L. I. TROWBRIDGE & ACKERMAN, ARCHITECTS.



LOOKING TOWARD BOYS' ROOM FROM TERRACE—RESIDENCE OF GEORGE D. PRATT, ESQ., AT GLEN COVE, L. I. TROWBRIDGE & ACKERMAN, ARCHITECTS. The stone of which the house is built is a seamfaced granite from Massachusetts. It is of a warm grey color and a delightful texture that are rarely found in this kind of stone. The general effect is varied by warm splashes of color that give a play of varying golden tones over the surface. The roof is of dull green slate laid in graduated courses and is thicker near the eaves and gutters.

The planting at Killenworth, designed by the landscape architect, Mr. James L. Greenleaf, is in perfect harmony with the architecture and has been done with skill and taste. It is difficult to believe that the house was finished just one year ago. Masses of box at each side of the entrance—(really wonderful box—one bush is said to be seventeen feet across and was brought all the way from South Carolina), tall cedars, rows of large linden trees, and shrubs of various kinds, give the house that air of belonging to the land, of having watched the green things spring up about it, that seems characteristic of an English country house. The position of each plant has been carefully chosen from the point of view of design and effect.

Although Killenworth is a large house it is, within and without, distinctly domestic. Because of the irregularity of the plan, the façade gives no idea of the size of the house. Three gables across the front rise above three generous Tudor bay windows. In the centre is the main entrance from which there is a lovely view of trees and lawn in the distance, and in the foreground a sunken lawn with enclosing stone balustrade and fountain. One is here introduced to the blending of Renaissance and mediaeval details so characteristic of the whole The mouldings purposely are house. made slightly crude and heavily undercut, and the triglyphs flattened. In Killenworth, the architects used details from characteristic | English periods: many Gothic, Tudor, Jacobean and Georgian. The most delightful English houses owe their unique charm to this admixture of styles which has given them a feeling of growth, development and age. They are more than architectural creations, they have personality.

Into this house the essence of such English charm has been infused, and it is thus freed from the monotony so apt to creep into a building of any distinctive style. French or Italian influence has been studiously avoided. Though all the Renaissance architecture of the three countries originated from the same models, the adaptation of them in England was distinctly different-more vigorous and naïve. This appreciation of the spirit of English design, more than anything else has made Killenworth the harmonious house it is. No attempt has been made accurately to copy anything, anywhere. It is true that one ceiling in the house is an exact replica of an old one. and there are bits of carving which are nearly exact copies, but the effect has been gained through insight into the influences that formed the English design. England is a land "stubborn of change." When the Renaissance superseded Gothic, the details were slow to change—the workmen were loath to give up ornament with which they were familiar for new designs from strange lands across the channel.

Over the main entrance is a cartouche of fine design and strong modelling, from which may be disentangled the initials of the owner. The front door opens into a small vaulted vestibule, very simple, almost plain in treatment.

This lack of ornament was deliberate—the visitor is unconsciously led into the house by the feeling that the real interest is beyond. The marble with which the walls are lined is very soft and lovely in finish and color. Its dull surface in no way suggests the hotel or apartment house marble of high polish. The handsome grilles of the radiators are particularly worthy of note.

On one side of the front door, on the same level, is the kitchen, and on the other is a charming little Georgian reception room, whose details, because of the low ceiling, are finer and flatter than those found in any typical Georgian models. As the necessary result of the grade levels, the front door is almost a full story lower than the ground floor of the main body of the house. An enclosed



TERRACE STEPS AND LIBRARY BAY—RESIDENCE OF GEORGE D. PRATT, ESQ., AT GLEN COVE, L. I. TROWBRIDGE & ACKERMAN, ARCHITECTS. staircase leads up to the square hall above. The ceiling in this hall is designed in the spirit of the early English work. The panelling and larger subdivisions are English in character, while the ornamentation shows Italian influence. It is an original design by the architects for this particular place.

The woodwork all through the house is exceptionally good. The walls of the dining-room are panelled throughout in English and American oak. The gnarled pieces of English wood are very beautiful and the finish is admirable—every groove has been tooled and rubbed down by hand till the wood glows from beneath the surface through the patine. An effort has been made to give the finish of the woodwork the charm of the antique by removing sharp edges which give a mechanical quality to so much indoor work. The ceiling in this room is an exact reproduction of one in the Victoria and Albert Museum, originally in Sir Paul Pindar's house, but suits the room as if it had been specially designed for it. Every detail of furniture and materials has been carefully chosen with reference to the general color effect.

The glass all through the house is most interesting. The main body of the windows is made of small heavily leaded rectangles of clear glass, and set in them, like precious jewels in many colors, are bits of stained glass brought from Europe by the owners.

The woodwork in the living room is also very fine. It is a charming dull fawn-colored butternut with almost no polish. The walls are covered with a woven material of violet blue and soft gold tone. The color effect in this room is most lovely. The lighting fixtures repeat the prevailing mulberry tint in their crystal hangings. All the fixtures in the house were designed by Caldwell. They are of beaten iron, gilded in part. Those in the dining-room are of a Jacobean design of strap work in silver. The mantel in the living room, of Hauteville marble, was detailed in the architect's office, and after it was carved every surface and edge was rubbed down by hand, to take away the rawness of the mechanical finish. Personal interest is felt in every detail. The backs of the fireplaces, for

instance, are lined with briquettes laid in attractive diagonal and diamond patterns.

The Georgian morning room, painted cream white, is one of the most livable and charming rooms in Killenworth. It is gay and bright and the walls are hung with sunny pictures by Friesicke and by Miller. The paintings, prints and water colors through the house add much to its personal charm. Just beyond the morning room is the study, a man's room, wainscoted in dark wood with beamed ceiling and animal's heads and sporting prints upon the walls.

The hall outside this room leads into the service wing, containing bedrooms on the level of the first floor of the main body of the house, and below them more bedroms, and still lower down, the laundry, boiler rooms, a small garage, and storage rooms, a refrigeration plant, kitchen work rooms, and two large boilers, machinery for the gas, vacuum cleaner and elevator. These rooms have been kept very free from the overhead pipes which in most houses are a necessary evil. Here, because of the low level of the boilers, they could be sunk in a special tunnel in the unexcavated portion, below the main house. The principal rooms of the first floor are heated by indirect coils with thermostatic regulation, while the second floor has radiators hidden behind grilles.

Climbing the stairs, we reach the loggia that opens off the study. This loggia and the various doors opening from the house into the south terrace have been placed with reference to entertaining a number of people. The circulation about the music room has been particularly well thought out and the entrances have been arranged so that the music could be enjoyed from the terrace. This room is the only one in the house not designed by the architects. It was executed under separate contract by an English decorator, who has made a special study of Adam decoration. The loggia near the music room is opposite the rectangular stone tea house and repeats its arches in the general proportions of its three openings. The two are connected by stone flagged walks, running the length of the south terrace and crossed by others leading to the various doors of the



VIEW ON TERRACE-RESIDENCE OF GEORGE D. PRATT, ESQ., AT GLEN COVE, L. I. TROWBRIDGE & ACKERMAN, ARCHITECTS.



TERRACE STEPS—RESIDENCE OF GEORGE D. PRATT, ESQ., AT GLEN COVE, L. I. TROWBRIDGE & ACKERMAN, ARCHITECTS.

THE ARCHITECTURAL RECORD.



VIEW ON TERRACE—RESIDENCE OF GEORGE D. PRATT, ESQ., AT GLEN COVE, L. I. Trowbridge & Ackerman, Architects.

house, to the porch and the garden below. The irregular slabs of stone of which these paths are made come from the same quarries as the stone of the house.

The enclosed porch is really an out door room, screened and open on three sides. It is cool and bright, the walls being of stone and the ceiling plastered, with the furniture of wicker.

Here on the south terrace the feeling

of unity in the conception of the house and its surroundings is very marked. Although the plan of Killenworth is so irregular one feels everywhere that all the parts are unusually well arranged with reference to one another, and that the plan is held together by the logical development of the existing conditions. It is thus the true expression of the life of its owner and as such reaches a high point in domestic architecture.

AN OLD PRINCIPLE REAFFIRMED By W. A. Nichols

With the development of certain resolutions passed at the last meeting of the Trustees of the Cathedral of St. John the Divine, that foundation will resemble the great English Cathedral foundations more than any other in America.

Of first importance among these, is the decision to proceed at once with the erection of the nave of the Cathedral. Who should design and superintend in the capacity of consulting architect has been for some months past a disputed point, but not so widely disputed or so acrimoniously debated as current newspapers would give the casual reader to imagine. From certain quarters there has been opposition to the designs and plans of Mr. Ralph Adams Cram, of the architectural firm of Cram and Ferguson, with headquarters in Boston, the reason, though covert, being not the less apparent: Mr. Cram persists in reproducing the traditional viewpoint of the Church Catholic rather than the modernist idea of the so-called liberal school. The approval of Mr. Cram's drawings was almost unanimous in the Board of Trustees, whole final dictum is absolute; and it has been enacted to employ Mr. Cram to submit plans for the nave, which will cost in the neighborhood of a million dollars. The plans will follow the general lines and ideas of the drawings already submitted and approved.

Similarly, at a recent meeting of the Cathedral League, which organization contains men representing practically the whole Episcopal Diocese of New York, it was decided to begin building operations. As Bishop Greer said in his address to the League, the time for talking has gone by, the time to act has arrived, and the beginning of fall should see work under way.

Mr. Cram stated that, instead of building from without to within, the plan to be adopted at this cathedral was reversed—that is to say, a certain idea of devotion and its exemplification in the form and genius of the cathedral would be the starting point. This idea will regulate the design of the interior of the nave. In line and material then, this will be the nucleus of the nave, and logically following—of course developed according to strict architectural rule and standard—will the great building take shape.

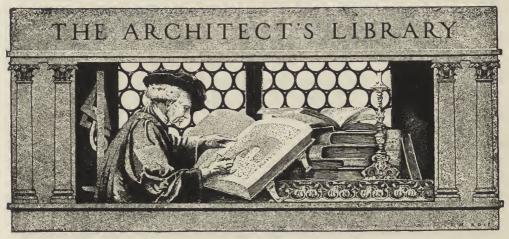
This means, therefore, that primary importance is not to be placed on the lines of the exterior of the building, but that, as it grows, each buttress used, pillar and pilaster as needed, will fall normally and naturally into its place, harmoniously component parts of an ecclesiastical cosmic whole. This was the idea of the early Christian churches, from the time of Alexander Severus all through mediaeval cathedral builders.

At present no work will be done on the transept or the great central tower or two corner towers or the front elevation of the Cathedral.

As one of the members of the League was able to report pledges running up into thousands towards the erection of homes for the Residentiary Canons, it was ordered that Mr. Cram be requested to prepare plans for such; and the northwest corner of the Cathedral Close has been set aside for this colony. The first house to be erected is that for Canon Jones, the Canon-Bursar of the Cathedral Foundation.

These, according to the present idea, will be individual houses rather than in college form as is more or less common at English Cathedrals.

Thus the Cathedral Foundation at Morningside Heights, as now provided by enactment of the Trustees, is to include the Cathedral proper,— Chapels, the high altar, chancel and nave,—Episcopal residence, the Deanery, St. Faith's Home for the training and residence of deaconesses, the Choir School and homes of the Canons in residence.



The Domestic Work of E. L. Lutyens. Houses and Gardens. By E. L. Lutyens. Described and Criticised by Lawrence Weaver. London: Country Life Press.

"Architecture is the most vital of the arts with which we have to do." With this eminently true and timely observation as a text, Mr. Weaver sets forth, with his characteristic charm of manner, in the volume under discussion to describe appreciatively and critically the work of Mr. Lutyens, who has contributed so materially in recent years to the betterment of English domestic architecture.

At the very beginning of the preface attention is called to the recent remark of a non-British critic to the effect that "the domestic architecture of Great Britain today is not only a finer thing than that of any other country, but better than that of any period of history." Whether or not the reader is disposed either to dispute the truth of this "large claim" or to coincide wholly with its letter and spirit, a claim full large though it be strictly limited to domestic work, it is undeniable that there is much of absorbing interest in the recent productions of English housebuilders and much to be learned from a careful study of their achievement. Of none of the architects is this more signally true than of E. L. Lutyens.

Should any one object to Mr. Weaver's alluding with some satisfaction to the favorable criticism of contemporary British domestic architecture just noted they cannot fail to admire, at the same time, the complete candor he displays in going on to say that "in the larger field of civic buildings and in the planning of towns, in the exercise of the Grand Manner, Great Britain lags deplorably." "The very individualism," he continues, "that is expressed so intimately in domestic building may be a handicap to us as a people when we come to deal with schemes of a municipal or national sort. Our street architecture from that point of view is too often a confused expression of unrelated eclecticisms." * * * "We turn, therefore, with refreshment * * to the field where individual taste may find its just expression in building without running the risk of destroying a neighbor by unhappy contrast—to the country house."

The author then bids our attention to the general question of design and the wisdom of looking on each succeeding architectural style as, in its way, the just expression of its generation. "As the in-heritors of a great tradition," he reminds us, that "we are at liberty to ransack the centuries for the architectural expression which best represents our outlook on life and manners." "To choose any one moment in the centuries and claim for it an essential rightness of inspiration to be denied the others" is unreasonable. Right-ness in modern design, he adds, "can best be shown by the wise handling of these varying motifs, by the absorption of their essentials, and by a fresh expression of the chosen outlook in the same language, but in new phrases. Architecture can no more invent a new style than literature can create a new language." Guided by tradition, therefore, and stimulated by the fresh needs of the day and generation in which he works, the modern architect sets his skill to solving "new problems with old materials" and creating new compositions from the same elements.

It is because Mr. Lutyens has achieved signal success in many modes of expres-

sion that Mr. Weaver deems his work especially worthy of close study. For this valuable faculty of adapting honored tradition to the needs of his own generation and because his influence "is good, strong and increasing" the author has felt that a volume devoted to the explanation and critical appreciation of Mr. Lutyens' performance was timely and appropriate, an opinion with which architects generally, both in England and America, will thoroughly coincide.

As its title indicates, Mr. Weaver's book is distinctly a book of houses and gardens and from first to last they are set before us with so much of his wonted analytical felicity and facility of expression that the pleasure of perusal, quite apart from the valuable informatory and critical matter contained in the pages, is intensified. The illustrations, greatly always a most desirable and suggestive feature to architects, are many and singularly excellent, as we should expect them to be in a publication issued by the Country Life Press.

The Introduction, starting with a very brief biographical notice tracing the sources of Mr. Lutyens' early inspiration, affords a summary disclosing the growth of his genius, and this continuous development of feeling and personality up to the most recent phases of his professional career may be plainly followed, as the scheme of the book has been planned with special reference to presenting a chronological point of view. As might be inferred, the consideration of Mr. Lutyens' own work incidentally involves a review of the general state of English architecture and its development during the last five and twenty years, the period covered by his most significant practice. Among the formative influences of his style must be mentioned the early inspiration he drew from the work of Norman Shaw and Philip Webb, from the former of whom he acquired elasticity of design while from the latter came the incentive that led to his rapidly increasing mastery of materials and their influence on form.

His outlook had its starting point in what might be called the picturesque manner and one of his first buildings, Munstead Corner, displays walls of stone with an upper story of half-timber. Another house, built a few years later, showed the same method of construction, but he soon abandoned the use of half-timber, which has little real meaning in a country where most of the timber has to be imported. It is worth noting that the element of studied picturesqueness is observable in his work executed until about 1900, but as a factor of steadily lessening importance. It is most interesting and, at the same time, most instructive to see how, by a gradual process of elimination, he arrived at a more chaste and severe and, of course, a more strongly individual and convincing mode of architectural expression characterized by reticence of detail and careful restraint. It should also be noted in connection with his early work that, owing to his primary picturesque conception and the consequent temptation to work from the elevation to the plan, there is sometimes a weakness and incoherence in the general lay-out. This failing, however, was soon remedied by a reversal in method

In one respect Mr. Lutyens' career affords an example by which architects, especially young architects, may vastly profit -his early acquisition of a practical knowledge of garden planning and making and the construction of a suitable setting for the houses he designed. "One of the most important happenings in his artistic career was his early acquaintance with Miss Jekyll. Her great gift for gardening served as a stimulus to his appreciation, and led him to give the large attention to garden design which he has developed so notably "in many of his commissions." It would be difficult to exaggerate the importance of her influence. Architects find in gardens a just sphere for design, but they cannot be expected to have a wide knowledge of horticulture" unless there is some powerful incentive impelling them in that direction. "Miss Jekyll added to this knowledge an intimate sense of design, and Mr. Lutyens' association with her in the joint labor of design and planting led not only to splendid results in individual gardens, but also to the widening of his outlook on the whole question. It is enough to say that the gardens illustrated * * * would never have been created without her help."

In his fine choice of materials, in his facility of design, in the vitality and sane vigor of his conceptions in domestic architecture and by numerous other qualities, which the exigencies of space preclude our mentioning, Mr. Lutyens commends himself to our most attentive consideration. For a long time past the reviews of Mr. Lutyens' work that have appeared in *Country Life* have elicited much interest among our architects and this opportunity to get a large number of them together, along with much additional matter hitherto unpublished, will doubtless be gladly welcomed.

NOTES AND OMMENT

New Tablet

A dignified and artistic addition to the monumental memorials al-Commemorating ready standing on Bosthe Transfer of ton Common has just Boston Common. been erected. This is to commemorate the transfer of the property

which now constitutes the Common, by William Blackstone, 280 years ago; and is the work of R. Clipston Sturgis, architect. The cost of the structure was \$5,000, and it is the opinion of good judges that this memorial excels perhaps all the others, with possibly the exception of the Soldiers' and Sailors' Monument on the brow of the hill.

The memorial proper is a bronze tablet, about ten feet in height, charged with a legend, in imitation of the letterpress of the period, in the following inscription; "Boston Common, in or about the year of our Lord one thousand six hundred and thirty and four the then present inhabitants of the town of Boston, of whom the Hon. John Winthrop, esq., Governor of the Colony was

cheafe, did treate and agree with Mr. Wm. Blackstone for the purchase of his estate and rights in any lands lying within said neck of land called Boston, after which purchase the town laid out a plan for the training field which ever since and now is used for that purpose and for the feeding of cattell. (The deposition of John Odlin and others concerning the sale of Blackstone's land, known as Boston Commons."



TABLET COMMEMORATING TRANSFER OF BOSTON COMMON. R. Clifton Sturgis, Architect.

The tablet is mounted on a stone panel, flanked by pillars and surmounted by a pediment. Within the latter is charged the arms of the City of Boston, underneath, but yet above the tablet is a bronze tablet bearing the legend, "Boston Common." Two wings end in posts, the one of the right being charged with the arms of Massachusetts, while that at the left carries the National blazon.

An Interesting Landmark of Older New York.

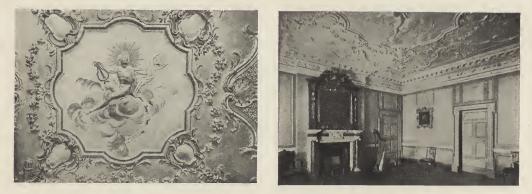
The Assay Office which is soon to be torn down to make way for a much larger Assay Office, was designed and erected in 1823 by Martin E. Thompson, for the New York Branch

of the Bank of the United States. Mr. Thompson was later the architect of the Merchants' Exchange Building, which was afterward used by the United States as a Custom House, and is now occupied by the National City Bank. It is without doubt

the best example of classic revival work in New York.

It is understood that the Federal government through Hon. George McAneny, when Borough President of Manhattan offered the faç-ade of the building to any society that would remove and preserve it.

Unless the city or some historical or other society desires to take the old building, it will have to be torn down to make way for the new Assay Office and large gold vault.



GEORGIAN ROOM AND ITS MOULDED APOLLO CEILING, NATIONAL MUSEUM, DUBLIN

Architectural "Monuments" and Museums

The New Georgian Room in the National Museum, Dublin, represents a step in museum management that may well be followed to advantage by other, museums-and especial-

ly by those of the United States. Regarding this room *The Connoisseur*, of London, says: "Old Dublin has been so fast disappearing of late under the devastating hand of utilitarianism that Irish antiquaries have begun to express grave anxiety about the preservation of some of the noble domestic interiors of the early Georgian period, especially those which still contain those beautifully moulded old ceilings delicately wrought by the im-ported Italian artificers of the mideighteenth century. It is satisfactory now to learn that owing to the successful carrying out of a happily conceived project, all relics of the old aristocratic mansions cannot possibly disappear. The authorities of the National Museum of Ireland have just availed themselves of the demolition of Tracton House, in St. Stephen's Green-a time-honored edifice, dating from 1746-to acquire, partly by purchase and partly by gift, all the permanent characteristics of an eighteenth century drawing-room. For the realistic housing of these a special room has been built in the Museum, henceforth to be known as the Georgian Room. All the various features of the room, from the magnificent Apollo ceiling to the white and sienna marble mantelpiece, are strictly of the early Georgian period. Little difficulty was experienced in removing the doors, windows and panellings from Tracton House, but the taking down of the ceiling and cornice without injury to the superb moulding presented a problem which demanded the exercise of many minds to solve. Eventually by sawing

through the surmounting floor and cutting out the ceiling in thirteen carefully mapped-out sections, the thing was successfully accomplished."

It seems that the suggestions which led to the permanent preservation of the fine old room originated with Count Plunkett, the director of the Museum, and he is certainly to be congratulated on the successful outcome of the project.

Photographs of Colonial Gravestones by Frank Cousins

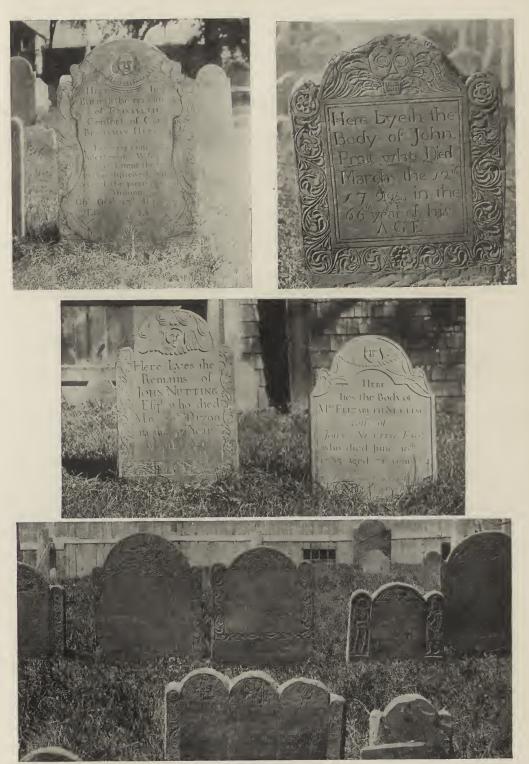
The present-day revolt against the various forms of "Mid-Vic-torian" ugliness has fortunately not overlooked the cemetery as a place where vast reforms in the matter of better

and more dignified design is urgently needed and worthy of careful thought and study.

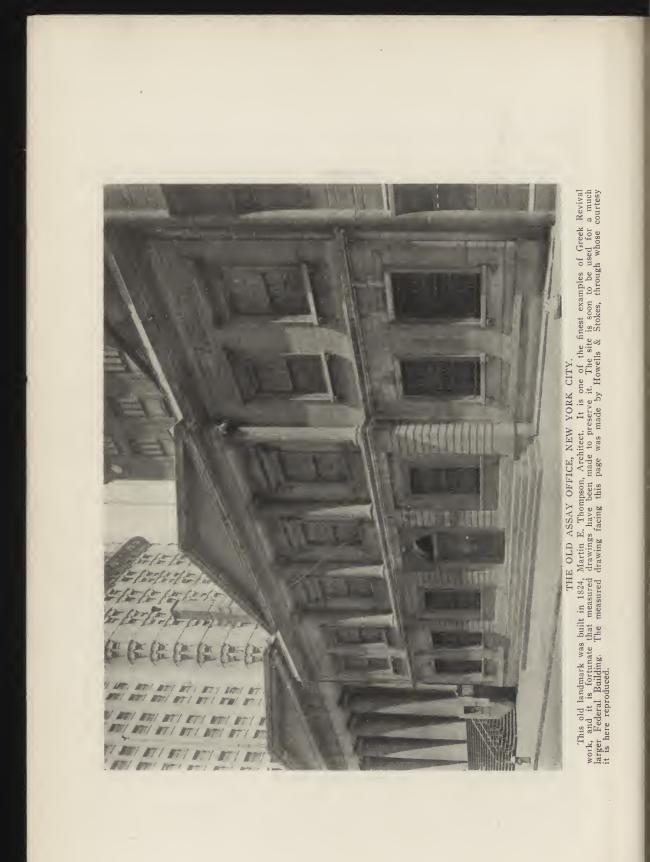
But it must be said that too little attention has been given to the smaller-though more frequent-and less costly memorials. For this class of work there is no better model to which designers may turn than to the well known Colonial "tomb-stones" which are to be found in practically every town or city which boasts any claim to antiquity.

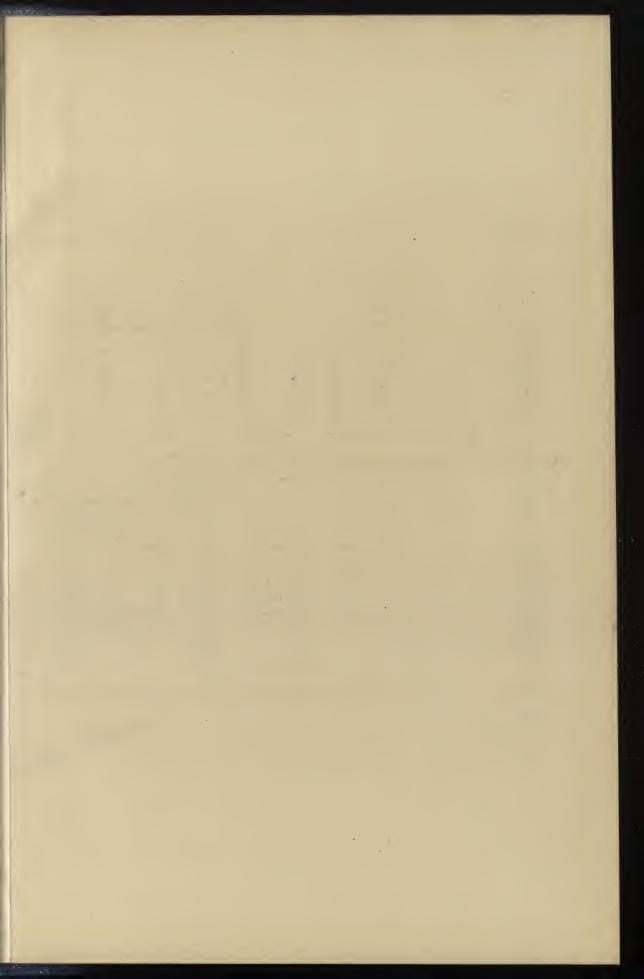
The study of these Colonial examples is a fascinating one. There is a certain quiet dignity and straightforwardness about them that is always commendable. The decoration is, as a rule, well studied and not always crude, and these monuments are especially deserving of study, if for no other reason than for the excellent lettering that one always finds carved upon them. In the old Charter Street burying ground in Salem there are many fine examples, of which a few are reproduced on this page. Most are of Welsh slate or marble instead of the usual brownstone of the early nineteenth century.

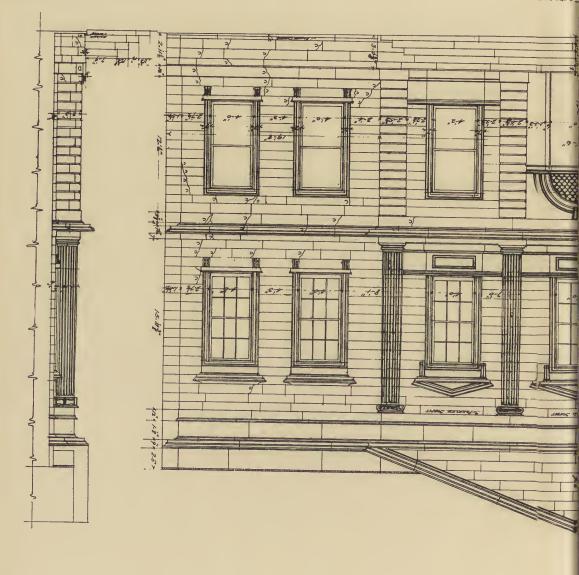
THE ARCHITECTURAL RECORD.



Photographs by Frank Cousins. GRAVESTONES IN THE CHARTER STREET BURYING GROUND, SALEM, MASS.





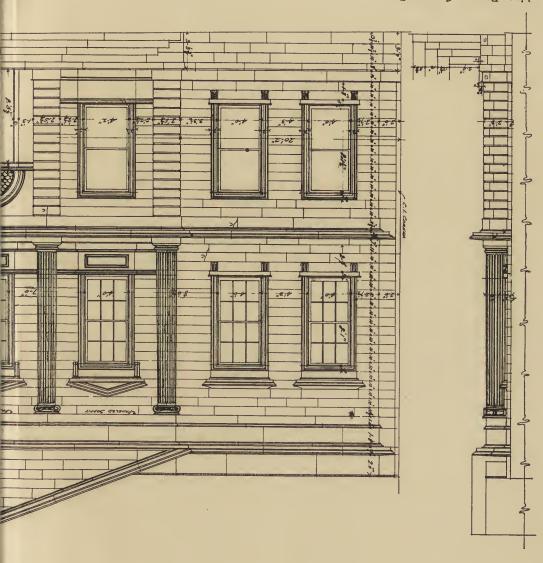


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DETAIL PLATE NO. 29. ARCHITECTURAL RECORD

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