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Architectural Education—Harry F. Cunningham

Current Dutch Brickwork—Gerald K. Geerlings

The Painter's Dilemma—Harold W. Rambusch

Portfolio: Sixty Photographs of Corbels

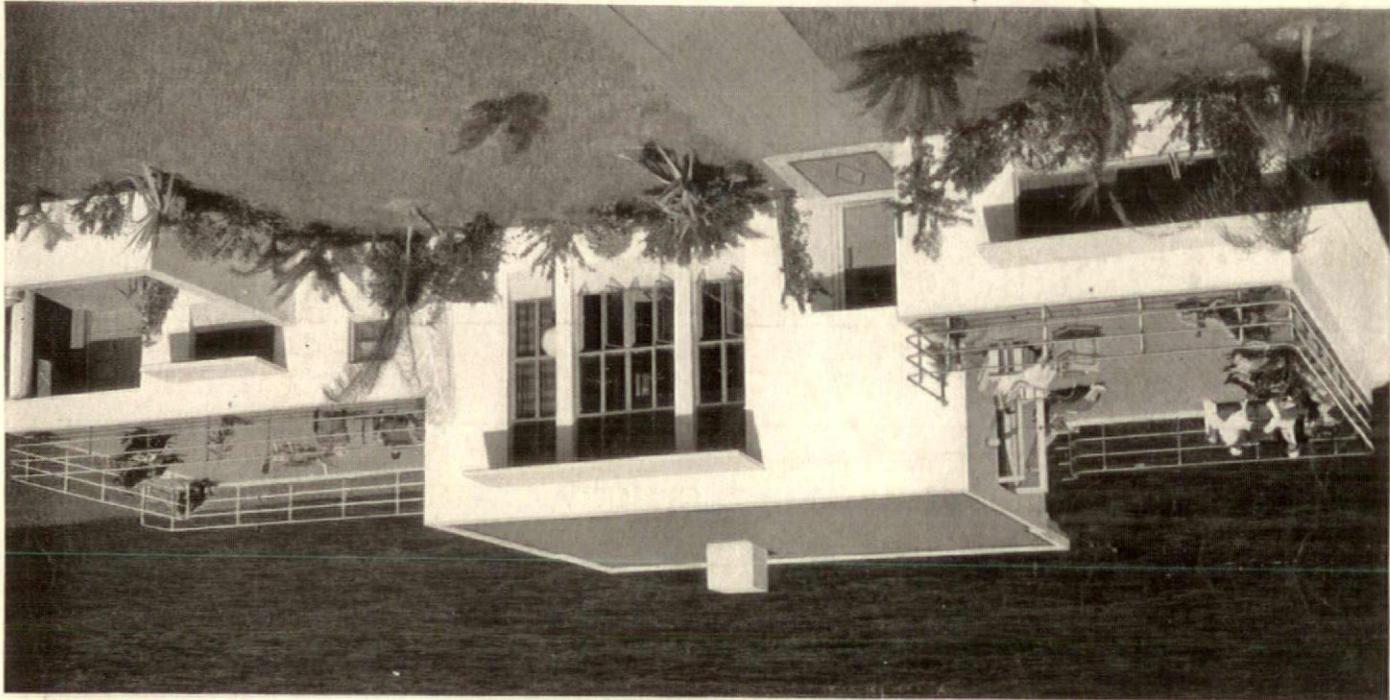


September 1933

ARCHITECTURE

FAVORED BY THE FAIR

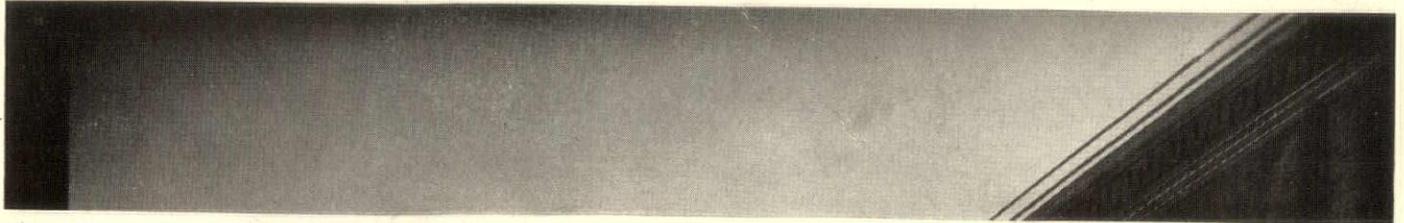
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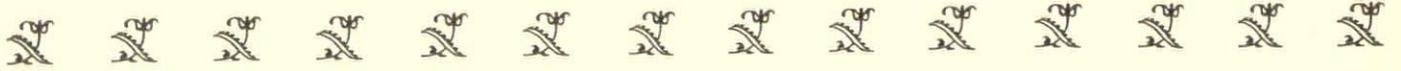
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Water-plants, and particularly water lilies, are becoming more and more popular as gardeners realize that they are among the hardiest of plants; that of all hardy plants many of them produce the largest flowers and the most beautiful colors; and that they can be grown easily and cheaply in the simplest of ponds in the smallest of gardens. No modern book has hitherto existed, in English, dealing solely with this fascinating type of gardening. On the Continent, where water lilies have been grown in increasing numbers for many years, the author of this book, who is leader of research into water-plants for the Guild of German Horticulturists, is recognized as a first authority. 136 pages, 7½ by 10 inches. Illustrations from drawings and photographs. \$3.00.

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and—

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BY RICHARD SUDELL, F. I. L. A., A. R. H. S.



It is quite impossible, without seeing this book, to appreciate its comprehensive quality. Every phase of gardening is fully and authoritatively covered, and the book should be of the utmost value to every gardener, whether amateur or professional.

Gardening, like most arts, is constantly changing. In order to get a proper register of all that is best and newest in the way of method and information, various specialists have contributed the sections devoted to their particular subject. And to assist those amateurs who specialize, some of the more popular flowers have been dealt with rather fully in the text, and the material in such cases has been supplied by gardeners who have themselves specialized in the particular flower for many years. In short, the cream of many years' experience is included in these pages, and as far as possible all that is best in modern garden information has been expressed in simple form, so that the novice will find it a useful book of reference.

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CHARLES SCRIBNER'S SONS, New York

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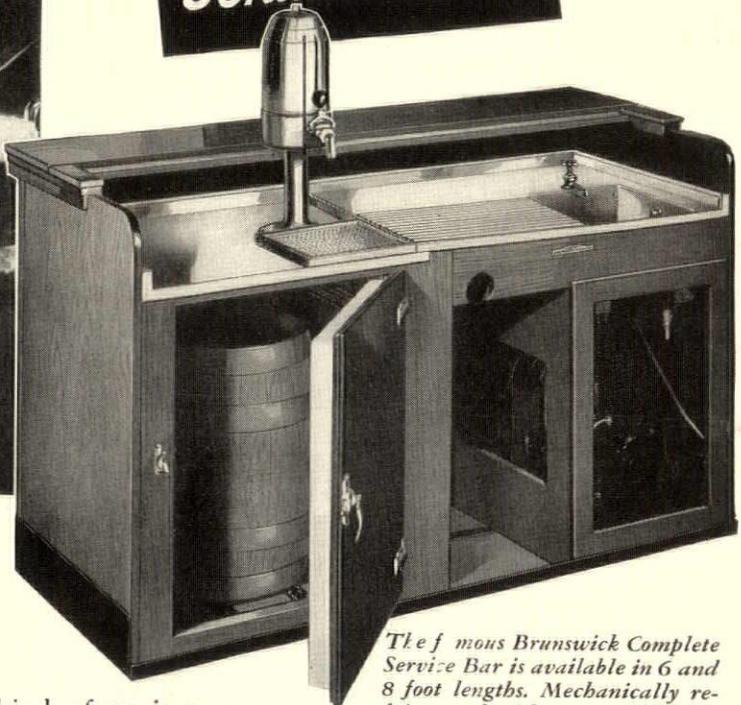




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THE
TREASURY DEPARTMENT
AND PRIVATE PRACTICE

PRIVATE architects and engineers throughout the country will be engaged by the Treasury Department to prepare the plans and specifications for a large Federal building programme which may reach a total of \$200,000,000. L. W. Robert, Jr., Assistant Secretary of the Treasury, has adopted this policy in order that professional men who have not had employment will benefit by the large expenditure for new Federal buildings, the design and construction of which come under the authority of the Supervising Architect's Office of the Treasury.

For the purpose of spreading employment as far as possible among architects and engineers who, preferably, have had some previous experience in public-building work, Mr. Robert has requested the co-operation of the American Engineering Council and the American Institute of Architects in enrolling qualified individuals and firms. His purpose is to engage on every building architects and engineers resident in the State in which it will be erected.

The Treasury Department, with the co-operation of the American Institute of Architects, is assembling the records of architects throughout the country. Each known architect has or will receive a prequalification blank, which should be forwarded to reach the Treasury Department promptly.

As the procedure adopted for enrolling architects could not be utilized satisfactorily to obtain the same character of information concerning engineers, the American Engineering Council has been requested by Mr. Robert to compile state lists of engineers and engineering firms that customarily engage in construction of buildings of the monumental character usually typifying those built by the Federal Government.

Any qualified engineer desiring to participate in the Treasury Department's building programme should send to L. W. Wallace, Executive Secretary, American Engineering Council, 744 Jackson Place, N.W., Washington, D. C., a complete statement, in duplicate, of his professional record, with a citation of significant references.

If, as an architect, you desire that your name be placed on file, it is requested that you fill out the questionnaire at once and return it to this Department. This should be

CCCCC

done even though you may be well known to the Department and even though you have an application already on file. It is requested that where the business of your office is under the direction of a firm, each member of the firm fill out a similar statement.

N. Y. U. SCHOLARSHIP

THE department of architecture in the New York University College of Fine Arts has announced that the annual graduate scholarship prize in architecture has been awarded to Frederick W. Bucky, Jr., Jacksonville, Fla. Milton Sherman, Ventnor, N. J., received honorable mention and was designated first alternate.

By his victory Mr. Bucky will be provided with a sum of money equal to the tuition fee for a year of graduate study in the College of Fine Arts and will pursue work leading to a degree of Master of Architecture.

Graduates of six universities, who entered the competition, were limited to one week in which to prepare the design of a model summer school.

The jury included E. Raymond Bossange, dean of the College of Fine Arts, Joseph Freeland, Ralph Walker, Will Rice Amon, Lloyd Morgan, and A. C. Schweitzer.

STANDARDS

THE following activities of the National Bureau of Standards are to be transferred to the American Standards Association, a federation of thirty-seven national technical societies, trade associations, and governmental bodies, with headquarters in the Engineering Societies Building, 29 West 39th Street, New York, as the result of an arrange-



Chicago's curb market for works of art, on the lake-front sidewalk near the Art Institute

ment worked out between Secretary of Commerce Daniel C. Roper and President Howard Coonley of the American Standards Association:

- Division of Trade Standards.
- Division of Specifications.
- Division of Simplified Practice.
- Building Code and Plumbing Code
- Sections of the Building and Housing Division.
- Safety Code Section.

NEW YORK CHAPTER, A. I. A.

IN the Bulletin Board last month the new officers elected by the Chapter at its annual meeting were given, but in error the organization was mentioned as The Architectural League of New York. Mr. Ralph Thomas Walker succeeds Charles H. Higgins as president of the New York Chapter, A. I. A., for the present year; vice-president, Frederick Mathesius, Jr.; secretary, Eric Kebbon; treasurer, Daniel P. Higgins; recorder, Christopher La Farge.

ARCHITECTS' EMERGENCY COMMITTEE PRIZE

THE most recent of the competitions sponsored by the Architects' Emergency Committee called for a poster design relating to the so-called "Manhattan Land Cruise." First prize was won by Henry F. Bossert of New York City; second prize, Otto Victor Reeser of Dumont, N. J.; third prize, Robert I. Hillier, Brooklyn. Julian Clarence Levi was chairman of the committee awarding the prizes.

PERSONAL

Edwin D. Bates, Jr., registered architect, and Edwin D. Bates, registered engineer, have opened an office at 8240 Brookside Road, Elkins Park, Pa., and request that manufacturers' catalogues be sent to them.

George E. Trent, architect, announces a change in his address to Union National Bank Building, New Brighton, Pa. It is requested that manufacturers' catalogues and samples be sent to the new address.

Phelps Barnum, architect, announces the removal of his office to larger quarters at 19 East 47th Street, New York City.

James Riely Gordon, architect, announces the removal of his offices to 5 East 44th Street, New York City.

(Continued on page 8)



SHOWING UNUSUAL BANKING INTERIOR—FINISHED IN WOOD

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See Pages 127-146

Fine Woodwork

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The Housing Study Guild

THE Housing Study Guild has recently been formed as a centre for studies in technical and social aspects of housing and community planning, and to serve as a clearing-house for information within this field. The purposes and scope of the guild are set forth here by Mr. Albert Mayer, one of its sponsors.

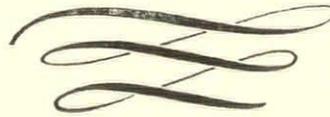


Why a housing study centre? It is a truism to say that the next phase of large-scale construction in this country must lie in the field of housing. Due to government stimulation an unprecedentedly sudden expansion is imminent in this field. The question is whether we are merely going to do the necessary building in a hurry (and ill-advisedly if necessary), or whether we shall insist on intelligently planned and integrated communities which shall have the prospect of permanence. Are we going to build solely to help end a four-year depression, or also to end a hundred-year neglect of housing and broad planning?

An important immediate requirement for an adequate housing programme is a body of technical information and a centre for disseminating it. Only the beginnings of such a technic exist in America, and what we have lies largely in the hands or minds of a relatively few scattered individuals. To meet this situation, the guild has been formed. Its active sponsors are Henry Wright, Lewis Mumford, Carol Aronovici, and Albert Mayer. Others who are helping to direct technical studies are Clarence S. Stein, Frederick L. Ackerman, Henry S. Churchill, William E. Lescaze, and Catherine K. Bauer. A group of younger men and women will carry out the studies.



Our work will be twofold: to collect and collate existing information so that it is available in one place; and to formulate and investigate the pressing problems that confront the planners of new housing. The guild stresses its technical approach—technical in the broadest sense, to include economic, social, and regional planning aspects—as opposed to



traditionalistic or sentimental approaches.

In the first phase of our work we are making existing information more available by thorough indexing and classification, and by abstracting or translating significant contributions to modern housing literature. Carrying this idea still further, we are listing and characterizing the work of individuals and organizations here and abroad, so that persons interested in specific phases of the problem will be able both to locate available information and to communicate with others who are working in these fields.



The other principal aspect of our work—to our minds the more important—is that of creative study. Groups of co-operating younger men and women, under the direction of the sponsors and others who are pledging definite amounts of time to the guild, have begun to study the many problems in planning, production, and operation of housing which keep cropping up and which have never been pursued to their logical conclusions. I mention a few of these harassing problems: the relation of land and financing costs to practicable room rents with strictly minimal planning; the relation of operating costs to building plan, building height, types of construction and equipment; the effect of the cost of public utilities including transit in the badly distributed residential occupancies of our cities; principles of planning in relation to new construction methods and materials; the trends and requirements of social organization and social equipment in communities; the distribution and patterning of new population centres for economy and livability. We shall also keep a current check on the social and financial experience of such housing as is built. Our studies will be specific



case studies of particular situations. Their technic will be applicable generally, but the importance of our method and the value of its results will depend on their specific factual nature. The training of younger people through such studies as these, with the guidance of active practitioners, may prove to be our most valuable contribution, for there can be no question that there is an inadequate number of men trained in modern housing technic.



In these and similar studies we are trying not only to check up on current shibboleths and to bring our information up to date, but also to furnish a sort of spear-head of advance. In addition to the urgent problems that thrust themselves upon us for study, we are formulating other general problems and experimental ideas which our groups will test out. Although our principal studies will be published in architectural magazines, we aim also at a more informal interchange of findings and ideas. We are glad to have problems or specific plans sent to us for study in so far as our facilities permit. We look forward on the other hand to receiving the results of studies made by others, to avoid duplication of effort, and to this end we are establishing a wide circle of correspondent associates here and abroad. Realizing that our interests will frequently overlap into the province of the several social sciences and of other research agencies, we aim to develop working alliances with authoritative workers in these fields.



Our facilities provide a discussion centre where interested persons gather periodically to air their views and problems. We shall welcome out-of-town visitors to our discussion meetings or at any other time.

There are some places to be filled in the younger study group, and applications for these places will be considered. Correspondence may be addressed to The Housing Study Guild, Allan A. Twichell, Executive Secretary, 400 Madison Avenue, New York City.



Photograph of escalators in the new building of The Philadelphia Saving Fund Society

WHY ESCALATORS?

RECENTLY Otis escalators have been installed in a number of important buildings. In Rockefeller Center. In the new Cities Service Building, Sixty Wall Tower. In the Metropolitan Life Insurance Company's building of New York City. In the Old Merchants National Bank and Trust Company of Battle Creek, Michigan. In the new building of The Philadelphia Saving Fund Society.

It has been found that the Otis escalator provides convenient, economical transportation where people must travel comparatively short vertical distances. Because of the escalator, a bank can have its offices on the second floor and rent the valuable

space below. A basement or upstairs restaurant served by escalators is almost as convenient as one located on the street level. The installation of escalators represents a distinct innovation in office building construction.

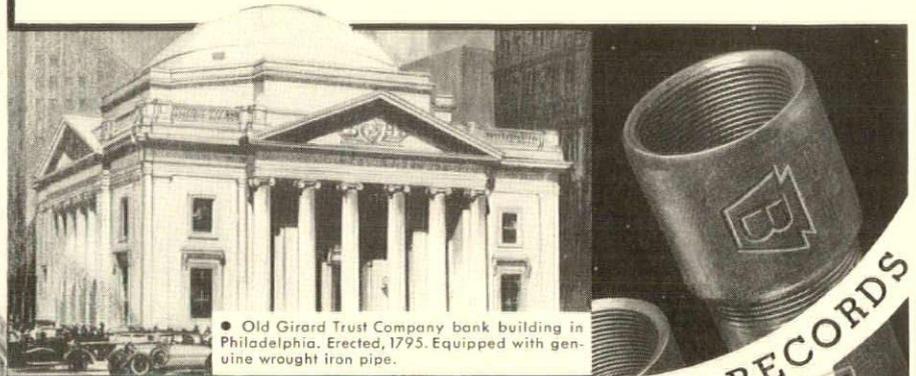
Recently Otis Elevator Company has developed refinements in escalator construction which produce smoother and quieter operation. This important improvement opens up many new uses for the escalator in varied types of buildings. Consider the escalator, either in the erection of a new building or the modernization of an old one.

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THE PROFESSIONAL ARCHITECTURAL MONTHLY

VOL. LXVIII, NO. 3

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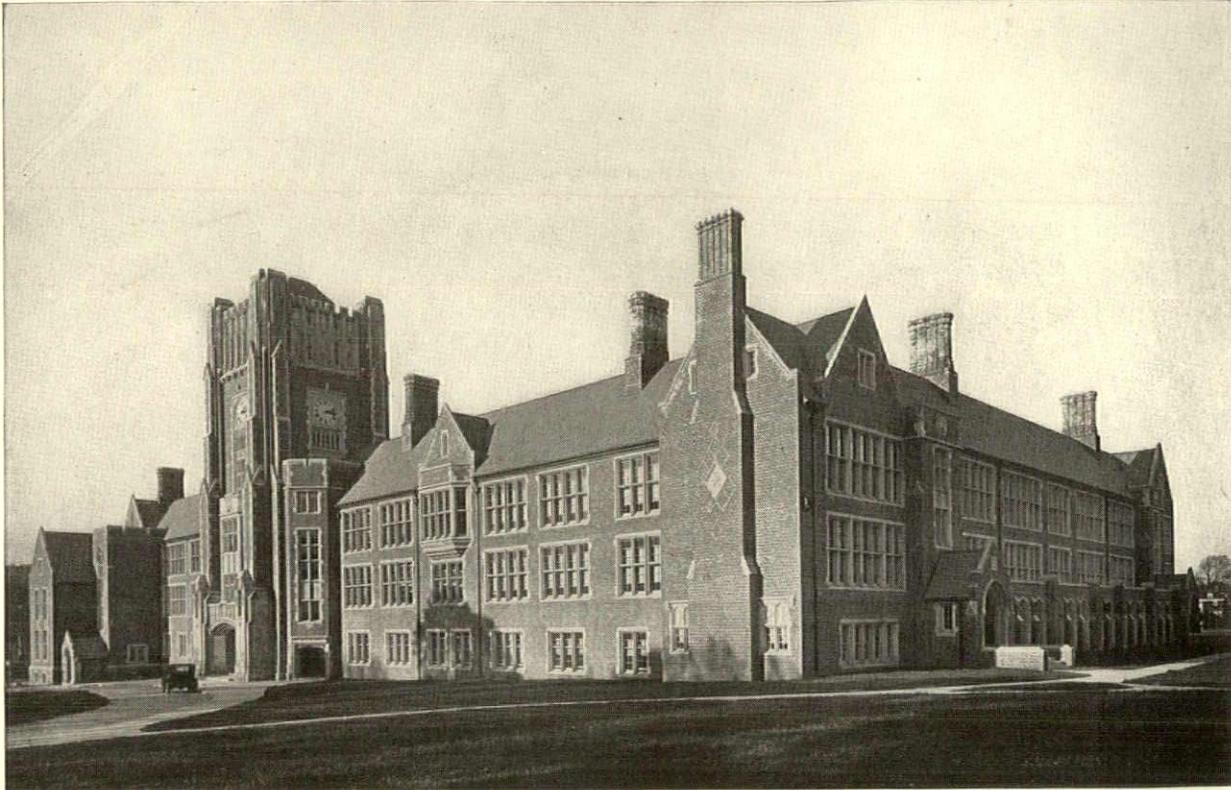
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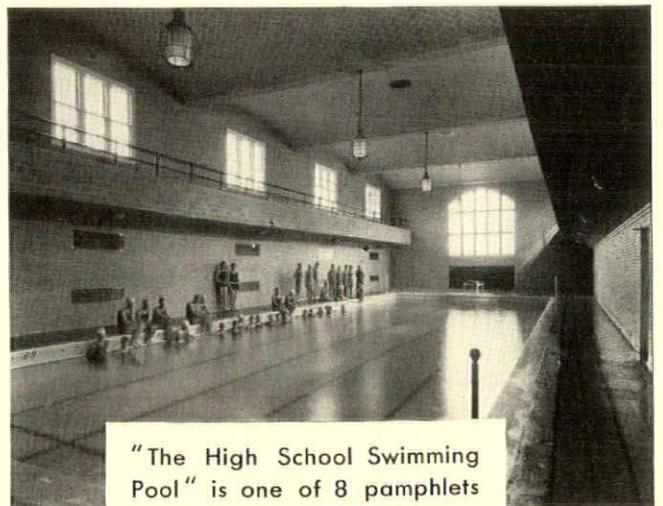
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NEW YORK
CITY

SHREVE, LAMB
& HARMON,
ARCHITECTS

*From the
rendering by
Hugh Ferriss*

ARCHITECTURE

❖ VOLUME LXVIII

SEPTEMBER 1933

NUMBER 3 ❖

The Bankers Trust Company Building

ALTERATIONS AND ADDITIONS TO A WALL STREET STRUCTURE OF
TWENTY-FIVE YEARS AGO—SHREVE, LAMB & HARMON, ARCHITECTS

By Richmond H. Shreve

IN 1930 the Bankers Trust Company, New York, occupied the lower stories of the building at the corner of Wall and Nassau Streets which the company had built for its own use more than twenty-five years before.

In addition to this building, No. 14 Wall Street, the Trust Company owned and in part occupied the property to the west, No. 10 Wall Street, running through to Pine Street, and also the building on the north, No. 5 Nassau Street, known as the Hanover Bank Building, on the corner of Nassau and Pine Streets.

In spite of the annexation of space in these adjoining buildings and of numerous adjustments of working areas and staff organization, the "housing" was not fitted to the "machine"; it prevented the most effective operation and fell short of a true expression of the position and function of the company in this growing centre of the world's financial markets.

The problem presented to the architects was therefore that of devising more and better space for housing this business that had grown beyond expectation, and of providing for its further growth and evolution in the years ahead.

The site, comprising the eastern section of the block fronting on Wall, Nassau, and Pine Streets, is relatively one of the most valuable properties in the world. This high land value, the volume of urgent business arising from the financial district, and the need of effective interrelation of the banking floor and other departments placed a premium on space usefulness and the thorough study of the Trust Company's organization.

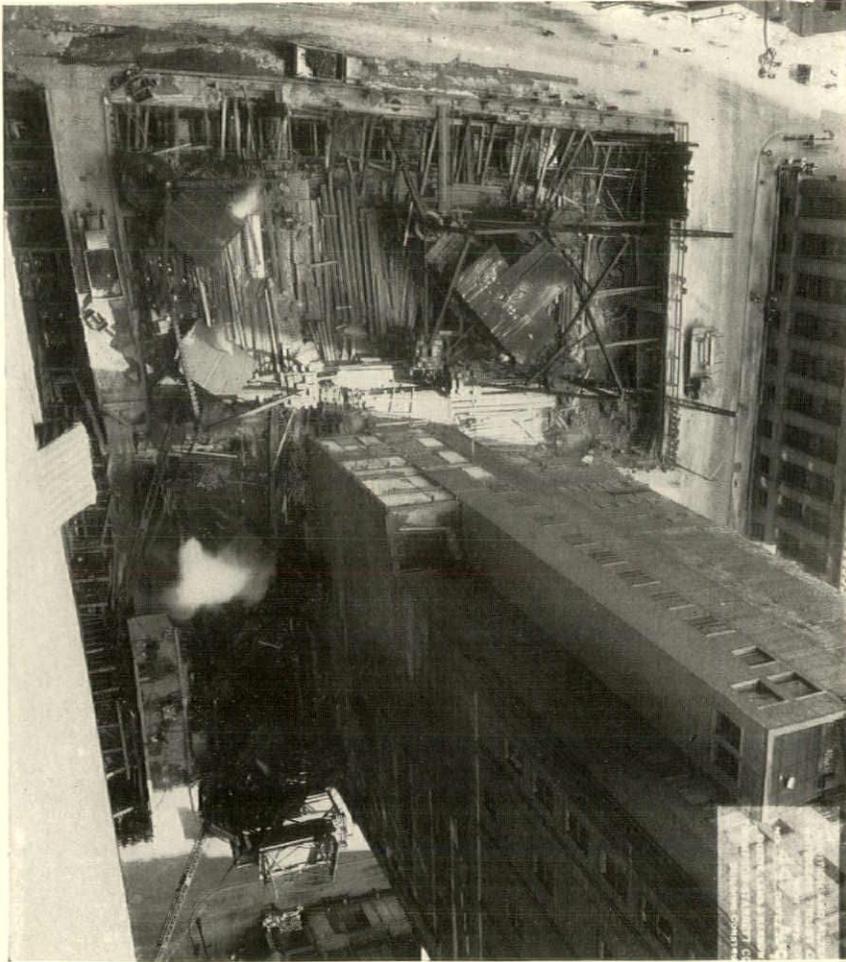
Some of the difficulties to be avoided or removed arose from the fact that the entrances to the building and to the Trust Company had become inadequate; that there was great congestion throughout the entrance lobby due to its

use at once as building entrance, elevator hall, and public passage from Wall Street to Pine Street; that the elevator system was inadequate or badly hampered, and that the great depth or thickness of exterior walls (over six feet of masonry) restricted the entrance of natural light. None of the buildings other than the original Bankers Trust Company Building were well adapted to the purpose for which they were being used. Satisfactory additional space might have been obtained by expansion vertically in the Bankers Building, but as there is a limit to the area in upper floors which can be effectively operated in connection with a public-contact first-floor banking-room, it was agreed that relief was to be more profitably obtained through lateral extension.

The first thought of the owners in this direction was to consider building only on the plot No. 10 Wall Street (running through to Pine Street), either (a) a temporary structure, or (b) one which might itself later be incorporated in a more extensive development without losing the space obtained by the erection of this first building. But the Bankers Building and the Hanover Building had floor systems of different heights and therefore at different levels, and it was necessary, along with other decisions, to determine at which of these sets of levels the floors of the new building should be placed.

Consideration was necessarily given to:

- (a) the use, amount, and subdivision of the new space, whether intended for banking use or for tenants;
- (b) the circulation both vertical (elevators) and horizontal (intercommunication) for the Bankers Trust Company staff, as well as for the public;
- (c) the conditions affecting the Bankers Trust Company business during the period of building operations;



Its elevators were antiquated and badly placed in relation to the general plan of the three buildings considered as a unified floor space. The cost of providing in this building legal standards of construction and of exit and efficient heating and ventilating, plumbing and electric systems would have produced a return on capital invested not nearly so satisfactory as that to be obtained if the whole building were removed, a new and modern unit erected with floors at the same level as those of the original Bankers Trust Company Building and the new building on No. 10 Wall Street, and the structure on the three plots set up as one organized whole (page 129) instead of three badly related elements.

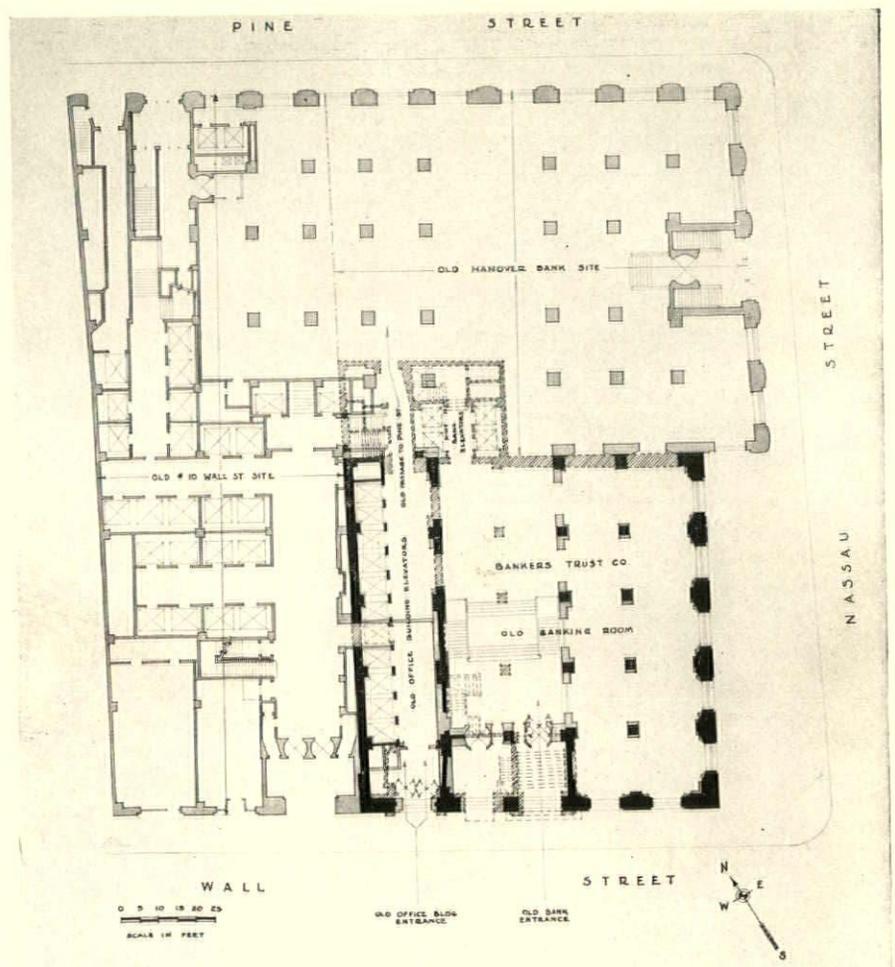
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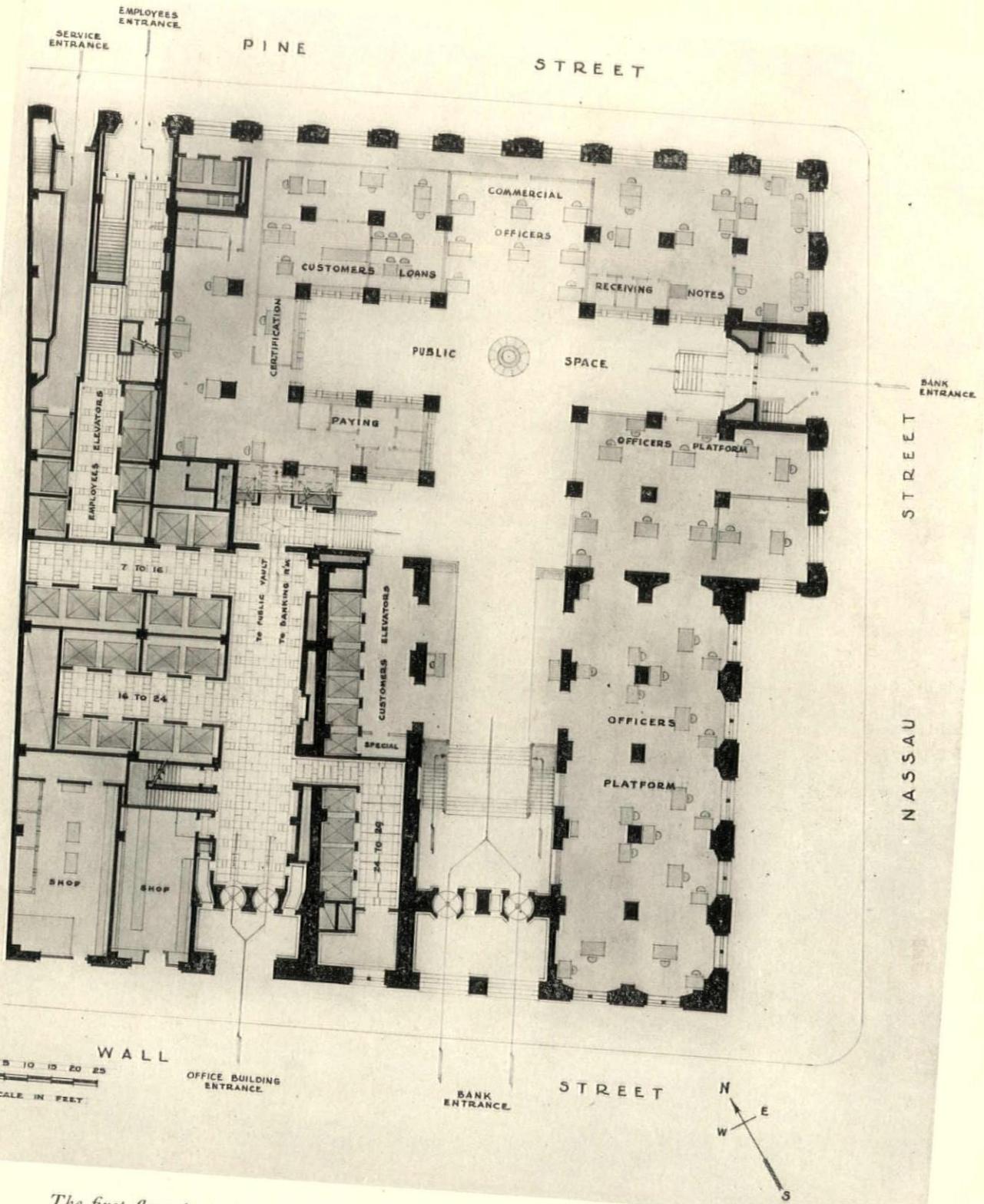
At left, a progress photograph looking down on the site during demolition, the photograph oriented to match the plan below. On the latter the black represents old work retained; the heavier cross-hatching, old work destroyed; and the lighter cross-hatching, new work

- (d) the cost, whether capital investment or loss of income or other expense due to the building operation.

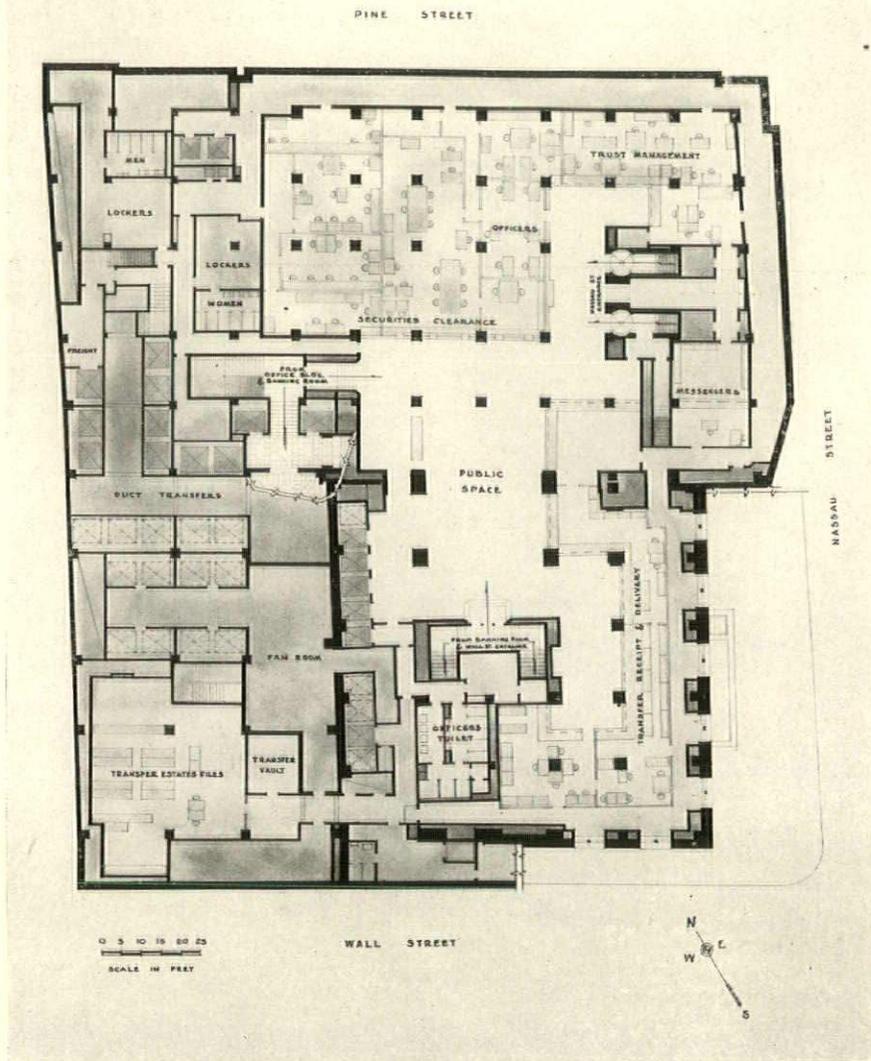
These points requiring consideration are mentioned in this detailed form because it was through study of them that a solution of the problem quite different from that originally thought of was arrived at, one which would not have been adopted at all had the analyses of the proposal to build been confined to the No. 10 Wall Street property, for in that case the Hanover Building would have been altered and retained. It was not a modern structure in appearance, construction, or usefulness. The exterior walls were of heavy masonry, so that window reveals were four feet or more in depth, and the natural lighting was further blocked by exterior projections not found in efficiently designed office buildings.

◀ ARCHITECTURE ▶





The first floor is entirely a public-contact area and recognizes at once certain fundamental divisions of use and circulation. Public access to the office building itself, as distinguished from the banking quarters of the Trust Company, is from Wall Street only, leading north through the main entrance hall to elevator groups serving all floors above the banking floors. The Trust Company's employees enter from Pine Street, passing south to elevators reserved for staff use only. The remainder of the ground floor is given over to the Banking Room and to the bank service elements necessarily placed at the first-floor level, including elevators serving all floors devoted to banking use, and elevators for customers' use leading to the public safe deposit vault



The Banking Room is entered from Wall Street, from Nassau Street, and from the entrance hall of the building. All three entrances are at a level between the Banking Room and the floor next below and serve equally well as entrances to either one, thus making Basement A (shown at left) virtually a second ground floor. Here are the public-contact phases of the Receipt and Delivery, Re-organization and Transfer Departments, the arrangement of open floor space and cages on this floor being particularly adapted to these operations.

Dominating the scheme of the building plan, but without losing harmony or dignity of treatment, are the qualities of practicality and efficiency. Safety in the handling of money and securities, orderly sequence in the arrangement of the processes of business, free but controlled circulation of staff and customers, an assured zone control of valuables, bank organization and public, these mark the arrangement of every part of the banking space. Never is the line of travel requiring protection, the "red line" as it came to be called in the earlier days of plan discussion, crossed by officer or public traffic, and it is touched by officer or staff circulation or management only under conditions giving full protection.

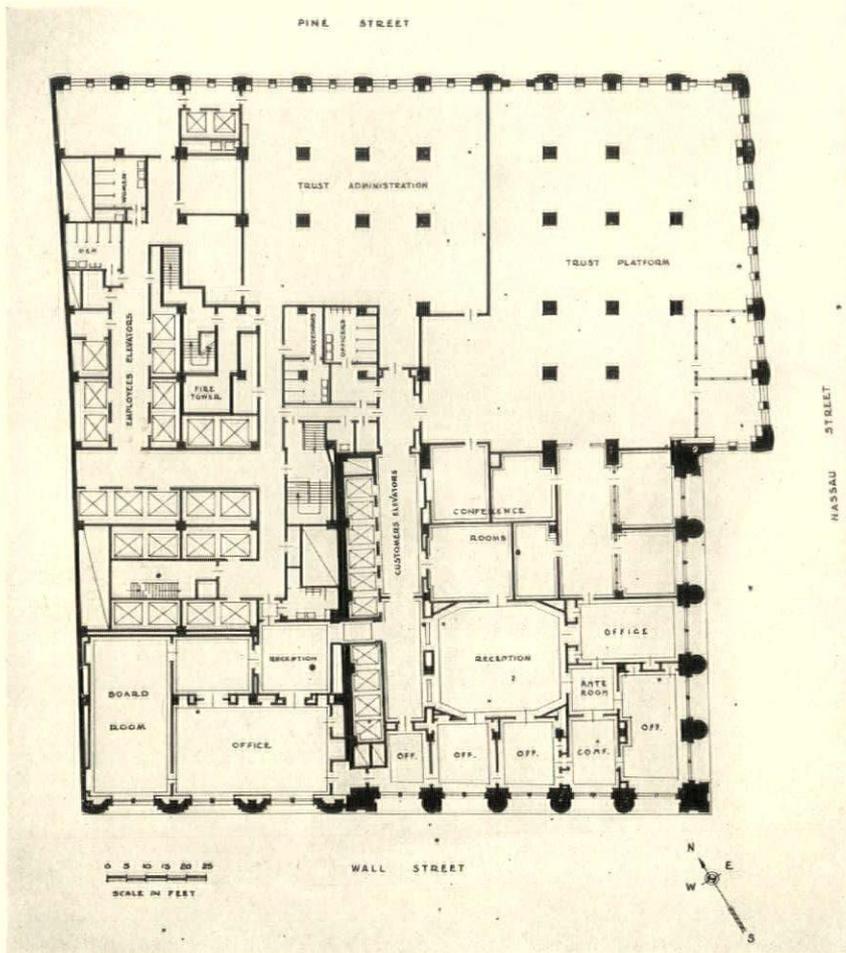
From the vertical circulation, the hub of the building plan, radiate fanlike the arteries and areas of working space, clearly defined but in close contact, with boundaries capable of being shifted at will and areas which can be enlarged as required. All of this flexibility is made possible without loss of accessibility, safety, or usefulness. There is, of course, acoustical plaster over the banking rooms to insure quiet operation

use of the space obtained, of the vertical and horizontal circulation, of conditions affecting the owner's business while the work was being done, and of the expense, income, and return on the investment, made it clear that the economy of keeping the old Hanover Building was more apparent than real and that true economy lay in tearing it down and throwing it away. Not only was the new space created on the Hanover plot more useful, but there were many more square feet of that space on each floor of the new building, and, because of the new story heights, an extra story was to be gained in reconstruction without increase of cubical contents. Further, because the service and utilities group in this

plan could be placed near the unlighted west wall of the No. 10 Wall Street unit, the Hanover section of the new structure comprised virtually only free unobstructed floor space and showed an unusually advantageous ratio between cube and useful area, or between capital cost and income.

It was from this study of practical values that the plan finally adopted was developed.

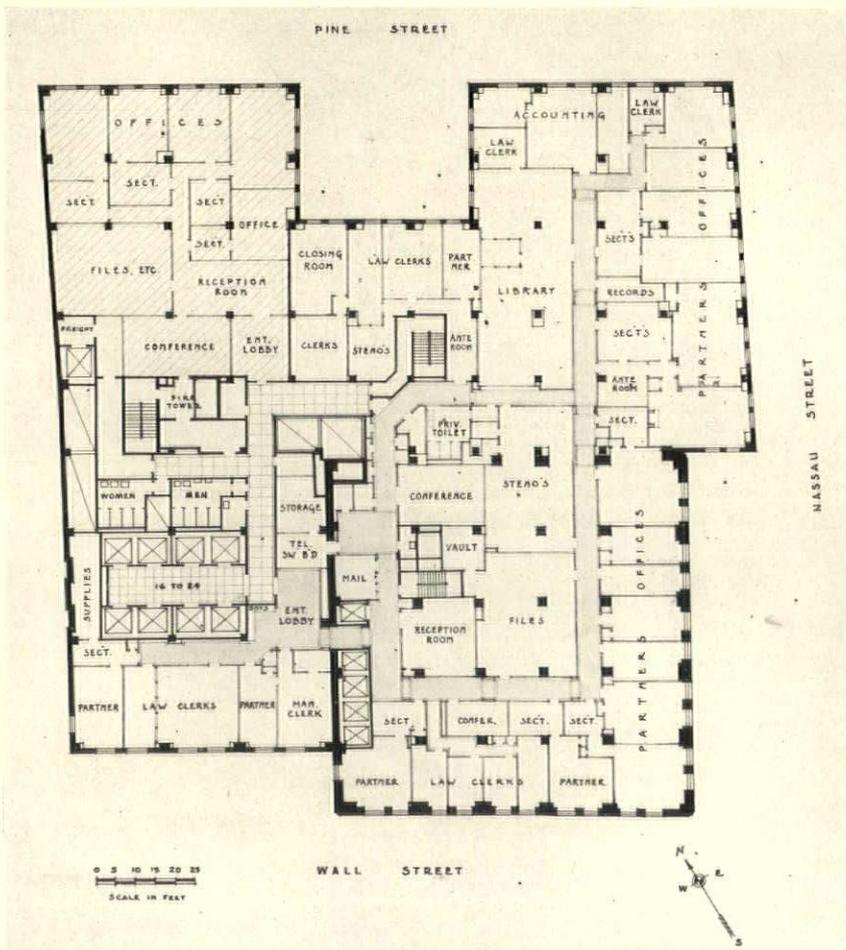
Messrs. Purdy & Henderson were the engineers responsible for the foundation and steel work; Meyer, Strong & Jones, Inc., engineers in charge of the heating, ventilating, electric work, and elevators; Fred Brutschy, engineer for the plumbing; Thompson-Starrett Company, Inc., were the builders.



At left, plan of the second floor. In the new portion of the building on the Wall Street front there is the Chairman's Suite. Adjoining this, in the old portion of the building at the corner of Wall and Nassau Streets, is the President's Suite, extending north as far as the third column. Beyond this to the north is the Trust Platform (a "platform," in banking parlance, for those who do not know this long-established tradition, is a floor space for officers to which the public has free access). Continuing around the Pine Street front is the Trust Administration.

The executive officers in the Chairman's and President's Suites, and in the Trust Department, are in direct contact with the public through the bank of elevators rising from the main floor, and with all other departments by these same elevators. It will be noticed that the south elevator of this bank opens directly into the reception lobby; it is reserved for bank officers. Photographs of these executive offices will be found on pages 141 through 153

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At left, floor plan of the twenty-second floor—representative in general of floors from the twelfth up. This particular floor is laid out for the use of a large law firm. Note the omission of the inside corner columns in the new portion of the building to permit of the maximum flexibility in the subdivision of these floors for individual tenants

« ARCHITECTURE »



Office Building lobby, looking toward Wall Street. The floor is paved with Tennessee marble in dark and light pink; for the walls *Tavernelle Clair* and *Tavernelle Fleuri* are used; the ceiling is plaster, covered with aluminum leaf toned down by glazing, with ornamental bands of gold leaf; the metal work is of bronze, with light statuary finish.

Photograph by F. S. Lincoln

The color scheme, therefore, is tan, rose, and dull gold

The old Bankers Trust Company Building, the "Tower of Strength," through its influence on the conception of the exterior design of the addition, produced several interesting problems. The advertising value of this Wall Street landmark, as well as the sentiment attached to it by the company, made it essential that any addition should be decidedly subordinated to its solid and robust architecture. On the other hand, the desire of the owners for an expression of the increased frontage on Wall Street led to the carrying through of the rustications and belt courses of the existing work at the ground-floor level.

The illustration opposite shows the lower part of the new building on Wall Street

« ARCHITECTURE »



Photograph by F. S. Lincoln



Photograph by F. S. Lincoln



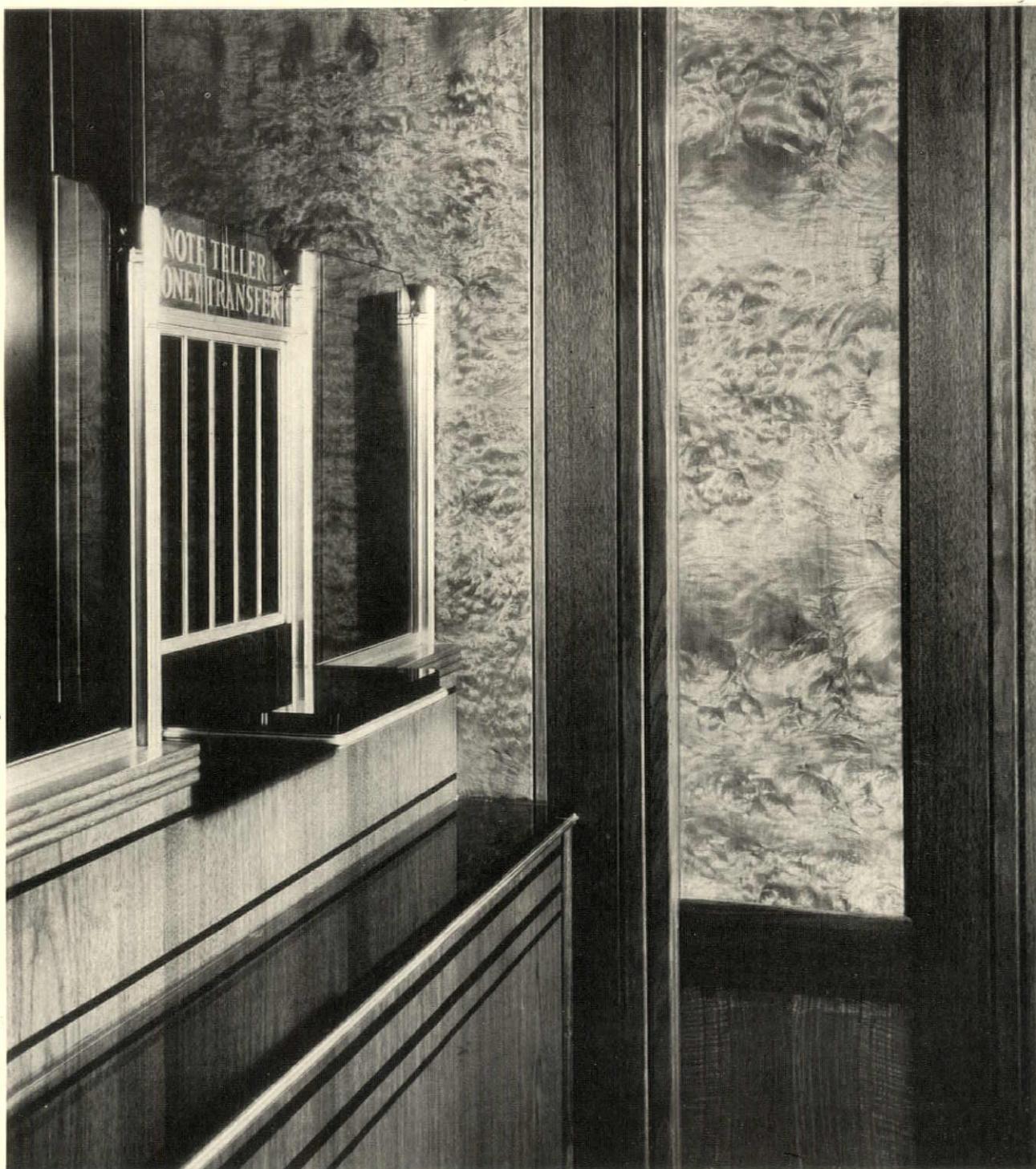
Photograph by F. S. Lincoln

The main Banking Room on the first floor extends from Wall Street through to Pine Street, and from Nassau Street almost to the western lot line, forming an irregular T, each arm being almost 200 feet long. An enclosed mezzanine (a portion of the old second floor) surrounds the bottom end of the T, and under one side of it is the officers' platform. The desire to achieve an impression of the dignity of the institution and yet avoid the great coldness which is the usual result of such a desire, led to a treatment entirely of wood. The walls are of Oregon myrtle burl combined with a walnut base, the whole built up of flush panels, over 26 feet high and 4 feet wide, separated by recessed strips to give the movement and flexibility which the material demands. The piers and columns are also of myrtle burl set in flush frames of solid walnut. Metalwork in railings, window grilles, and in the duct grilles is of bronze

« ARCHITECTURE »



Photograph by F. S. Lincoln



Photograph by F. S. Lincoln

One of the most difficult physical problems which a great modern bank has to face is the continual changing in the size and relation of its various departments, due to sudden emergencies such as we have had in the past few years. The immovable and inelastic bank screens of marble and heavy bronze have made any such changes in the banking-room layout a serious operation, both in cost of alteration and cost of delay. In answer to this problem a screen was evolved in which changes can be made literally over a weekend. The whole unit was conceived as a piece of furniture, built so that it could be cut or extended, moved bodily, or its wickets rearranged with comparative ease. The illustration on the facing page shows the general effect of the counter screen, a detail of which appears above. Opposite, the check desk in the foreground is of light Cardiff Green marble above a base of Verde Antique set in bronze frames, the counter being of clear plate glass. In the top of this check desk is provision for indirect lighting units

« ARCHITECTURE »



Photograph by F. S. Lincoln

Entrance from Wall Street to the main Banking Room. The photograph is taken from the opening between the lobby containing the customers' elevators and the lower leg of the T-shaped public space, and looks toward the officers' platform through the opening at the right. In the left foreground is the information desk. To break the broad expanse of light marble flooring the area at the sides has been carpeted

« ARCHITECTURE »



Photograph by F. S. Lincoln

*Above, the main Banking Room from the Wall Street corridor, looking toward Pine Street.
Below, the officers' platform in the corner bordered by Wall and Nassau Streets, under a
mezzanine floor. The view is taken toward the Wall Street end*





Photograph by F. S. Lincoln

Above, the Basement A banking floor, looking toward the stairway leading down from the Office Building lobby. Below, the Basement A banking floor, looking toward the Nassau Street entrance





Photograph by F. S. Lincoln

The executive offices on the second floor are reached by the customers' elevators from the main Banking Room. On the west is the Chairman's Suite, in French walnut—excepting the Chairman's Office, done in painted cherry. On the east is the President's Suite, occupying the front half of the original building, all finished in figured Burmese teak. The detail above is a corner of the board room

« ARCHITECTURE »



Photograph by F. S. Lincoln

An office in the President's Suite, looking toward the Reception Room. Walls are of Burmese teak, the floor covered with a heather-green high-pile carpet. A finish closely matching the teakwood is given the bronze grilles of the frieze. In the furniture, French walnut has been used, inlaid with ebony; the lighting fixture is of bronze with translucent glass

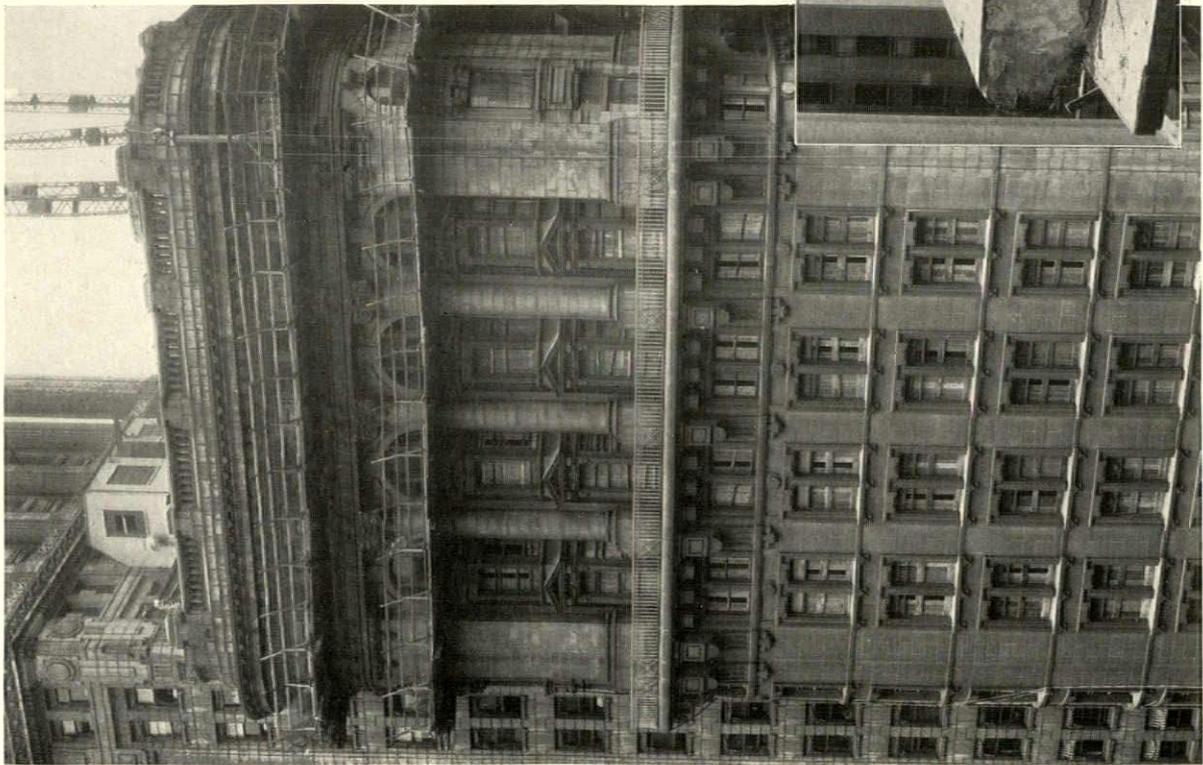
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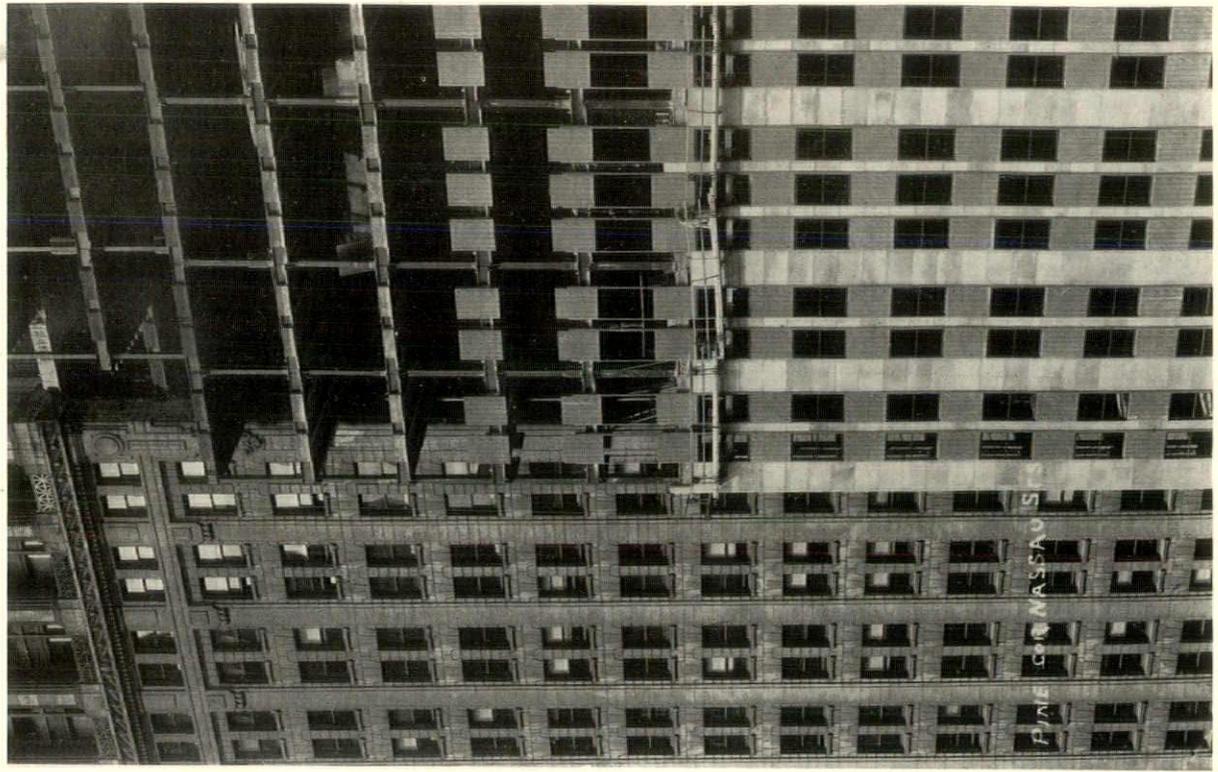
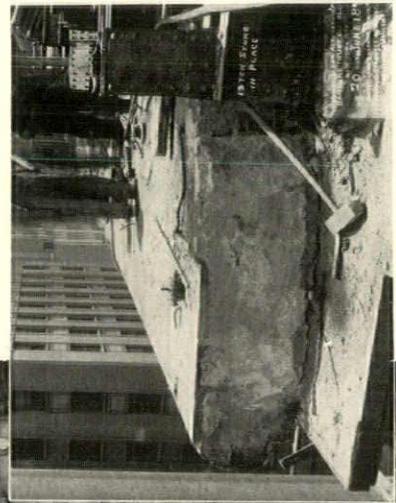
Photographs by F. S. Lincoln

Above, the reception room in the President's Suite. Below, office in the Chairman's Suite. Here the walls are of French gray enamelled on cherry; the grilles of pierced wood

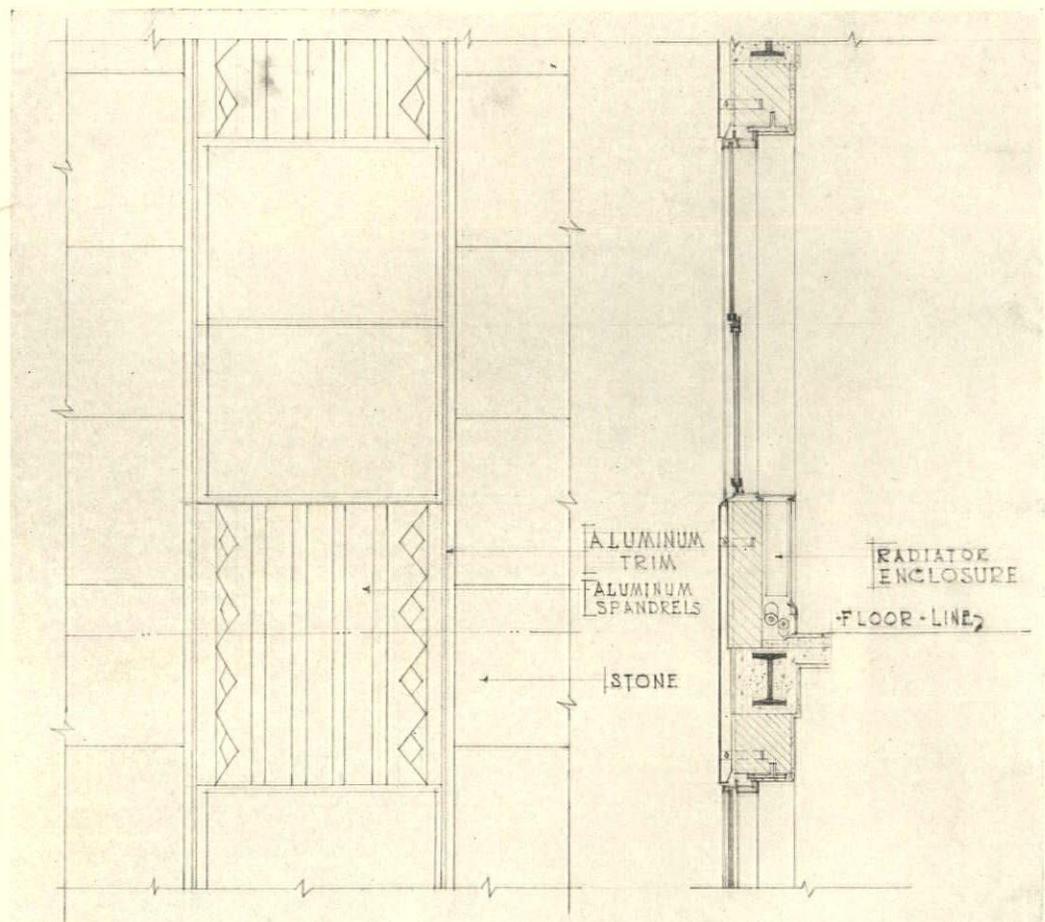




Here is an interesting comparison of wall structures, the two progress photographs taken from almost the same view-point. The Hanover Building was erected in 1902. Its steel frame carried only its floors, stairs, etc.—the great masonry wall, some 24 stories high, being merely self-sustaining, although more than six feet thick in the lower stories and of massive construction throughout. (Insert below shows the stone balcony or cornice member in the wall above the 17th floor)

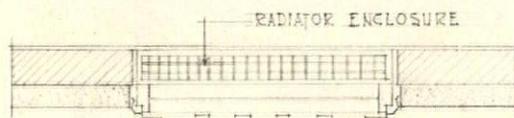


◀ ARCHITECTURE ▶



ELEVATION

SECTION



PLAN

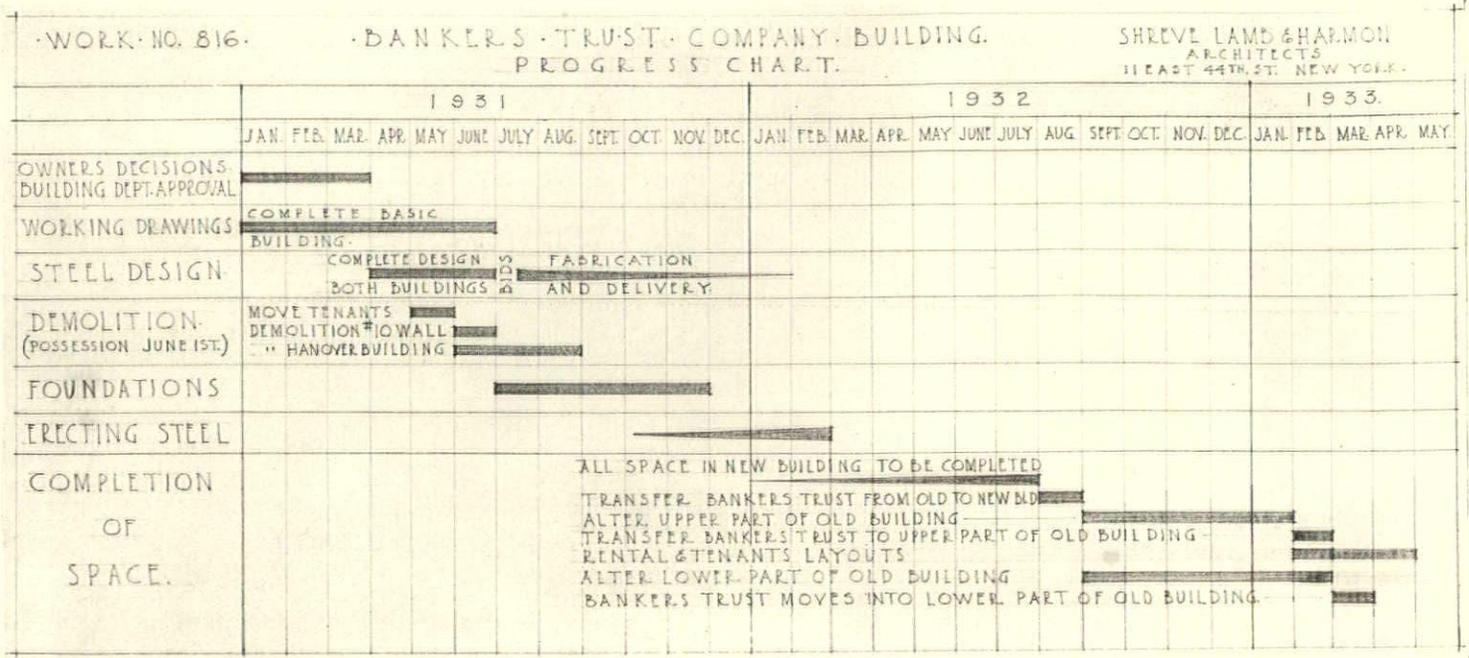
Contrasting with the heavy masonry walls of the old work is the structure of the new building. Within a space of 13 inches of wall thickness are placed the stone facing and brick backing, and within this same dimension room is found for the windows, the spandrels and aluminum trim, and the enclosed radiators.

This modern wall has its glass in part outside of its outer face, its radiators stand within its inner surface; only its thickness of a foot or so is lost from useful floor space in order to enclose the building. Its spandrels, trim, windows, and stone may be set independently and at varying levels without one "pier" delaying another. Speed and economy in the building work at the site are possible through the interchangeability of "standard parts," while their shop production in quantity makes for speed and economy in fabrication. The result is less space taken by the structure, less time required to build, lower cost, and higher income—altogether not a bad combination.

The design and execution of the work presented certain unusually difficult engineering problems. The

chief of these in the new structure developed as the foundation was carried to rock, approximately 70 feet below the sidewalk. This was done through the open-cut method without using air pressure, notwithstanding that ground water was encountered some feet below street level, that the Nassau Street subway tube had to be protected, that the pressure from three streets and certain neighboring buildings had to be held back, and that neither of the building foundations on the fourth side had been carried to rock.

Upon completion of the perimeter foundation wall the site was excavated and simultaneously cross-braced—and the steel was then set through planned spaces in the cribbing, permitting the introduction of columns and bracing girders.



The program of construction was governed largely by the necessity of carrying on banking operations without interruption. This required a number of departmental "shifts" or rearrangements from time to time. The buildings to be demolished were to be vacated by the Trust Company and tenants on New York's spring rental date, and the first shift from these buildings to other working quarters therefore was set for May 1, 1931.

A new building was then to be erected on the vacated site, and business operations transferred to it in order to permit alterations in the old building. This second shift could be most conveniently arranged in the late summer, and was fixed to occur about August, 1932. The final shift to the combined new buildings and altered old building was desired to be made in March, 1933.

These dates: May, 1931, August, 1932, and March, 1933, were therefore established as fixed points, and the organization of the work in drafting-room and in the field was planned about this general schedule.

The Progress Chart reproduced on this page was set up by the architects for the guidance of the construction committee, composed of the owner, architects, engineers, and builder, who met weekly or oftener in directing the

work. It was agreed and noted on the chart that if the owner's fundamental decisions were made by April 1, 1931, working drawings would be completed, steel drawings made ready for contract, and foundation drawings ready for execution of work by July 1. These dates dovetailed with the May 1 shift from the old buildings and the completion of the demolition on the No. 10 Wall Street site on July 1, in advance of the Hanover Building demolition, to be completed September 1. The construction schedule then took control. The beginning of steel setting coincided with the completion of foundations, and other trades became active in sequence. The rapid construction of the building (in spite of nearly two months lost through a general strike) permitted the Trust Company to move to the new building over Labor Day, September 5, 1932.

The work of altering the old building was at once begun and was completed in time to permit the first departmental shift to be made on March 3, 1933, and the main banking room to open on the date set nearly three years before at the owner's choice.

A very involved and difficult construction contract had been completed on time, with a marked saving in cost and without interruption of the business of Bankers Trust Company.

SOME—not many—of the friends on my visiting list are educators. We are not professional educators in any accepted sense, for we do not run with the pack—we do not believe that real educators ever should, properly, or ever could, honestly, run with the pack. Hence, we are academic pariahs. The University Marshall does not speak to us—he looks the other way when we pass his round pink person on the campus. Incidentally, I fear, we are rather proud of our status. One derives vast amusement from the academic profession if one is careful to hang about on the fringe of it; one is quickly moulded to the standard sad pattern if he grows careless and allows himself to be drawn into its majestic, pompous whirls. One of my dearest friends is engaged in the same sort of education as I, myself, am. We have visited of late, quite frequently, and our conversation has turned, invariably, toward the problems and the pleasures with which we come into daily and hourly contact. My friend has just sent me a letter, and I consider his letter so important that I am eager to give it a much wider circulation than the quiet privacy of my files can ever accord to it. For obvious reasons, I must leave my friend in that happy state of anonymity which will assure to him the continued enjoyment of his job in these jobless days. I do, however, have his permission to print the edited version of his letter which follows. Everything he says, I have no hesitancy in remarking, I believe myself. All that he speaks of wanting to do, I have the temerity and the pride to state, I do—or try to do; with whatever success time alone can tell. Here, then, is the letter—or the greater part of it—appropriately edited so as to preserve the veil of mystery behind which my friend must remain.



“Dear Cunningham: Yours of the seventeenth is just in, bless you! I’m sorry if my last revealed an unusual state of mind, superinduced, I suspect, by too much to do and no time to do it. Perhaps, conditions have driven from me my sense of proportion—sort of depleted what store of humor I, sometimes, think I possess. That shows a disordered mind, does it not? Must be getting old and crotchety, dammit! But, by the Great Horn Spoon! it isn’t my

Architectural Education

A LETTER FROM A FRIEND

BY

Harry F. Cunningham

Professor of Architecture,
University of Nebraska

fault, after all; it is the way the world has with one, sometimes. One does not elect to do certain things—they are simply laid on your doorstep for you to stumble over when you open the door. You just have to take them in and care for them, don’t you? Then the job starts riding one, instead of one’s riding the job. Here, this afternoon, more things seem to need attention—because other persons appear to think so—than I can possibly dispose of. So, I chuck them all, for a while, and visit with you. What guilt I feel to think that I have given no attention to your discourse on the subject of an architectural education’ way last November!

“I suppose education, as it is practised today, has to be ‘organized’ in one way or another. But, what that organization is intended to do should determine what it shall be. If it is intended to produce mere cogs in the Great Machine (whatever that is) it will—or should—be one thing; if, however, it is intended to develop human beings along human lines it must be a quite different thing. My own little formula for ‘education,’ so far as schools are concerned, is about like this: The school should be, primarily, an environment made up of as serviceable a plant as possible, a staff of men equipped with experience in their several fields and possessing that rare, inborn ability to inspire and enthuse others. Students would come when they think coming would help them, stay as long as they liked, go when they wished to, and devote themselves, while they were there, to such work as really engaged their interest. There would be no attempt on the part of anybody to ‘grade’ them as to accomplishment, or to decorate them with degrees (which are quite comparable to the pink ribbons pinned to the fattest pig at the fair).

“That would restore the glory of knowledge and skill to its rightful place in the minds of a new generation, awaken those minds to an appreciation of the things really worthwhile in human life, and do away with the false objectives now magnified out of all semblance to sanity. And, isn’t that exactly the attitude you have adopted with regard to your own children? I should do away with the thing usually regarded as ‘discipline,’ that is to say, discipline imposed from without. The only real discipline for a free soul—and you’ve got to believe every soul is free by nature—is the discipline which it imposes upon itself. What that shall be must be self-discovered.

“Why must ‘education’—when it seeks to ‘organize’ its efforts—choose a view-point so different from that adopted with relation to sports? The young chap who would play golf can’t wait, once a little *experience* in his own way reveals his deficiencies, to beat it to the coach and drink in every word the coach says, and profit by every example of the way to stand, to swing, to strike, to follow through. He will subject himself to the most rigorous discipline to overcome his own awkwardness, and why? Because *he* wants to improve *his own* game—he is carried forward, he progresses, by the urge of his own inner interest, his own self-animated purpose. As he grows he will, just naturally, take on studies in the history of the game, the manufacture of clubs, the science back of the whole business, the methods of the great players. He will, just naturally, study the adaptability of different clubs to different lies, and the differences in balls, their weight, their resilience. By and by, he will delve into the study of golf courses themselves, their engineering and landscape features, arrangement and lengths of links, design and management of golf clubs, their financing, the character of their membership, etc., etc.



“Now, let us hand this enthusiastic youngster a Course in Golfing and arrange a curriculum in accordance with the foregoing elements involved in the glorious game of golf. We will tell him he must study and recite in golfing classes on clubs, balls, links, finances, and all the rest of them *seriatim*; then we will tell

him, at the end, that he does or he does not know it, and we will figure out and make a matter of record, the exact percentage of his knowledge or his lack thereof. If the percentage is high enough, we will give him a diploma testifying to all and sundry the fact that he is a 'Bachelor of Golfing.' Can't you picture the rebellion which would rise up in his soul if we were to pursue such a program applied to the *game* he wants to *play*? But, that is exactly what we are constrained to do, more or less, to these youngsters who come to our schools fired with some innate desire and a grand, eager enthusiasm to play one phase or another of the game of life. 'No,' we say, 'you can't do this now. You must do this other thing first and make such-and-such a grade in it. We know, by our experience (?), the exact, precise order in which these things must be taken up. By and by, when you have learned all of these things, in their proper sequence, then you can do what *you* want to do. Now you must do what *we* know you should do.' Bah! say I, and I am cheered through the knowledge that I hear your own voice echo my 'Bah!'

"But, our non-agreeing friends (and they are nearly the whole of the crew) say: 'Ah, would you just let them run loose and not *make* them get the fundamentals first?' How they miss the idea! As if a *real* teacher could have so little of an intimate part in Youth's development that *his* young friends ever could—or would—'run loose.' Just think of the joy and excitement of *leading* Youth's enthusiasms, all unaware of the leading, along pleasant ways; changing the ways as the enthusiasms ripen; *helping* Youth, all unconscious of the helping, to develop his own initiative, teasing him into it, if you will; Youth coming, all at once, to see *for himself*, the desirability of an ordered progress, an accumulating series of exercises. From his growing ability to trace cause and effect, he takes on—of his own free will—this and that because he *wants* to; as his experience expands, he comes to rely (but not depend) more and more upon the advice and judgment of his teacher, because Youth has *discovered, for himself*, the logic and the value of his teacher's judgment. Is this unorganized, undirected education—letting them 'run loose'? No! not in *our* cosmos. It seems to me to be the only *real* scheme of education, this drawing

out, from within the soul and spirit, of all their highest potentialities.

"May we not learn processes from nature? Take the plant. What can its 'educator' do for it? He can water it, provide light and sunshine, protect it from encroaching weeds, cultivate the earth *around it*; create, in other words, an appropriate, agreeable environment. From then on, it will take from what is at hand, exactly what itself knows it will need and profit by; nothing else can be done for it without doing violence to its plant nature. The flowering will be, *must* be, of its own kind, quality, strength, and virility. The one thing for the plant educator to do is to provide and preserve that healthful and rich environment so that the *roots* may go down in their own natural way, free to take, from their environment, what the plant requires to live and flower true to its race and its promise.



"But, we hear them say that the human mind is different—it has to be violently sprayed and pruned, bolstered and bent. Nature appears to have been careless, when she made the human mind, and one must adjust it, from without, using devices of standard pattern and approved origin. And all minds shall be treated alike, with these devices and inventions, whether the mind be of the order of the lily or of the genus of the cabbage. My God! Wouldn't it be just common, human decency (as well as, paradoxically, almost divine wisdom) to give these human minds and dispositions and inclinations a chance to discover whether they are *really* lilies or cabbages? But, it can't be done, my friend, while all of the 'wiser ones' insist that all shall be lilies and treated as such.

"I think of a case here in my own school, where I strive to enlarge (as much as I can) this notion of freedom. A chap to whom was recommended the general survey course which we call 'History of Architecture' (but is really a sort of introduction to all the *gay* things men have done when they loved their work), didn't seem to think that it was what he wanted. 'All right,' said I, 'don't take it.' So, he went on without it, doing other things he thought he would like better. The things he 'liked' were those in which he felt an interest, those concerning

which he was intellectually curious. And even these did not occupy him so continuously as to hurt him—he worked only when he *wanted* to work at them. In his fourth year, this fellow thought he would like to take that 'history' course. 'Go to it,' said I. Not long ago, he said to me, with great earnestness: 'Mr. X, I think that is a great course—I think every student should be *required* to take it right at the beginning.' Said I: 'Suppose you had been *required* to take that course right in the beginning.' He looked at me a moment. Then he laughed and said: 'I get yuh.' Then I went on with some of this environment stuff and asked him if he did not see how it was dangerous to interfere with *natural* growth—that the human make-up must be ripe for whatever it attempts to assimilate—that only then can it develop in a growth that will make the most of every ray of sunshine, every drop of water, every nourishing surrounding condition. And he said: 'I see; everybody is not ripe for the same thing at the same time and cannot really profit by taking some things until he *really wants* to, and then—well, then it just comes easy and is great fun.' I could rehearse dozens of similar cases—we both could. And, after all, this system (or this lack of *obvious* system) which I recommend is really founded upon *real* efficiency—the removal of frictions, the elimination of unnecessary motions, the clearing of vision, the concentration of the power to do, the fulfilling of the individual's destiny. For us who are interested in *really teaching*, the knowledges and the skills we would teach are possessed, or are accessible. All of that is 'on tap.' We just have to open the proper 'tap' and let it run out—easily. But, the one superlative need is for an endless patience to let each mind develop after its own kind—the kind being no responsibility of the teacher.

"Now, somebody wants to know about a 'curriculum.' Architects and teachers of architecture will agree to a certain set of studies for students of architecture. They will not agree individually, with each other, but what does that matter? No one student would be likely to take all of the subjects that would satisfy all of the makers of the set of studies—there would be more, I am sure, than any student *could* do in one term of enrollment, if all the things these architects and teachers

◀ ARCHITECTURE ▶

might think of were listed. But, I see no reason for curtailing the list—if the available staff could handle the multitude of subjects. They would, all, constitute a field for the students' activities. One fellow might prefer to eat clover over here while another would elect to chew hay over yonder, even though both were admitted to the field at the same time and through the same gate. But, under the scheme of encouragement and non-restraining guidance, the one chewing hay would (in time, only) change places with the one eating clover, because experience, curiosity, suggestion or something else would have awakened an appetite not suspected or felt before. Why should the taste for intellectual pabulum differ from that for physical sustenance? Lack of this sort of 'education' in diet explains the fact that most people today are in various degrees of ill health. Instead of following the dictates of nature and discovering what their own physical apparatus needs and can manage with benefit to them, they read, and act upon, what somebody says is the proper thing for all the race. My good wife says that, by all the rules of the dietitians, I should have died twenty years ago. I may be wrong as to cause and effect, in this case, but I have tried to 'educate' myself in diet, for my growing body, after this fashion which I prescribe for the growing mind. And I suspect that I shall still not be dead twenty years hence, although I shall be, then, what is usually called an 'old man.' And let me tell you this: I think that, following this *natural*, free intellectual diet, all would arrive in due season, fairly abreast in the sense of need, if not necessarily in the degree of accomplishment; all would have covered the field and been well nourished in proportion to their respective potentialities. To *force* gorging on one thing until a nausea is created is not only to precipitate an illness and a distaste which incapacitates one for any more of that thing, but to weaken the general stamina required for the heavier diets that follow, even though they may be relished.

"However—and here's the rub—our regime of natural freedom cannot be fitted into a system of grades and diplomas, a system which magnifies the importance of superficial trivialities and suppresses the one thing said to be aimed at, education.

Now, purpose is divided, and what that means in results is too familiar to talk about. But, into such a regime (for we follow it, you and I, pretty darned fully after all) we must try to fit a 'curriculum.' For these boys of ours have to go out among their fellows who have followed curriculums and been styled by the system and tagged with the mark of their style. Small wonder that the curriculum, no matter what we do to it, fits so damned badly into our regime of natural, intellectual freedom. And here, apropos of anything you like, it occurs to me that some persons tell me that my faith in the thing called 'human nature' is exaggerated. I prefer to think not. To me, human nature is pretty near the surest thing, in its behavior, that there is. Its reactions are the direct results of the stimuli to which it is subjected, and we should be able to see the unwisdom of our present processes by these very fruits of discontentment, impatience, discouragement, laziness, which we find hanging, in such profusion, upon the academic tree and which come straight from the customary violations of individual human natures. The recognized system is a *damnable* system, and there is no getting around that.



"What is the psychology underlying the present system? Does it not have something to do with the position in which the teacher finds himself placed—a position wherein he must get the student through certain arbitrarily assigned courses by a certain time and at a certain speed, unless he would draw criticism upon his own shoulders? It is said to be a reflection upon his ability, his discipline, his classes, his school, if a certain proportion of his students does not make a certain, arbitrary grade. Statistics have been worked out to determine these matters—grave matters, indeed—of percentages, proportions, grades. Must not the teacher appear to be all-wise in his subject? Must he not carry a bluff, a false dignity, an aloofness from the very ones with whom, by the *real* nature of his calling, he should be in intimate contact and ready, with friendly understanding to help? Some of the most *human* of the psychologists know these things are so. Why must we—and worse than all, these youngsters—be ruled

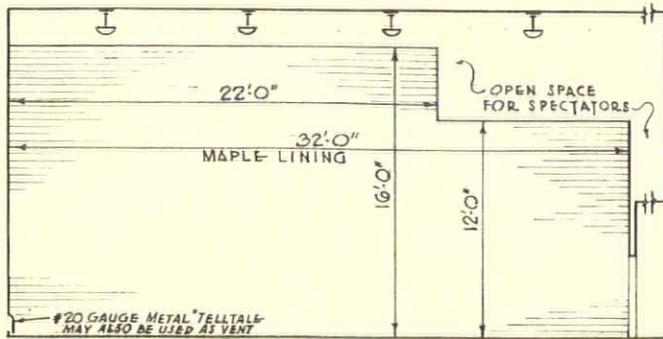
by a system devised by the other sort? Tell me, am I altogether crazy?

"Now, look at me. I can remember only three or four of the courses I took in school—it was all chemistry and physics and mathematics and statics as I remember it now. I do not use any of it directly, and I never did. I have forgotten all the formulæ—forgot them the day after the final examination. But, I was brought up, as one says, in the liberal atmosphere of an intelligent, well-educated, scholarly gentleman's household, where the reading of the Scriptures, for example, was a fine art and a delight. The children were held to the responsibility of deciding on all matters pertaining to themselves. I know that I distressed my father greatly, because, as a child I did not like to read and didn't do it—my brother and sister did. Yet I remember a few times when my father tried to induce me to read; once on a dare that I just couldn't subject myself to the discipline of reading Macaulay's "History of England." I did read it, but not because I liked it—it was merely because I wanted to show him I could do it. What a reason! Since maturity I have been told that I read everything that is printed—now, I *like* to read.

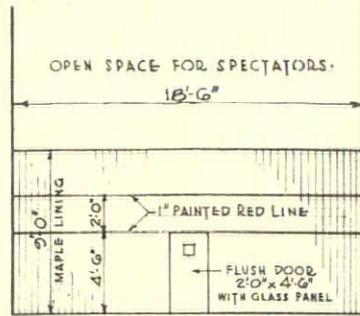
"But, I hasten to add that I do not know that I should have been any better educated if I had *liked* to read in my early youth and had done a lot of it. As regards other things in which I felt a youthful interest, and which I pursued when I 'should have been at my lessons,' I am far ahead of my brother. But I had to get what I *wanted* then, out of hours and out of bounds, as it were. And these things—things that I stole from the 'system,' you might say—I have always valued much more highly than the things I had fed to me through the regular channels of the system. However, out of the environment of the home, from the influence of my father, through the wise attitudes of three or four of my teachers toward my wayward curiosities, I assimilated things which nourished what was *me*. (I observe, with relief, that 'me' is now permissible, so used.) Nobody could have *made* a scholar of me, nobody could have *made* a business man of the youth that I was. I wonder if anybody could have *made* me a better architect or teacher. I could

(Continued on page 172)

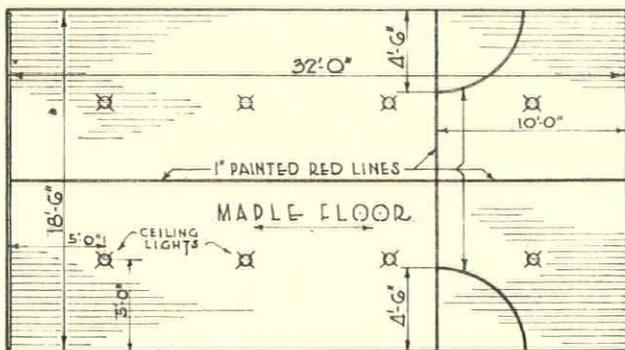
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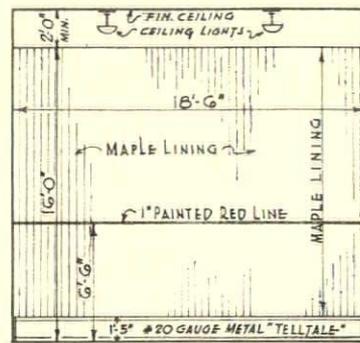
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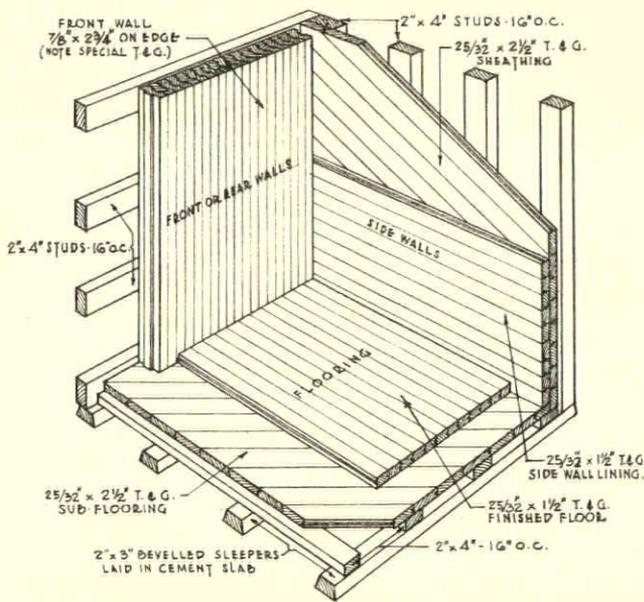
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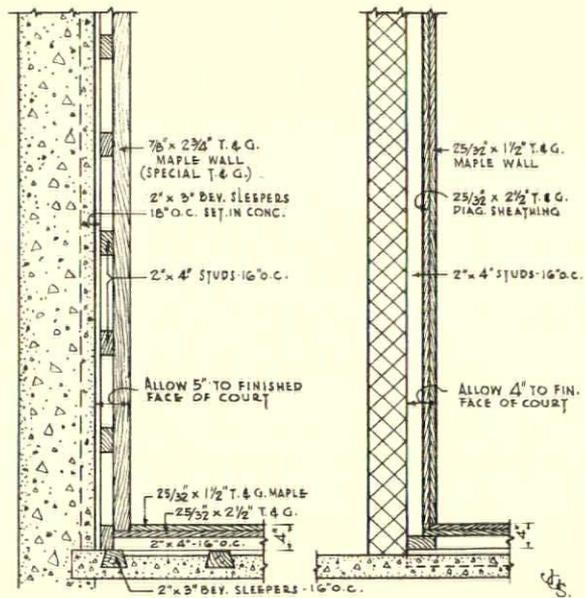
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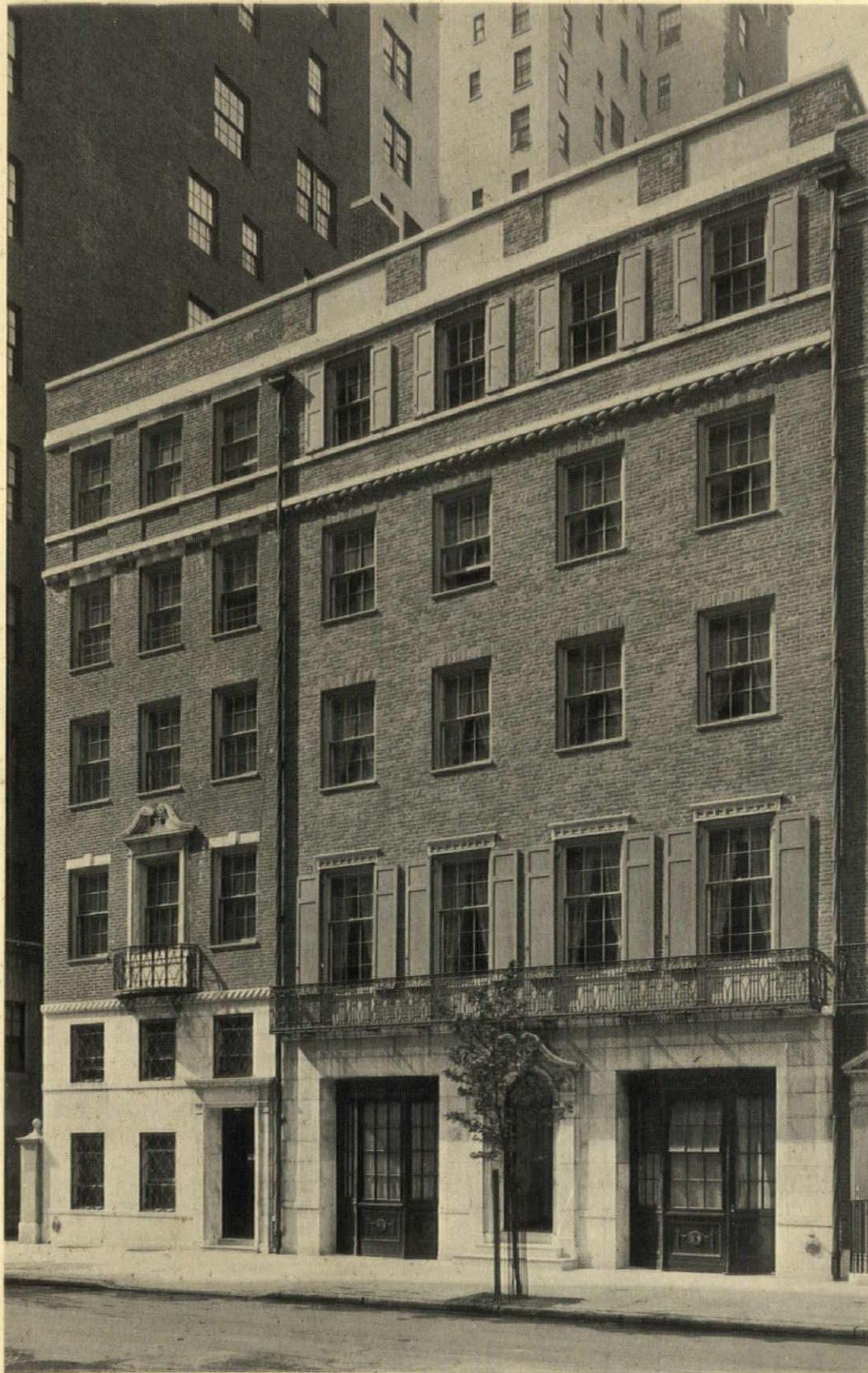
· FRONT & REAR · WALL · · SIDE · WALLS ·

· SQUASH · RACQUETS · & · SQUASH · TENNIS · COURT ·
 A SERIES OF WORKING DRAWINGS BY JACK G. STEWART

· SCALE ·: 0 1 2 3 4 5 6 7 8

· PLATE · N^o · 39

Photographs by
Samuel H. Gottscho



Mr. Hoyt's house is one of a group of seven city houses, four on East 71st Street and three backing up to these on East 70th Street. Six were designed by Mr. Embury and one by Mott B. Schmidt. There is unity in the group, achieved through common materials and by some uniformity of horizontals, even though the number of stories differs in adjoining houses. A carefully chosen common brick and Vermont marble are used for the façade of the Hoyt house, the balcony railing being of wrought iron

AYMAR EMBURY II, ARCHITECT

House of Richard F. Hoyt, New York City



Here are two photographs of Mrs. Hoyt's boudoir. In the illustration above, showing the fireplace end of the room, the woodwork is a full-bodied green, as is also the rug; upholstery, dark green damask. On the other three sides of the room, the walls have been covered with imported panels of paper. Its color scheme includes a background of pink which, it will be noticed, carries across the fireplace end as a frieze beneath the cornice. The colors of the birds and flowers are fairly dark—blue, green, yellow, etc. Draperies are of taffeta, between flame and peach, the under-curtains of ecru net with plaited ruffles; sofa upholstered in peach velvet. Miss Shotter, Inc., interior decorator



Monday, June 26.—The Producers' Council is holding its Tenth Annual Meeting here in Chicago, and we started the session with a visit to the Exposition, where Clarence W. Farrier, assistant director of operations, told us something of the special problems encountered, and how they were solved. Lunched at the Century Club, which is a Chicago organization foresighted enough to provide an extension of its club facilities over one of the restaurants in the grounds. A banquet this evening at the Blackstone, over which Robert D. Kohn presided as toastmaster, brought together representatives from a number of organizations in the architectural and building world. Among these it was a pleasure to meet many old friends: E. J. Russell, I. K. Pond, Pierre Blouke, F. P. Byington, J. C. Bebb, William Jones Smith, Earl Reed, J. C. Bollenbacher, Alfred Granger, and others.

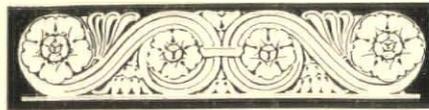
Tuesday, June 27.—Another day spent in seeing the Fair, my impressions of which are set down in the August issue. At dinner the Producers' Council found a cool retreat from Chicago's 100° F. in the basement of the Architectural Club, where C. Herrick Hammond spoke briefly of the gradual welding together of Council and Institute policies during the past three administrations of the Institute.

Wednesday, June 28.—While the members of the Producers' Council—or many of them—formed their foursomes to try out the golf links of one of the country clubs, I tramped many of the eighty-three miles said to be required for a complete circuit of the Exposition.

Thursday, June 29.—I see that the art world of Chicago is seeking an outlet for its works on the public space near the Art Institute along the lake front. Here, as in Washington Square, New York, artists have pre-empted a market-place for their wares, parts of which, like the curate's egg, seem very good indeed.

Friday, June 30.—Air travel is looking up. In the eight flights a day of a single transportation line from Chicago to New York, I was able two days ago to get a reservation in only one flight, and in that for the "second section." When I finally got to the field there were three planes making this one scheduled flight, all filled. The journey back east, with following winds carrying storm clouds again, was no less interesting and enjoyable than the flight west. I look down from somewhere over Pennsylvania, see a city that I do not recognize, and am told by the mate, "That is Easton. We'll be in in twenty minutes!"

Saturday, July 1.—Edward Alden Jewell says that in spite of the fact that everything at the Chicago Fair is described in terms of size and number, the



The Editor's Diary

fine arts end (in the Art Institute, and not inside the grounds) "is quite as impressive in quality as in bulk . . . for the show is, frankly, magnificent," which reminds me that the exhibition of photography inside the grounds is one of the finest examples I have ever had the pleasure of seeing.

Monday, July 3.—Richard P. Rase-man, secretary of The Cranbrook Academy of Art, tells me that in response to the announcement of the advance training course in the field of architecture, a considerable number of applicants who are practising architects are taking advantage of these as yet slow times to prepare themselves more fully for the future.

Tuesday, July 4.—We make our respectful salams to Doctor Albert Kahn, of Detroit. In conferring the degree of Doctor of Laws, the University of Michigan called him, "a leader in contemporary architecture, whose creative imagination is attested by imposing structures that combine utility with dignity and beauty. Great industrial plants and towering office buildings in Detroit and elsewhere have risen responsive to his dream. By expressing function and purpose in harmony with massive strength and artistic design, they bear witness to the progress made by American architects and challenge comparison with historic monuments."

Likewise we salam again to Doctor Eliel Saarinen of Cranbrook, Doctor of Architecture—"architect, city planner, designer, whose achievements are known here and beyond the seas. Formerly associated with the university, he was called to translate the vision of Mr. George G. Booth into reality at Cranbrook. Under the magic of his art, stones and mortar rise in new and compelling forms of beauty and remain enduring monuments of his skill."

Wednesday, July 5.—In line with the unmistakable trend from employment in actual production of goods towards employment for services, it appears that nearly ten times as many Americans are now engaged in professional work as there were sixty years ago. The advance has been most striking in the newer professions, the number of en-

gineers having increased more than thirtyfold between 1870 and 1930. Designers, draftsmen, and inventors have increased in numbers still more rapidly than the engineers. "The two thousand architects of 1870 were probably more nearly adequate in number for their task than the twenty-two thousand in 1930," according to The President's Research Committee on Social Trends. I judge that by "twenty-two thousand," the authors mean architects and all the other members of their organizations, for there are no such number of architects in the United States.

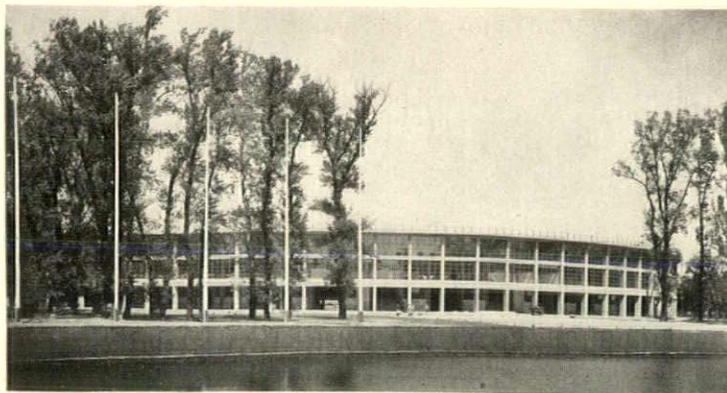
Thursday, July 6.—Down to the Princeton Club with Ted Embury, Aymar Embury's son, to see some murals, colorful and full of humor, that he has just completed for one of the private dining-rooms.

Saturday, July 8.—I see that John Russell Pope has the job of remodelling the Frick property at Fifth Avenue and Seventieth Street, New York City, to make of it a public art museum, as provided for in Mr. Frick's will. A million dollars is to be spent in the alteration, maintaining the residential character of the house, but providing a new reception room, cloak room, entrance gallery, inclosed court, and a lecture hall, together with a seven-story art library.

Monday, July 10.—A deep gloom settled upon The Architectural League at lunch time today when word came that Joseph Urban had died early this morning. The loss of Urban as an internationally known artist was great enough, but still greater was the sense of personal loss among those who knew him intimately. Here was one of the great souls of our time. With the stupendous amount of work that he managed to do by laboring night and day, there was a modesty, a diffidence, and a dependence upon the opinions of others quite surprising. When Joseph Urban talked with even an obscure youngster in the field of art, the youngster was made to feel that his opinions and criticism were of the utmost value and help to the master. This was no mere pose, either, for Urban had an almost unbelievable mistrust of his own ability. When producing some work of art he would apologize profusely for his ineptitude, and attempt to explain in his English, still touched by Viennese, what he really had been trying to accomplish. Great in bulk, magnificent in his enjoyment of the good things of life, simple as a child in his modesty, Joseph Urban in passing leaves a niche that can never again be filled.

Tuesday, July 11.—Unlike the city of Cleveland, New York is apparently quite unready for the great forward push of housing that seems imminent. There are plenty of schemes offered, but

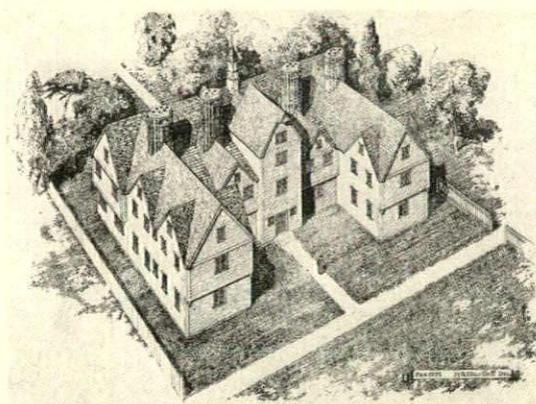
(Continued on page 156)



The new Vienna Stadium, to seat sixty thousand people in a great open oval. The architect, Otto Ernst Schweizer, utilized the fine old trees of an existing park. Reinforced concrete is the material used. The upper tier of seats is reached by staircases, the lower tier by tunnels leading from the glass-enclosed ground floor

Architectural News in Photographs

At the right a pen drawing from "Old-Time New England," representing a conjectural restoration of the first building at Harvard as developed by Samuel



Eliot Morison and Perry, Shaw & Hepburn. The building, called "Old College," was begun in 1638, and by 1677 what was still left of it was demolished

The new building for the Insurance Company of North America, at 99 John Street in lower Manhattan, has recently been completed. It was designed by Shreve, Lamb & Harmon



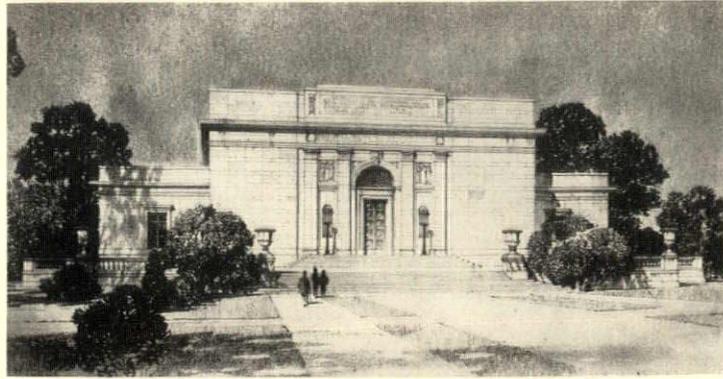
The new home of Springfield Safe Deposit & Trust Company, Springfield, Mass. Thomas M. James Company, architects and engineers

The new City Hall and Court House of St. Paul, Minn. Ellerbe & Company, Holabird & Root, associated architects





A preliminary perspective of the United States Post-Office at Milton, Pa., which building is now under construction. Harry Sternfeld, architect



A new building for the National Institute of Pharmacy will be erected on Constitution Avenue, Washington, D. C. Office of John Russell Pope, architect



A new commercial building for the use of Bell & Howell Camera Corporation in Hollywood, Calif. Marshall P. Wilkinson, architect

The new building for the Portland Art Association, Portland, Ore., completed late last year. A. E. Doyle and Associates, architects



The recently completed office building for Westchester County at White Plains, N. Y. Morris & O'Connor, architects



Below, the new home of the Union Club at Park Avenue and 69th Street, New York City, the fifth home of the club. Delano & Aldrich, architects

Below, the Eye Institute, a recently completed unit in the Columbia Presbyterian Medical Center, New York City. James Gamble Rogers, architect



(Continued from page 153)

so many of them are basically wrong—and the trouble is that the public is not sufficiently informed to know that they are wrong—schemes which have no real justification in our future economy, and likely to be swept into being by a demand for housing betterment and slum clearance that is attaining all the attributes of a public movement. Too long we have sought, preached, and begged for slum clearance, without paralleling these efforts with investigation and study as to what really should be done. Now the danger is that the idea will be accepted so enthusiastically that we shall go ahead with an unstudied rush of building. Particularly does it seem that we are in danger of subsidizing the owners of land, rather than the tenants of the new housing.

Wednesday, July 12.—Three years ago the Lincoln Building was put up opposite the Grand Central Terminal, representing an investment of about \$27,000,000. Yesterday it was sold in a foreclosure auction to the first mortgage bondholders' committee, on a bid of \$4,750,000—one of the most dramatic evidences of New York real estate liquidation ever encountered.

Thursday, July 13.—Twenty-five of his close associates here in the office gave a luncheon today to Robert Bridges, celebrating his seventy-fifth birthday and a magnificent period of some forty-seven years in connection with Charles Scribner's Sons.

The appointments of new architect members to the Advisory Board of the Park Association of New York City show careful thought and good judgment in selection. Clarence S. Stein is chairman, the other members being Frederick L. Ackerman, Henry Wright, and Ralph T. Walker. This group replaces Arthur L. Harmon, Thomas H. Ellett, Francis Y. Joannes, William E. Moran, and John Sloan.

Friday, July 14.—Charles L. Borie, Jr., of Philadelphia, joined a luncheon table group today at The League, and told me that the architects' survey of the worthy early work in Philadelphia has now been completed. It will be recalled that the architects divided the city into districts, with architect captains and drafting cadets to search out and record the early work in each section worthy of putting into measured-drawing form.

Saturday, July 15.—Contracting awards in the thirty-seven states east of the Rocky Mountains during June totalled \$103,255,400, according to the F. W. Dodge Corporation. This was a gain of almost 34 per cent over May, but \$10,000,000 short of the volume for last June.

Monday, July 17.—Some one has dug up the fact that the White House orig-

inally cost about \$350,000 to build, which included \$500 for James Hoban, the architect. Rebuilding, additions, redecorations, and other expenditures since the original construction, bring the figure up to about \$10,000,000 total investment in the building.

Wednesday, July 19.—There has been, heretofore, real difficulty in putting one's hands easily upon biographical material concerning the early American architect. One would find a bit here and another bit there, making the search for adequate information slow and difficult. The "Dictionary of American Biography" bids fair to clear this trouble. This is to be a work of twenty volumes, including names of those who have made some significant contribution to American life. No living person is included. In Volume XI, which appeared on June 16, I find a splendid biography of Benjamin Henry Latrobe—practically six pages, or over five thousand words, on the man who, in 1815, was asked to take charge of the rebuilding of the Capitol in Washington.

Thursday, July 20.—The news is finally out concerning the personnel to direct the housing division in the N. I. R. A. Robert D. Kohn, of New York is to be director; N. Max Dunning, of Chicago, assistant director; and Eugene H. Klaber, of Chicago, chief of the technical staff. There have been named also consultants: Henry Wright, New York; Mrs. Edith Elmer Wood, New Jersey; Frederick L. Ackerman, New York; Jacob Crane, Jr., Chicago; Russell Black, Princeton; Coleman Woodbury, Chicago; Harold D. Hynds, New York; and Tracy Augur, Detroit. Approximately half of these names—mostly the latter ones—are well known as landscape architects and city planners.

Friday, July 21.—The National Association of Real Estate boards makes a semiannual survey of the market. In the last one of these it was found that in one-third of the American cities of over five hundred thousand population there is an actual shortage in single-family dwellings. There are a few less attractive elements in the picture, however, such as the fact that money for mortgage loans is practically nonexistent.



Saturday, July 22.—Howard M. Robertson, one of the foremost exponents of a rational modernism in England, wrote an article on "The Outworn Mode" for the New Year's number of *The Architect and Building News*. E. N. Jenckes, Jr., of *The Springfield Republican*, took the liberty of questioning the statement by Mr. Robertson to the effect that we had rather overplayed the use of classic styles in this country in connection with our utilitarian structures. He had remarked that American power plants sometimes

had a full classic façade with tall smokestacks in the rear. There may be a few such—Jenckes recalls a generating station on the Delaware River near Philadelphia, but the practice is surely not common, and certainly not typical. As a matter of fact, our industrial architecture may well be given credit for having first recognized honest functionalism developed without the need for decorative details from past eras. Mr. Robertson agrees, however, that "practically every phase of Continental modernism has been worked out in the early industrial architecture," which is interesting in view of the extravagant claims frequently advanced by some of our literary architectural critics to the effect that the continental style is an entirely new thing for which we in America can claim no credit.

Monday, July 24.—Harold Stone, *The Washington Post's* roving reporter, has discovered at the University of Virginia some partly carved capitals of native Virginia sandstone which Thomas Jefferson wanted to use, but, on trial, found the sandstone too soft to handle. Jefferson tried stone from the quarry of General Cocke near Bremo, also from a quarry near Richmond. After spending nearly fifteen thousand dollars he gave it up and sent to Italy for Carrara marble which was carved over there.

Tuesday, July 25.—Lunched with R. H. Shreve who was telling me of the workings of a fellowship his firm maintains in the office for a student from Cornell. Cornell selects the man, and Shreve, Lamb & Harmon agree to pay him thirty-five dollars a week for a year. He is allowed to pursue any particular branch of architectural work that his fancy dictates; he may try to write specifications in a new way if he feels so inspired, or he may go out on the job and see how it is being built. Shreve says that most of these men ask to be put to work detailing some such simple thing as a window box, feeling that they know very little of such minor commonplace elements. Personally I should think that the firm's thirty-five dollars a week might well be listed under the heading of philanthropy, for there are few men fresh from the architectural schools who are worth their salt the first year in an architect's office.

Thursday, July 27.—Ralph Adams Cram says that the greatest work of art which man has ever produced is a High Mass in a Gothic cathedral of the fifteenth century. In it every art that man has ever devised, or had revealed to him, is brought together in one great unity. It combines not only architecture, sculpture, and all the arts dealing with lifeless materials, but also music, and is, through this combination, made "the very greatest and most powerful stimulus to the generation of high emotions."

◀ ARCHITECTURE ▶

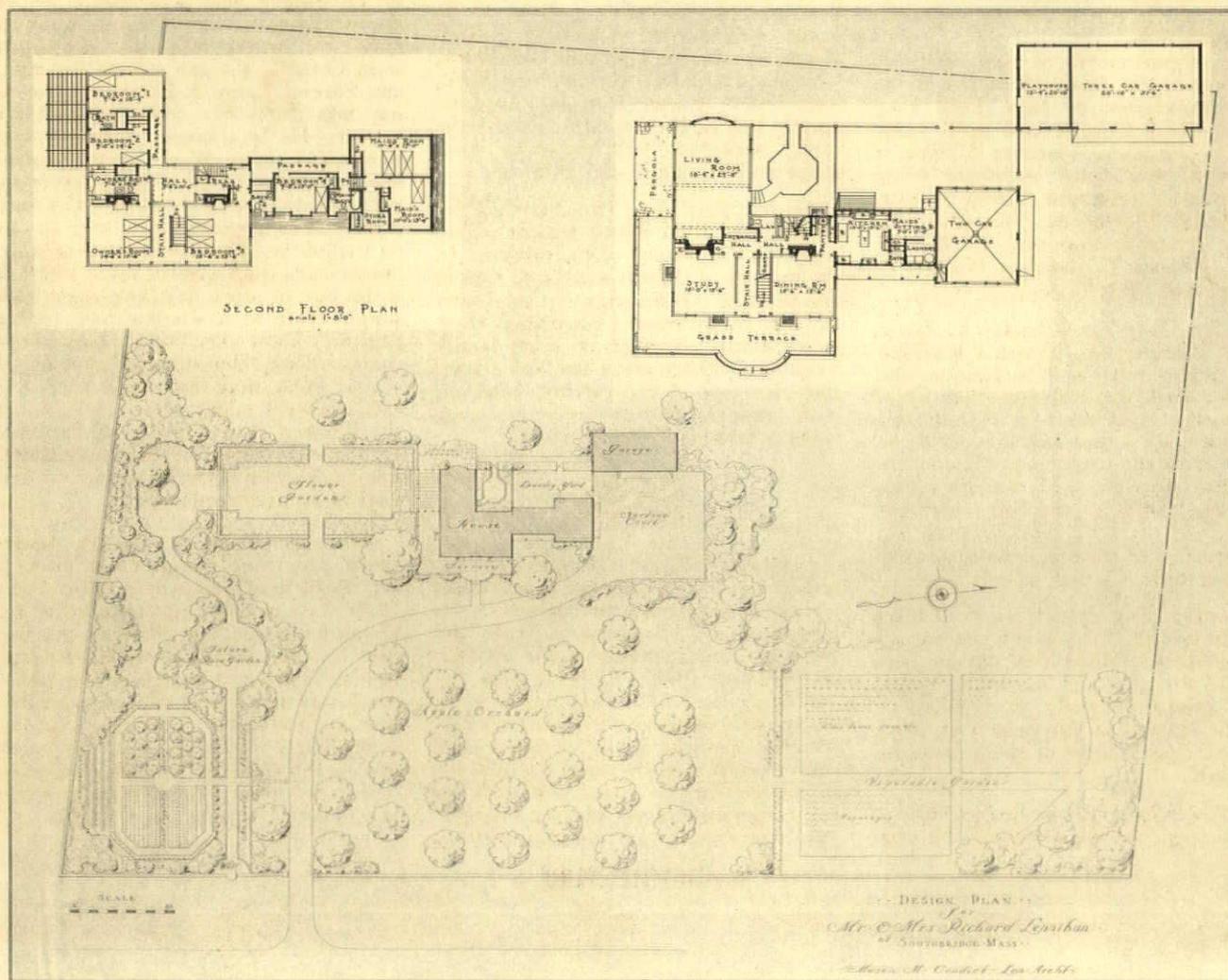


Photographs by George H. Van Anda

House of Richard Lennihan, Southbridge, Mass.

LAURA M. COX, ARCHITECT; MRS. MASON M. CONDUCT, LANDSCAPE ARCHITECT

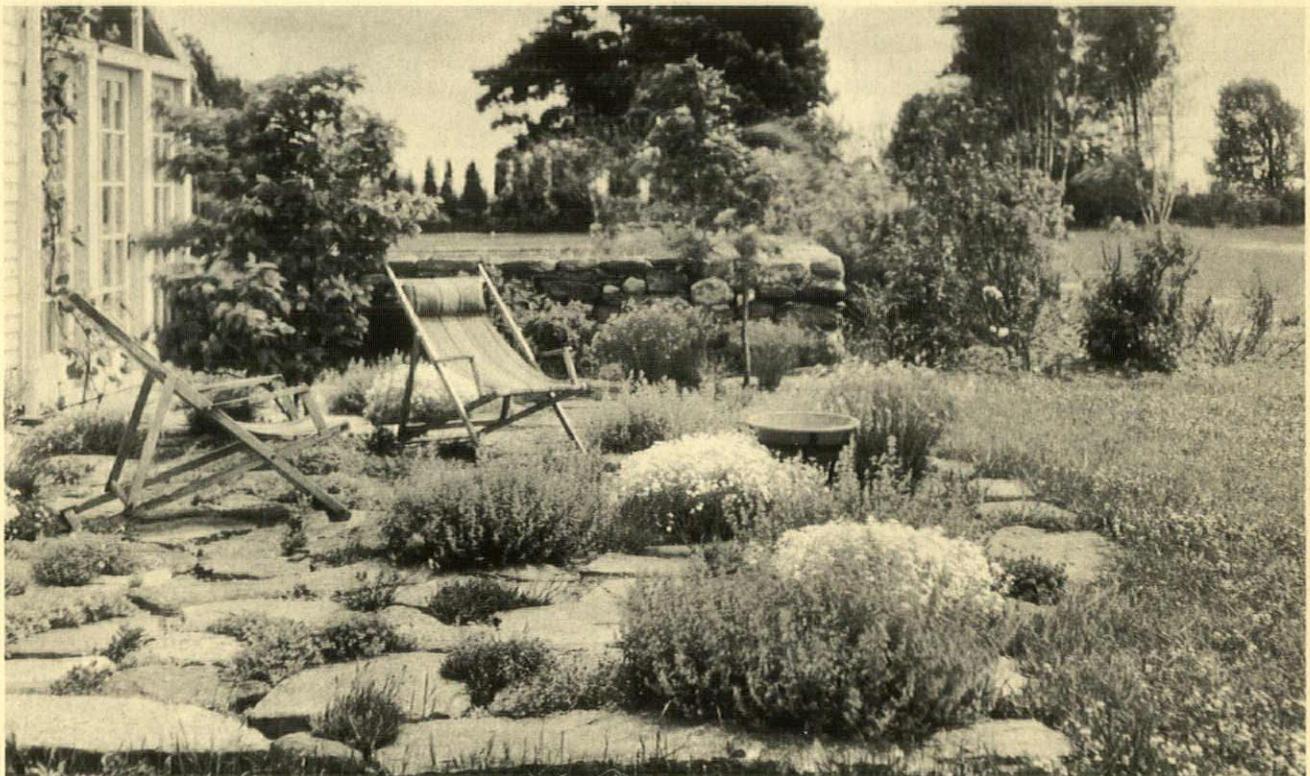
Below, plan of the plot, with first and second floor plans at larger scale



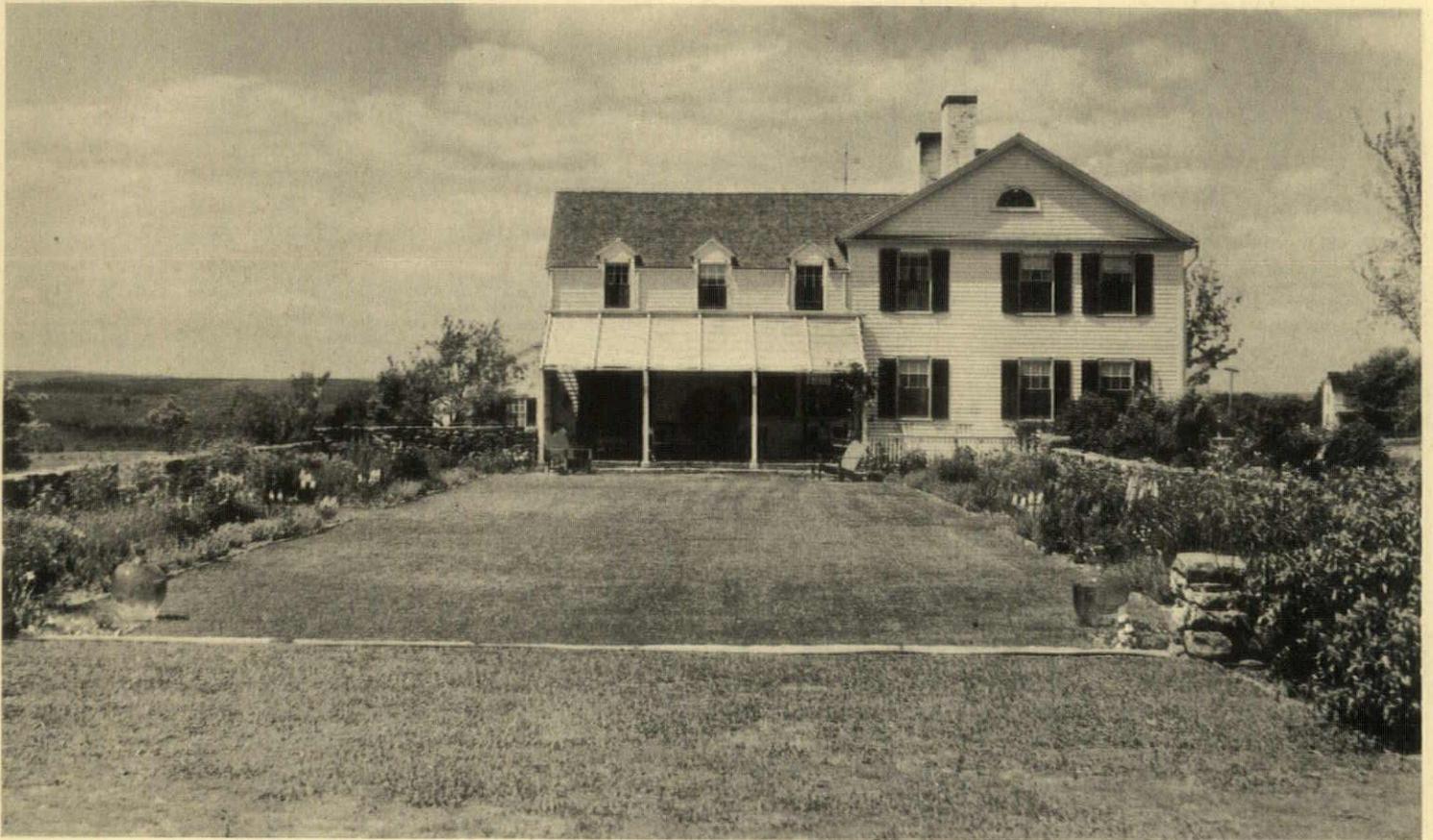


The living-room ell to the left rear, the service wing, and the garage at the right, were separate buildings on the plot and were added to the main house in the remodelling. The front terrace railing was found in the attic

Below, a corner of the stone terrace adjoining the end of the living-room. All of the stone for garden walls and paving was found on the place

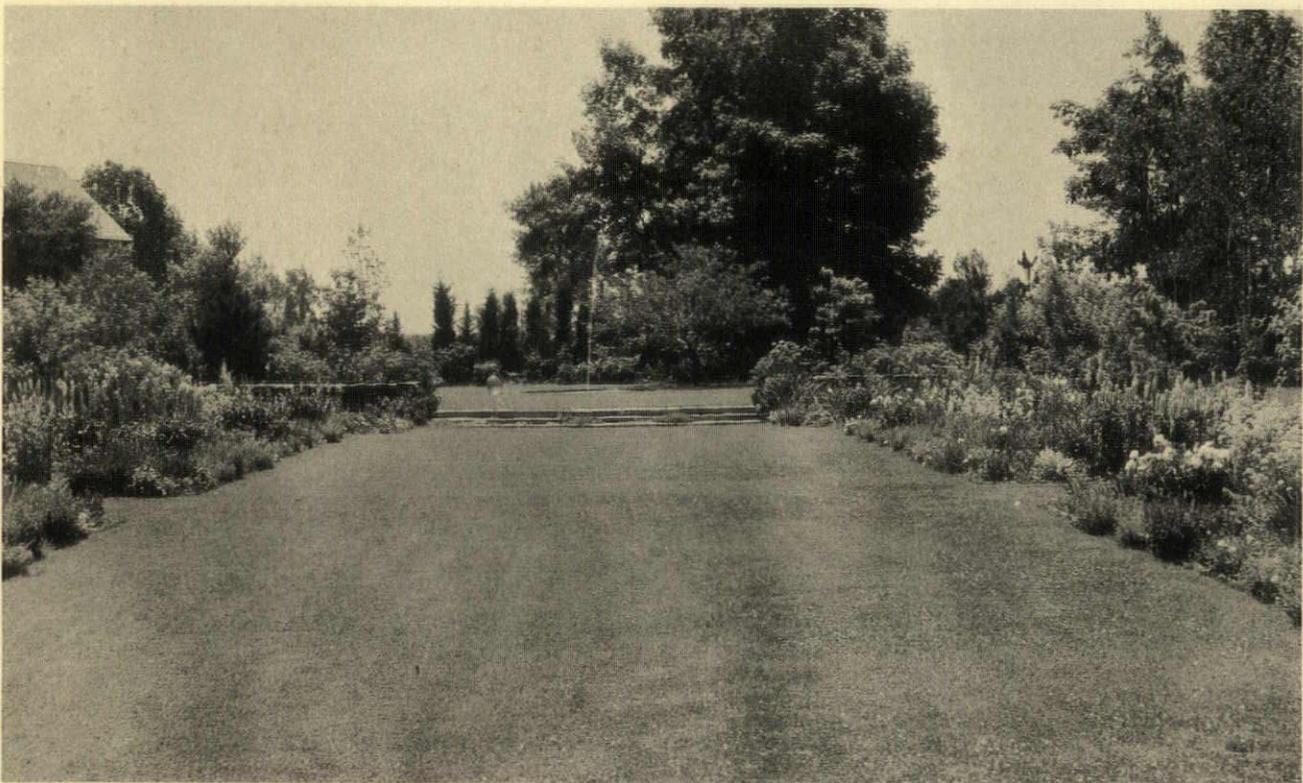


◀ ARCHITECTURE ▶



Below, a view looking out from the awning-covered terrace off the living-room into the garden, with its pool on an upper level. The plot was originally a cornfield

The client asked the landscape architect to provide a flower garden adjoining the living-room, a secluded play spot for the children, which would be a future rose garden, and a small vegetable garden



« ARCHITECTURE »



Fireplace end of the living-room. In the left corner may be seen the entrance hall leading past the stairs to the front door

The house is built of white clapboards, with ox-blood shutters. At the extreme right may be seen in the distance a corner of the detached three-car garage and play-house, added later

A corner of the kitchen, in which the walls and wood-work are orange-yellow. The painted panels are copied from old Quimper plates. Floor and counter-tops are of linoleum



Current Dutch Brickwork

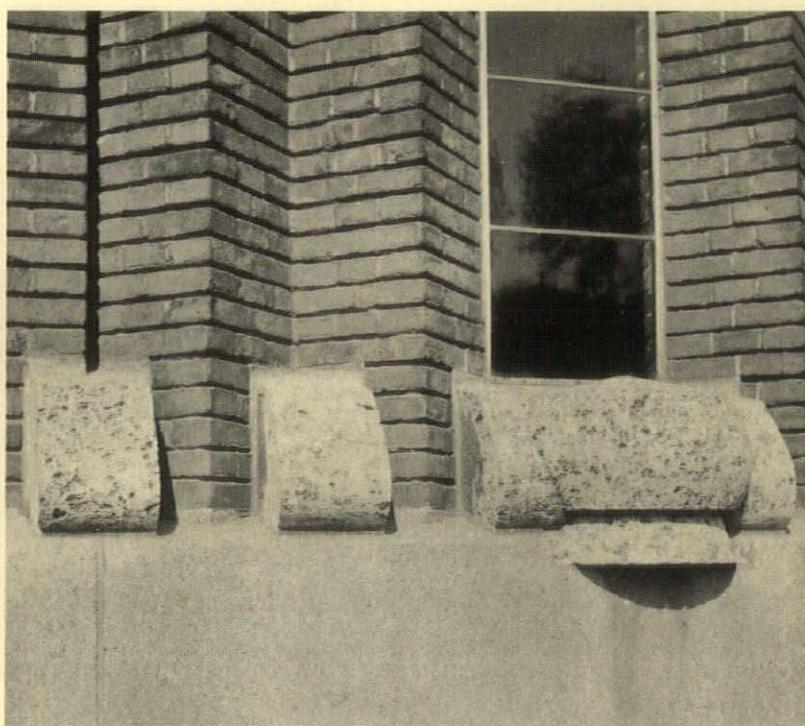
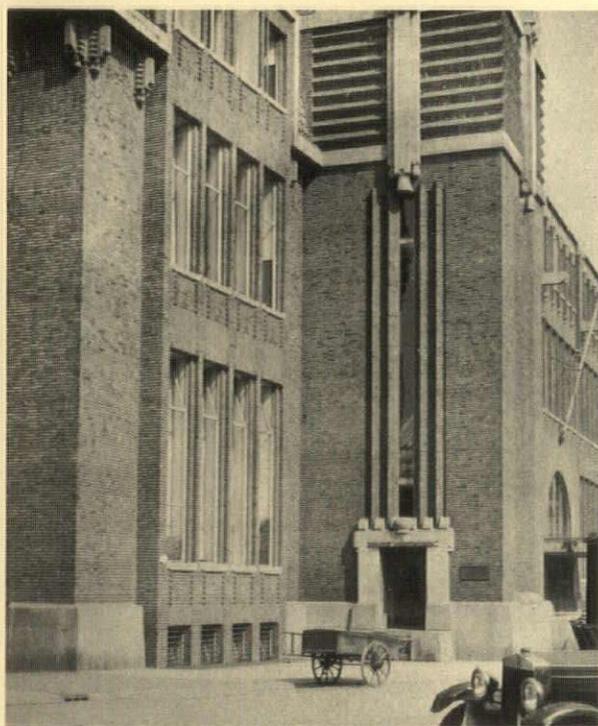
By Gerald K. Geerlings

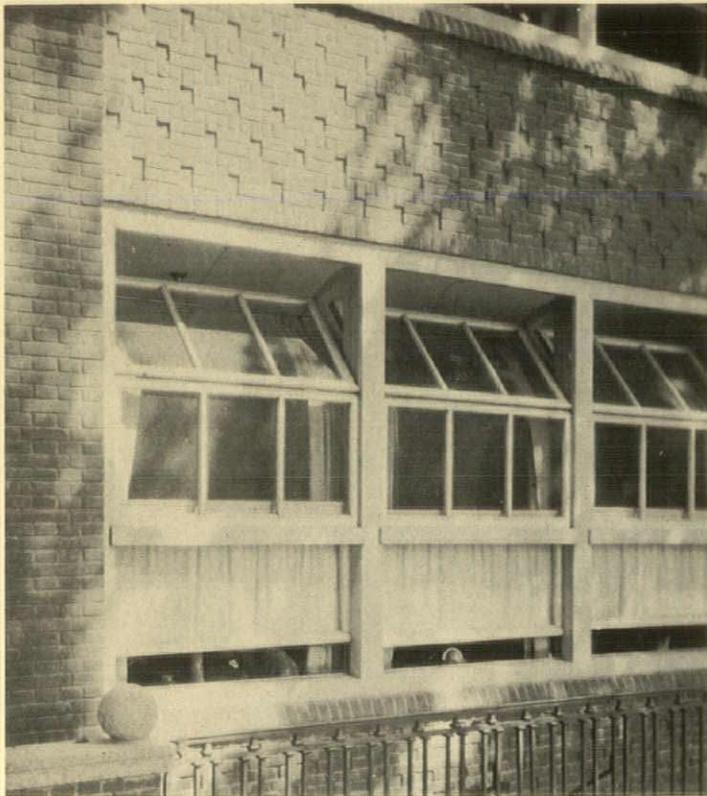
THE current brickwork of Holland is as old as her mediæval churches, and as modern as the 1933 calendar. The forms it has lately assumed are the result of the recent types of buildings: the moving-picture theatre, office building, power-house, and school. These have demanded large windows, economy of ornament, and an expression limited to absolute utility. The concrete and steel skeleton has also brought about natural changes affecting brick usage. But the actual brick details—the resourceful combinations of stretchers and headers, the introduction of panelled forms, the lively inventiveness of patterns—these are a continuation of the heritage of the past. Holland has no quarries, and only very limited forests in the east, so that brick has always been her one and only natural building material. Stone was necessarily expensive to import, and the painting of cement quoins to make them appear to be stone was never a popular substitute. Their builders have therefore learned to work with a limited palette, and with the available pigments have come to appreciate their every possibility. In America the

modern movement finds us poring over imported books, desperately hoping to cull enough good ideas from them so that we will not have to think them out ourselves. But with the Dutch it is not so. The *ensemble* is a product of frank expression; the details are a natural development of a wealth of brickwork tradition.

For the American architect who may not be in sympathy with the present tendencies in Dutch design as a whole, there is at least a wealth of suggestion in the various details. The manner of securing vertical accents, of pulling forward horizontal courses, of depressing stretchers in panels, of alternating stretcher and rowlock courses, or placing stretcher courses vertically in spandrels—all these and more can be gleaned from the observation of current Dutch brickwork. In the examples which follow it is to be hoped that the reader will approach them with an open mind, to discover what is good and what is applicable to his practice. Before a motif is condemned as unsuccessful, it will be worth the trouble to ascertain if it be not so much a deficiency in the design as in one's own preconceived ideas and preferences.

Post Office, Utrecht. Although one may pick a quarrel with the general design if he so wishes, the detail offers suggestions in harmony with the most restrained form of conservatism. First of all, the brick is pleasant in color—pinkish tan to yellow predominating, with some lively salmons scattered throughout. Then, to accent the horizontality, only the horizontal joints are raked out. Strong vertical accents are accomplished by the favorite Dutch trick of laying up piers at 45 degrees to the face of the building. Perhaps most useful as a suggestion is the travertine texture given the concrete

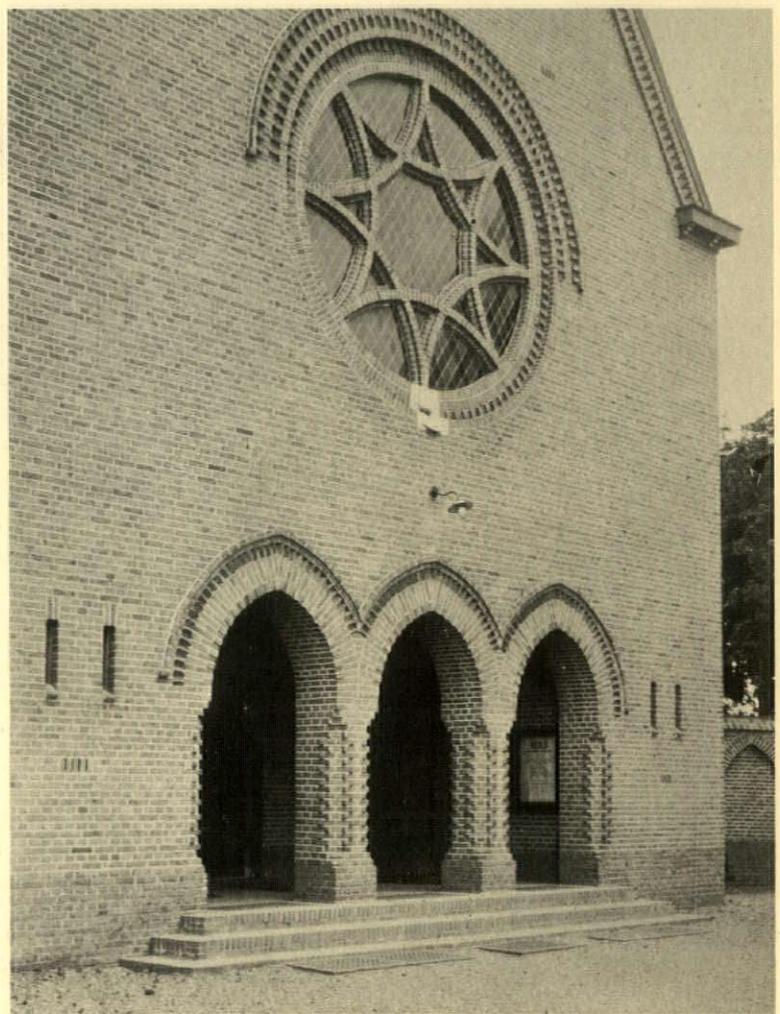




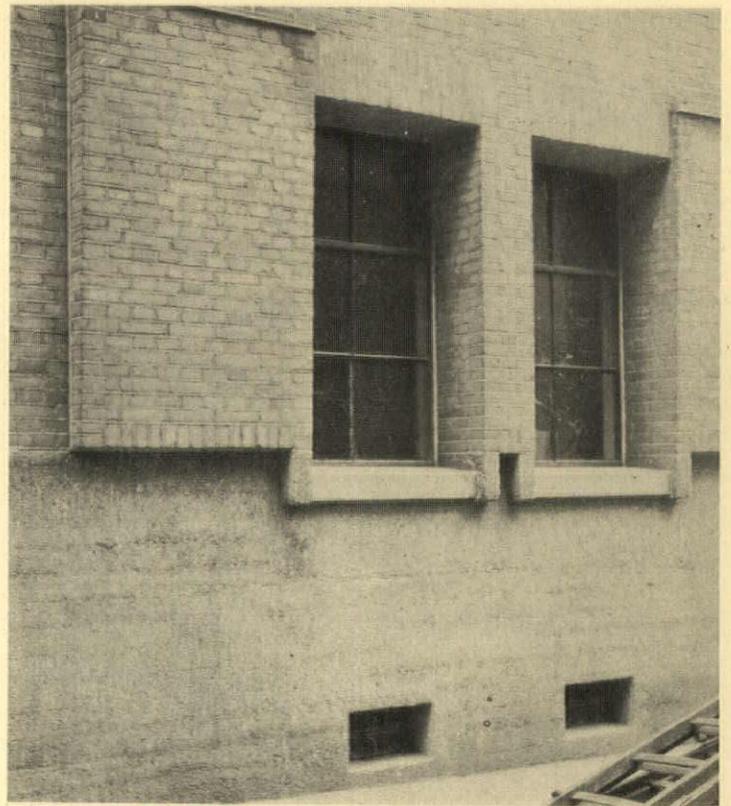
The two illustrations above show a lower-grade school, near the Cathedral, Utrecht. Dutch brick spandrels possess a sense of rightness of design which those of most of our own modern buildings lack. Seldom, if ever, is there a mixture of various colored bricks, but the variety of surfacing is relied upon to promote even greater color contrasts. Here there is a simple enough scheme of making every third course a rowlock, and in the two intermediate courses, alternating two stretchers (which line up vertically), with a recessed header. Close examination will disclose that every alternate brick is a square header in the rowlock course. The window-sills are moulded with a 45-degree slope at the outer edge. The wall coping and ball are of cement. The wood is painted cream, and the cast-iron railing black.

The surfacing of the pier (upper right) corresponds in purpose to that of fluting a column at just such an entrance problem. It is a good example of making the ornamentation an integral part of the building. The tapestried pattern is obtained by depressing every alternate header—all courses being of headers

Entrance to a church at Hillegom. One may cavil at the tour-de-force of the brick tracery, but the designer was on surer ground in his entrance detail—an enlarged illustration of which is shown on the opposite page



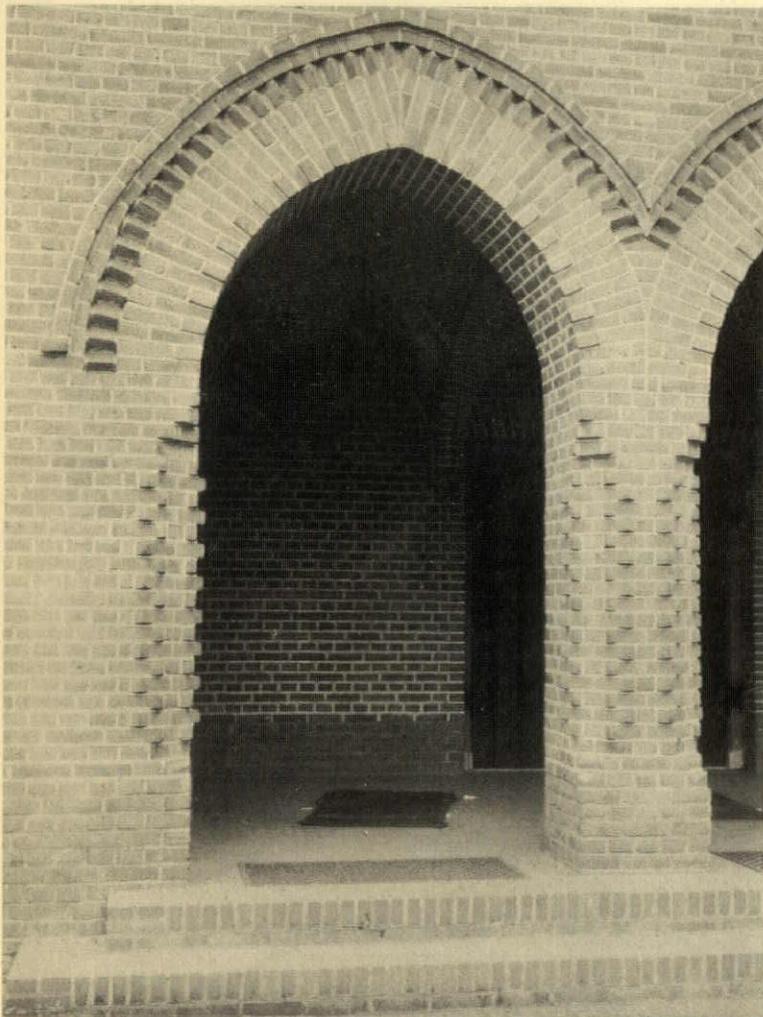
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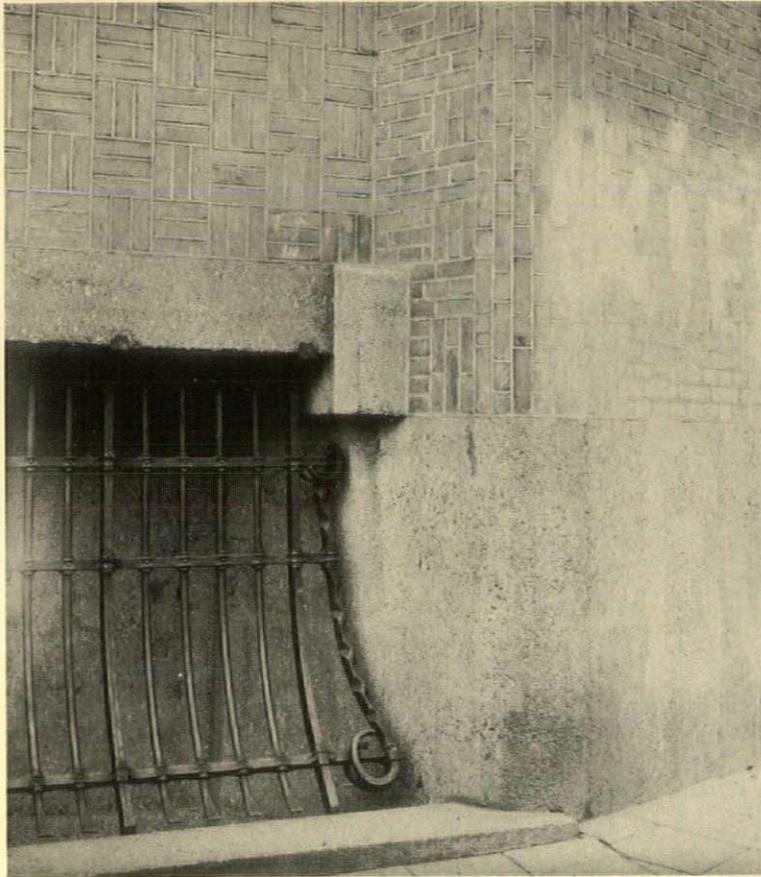


Both illustrations above are from a powerhouse on Delftsche Canal, Rotterdam. In theory it is simple enough to discourse on the rightness of expressing utility in terms of beauty, and frankly exposing structural forms without a veneer. But in actual practice it is not so simple to achieve. Yet in this building the concrete lintel and spandrel over the door, the ends of the concrete lintels over the windows, and the sills beneath them, as well as the outer face of the concrete roof slab, are as decorative as travertine. The businesslike simplicity of the window mullions over the door, and the vertical pattern of brick along the left corner are sufficiently interesting to offset the vandalism of campaigning politicians in painting the base with whitewash.

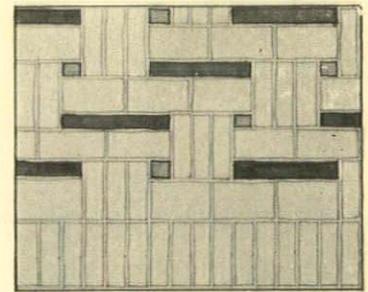
As to the illustration above at the right, if the piers flanking the windows did not project, if the concrete sills did not carry the mullion and piers, if the brick had run down to the pavement—what then? A repetition of the usual puerile power-house window, considered unworthy of the architect's study. The bricks span a color variation from yellow ochre to a dull gray-pink tonality

Detail of the church entrance at Hillegom. There is an amazing dexterity here in the use of brick. Note the very slight projection of headers on the inside line of the arch; also the way in which this right-angled edge has been corbelled back to cut the pier corners



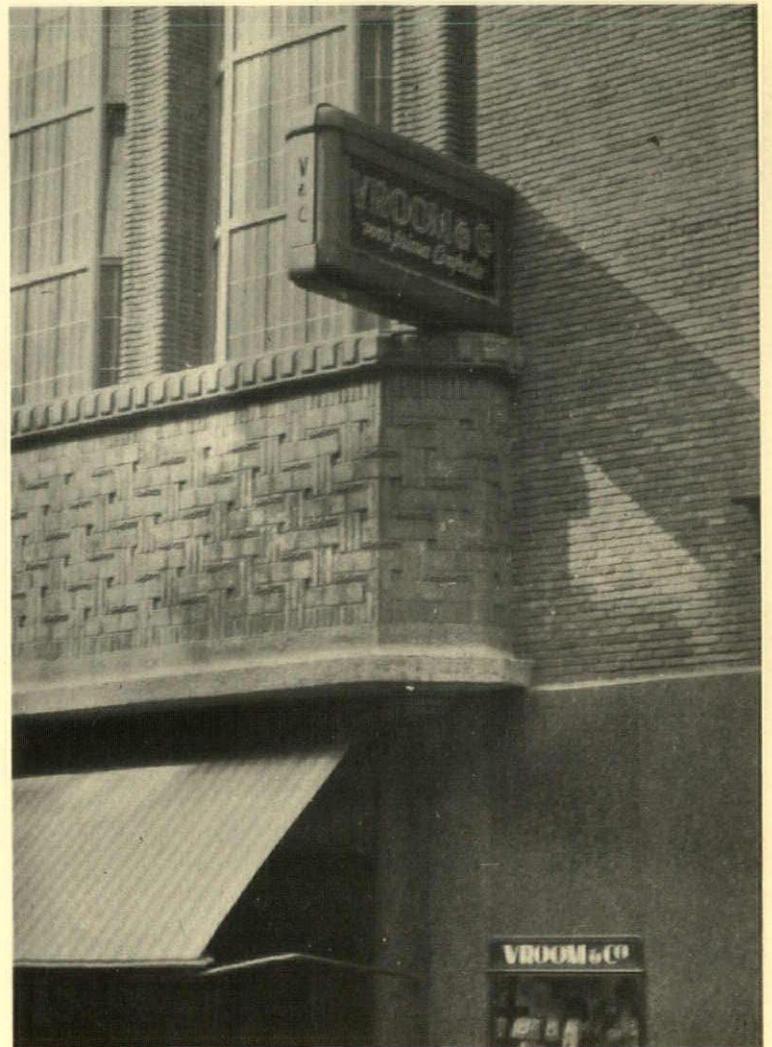


Another detail of the power-house on Delftsche Canal, Rotterdam. Here the corner is rounded off by seven rows of stretchers laid vertically. The corner shown at first glance appears an intricate pattern of dovetailing the usual horizontal courses with the special vertical ones. Yet the detail shows how ridiculously simple it really is. Without the groups of three vertical stretchers which flank the seven vertical courses, the latter would be pathetically out of place. Incidentally, this manner of rounding off a corner on a short radius is the only way it can be done in brick without the use of special shapes

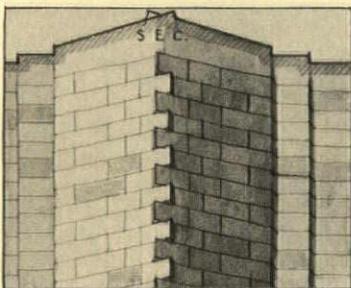
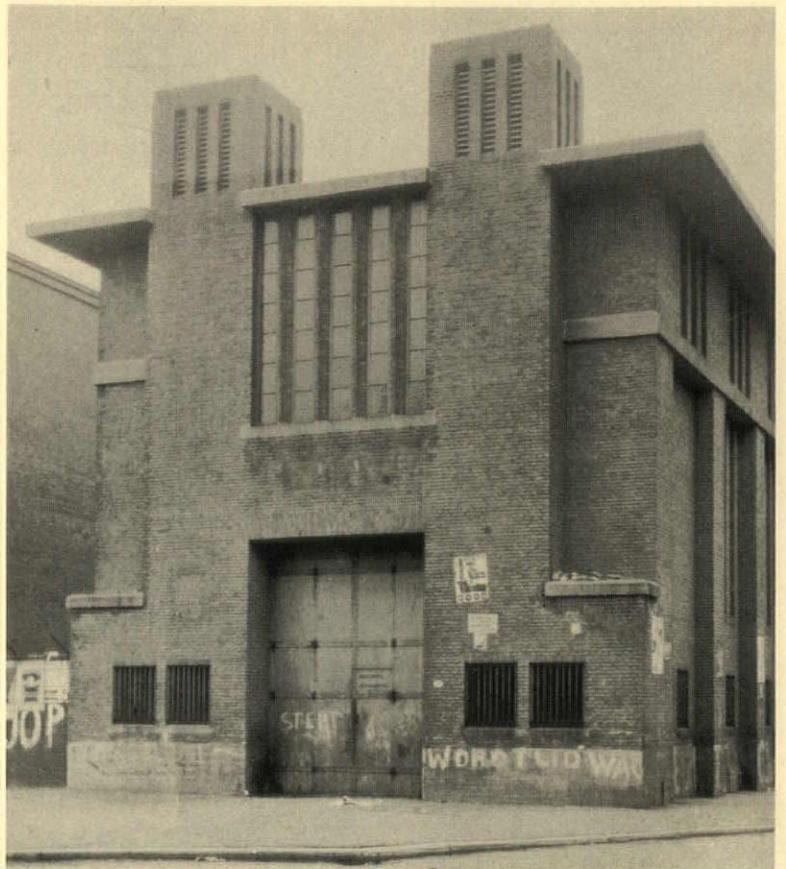


Detail of department store, Vroom & Co., Amsterdam. The most arresting detail of this store façade is the pattern of the projecting horizontal panel above the first-floor awning. While there are wide variations in the color of the brick, from yellow through yellow-browns toward red, one's interest is chiefly stimulated by the manipulation of the surfacing. Regular stretchers are laid upright in groups of three, special short brick are placed with their wide, flat faces exposed, while specially surfaced stretchers project slightly, and special small square headers are recessed. The base course of the panel is of cast concrete, the sill of terra-cotta. The surmounting piers are laid up with curved front faces, which are so much in vogue with modern Dutch architecture, and which seem in questionable taste unless at a large scale

« ARCHITECTURE »



Power-house, Baan, Rotterdam. This version of a power-house is a lucid translation of absolute utility without frills. It expresses strength and kilowatts in every brick. The walls and buttresses go about their jobs like brawny stokers, and do a manly job of it. A concrete skeleton is evident beneath the brick, and actually apparent on the face of the roof slab, window-sills, and base (the latter unfortunately victimized by a current election when this photograph was taken). The mullions of the window above the door are laid at 45 degrees to the face of the building. The brick is dull gray-red in tonal effect



Nationale Bankvereniging on the Vredenburg, Utrecht. On the façade of this little bank the only ornamentation has been accomplished by the manipulation of ordinary brick, and the application of some free-standing wrought-iron signs. If the pilaster-piers had straight, flat faces, and the spandrels had no accents, the façade would shriek mediocrity. But as it is, only the round columns at the entrance corner seem in poor taste. The remainder of the façade employs brick extremely well—the rusticated ground floor, the window lintels laid up with vertical joints, the simple but effective piers, and the spandrels with their square projecting headers. The brick, dull red

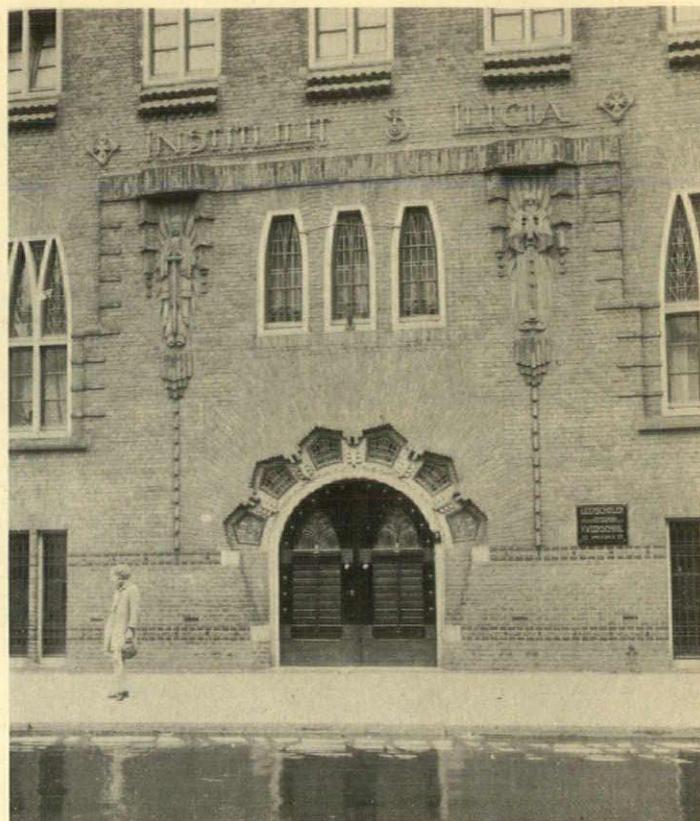
◀ ARCHITECTURE ▶

Below, a bank at Haarlem. If a disciple of Vignola does not agree with this design, he must at least admit that it has followed the same principal tenet on which the Classic is built—that of maintaining harmonious unity throughout. The design of this bank is preferable to the modern use of Classic in many schools, banks, and libraries, which make an archæology projet out of the entrance motif, while the rest of the building goes begging in paltry factory tatters. This façade is not far removed in feeling and parti from the French provincial Gothic churches, and can be recognized as such if the ornament detail, roof material, and tower profile be imagined as changed. And moreover, the designer has created—not merely copied a jumble of excerpts

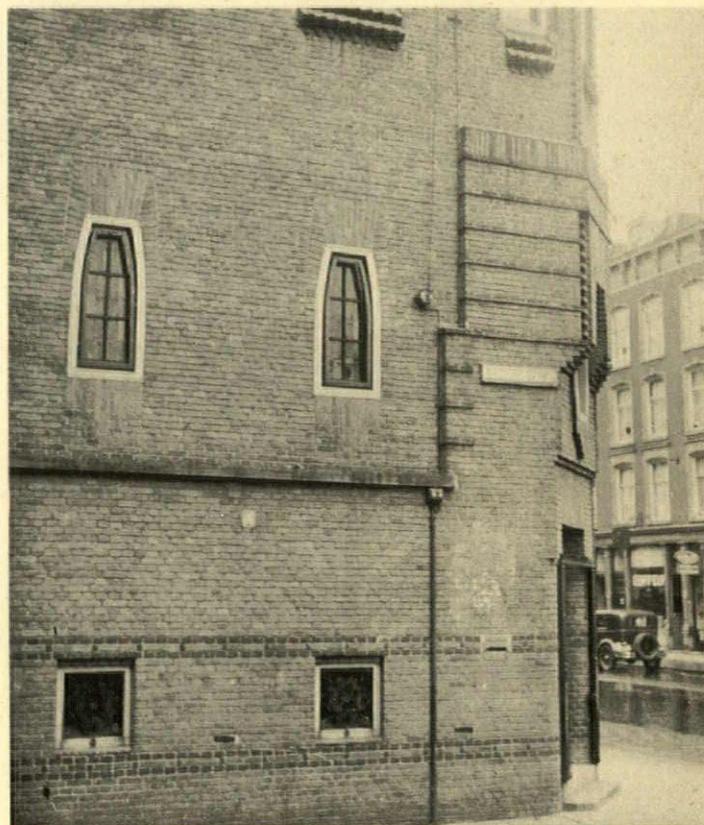


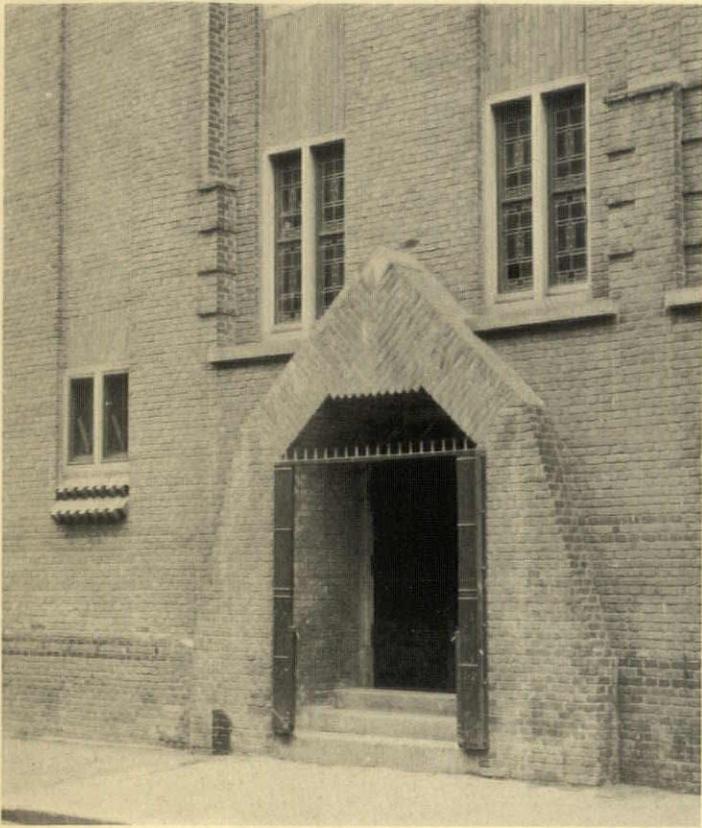
Corner, Institut St. Lucia on the Lijnbaanstraat, Rotterdam. Subtract the battered windows, the heavy upper sills, and the remainder still brings the number of good ideas up to a creditable sum. The handling of the corner is unusually deft, as the offsetting base gradually steps itself above the second-floor window. Also noteworthy are the projection of every sixth course, and the pseudo corner quoins (opposite and slightly below the queer window). The brick creates a dull, gray-red tonality; the darker courses above and below the basement windows are black

« ARCHITECTURE »



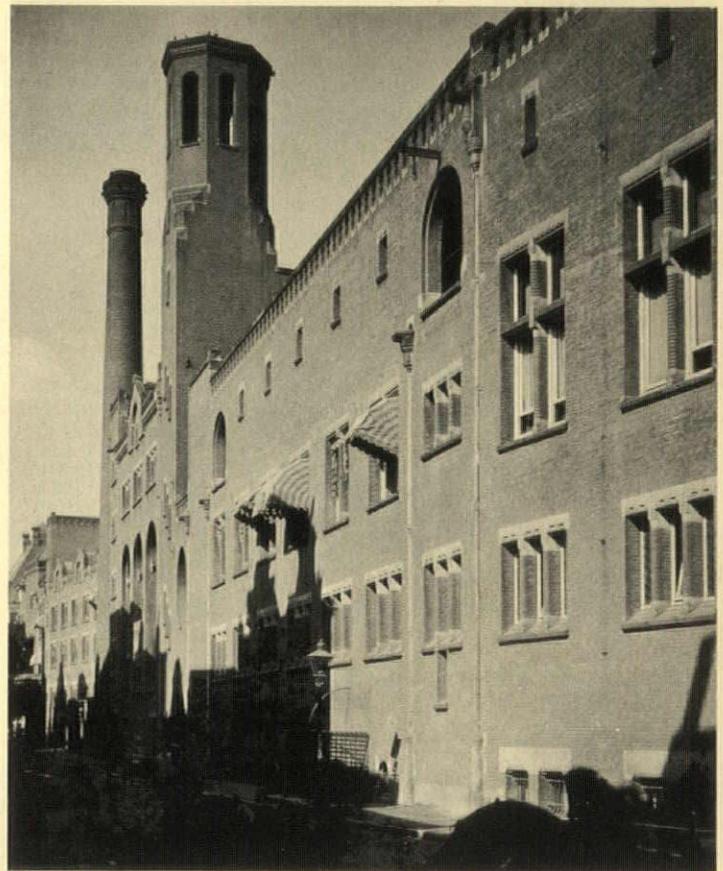
The main doorway, Institut St. Lucia. The designers felt the need, which we may regret, of going outside their brick palette. With the dull gray-red brick they have used figures of moulded terra-cotta, and tiles of blue, buff, and red in the arch over the door. This latter is of orange varnished wood, with wrought-iron ornaments. The four single-course base lines are of black headers





Side façade of the Bourse, Amsterdam. While this building was one of the forerunners of the new manner, its utilitarian façade on the narrow street washing its starboard side, has remained practically unphotographed and unsung. The fault which the conservative residents have found with the building from the very first is all the more marked on this elevation. What they say sounds like certain opinion in America, "You can tell what the building has in it. All the large and small rooms are so frankly shown on the outside, that they disclose the plan and purpose of the entire structure." In other words, "Long live the age of architecture when banks, court houses, and Christian Science churches all look alike!"

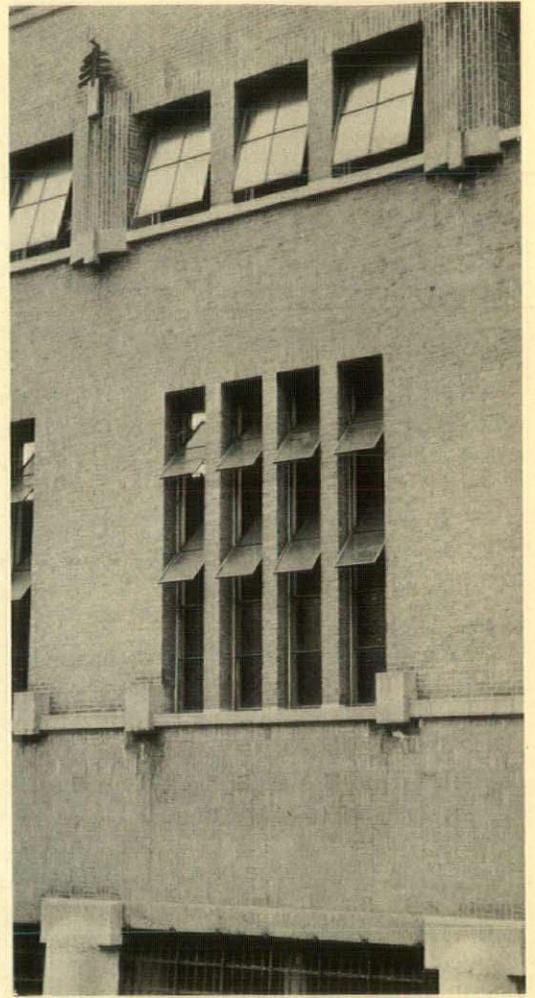
Side entrance to the Institut St. Lucia. Granted that the art glass windows and the heavily lunging sides of the doorway are not worthy of emulation. But every pioneer gets blown off his course now and again. There are excellent ideas in the manner of stopping the long vertical window panels at the left, by the sloping sills (which are a bit overdone, perhaps), and the heavy jamb of the door which affords shelter. The base of the offset (to the upper left of the door) gets under way neatly



Bewaarschool, Rotterdam, on a little street between the Kruikslade and Aert Van Nesstraat. One of the outstanding virtues of Dutch brickwork is that where the masonry is load-bearing, it is laid in a straightforward horizontal bond, but where it is decorative, as at doorways, or merely a wall covering as in a window span-drel, liberties are taken within the natural bounds of the material. The brick on the whole are a dull gray-red, with a few black and soft yellow ones introduced for ornamental accents. Window-frames are painted yellow, and the muntins dark green



At left, a moving-picture theatre, Rotterdam. By this time most architects realize the futility of designing modern theatre façades without yards and yards of free space for display signs, and make proper provision for advertising area which the management will usurp if not voluntarily given it. The plain brick wall of this Dutch theatre serves well as a foil for the advertising. The vertical tower, with alternately black and white glass, is illuminated at night

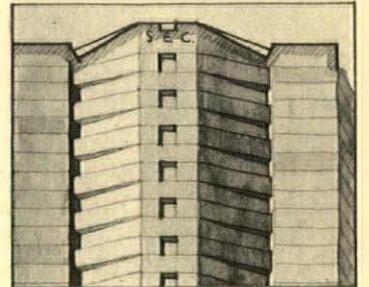
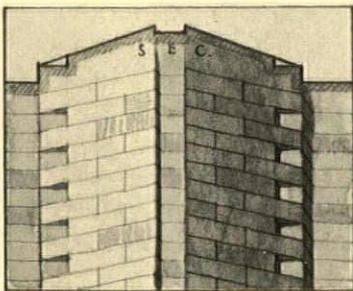


At right, another detail of the power-house at Rotterdam. The basement needs a maximum of light, and receives it. Sufficient support for the building above is expressed in the projecting concrete piers and the wide frieze of herringbone pattern brick. The tall windows, with their patrician proportions, are centred and anchored to the voids below, by the projecting concrete accents on the sills. The chamfered piers of the top floor form a very necessary interruption to the flatness of the façade

Commercial building adjacent to Catherine Bridge, Utrecht. The problem of obtaining moulded brick in Holland is apparently as difficult of solution as in this country, but the Dutch designers have managed to obtain as many ornamental effects as though they had all the moulded forms of their forefathers with which to work. The



accompanying sketch (left) indicates the skilful manner in which this pier is laid. The intermediate piers and mullions carry the vertical enrichment across the façade, and prevent its being stranded on the widely spaced large piers. The color of the brick varies from pinkish red to yellow ochre. Below, a detail of the intermediate piers



« ARCHITECTURE »

Some Pitfalls in Supervision

By *W. F. Bartels*

XXXV. DUCTWORK

DUCTWORK forms an important part of modern building construction, and should not be neglected by the superintendent. To have a ventilating system in a building break down because of lax inspection is a poor recommendation for the superintendent and his employer.

The inspection of the ductwork should begin as soon as the first truckload of the sheet metal arrives on the job. The gauge of the metal must be checked; likewise the manufacturer's name appearing on the sheets should be compared with that in the specification. No brand, other than that specified, should be accepted without the architect's authorization. If the work is not made up it may be difficult to check the gauge, because different thicknesses will occur in different places. However, this can be followed up as the work is being laid out. All joints and seams should be examined to see that they have been executed in a workmanlike manner. All important elbows and bends may well be checked for radii at this time. A sharp elbow or bend will materially slow up the subsequent flow of air in the duct, and therefore should not be passed unless it is satisfactory to the architect or engineer who laid out the work. There must be no change in the width or depth of the duct without good authority, or a check-up by the superintendent. If the duct sizes do not agree with the plans, the entire matter must be gone into further. It should be kept in mind that, while the same cross-sectional area may be present, it does not follow that the same efficiency of air flow will occur. If, for instance, a duct 18 by 36 inches is changed for one 12 by 54 inches, the same cross-sectional area is obtained, but not the same perimeter or efficiency. In fact, the flow is lessened by this change over 4 per cent, and will further decrease proportionately with the narrowing of the duct.

When the ductwork is started one of the important considerations is that of adequate support. No deviations from the details should be allowed. All floor supports should be firm, and yet so constructed as to eliminate the transmission of any vibration or rattling. Hangers should be securely fastened to the ducts and then adequately attached to their supports. The superintendent may find here that galvanized

straps or hangers are used to support copper ducts, or vice versa. This should be studiously avoided, as there is always the lurking danger of electrolysis present. The num-

ber and frequency of hangers should also be given careful attention. An omitted hanger may cause a bend in the line, thus permitting water to accumulate in the duct and subsequent rusting to occur.

All large areas of sheet metal, forming ducts, should be braced as called for by the plans and specifications. All re-enforcing angles of the size called for should be incorporated with the cross joints to give stiffness to the duct, and suitable anchorage for the hangers or supports. No more bends than are absolutely necessary should be contended. If it is necessary to change a duct size in order to maintain an established headroom, the superintendent must see that the change is made gradually, and not accomplished within too short a distance. Where ducts go through walls, a lintel, such as an angle or other suitable form, must be demanded by the superintendent. The duct contractor and mason will argue that the duct is strong enough to support the wall, and that the latter will arch over it as soon as it is set. But none of these arguments will compensate for the loss of area in the duct if it is bent in by sagging masonry. Nor is there any assurance that future vibration will not bring down the section of wall. If the duct occurs in a hung ceiling and pierces a fire wall, double vigilance must be exercised, because the contractor will probably omit the wall entirely over the duct, particularly if it is a wide expanse.

20

From time to time the superintendent should inspect the insides of the ducts. There must be no projecting edges inside that will collect dirt. While the superintendent is inside the duct, it would be well for him to have some one outside with a good flashlight. By having the light flashed along the seams and joints a good check is obtained on the general tightness of the work. The corners probably will be the most faulty spots, and afford the most likely indication as to whether workmanship has been good or bad. Generally the contractor will take more time to

explain how holes at these junctures "are bound to occur" than it would take him to eliminate them.

The superintendent must carefully check the plans and specification against the job to make sure that any copper ductwork called for in damp places, such as shower baths and steam rooms, is installed. In some places there may be combinations of black iron for a certain distance, and as conditions change, galvanized work. All these items, as well as the gauges and weights, must be checked. Where any copper ductwork joins galvanized work the specification will probably call for an asbestos washer so that there will be no danger from electrolysis.

If there is a fan, it should be checked along with the motor. The superintendent must see that the fan and motor foundations are as shown on the plans. Some of their noise and vibration will be transmitted through the ducts—hence the necessity for alert supervision. The canvas, connecting the ductwork with the fan enclosure, will be banded tightly to the end of the duct and to the fan, but loose enough between them to avoid transmitting vibrations as it might if stretched too tightly to connect these parts.



In making an exterior check of the ductwork the access doors should be gone over to see that they have the proper hinges and fasteners, and that they are properly attached. The dampers will be checked to see that they are all provided as called for. Then too, any special requirements of the Fire Department or the Board of Fire Underwriters will be gone over to see that they have been complied with. Mesh that is called for in back of the grilles must be installed. The superintendent would do well to make sure of this as its omission is something to be regretted in the finished appearance, as well as in other respects, such as allowing paper and debris to collect.

When the registers and grilles are being installed the superintendent must keep a constant lookout to make sure that they fit tightly against the plaster. Any minute space will result in those well-known smudges which gather around loose grilles, like dirty fingers projecting from them. It may even be necessary to insist upon some form of a washer to go between the grille or register and the wall. But, whatever may be used, it will pay the superintendent well to insist upon a tight job here.

Before the ducts are turned over for opera-

tion they should be well cleaned, and a general recheck made. A small workman can get into most ducts and do a good job of the cleaning, but no matter how much dirt there may be in the ducts, the contractor prefers to blow it out. It is cheaper. It is of course realized that the smaller ducts will have to depend on the air force for their cleaning. The superintendent should make sure that this blowing out of the ducts does not occur when there is any fresh paint in any of the rooms having outlets, otherwise a dark sandy paint job may be the result.

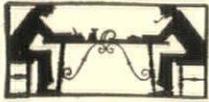


The painting of ducts, as is true for the painting of any work, must be carefully watched. It is good practice for the superintendent to insist upon the duct throats being painted—generally black—before the grilles are put up. This does away with refitting the latter with subsequent marks on the wall, or a poor fitting job. The chances of getting faulty workmanship are prevalent enough without trying to reset grilles. The specifications may call for special paints to protect certain ducts against fumes, such as those from acids and other chemicals which may have a deleterious effect on the sheet metal. It is self-evident that the painting of small ducts for such places should be done before the sections are erected, so that only touching them up is necessary after each piece is put in.

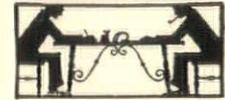
There are still two other items in connection with ductwork that the superintendent must inspect: soundproofing and insulation. The specifications probably call for insulation to prevent sweating, loss of heat, or absorption of heat. The material to prevent these from happening must not only be put on to look well, but must be there to stay. The insulation will probably be glued to the duct, and then, as a possible preventative of its falling off, tied on with copper wire. The superintendent should see that the adhesive material is according to regulations, and that it is adequately applied. The wire binding must not be carried too far without being tied. Otherwise if one wire breaks it might let several lengths of insulation fall, if their adhesive had also "quit on the job."

The superintendent will of course inspect and check the tests required by the architect to ascertain if the air changes and velocities called for in the specifications have been produced. Any sin of omission or commission will of course be remedied before the building is turned over for occupancy.

CONTACTS



DEVOTED TO A BETTER UNDERSTANDING OF THE BUSINESS SIDE
OF ARCHITECTURE AND ITS RELATION TO THE INDUSTRIES



PAINTING is one of the oldest building trades and it has survived through the ages without any material change. We find it practised now much as it was hundreds of years ago.

But, springing up side by side with the painting in our modern buildings, we find new trades, or new modifications of old trades, particularly associated with metal and glass. The finishes of the latter have been modernized and are in keeping with the contemporary character of the products themselves, and show up the painting to anything but advantage. The metal trim, with its factory finish, makes the painted wall treatments appear crude and inelegant. This is a condition that those who are engaged in the painting trade cannot ignore without serious danger to themselves and their trade. It is clearly the result of comparison between the old-fashioned hand trades and the modern factory production.

Articles produced by the latter method are under systematic control and produce standardized results of a comparatively perfect quality, while those produced by hand on the job vary according to the relative skill of the individual mechanic producing the actual work.

The situation that faces the painting trade is that it will either have to change its methods and improve the product or the architects and owners will continue to seek, and ultimately will find, another solution of the problem; they will struggle to find a kind of wall and wall finish more uniform in surface and, at the same time, more durable than the present painted plaster. It seems obvious that the problem is not one of paint alone, because a finish is no stronger than its underground. The plaster that is being used today is not hard enough to withstand any serious amount of wear and tear; nor is its application sufficiently level, even, or smooth, to present a surface comparable to the perfection of finish of wallboards and wall sections now on the market.

A decided need exists for a harder plaster finish; one which can stand a reasonable amount of wear. The

The Dilemma of the Painter

By Harold W. Rambusch

plastering trade, as a whole, will have to deliver a better surface than that usually produced. We find, occasionally, walls and ceilings that may be called perfect. Our modern technicians have proven that, if it can be done in one instance or on a given area, it can be reproduced in quantity.

Given a strong and perfect surface, the problem is directly in the hands of the painters and paint manufacturers, who will have to supply materials that can be applied under job conditions and produce surfaces and finishes that will satisfactorily compare with the sprayed and baked products of the factory methods.

The problem of the manufacturers presents several phases: the first has to do with the appearance of the product itself; the second has to do with the practicability of application under job conditions.

In discussing the appearance of the object, we encounter, first, the problem of color, which represents no difficulty. Quality of surface is more difficult to solve. In this age, where texture of surface, at least on utilitarian projects, seems quite secondary to the quality of finish, we find that gloss and mattness of surface are specifically required to fulfill definite needs. The lighting engineers want matt surfaces for their reflecting areas, particularly the ceilings, while those who are in charge of upkeep require a reasonable amount of gloss on wearing surfaces. Gloss and mattness also fulfill definite useful elements in the esthetic appearance of the room.

The manufacturers at present are encountering serious difficulty in producing surfaces in semigloss or matt finishes without sacrificing the cleanliness or the ability of the sur-

face to shed dirt and to resist stains. At present paints can be had in semi-gloss or matt finishes, but they are easily soiled, and the dirt and stains cannot be readily removed.

As the second part of the manufacturers' problem, we find the need of recognizing job conditions. There are nearly always other trades working at the site, with the result that the air is agitated, and dust is raised which, settling in the fresh paint, naturally stays and disfigures the finish. It therefore becomes a problem to reduce to a minimum the amount of time between the application of the paint and its setting. With modern lacquers used in the plants, this time has been reduced to minutes, but in New York, unfortunately, and in many other large cities, the use of the spray gun has been prevented by the labor unions. This condition, of course, is clearly up to the painting contractors to remove by negotiation with the labor unions.

In the meanwhile, and until this condition can be removed, it is necessary to find paints that can be applied by brush and that will set in a few hours, thus reducing the time during which surface has to be protected against dust. It is admitted that this is not the simplest of problems, as a paint that sets too quickly does not permit the mechanic enough time to apply it neatly and without laps. There are, however, paints on the market that have brought the time of setting (which used to be twelve to fourteen hours) down to three or four hours. We need to shorten this time to one or two hours, and we shall then have overcome one of the greatest difficulties in applying paint under building conditions.

Conditions have also made the problem of the painting trade more exacting in that the modern trend has been toward the elimination of glazes and antiqued surfaces. The painter has become accustomed to relying upon antiquing and glazing to cover up many faults and imperfections in finish, but he has also figured upon these glazes to pull together the color scheme. With the elimination of antique the problem

ARCHITECTURAL EDUCATION

(Continued from page 149)

of matching and harmonizing colors becomes much more difficult and precise. Colors and tints now have to be studied and applied directly to the finished surface without the common denominator of a glaze. This requires, on the part of the painter, considerably more knowledge of the harmony of colors and their esthetic appearance. The same applies to the metal finishes so often used on ornamental plaster or moldings. These have to be placed and used with colors and tints so that the scheme balances within itself. This condition has arisen partly because of the modern trend of using metal and paint, and partly because of the general schemes worked out in our buildings where metal and paint and enamelled surfaces are applied separately, in various elements, to form a scheme.

An example of the use of tints and metals thus separately applied in a scheme of decoration may be found in the ceilings of the vestibules and foyers in the new Metropolitan Life Insurance Company Building on Madison Avenue, New York. This instance clearly shows the relation that exists between such a scheme of painting and its fitness in connection with the utilitarian treatment of the marble walls, metal grilles, glass, and metal doorways.

We are living in an age which has made tremendous strides in the use of metal and glass and in the finishes in which these products are produced, and unless those trades which are still carried on at the site, such as plastering and painting, are brought to the same high standard of excellence they will ultimately be eliminated.

It would seem that when the problem is so clearly put up to these two trades they should be able to recognize it, face it squarely, and eliminate the somewhat home-made appearance their work still presents.

Part of the difficulty also lies with the mechanics themselves. They have been brought up on the jobs and have, through generations, built up their own ideas of craftsmanship which, unfortunately, are ill-suited to modern conditions. These traditions develop individualism and private opinion. They are, however, fighting a losing battle against the standardization of the modern factory system, which has created a new type of mechanic who is willing to forget his own opinions and act according to formula.

have made a better *man* of myself had I been fortunate enough to live in the kind of school I have tried to depict.

"And now, dear man, what say you to this afternoon's scribbling? I have forgotten that time was passing, I have neglected the thousand things that my 'betters' have decreed I was to do this day. But I have done exactly what I *wanted* to do, and it isn't often that we old 'uns get a chance to do that, is it? If you would preserve my reputation for reasonable sanity (which merely means, of course, apparent conformity) don't, for heaven's sake, 'peach' on me; I mean well, as you know. . . *au revoir*. X. Y. Z."

When I had read that letter, I felt that here was a great letter (another proof to add to the many I have, of the fact that the old-time fine art of letter writing may not, actually, have perished from the earth). My friend had put into vigorous, fresh, direct words what many earnest persons must have been thinking and trying to say, for a long time. Of course we realize—my friend and I—that a certain part of every young mind's development must be accomplished along standard lines and according to standard formulæ. Such a part would include, for example, the fundamentals of grammar and the use of language, mathematics, history, natural sciences. But, all of these fundamentals should be attended to before Youth enters into the fair, free pasture upon which the university gate *should* open. An enthusiastic, sympathetic attention to these fundamentals would fill the very young mind with that desirable quality of "intellectual curiosity" which would make a sojourn in the university pasture a joyous adventure, a splendid wayfaring—therefore a *profitable* sojourn. It is conceivable that, even in a university, there will be necessities for providing certain standard patterns to which the mediocre can be moulded, with the least effort on the part of the moulders and with the minimum pain to the moulded. But, is it not, likewise, conceivable that less willingness to believe the customary dictum that the "majority is mediocre," and more willingness to provide and preserve the opportunities

of a rich, free environment might, in time, open our eyes to the possibility (which may have been, all along, an unperceived fact) that the mediocre are *not* in the majority but, decidedly, in the minority? May it not be that the majority *appears* to be mediocre because of the system which disguises and disfigures it, and is not really thus by nature? At all events, it would be great fun—and perhaps a great advantage to society—to see an experiment, on a much larger scale than that to which an individual "academic pariah" can operate in his own classes.

Of course, such an experiment would labor under the disapproval, and the verbose scorn, of organized "education." It is obvious, perhaps, that such an experiment would be quite purposeless in many of the fields wherein Youth elects—or is forced—to seek standard nourishment. It would not be suited to elementary types of engineering study, although one can imagine its application to more advanced phases of *real* engineering, and one can see that there might come of it a new and delightful kind of engineer who would throw away his handbooks and his slide rules and employ his imagination. It would not be suited to the pharmacy trade nor the dental profession, one suspects, nor even to the elementary stages of medical study, although the doctors have always paid honor to human nature and its right of free choice once the essential stepping-stones had been passed over. It would—when it had shown its value—do away with teachers colleges, with their stultifying statistics, their false psychologies, and their other innumerable types of canned foolishness. But, ah, how beautifully it would adapt itself—this "noble experiment, humane in motive"—to training in the creative fields; philosophy, literature, history, the classics (who says there is no field for creative work in the classic field?), architecture and its allied arts of painting and sculpture! It would involve a sort of revolution in fields that have been called—by courtesy?—"intellectual." But, it would be a bloodless revolution after all, for the things against which enthusiastic human nature would revolt are dead already—they only need to be gathered up and buried.

« ARCHITECTURE »

THE EIGHTY-THIRD IN A SERIES OF COLLECTIONS OF PHOTOGRAPHS
ILLUSTRATING VARIOUS MINOR ARCHITECTURAL DETAILS

ARCHITECTURE'S PORTFOLIO OF CORBELS

*Subjects of previous portfolios are listed below
at left and right of page*



*Below are the subjects of
forthcoming Portfolios*

❖ 1926
DORMER WINDOWS
SHUTTERS AND BLINDS

❖ 1927
ENGLISH PANELLING
GEORGIAN STAIRWAYS
STONE MASONRY TEXTURES
ENGLISH CHIMNEYS
FANLIGHTS AND OVERDOORS
TEXTURES OF BRICKWORK
IRON RAILINGS
DOOR HARDWARE
PALLADIAN MOTIVES
GABLE ENDS
COLONIAL TOP-RAILINGS
CIRCULAR AND OVAL WINDOWS

❖ 1928
BUILT-IN BOOKCASES
CHIMNEY TOPS
DOOR HOODS
BAY WINDOWS
CUPOLAS
GARDEN GATES
STAIR ENDS
BALCONIES
GARDEN WALLS
ARCADES
PLASTER CEILINGS
CORNICES OF WOOD

❖ 1929
DOORWAY LIGHTING
ENGLISH FIREPLACES
GATE-POST TOPS
GARDEN STEPS
RAIN LEADER HEADS
GARDEN POOLS
QUOINS
INTERIOR PAVING
BELT COURSES
KEYSTONES
AIDS TO FENESTRATION
BALUSTRADES

Pew Ends

OCTOBER

Gothic Niches

NOVEMBER

Curtain Treatment at
Windows

DECEMBER

Exterior Plasterwork

JANUARY

Church Doors

FEBRUARY

Fountains

MARCH

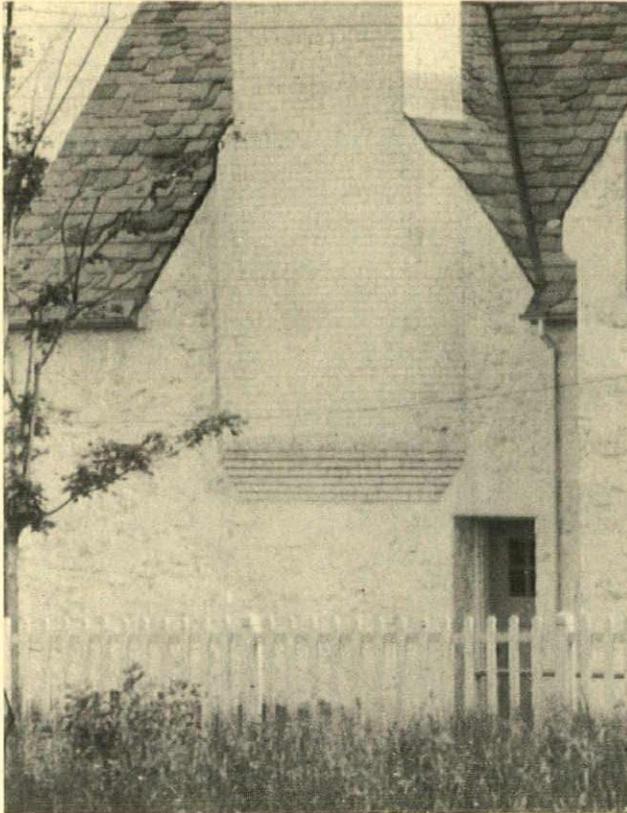
*Photographs showing interesting
examples under any of these head-
ings will be welcomed by the Edi-
tor, though it should be noted that
these respective issues are made up
about six weeks in advance of
publication date.*

1930 ❖
SPANDRELS
CHANCEL FURNITURE
BUSINESS BUILDING ENTRANCES
GARDEN SHELTERS
ELEVATOR DOORS
ENTRANCE PORCHES
PATIOS
TREILLAGE
FLAGPOLE HOLDERS
CASEMENT WINDOWS
FENCES OF WOOD
GOTHIC DOORWAYS

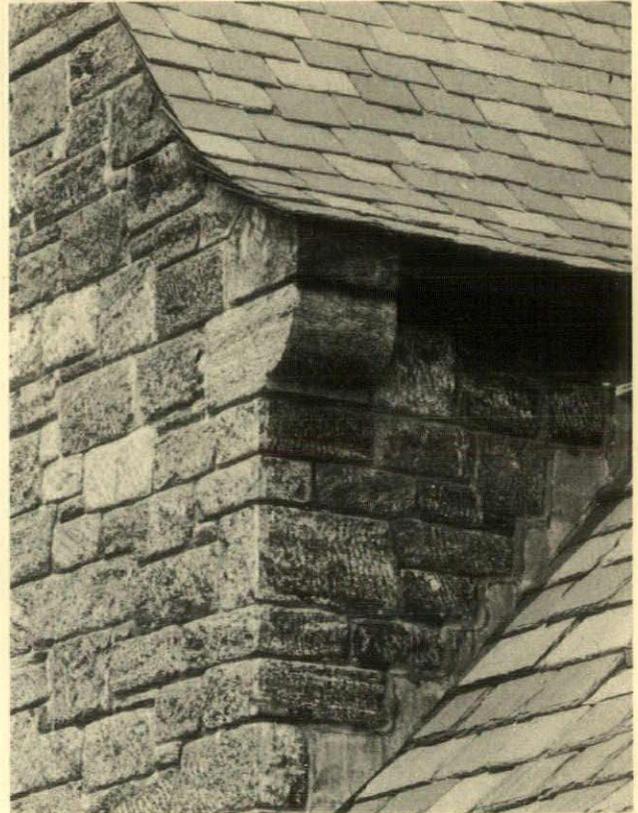
1931 ❖
BANKING-ROOM CHECK DESKS
SECOND-STORY PORCHES
TOWER CLOCKS
ALTARS
GARAGE DOORS
MAIL-CHUTE BOXES
WEATHER-VANES
BANK ENTRANCES
URNS
WINDOW GRILLES
CHINA CUPBOARDS
PARAPETS

1932 ❖
RADIATOR ENCLOSURES
INTERIOR CLOCKS
OUTSIDE STAIRWAYS
LEADED GLASS MEDALLIONS
EXTERIOR DOORS OF WOOD
METAL FENCES
HANGING SIGNS
WOOD CEILINGS
MARQUISES
WALL SHEATHING
FRENCH STONEMWORK
OVER-MANTEL TREATMENTS

1933 ❖
BANK SCREENS
INTERIOR DOORS
METAL STAIR RAILINGS
VERANDAS
THE EAGLE IN SCULPTURE
EAVES RETURNS ON MASONRY
GABLES
EXTERIOR LETTERING
ENTRANCE DRIVEWAYS



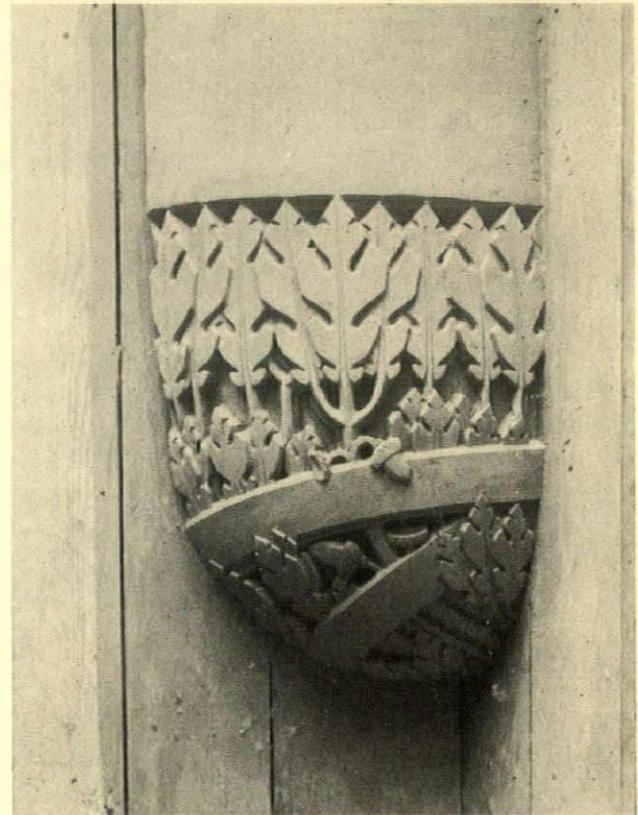
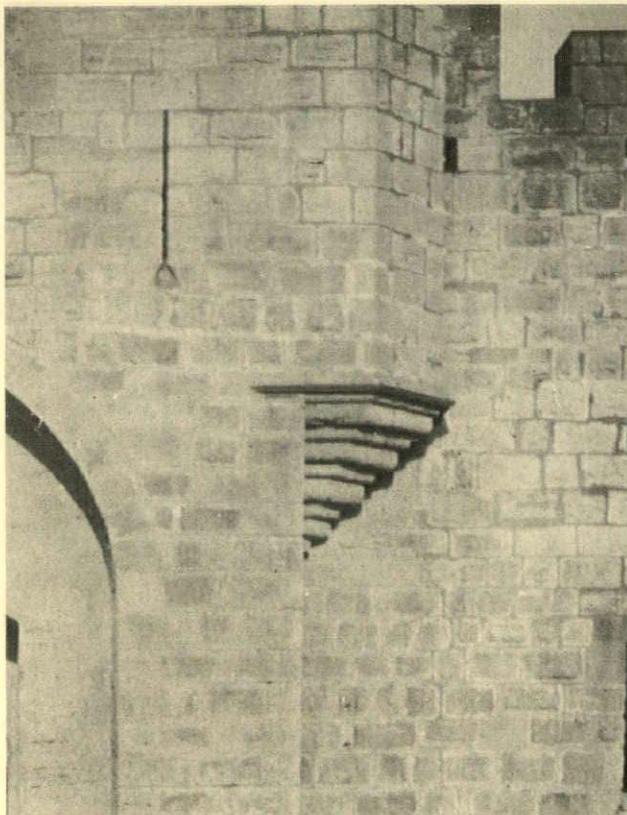
Palmer & Lamdin



John Oakman

*Eleventh-century fortifications,
Aignes-Mortes, France*

Ulric H. Ellerhusen





Smith, Hinchman & Grylls

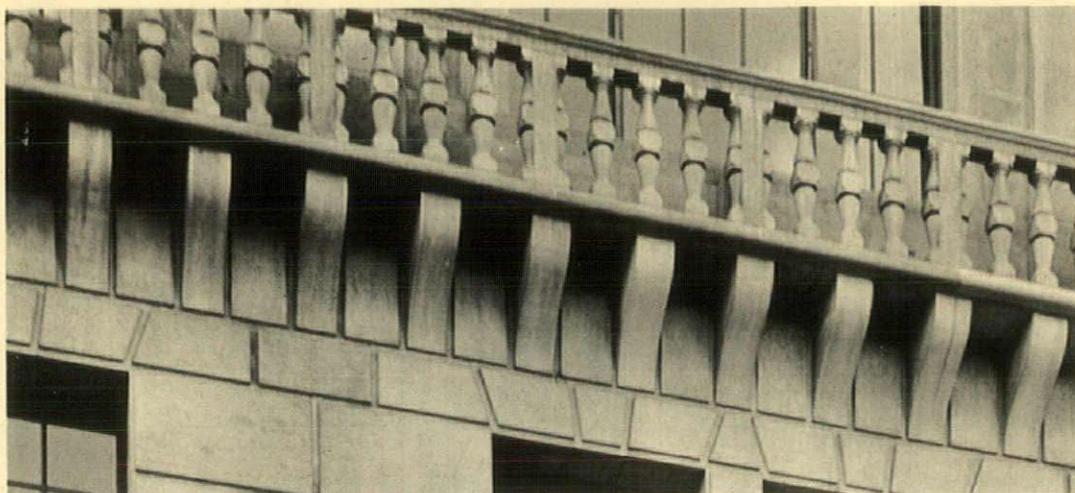


Bottomley, Wagner & White

William B. Tubby

Ulric H. Ellerhusen



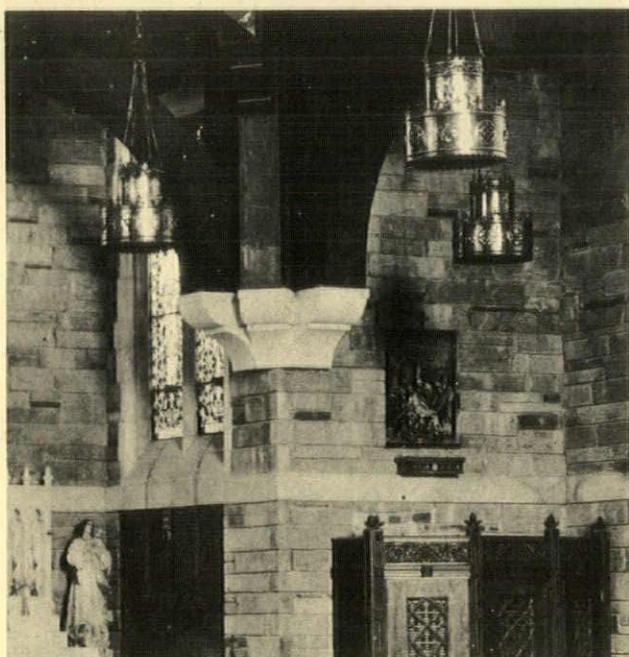


*Goodwillie
& Bessell*

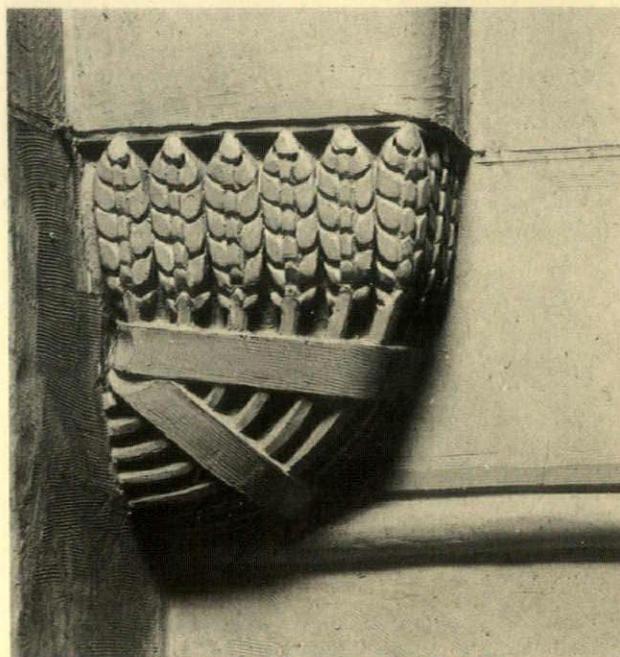


*Chancery Lane
Court, London*

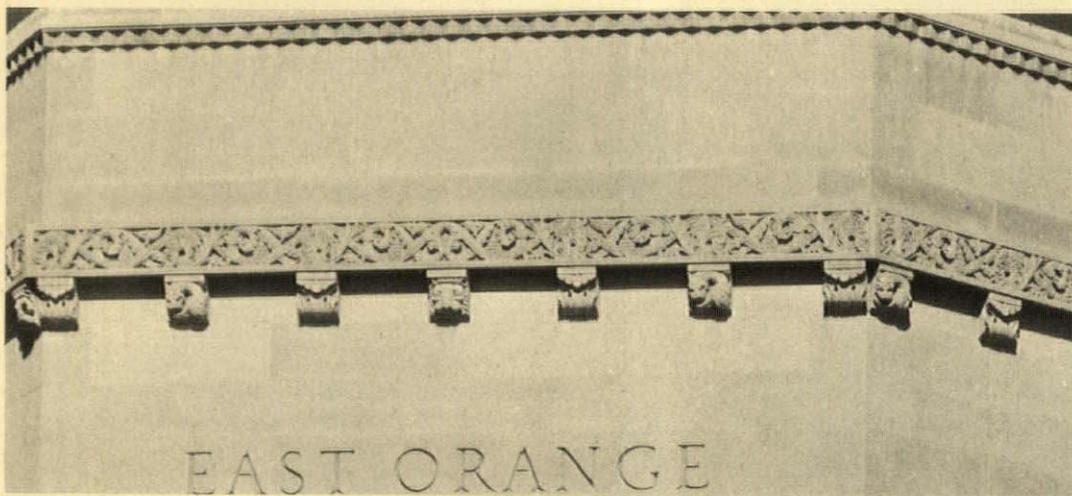
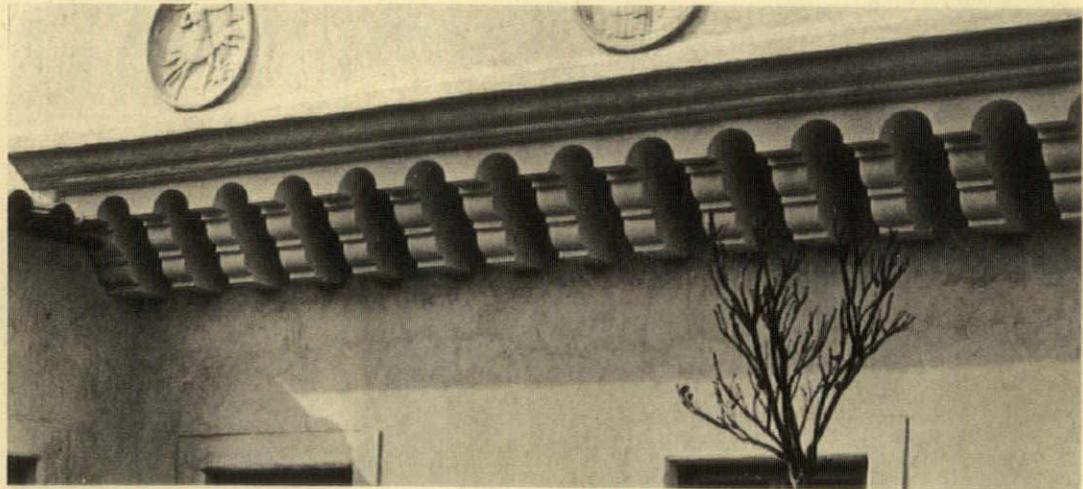
Henry D. Dagit & Sons



Ulric H. Ellerhusen

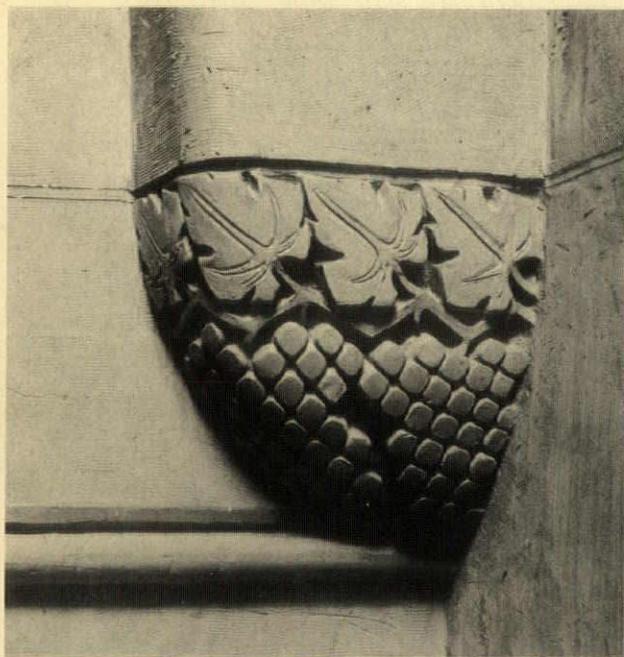


*Gordon B.
Kaufmann*

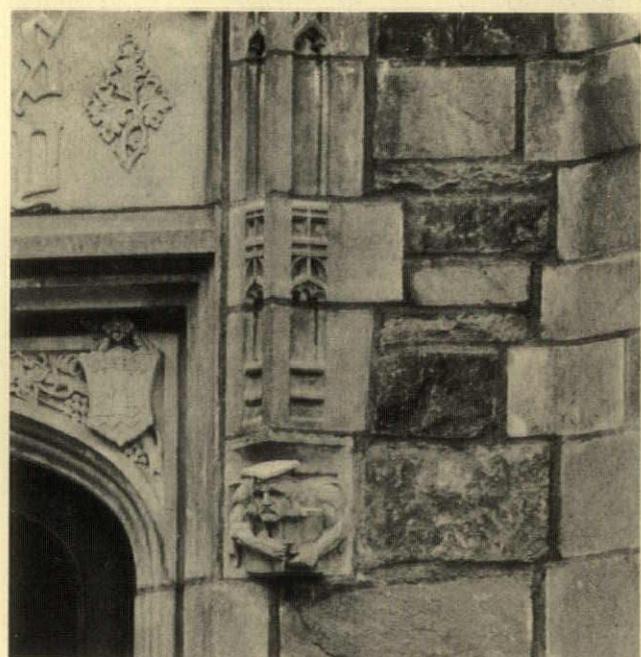


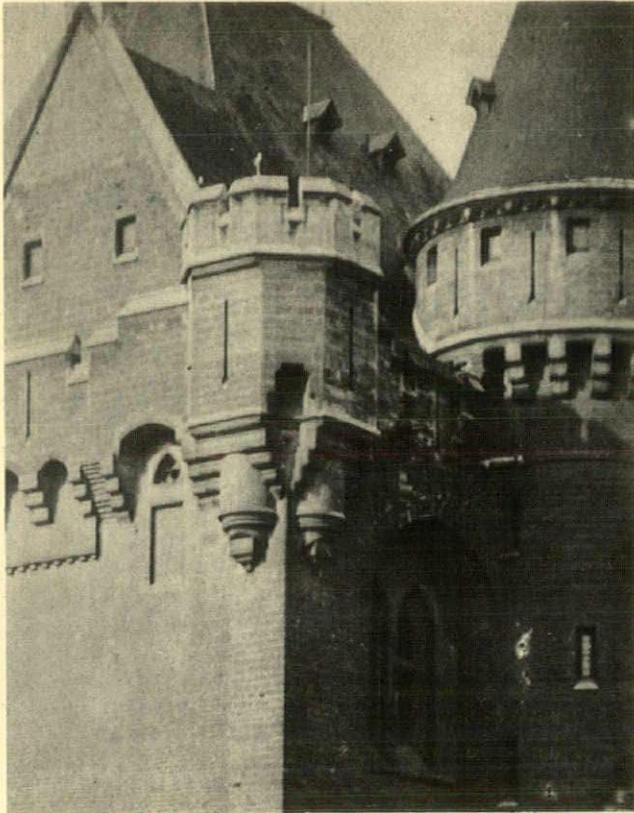
*Holmes &
Winslow*

Ulric H. Ellerhusen

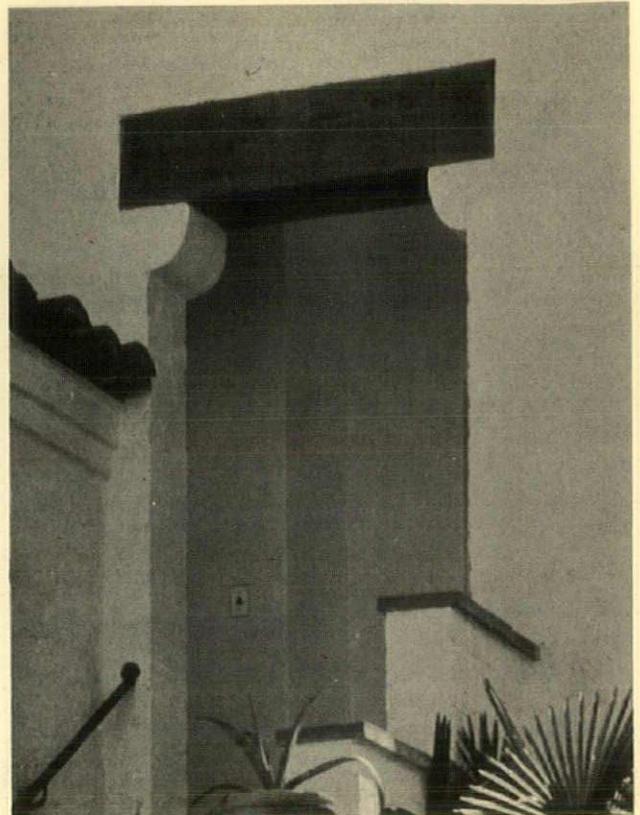


York & Sawyer





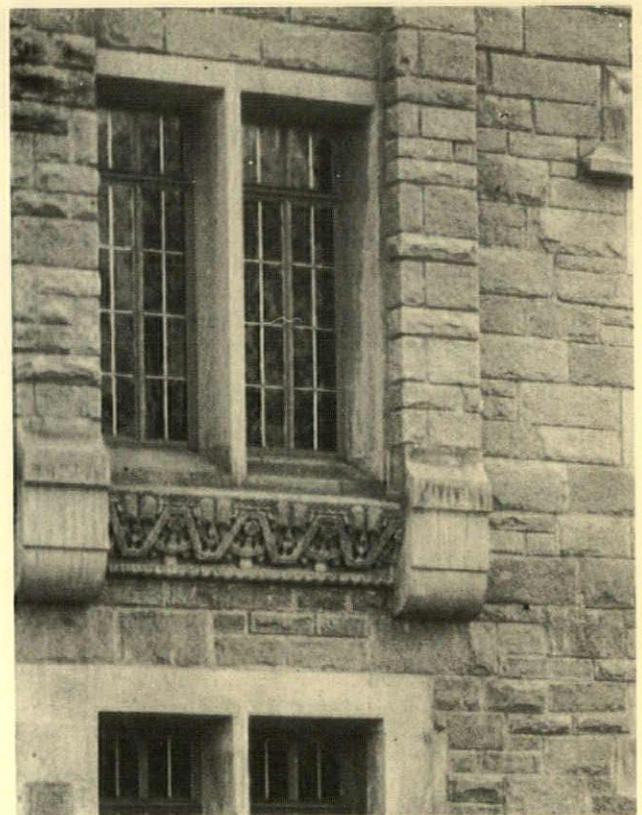
Fourteenth-century town wall, Brussels

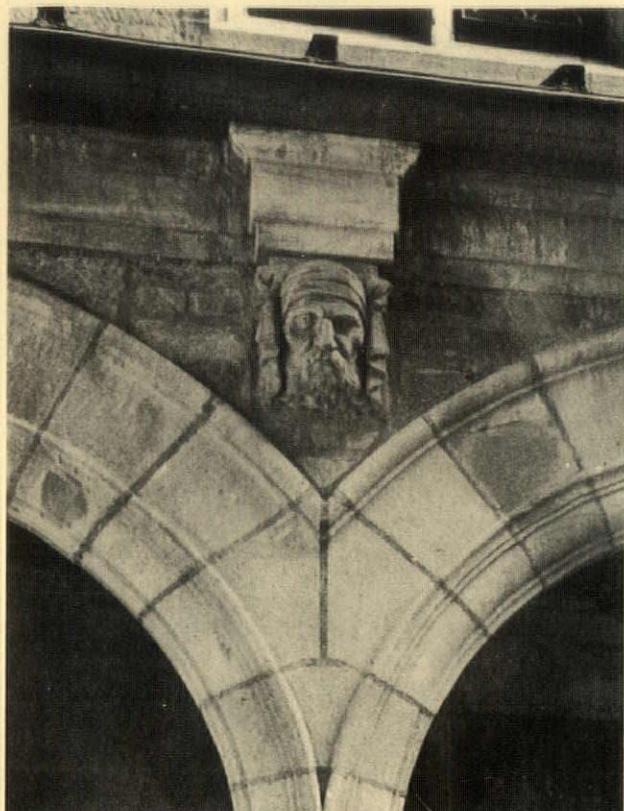


Jonathan Ring

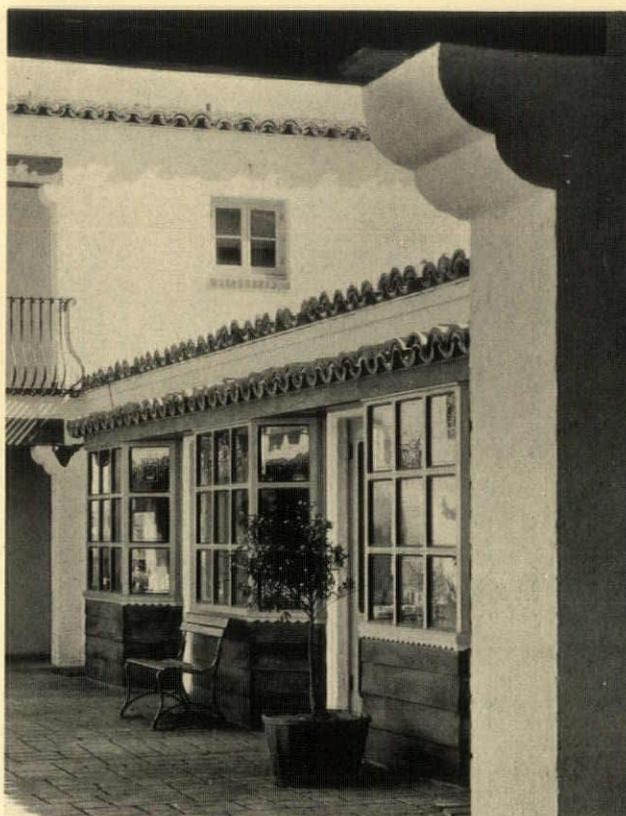
Raymond Hood

Thomas Hibben ; Robert Frost Daggett





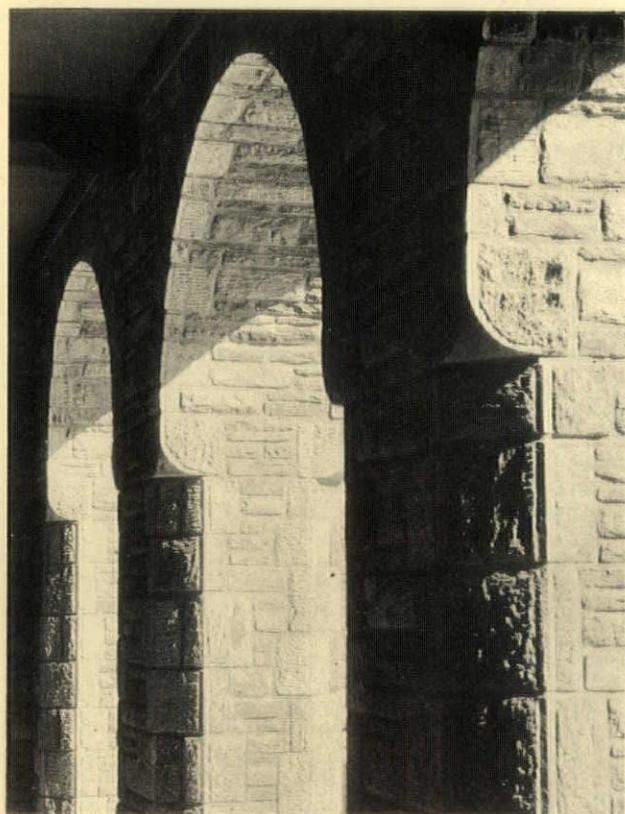
James Gamble Rogers



Jonathan Ring

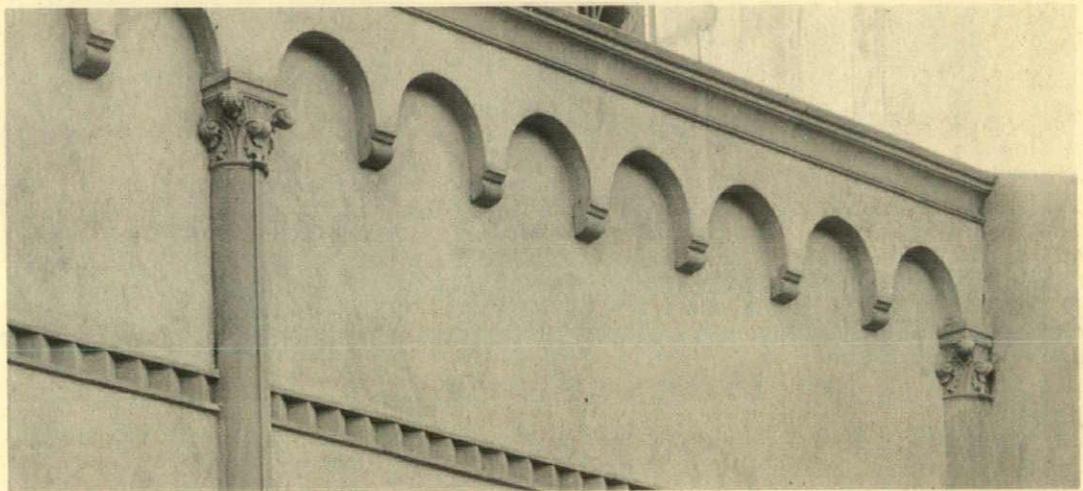
Harry Sternfeld

Philip M. Jullien





*Lester Beach
Scheide, Inc.*

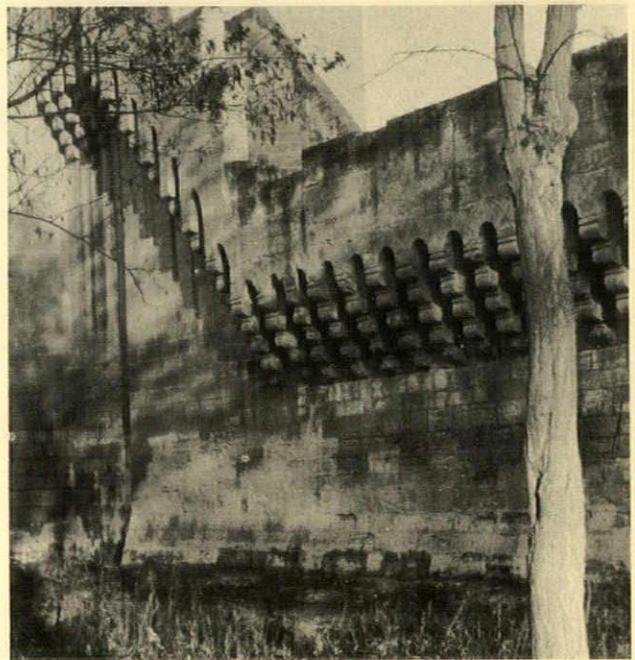


*Carleton M.
Winslow*

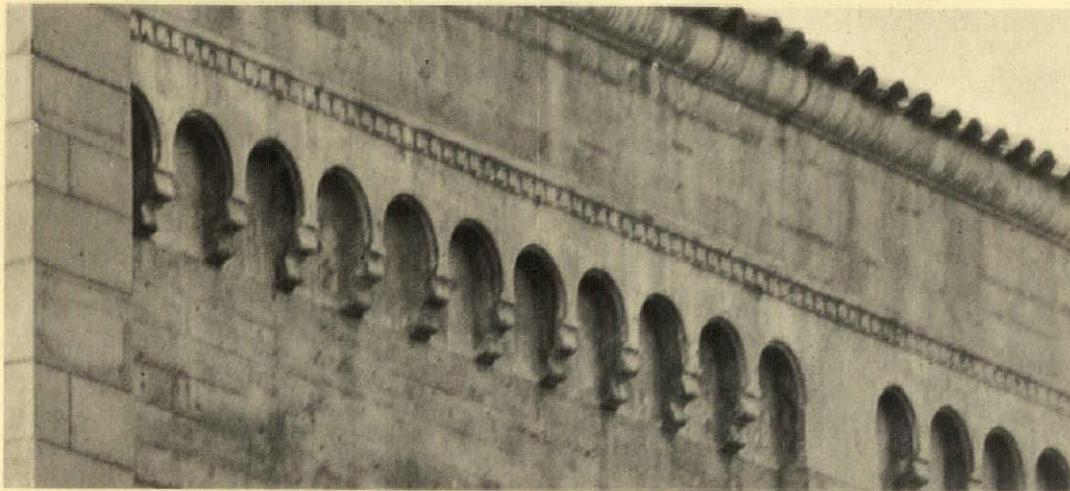
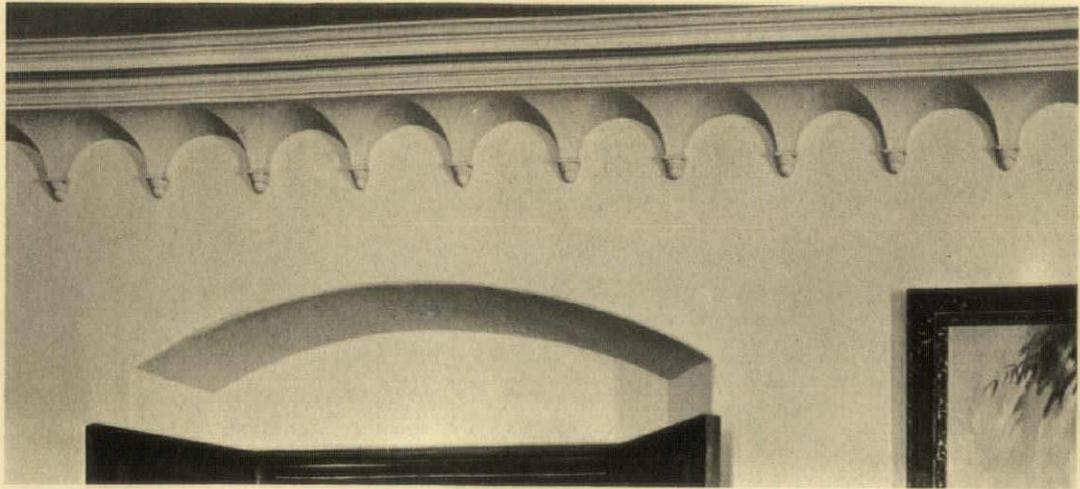
Church of San Juan, Segovia



City walls of Avignon

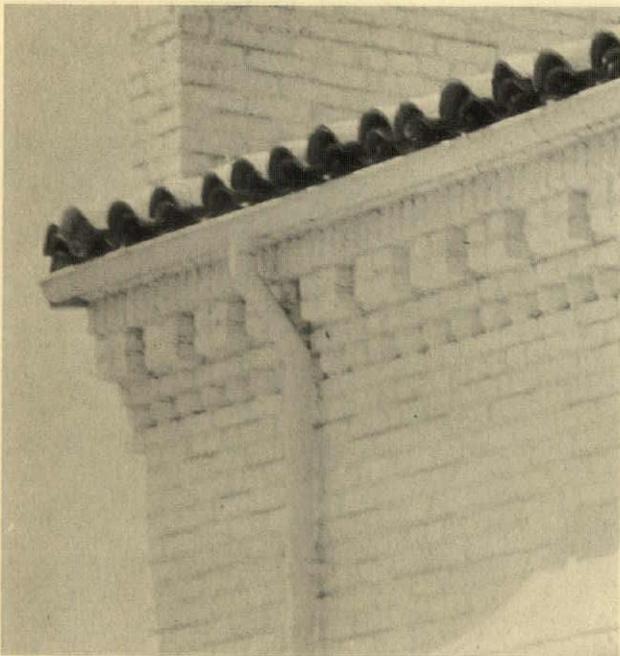


*Gordon B.
Kaufmann*

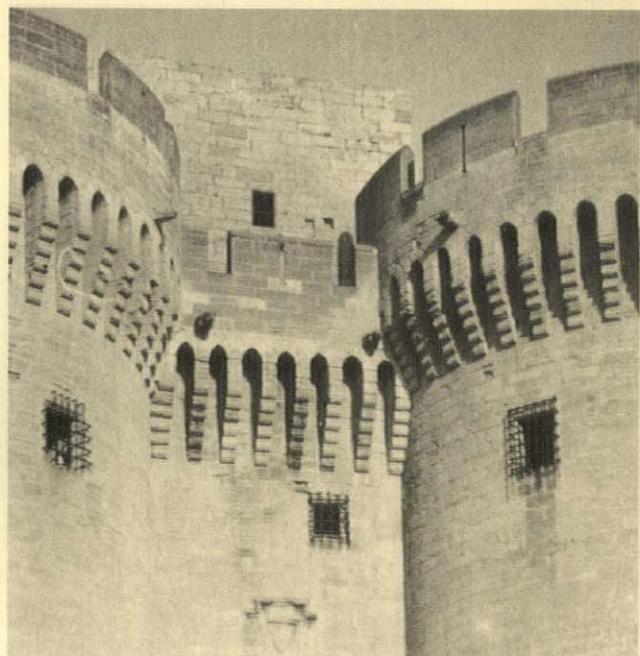


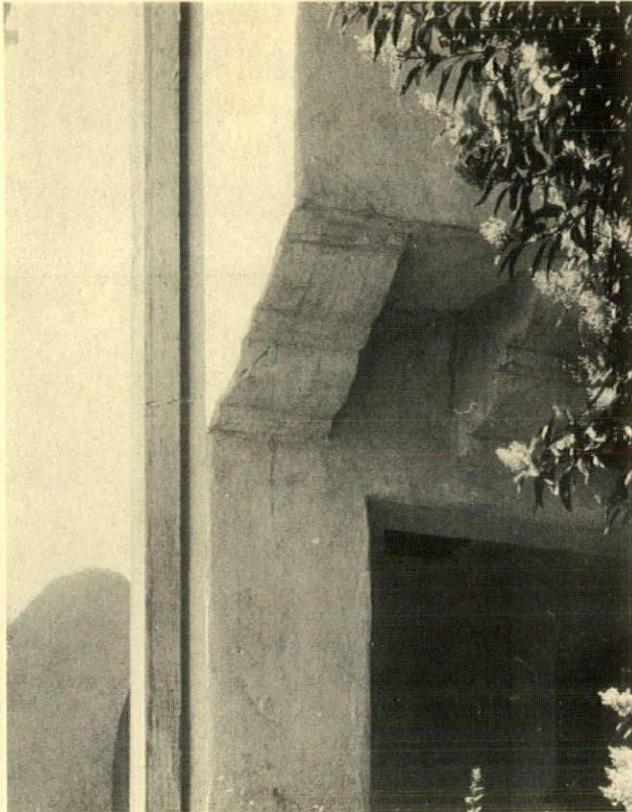
*Allison &
Allison*

Marshall P. Wilkinson



Fort St. André, Villeneuve-lès-Avignon





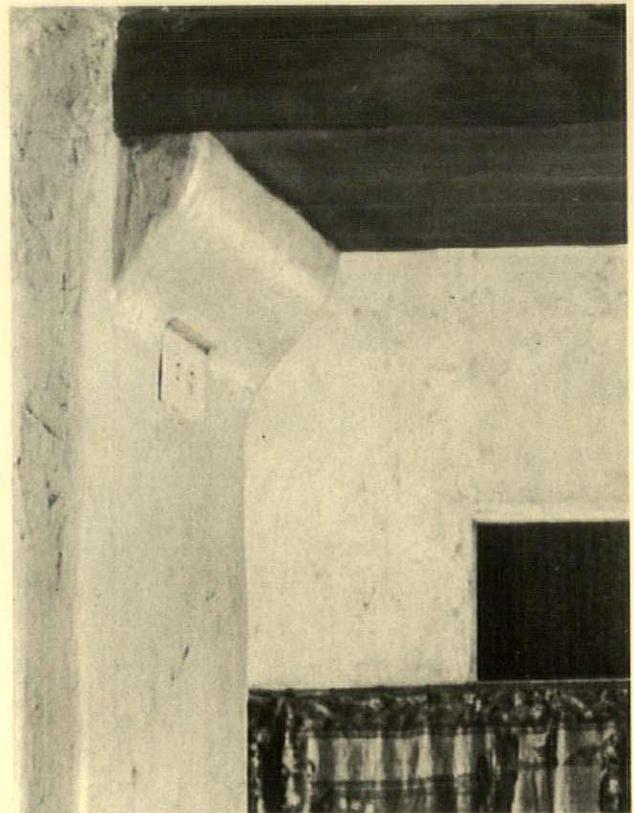
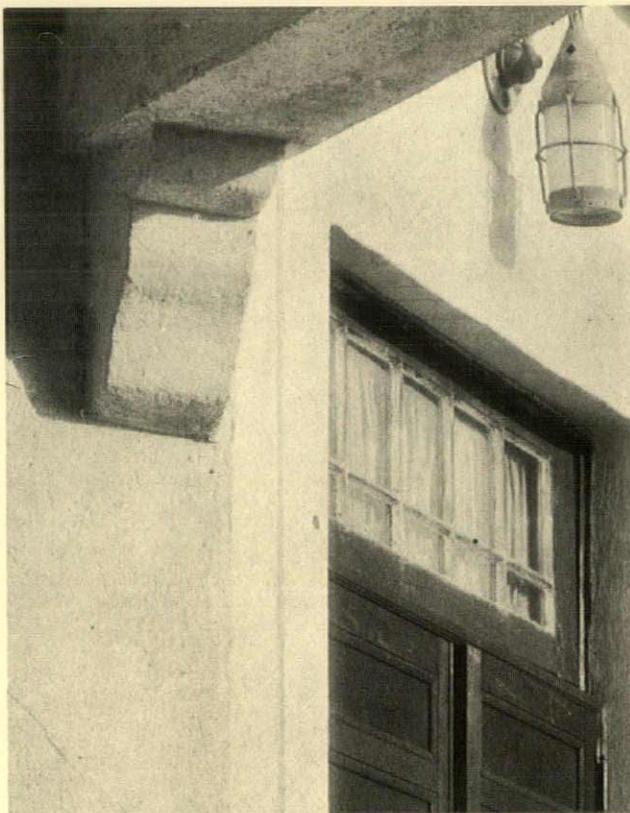
John Byers



Mellor & Meigs

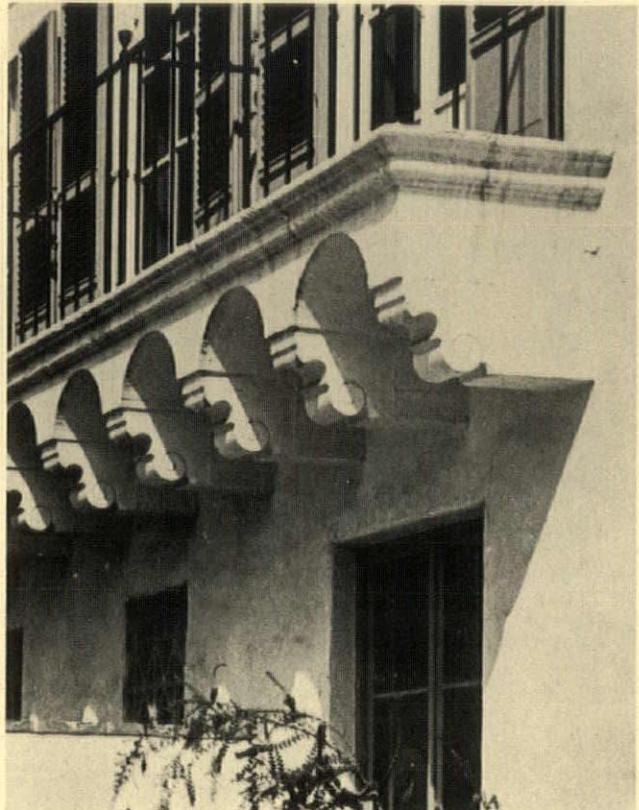
M. E. Boyer, Jr.

Willis Polk & Company



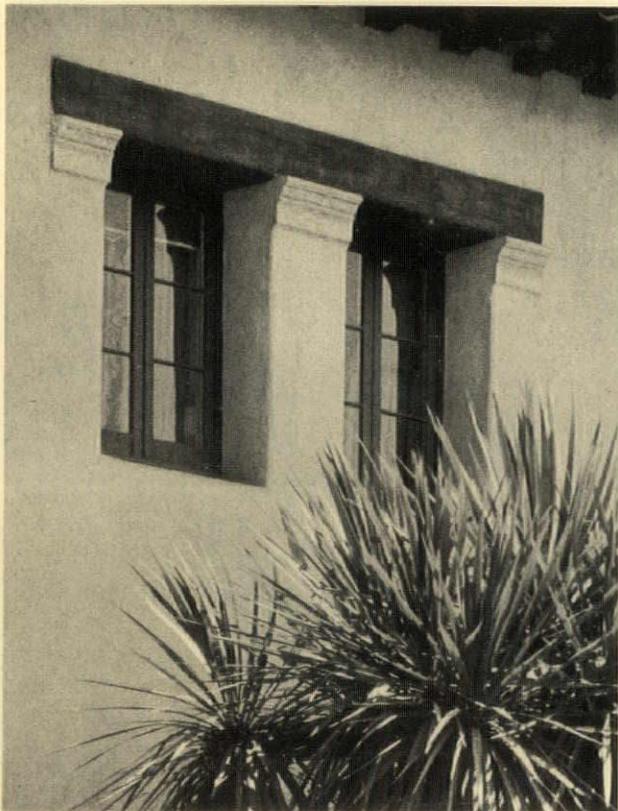


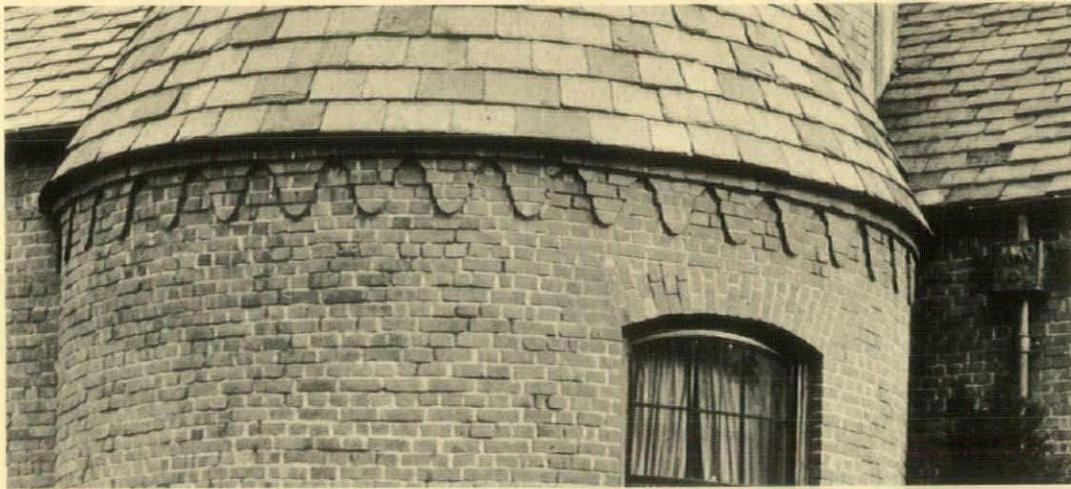
Masten & Hurd



Gordon B. Kaufmann

John D. Atchison *Beverly Hills, Calif.*



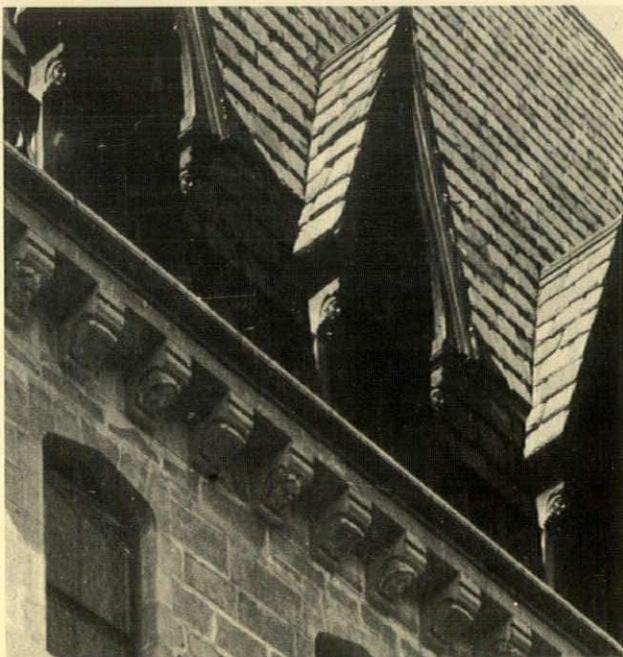


*Godwin,
Thompson &
Patterson*

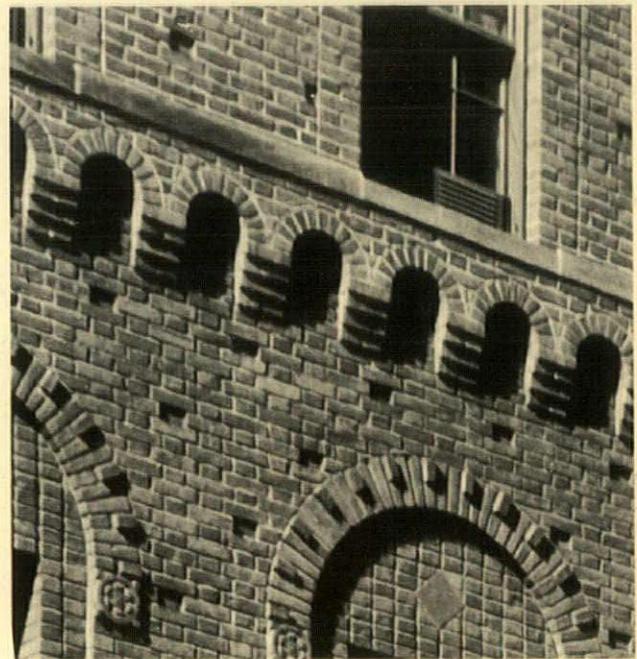


Polhemus & Coffin

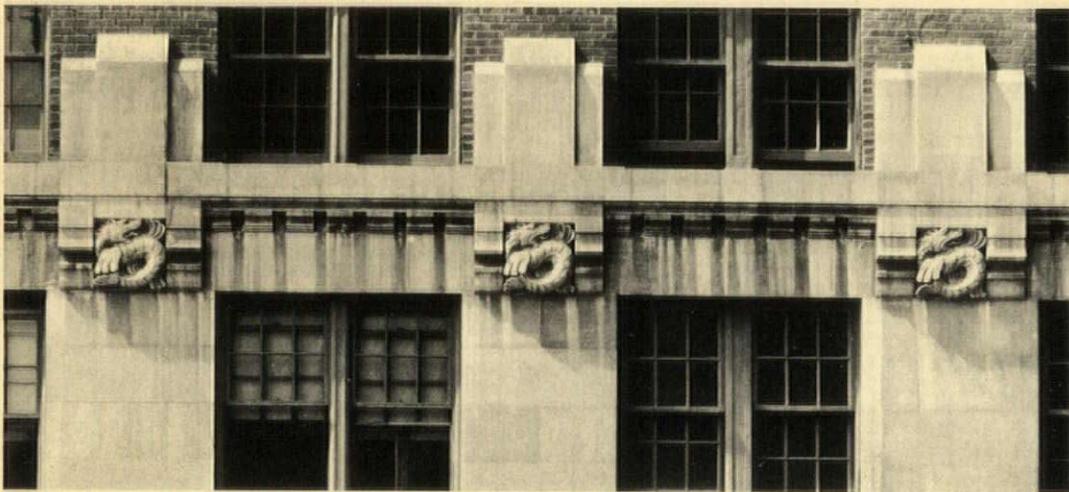
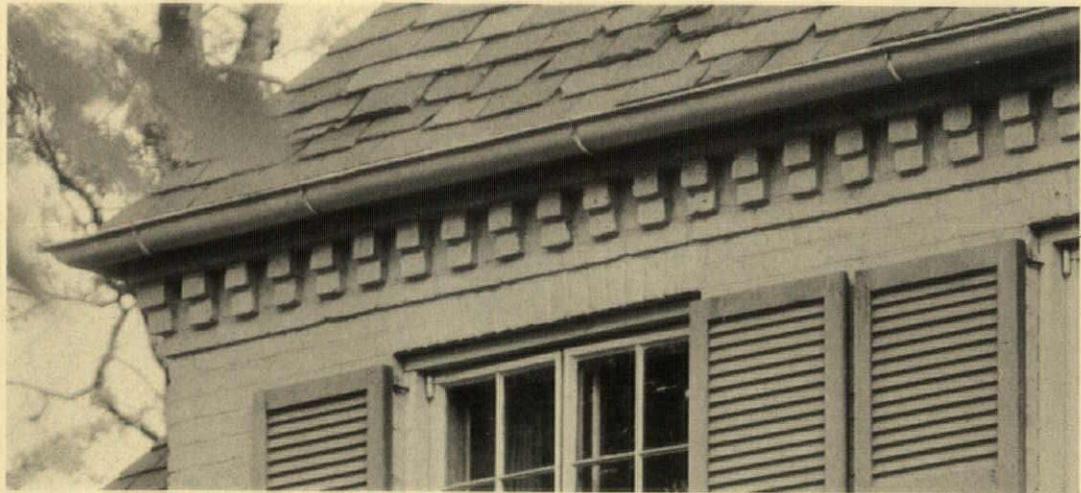
Harry Allen Jacobs



McKenzie, Voorhees & Gmelin

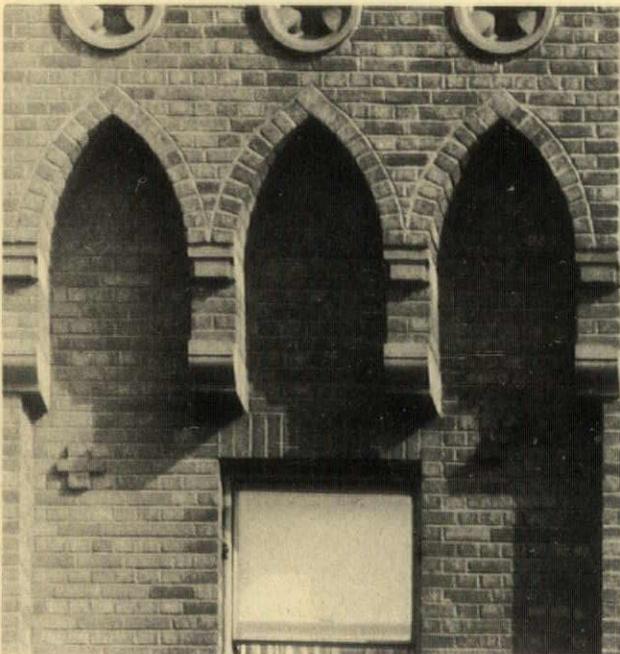


Clark & Arms

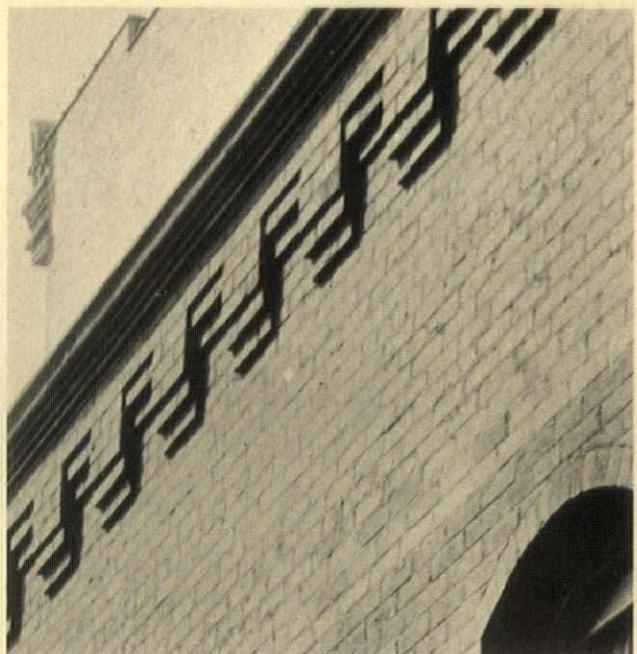


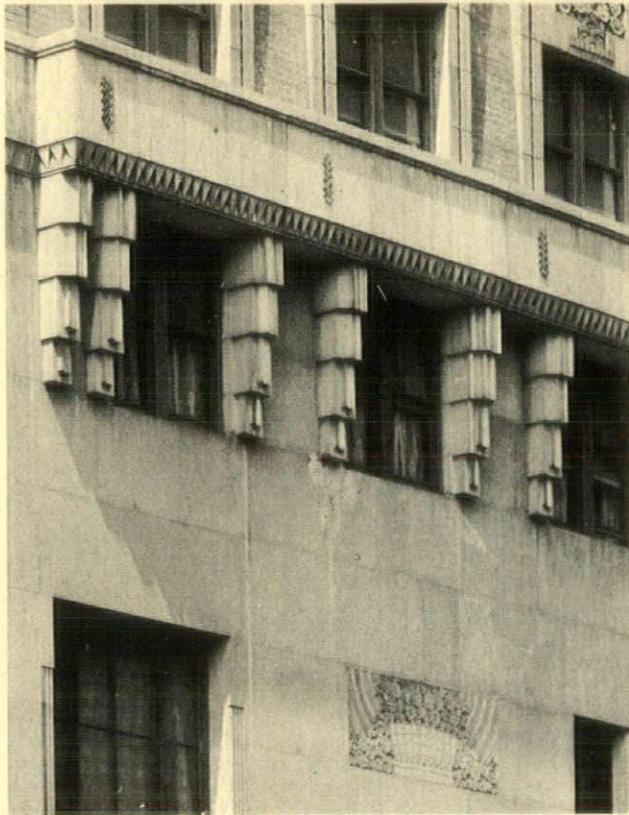
Rosario Candela

Arthur Loomis Harmon

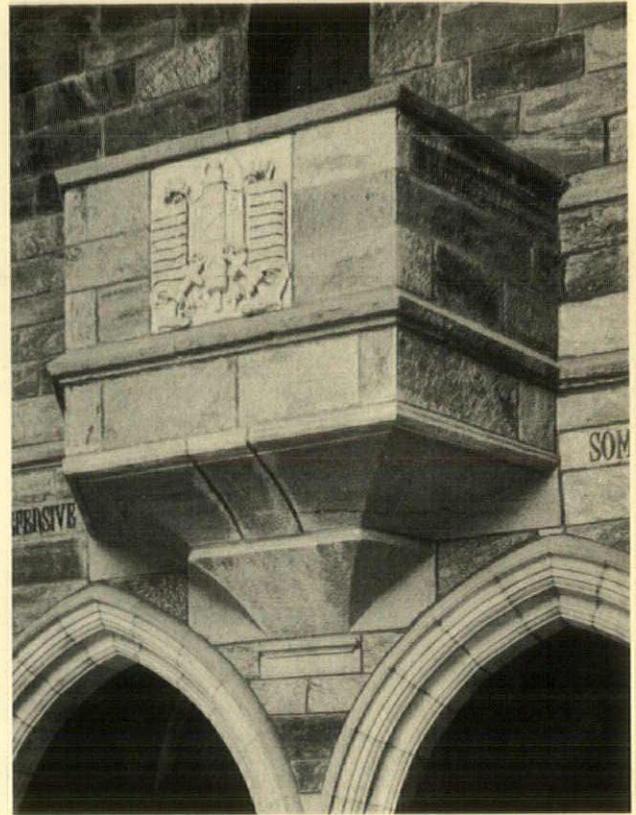


Remodelled stable in Sniffen Court, New York





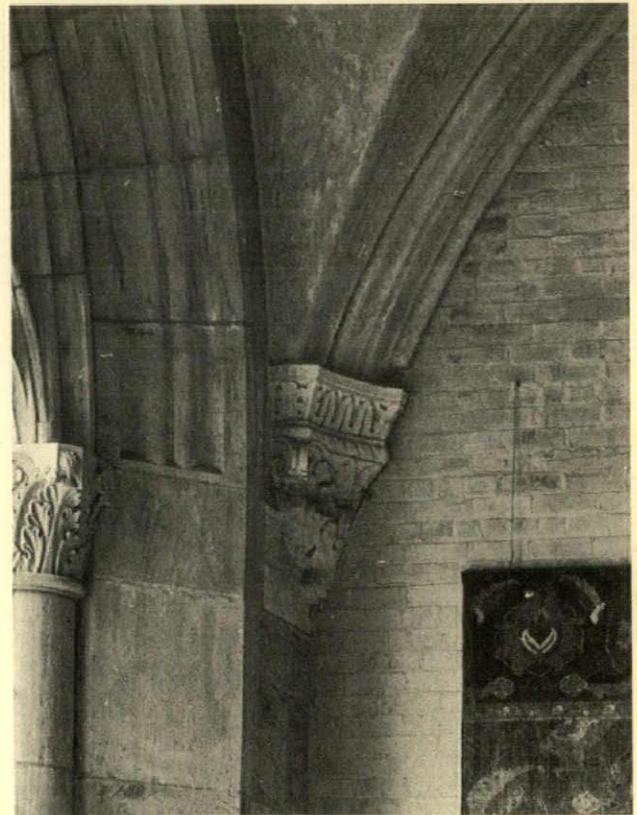
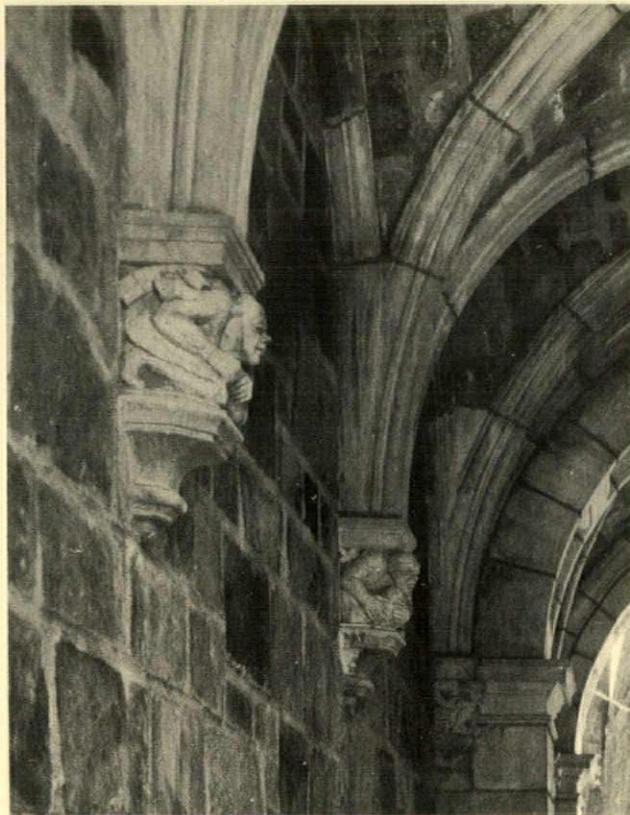
Sugarman & Berger

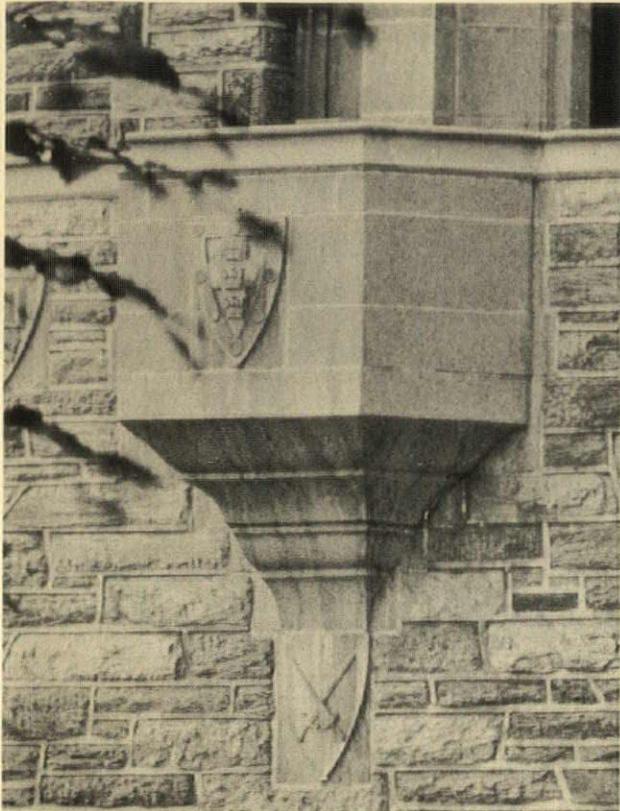


Walter T. Karcher & Livingston Smith

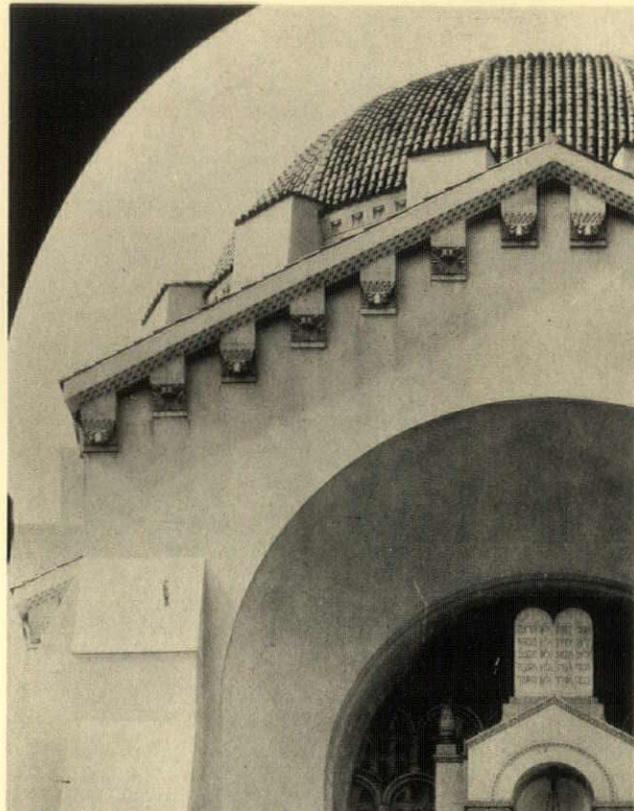
York & Sawyer

Egerton Swartwout





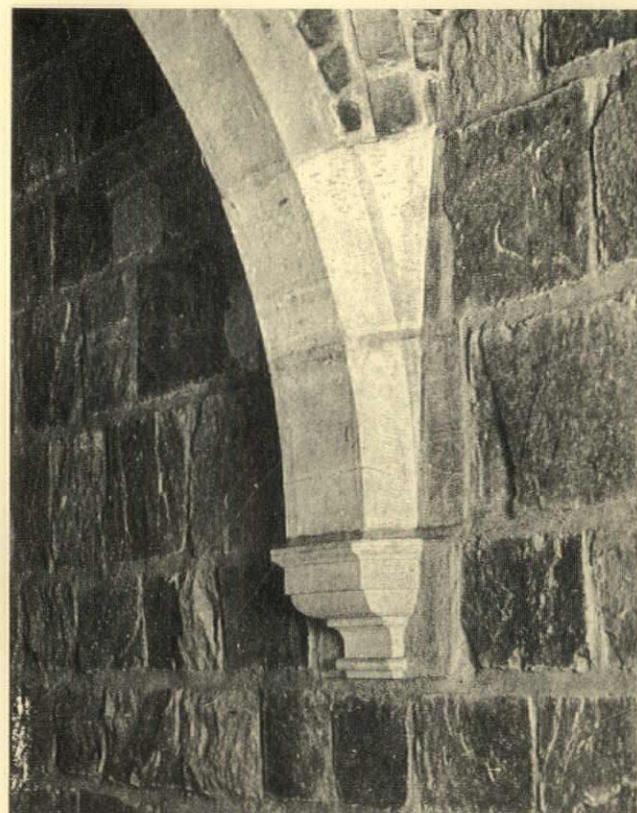
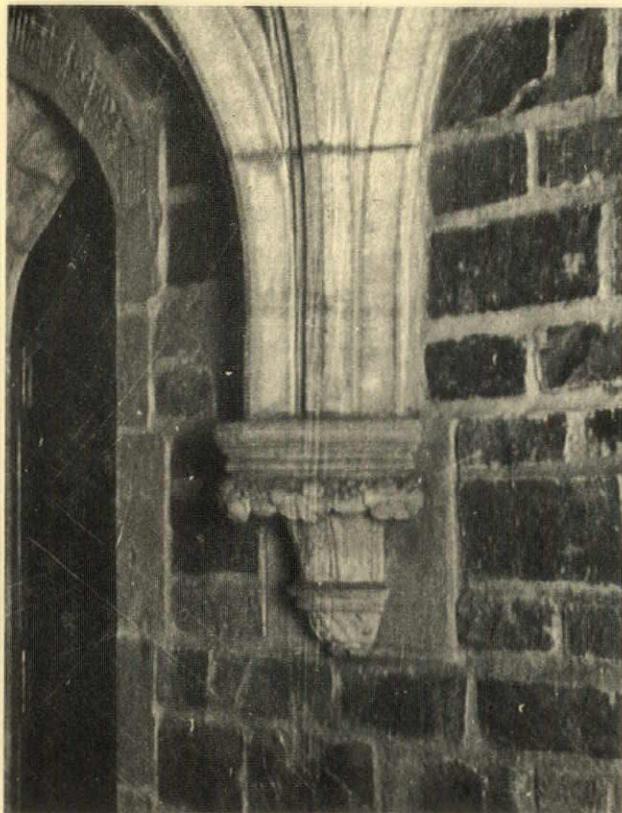
Zantzing, Borie & Medary

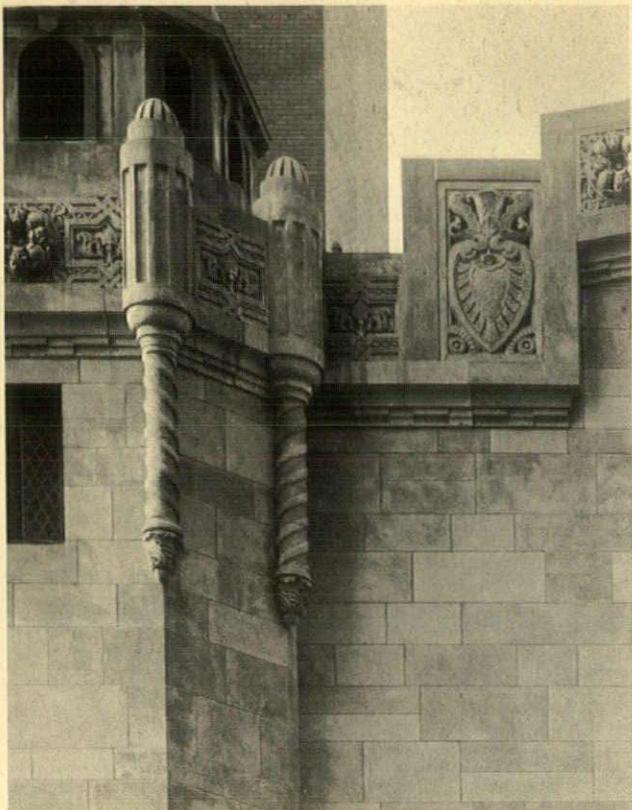


Bakewell & Brown ; Sylvain Schnaittacher

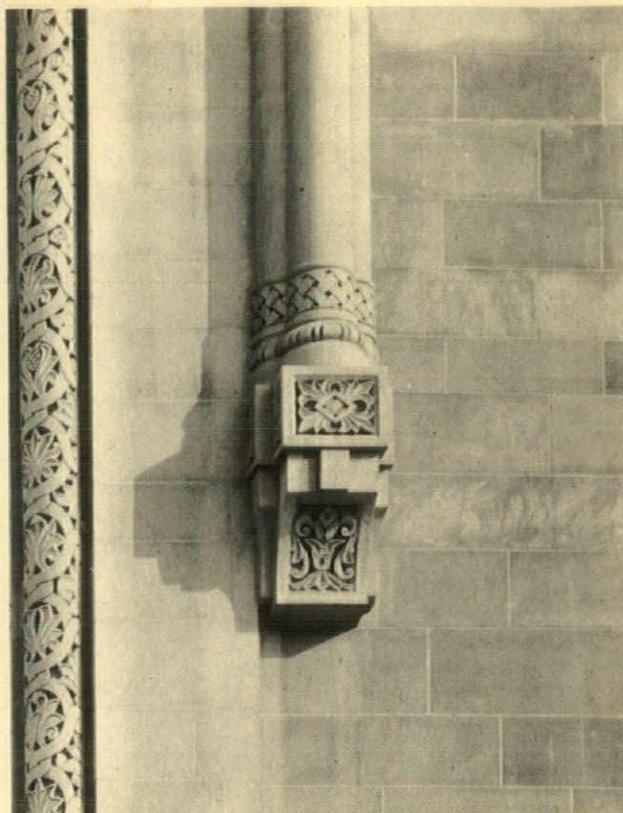
James Gamble Rogers

James Gamble Rogers





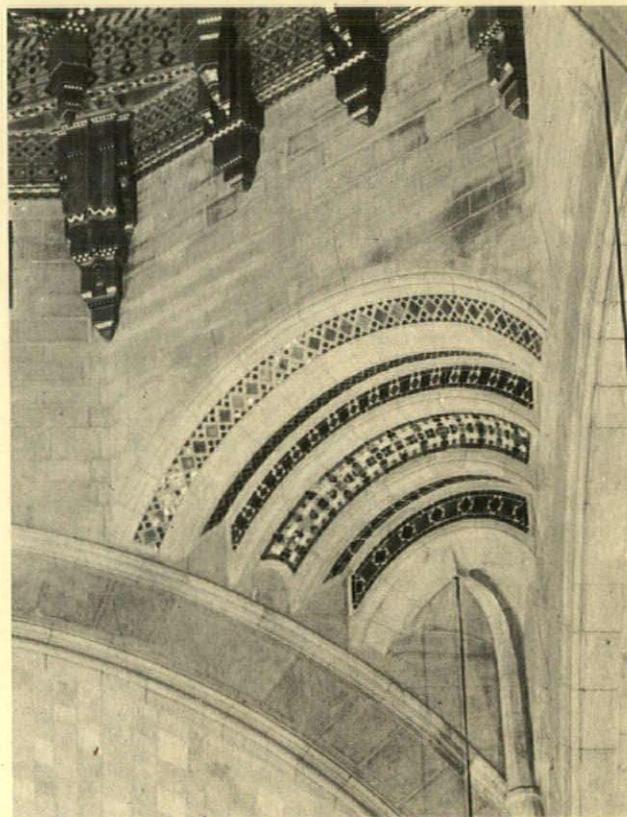
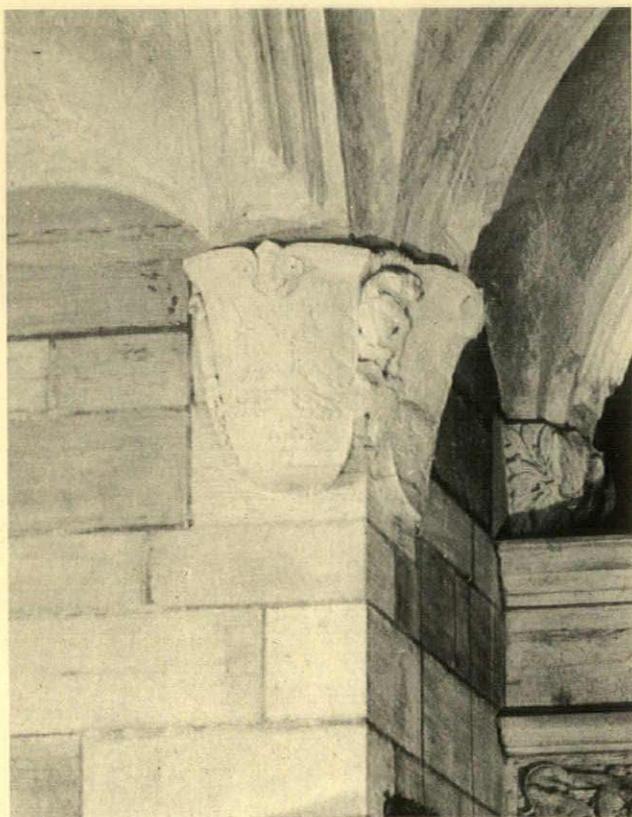
Walter S. Schneider



Robert D. Kohn ; Charles Butler ; Clarence S. Stein ; Mayers, Murray & Phillip

Egerton Swartwout

Mayers, Murray & Phillip



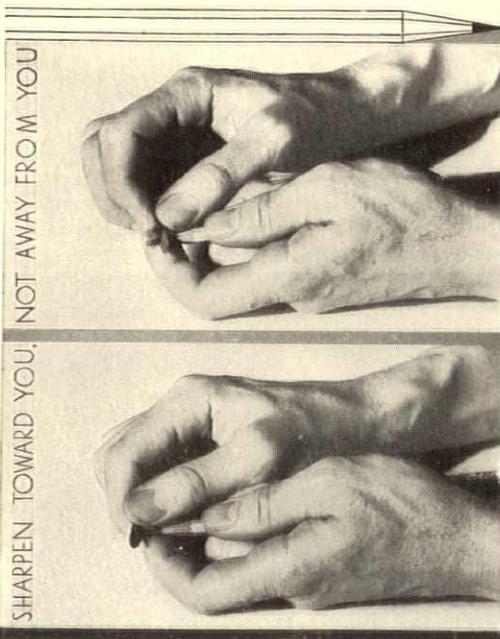
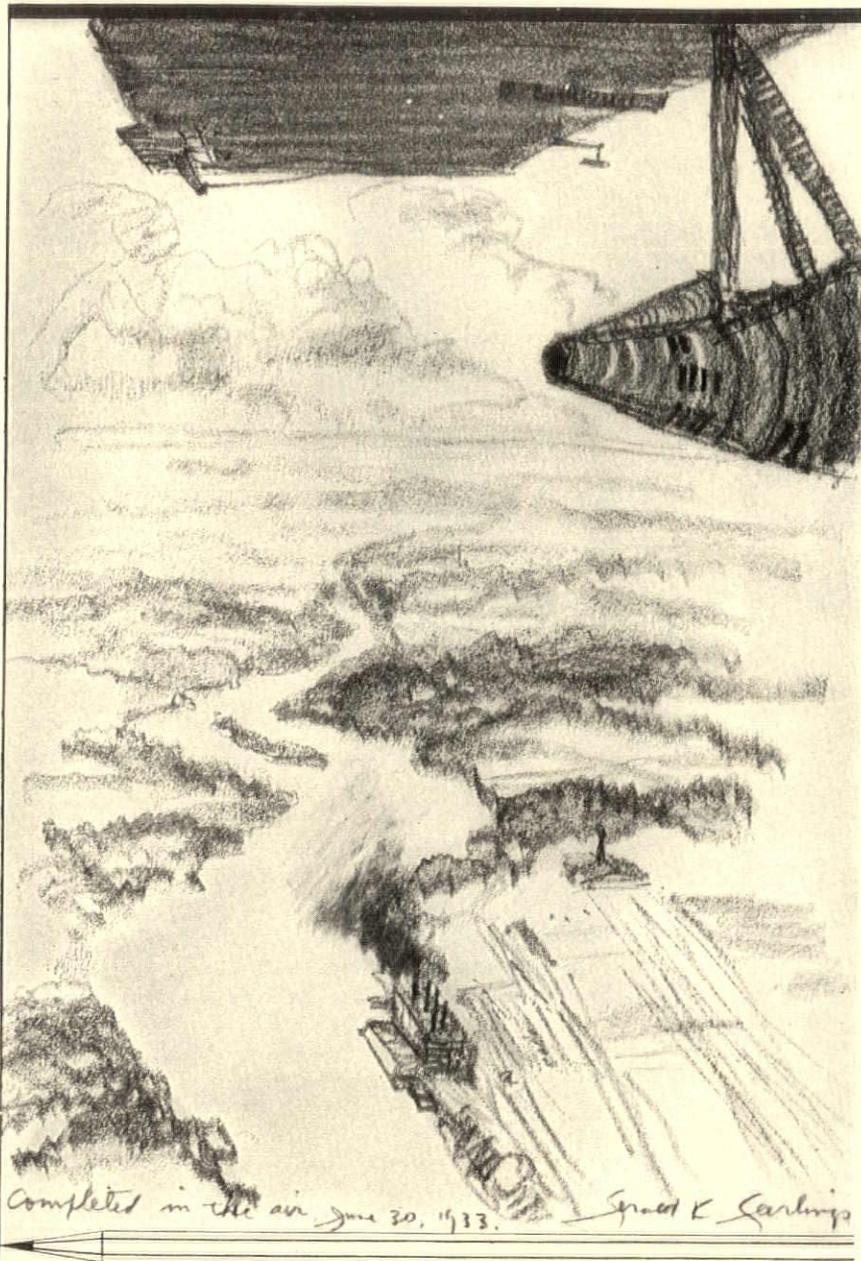
THREE - MINUTE SKETCH FROM AN AEROPLANE

THIS DRAWING WAS MADE by Gerald K. Geerlings while flying from New York to the Chicago Fair. On landing it was "fixed" but that was all. It illustrates one means of making a quick sketch with the broad, flat surface of pencil lead. Mr. Geerlings' notes, jotted down while in the air, read as follows:

"How's the trip?" the co-pilot asks each passenger, beginning with Number 1. I am Number 9. When it is my turn, for answer I show him a sheaf of drawings I've completed since we left Philadelphia. 'Fairly smooth day for drawing', he laconically offers. 'Yes, and a very smooth drawing pencil I'm using,' I add as he passes down the aisle.

"I've drawn from a 'plane before. Previously my chief difficulty has been to get a drawing kit which would do all things, yet consist of a single pencil. This trip I'm depending solely upon one 7B Microtomic Van Dyke drawing pencil, and have no complaints whatsoever to register. For the seven drawings the wood has required whittling only once, while the lead has been pointed twice. Obviously, drawing on a vibrating 'plane which hurtles through space 150 miles an hour is subjecting any pencil to unusually rigorous tests."

FREE SAMPLES of any two degrees of the Microtomic Van Dyke Pencil are yours for the asking. Write to the Eberhard Faber Pencil Co., Dept. AR 9-33, 37 Greenpoint Ave., Brooklyn, N. Y.



NOT AWAY FROM YOU

SHARPEN TOWARD YOU.

CUT SOFT LEAD TOWARD YOU

"I remember scoffing when I was first told that it was an advantage to sharpen thick, soft lead by cutting toward the pencil, as in the lower photograph to the left, instead of away from it, as in the upper one. But it really works. If you have never experimented, or if you have been annoyed

with the common complaint of having soft grades break while sharpening the lead, try drawing the knife toward you. In any case, no matter in which direction you maneuver the knife, be sure to support the end of the lead, or it won't be to blame if it breaks."

—Gerald K. Geerlings.

MICROTOMIC VAN DYKE PENCIL EBERHARD FABER

Made by the New Eberhard Faber Chemical Process. in 18 Consistently Accurate Degrees—7B Softest to 9H Hardest.



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ARCHITECTS AND EVERY ONE INTERESTED WILL FIND HERE THE LATEST AND MOST UP-TO-DATE INFORMATION ON BUILDING EQUIPMENT AND ACTIVITIES IN THE INDUSTRY. THESE PUBLICATIONS MAY BE HAD BY ADDRESSING ARCHITECTURE'S SERVICE BUREAU FOR ARCHITECTS, 597 FIFTH AVENUE, NEW YORK. OUR SERVICE BUREAU WILL OBTAIN ANY OTHER CATALOGUES OR DATA YOU REQUIRE.

GLASS BLOCK BUILDING

Perhaps the most interesting literature that has found its way recently to our desk for comment has been that on the Glass Block Building at the Century of Progress Fair. The prediction has been made that after seeing this building, the profession will see in this material new and interesting possibilities of achievement. Points to be observed are the unlimited color range for effects for both exterior and interior, the answer to many problems of lighting and ventilation, and the elimination of moisture condensation. Glass blocks are already being considered ideal for garages, gas stations, dairies, bottling plants, theatres, recreation buildings, warehouses, factories, and office buildings.

Although forty-five days of rain threw the building operations at the Fair behind schedule, the 27,000 glass blocks of this building bringing the walls to completion were laid by five men in twelve working days of eight hours each—an average speed of over 400 blocks per day per man. If you cannot get to the Fair, the Owens-Illinois Glass Co., of Toledo, will be glad to send you data on glass blocks and the building at Chicago.

NIGHTTIME GOLF

Westinghouse Electric and Manufacturing Co., Edgewater Park, Cleveland, Ohio, issues an eight-page bulletin on "Recommendations for Illuminating Golf Courses." On a Pacific Coast course, the method has had practical trial, and it was found that just as good low score golf could be played at night as during the daylight. We vision the decrease of the bed industry. Get your naps at the tees, nineteenth for breakfast, and off to business after a refreshing night of golf.

"ROMANCE OF THE AIR"

The American Radiator and Standard Sanitary Corp., of 40 West 40th Street, New York City, have recently published a booklet entitled "Romance of the Air." It is interestingly written and illustrated, containing various topics on the value of air to the human body and showing how the latest air conditioning equipment achieves the desired results. Primarily a consumer bulletin, it is nevertheless worth perusing in any study of air conditioning.

ATLANTA TERRA COTTA

We have just received a splendid brochure from the Atlantic Terra Cotta Co., 19 West 44th Street, New York City, dealing with the part played by terra-cotta in the new Cincinnati Union Terminal. 145,000 square feet of terra-cotta was used in this most modern of terminal structures. The brochure gives one a very thorough idea of just how the material was used, showing photographs of both the finished job and detailed scale drawings. Beside its appearance value, the terra-cotta helps achieve a low maintenance expense. In buildings such as the terminal where dust accumulates, the terra-cotta walls are easily and readily washable.

STURTEVANT

Catalogue No. 392 from the B. T. Sturtevant Co., Hyde Park, Boston, Mass., covers the complete line of Sturtevant Air Conditioning Units. The catalogue is so printed that unusual ease of reading is possible, and the illustrations are sizeable and clear. Send for your copy.

DRAFTING-ROOM FURNITURE

How about your drafting-room equipment? Are you all primed for the new era in building? The Hamilton Manufacturing Co., of Two Rivers, Wis., have a good slogan as regards your office needs: "Hamiltonize and Economize." Their latest catalogue, just received, is replete with data on the latest drafting-room equipment. Before purchasing new equipment you will want to at least see this catalogue.

SIMP-L-ON FURRING

The Simplon Products Corporation, of 551 Fifth Avenue, New York City, describe in their recently published folder their Simp-L-on Furring System, its advantages, purposes, and specification requirements. The system is said to eliminate damp plaster walls, corrosion, and insure speedier construction and more rigidity.

MODULATION VALVES

Bulletin from Barnes & Jones, 128 Brookside Avenue, Jamaica Plains, Boston, gives details on their Modulation Valves. They are produced for use on either open return line vapor systems or vacuum systems. They allow partial or entire heating of radiator as desired and enable heating of a radiator independently of other radiators in the system.

BAKELITE

The Bakelite Corp., of 247 Park Avenue, New York City, answers the question "What is Bakelite?" in a booklet entitled "The Versatile Service of Bakelite Resinoid." Sketched briefly are the origin, manufacture, and industrial applications of Bakelite products created from the initial resinoid. It is a very readable booklet, worth possessing.

COPPER-ARMORED SISALKRAFT

Announcement is made by the Sisalkraft Co. of a new development in its line of building papers, called Copper Armored Sisalkraft. It is described as a combination of a one-ounce (per sq. ft.) sheet of electro-deposit copper with Sisalkraft and for the present will be marketed in rolls ten inches wide for flashing door and window openings. Sample on request.

TAKING THE PLACE OF RADIATORS

Bulletin No. 6 comes from the Commodore Heaters Corp., 11 West 42d Street, New York City. The Convectofin heating principle is stated simply, its advantages illustrated, various types of installations photographically shown, and heating capacity tables given. Much new data is included. Copies on request.

(Continued on page 16)

SHONNARD MOTOR STAIRWAYS

EQUIPPED WITH PATENTED
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*Full specifications will be found in Sweet's Catalog,
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(Continued from page 14)

"ROBERTSON BONDED-METAL"

The Mellon Institute of Industrial Research, University of Pittsburgh, has released data on a new product—"Robertson Bonded-Metal"—developed to meet the need of the resin-laminating industry. The new material facilitates the production of decorative resin finishes and economies in time and material are said to be noticeably secured. Copies of the research report relating to "R-B-M" and to its use in resin laminating will be sent to architects and engineers upon their request.

COOLING TOWERS

Bulletins from the Cooling Tower Company, Inc., 15 John Street, New York City, contain interesting data on its Mechanical Draft and Atmospheric Cooling Towers. One of its installations, illustrated in the bulletin, is the forced draft cooling tower installed on Building No. 10, Rockefeller Center, New York City. These bulletins are of reference value.

HOME INSULATION

The Johns-Manville Architectural Service sends a bulletin on Home Insulation which is well gotten up and should be useful in your work. It treats of the application of J-M Rock Wool, available in two forms. Type A is blown by compressed air into spaces between studs in outer walls. Type B is furnished in resilient bats. Ample technical data and specification directions are furnished.

GYPSTEEL PLANK

The Structural Gypsum Corp., of 535 Fifth Avenue, New York City, has issued a substantial, well-illustrated brochure on Gypsteel Gypsum Plank. In addition to information on its manufacture, use, and advantages, are specification directions and details which make it a desirable part of your reference files.

ODOR FILTER

The Consolidated Air Conditioning Co., of 192 Lexington Avenue, New York City, shows in its recently published bulletin how positive odor removal can be secured at reasonable cost with the Consolidated Odor Filter. Bulletin on request.

COOLERS AND FANS

Bulletins Nos. 2904 and 475C from the Buffalo Forge Company, Buffalo, N. Y., treat of Unit Coolers—description, illustration, and rating tables—and Electric Ventilating Fans. The latter are useful for supplying air for drying systems, cooling generators, and exhausting heat and odors.

FIREBOX BOILERS

Catalogue No. 90b from the Kewanee Boiler Corp., Kewanee, Ill., is a very complete exposition of its Firebox Boilers. The specification tables and blue-prints make it a valuable working tool in any architect's or engineer's office. Make sure you have a copy for your working file.

ARCHITECTURAL PORCELAIN-ENAMEL

A recent folder from the Porcelain Enamel and Mfg. Co., of Easton Avenue, Baltimore, Md., features especially the Stran-Steel Good Housekeeping House at the Century of Progress Fair as the first successful all porcelain-enamel house. Letters from various leading architects are included, commending results they have achieved with the use of "Glasiron Macotta." The face of this product is Pemco Architectural Porcelain Enamel.

RUSTLESS SCREENS

Booklet from the Burrowes Corporation, of Portland, Me., furnishes information regarding its experience and ability to assist on problems of screening and weather-stripping. The booklet is entitled "How to Measure for Burrowes Rustless Screens."

BEER

We still are getting literature on Beer Dispensing Equipment. This time from Robt. M. Green & Sons, 1413 Vine Street, Philadelphia. Their latest Draft Beer Dispensers are finished in stainless steel, have copper linings, block tin coils, and compressed cork insulation, with provision for either electric refrigeration or direct icing. They are the manufacturers of the Green Polar Soda Fountains.

THE INTEGRA

Is the new one-piece toilet just announced by the Kohler Company, of Kohler, Wis. This being the season for one-piece suits, the announcement should arouse your interest and make you send for literature and illustration. Smart modern design, true syphon jet, and water action that is vigorous but quiet are the heralded features. Lack of rubber gaskets or brass connections make for increased sanitation and easier cleaning.

VENTILATING FANS

A new, improved line of Emerson Ventilating Fans for the home kitchen is announced by the Emerson Electric Mfg. Co., of 2018 Washington Avenue, St. Louis, Mo. A circular, A. I. A. 30d1, describes fully this new line of reversible fans for quiet, effective home ventilation.

SHOWER-BATH COMPARTMENTS

The Fiat Metal Mfg. Co., of 1201 Roscoe Street, Chicago, has issued a new A. I. A. file folder showing their latest Shower Bath Compartment and equipment. Construction details and data on various models is included for handy reference.

DISH-WASHING EQUIPMENT

A compact new Colt Autosan Dishwashing Machine is fully described in the new Colt catalogue. Blue prints, specifications, and engineering data on their various models are included. If your Colt file does not contain this latest catalogue, send for it. Autosan Division, Colt's Patent Fire Arms Mfg. Co., Hartford, Conn.

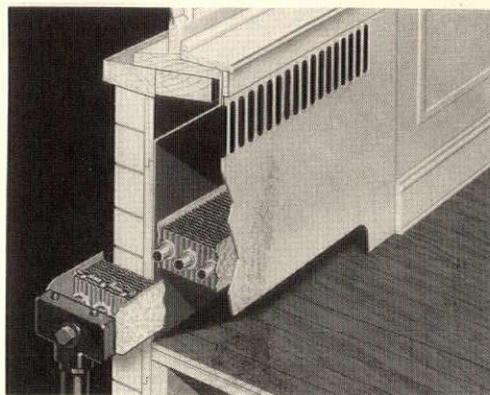
LITH

A Mitchell-Rand Mfg. Co. paint recommended as an efficient paint for one-coat applications on Celotex, Insulite, Treecraft, J/M Lumber, Gold Bond, Masonite, Temlok, and other fibrous or highly absorbent surfaces. It comes in all standard colors, black and white, and can be applied without sizing. Further information from the company at 51 Murray Street, New York City.

INLAND HANDBOOK

The Inland Steel Co., of Chicago, has just published a practical handbook on Inland Sheet and Strip Steel Products. It covers Standard Extras and Differentials, Sheet Weights and Bundling Tables, Trade Customs and Practices. It contains 64 pages of useful information to the buyer of steel sheets and strips.

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COPPER RADIATORS**



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SEE SWEET'S CATALOG, PAGE D-414

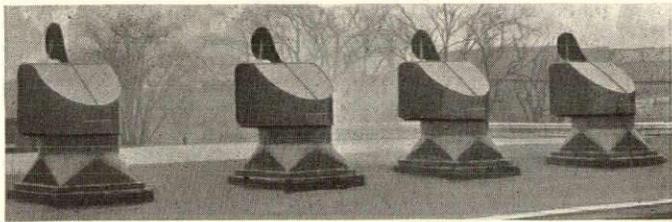
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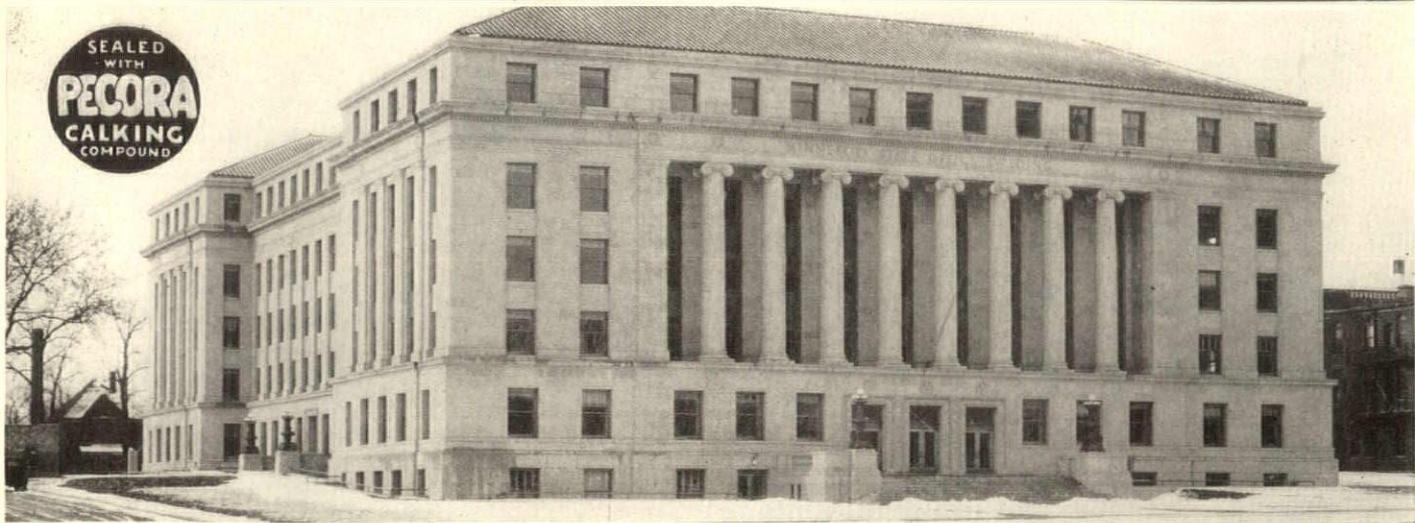
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WHERE TO BUY

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REFER TO PAGE 14 FOR ANNOUNCEMENTS OF THE MOST UP-TO-DATE PUBLICATIONS OF MANUFACTURERS.



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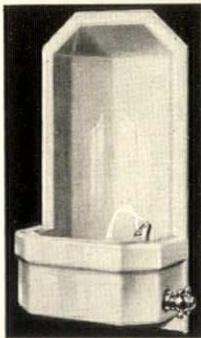
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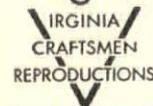
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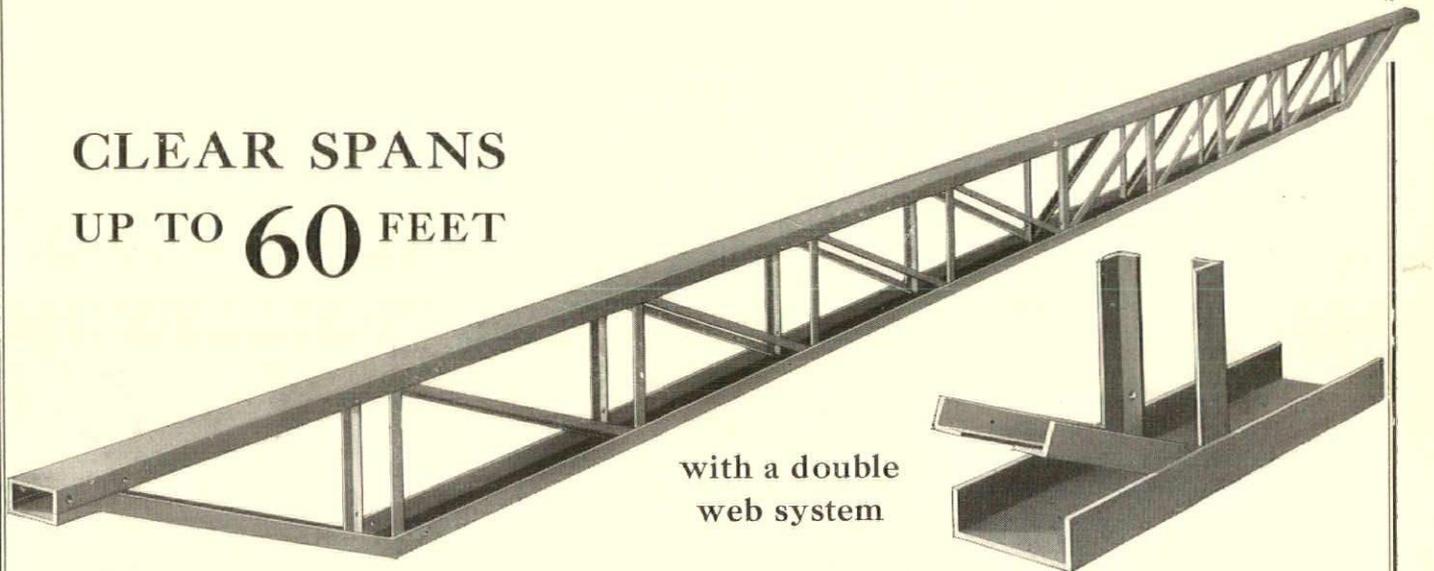
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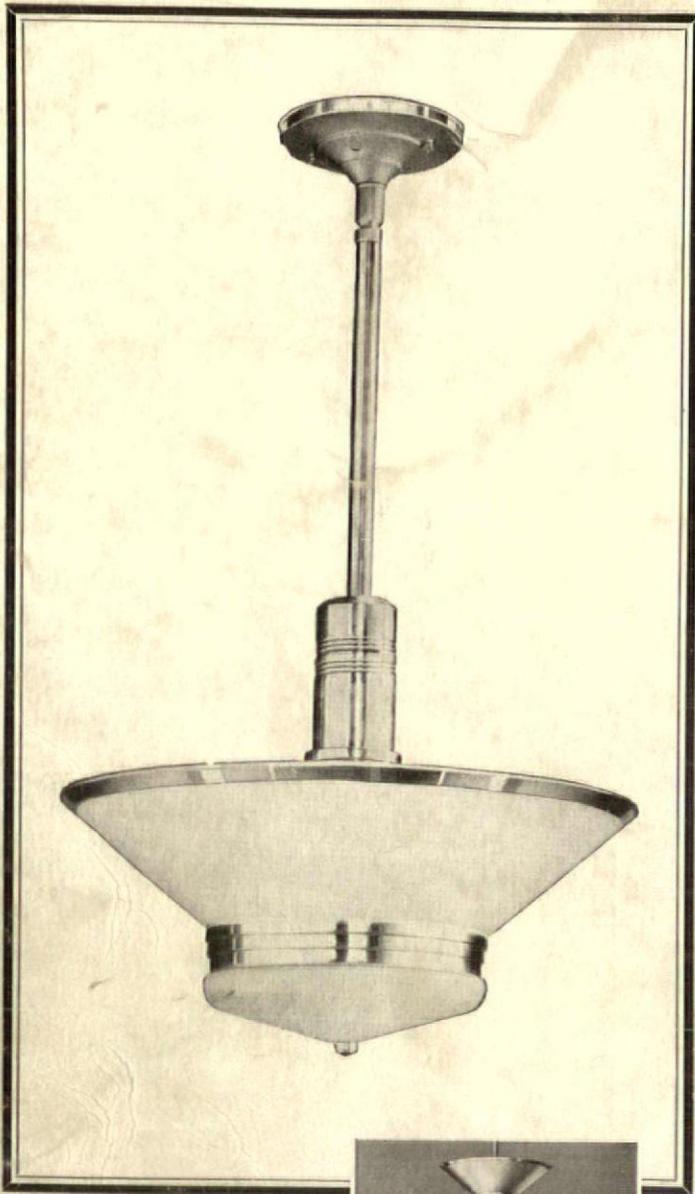


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