

The AMERICAN ARCHITECT

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The Cover

A STUDY for a mural by J. Monroe Hewlett, for the Providence National Bank, Providence, R. I., is the subject used on this month's cover. This mural is one of a series of five that depict the industrial and commercial history of Providence. The building in the background is the Joseph Brown Mansion built in 1774, later the office of the Providence National Bank, which was established in 1781. In the foreground is seen the ship *Ann* and Hope with Commodore Whipple in front.

The architects of the Providence National Bank were Howe & Church.

J. Monroe Hewlett, member of the firm of Lord and Hewlett, architects, New York, and mural painter, is a Fellow and first vice-president of the American Institute of Architects.

Next Month

PUBLICITY—How architects in Pittsburgh and Altoona are selling the man in the street.

COMMUNITY PLANNING—A new idea.

ACCOUNTING—An accounting system, easy to use, and fool-proof.

DETAILING—How to detail doors.

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Cover, a water color by J. Monroe Hewlett

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BETHLEHEM

The COMPETITION problem

By Benjamin F. Betts, A.I.A.

COMPETITIONS have long presented a vexing problem to the architectural profession. To many architects the question naturally arises as to why competitions are necessary as a means of selecting an architect. To laymen competitions seem to be the logical method of choosing an individual or firm qualified to provide a satisfactory solution to their building problem. While it is not customary to hold competitions as a means of selecting a lawyer or doctor, in the field of creative art the procedure is fairly well established.

Through the efforts of the American Institute of Architects the conditions under which architectural competitions are held are today better than at any time in history. Competitions conducted under the code of the Institute are probably as fair and as satisfactory as any competition can be. The fly in the ointment, however, occurs when originators of a competition refuse to conduct it under the conditions insisted upon by the Institute.

A SITUATION of this kind has arisen recently in a city in New York State. The school board of this city is holding a competition for a school and refuses to conduct it in accordance with the competition code of the Institute on the grounds that it "will not be dictated to by any organization." Local architects, members of the Institute, invited to enter the competition informed the board that participating in an unapproved competition laid them open to censure by the Institute and refused to compete.

The board intends to judge the competition, and the members of the Institute rightfully argue that a matter as technical as a school building should not be judged by a jury of laymen. The school board in turn states that lawyers submit their cases to laymen juries for decision. But it forgets that there are judges, experts in legal matters, to whom the lawyers may appeal, and who are empowered to make a binding decision.

THE position taken by the board narrows the field down to architects who are not members of the Institute. As a result certain architects well qualified to render the city adequate service are penalized. An approved competition does not bar architects who are not members of the Institute from competing, but does assure a properly prepared program fairly conducted and that the opportunity has been made available for securing the best talent.

In cases of this kind the Institute can not remain passive without injustice to its members. After an unapproved competition has been started there is, however, little that can be done about it. This only serves to emphasize the urgent necessity that exists for greater aggressiveness in informing the public concerning architecture. A proper presentation of the competition question would forestall competitions that are not open to all architects and that as a result may not be held in the best interest of the public.

TELLING THE "Man in the Street" through the publicity of the A.I.A.



• • • • •
FACTS

- 1..A. I. A. formed Committee on Public Information.
- 2..A journalist was engaged as a publicist.
- 3..A. I. A. Executive Secretary transmits news to the publicist.
- 4..Committee approves stories to be released.
- 5..Institute publicity is national in scope.

THOUGHTS

- 1..Would advertising overthrow a tradition that surrounds architecture with the dignity and importance of an aristocratic profession?
 - 2..Would a national advertising campaign result in newspapers and other publications printing the news of architecture less frequently
- • • • •

By WILLIAM HARMON BEERS
Chairman Committee on Public Information, A. I. A.

THE question of publicity or public information as applied to the profession of architecture is becoming one of increasing importance.

Some years back, far-sighted men, members of the American Institute of Architects, realized this and formed a standing committee of the Institute called the Committee on Publications and Public Information. This name has since been changed to the Committee on Public Information. At its inception it perhaps was not realized the part such work was to play in Institute activities but, after several years had passed, the need for increased appropriations for this committee was felt and appreciated. By chance I was made Chairman at that time and found my associates to be men of vision.

We decided that our first work was to make a careful survey and to find out what plan of campaign would be best suited to place the profession of architecture before the layman. In doing this, thoughtful consideration had to be given to the method of approach and whether advertising should be included. None of us were experts in publicity and the need of advice was strongly felt. As the most widespread publicity is to be had in the daily newspapers, a canvass was made among the managing editors of several of the New York dailies with the result that a well-known publicist was approached and asked if he would be willing to serve as our advisor. At that time the appropriation for our Committee was small and at

great personal sacrifice, this publicist consented to help. Through his knowledge and experience and by careful study the Committee came to the following conclusions and laid out the following program:

Public Information, in its most general sense, implies the widespread diffusion of knowledge not readily available otherwise than through channels opened up by the art or discipline or interest of the special field to which the information relates. Public information, adjusted to the situation which confronted us as the Committee on Public Information, demanded the setting up of a system functioning approximately as journalism functions, the test of the worth of this system residing in its capacity to sympathize in spirit and practice with the processes of journalism. This general statement presupposes that we are bringing architecture, which for our purposes, we may call a discipline, into association with other disciplines in order to promote both the good of the community and the good of a profession—or art.

Experience has shown that the natural source of public information in organizations of this kind is the office of the Executive Secretary. Here the business of the Institute centers, and here is the home of its publications. The Executive Office, therefore, is normally the news center of the Institute, and any other view is both arbitrary and unsound, leading only to awkward practice and to cumbersome, ineffective (Continued on page 88)

What is This MODERN ARCHITECTURE Trying to Express?



By
GEORGE
HOWE

A. I. A.
of
Howe & Lescaze
Architects

THE term "Modern Architecture" has come to cover such a multitude of sins as well as virtues as to fall into disfavor with the more serious advocates of contemporary design. Nevertheless, it does mean *something*, and I prefer to limit the meaning rather than discard it in favor of some other term as yet devoid of connotation.

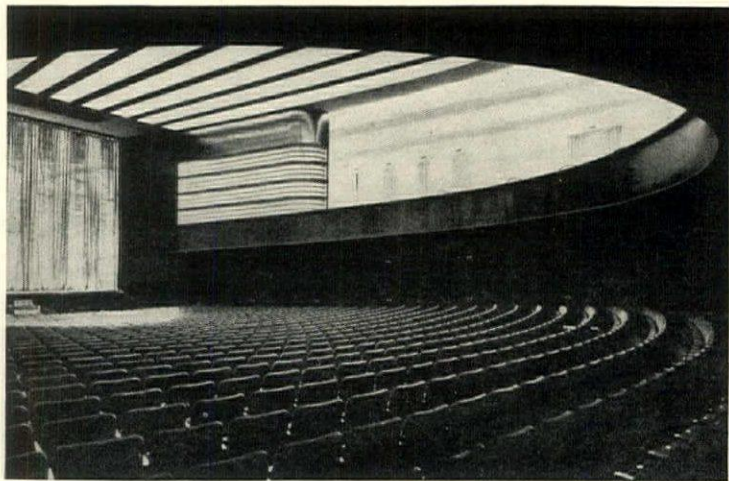
Modern architecture, then, includes properly all those buildings in which an effort is apparent to return to sound tradition, as opposed to stylistic tradition, that is to say to the interpretation of function, spiritual as well as material, logically and imaginatively, in terms of modern materials, internally structural as well as visible. Modern architecture is not produced by the mere application of startling superficial ornament, but represents a fundamental and organic change in point of view toward the problems of life brought about by the economic, sociological and philosophic modifications in our outlook which have accompanied the development of science, and its mechanistic and humane application to daily life.

It follows that modern architecture has very little to do with what is generally understood as modern decoration, which is for the moment the product of individual fancy, untrammelled by basic restraints, and as variable and unimportant as the length of a woman's skirt. Fashion may change with the quarterly dividend, but the fundamental principles of architecture remain unalterable.

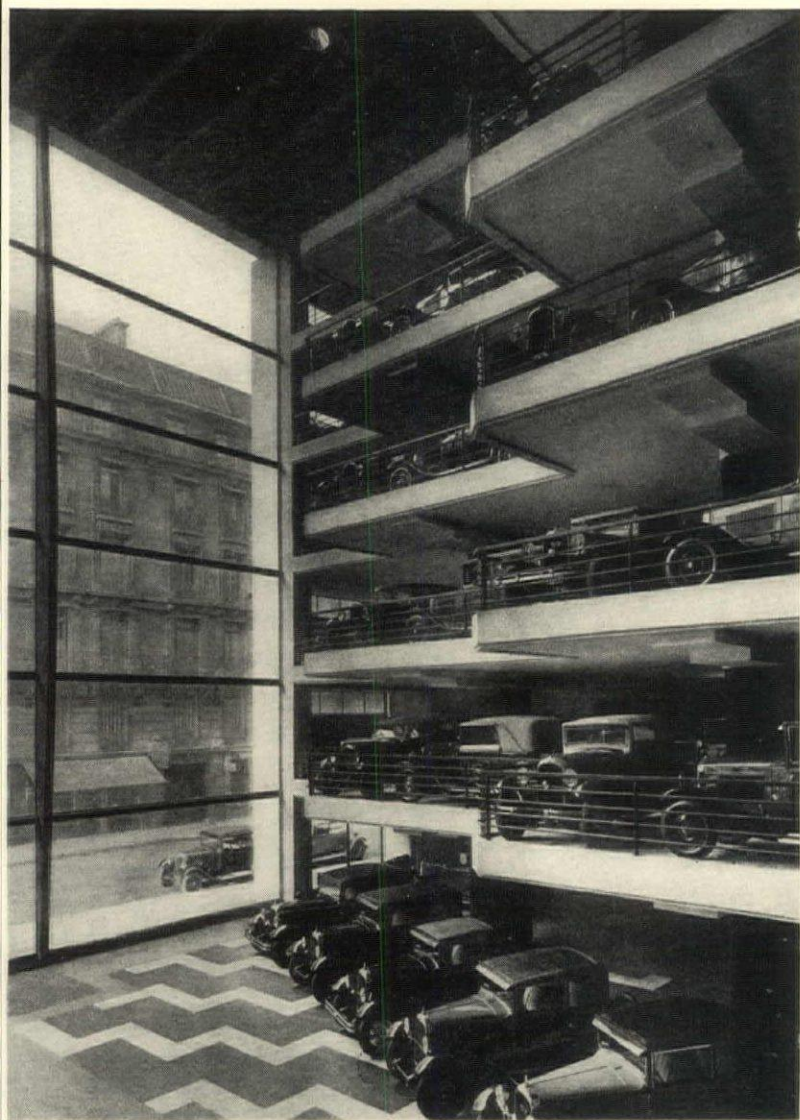
These principles were sufficiently obvious and easy to apprehend when every functional problem could be solved by the simple formula of four walls and a roof, when a building was not yet a network of mechanical veins and arteries almost as complicated as the human body, and when the available building materials imposed

a strictly gravitational equilibrium. With the application of science to daily life, however, has appeared an infinite variety of new and specialized functions, each requiring a new formula, a complication of internal mechanisms which have strained the ancient framework, and a new form of construction capable of holding seemingly impossible masses suspended in space.

Faced all at once with so many problems and possibilities it was only natural that men should flounder for a while in their search for a coherent architectural expression. It was also natural that they should stubbornly adhere to traditional external forms while readily accepting fundamental internal changes, as they will defend a creed with their lives, though its spiritual significance may long since have been forgotten. While they were driven by necessity to devise new forms in plan to meet new needs, they continued to borrow the external garments of the past which seemed to them best to fit their imaginative requirements, as, for instance, the Greek temple for the classic dignity of the bank, and the Gothic tower for the aspirations of the five and ten cent store. The fit was obviously not very exact, for a bank is not a place of solemn festival, but a maze of marble and bronze, humming with the machinery of communication, reproduction, computation and record, where men drive hard bargains, and the five and ten cent store is not the resort of mystical adorers, but a place of barter,



In a theater the stage is the center of interest. This is expressed in the auditorium of the Universum-Lichtspieltheater in Berlin by the design which directs and focuses attention on the proscenium



The psychology of selling is expressed in the Marbeuf Auto Sales Building, Paris, by the use of glass that makes the salesroom virtually a mammoth display window

distinguished by gold letters on a vermillion ground, crying aloud its cheap, if useful, wares.

Having adopted fancy dress as a disguise it followed that men found every useful article of daily life an encumbrance. Having no pockets for their pipes and pouches they were obliged to carry them in ancient reticules, and it was with difficulty they concealed their felt hats behind their backs. In architectural terms, they dressed up the water-tank as the tower of Independence Hall, the smoke-stack as a mortuary chapel, and, with ostrich-like oblivion, concealed everything modern that could be concealed behind something that looked as much as possible like something else.

At the same time, in order to give material expression to their anomalous dreams, men forced building materials to perform prodigies of acrobaticism. Huge projecting corbels were seen suspended hundreds of feet above the street on steel threads, while walls and pediments of incredibly solid appearance remained poised on brackets until the last stone of the hollow granite base or column completed the palpably massive substructure; unless, necessity impelling, the imperfectly proportioned colonnade of the second floor found itself obliged to remain precariously balanced on the brittle edge of a continuous plate-glass store-front.

Now it is obvious that the bank and chain store, as well

as all the other complicated and multifarious functions of modern life, have a peculiar dignity of their own, capable of an appropriate architectural expression, and that they are only made ridiculous by being clothed in the borrowed finery of ancient or mediaeval times. It is also obvious that plumbing, heating, ventilating, electric illumination, and the elevator are as inspiring an evidence of man's material ingenuity as the flying buttress, and that their architectural falsification is a denial of our own genius. Lastly, it is certain that to be able to support great weights at incredible heights, and in unheard of positions, is a feat to be proud of, and that to introduce false supports for the satisfaction of an unthinking optical habit is an absurdity, which is only emphasized by the fact that in meeting our own needs we often find ourselves unable to satisfy our craving for a false structural logic.

Nevertheless, in following out any purpose, however wrongheadedly, men always learn valuable lessons. Furthermore, while architecture in its more monumental expression has remained bound by stylistic tradition, in its more utilitarian and novel expression it has developed an experimental method which has evolved forms of surprising significance. At the same time, in the field of mechanics, simplification has been disclosing a new esthetic in the pursuit of effective utility.

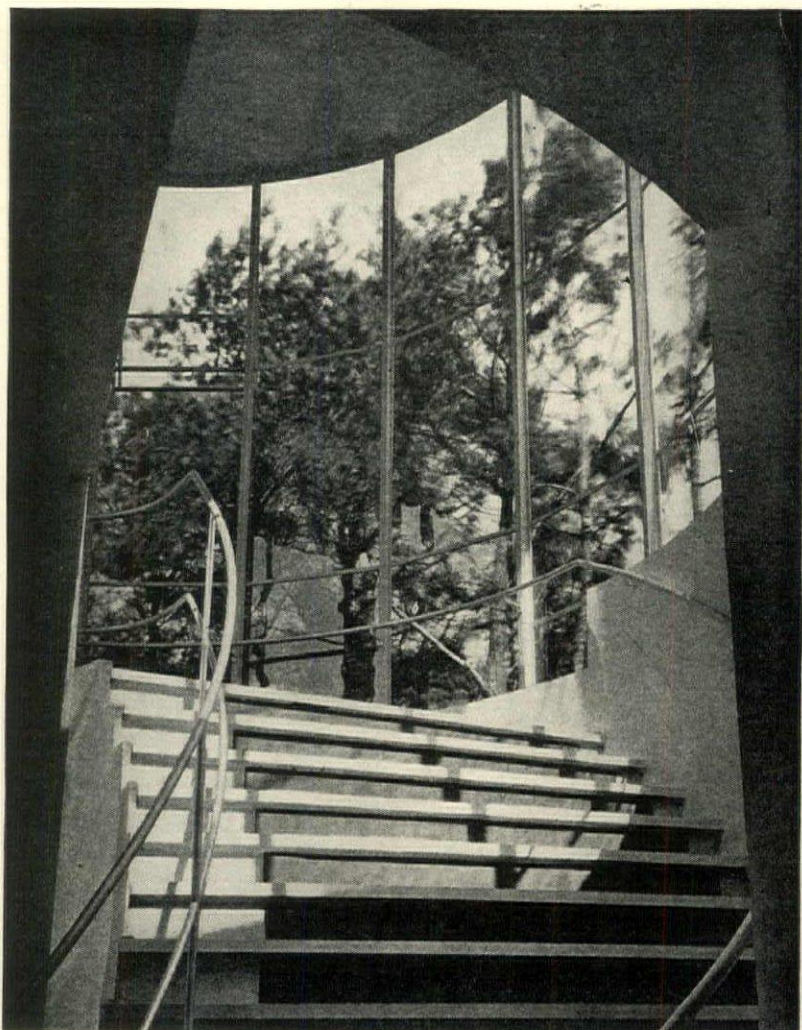
IN these developments it was natural that the community at large and the engineer should take the lead, for the development of a coherent architecture, as of an individual building, involves four stages, at the third of which only the architect, as artist, appears. The first stage involves the formulation of a program by the community, that is to say, a tabulation of its physical and spiritual requirements, together with the order of their interrelation. In other words, the community must learn to know what it wants.

The second stage involves the provision by the engineer of the material means to fulfil the community's program. The third stage involves the assimilation of the spiritual significance of the programme in terms of its material fulfilment, and the ordering of its elements, with due emphasis on the important and subordination of the unimportant, in such a way as to produce a work of art, or, as Clive Bell has comprehensively expressed it, "significant form." This is the duty of the architect, who, at the fourth or decorative stage, must also direct the activities of painters, sculptors and ornamentalists, so as to maintain unity of design in the building, while at the same time giving the widest possible scope to the individual talents of his collaborators.

It is needless to say that, though in theory the functions outlined for public, engineer, architect and decorator are clearly distinguishable, in practice they overlap and become confused to such an extent that one man often assumes the duties of all four. The more completely each can understand and delimit his own functions, however, the better the organization for the development of a coherent architecture will be. As I have said, men learn always by experience, and in the midst of our apparently abortive experiments they have been slowly and painfully acquiring the necessary knowledge to play their parts successfully in the architectural movement, which is still only at its inception.

While so many have been floundering, however, certain pioneers have had the genius to fulfil in themselves, with a certain degree of success, the quadruple function of programme-writer, engineer, architect and decorator, and, while the community was still unprepared to receive their prophetic message, have opened the way for the movement which is assuming such irresistible proportions. It is not surprising that, aided by the easy means of communication of to-day and encouraged by the common needs of civilized men throughout the world, we should find the new idea taking root in many countries at once, in very similar manifestations, and that the list of the names of pioneers should be international. It is not my present purpose to give an historical account of the development of modern architecture, whose beginning goes back well into the last century, nor a complete list of the architects who have contributed signally to it, but a random list of some of its outstanding exponents will serve to indicate its scope.

AMERICA has always been the land of lone prophets without much but posthumous honor in their own country, which has been too busily engaged in exploiting its vast resources to take much interest in the spiritual consequences of its own acts, and Wright, Sullivan and Price were among the first to grasp the architectural possibilities of the new life and the new means of construc-



The therapeutic value of sunlight and fresh air is expressed through the medium of glass in the design of this stairway in a Holland sanitarium

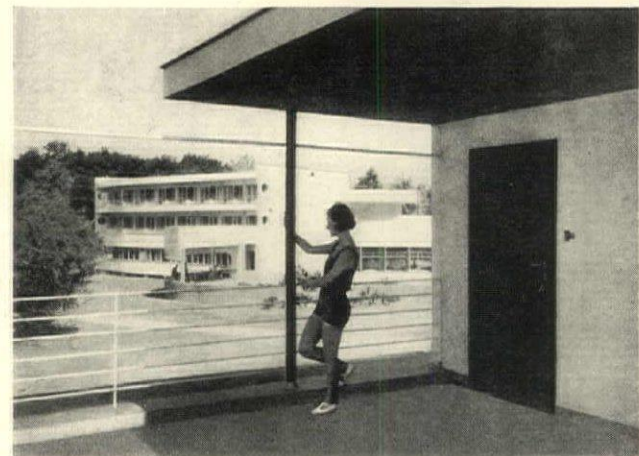


Protection from the weather and an unobstructed view of the athletic field is the problem of the stadium

tion. Their names were known in Europe, and their works reproduced, while they still remained comparatively obscure among their fellow-countrymen. The movement has received its greatest impetus in Germany, however, where the community spirit is well-ordered and progressive, and where such men as Mies Van der Rohe, Mendelsohn, Gropius, Taut and Schweizer, among many



The utilization of modern construction results in a delicacy of form through the replacement of the massiveness of stone with glass and concrete



The importance of healthful out-of-doors recreation is expressed by the use of balconies and terraces

general interest in the subject as any one man. Peret and Garnier are among the early French pioneers, while Lurçat and Siclis have displayed great virtuosity.

In Switzerland, Moser has produced the most striking religious edifice of recent times. In Holland, Oud, Duiker, Byvoet, Brinckmann and Van der Vlucht form a brilliant group. In England there are Robertson and Tait, in Russia, Bourof, one of the most enterprising experimentalists. In America today Wright is still in the van, Neutra and Schindler are producing admirable work in California, and in the East the same tendency is evident in the work of a number of well known architects.

ALL the buildings produced by these men, and they include everything from factories and workmen's houses to hospitals, theatres, churches, schools, public buildings and palatial dwellings, show a distinct and coherent tendency. They are imbued with the deep conviction that an architecture, to be strong, must be universal in its application; that there cannot be one style for the rich man's house, another for the church, another for the office building, and none at all, or worse still a false front, for the workman's house and the factory; that within the building itself there must be unity, as there is in ancient buildings; that it is spiritually stultifying to conceal a power plant in the basement of a pseudo-mystic mediaeval church and a sanitary kitchen in the wing of an imitation peasant's cottage, or to place a pathetic classic colonnade in idiotic juxtaposition

to a row of electric transformers.

The modern architect has returned for his esthetic satisfaction to the use of adequate and well-proportioned volumes, walls, roofs and openings, suitably interpreted in terms of modern building materials, convinced that in the study of these elements there is sufficient scope for experimentation to satisfy our present needs and knowledge. Not the least important among the elements of composition at our disposal are the mechanical devices so essential to our very existence under modern conditions, especially electric illumination, and these have been brought out from their places of shameful concealment to form the basis of innumerable interesting experiments in design.

Of decoration per se you will find little or none in the work of the "modern" architect, for we have reached at present only the third stage in the development of modern architecture, which consists, as I have said, in assimilating the modern programme in terms of modern construction, and reducing it to "significant form." Decoration will develop later in the due and natural course of events, significantly, instead of meaninglessly as at present.

The creation of a simple structural idiom, based on the fundamental elements of architecture, was a prerequisite to its healthy growth. Architecture is the most organic and the least flexible of all the arts. It evolves with slow inexorability, with (Continued on page 106)

others, have produced remarkable and outstanding works.

In France, LeCorbusier, with a native bent for logic, has reduced the elements of the new architecture to philosophic yet practically applicable terms in three brilliant volumes, "Vers une Architecture," "L'Art Décoratif d'Aujourd'hui," and "Urbanisme," and by his works, as well as by his writings, has done as much to stimulate

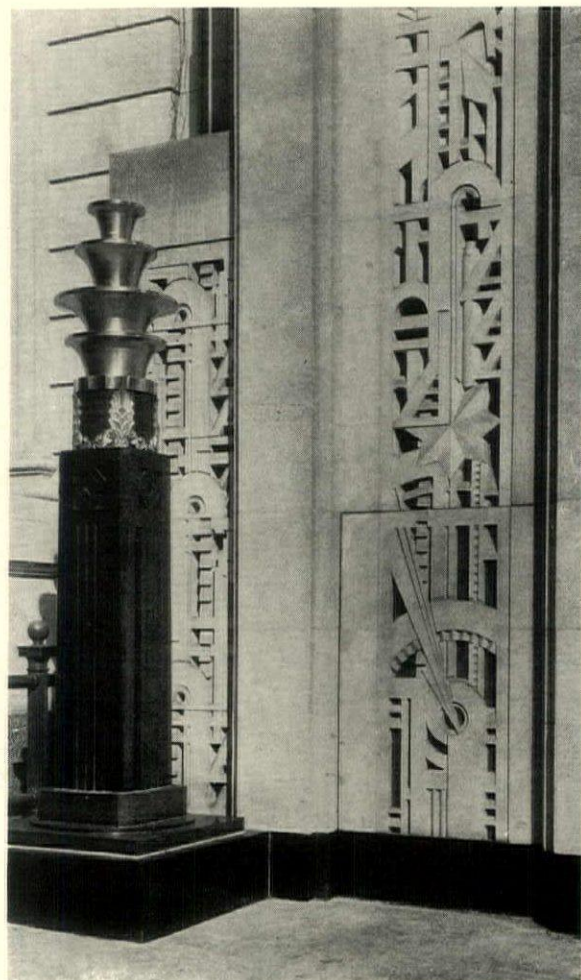


Reflecting
 THE SPIRIT
 OF TODAY

Building for the
 NATIONAL
 TITLE GUARANTY
 COMPANY
 Brooklyn, N. Y.

•
 Corbett, Harrison & MacMurray
 Architects

Photographs by Van Anda



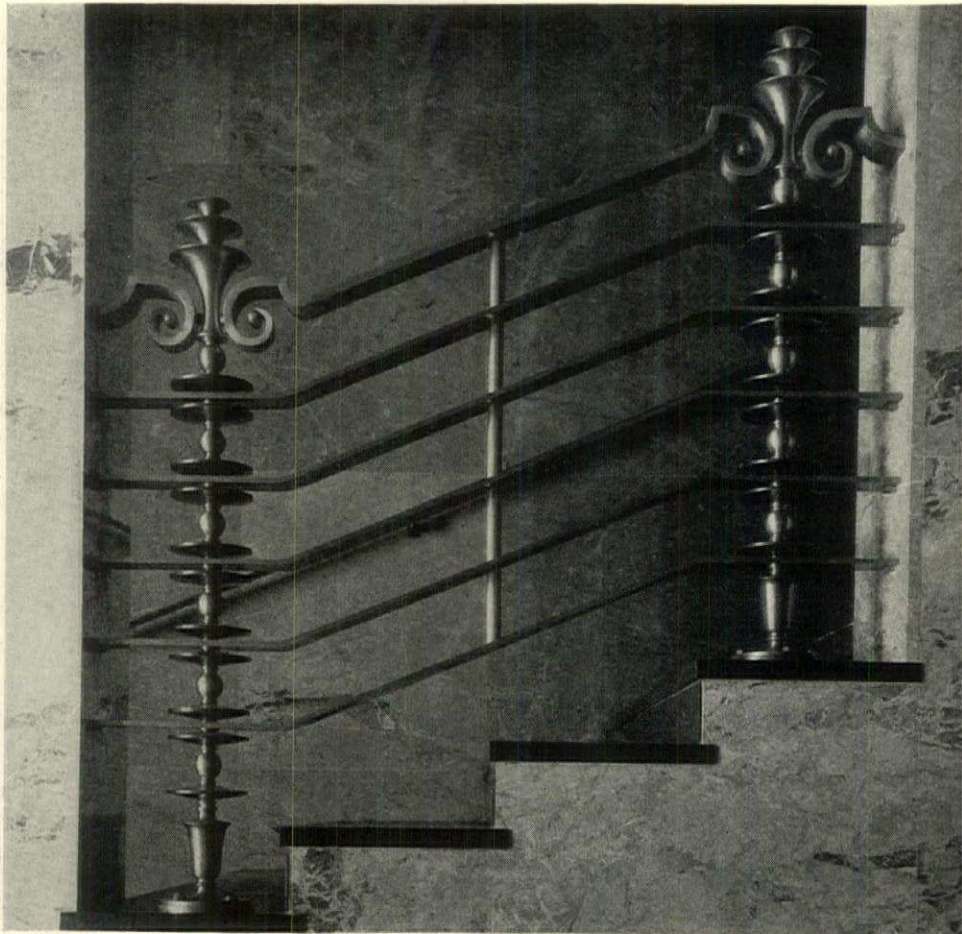
DETAIL OF PIERCED PANEL

The bottom of the panel is a door concealing the emergency and fire tower exits. The door is of pierced limestone secured to a hinged metal frame. The lighting pedestal is of black granite surmounted by an ornament executed in gold leaf bronze



PIERCED PANELS OF LIMESTONE

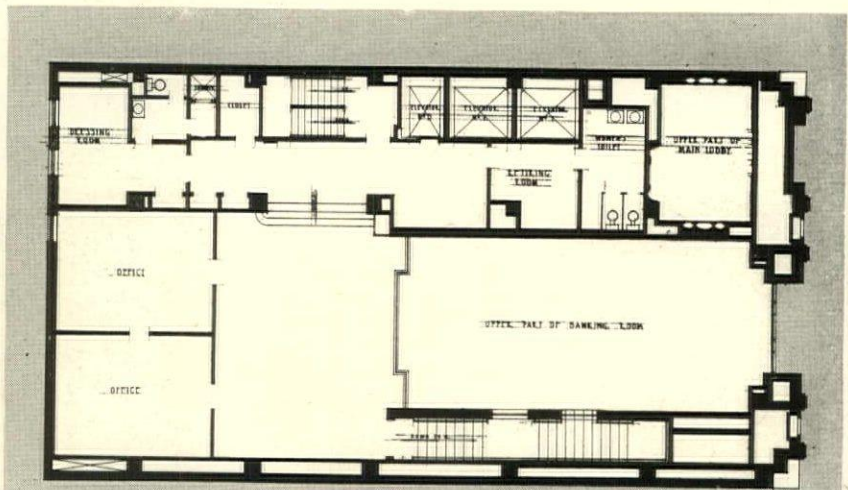
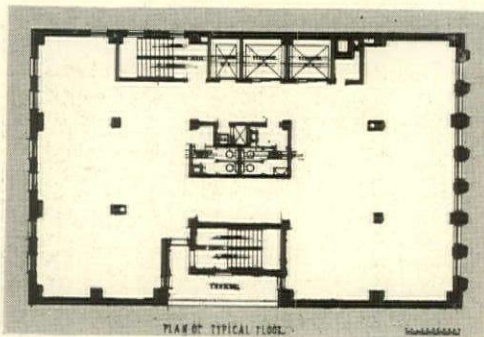
conceal lighting units which throw the pattern into bold relief at night. Flood lights behind the top of the panels emphasize the buttresses and bullnose mouldings of the spandrels above



Building for the
NATIONAL
TITLE
GUARANTY
COMPANY

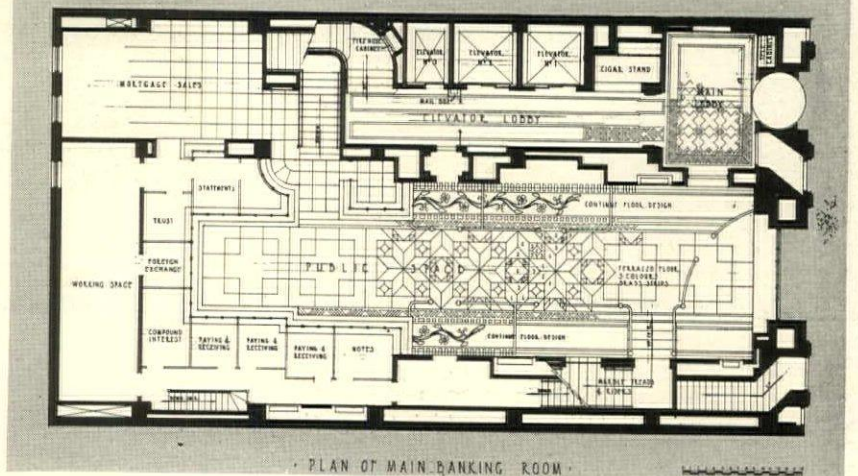
Corbett, Harrison
and MacMurray
Architects

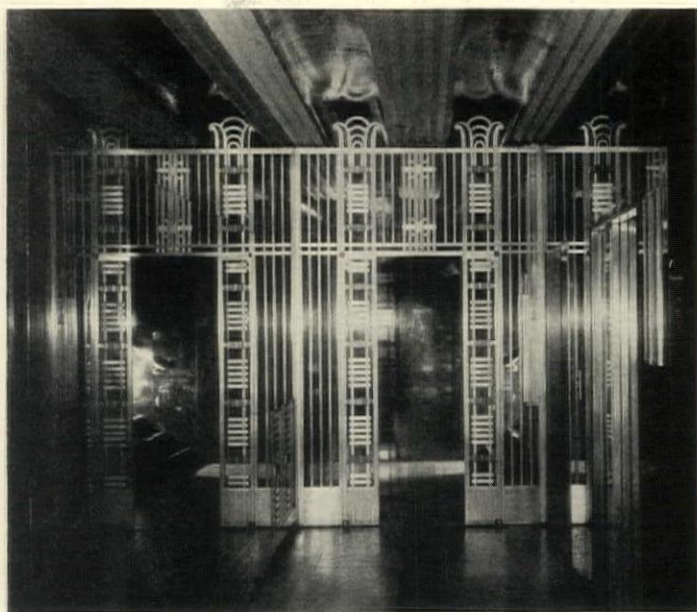
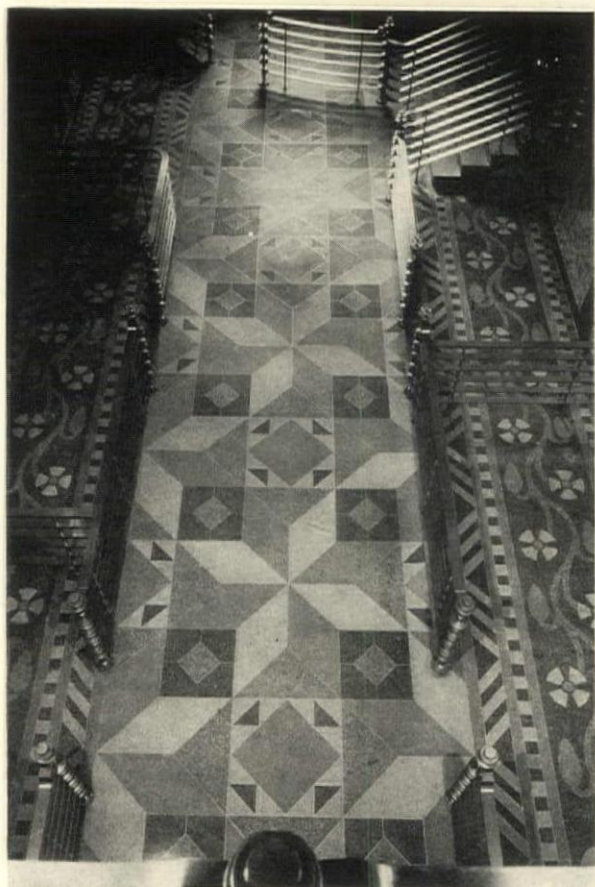
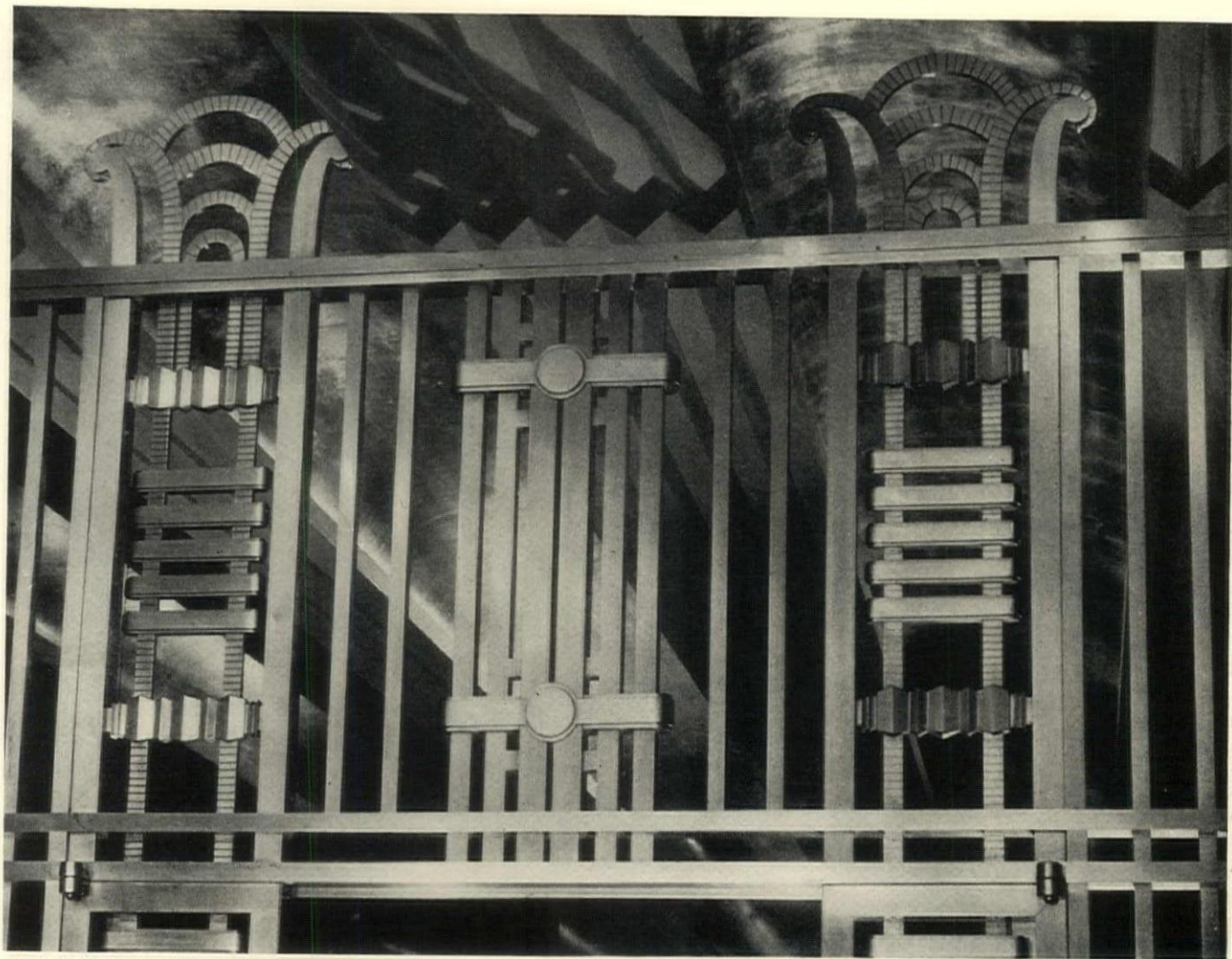
WHITE METAL
and bronze have
been combined in
the design of the
metal work of the
main banking room



FLOOR PLANS

Three floor plans which
show the principal fea-
tures of the layout of
bank and office space
in the building for the
National Title Guaranty
Company, Brooklyn, N. Y.



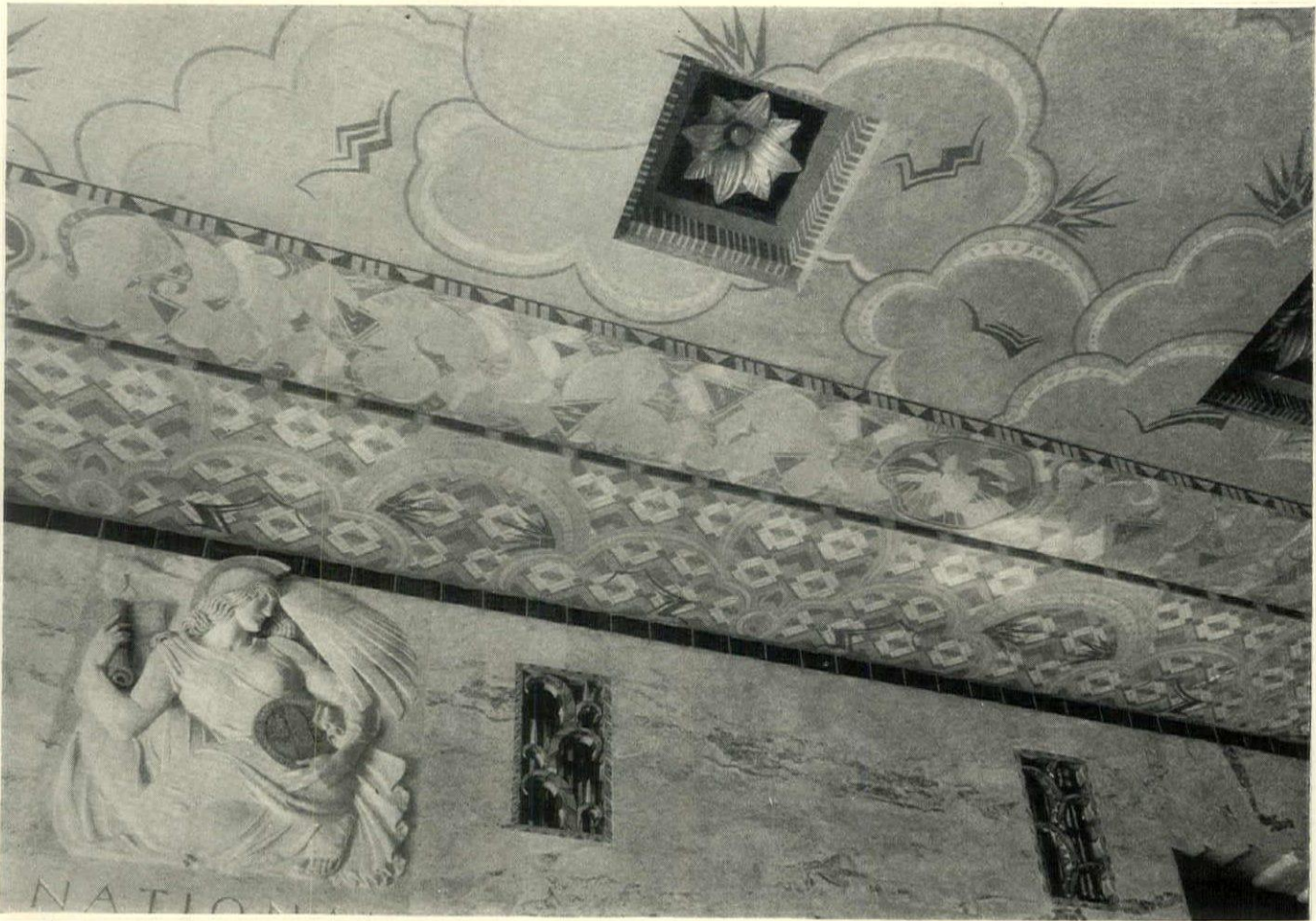


ORNAMENTAL GRILLE

General view and detail of the ornamental grille of white metal of the safe deposit department of the National Title Guaranty Co.

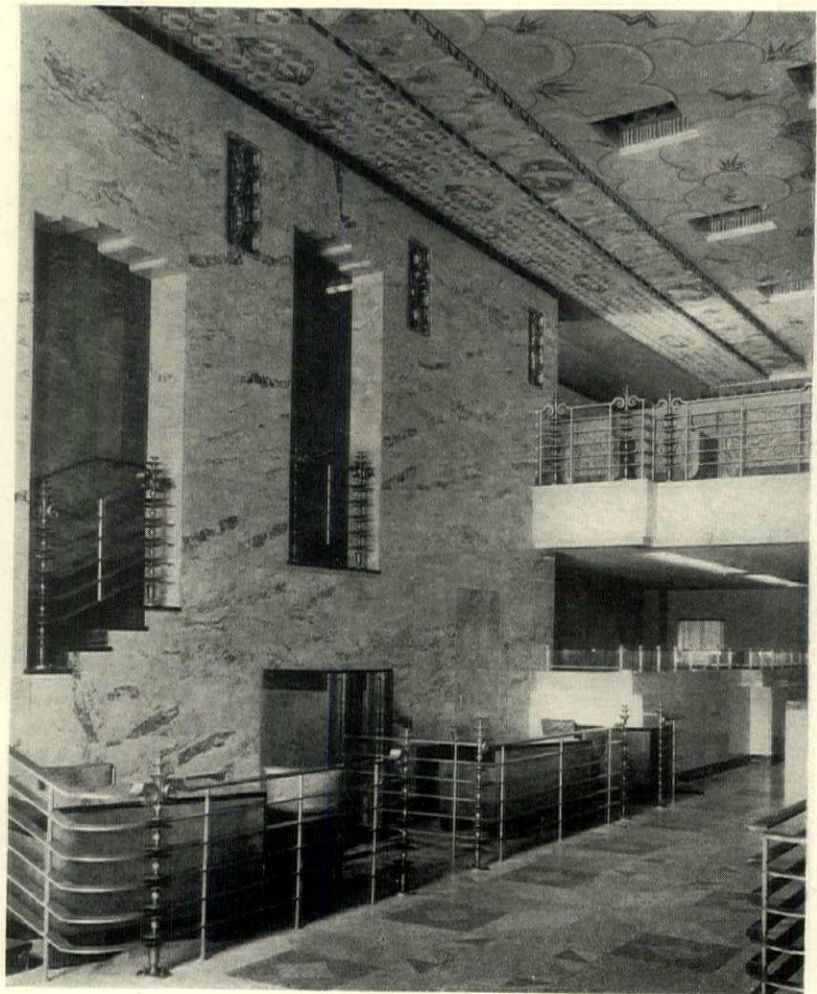
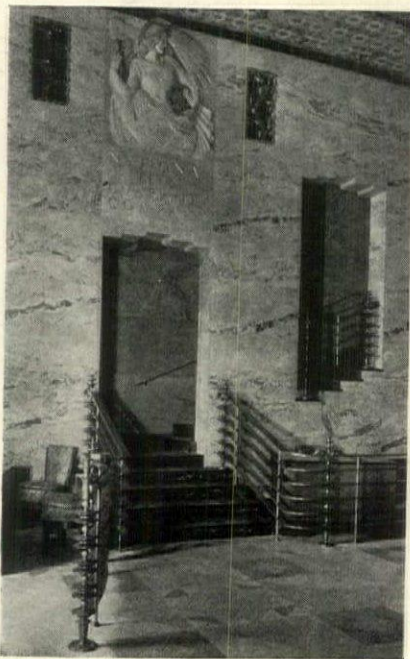
Bright colors in a geometrical pattern keep the terrazzo floors in harmony with the modern note of the main banking room

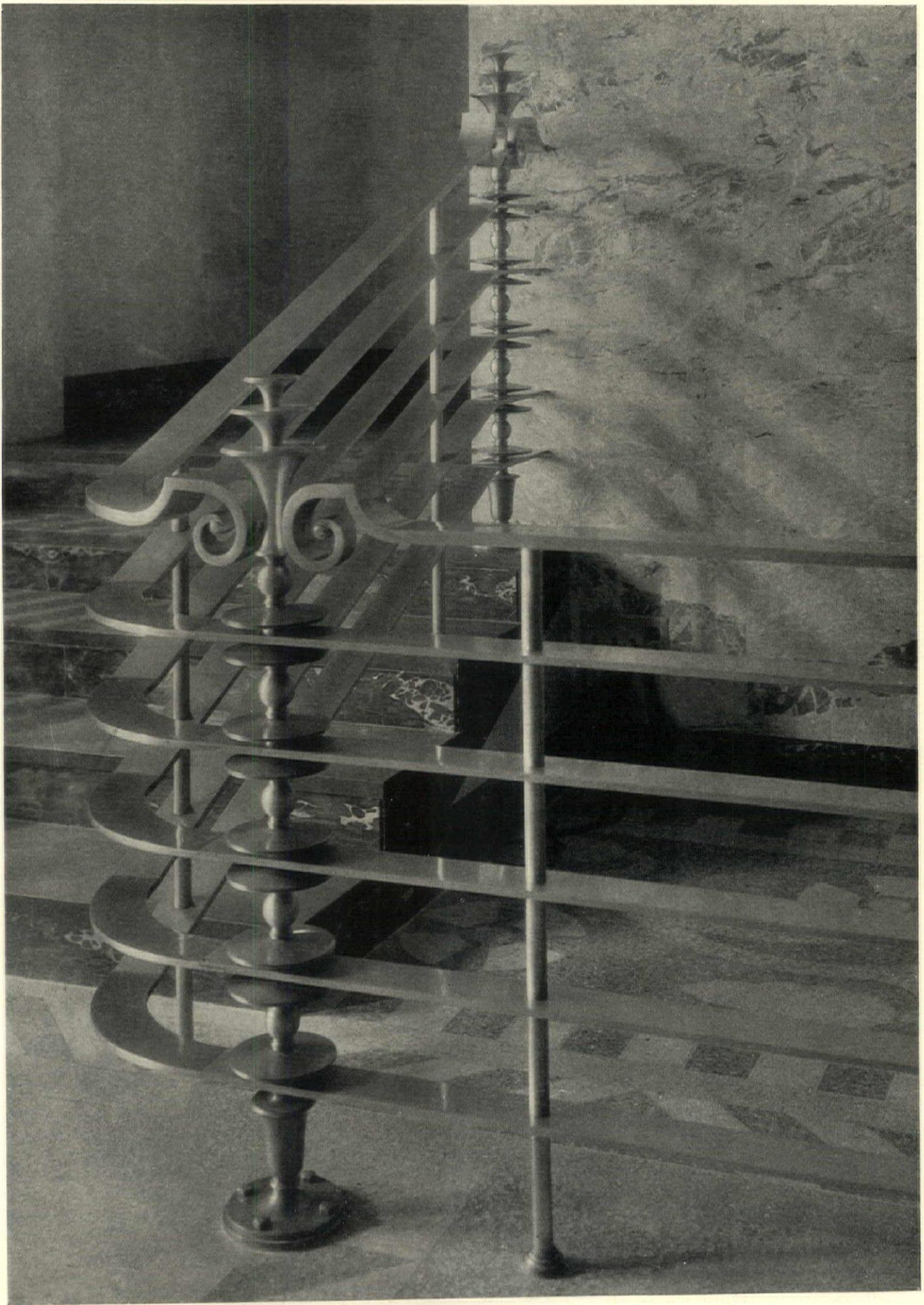
J. B. FRANCO



CEILING IS OF PLASTER

with painted decoration. Walls of dark Loredo Chiaro marble. The flower ornament at the center of the ceiling coffers, or exhaust ventilators, is of plaster. Wall grilles are of wood concealing lighted reflectors that bring out the pattern. Marble figure carved by Renee Chambellan. Corbett, Harrison and MacMurray, architects





BENEDICT NICKEL AND BRONZE

were combined in this fine example of modern craftsmanship. The wall is of dark Loreda Chiaro marble. The base and stair risers are of black golden veined marble; treads are of Belgian black marble.

WASTE SPACE

in the Small House

and

HOW TO AVOID IT

• *Mr. Bien, of Washington, D. C., is a contractor with unusual experience in the building of small houses. His observations on the practical aspects of planning are worthy of serious consideration by architects*

By V. T. H. BIEN

WHY do architects often puzzle and scheme to save the cost of a plumbing stack or a few feet of waste lumber, only to throw away many times these savings in wasted space?

How many times do plans have to be revised because bids are too high? This is work—double work—for the architect, a disappointment for the owner, and the low bidder does not always know whether to be sorry or to be thankful. The architect goes back to his drawing board to seek other ways to “cut the cost.” Different materials are substituted, different types of construction are resorted to and, if these fail, the plans must be revised or the project abandoned.

Personal observation has shown that there are but few plans in which waste space will not account for from 5 to 10 per cent of unnecessary cost. In fact, 15 per cent is not uncommon.

The engineer is schooled in efficiency. If he designs a steam engine he strives for maximum power per pound of steam. If it is a bridge, the design must provide all the strength required, at minimum weight. The same is true in the architectural profession when the designing of buildings is the consideration.

Yet there is surprising indifference to the wisdom of conserving space. Since the cost of a building varies with its size, every foot of wasted space is money thrown away. The conservation of space is particularly important in the case of small houses where usable area is at a premium. The importance of this statement is illustrated by comparison of the two plans of a conventional small house. House No. 1 and House No. 2 are approximately the same size and the floor areas of the principal rooms on the first floor are about the same. At the same

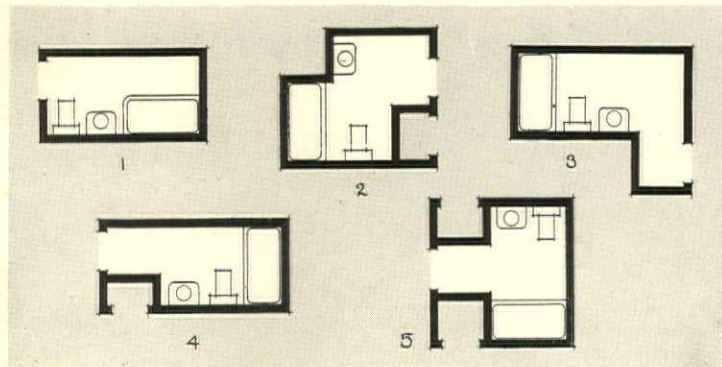
time house No. 2 has a hall of usable proportions while the hall in house No. 1 is but four feet square.

Similarly the bedrooms of both houses have about the same total area but house No. 2 has four bedrooms instead of three as in house No. 1.

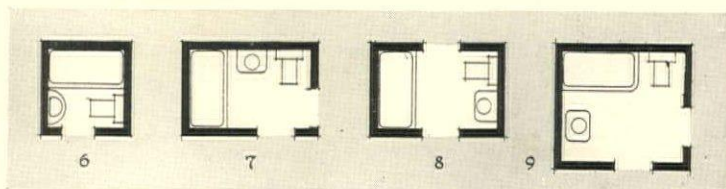
If the total floor area comprised in the principal rooms, including that of the first floor hall, of both houses is compared, the difference is startling. In fact, if No. 1 were enlarged sufficiently to provide as much living space as in No. 2, the cubage would be increased by about 15 per cent, which, at 50c a cubic foot, would amount to \$1700. Many a house project has been abandoned for this amount.

While this discussion will be limited to dwellings, the principles apply to other buildings as well.

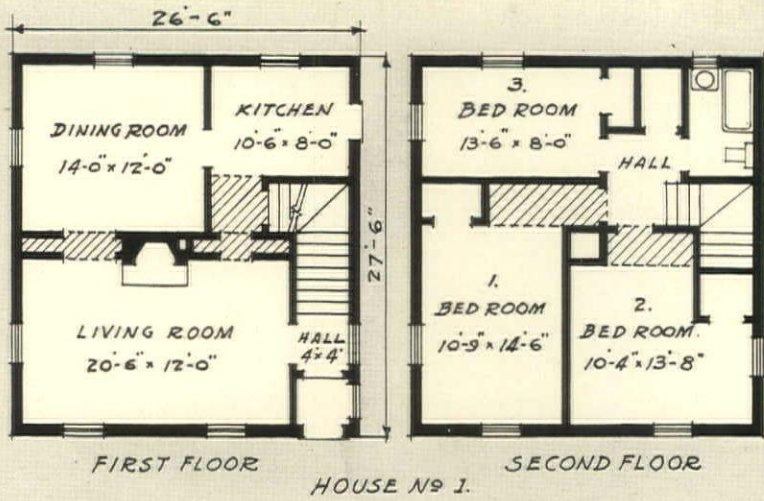
The writer has often noted instances of wasted space in the arrangement of hotel rooms. One such case in-



Bathrooms
20% TOO LARGE

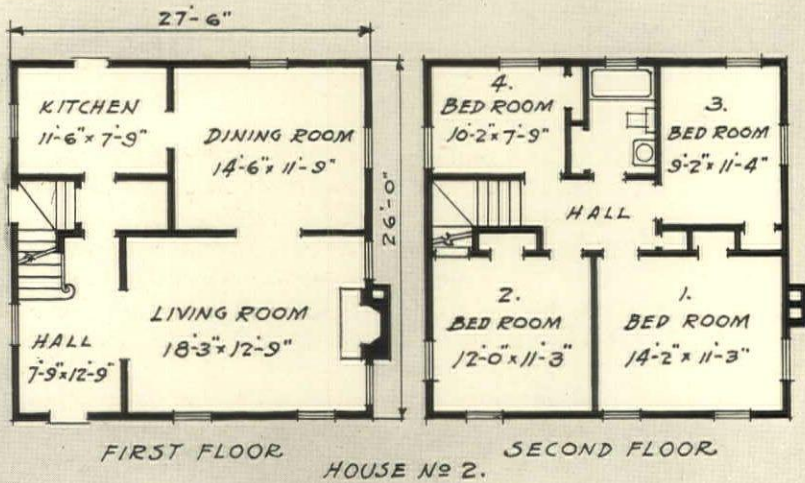


Four Bathrooms
WELL-ARRANGED
and Economical
to Build



12%
SPACE
WASTED

Shaded areas of house No. 1 are wasted areas. House No. 2 contains thirteen square feet less area than house No. 1, yet it has 12% more usable area



Total room areas are respectively 920.5 and 1070 square feet. The efficiency of the plan of one is 63.0% and of the other, 74.9%

12%
SAVED

COMPARISON OF USABLE AREA

	House No. 1	House No. 2
1 Width	26' 6"	27' 6"
2 Depth	27' 6"	26' 0"
3 Outside measurements	728'	715'
4 Outside measurements, two floors	1456'	1430'
<hr/>		
5 Living room area	246□'	233□'
6 Dining room area	168□'	171□'
7 Kitchen area	84□'	89□'
<hr/>		
8 Area principal rooms of first floor	498□'	493□'
9 Area of first floor hall	17.5□'	99□'
<hr/>		
10 Bedroom No. 1 area	156□'	160□'
11 Bedroom No. 2 area	141□'	135□'
12 Bedroom No. 3 area	108□'	104□'
<hr/>		
13 Area of bedrooms	405□'	399□'
14 Bedroom No. 4, lacking in House No. 1 area		79□'
<hr/>		
15 Total area of rooms	920.5□'	1070□'
16 Efficiency of design (total room area divided by outside area of two floors)	63.0%	74.9%

NOTE: The space omitted in this determination is taken up by closets, bath, second floor hall and walls. The shaded portions in house No. 1 have been excluded as waste space and the room areas above do not include this space. In house No. 2 this wasted space has been turned into usable space as a first floor hall and a fourth bedroom. Note how the rooms compare in size both individually and in the subtotals, lines 8 and 13.

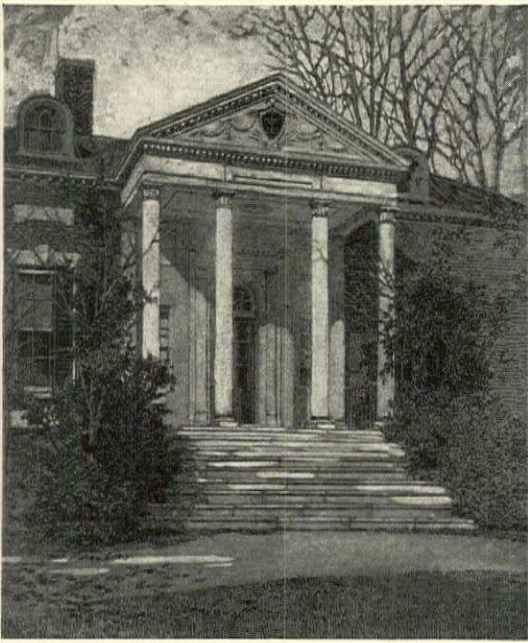
indicated a waste of 35 per cent. What would an increase in gross revenues of 35 per cent with no increase of investment mean in the operation of any hotel or apartment house?

Waste space is not alone that which can not be used. The meaning should be more comprehensive, somewhat as follows:

Space is wasted if (without interfering with the purpose or functions of the building) a rearrangement of the plan will reduce the size of the building without reducing the size of the principal rooms; or conversely, if it will increase the size of the principal rooms without increasing the size of the building.

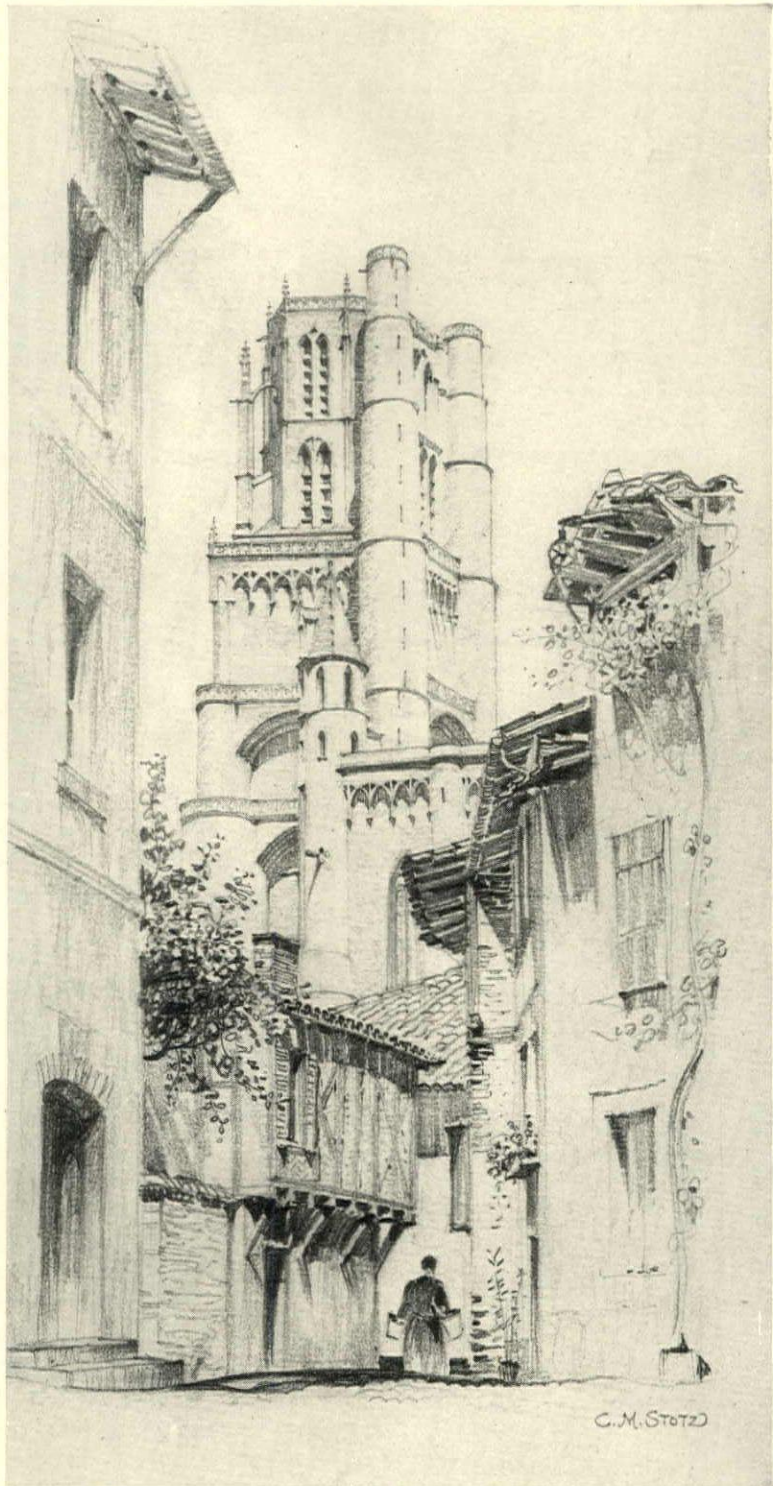
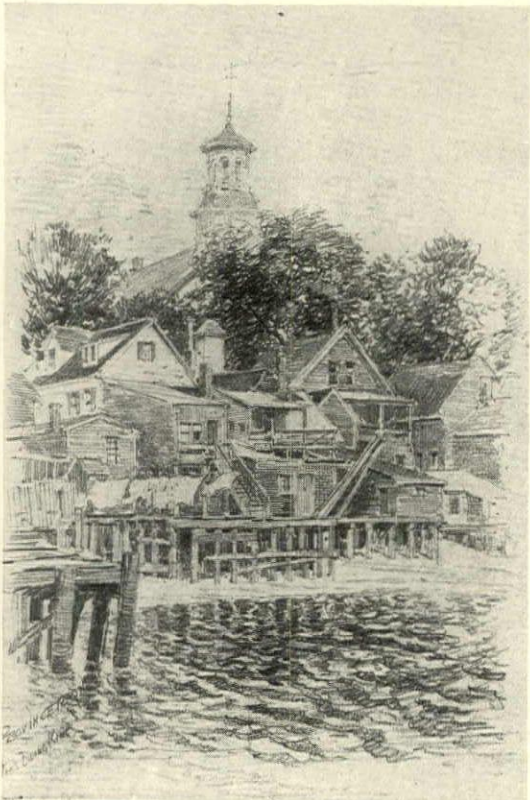
HOUSE No. 2, as compared with No. 1, is clearly a case in which a rearrangement has increased the size (or area) of the principal rooms without increasing the size of the house. The "efficiency" of design as arrived at in the table is an excellent index of whether the house includes waste space. Studies made of many houses indicate that the efficiency as here determined should exceed 70 per cent in a small two-story house. It will probably not exceed 75 per cent without the sacrifice of needed closet and bathroom area.

The percentages in larger houses are properly somewhat lower, because of the need for long hallways to reach isolated parts of the house. There is not the same need for compactness in a large house as there is in a small one. Compactness, (Continued on page 96)



HOMEWOOD
BALTIMORE
and PROVINCETOWN

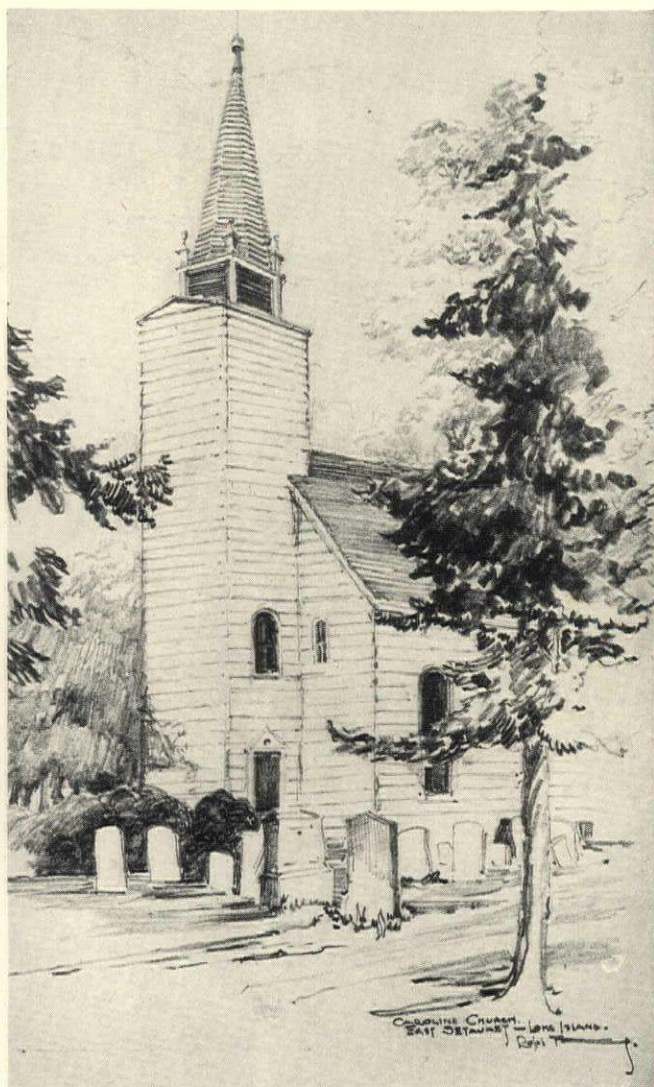
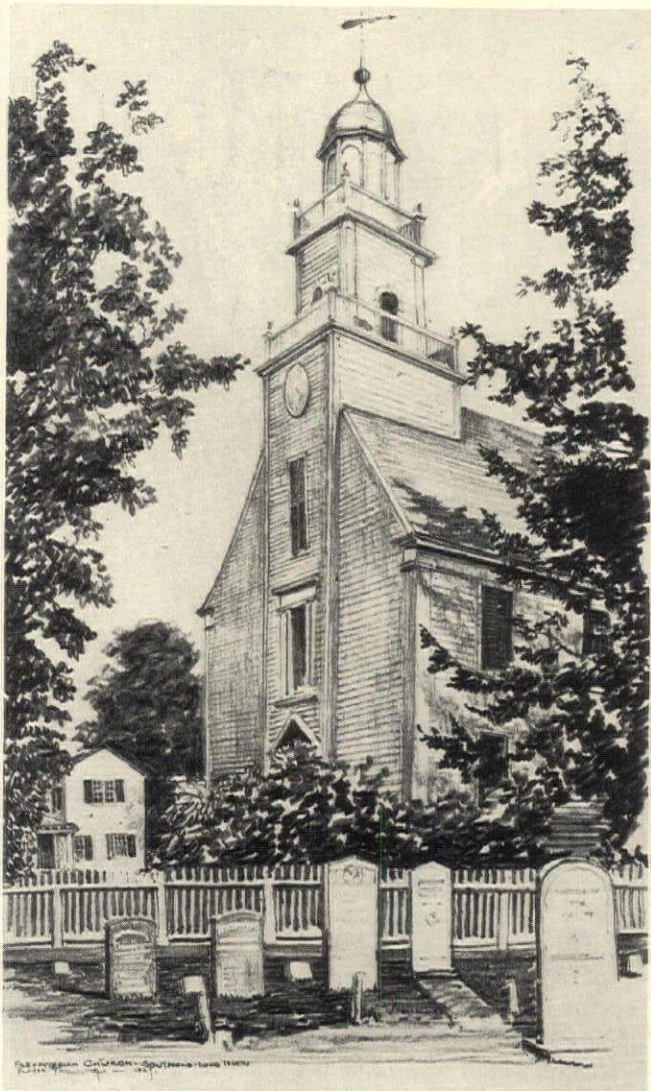
by
Thomas Ewing King



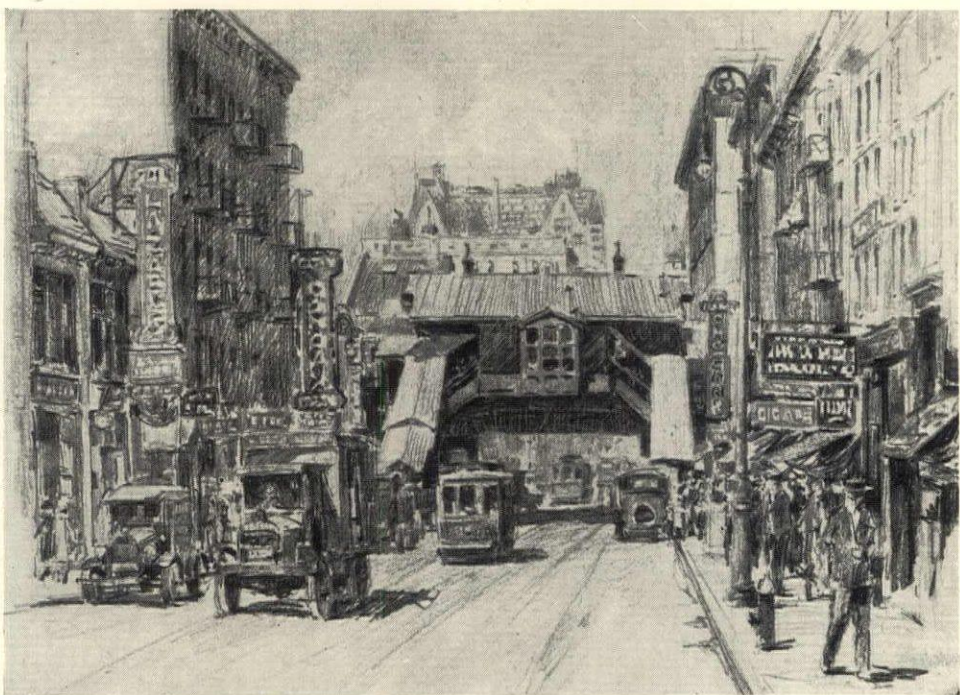
The CATHEDRAL, Albi, France
Pencil Drawing by C. M. Stotz

SKETCHES

THE AMERICAN ARCHITECT



Two old churches on Long Island, New York. That at the left is the Presbyterian Church at Southold. The sketch shown at the right is Caroline Church at Setauket. These studies are reproduced from pencil sketches by Ralph Fanning of Ohio State University



Fifty-ninth Street, New York. From a drawing made with colored pencils by J. Urich



DAYLIGHTING INDUSTRIAL BUILDINGS

by

A. J. MARTIN

*Illuminating Engineer
Detroit Steel Products Company*

- 1 . . . *How much light is cut off by obstructions?*
- 2 . . . *What can be done to increase daylighting on lower floors?*
 - a . . . *Increase height of windows at lower stories*
 - b . . . *Treat walls of obstruction to reflect more light*

It is common knowledge that any floor of a building facing a court has less daylight than the floor above it, the cut-off by the structure opposite the window being the primary cause. The amount of this cut-off depends upon the width of the court, distance of the sill of the window below the top of the obstructions and character and type of the materials of which the obstructions are composed.

Extensive investigation on this subject has made it possible to isolate the various factors governing the daylighting of industrial buildings, and to answer the questions stated above. For example, in the two common types of courted buildings, (open ends and closed ends) shown in Figure 1, we may be interested in the illumination at the center of the building, as shown by the circle marked "station." In this case, the building under consideration has been considered as 80 ft. 0 in. wide and about 480 ft. 0 in. long, which would make the center point 40 ft. 0 in. in from the sidewall windows and 240 ft. 0 in. from the end of the court.

The width of the court, as shown in the vertical section, is "C," and the vertical distance from the top of the obstruction (in this case, the building across the court) to the sill of the window on each floor is "H." Then for each floor, the relation of "C" to "H" is dif-

ferent, and becomes a factor in the measurement of the quantity of daylight remaining. This relation of dimensions can be expressed as a ratio C/H, which is used as the abscissa of the curves in Figures 2, 3 and 4.

From Figure 2, knowing the ratio of C/H for a particular floor, we can determine how much less daylight our station would receive than if the windows had an unobstructed outlook. For example, suppose that the ratio of C/H for a particular floor was 2.0. If the ends of the court were open, a station at the center of the building (of the dimensions indicated) would receive 37.5% of the daylight it would normally receive, and with the court closed on both ends, 25%.

With some knowledge of how much daylight is lost

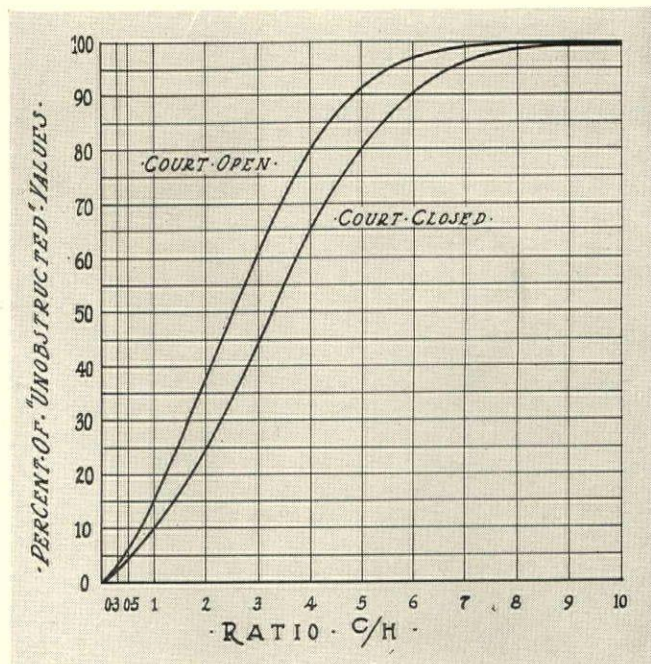


FIGURE TWO

C U R V E S t h a t

THE AMERICAN ARCHITECT

by the windows facing an obstruction, the question of improvement can be answered in two ways. First, increased heights of windows for the lower floors, second; treatment of the walls of the obstruction to permit more light to be reflected from them.

Figures 3 and 4 show the great increases in illumination which may be obtained at the station we have been considering, due to increasing the reflecting value of the masonry surfaces between window areas in the obstructing walls across the courts. Figure 3 is accomplished by having both ends of the court open, an increase of as much as 400% for a C/H ratio of 0.3 being noted for an increase in reflecting value of from 5% to 82%.

WHEN the court is totally enclosed, the gain from using light colored exterior wall surfaces is considerably greater, as can be seen from Figure 4. For a C/H ratio of 0.3, increasing the reflection factor of the obstructing wall areas from 5% to 82% produces an increase of 1200% in the illumination at the station we are considering.

The reflection factors noted on Figures 3 and 4 correspond roughly with the following building materials:— 82%, white terra-cotta and white glazed brick; 55%, ivory tan or light grey terra-cotta and buff matte brick; 5%, dark clay slate or dirty common brick.

The curves shown are applicable only to buildings approximating the dimensions shown. Each building presents its own problems, and must be analyzed as such, in order to obtain the best results from its fenestration. The data shown should, however, emphasize the fact that the light reflecting value of the exterior walls of a building is of great importance in daylighting, and due to the inevitable blocking of light by the building itself, should receive careful consideration in the design.

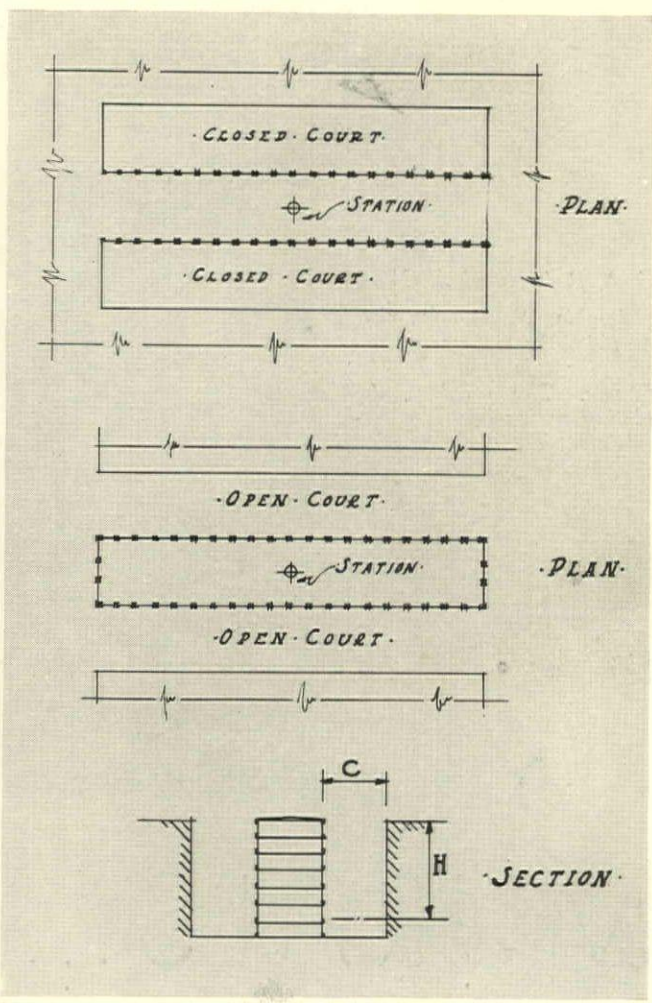


FIGURE ONE

DAYLIGHTING at point marked "station"

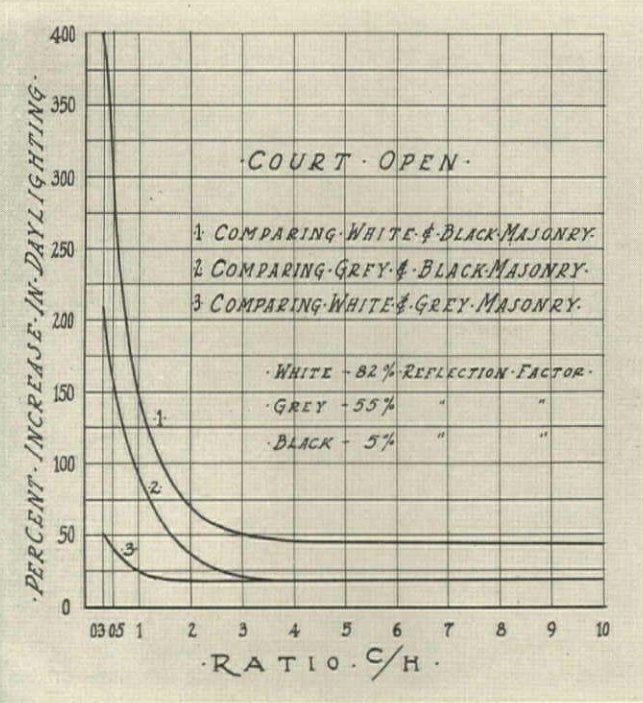


FIGURE THREE

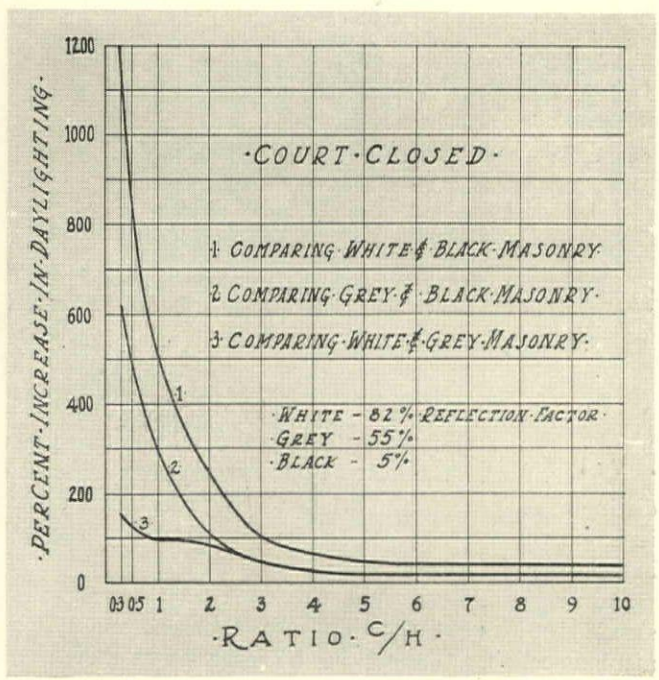
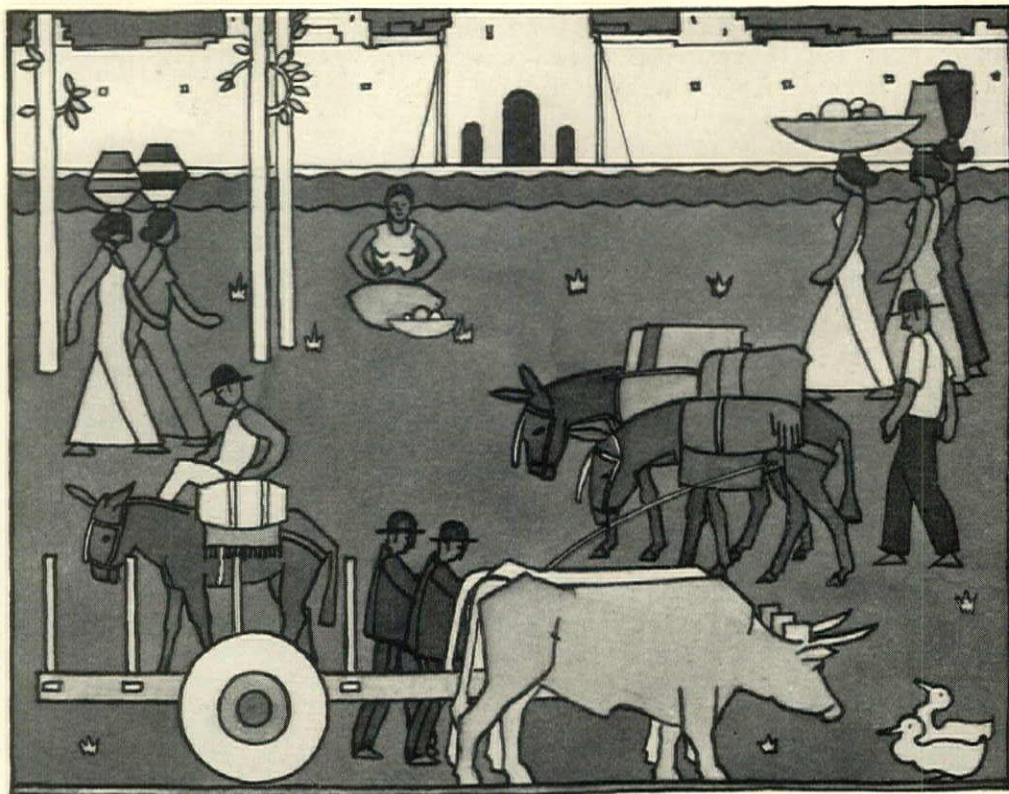


FIGURE FOUR

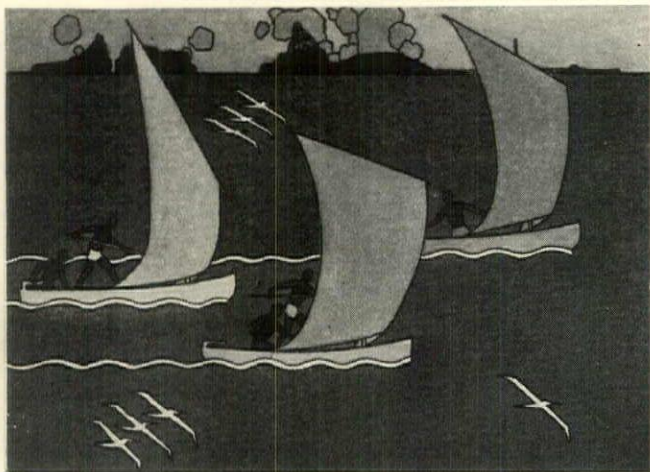
illustrate the principles of daylighting

CARTEGENA

Colombia, South America, provided the picturesque setting for this study by Mr. Sheets. The original, depicting native life, is colorful in subject, and execution



MURALS...the Handmaiden



Native fishermen, Mazatlan—a study in rhythm

MURAL painting as generally practiced today is a presentation of an enlarged easel painting upon a wall. We have in our country many fine and distinguished artists who are producing real mural paintings, but also a class of decorators who only succeed in painting pictures on walls.

Painting, sculpture and architecture are three arts that should be brought together into a closer, more harmonious collaboration and not be separated as they often are now by lack of cooperation and mutual knowledge. The painter is all too frequently lacking in any knowledge of architecture and even not thoroughly conscious of the design the architect has striven for in his build-

ing, and he then only succeeds in manifesting this confusion of thought by cutting holes in the architectural wall space with his decorations, and not in decorating it by a sympathetic treatment in accord with the architectural design.

Equally true on the other hand, is the fact that not many architects are keeping in touch with the trend of modern decoration, and so both architect and painter fail to collaborate, by the use of decoration that is not suitable to a modern building. This confusion arises from our high tension system of specialized education and the consequent inevitable elimination of a background of training in the allied arts. This is in contradistinction to the past history of art when painters were architects and architects could paint, and so by mutuality of interest they easily visualized their collaboration.

Today the decorator is too often handed a contract for so much money to cover a given wall space and he proceeds to put his version into the building where the architect has been forced to leave off just short of a full expression of his conception.

An easel painting does not always make a decoration. The origin of a frame around easel paintings was to suggest to the beholder the effect of looking through a window to the outside world and there finding the landscape or figures as painted. On the other hand, a mural painting, however, should not give the impression of looking outside, thus ignoring and destroying the sense of the architectural wall space. It should bring the outdoors, indoors, and give warmth and interest to the room through its design and color. In addition a true



MARKET IN GUATEMALA

Native life in far off corners of the world is interpreted by this artist in a colorful, decorative pattern that lends new beauty and interest to an otherwise prosaic subject

of Architecture

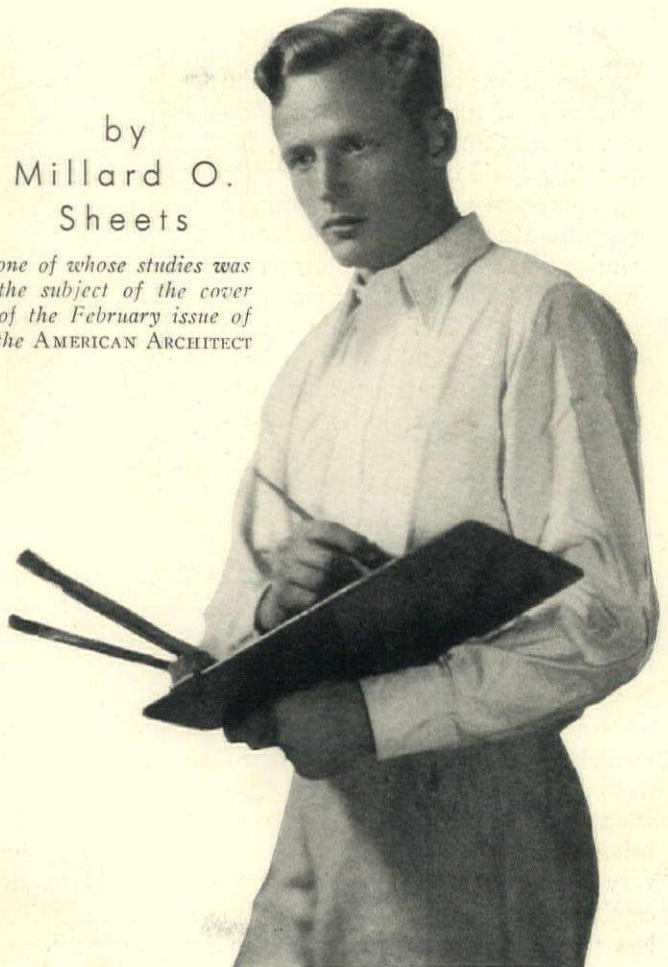
mural painting does not come forward from the wall upon which it is painted; it does not lunge forward at you shouting "Here am I"; but keeps its place flat on the wall and is perhaps only noticed when one cares to view it. Much so called decoration is so obvious and in bad taste that one does not care to be in its presence too long. We decorate because we want a quality that plaster or a painted wall finish alone will give us. We do not gain quality by becoming rampant with color in clouds, trees, birds and boats. We arrive at the perfect expression by the artists' appreciation of the architect's design of the wall space. The architect felt the need of placing it just so and it should be retained.

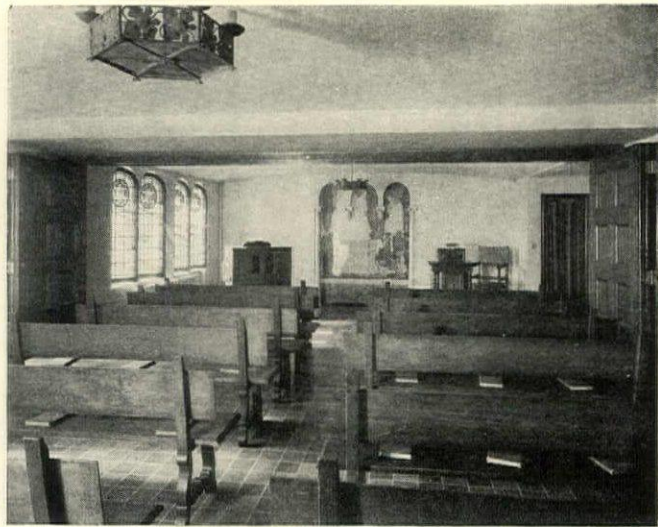
THE return of fresco painting as practiced by the early Italians is assured us by the earnest research work that is being done in France at the Fontainebleau School. Here are being developed very fine students of fresco painting. The beauty of fresco painting and its adaptability to application on reinforced concrete make these one of the finest combinations of materials in decoration today. Fresco colors can be very subdued or very brilliant, not being limited to the range of grayed colors usually thought of as comprising fresco pigments. While a very difficult medium to use in the expression of the artist's conception, yet because of its lasting durability and because for the artist it answers problems as regards sunlight and atmosphere, such as oil paint cannot be made to do, fresco is finding a rebirth in a new field.

Let us keep in mind that decoration in our modern buildings should be in keeping with the building and

by
Millard O.
Sheets

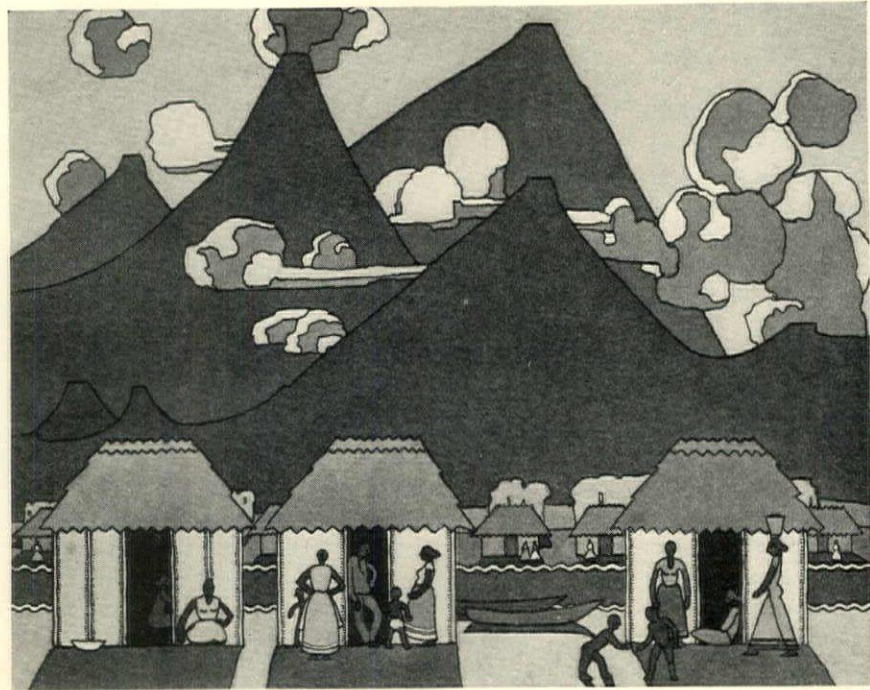
one of whose studies was the subject of the cover of the February issue of the AMERICAN ARCHITECT





A SYMBOLICAL MURAL
*executed by Mr. Sheets, is the center of interest
 in the chapel of the Pasadena, Cal., Y. M. C. A.
 It is in no sense an easel painting, for it was
 carefully considered as a part of the architecture*

VOLCANO—*Santa Maria, Guat-
 mala. A study in which the
 painter has caught the atmosphere
 of uncertainty that surrounds the
 inhabitants*



also should be understandable by the thousands of people who pass its way. It must answer both needs, for upon that basis only, of adaptability and appreciation mural painting progress. Much so-called "moderne" painting is so completely abstract or affected that the average mind cannot appreciate it. This only causes misunderstanding and arouses a feeling of antagonism against this "moderne art." A large majority of modern painting should never be permitted to leave the artist's studio because it is so highly experimental. Much of the experimental work in art today is parallel, because every artist, each in his own studio, may have discovered for himself the working possibilities of the medium that he uses. But until he subjects this use of medium to greater tests in the expression of ideas these experiments should not be brought before the public eye as complete expression (which they are not) and the public then asked to accept them into an already confused art-consciousness. That which is to be seen by the many, and by so constantly being seen, is absorbed into their concepts, should be the very highest type of expression of the very highest conception of the subject possible to the artist. Anything less than this will mean that the mural painters them-

selves will eventually be the greatest sufferers in finding a neglectful and misunderstanding public, in place of a public which seeks color, harmony, enjoyment and beauty through murals, in an otherwise material world.

Today there is no evidence of a marked tendency to replace murals with other forms of decoration. If anything there has been shown an increased appreciation for properly executed paintings in public and commercial buildings. It remains with the artists to stimulate by their works, beauty that is individual, created for a specific place, to accomplish a definite purpose and is a part of architecture as much in keeping with the harmony and spirit of the design as the structure itself.

CRITICISM might help Architecture Let's Try It

By Talbot Faulkner Hamlin, A.I.A.



THE confusion between architecture as a profession and architecture as a business is no better illustrated than in the architect's reaction to criticisms of the aesthetic side of his work. The architect who considers his vocation a business necessarily thinks in money terms; his job is to sell a commodity (his skill and effort) at a profit; it is the profit which is his aim. To him any criticism of his work from an artistic standpoint seems unjust; it is, he can only think, an effort to interfere with the distribution of his product and so diminish his profit. Hurt, he thinks, in his pocket-book, he seeks a dollars-and-cents remedy and runs to court with a libel suit.

This attitude toward architecture is distressingly prevalent. It closes the architectural press to any definite attempt to evaluate current work, save by means of praise or simple description; adverse criticism can only be hinted in the most general terms. Gone are those bold days of Montgomery Schuyler's "Architectural Aberrations" that enlivened the Architectural Record of the nineties—nowadays we can only smile at each other like women at a tea party whose external good manners hide a multitude of jealousies. Nor is this attitude confined to the architectural periodicals. Newspapers usually vary between fear of giving free advertisement, willingness to fall into the hands of the most brazen publicity agents, and forgetfulness that architecture exists. Even the better class magazines generally avoid actual criticism; the ogre of a libel suit not unjustly stares at them continually from afar, and even a witty criticism may bring the architect pouncing down with bared claws, as a New York weekly publication expensively discovered not so many years ago.

This is the more unfortunate because there never was a time when rigid and relentless architectural criticism was more necessary. The present rapid breakdown of traditional standards of taste—at least in matters of detail—is a fact to deplore or cheer as the case may be.

Architects generally are floundering in a morass of half decayed periodism full of strange new growths, like a poisonous marsh. The fashion of "modernism" is a fashion only; not even its practitioners know what it is, what it means, how it will grow. "Modernistic" forms—triangles, stepped arches, corner windows and what you will—are used broadcast without regard to meaning or structure, as romantically as the most Victorian furbelows. "Modernistic" bareness and fear of ornament are copied everywhere without thought as though bareness were in itself beauty. These things are the merest cant and present-day slang of "smart" architecture, as ephemeral as the slang of the flapper era and as meaningless. But buildings, alas, stand their twenty years or more.

AND the time is ripe for architectural criticism. Never since the eighteenth century has popular interest been so widespread, and it is continually growing. There are plenty of books on the subject but proportionally their readers are few, and many of them are controversial rather than critical. Many are too technical; some too tricky in content and presentation. So the great run of interested people are forced back on newspapers, periodicals and the architectural press. And there they usually find either arid statistics, sentimental gush in the home making and furniture magazines, and critical vapidity in the architectural journals.

The result is bad, both for the architect and the public. The public, prone enough to follow where it is led, reacts either aridly, sentimentally or rapidly. Its little store of treasured up taste is no match for the popular fashions and it can find no artistic criterion, no one to speak with authority. It therefore finds the best criteria it can, height and brute size, and worships them, as though any building over thirty stories were itself an Nth wonder of the world. The architect has at least the criticism of his own office during

(Continued on page 90)

ST. LOUIS TO PROTECT Buyer and Seller

By Ernest Eberhard

DISHONESTY and incompetence in the building industry will be driven out of the City of St. Louis, according to plans now in operation which were formulated by the Better Business Bureau and industrial leaders. In every industry where the national or local bureaus have operated within the past sixteen years, a noticeable improvement has been noted and it is logical to expect that the same result will be enjoyed in the building industry.

The decision to include the building industry as a major part of the bureau's work was arrived at after consultation with leaders in some of the important basic industries supplying the building business. These men met weekly for several months and finally determined that the idea was practical and could be developed to the benefit of all reputable factors concerned. The organization plan as worked out includes committees appointed from the various basic industries comprising the building business. Each one of these committees is represented on an executive council composed of the chairmen of each committee from which chairmen, in turn, are selected six directors as part of the sixty-one members of the directorate of the Better Business Bureau of St. Louis. To focus activities of the bureau, a former building commissioner of St. Louis, Wm. C. E. Becker, of the firm of Taxis Y. Becker, civil and consulting engineers, was engaged on a part time basis.

The objectives which these campaigns are intended to accomplish include:

1. To protect the public from misrepresentation.
2. To establish a measure of construction value by which the public may value its purchases and investments.
3. To encourage better construction through extended public education.
4. To drive out unscrupulous operators.
5. To stabilize relationship between financial agencies, construction interests and the public.
6. To establish standards of practice.
7. To place responsibility for faulty construction and substitution of materials.
8. To aid reputable interests to remove practices which lessen public confidence.
9. To correct unfair and misleading advertising and sales work.
10. To establish higher standards of public safety.

The expected results of the work as outlined are of interest to two classes of people: the owners, particularly of houses, and the investors or loaning sources.

• *Lack of architectural supervision has caused so much dishonesty and poor construction in the building industry that the Better Business Bureau of St. Louis has established a Construction Industries Section to improve conditions in that city. These conditions are in no way worse than those prevailing generally, and yet they are bad enough to warrant the collective action of the better building element of the city in cooperation with the bureau.*

Again the necessity for competent architectural supervision is apparent—a necessity which is fully recognized by the bureau in its literature.

Most people who buy houses are utterly inexperienced, particularly as they usually make but one such purchase during their lifetime and therefore have had no opportunity to learn through experience. In many cases, their lifetime savings are represented by this investment and when a mistake is made it is irremediable.

The bureau states: "The inability of assuring oneself of the fact that the proper workmanship and materials set out in the original specifications have been utilized, unless an architect's supervisory services have been employed, often leads to the acceptance of a structure of doubtful merit."

The buyer of a completed building, not erected under capable architectural supervision, is placed in a similar position, for he can only determine the quality of the completed building by its visible portions: no unbiased supervision has insured a quality building.

The same condition applies to the purchaser of first and second deeds of trust and real estate mortgage bonds, and building and loan stocks. The loaning companies themselves face the peril of inadequate security if poor workmanship and inferior materials are employed. Again, too, insurance is affected as to hazard through the rate for the same reasons.

THE PUBLIC'S CHOICE
The Public's Choice is a new feature in the Building Construction section of the Bulletin. It is a monthly feature which will be published by the Bureau of Building Construction. It is a monthly feature which will be published by the Bureau of Building Construction. It is a monthly feature which will be published by the Bureau of Building Construction.

Deeds of Trust (Mortgages)
In a deed of trust, the mortgagor conveys the property to the mortgagee as trustee for the mortgagor. The mortgagee then conveys the property to the trustee. The trustee then conveys the property to the mortgagor. The trustee then conveys the property to the mortgagor.

Liens
A lien is a legal claim against the property of another person. It is a legal claim against the property of another person. It is a legal claim against the property of another person.

Finances
Finances are the funds used to carry out a business. They are the funds used to carry out a business. They are the funds used to carry out a business.

Resale Value
The resale value of a property is the price it can be sold for. It is the price it can be sold for. It is the price it can be sold for.

Buying a Ready-Built Home
Buying a ready-built home is a convenient way to get a new home. It is a convenient way to get a new home. It is a convenient way to get a new home.

Investigate All Plans
Investigating all plans is a necessary step in the building process. It is a necessary step in the building process. It is a necessary step in the building process.

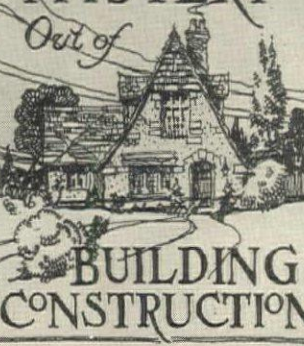
Leaky the Tank
Leaky tanks can cause serious damage to a building. It is a serious problem. It is a serious problem. It is a serious problem.

Building a Home
Building a home is a major life event. It is a major life event. It is a major life event.

Get Architect Advice
Getting an architect's advice is a wise decision. It is a wise decision. It is a wise decision.

Get Competent Advice
Getting competent advice is essential for a successful building project. It is essential for a successful building project. It is essential for a successful building project.

Taking The Mystery Out of BUILDING CONSTRUCTION



AN Authoritative Guide for the Protection of the Public Intending to Buy or Build a Home

Better Business Bureau and Building Interests Organize to Protect Public by:

- I. Aggressive campaign against misrepresentation and poor construction
- II. Public education showing how to safeguard the building dollar
- III. Development of technical standards of practice
- IV. Constantly reiterated advice to employ an architect

To attain the desired ends, a measuring stick will be developed for the various branches of the construction industry through the formulation and publication of technical standards of practice. These standards will be prepared by the Construction Industries Division in cooperation with the special advisory committees selected from the various basic industries, thus combining the technical knowledge of those committees with the bureau's own experience as to the best means of protecting the public.

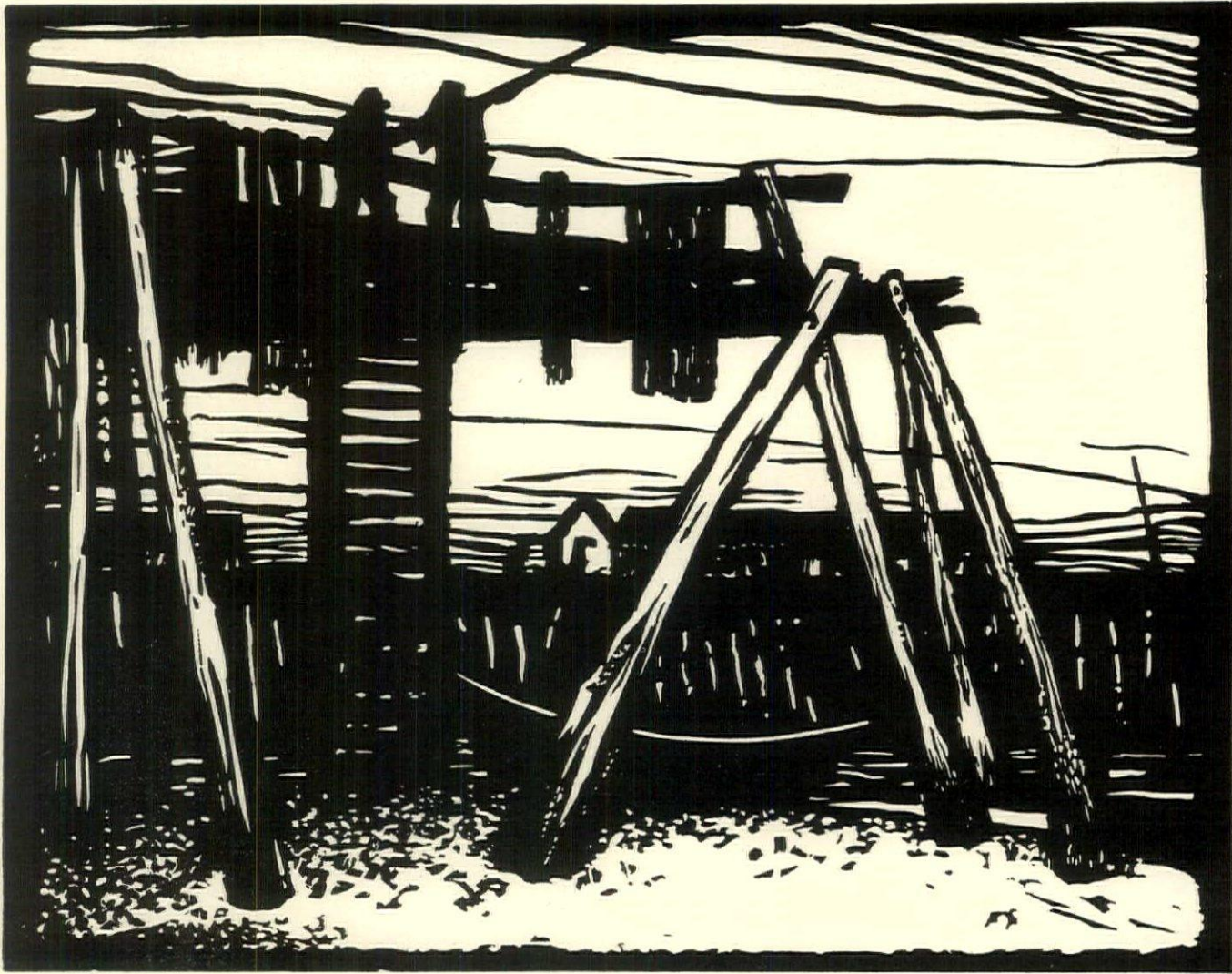
Attention to the plan and its progress is being secured through the issuance of a monthly bulletin. Perhaps the most useful feature of this bulletin is the presentation of facts concerning irregular practices by the construction industry that tend to undermine public confidence with respect to the purchase of and investment in real estate. The bulletin is being sent to architects, building contractors and sub-contractors, material dealers and manufacturers, real estate dealers, banks and trust companies, building and loan associations, engineers, and the secretaries of the building trades unions.

To furnish immediate information to the public, the bureau has published an illustrated booklet entitled, "Taking the Mystery Out of Building Construction. An

Authoritative Guide for the Protection of the Public Intending to Buy or Build a Home." This booklet briefly discusses liens, finances, loan agencies, deeds of trust, resale value, selecting the building contractor, title examinations, stock plans, buying a lot, and so on. In all cases it recommends that competent advice should be secured, suggesting that, before buying any house, the paid services of an architect, engineer or reputable contractor be employed for an examination of the building.

What the bureau states in this booklet concerning the services of an architect is of interest and indicates the services of an architect is of interest and indicates this aspect of the problem is being carefully considered: "Enthusiasm and interest will produce action but they will not always produce the best results. You may have the best of intentions in making a suit of clothes and may buy the best materials, but it takes special skill to make a presentable suit of clothes economically. And so it is in building a home—it takes someone specially trained and experienced to produce satisfactory economical results. It is the old maxim—every man to his trade.

"A competent, reputable architect, for instance, is qualified by training and experience to prepare plans and specifications, award the (Continued on page 100)



MANTOS' WHARF



THE NET MENDERS



THE BOAT BUILDERS



WINTER

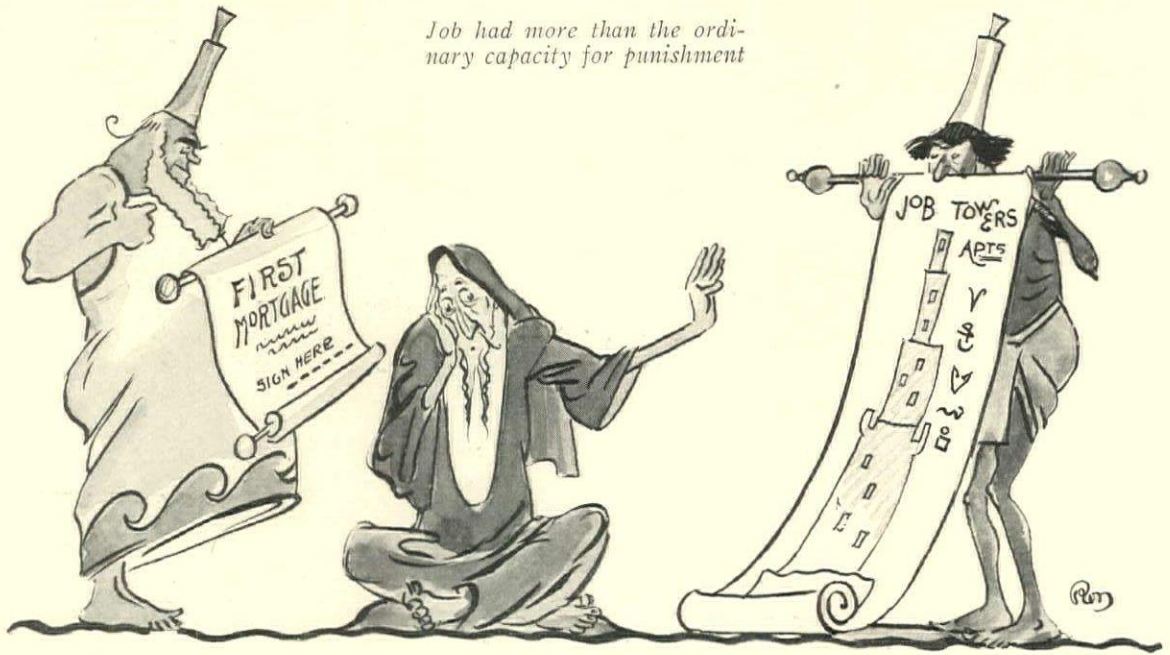
FIVE
BLOCK PRINTS
by Tod Lindenmuth

PROVINCETOWN
MASS.



MY STUDIO

Job had more than the ordinary capacity for punishment



THINGS

about Architecture that

I LIKE

ROBERT LOUIS STEVENSON'S zest for life has become a legend. In the nineties it was an inspiration, and the youth of that day enthusiastically endorsed his exultant cry, "The world is so full of a number of things, I'm sure we should all be as happy as Kings." In the nineties, mind you, he, dying of consumption, smoking cigarettes that couldn't have been toasted, and smoking them with his eyes open felt that way; and we all agreed with him. Observe too the utter lack of qualification in his statement. "As happy as Kings"! That meant something in those days, however little it may mean to-day. To-day the number of kings has greatly diminished, and the number of things inordinately increased. R. L. S. had a wonderful capacity for liking, not as a maudlin Pollyanna, but as a discriminating taster and savorer of the beauties of life. When he said, "Things," I have a hunch that he did not altogether mean material things or objects, for he was no great accumulator of these. He did love corn on the cob, and corn in the keg, and sailing vessels and Edinburgh Castle, sunny beaches, coral reefs, tobacco, donkeys, dogs and books. He didn't of course know about Fords or Buicks or Rolls-Royces, grape fruit or honey dew melons, jazz, the radio or aeroplanes. He never saw a real skyscraper, a purple bath tub, or an apricot lav-

Stevenson loved corn on the cob, and corn in the keg, and sailing vessels and Edinburgh Castle, sunny beaches, coral reefs, tobacco, donkeys, dogs and books

Illustrated by
GORDON ROSS



atory, a water color by John Marin, a piece of sculpture by Brancusi, or a church by Le Corbusier.

As a matter of fact, though he ranged pretty widely over the word, he lived a rather restricted life, much of the time in bed; and yet, in spite of all its handicaps physical, pecuniary, and above all Victorian, it was a life of intense exhilaration.

These references to Stevenson are made after much deliberation. When the Editor of this engaging periodical engaged me to write a short piece, to which the

By

Louis LaBeaume

*a member of the firm of La Beaufort and Klein of St. Louis,
a Fellow of the American Institute of Architects and
a member of the Board of Directors of the Institute*



title appearing at the beginning of this article might apply, it became necessary to approach the subject in a proper mood. Architecture of course, like literature, has its romantic side, but so many of us consider ourselves unresting drudges, or unappreciated idealists, or hard-headed business men, in a manner of speaking, that we are apt to overlook the delights that troop toward us with each rising of the sun. We are much too apt to neglect to count our blessings. The example of a sick man like Stevenson, or a patient one like Job, is invigorating. It is true that Stevenson was a vagabond with an altogether irrepressible resilience of temperament: while Job we may assume had more than the ordinary capacity for punishment. The mere fact, however, that neither of these great men was subjected to the whims of clients, the importunities of salesmen, the fickleness of fashion, or the prolific enrichments of science, in no way detracts from their heroism. R. L. S. liked what he liked when he liked it, and Job submitted with a tough and unbreakable spirit. Both attitudes were admirable, nay beautiful.

Let us then look about us and set down a list of the pleasant things, the things we like in the Art or the practice of Architecture. As for me, first of all I like most my fellow architects. This is a broad statement made in full consciousness of our occasional rivalries, jealousies, differences of taste, and the differing values different men place on their services. There is something about the mere fact that a man calls himself an Architect that is winning. It seems to mean that, worthy or unworthy, he has entered a kind of priesthood. There is a child-like purity of mind about him, an innocent courage sweet and thrilling, that reminds me—even

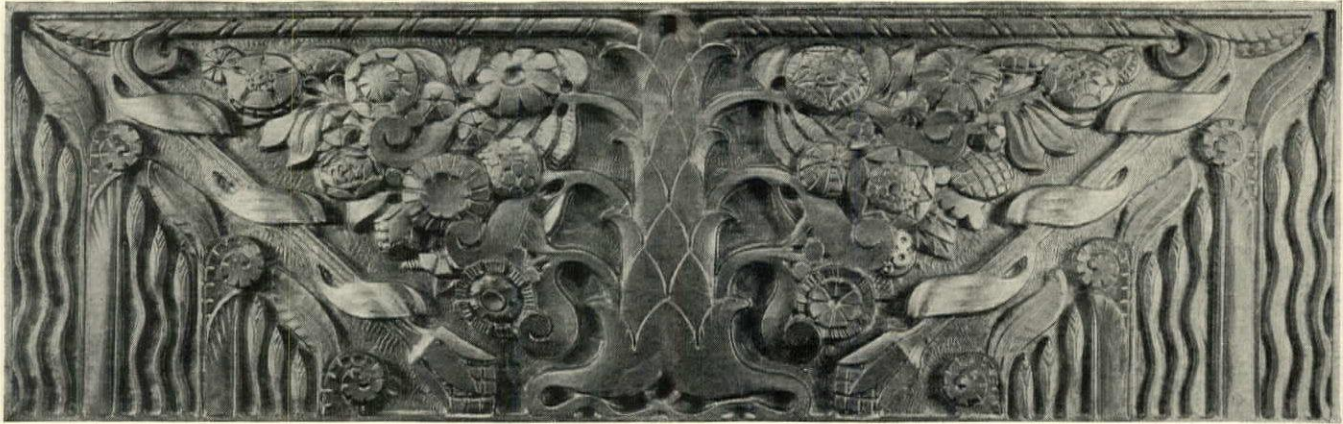
though he grew to be an old man with whiskers—of the young David going forth to slay the Goliath of Ugliness. I like that. I like it particularly because David is so sure Goliath will fall. And I like David's undismay when, though Goliath may fall, Goliath's brothers and sons and uncles and aunts come crowding up to confront other Davids. I don't mean to imply that David isn't practical or that he isn't often a sure shot; but it isn't the practical in him or even the accuracy of his marksmanship that is most admirable. It is his simple faith. There is a charming sentimentalism and lack of logic about the most practical of Architects; and, though I know you will be thinking of several exceptions, a meekness which makes me sure that eventually they will inherit the earth.

NEXT, and as this is in every way a very personal confession and not in any sense an attempt to specify the things every right thinking man should like, I, speaking strictly for myself, like praise. To speak the truth, the whole truth and nothing but the truth, I may say that I like praise even more, if possible, than I like my fellow architects. This is, I realize, to put it very handsomely but the statement needs emphasis. There is something very warming and invigorating about praise. Stevenson, connoisseur as he was, loved it, and drooped in the absence of it. Premature or unintelligent praise, as we all know, has resulted in some very poor design and kept

many a good fellow from blossoming into genius; but I am, of course, speaking of merited praise, the sound kind of praise which one feels in his bones is not only deserved, but inevitable, like Fate. I am inclined to believe that if a vote were taken to determine what architects generally, young and old, good and bad, male and female, (if there are any) like best, praise would win overwhelmingly. There might be a few scattering votes in favor of candor or honest criticism, the Lincoln Memorial, the Palmolive Building, the Swedish Movement, fuller and more frequent fees, et cetera, but the votes in favor of praise would smother them all. The praise of a fellow architect would, I fancy, be the sweetest of all praise, but actual testimony on this (Continued on page 86)



The lady client who has been keeping a scrap-book



Spandrel of cast aluminum used on the Gulf Research Building, Pittsburgh, as it appeared when taken from the sand. No chasing or finishing had been done. Ludlow and Schwab, architects

Architectural Uses of ALUMINUM

By Ernest Eberhard

EVERY material has certain characteristics that fit it into a more or less well defined field of its own. The characteristics of aluminum are such as to define its field as one where factors to be considered include lightness in weight and consequent ease of handling on the job, freedom from corrosion by water or gases, permanence, and a natural finish that does not require surface protection. Since aluminum is not affected by ordinary atmospheric gases, it is suitable for use in locations exposed to smoke or various gases, as in or near roundhouses, chemical factories, or places where industrial processes result in a gaseous or damp condition such as that which prevails in the textile or laundry business.

Aluminum can be worked and fabricated in much the same way that other metals are and in many instances much more easily. It can be cast, rolled, drawn, stamped, pressed, forged, extruded, spun, machined and welded. It may also be etched or finished in a number of different ways as required by the decorative scheme.

Every metal on exposure attains its own characteristic patina, that of aluminum being a medium gray color which may be polished back to its original appearance. The peculiarities of fabricating the metal may be said to belong to the manufacturer, not to the architect, for if the design is characteristic of metal and its fabricating process, there need be no fear of its proper execution in aluminum if intrusted to competent hands.

When aluminum oxidizes, the metal returns to a pure white powder. There is therefore nothing in it that will stain stonework or other materials, though care should

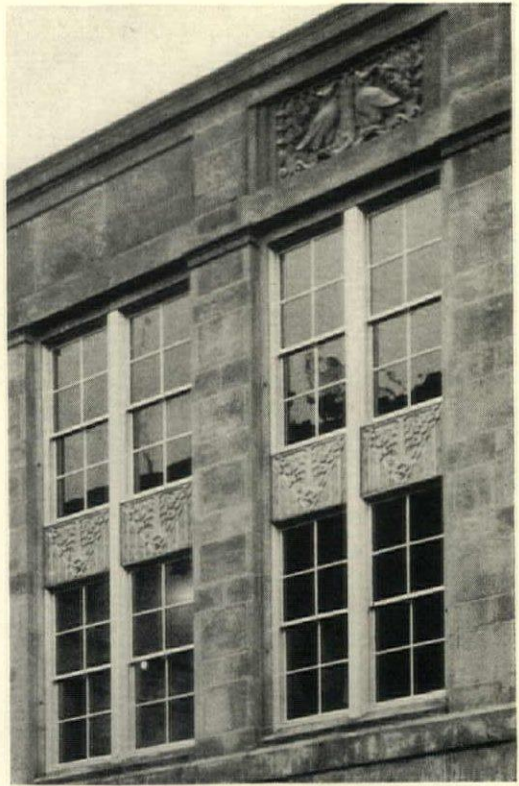
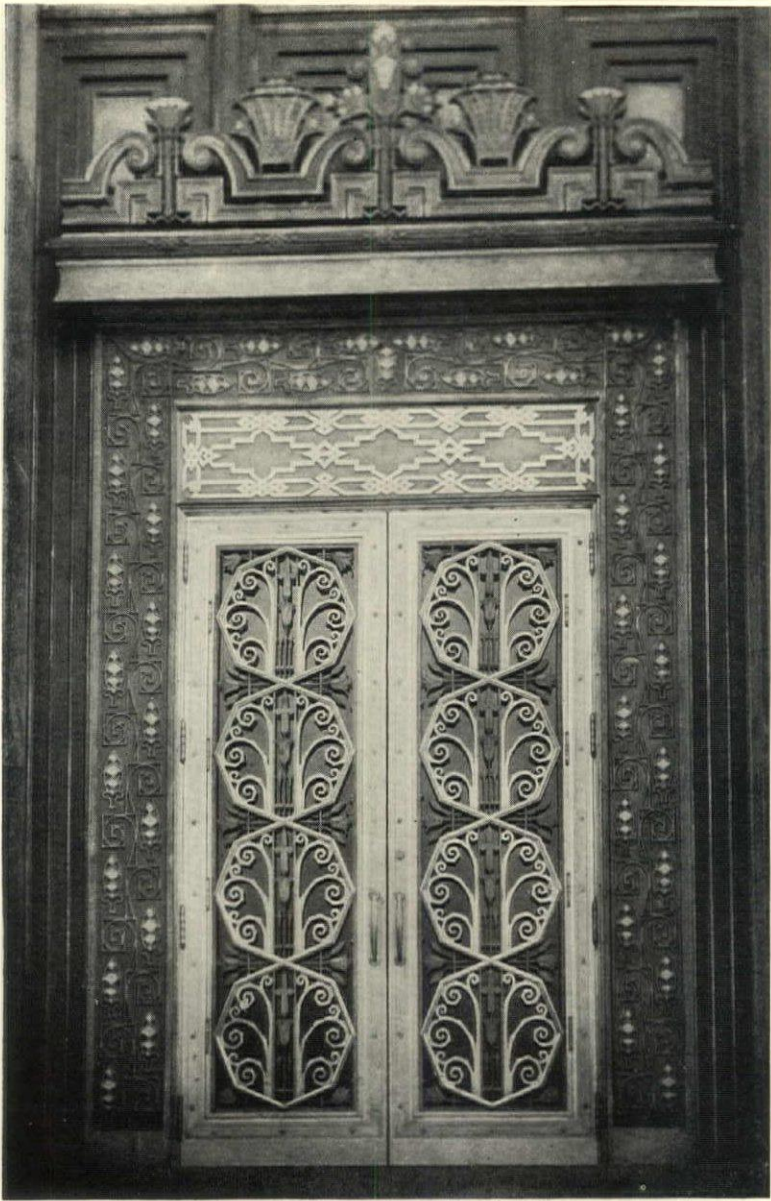
be exercised in using aluminum in combination with alkaline cements; when dry they do not harm, but when wet they may. A coating of paint is sufficient to protect any aluminum in contact with wet cements. After the concrete sets there is no further action on the metal.

Aluminum specified in architectural work should be of good quality, and that made from scrap should never be allowed. Most architectural specifications are written calling for the use of Alcoa No. 43, which has a nominal composition of 95 per cent aluminum and 5 per cent silicon. Other alloys may be had that are either extremely malleable or stiff and strong like steel.

Aluminum may be plated with nickel, copper or other metals. Such plating is not recommended for outside architectural uses. Its only purpose is where it is desirable to combine light weight with the appearance of other metals required by the decorative scheme. It may also be lacquered or painted. The metal holds paint well, especially if sand blasted before painting. Since it will not rust or disintegrate, there is neither scale nor rust particle to "push" the paint off.

As regards fabrication, aluminum may readily be riveted, torch welded or spot welded, but does not lend itself readily to soldering. Welds are made easily and rapidly and result in a joint much stronger than could be obtained by soldering.

One peculiarity of aluminum, that differentiates it slightly from other metals, is that it casts in particularly sharp lines, thereby making it possible to have sharp detail with little chasing. When cast, it will show defects more readily than will bronze or other metals.



Cast aluminum takes on a patina much faster than does extruded aluminum, as shown by this detail of the Gulf Research Building, Pittsburgh. Spandrels here are cast, mullions and window frames are of extruded shapes

Castings deplated and high-lighted were used for the doors of the New Kensington Research Laboratory of the Aluminum Company of America. The cresting and castings around the door were finished in baked enamel colors. Henry J. Hornbostel, architect

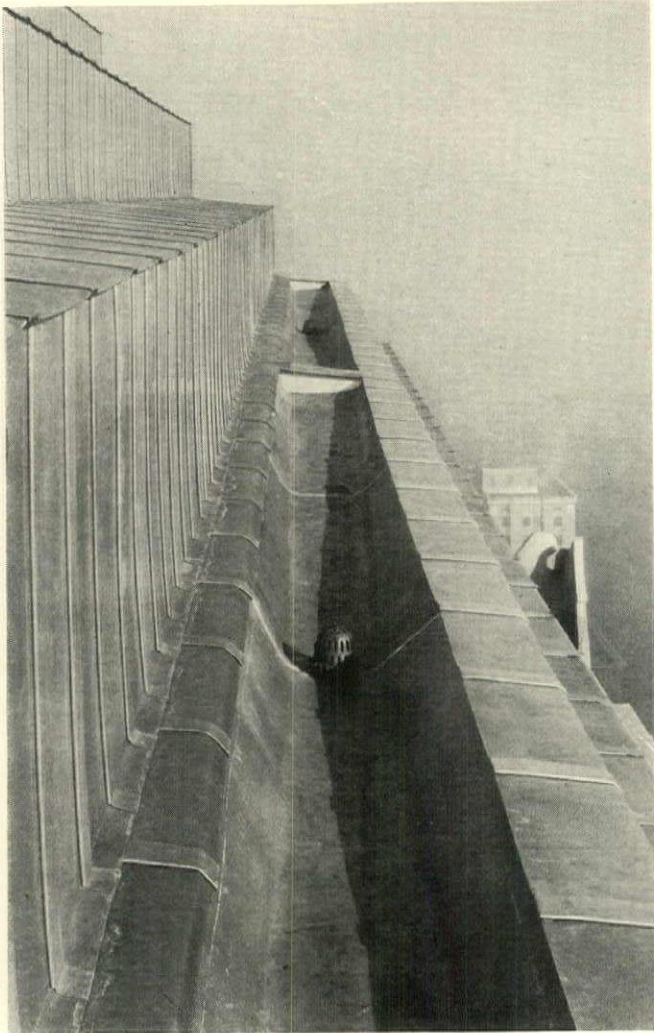
The largest architectural use of aluminum so far has been in spandrel work. The lightness of aluminum spandrels, approximately one-third that of other metals, makes them easy to handle on the job, with a consequent reduction in cost of installing, particularly on high buildings. Those on the Koppers Building, Pittsburgh, for instance, were 5 feet square with a wall thickness of $\frac{1}{4}$ inch, and weighed approximately 115 pounds each. They were easily handled without special equipment by two men at an erecting cost estimated to be 40 per cent less than would have been required for cast iron spandrels.

SPANDRELS may be either stamped or cast. Most of them are cast, and have a slightly roughened surface that darkens up more quickly than when the metal is drawn or extruded; they may, however, be polished so that a smooth surface is presented that remains bright for a longer time. When stamped, the process does not permit of the unusual sharpness of detail that may be obtained with castings, and so stamped designs should be detailed with rounded rather than sharp angles.

After casting, a spandrel or other detail may be treated decoratively in several ways. First, it may be left as it came from the sand. Second, it may be deplated, which

is a process whereby the aluminum is removed from the surface of the casting and the silicon exposed; this gives the casting a lead-like color similar to what it assumes after long exposure. Third, the deplated casting may be burnished up with high-lights so that part is dark gray and part bright like silver; any deplated aluminum surface may be burnished back to its original brightness since the silicon covering is merely a surfacing that can be burnished down until the aluminum shows up bright again. Fourth, various machine finishes may be used on natural finish or deplated work. Fifth, it may be colored. Sixth, a dipped finish may be employed, which consists of dipping the casting or worked section in nitric acid, giving it an appearance similar to that of frosted glass. Seventh, various carborundum blasted or sand blasted finishes may be employed and combined with high lighted, deplated, wire brushed or other finishes. Eighth, a satin finish, which is particularly suitable for store front work, bank grilles, etc.; this finish is secured by rubbing the aluminum with emery and results in a finely polished surface suggestive of its name.

Enameled aluminum has been used for the spandrels and other exterior aluminum work on the new research laboratory building of the Aluminum Company of Amer-



Sheet aluminum used on the roof of the St. Louis Civil Court House. The Plaza Commission, Inc., architects



Aluminum shingles being applied to the annex of the Drake Hotel, Chicago. Benjamin H. Marshall, architect

• ALUMINUM ROOFING •

ica, New Kensington, Pa. This indicates some of the possibilities, where color combined with light weight becomes a desirable factor. Such use has the advantage of permitting portions of the metal to be left exposed in the natural metal without danger of corrosion or staining adjacent surfaces. This field is being further enlarged by the recent development of dyed aluminum, not yet commercially available, in which dyes are used that make it possible to finish the metal in various colors suitable for either exterior or interior use. Tests indicate that these colors are of at least reasonable permanence.

Extruded aluminum may be used where there are a large number of pieces of rather simple outline suitable to the process, such as mouldings used in store fronts, glass tops, show cases, etc. The process of extrusion may be likened to a metal toothpaste container where the orifice forms the die and the metal is forced through, taking the shape of the die. Extruded aluminum is often used in combination with cast aluminum. In designing where the two processes are to be used in combination, it should be remembered that the extruded metal will retain its brightness far longer than will the cast, because

of the greater smoothness of the surface obtained by its fabricating process.

Aluminum may be hand-forged, which in working and detailing is similar to hand-wrought iron. It may be made from bars of different alloys according to the need of ductility, which, however, has nothing to do with the wear or color of the material.

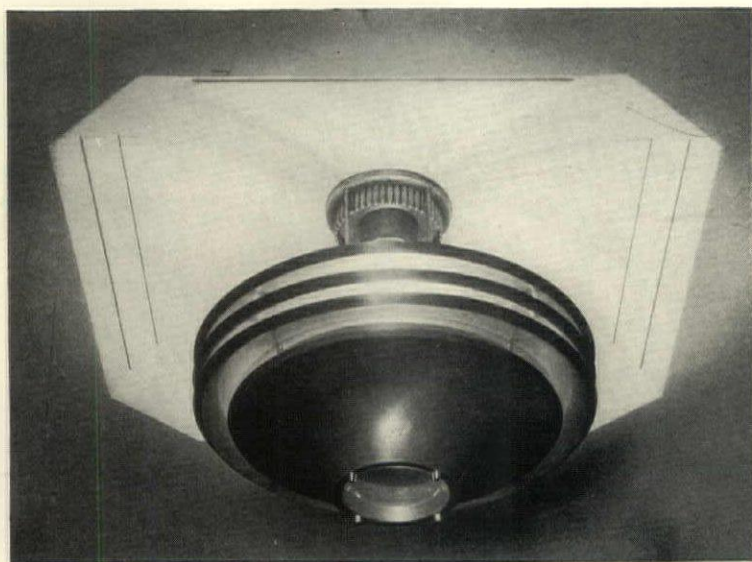
An example of the use of aluminum for the same purpose but with different effects, due to various degrees of malleability, lies in terrazzo strips. A harder alloy may be used for the usual rectangular patterns, where, if a non-contrasting effect is desired, the aluminum strip blends into a gray terrazzo so that the separations are not noticed. Or the use of a softer alloy will permit the metal strip to be readily bent into various shapes so as to form a pattern followed by the terrazzo. Aluminum terrazzo strips must, however, be painted as otherwise an alkaline cement will cause bubbling and destroy the bond. Ordinarily the aluminum strips are first installed, then painted and the terrazzo put in place.

Aluminum transmits heat quickly, as shown by a person's ordinary experience (Continued on page 78)



Cast aluminum sphinx, with sand blast finish, used as the apex to the roof of the St. Louis Civil Court House. Cast in thirteen sections, each section having a wall thickness of one-half inch. Total weight assembled, 5,000 pounds

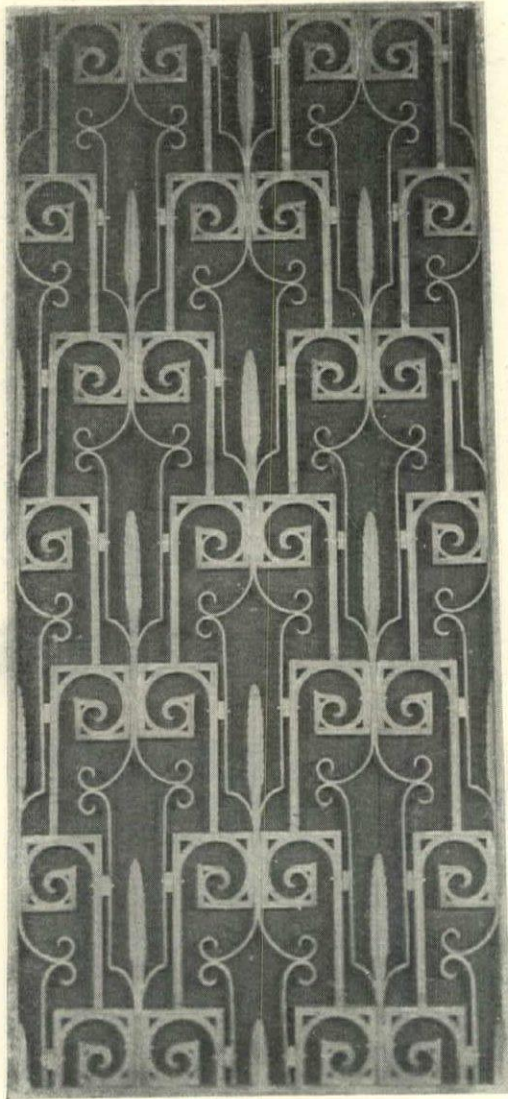
7 pages of details in
ALUMINUM



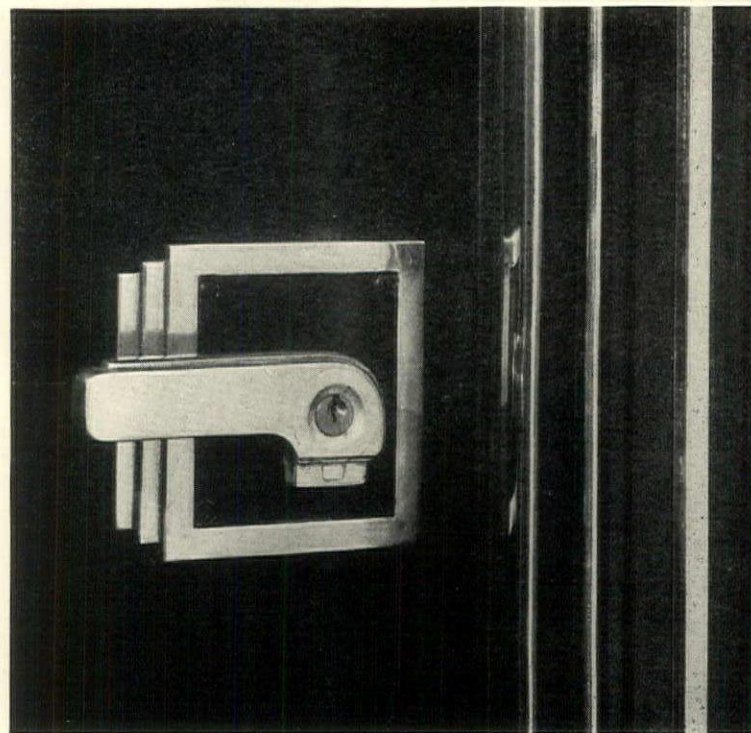
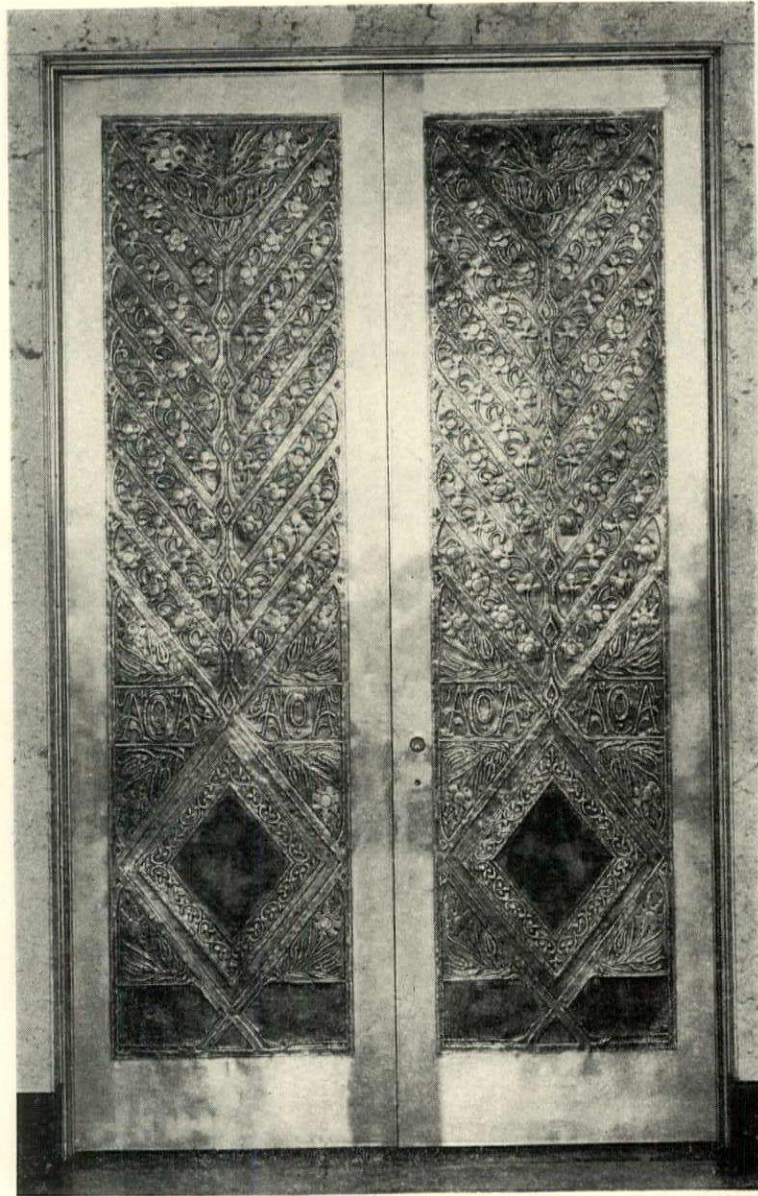
Lighting fixture of aluminum used in the New York office of the Aluminum Company of America. Designed by French and Company, decorators, and executed by Kantack

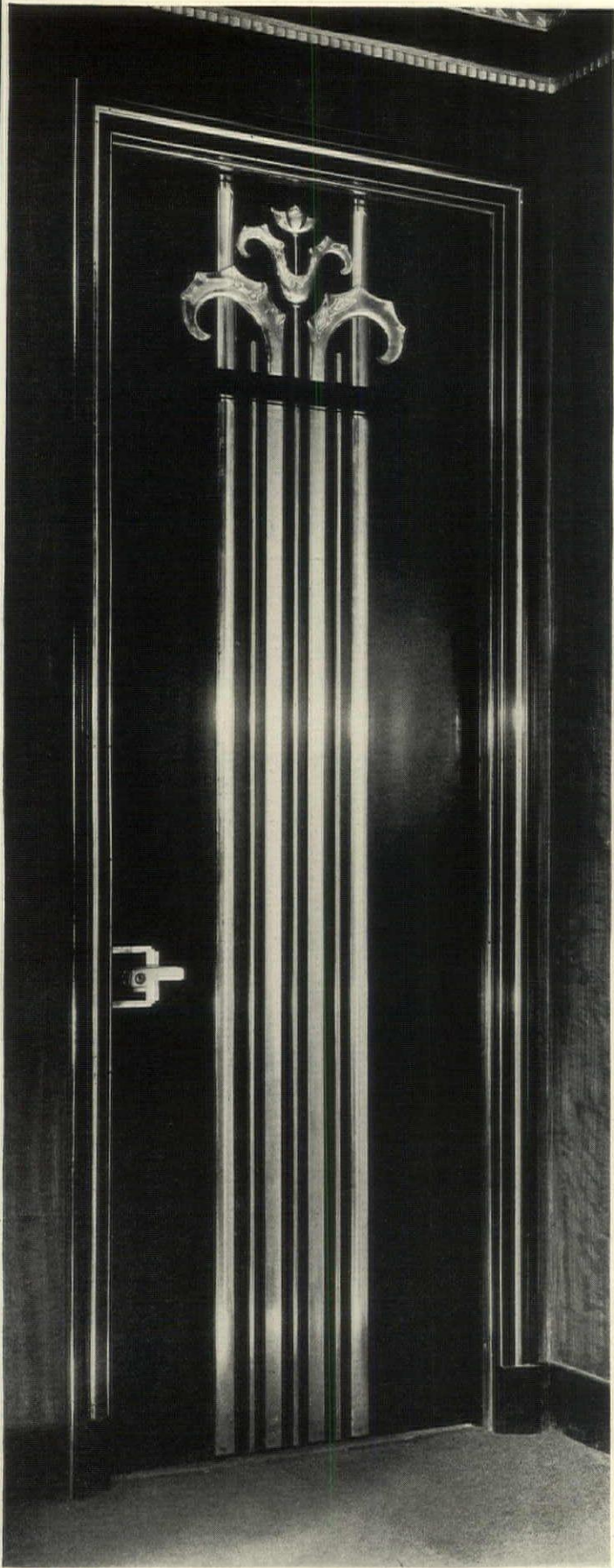
CAST AND SHEET ALUMINUM

*Entrance doors of the New Kensington
Research Laboratory of the Aluminum
Company of America. Henry J. Horn-
bostel, architect: at right*

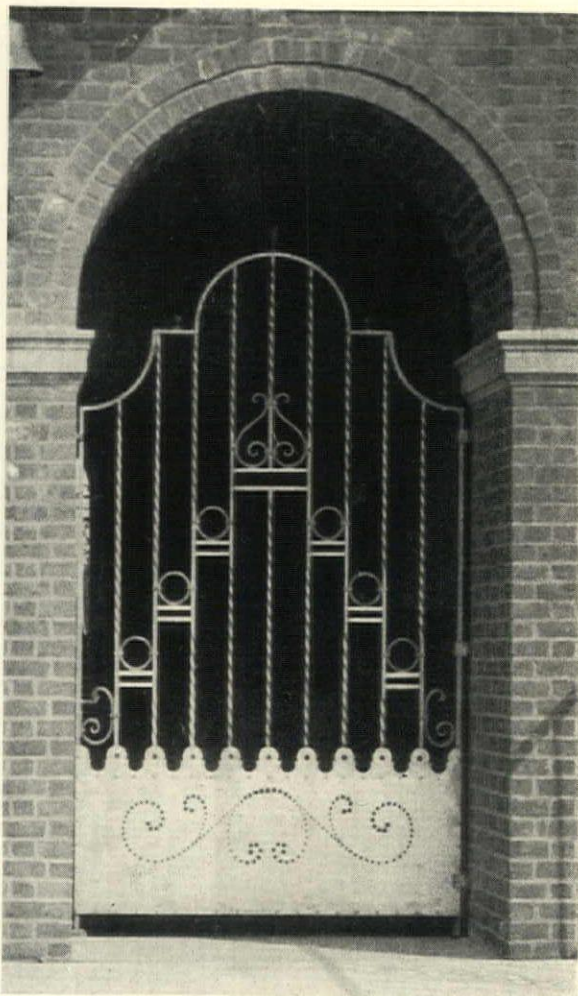


*Section of hand-wrought aluminum gates
at the entrance of the New Kensington
Research Laboratory. Designed and exe-
cuted by the Wendel August Forge*





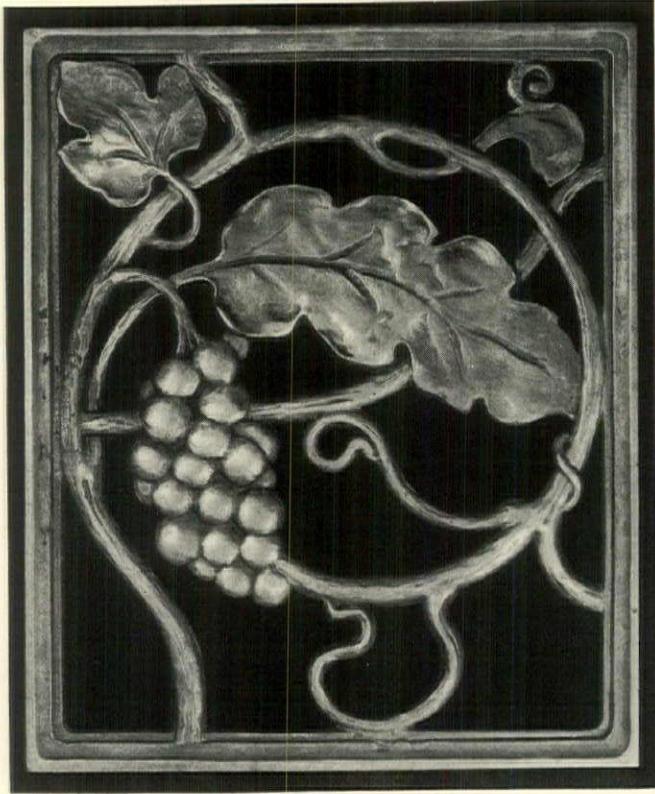
Doors with applied tubing and extruded shapes used in the New York sales office of the Aluminum Company of America. Executed by Kantack. French and Company decorators. At left: detail of hardware on similar door



GUILD SERVICE

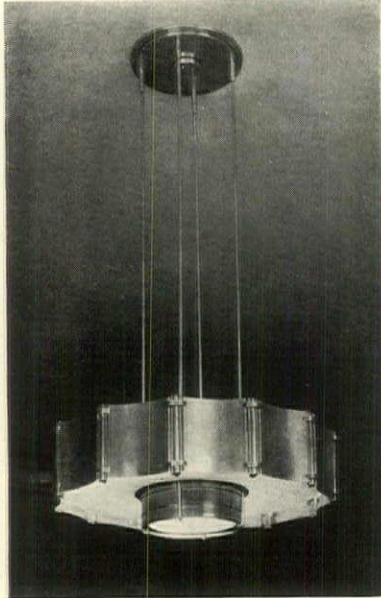
HAND-WROUGHT ALUMINUM

*Gate at the Ursuline School,
New Rochelle, N. Y. McGill
and Hamlin, architects. Executed
by Hasselman and Salterini*

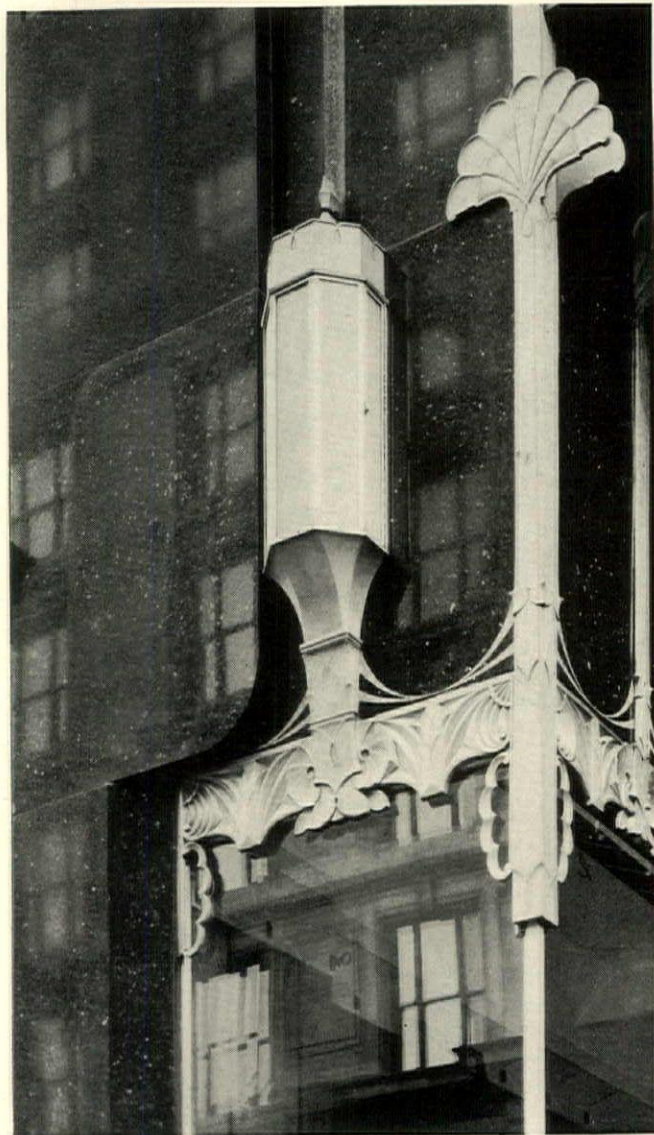


VAN ANDA

Below: Lighting fixture of aluminum in the New York sales office of the Aluminum Company of America. French and Company, decorators. Executed by Kantack



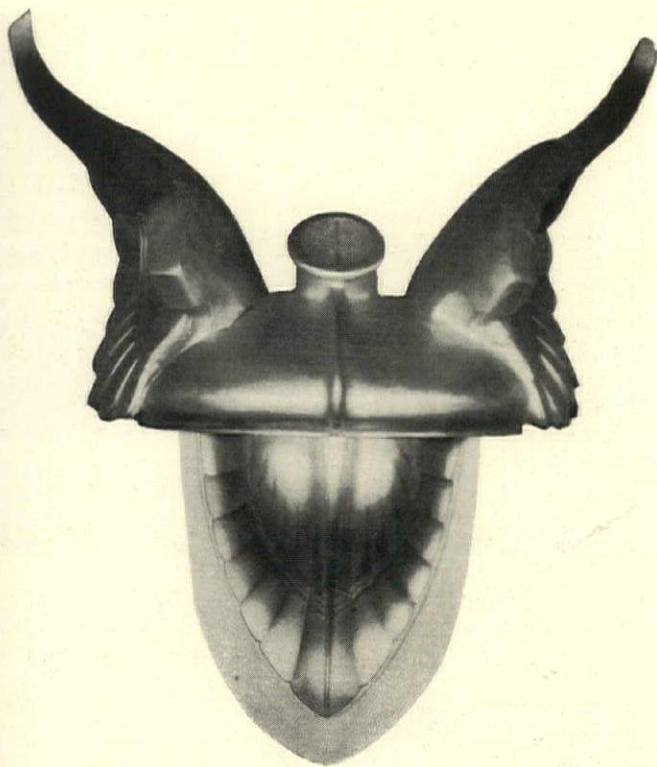
At right: Detail of aluminum work above show-window of the store of James McCreery & Co., New York. Of cast aluminum with a sand blast finish. Executed by the General Bronze Corp. Starrett & Van Vleck, architects





VAN ANDA

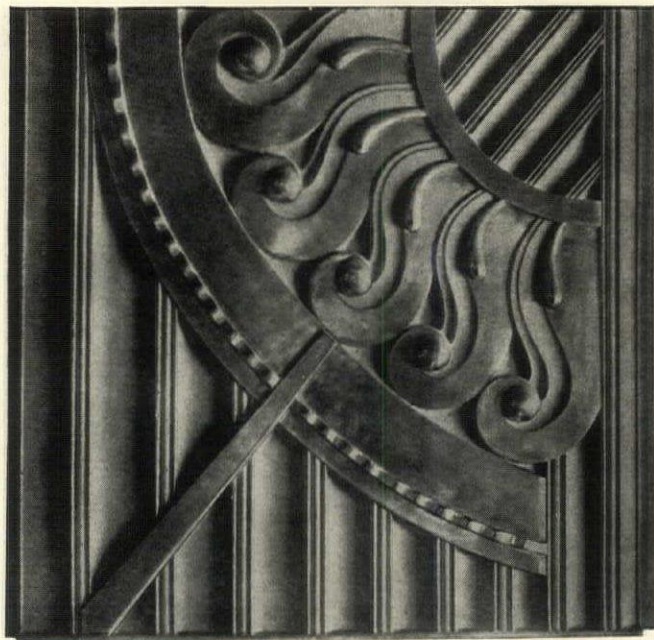
Above: Three sections of a radiator grille in the residence of Richard Sellers, Bellevue, Delaware. Fabricated of hand-wrought aluminum. Prentice Sanger, architect



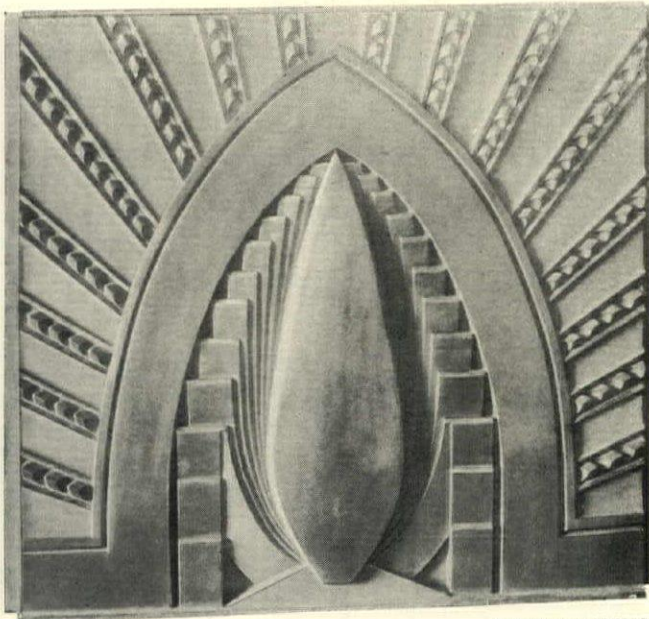
REMBRANDT STUDIOS

FLAG POLE SOCKET

The radiator emblem on the Chrysler automobile inspired this flag pole socket of polished cast aluminum used on the Chrysler Building, New York. William Van Allen, architect



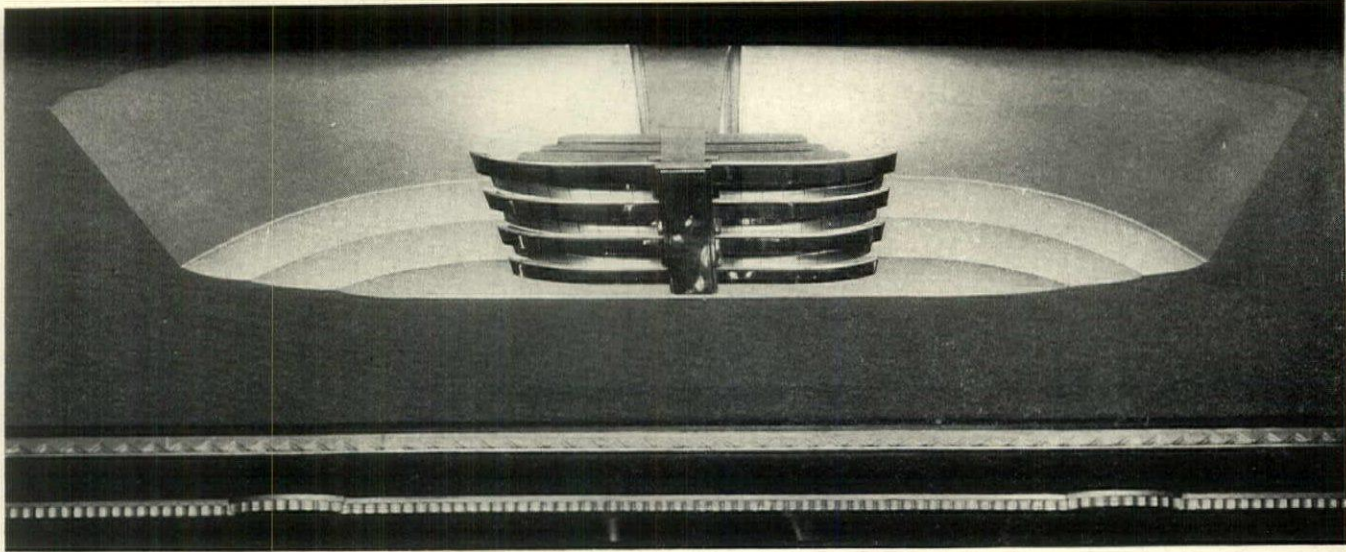
REMBRANDT STUDIOS



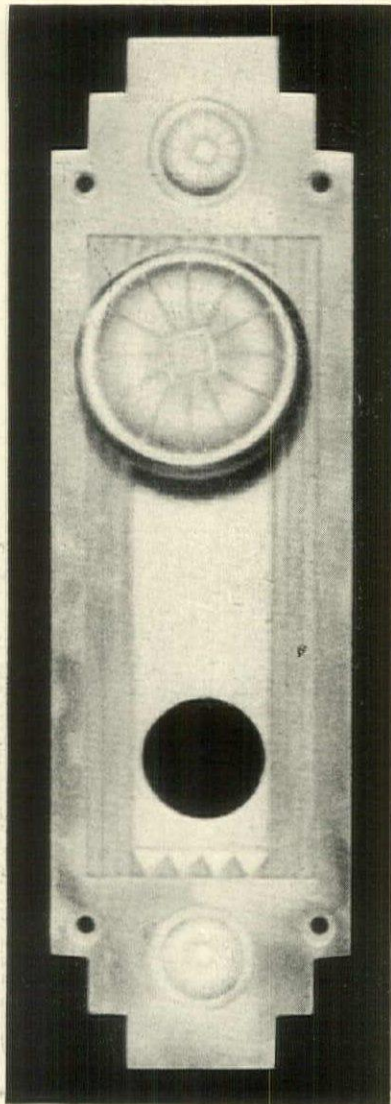
REMBRANDT STUDIOS

SPANDRELS ON CHRYSLER BUILDING

Two of the cast aluminum spandrels used on the Chrysler Building, New York, are shown above. They were given a sand blast finish and high-lighted with a medium polish



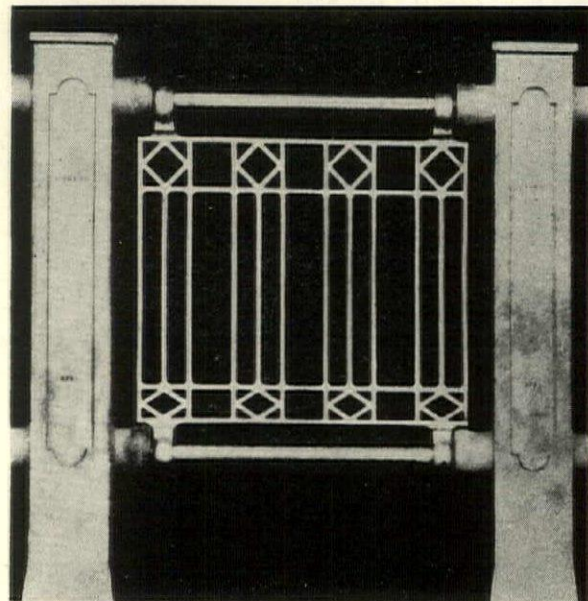
Lighting fixture of bright sheet aluminum in the New York sales office of the Aluminum Company of America. French and Company, decorators. Executed by Kantack



REMBRANDT STUDIOS

RAILING

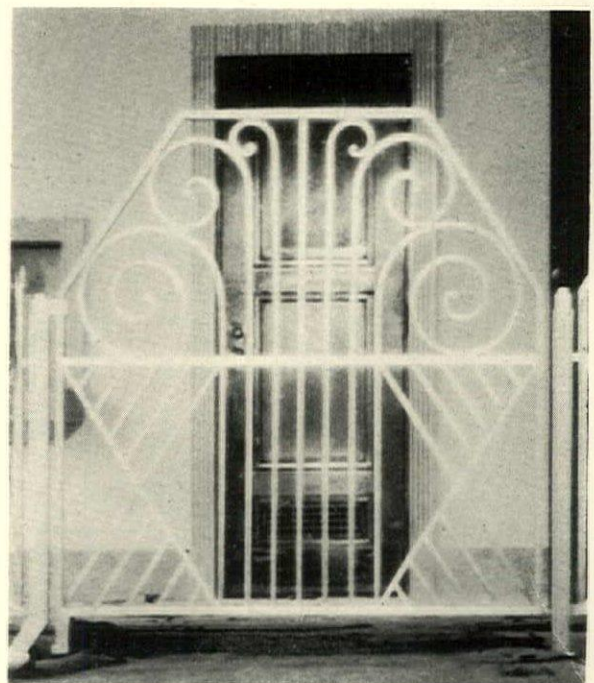
Section of West 106th Street Bridge, Chicago. Made of castings and tubing with natural finish. Designed by the Engineering Department, City of Chicago



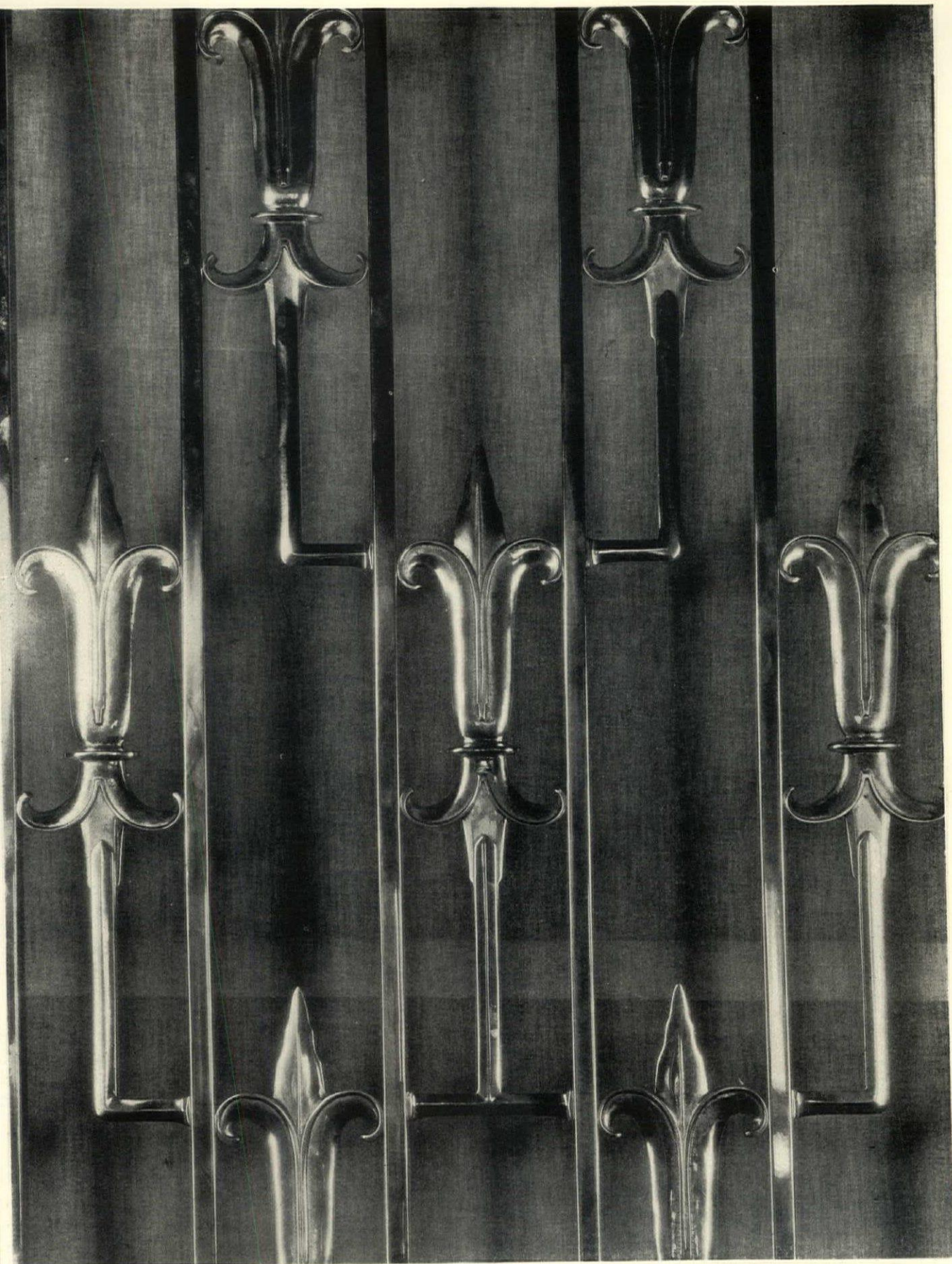
REMBRANDT STUDIOS

GATE

Gate of aluminum with satin finish in the lobby of the Michigan Diamond Telephone Exchange, Cleveland, O. Hadlow, Hughes, Hick & Conrad, Inc., architects



Door hardware offers opportunities in modern expression. The above escutcheon is of cast aluminum with an antique finish secured by an oxidizing and deplating process



ALUMINUM GRILLE AT SWITCHBOARD

Built of cast and extruded shapes highly polished. Used in the New York sales office of the Aluminum Company of America. French & Company, decorators. Executed by Kantack

WHAT ARCHITECTS



The newly completed Luhrs Tower at Phoenix, Arizona. Trost & Trost, architects and engineers

ANATIONAL standard safety code for building exits has just been approved by the American Standards Association, made available for adoption by state and municipal authorities and for use by architects, engineers and builders. The code was prepared by a technical committee of thirty representatives of safety and insurance organizations, federal government departments, state departments, of labor, local fire departments, architects, engineers and others.

THE ARCHITECT of today is both a business man and an artist, according to C. Herrick Hammond, president of the A. I. A. "An architect's office of modest size will handle with care the businesslike expenditure of \$2,000,000 of his clients' money and see that every dollar is accounted for and that value has been received for every dollar spent. A so-called business concern expending this volume in a year would have an important standing in business and financial circles, and its owners would be recognized as leaders in the business world. An unjust opinion of the architect has probably been brought about because of the architect's inherent desire to bring beauty into all the work he produces.

"Henry Ford once said in substance that he would not give five cents for all the art the world had produced. However, because of the desire to sell, in competition with

Licensing of Contractors Urged

Hammond Says, "Public Buys Beauty"

Income as Easy to Forecast
as Construction Cost

other automobile manufacturers who had added design and color to mechanical efficiency he was forced to scrap all of his original dies and machinery and is reputed to have spent \$200,000,000 in producing new dies incorporating that element of beauty now demanded by the public. This enormous investment has now been proved to be another evidence of the value of foresight.

"Similar experiences can be applied to almost every industry serving the public. Where the public has a free choice, it will invariably purchase the thing that is most attractive."

SHARPENED SPLINTERS of a treated wood are declared usable as nails in ordinary hardwood, according to reports of a new process invented by Alfred G. Olsen, of Elkhorn, Wis., that makes wood as hard as iron. It is said that chemistry, electricity and compression play a part in the process, the wood being greatly reduced in thickness without destroying the grain.

THERE are twelve million people living in cities of over one hundred thousand who have no bathrooms; eight million of the bathrooms in such cities are obsolete. According to "The Valve World," two million houses within central stations are not wired for electricity; twelve million have obsolete wiring; eight million have obsolete fixtures. These are some of the reasons for the rapid spread of the home modernization idea.

IN order to instill an appreciation of beauty in bridge design among both engineering and architectural students, it is proposed that student competitions for bridge designing be held among those two classes. This is a recommendation of the committee in charge of bridge design of the American Institute of Steel Construction, made at the recent convention in Biloxi.

VAST IMPROVEMENT in the nation's buildings has been brought about by the trained architect," states William O. Ludlow, Chairman of the Committee on Industrial Relations of the American Institute of Architects and vice president of the New York Building Congress. "Recall the buildings of two or three generations ago, when architects were almost unknown—those miles of brown stone fronts with monstrous cornices of sheet metal; those rows of pressed brick facades where the criterion of excellence was that every brick should be the exact shade of color of every other brick; the steep pitched slate roofs, known as

ARE TALKING ABOUT

Census Collects Construction Facts

Tulips Featured in Railroad Landscaping

Twelve Million City People
With No Bathrooms

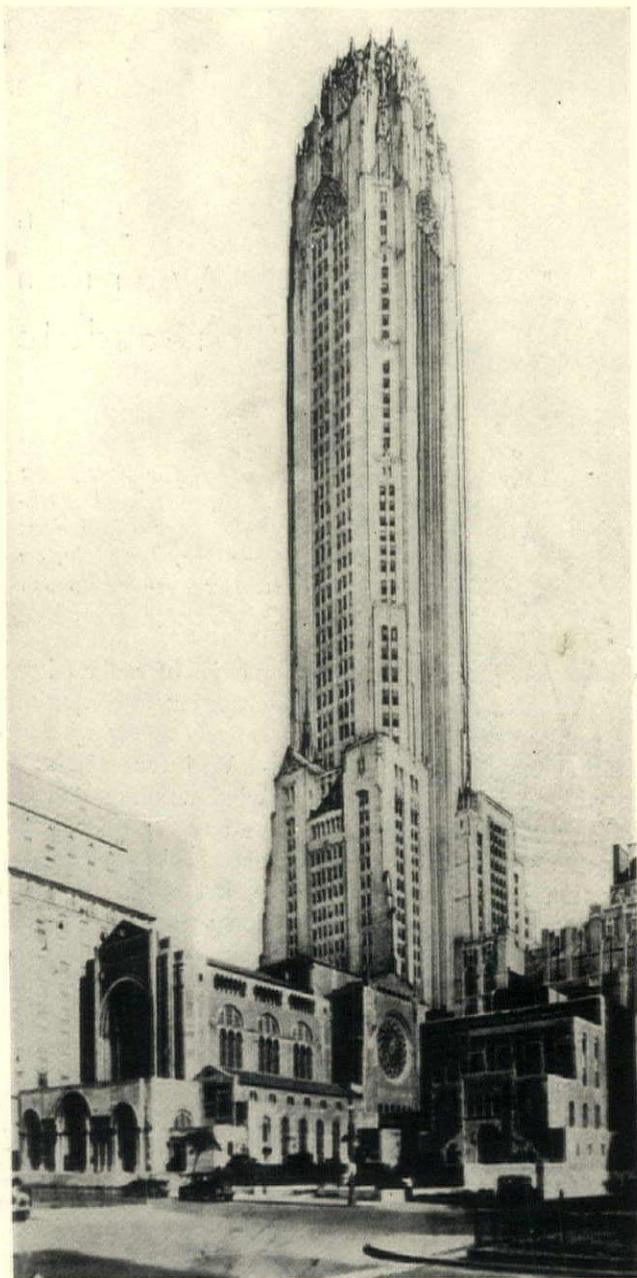
mansards, ugly with filigree crestings; the jigsaw patterns and scrolls cut into marvelous convolutions by the artist of the band saw.

"But, worst of all, was the planning or lack of planning of these buildings; the badly shaped and dark rooms, the small windows and the many rooms without windows, the winding narrow stairways, and such bad arrangement of plan that large areas of space were literally thrown away.

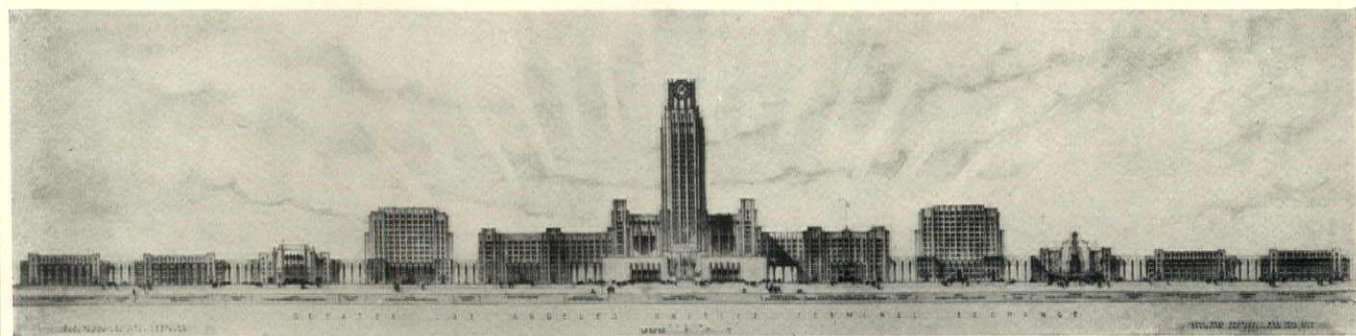
"Contrast all this with the buildings of today that are the work of men trained to plan and trained to design. If an architect now cannot save to the owner his commission several times over by economical and reasonable planning, and produce withal something good to look upon, he has no right to his title and a discerning public soon finds it out."

CONSTRUCTION statistics will be collected by the Bureau of Census when it takes the 1930 census. Figures on all construction work in process and contracted for will be obtained, sorted and compiled for the use of federal agencies, other interested persons and organizations.

THE PRESENT TREND of architecture in the United States is toward the more sparing and more effective use of ornament," according to Louis La Beume, a member of the Board of Directors of the American Institute of Architects. "Though the architect builds with opaque materials, he uses light to paint his building by means of shadows, and in the composition of these lights and shadows, by means of buttresses and piers, voids and solids, wall surfaces and fenestration, and the details we call ornament, lurks the ultimate beauty of his design. Each element is as important as the other, and each must serve with the nicest tact to enhance the effect of the other, (Continued on page 110)



Sketch of the new RCA Victor Building to be erected at Lexington Avenue and 51st Street, New York City. Cross & Cross, architects



Proposed Greater Los Angeles Unified Terminal Exchange, John Mead Howells, designing and consulting architect. A. P. Gillies, chief engineer



We Need New STRUCTURAL

by John
Warren
Teasdale



• In the March issue of THE AMERICAN ARCHITECT, the editors asked for articles on new materials or on new uses of old materials. Francis Keally contributed a few ideas in the April issue. Now Mr. Teasdale, an architect of St. Louis, has a word to say

WILL the future bring us cities of radiant jewel-like buildings of ever-changing hue, sparkling in the sun by day and entirely aglow with brilliant changing color at night? Will these buildings be without windows but be all window surface in that walls, roofs, floors, and partitions and even beams and columns will be of reinforced glass? Will such construction be not only practicable, but also economical, comfortable, healthy and utilitarian as well? I believe so. I shall try to explain why I expect this to come to pass and how I believe it will be accomplished.

Throughout architectural history probably no building material has enjoyed more continued popular favor than glass. From its earliest utilization up to the present day it has gradually increased in use and importance without ever suffering a loss of esteem. Each style in which it was used has shown increasing external areas of glazed openings and correspondingly diminishing wall surfaces as that style approached its highest perfection. With the exception of the Gothic to the Renaissance, each later style presented larger glass areas than did its predecessors. Present indications point to a fuller utilization of glass in the future than is now the case.

In the early days windows were necessarily made small as a protection from marauders and enemies but also because methods of manufacture and installation did not permit large openings. As better methods of both were developed and as law and order became more established, glazed openings increased in size and importance. At present it can hardly be said that we utilize to their fullest potentiality the glass materials available or the means at

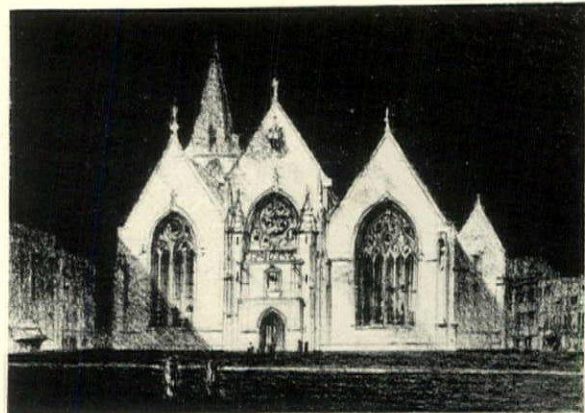
our disposal for incorporating them into our buildings. However, we are constantly progressing in that direction.

Mills and factories, perhaps because they are less influenced by precedent, have for some time presented glass walls broken only by the necessary structural members of mullions, imposts and muntins. Roofs, too, in these buildings, have become largely glass areas. In more finished buildings the tendency toward glass is not so marked, yet in residences, apartments, hospitals and the like we have full glazed solariums and terraces set with prism lights. Windows extending around corners of such buildings have recently made their appearance. A few years ago such fenestration would have been considered freakish. Sky scrapers, the outstanding modern architectural creation, present walls that are, in many cases, artistic screens of grilles in which the openings are glazed. The demand by retail merchants for display space has resulted in the lower story of many of our buildings being almost entirely of glass.

In days of old, they had little use for glass, not infrequently taxing windows



As time went on, windows became larger and more numerous until, as in the Church Saint Vivien, Rouen, completed in the 15th century, they became a featured element of architectural design



Materials

GLASS

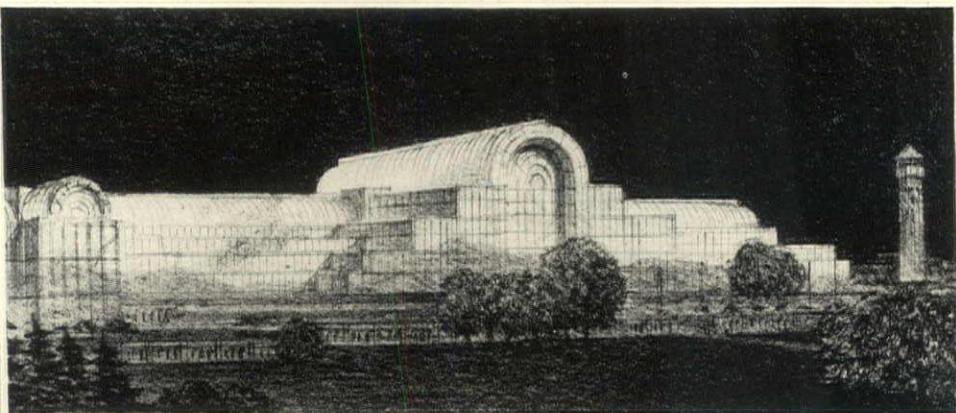
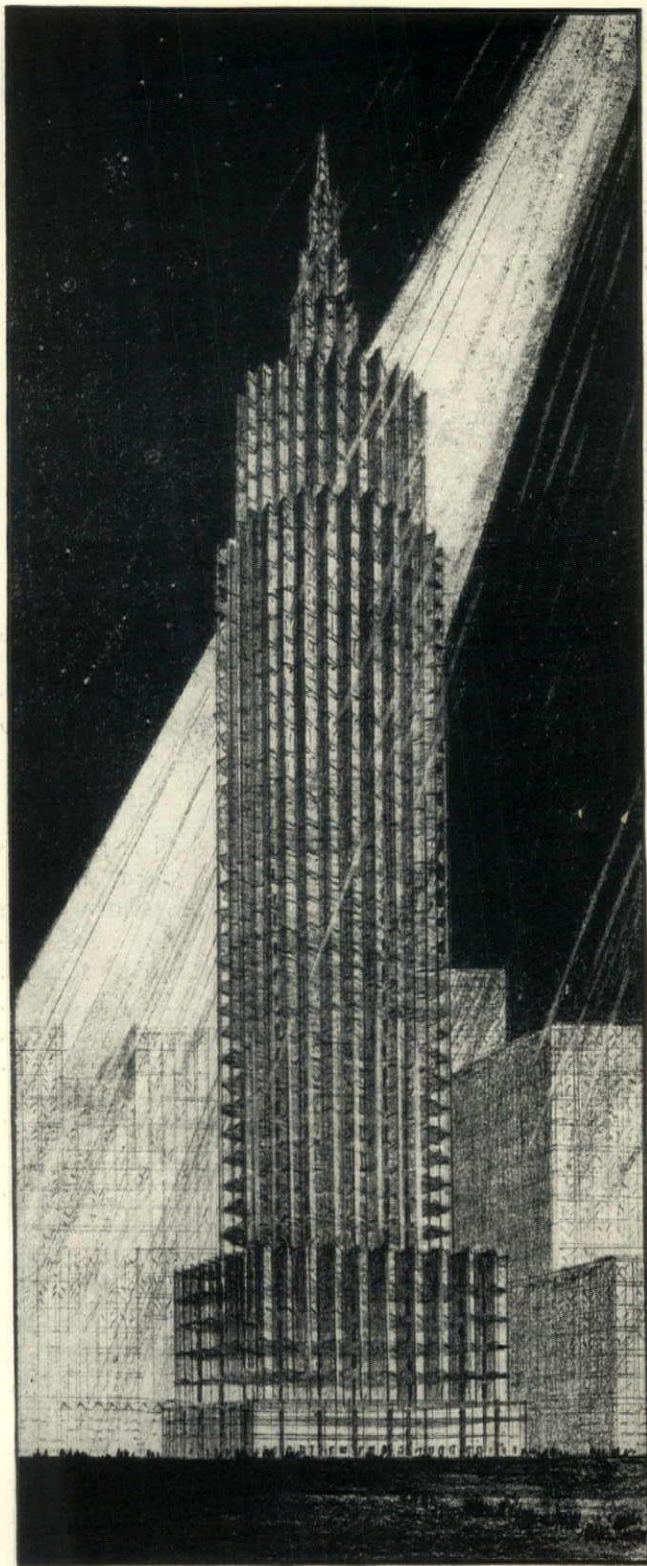
While we are taking increasing advantage of recent improvements in glass manufacture and of devices and means of installing it, there is no reason to suppose that these have reached ultimate perfection, or are incapable of further improvement. More likely new methods and developments will extend still further our opportunities for the use of glass. What these will be we are unable to predict, but that they will come is a certainty.

The Gothic builders, starting with the heavy, massive construction of the Romanesque period, constantly worked toward a lighter and more open structure. By studying thrusts and stresses they were able to design and dispose their structural members so as to adequately provide for the forces present and yet be as small in section and as light in appearance as possible. In its highest development, the Gothic cathedral presents walls of glass broken only by piers so thin that they would not have been possible but for the wonderful developments they made in vaulting, buttresses and flying buttresses. So zealous were these builders in this endeavor that they sometimes have been known to take liberties with their factors of safety.

As stone was their chief structural material, there were limits beyond which the Gothic builders could not go in their striving for glass walled churches. They did attain maximum efficiency from the materials available. We have not done nearly so well with the variety of products at our disposal and our better knowledge of engineering principle.

A glass building is not a new conception. References to such structures occur in fairy tales and legends while the proverb, "Those who live in glass houses should not throw stones," is of ancient origin. This would indicate a long-felt popular desire for such buildings. Shatter-proof glass is one argument (Continued on page 80)

And then, about 1850, the huge Crystal Palace was built in London—an all-glass structure in which the structural elements were clearly visible as an integral part of the architecture



Tomorrow—will this tendency be carried to such structures as this, a conception of Francis Keally, with structural elements of dark glass, floors of glass in pastel shades, and walls of etched glass? Through the use of glass elements, the exterior and interior design are integral, forming a composite unit

Sketches by
Francis Keally

As It Looks

City Standards Not Universal

CITY folk seem to take for granted that the entire United States enjoys fine living conditions. For instance, a recent house organ, in defending the much maligned plumber against jokes, says: "No oil company can do business today without the aid of the plumber. He is the one who must fit up the filling station with lavatories and toilets." But unfortunately there are literally thousands of filling stations that never saw a plumber, that use nothing but the services of a moderately tasteful "specialist." There are still hundreds of thousands of houses that are not wired for electricity, still towns where Main Street is a pool of liquid mud in wet weather. Great though the progress of our country has been, there is plenty of room for improvement even in our large cities . . . to say nothing of the smaller towns and hamlets which, down-at-the-heel as they may often appear, are frequently suprisingly wealthy.

Booze and Architects

DURING the last two years I haven't done a house which didn't have a bar installed," is a statement attributed to Lewis Bowman and made the subject of editorial comment in the *New York American*. Mr. Bowman is an architect who has designed some of the finest houses in Westchester County, New York. Certainly the practice of architecture leads into strange paths and, if it be truly an expression of modern life, then Mr. Volstead must have many a cause to blush at the way in which architecture is at times reflecting that life rather than the law he so fondly fathered.

Electrical Unions

ELECTRICAL workers belonging to the New York Electrical Workers Union, No. 3, charged with restricting output and enforcing a "super-code," are defending themselves with convincing statistics. They have published a booklet entitled "Public Service" that states: "The records of the Department of Water Supply, Gas and Electricity for New York show the filing of 20,000 violations of the Code for the year 1927. . . . When we began our campaign for improvement in March, 1926, there was an immediate and big drop in violations. Only 10,070 violations were reported . . . during the nine months." Records of the New York Edison company show a drop in emergency calls from 18% to 7%; short circuits from 20% to 11%. "Hardly any emergency calls have been made in the buildings that have been wired in the past 18 months due to defective wiring. . . . Charges that the Union is restricting output and setting up a 'super-code' are seen for what they are, an effort to discredit the organization for actually observing the electrical code already promulgated by the city." No building law can be enforced

unless the workers are back of it, for inspection costs would be prohibitive. Unions that instill the pride of craftsmanship in their members are doing a job that is of genuine public service. Such are to be congratulated and encouraged in their work so long as it is founded on the spirit of fairness and square dealing.

Does Courtesy Pay?

A SEATTLE merchant made an experiment to find out whether courtesy pays. One day he instructed his sales people to show customers only the ordinary courtesies. The average sale was twenty-eight cents. The next day each clerk was instructed to show extra courtesies. For instance, the customer was called by name when entering, inquiries were made about the family efforts were untiring to find just the exact article that was desired, and the customer was conducted to the door instead of being left abruptly in the middle of the store. The average sale was ninety cents. What a testimony to the power of courtesy! And what an impetus to see that courtesy prevails throughout every contact—even in an architect's office.

Dangerous Locks

LOCKS sold with a strike plate having a lip that projects beyond the jamb are a nuisance that manufacturers should correct. Such lips are generally encountered with metal trim or metal partitions; the projecting lip is located at a good height to catch and tear a pocket or dress. It would appear that most architects are specifying for steel trim the type of lock usually used on wood trim, not figuring that the thinness of the metal requires a different type of strike plate. Manufacturers should advise the use of a more practical strike plate and architects should insist that it be supplied.

Guilt of the Accomplice

S TATES an editorial in the *New York Times*, under that title, "If architects sign their names to buildings for which they are responsible, the appearance of American cities is bound to improve, according to Mr. Benjamin F. Betts, editor of THE AMERICAN ARCHITECT. He argues that even an unknown name on a product indicates to the public that the maker thought well enough of it to want to be identified with it. At present public buildings are generally marked with the architect's name. Apartment houses, industrial buildings and houses seldom show a tag naming the man who designed them. "Although it seems a good idea to let the world know the authors of the buildings, monstrous or magnificent, that fill our cities, not all architects favor the plan. They are not shy of revealing their identity in most cases, but often enough circumstances warrant modesty.

to the Editors . . .

who has built a Good House for \$6,500?

LOW COST HOUSES that are convenient, livable, durable, and pleasing to view are a serious problem in the United States today. What is the architectural profession doing about it? Are architects lending their efforts to satisfy demand for well designed small houses? Is it possible to build houses that meet the space requirements of the average sized families, the sanitary standards of today, and that possess a meritorious architectural quality—for \$6,500 or less?

The editors of THE AMERICAN ARCHITECT would like to obtain opinions on this subject from architects in various parts of the country. They invite architects to submit photographs and plans of houses that have been erected and that meet the above conditions.

To avoid any misleading consideration due to the increased cost of building during the post-war period only houses that have been built within recent years should be submitted. The cost stated should cover the completed house exclusive of the land, but fully equipped as this term is usually understood.

"There is a story of a Washington architect, Mr. Hornblower, who built a fine house for the late Judge Gray. The architect explained to Mr. Evarts that there had been so much interference from the owner that he had not been able to build as he thought best. Mr. Evarts made a suggestion which might be taken up by the dissenting group today—have a tablet put on the house, 'Hornblower, fecit, Gray, interfecit.'"

Advertising by Architects

ALTHOUGH advertising by individual architects has always been looked upon with general disfavor, yet fifty years ago THE AMERICAN ARCHITECT . . . then known as *The American Architect and Building News* . . . carried several small advertisements of architects, one of which read: "W. W. Goodrich, M.A., C.E., Architect, Denver, Colorado. Designs, Plans, Elevations, Specifications, Superintendence, Estimates and Correct Sanitary Arrangements furnished for all classes of Public or Private Buildings. Ecclesiastical and Monumental Designs a specialty." The question of such individual advertising today, though done by a few, is far overshadowed by the necessity of advertising the function of the profession as a whole. A proper handling of ad-

vertising architectural service would quite understandably create a public recognition of the fact that this service is as essential to a modern building as four wheel brakes are to a motor car. And it is not so many years back that the advisability of four wheel brakes was a hotly disputed question. Advertising can do much. It can, unquestionably, place the architectural profession where it belongs in public esteem providing that along with such advertising the public can be given some gauge whereby it can recognize a qualified architect whose training and experience makes him worthy of his hire.

Litter Basket Beauty Contest

THE desire for beauty which has been roused in the hearts of the public during the last few years is strikingly revealed in the recently announced contest for public litter or waste receptacles, conducted by the New York Academy of Medicine for use in New York. A first prize of \$500 and a second prize of \$250 is offered for designs, which must be of metal and designed for attachment to a wall, lamp-post, pole or other suitable support. Indeed the public is becoming increasingly beauty-conscious!

Chiseling a New Profession?

STEPHEN VORHEES, talking before the New York Building Congress recently, referred to "the new profession of chiseling." Chiseling is not exactly new. Neither can it be dignified by calling it a profession. The term "chiseling"—as applied in the building industry—refers to the occasional practice of general contractors forcing subcontractors to cut their original bids on a particular job after the general contractor has been awarded the contract. Where the subcontractor will not reduce the bid, which the general contractor used in making up his estimate, the general contractor then often resorts to the practice of "shopping" for new quotations. Assuming that the subcontractors have been given a reasonable time to develop their estimates, then chiseling and shopping becomes an evil that works only to the advantage of the general contractor. Architects can help to curb the practice by requiring the general contractor to submit with his original bid a list of the subcontractors whose prices were used, together with the amounts of these subcontracts. Fair play and good sportsmanship should be respected in the building industry as well as in other fields of human endeavor.

Trick Store Front Invites Robberies

MORE than three hundred robberies in the Thom McAn shoe stores, New York City, lend point to the fact that stores with trick fronts cutting off a view of the interior of the store merely extend an invitation to the hold-up man to enter and get to work. This is another illustration of the changing times, when stores must be designed not only for appearance and convenience, but also for protection against bandits and hold-up men.

THE MAD HATTER Settles Everything

By G. Frank Corder, A.I.A.
Secretary Michigan Society of Architects

BRIGHT beams of the rising sun awakened Alice, the Mad Hatter and the Dormouse. The latter had slept under a crumpled copy of the Daily Jabberwocky, the headlines of which happened to attract his attention as he awoke.

"Mad Hatter," he exclaimed, "did you see this?"

"No, what is it?" he replied.

The Mad Hatter took it and read, "Arrowroot & Gingersnap, Well Known Mad Hatters, Forced to Wall Business to be liquidated."

"What does that mean?" said Alice.

"Well," said the Mad Hatter, who was young-to-middle aged and out of work, "I suppose that this overhead business has at last affected the big Mad Hatters as it did some time ago. No business, no money."

The Dormouse, puzzled, spoke up. "If that's the situation, how do you Mad Hatters expect to build that fine new Headquarters building for your National Association if business is so poor?"

"It's this way," said the Mad Hatter, "we believe that by putting up a big building in the High-hat center of the country we will so dignify our noble craft that good times will return and we will all be prosperous again."

"Will you have one of those big electric signs on it?" queried Alice.

"Goodness, No," replied the Mad Hatter, "that would never do. That would impair our prestige and dignity."

Alice being young didn't understand such things so she continued, "How will they know what building it is? And too, I have heard that the buildings there are very large. Will yours be seen?"

"Of course," answered the Mad Hatter, "it will be very beautiful as we will have a competition from which the best design will be selected. It will be very conservative and modest as befits our ethics."

Here the Dormouse, whose long thin nose and whiskers bespoke inherent business acumen, interjected, "You had better be careful or your ethics may turn out to be your deathics. How, I ask you, do you expect to pay for a building when all of you are out of work and without money?"

"Easy," he responded, "those who haven't money will give us their notes."

"Notes? what do you mean, Notes?," said Alice.

"What he means," intervened the Dormouse, "is that all the Mad Hatters who are stone broke will write on a little piece of paper a promise that they will pay \$200.00 each some day."

"But how can a building be built out of papers?" asked Alice, who was getting more confused all the time.

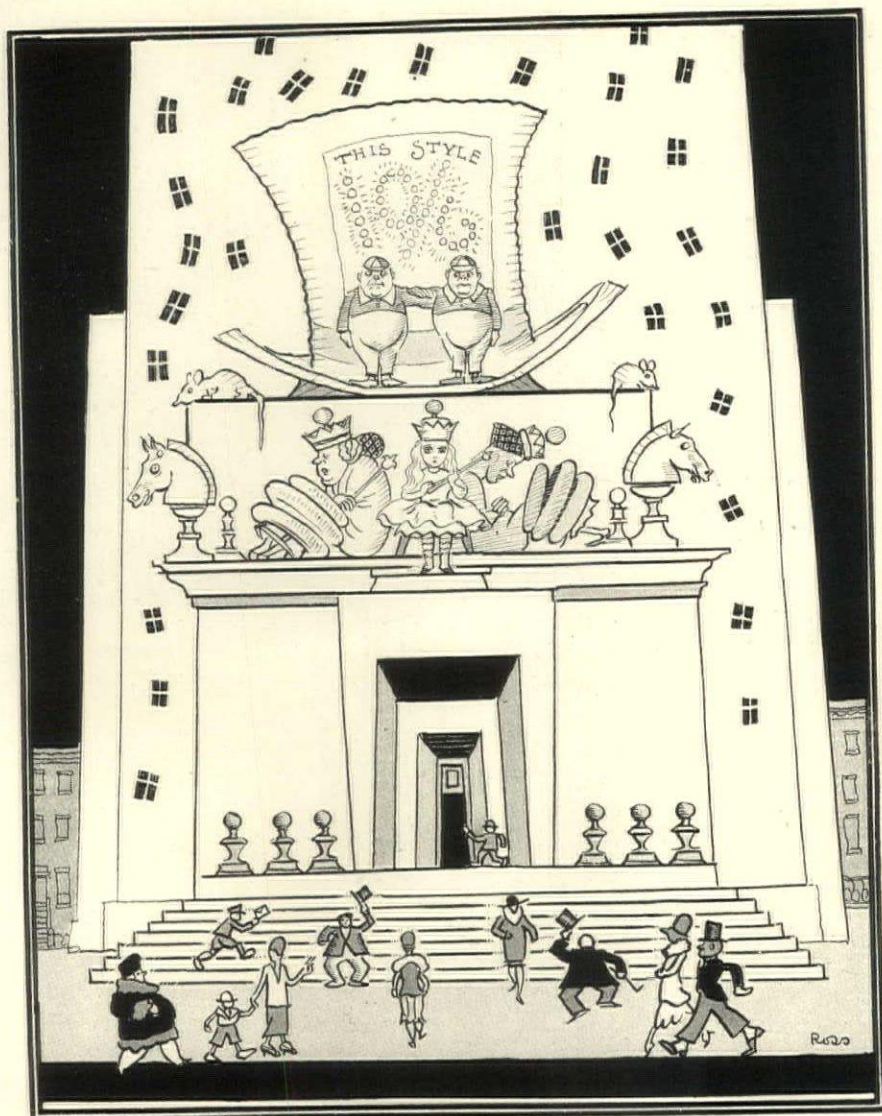
"I can see how Mr. Dormouse might use paper to build his nest but you Mad Hatters will have to have a real building."

At this the Mad Hatter waved his arms in utter disgust at Alice's dense ignorance and remained still.

Suddenly, a white rabbit with pink eyes came dashing up all out of breath and apparently exhausted. Stopping, he asked wearily, "I'm looking for a client, did he go this way? Have you seen him?"



Stopping, he asked wearily, "I'm looking for a client, did he go this way? Have you seen him?"



PROPOSED
FACADE
for
Mad Hatter
Building

*Drawings by
Gordon Ross*

"What's a client?" asked Alice, all curiosity.

"I used to know," said the Mad Hatter, "but I haven't seen one for so long, I hardly know what they look like. What did he look like, Mr. Rabbit?"

"Oh, I don't know," gasped the white Rabbit. "As I said before, I'm merely looking for one," and with that he went on his way.

There was silence for some time. After a while the Dormouse, who had been stroking his whiskers as if in grave thought, spoke up. "I believe I have an idea. Suppose, instead of asking each Mad Hatter for \$200.00 for this building, you postpone it for a while. Instead, ask them to give \$50.00 each for the purpose of advertising your noble craft in the Daily Jabberwocky or the Weekly Looking Glass. Tell the readers how unhealthy it is to go without hats; how it causes colds and baldness; how silly it is to go without hats yet wear fur overcoats. Tell them how much more economical the hats made by real Hatters are, how much longer they last and how well they retain their style over the years."

The Mad Hatter listened but evinced no spark of interest. "No," said he, "I don't think that advertising our business would do any good."

"Did you ever try it?" quickly responded the practical Dormouse.

"Well, no," said he.

"Then why don't you?" said the Dormouse.

"Well, er, er, it's never been done before. It might be all right to advertise biscuits and salmon but hardly our ancient and honorable craft. Its traditions wouldn't permit us to do so."

"Is that right, Mr. Dormouse?" asked Alice.

"Well," remarked the Dormouse, "I think that our friend, like most of his guild, has been too close to his shop and for too long a time. He glories in making fine hats, but overlooks the many possible customers who are attracted to hat substitutes made by other crafts which are not slow to shout their wares on the marketplace. He has been hiding his light under a high but dismal crown."

The Mad Hatter began to register enthusiasm. "By Knox, I think you're right," he exclaimed, "and here's something else. If your scheme works we will again become prosperous and be overjoyed to subscribe to the National Building Fund, just as truly as Warner. I'll write to the Board of Directors right away."

"Your Alterations
went up in

SMOKE

Try
and COLLECT,"
said the owner

By

George F. Kaiser



WHAT HE DID. "I want to remodel my house," said Field to Bryan, a local builder. Field and Bryan got together; a contract was signed and work started. When the remodeling was nearly completed the house burnt down. Bryan demanded that the owner pay him for his work, but Field refused. After Bryan had waited several months, he decided to start suit. Even after suit was started, the owner still refused to pay, and told Bryan the only way he could collect was by judgment.

WHY HE DID IT. The owner had heard that one contracting to erect a building is not excused from performance of his contract by the destruction of the building before the time fixed for its delivery, but he didn't know that a different rule applies where the contract is merely one for remodeling or for alterations.

WHY HE SHOULDN'T HAVE DONE IT. Where the continued existence of a specific thing is essential to the performance of the contract, its destruction from no fault of either party operates as a discharge. It is upon the theory of this exception that the distinction is made between contracts to build a structure, and contracts for repair. As to the latter, even though the repairs be only partly performed at the time the house burns, there may be a recovery upon the contract for the pro rata price since the destruction of the building being repaired operates as a discharge or excuse for the failure to complete said repairs, on the ground of impossibility. On the other hand, where the contract is to construct a building, destruction of the uncompleted building will not excuse the contractor; he must rebuild and complete his contract before he can recover the price or any part.

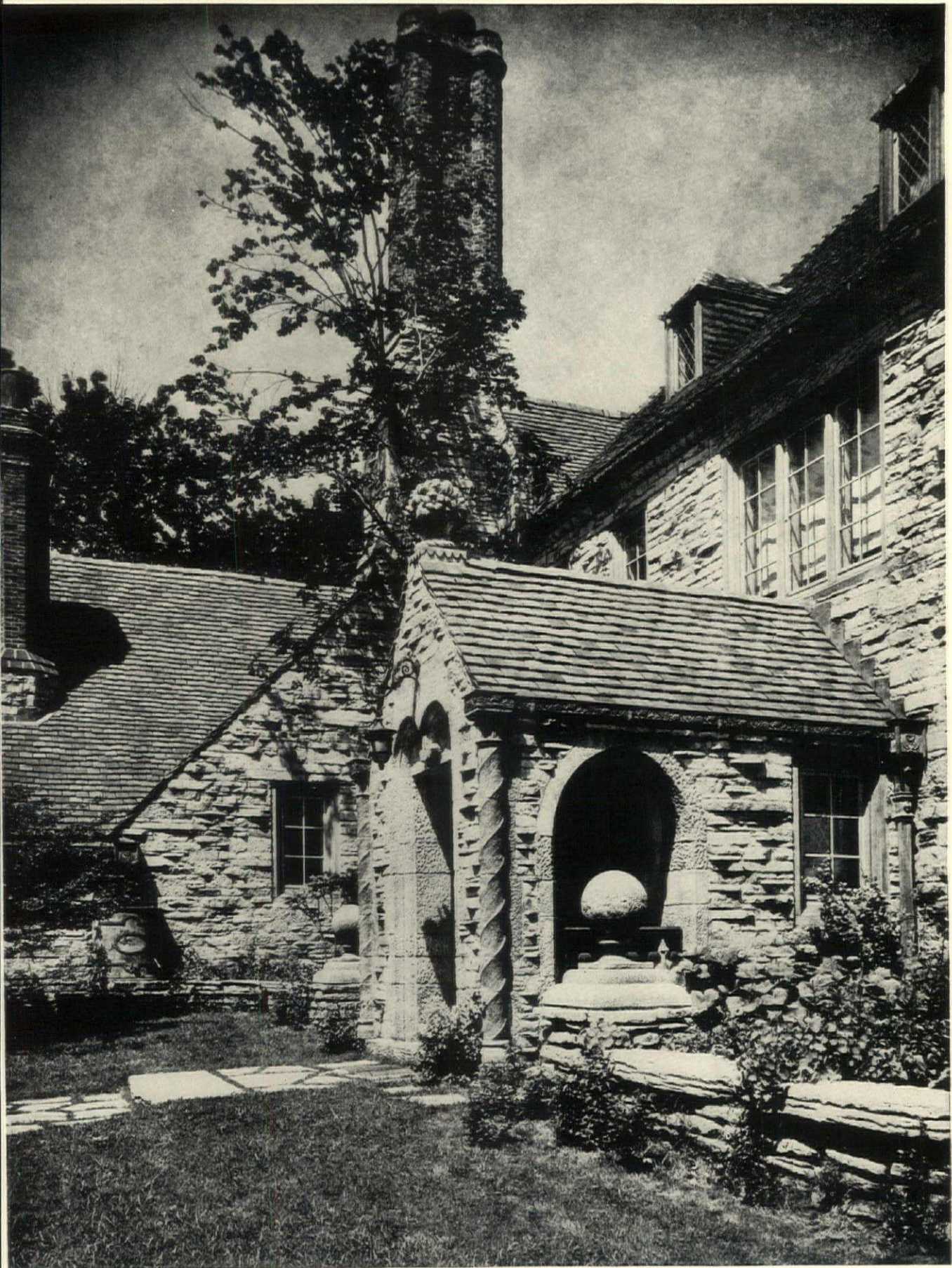
Fees for associate architects when one dies

WHAT HE DID. Benjamin & Benson were a firm of architects retained on a costly public work. As it was intimated to them that it might be well to retain Whalen & Hobbs as associate architects, they did so; the work proceeded under a partnership agreement between the two firms of architects. Then Benson died before the work was completed. Some time later Benjamin learned to his amazement and anger that Whalen had gone to the owner, and had procured a new contract for Whalen & Hobbs alone. When Benjamin could get no satisfaction, he sued for an accounting of the profits of the job, but Whalen & Hobbs still refused to share them.

WHY HE DID IT. Whalen and Hobbs claimed that the partnership between their firm and the firm of Benjamin & Benson had been dissolved by the latter's death.

At any rate, they thought they saw a chance to finish the work, freeze out Benjamin, and collect the entire fee.

WHY HE SHOULDN'T HAVE DONE IT. On a case decided on facts similar to those set out above, the New York Courts, in a scathing opinion, held that there was a breach of trust on the part of the partnership which solicited the remainder of the work on its own account, and without the knowledge of the surviving partner of the other firm of architects with which it had been associated. On this theory and on the further finding that the partnership between the two firms of architects had not been dissolved by the death of a member of one of the firms, it compelled Whalen's firm to account to Benjamin, the surviving member of the other firm, for the money received for finishing the job.



How appropriate to this Early English residence in Evanston, Illinois, is its roof of hand fashioned shingle tiles. The architect, Richard Powers of Chicago, chose IMPERIAL Roofing Tiles as best simulating the color and texture of ancient English tile roofs.

LUDOWICI-CELADON COMPANY
Makers of IMPERIAL Roofing Tiles

NEW YORK: 565 FIFTH AVENUE

104 S. MICHIGAN AVENUE, CHICAGO

WASHINGTON: 738 FIFTEENTH ST., N. W.

THE READERS

Have a Word to Say

• HAWAII ALSO WANTS TO SELL THE MAN IN THE STREET

Editor's Note: Mr. Wood's letter from far off Hawaii was received just too late to be included in the tabulation of sentiment of various chapters of the A. I. A., published in April issue of THE AMERICAN ARCHITECT.

THIS committee undertook a campaign of publicity which lasted a few months during the year 1925.

This was discontinued, partly because it was felt that the publicity was not of the right character, and partly because it was felt that the expense was out of proportion to the results.

Since that time nothing has been done in the way of organized or consistent work on these lines, in fact practically nothing has been done.

Some time last year this committee undertook to furnish a series of articles to the local newspapers with this object in view, but it did not materialize.

In view of the work along these lines that is being done in several places on the mainland it is hoped by this committee interest in the subject can be revived and something of a constructive nature will result.

We appreciate very much your interest in this matter and we shall be glad to keep in touch with you and help in any way that we can to further the idea of selling the value of architect's services to the general public as this is unquestionably a very vital phase of present day architectural practice.—*Hart Wood, Chairman for Committee on Education and Public Information, Hawaii Chapter A. I. A.*

• CORRECTION ON SELLING THE MAN IN THE STREET

Editor, The American Architect:

A MOST serious error appeared on pages 22 and 23 of the April issue of THE AMERICAN ARCHITECT in the tabulation entitled, "What 44 A. I. A. Chapters are doing to Sell the 'Man in the Street.'"

Your tabulation states that the Chicago Chapter under the sub-heading of "Paid Advertising," have issued a series of letters to the banks, mortgage houses, realtors, states-attorneys, building commissioners, lawyers, judges and members of the legislature, etc. As a matter of fact, the Chicago Chapter has done nothing of the kind. Whoever gathered this data has confused the work being done by the Illinois Society of Architects with the work of the Chicago Chapter. Credit for this publicity should be given to the Illinois Society of Architects and not to the Chicago Chapter, A. I. A.

For many years the work being done by the Chicago Chapter, A. I. A., and by the Illinois Society of Architects has been divided on rather definite lines so as to avoid a duplication of effort. The Chicago Chapter,

A. I. A., devotes its energies to the question of aesthetics and education. The Illinois Society of Architects to the problems affecting the business side of the profession.—*F. E. Davidson, A. I. A., Chicago.*

• ABILITY vs LAW IN REGISTRATION

Editor, The American Architect:

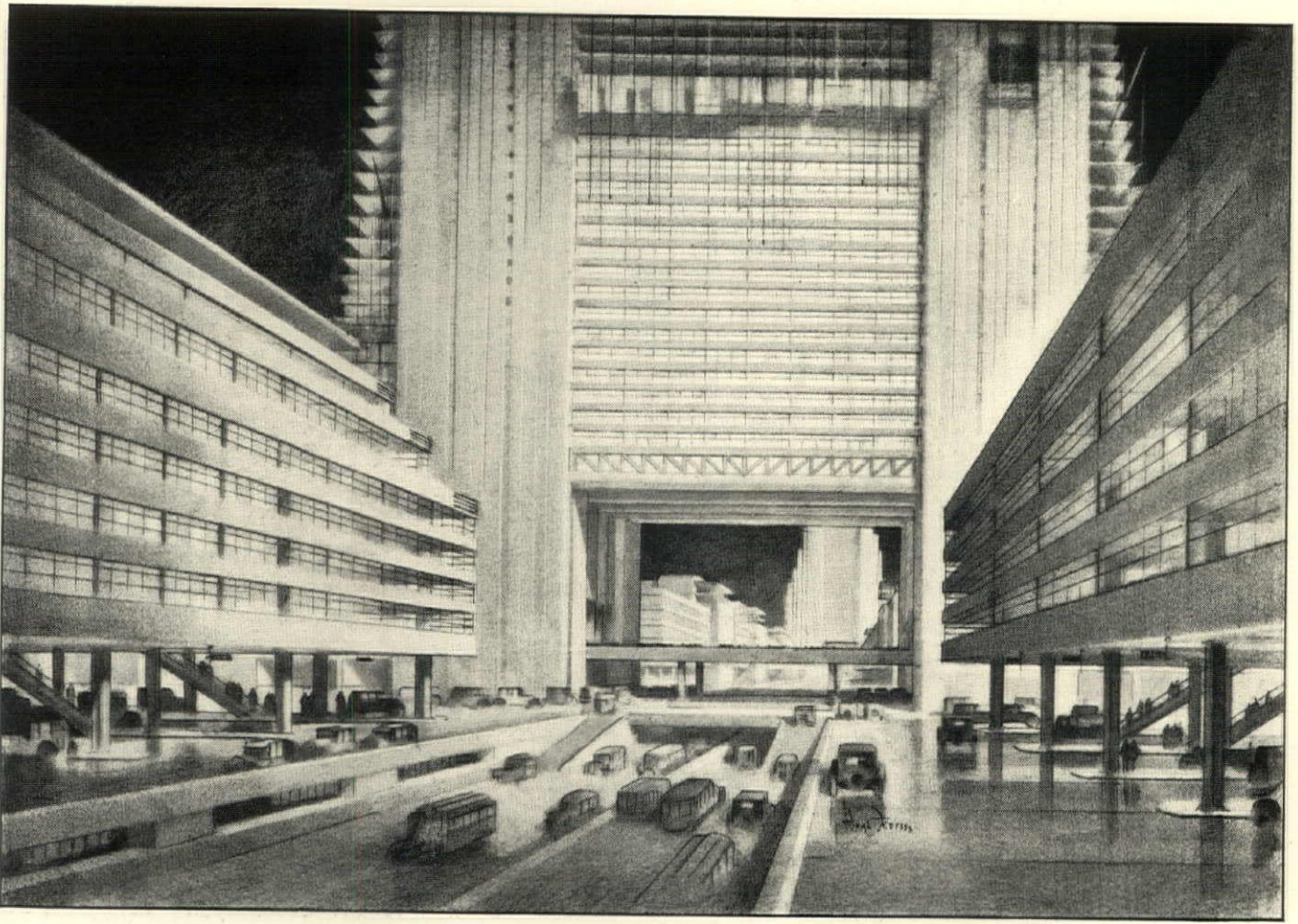
IN your April issue (page 70) Mr. Charles Butler stated that an architect who is a graduate of an architectural school and has had three years' experience is eligible for registration. This might lead some to believe that all such may be registered. There is, however, a difference, in this state, between eligibility and actual registration. One architect who applied for registration had about ten years' experience and was a graduate of an architectural school where he had also taken a post-graduate course. He is a student of art as well as of architecture and has a life license to teach his profession, issued to him by the same university that would prohibit him practicing it.

Much of what Mr. Butler has said in his remarks is well taken but "our requirements," namely, the judgments which determine whether or not an applicant shall be registered, are still from a moron source. It must be borne in mind that our laws designed to regulate the practice of architecture are being advertised most vigorously by hyphenated architects who would have the profession controlled by their own politico-commercial group. An eminent Chicago architect has said that architecture now-a-days is 95 per cent business and 5 per cent art. From my sixteen years of observation in the profession I venture that of the 95 per cent business about 50 per cent of it is monkey-business. There are many fine architects working over the boards who have not been graced with the ordination of the state. These constitute the bulwark and the life-blood of the profession upon whose genius and creative ability many a state-styled, commercialized architect depends for his societies and banquets.

Modern judgment of intellectual faculties depends too much upon the reputations of our institutions of learning which, to a large degree, annihilate rather than develop the creative talents. It depends too much upon degrees and titles and the vulgar babblings of aggressive professionals which are mistaken for learning and ability.

If it could be understood by examining boards that the student of architecture is not made by schools, experience, degrees and so forth, but is a student of architecture by "divine right," that is, by virtue of his natural propensities in that direction, they could see the necessity for personally acquainting themselves with the qualities and abilities of applicants and would, perhaps, more gracefully proffer their judgments.—*E'Haviland Boyle, Architect, Scotia, New York.*

STRUCTURAL STEEL CREATED THE SKYSCRAPER DREAMS THAT WILL LIVE IN STEEL



AN ENLARGEMENT OF THIS HUGH FERRISS RENDERING, ON SPECIAL STOCK FOR FRAMING, WILL BE MAILED WITHOUT CHARGE TO ANY ARCHITECT, ENGINEER, OR BUSINESS EXECUTIVE.

How HIGH the new city holds its head! The vaulting arch . . . the arrogant spire . . . the clean-limbed river span . . . these safely dare to reach so far *because steel is in their veins.*

Versatile steel! Worker of miracles solely through proved engineering formulæ and the competent art of drafting boards! For steel's adaptability, steel's strength and security are definitely known—controlled by scientific test and analysis at every stage in its manufacture.

Structural steel brings speed, safety and economy to the erection of small as well as large structures—to homes, apartment and mercantile houses, schools and small bridges. Before building anything find out what steel can do for you. The Institute serves as a clearing house for technical and economic information on structural steel, and offers full and free co-operation in the use of such data to architects, engineers and all others interested.

The co-operative non-profit service organization of the structural steel industry of North America. Through its extensive test and research program, the Institute aims to establish the full facts regarding steel in relation to every type of construction. The Institute's many publications, covering every



phase of steel construction, are available on request. Please address all inquiries to 200 Madison Avenue, New York City. District offices in New York, Worcester, Philadelphia, Birmingham, Cleveland, Chicago, Milwaukee, St. Louis, Topeka, Dallas and San Francisco.

AMERICAN INSTITUTE OF STEEL CONSTRUCTION STEEL INSURES STRENGTH AND SECURITY

The READERS have a Word to Say

• MORE ABOUT INSULATION

Editor, *The American Architect*:

REGARDING "A New Formula That Tells How Much Insulation to Use," by Paul D. Close, in your March, 1930, issue, I cannot agree with Mr. Close as to the base of reckoning. During my fifty-nine years of actual experience and observation, of six days each week in a varied line of building, in somewhat different temperatures of the central west, I have picked up some decided views on the installation of insulation. Having spent my early days farther south, where the first thought was to build to make as cool a house as possible in summer, that idea of building has not gotten away from me during the many years that I have been in my calling in this locality.

Insulation is reckoned both to keep cold out and keep heat in; it will also keep heat out. From this angle, more accurate reckoning can be made, for by actual tests the insulation required to keep the temperature at a given degree during a maximum of heat in a given locality gives basis for general reckoning which may be tested in various localities.

When you have insulated to protect against the excessive heat, you have a fair protection against the cold, which temperature can be regulated by the heating plant.—*W. H. Blair, Architect, Janesville, Wis.*

• WINDOWLESS BUILDINGS

Editor, *The American Architect*:

AN article in your publication (which I have not yet seen but will probably see tomorrow at my office) citing the probability of buildings of the near future being built without windows is interestingly commented upon in the issue of *The Putnam County Courier* of the 3rd instant. This comment, I read yesterday with great interest and the reaction—somewhat excusable, I feel—to the sentiment, "I told you so." Not that I did tell you, personally, so. But I did, literally tell Mr. John Wiley of the Wiley Publishing Company so, about thirteen years ago; and discussed the probability with him at length. I presume that he will recall the event and, in all probability his correspondence file may contain copies of some correspondence with me on the subject.

At that time, I prepared a very complete analysis of arguments against windows and in favor of buildings—especially city tenements—built without windows; and made a series of comparative drawings to demonstrate the arguments. The manuscript, I regret to say, has been lost. But, of five drawings made, I find that I have four. The fifth drawing—it being more pictorial than technical—I presented to Mr. Albert Lewis of the firm of Lewis, Valentine & Co. shortly after my last interview with Mr. Wiley on the subject of giving the project publicity through publication of the analysis and the illustrations. To the cool reasoning of Mr. Wiley, the idea, radical to a degree, must even have seemed fantastic; reactionary, at least: a possible revolution back to the inspiration of cave dwelling. To me, the idea seemed to be a perfectly normal step forward in civic

evolution. And so it seems now. It is no more a reaction toward cave dwelling than the present habitation of the skyscraper is toward cliff dwelling, or is the occupation of municipal transportation tunnels by millions of persons during thousands of hours annually, a reversion to cave dwelling.

Of course, it is conceivable that if anything like a windowless city tenement were devised, it would become a veritable dwelling machine, with light, heat and air subject to mechanical and possibly corporate control. It contains the germ of "socialism." I also advocated the elimination of stairways and substitution of automatic lifts.—*Franklin James Hunt, Architect, Patterson, N. Y.*

• ANOTHER MANUFACTURER URGES "CONSULT AN ARCHITECT"

Editor, *The American Architect*:

I WAS very much interested in reading your editorial on page 39 of the April issue of *THE AMERICAN ARCHITECT* relative to the manufacturers of various equipment urging the use of an architect. For your information, I am attaching with this letter a copy of our customer's booklet which is furnished to all prospects for Spencer Heaters. If you will look through this book carefully you will find where I have marked our various references to the services of an architect.

I am simply passing this information along to you to let you know that we are in full accord with the work of your magazine.—*S. M. Washabaugh, General Sales Department, Spencer Heater Company, Williamsport, Pa.*

• DO ARCHITECTS WANT CRITICISM?

Editor, *The American Architect*:

THE question, "Do Architects Want Criticism?" is asked by Ely Jacques Kahn on page 59 of your April issue. Usually, but it cannot be received in public places or magazines if couched in common, professional terms. The public would be panic stricken, trusting no one.

We do not teach children all the grief of life. Why attempt a similar thing with the public and the young practitioner? The rest of us pretty well know the truth.

By sound descriptive writing, rather than by the use of glowing adjectives, one can usually state the truth, or at least the ideal, thus leaving a record helpful to those who would follow.

Willingness to face the truth is fine, necessary and all that, but we had best beware the public "razz," lest all suffer by it.—*Miss Julian C. Mesic, Oakland, Cal.*

The three prizes offered by the American Institute of Steel Design for the most beautiful design of a steel bridge submitted by architectural students, made through the Beaux-Arts Institute of Design, were won by George D. Rocher, Russell O. Deeter, and Don P. Ayres in the order named, all students of the University of Illinois.

*The beautiful
Wilshire Tower,
Los Angeles,
built entirely
of concrete*



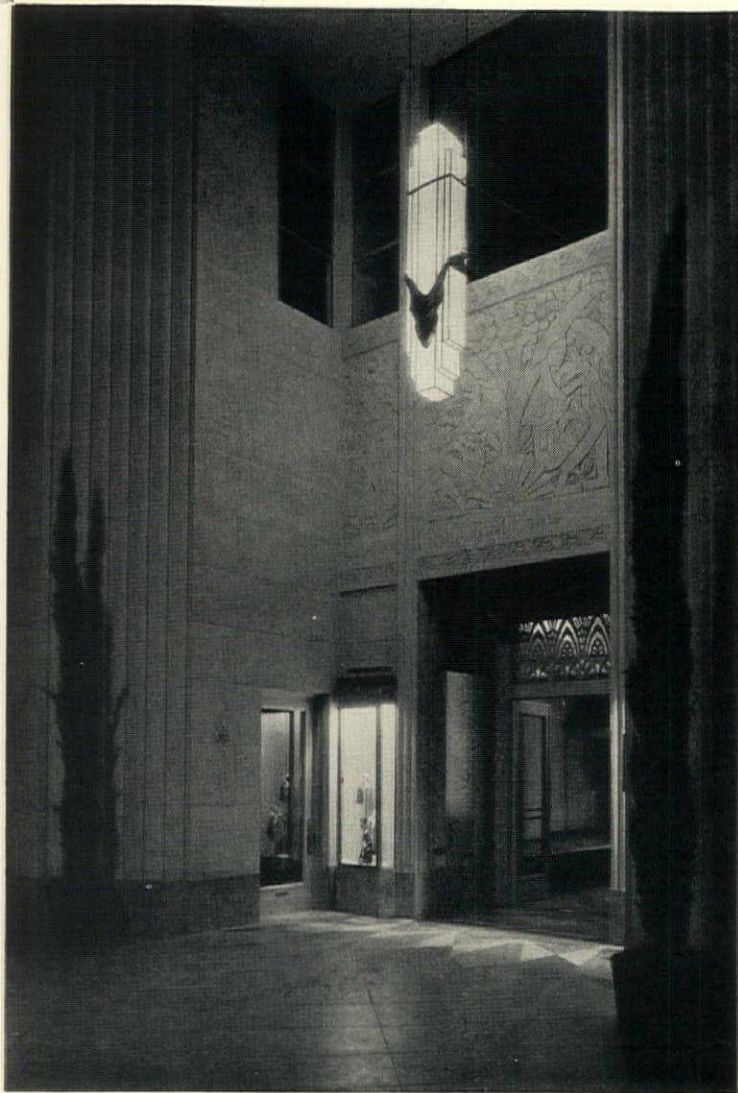
CONCRETE

*sets a magnificent
stage for sales*

As modernly conceived, architecture has become an important ally of business. Farsighted merchants know that sales are stimulated by an attractive setting. This is especially true with merchandise of high cost—yet even the great ten-cent store chains find good architecture an asset.

To provide the stage for modern merchandising, many architects have used concrete construction not only for purely structural purposes, but for exterior surfaces and ornamental detail. In their skilled hands, concrete provides an environment in which dignity is tempered with grace, and massiveness becomes a thing of rare beauty.

Because it is firesafe, concrete affords utmost protection. Because it endures through generations, its economy cannot be questioned. Throughout the structure it assures uniformity, rigidity, strength. From bedrock to skyline, concrete renders an unmatched service.



An example of fine craftsmanship in concrete. Decorative details, including panel over entrance, cast in place at the same time and of the same concrete as the walls. Exterior flat surfaces finished with tinted portland cement stucco. Gilbert Stanley Underwood, Architect; H. W. Baum Company, Contractors, both of Los Angeles

PORTLAND CEMENT *Association*
Concrete for Permanence and Firesafety CHICAGO



Mosque in El-Kasr, Dakhla Oasis. From "Egypt"

E G Y P T

By Ludwig Borchardt and Herbert Rieke. Published by B. Westermann Co., Inc., New York. Illustrated: 272 pages: size 9½ x 12¼: price \$7.50.

HERE is a book full of the emotional appeal of the beauty of bygone ages, of a time when the history of the world was but an infant in swaddling clothes. It pictures a land which was contemporaneous with the sphinx, the pyramids, the days when Egypt lived in the glory of the Pharaohs.

As one glances over the beautifully printed full page plates of this book, one becomes impressed with the fact that these days, too, saw men who lived and conceived in a dedication to beauty of mass and line; of men who seemed to have wrought with the sheer inspiration of the joy of living.

Every page bears its message of beauty. Off down at one end of a squalid street rises some minaret, a craftsman's gem. Through some darkened arch can dimly be seen an interior that makes one pause in thoughtful consideration. Or surrounded by the sand from which it peeps lies the tomb of a forgotten ruler, his memory living but through the art of the men who served him.

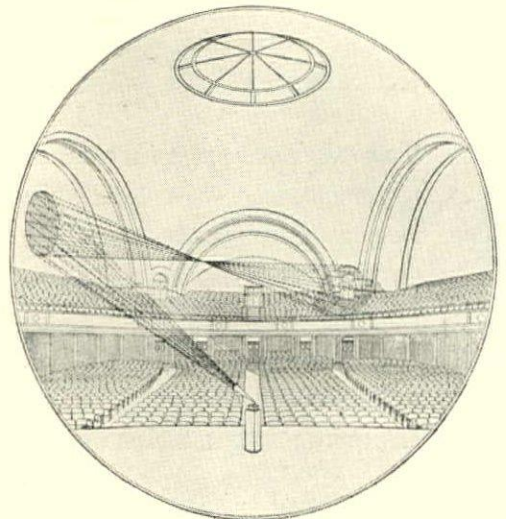
Few pictures are there which carry aught but an architectural appeal. And those few give one something of the atmosphere of the land and the character of the people who lived and loved and died there. The few pages of text which precede the plates help to convey this idea. Too, an adequate index furthers enjoyment of the book

The Law of Building Contracts
and Mechanics' Liens

By Myron H. Lewis, C.E., L.L.B.
Published by the author at 507 Fifth
Avenue, New York City. 98 pages:
size 8¼ x 10¾: price \$2.00.

THE full title of this book is "What Every Owner, Contractor, Architect, Engineer, etc., Should Know About the Law of Building Contracts and Mechanics Liens." It is of particular interest to those concerned with New York practice, being intended for the lay reader and not for practicing attorneys.

The material consists mainly of simple statements of statutory rules and decisions of various courts, being preceded by a few pages relative to the general nature of a contract and its essentials. The book consists of multigraphed sheets and is accompanied by a supplement containing an analysis and digest of the changes in the revised mechanics' lien law of the State of New York.



Perspective showing sound reflected from concave wall in balcony. From "Acoustics of Buildings"

Acoustics of Buildings

By F. R. Watson. Published by John Wiley & Sons, Inc., New York. Illustrated: 155 pages: size 6 x 9: price \$3.00.

THIS is the second edition of a book which first appeared seven years ago. It makes note of the many advances that have since been made in acoustics and presents the entire subject in a concise, easy to understand manner. Subjects covered include the action of sound with application to buildings, behavior of sound waves in a room, reverberation in an auditorium and its control, acoustic design of auditorium, sound absorbing materials used for acoustic (Continued on page 102)

≈

STONE

From Proven Quarries!

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Famous Quarries of Indiana Limestone Company

DARK HOLLOW	HOOSIER
P. M. & B.	DOYLE
WALSH	EUREKA
PEERLESS	

THERE is infinite variety in Indiana Limestone — why not take advantage of the fact? Why choose stone where your choice is limited to only a few quarries, when by dealing with Indiana Limestone Company you can make your selection from the most famous quarries in the district?

The buildings constructed of Indiana Limestone are the best "samples" from among which to find exactly the stone you're looking for. Look these over—then ask where the stone that interests you came from. Nine times out of ten it will be from a quarry now owned by Indiana Limestone Company. The facts will quickly prove to you that Indiana Limestone Company offers you a choice of quarries such as no other concern even approximates.

Along with unlimited variety of stone, you get from Indiana Limestone Company a standard of service such as was unheard of before this company was organized. Stone and service—these are the two most important factors in the success of your building. In fairness to yourself and your client, deal where you can get the best in both.

To make identification of Indiana Limestone Company stone easy, we are now marking every piece

ILCO



*Temple Emanuel, Paterson, New Jersey. F. W. Wentworth, Architect.
J. W. Ferguson Company, Builders.*

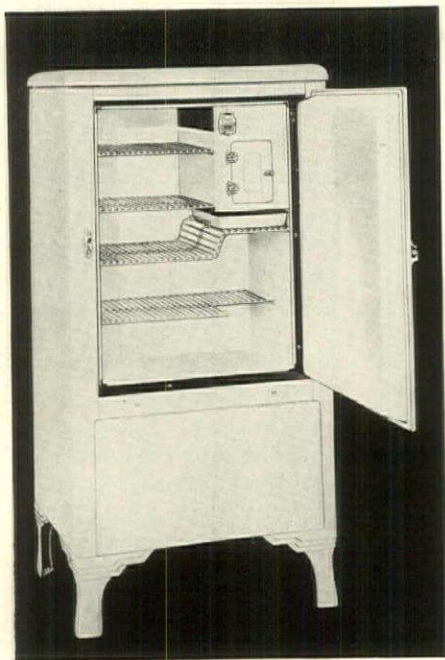
INDIANA LIMESTONE COMPANY

General Offices: Bedford, Indiana

Executive Offices: Tribune Tower, Chicago

NEW MATERIALS & EQUIPMENT

BRIEF REVIEWS THAT MAKE IT EASY
TO KEEP IN TOUCH WITH THE
PROGRESS MADE BY PRODUCERS



Electric Refrigerator

A new electric refrigerator has been placed on the market by the Norge Corporation, Detroit, a subsidiary of Borg-Warner Corporation. A feature of the refrigerator is that the ice cube compartment is enclosed by a self-closing porcelain door which prevents the cubes from acquiring flavor from food odors. This door also prevents the forming of frost on the trays, thus making them more easily removable. A cold accelerator, adjustable to five points, is located on the front of the ice cube compartment. The freezer, connecting tube and condensing unit may easily be installed or removed without moving the cabinet. The refrigerator needs no provision for special installation, merely being put into operation by plugging into an electric light socket.

Cleaning Apparatus for Houses

A new type of cleaning apparatus for houses, apartments and garages has been placed on the market by the Sanivac Co., 169 North La Brea Avenue, Los Angeles. It makes use of the ordinary city water supply to create a vacuum and also to carry off the waste and dust collected by the system. There are no moving parts. The cleaning unit may be plugged in anywhere that an outlet is provided.

New Glass

Two new types of glass have been placed on the market by the Mississippi Wire Glass Co., New York City, called "hylite" and "translite." Hylite is intended for use where ordinary transparent glass is not quite desirable; its pattern, composed of minute "etching point"

depressions, obstructs vision sufficiently to permit of a reasonable amount of privacy although the glass appears to have perfect transparency. It is intended for use in skylights, outside windows, and inside partitions. Because of the character of its pattern, it is easier to clean than other obscure glass. It is manufactured in $\frac{1}{8}$, $\frac{3}{16}$ and $\frac{1}{4}$ inch thicknesses weighing, respectively, 2, $2\frac{1}{2}$ and $3\frac{3}{4}$ lbs. per sq. ft. It is also made in wire glass and is furnished up to 48" wide and 130" long. Translite is especially made for transoms and has a pattern of $3\frac{1}{2}$ " squares made by broad, semi-transparent stripes. Thickness is $\frac{3}{16}$ " and approximate weight, $2\frac{1}{2}$ lbs. per sq. ft. Furnished in sizes up to 60" wide and 130" long.

New Type of Soil Pipe

A new type of soil pipe called Expan-Hub, designed to take care of expansion, contraction and settlement, has been developed by the Stringer Bros. Co., Inc., 1100 West 38th Street, Chicago. It has a specially designed gasket which is affixed into the base of each hub which permits a telescopic action in the hub that prevents the stacks from buckling and the caulked gas-tight joints from being loosened.

Anti-Slip Surface

A new product called "Nicalun" has been added to the line of anti-slip walkways surfaces of the American Abrasive Metals Co., 50 Church Street, New York. It has a base of Benedict metal with aluminum oxide incorporated in the surface at the time of casting. It is particularly recommended for elevator door sills, swing door saddles, and stair treads.

Drinking Fountain Head

A new drinking fountain head called the Century Bubbler Head has been placed on the market by the Century Brass Works, Belleville, Ill. It has a bronze equalizing piston which assures a uniform stream of drinking water, regardless of pressure.

Veneer for Furniture and Panelling

A new use for Micarta has been found in its utilization as a veneer material for panels, for wall coverings, soda fountain tops, cafeteria counters, furniture decoration, etc. The material, which is made by the Westinghouse Electric and Manufacturing Company, East Pittsburgh, Pa., is composed of specially prepared paper or fabric and phenolic resin which, under the action of heat and pressure, form a homogeneous, insoluble product. It is furnished in a variety of colors. It is claimed that the material will not absorb moisture, show scratches, or be marked by hot or cold dishes, nor is it affected by mild acids, alkalis or alcohol.

(Continued on page 82)

SHOWER BATHING

made safe . . . and simple . . .

By tempering the water at the spout first, accidental scalding is prevented.

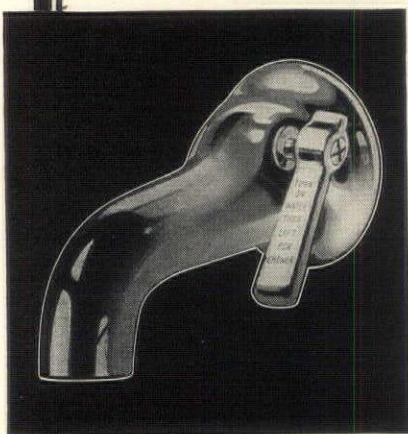
By merely lifting the lever on the spout, the same water is instantly diverted to the shower.

By shutting off the HOT and COLD valves, the diverter automatically returns to the tub position, which prevents unexpected showers.

Nothing in a combination bath fixture could be safer or simpler!

Why not specify a tub fixture with all these advantages:

No Rubber No Spring



Gravity holds the diverter in the TUB position because the handle outweighs the flapper. When the water is on and the handle is raised, water pressure holds it in the SHOWER position as long as there is water in the riser.

Improved shower head with removable face plate and holes that will not stop up.

Only two valves, separate HOT and COLD in the wall which are accessible from the face of the wall.

Each Valve with a standardized unit that's as easily renewed as a light bulb . . . all wearing parts come out with the loosening of the cap . . . seat is of Monel Metal.

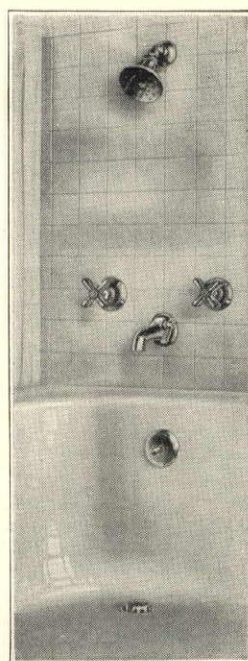
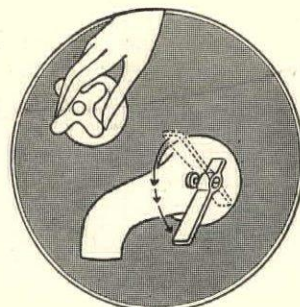
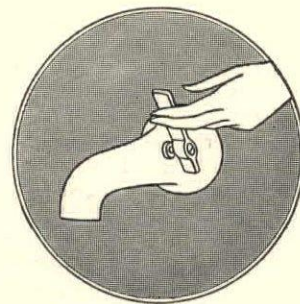
Diverter in spout on face of wall, not in wall. All metal . . . no rubber, no spring.

Pop-up bath waste with the stopper in the outlet of the tub—no need to get at it from behind.

Available in three distinctive styles: Art Chrome all-metal octagon pattern, chromium plated; round pattern with all-metal or china trim.

Write for a copy of our new 76-page catalog just off the press.

THE CHICAGO FAUCET COMPANY
2700-22 N. Crawford Ave. :: Chicago, Illinois



CHICAGO FAUCETS

NEW CATALOGS

Covering What Manufacturers Have to Say About
the Advantages and Uses of Their Products

CLOW GASTEAM HEATING SYSTEM

A data book issued by James B. Clow & Sons, Chicago, Ill., illustrating and describing radiator construction and operation, application of vented and unvented radiators, roughing-in measurements and data, methods of running vent stacks, mechanical ventilating system, school heating and ventilation, recessed and concealed ventilation, method of calculating radiation required, test data on air conditions, etc. Illustrated by photographs and drawings. A.I.A. file No. 29-f-4.

BETTER WALLS FOR BETTER HOMES

A booklet issued by the National Steel Fabric Company, Pittsburgh, Pa., with the sub-title, "How Steeltex solves four problems of plaster and stucco walls; reinforcing, damp-proofing, and sound deadening." Illustrations of attractive exteriors and interiors are given, together with specifications and progress pictures.

PIPE ECONOMY

This is the eighth edition of a 238-page catalog of James B. Clow & Sons, Chicago, Ill. It illustrates and describes all of the pipe products and accessories of this company, gives prices, various bits of specification data, and other information desirable for the files.

DOUBLE-HUNG WINDOWS

"The Monsch Safety Window," issued by the Monsch Safety Window Corp., 17 Academy Street, Newark, N. J. Illustrates and describes this double-hung window, the sash of which swings into the room so that they may be easily cleaned. For use in all types of buildings.

STEEL MOULDING

"Steel Mouldings," catalog 30 of J. G. Braun Company, 609 South Paulina Street, Chicago, Ill. Illustrates the various steel mouldings made by this company and gives their weights and sizes. Also illustrates forged nails, finials, perforated sheets, drapery hardware, and similar products. A.I.A. file no. 15.

CASEMENTS

"De Pett 400 Series Casements," issued by the De Pett Casement Corp., 223 West 19th Street, New York City. Gives details and sizes of De Pett casements, erection instructions, etc. Illustrated. A.I.A. file no. 16 e 1.

REINFORCED CONCRETE DATA BOOK

Issued by the Truscon Steel Company, Youngstown, Ohio, giving engineering data such as safe live loads

for "lockstyle" construction, for hooped columns, tables of reinforced concrete footings, etc. Describes and illustrates the Truscon system of bank vault construction and similar data. A. I. A. file No. 4 e.

JOSAM ADJUSTABLE CLOSET CONNECTION

Folder of the Josam Manufacturing Co., Michigan City, Ind., describing this water closet connection which makes use of no plastic sealing materials and is adjustable to bowls which may be either too high or too low for a normal fit. Gives installation details and other information. A.I.A. file no. 29 b.

FOLLANSBEE FORGE ROOFING

Catalog 29A of Follansbee Brothers Company, Pittsburgh, Pa., giving specifications and data concerning Follansbee Forge roofing. Has detail drawings showing methods of application on various types of roofs, for flashings, gutters, etc., manner of painting, and other interesting facts. A. I. A. file no. 12-c-1.

SWARTWOUT CONDENSED CATALOG

Bulletin S-10 of the Swartwout Company, Cleveland, Ohio. Covers feed water regulation, pressure regulation, condensation control, entrainment removal, water purification and heating, ventilation, etc. Illustrations of products. Tables of flange standards.

PREVENTING CRACKS IN TERRAZZO FLOORS

Specifications for the use of Sisalkraft between foundation and underbed of terrazzo floors, with detail illustration, issued by the Sisalkraft Co., Chicago, Ill. A.I.A. file No. 22 E.

MODERN AMERICAN HARDWARE DESIGNS

A beautifully printed booklet showing door hardware on a black background and illustrating modern hardware trends. Issued by Sargent & Company, New Haven, Conn.

CROUSE-HINDS PRODUCTS

Catalog 2200 of the Crouse-Hinds Company, Syracuse, New York, covering the condulets, groundulets, plugs and receptacles manufactured by this company. 280 pages bound in cloth.

PLASTERING ON CONCRETE CEILINGS

Describing a method of plastering direct on concrete ceilings, as recommended by the Arco Company, Cleveland, Ohio. Gives results of tests, and presents specifications for use. A. I. A. file No. 21f.

METAL DOORS AND TRIM

"Architects' Handbook on Metal Doors and Trim, Elevator Enclosures, Conduo-base" is the title of a booklet issued by the United States Metal products Co., Canton, Ohio. The material is presented in such condensed form as to be of use for ready reference. It is shown in a practical way how the different items of hollow metal work may be detailed and built. There are many illustrations, including color charts. Also specifications.

WATER HEATER DATA

"Excelso Indirect Water Heaters," issued by the Excelso Products Corp., 65 Clyde Avenue, Buffalo, N. Y. Contains a complete story of indirect heating and shows twelve diagrams of tested practical methods of installing indirect heaters. Covers not only an explanation of the company's heaters, but gives hot water fixture data, hot water radiator capacity information, tank capacities, and a table of sizes of Excelso direct and indirect heaters. Illustrated. A.I.A. file no. 29 d.

ROBERTS GAS BURNERS

Illustrated loose leaf booklet describing gas burner units for round boilers and furnaces manufactured by the Roberts-Gordon Appliance Corporation, Buffalo, New York. Describes special Roberts burner for converting rectangular sectional boilers. Gives installation diagrams and instructions.

WELDING IN CONSTRUCTION

"Evidence that Welding is Being Adopted for Fabricating Steel Bridges and Buildings," by Frank P. McKibben, a consulting engineer, is a document issued by the General Electric Company, Schenectady, New York, discussing this subject. Lists 140 jobs which were welded. Illustrated.

FRENCH CEMENT

Folder of G. A. Helleken, New York, selling agents for an imported cement known as "Cimentolithe," used for exterior purposes. Also describes "Devigan," a caen stone imitation that can be furnished in any color or texture for interior decoration.

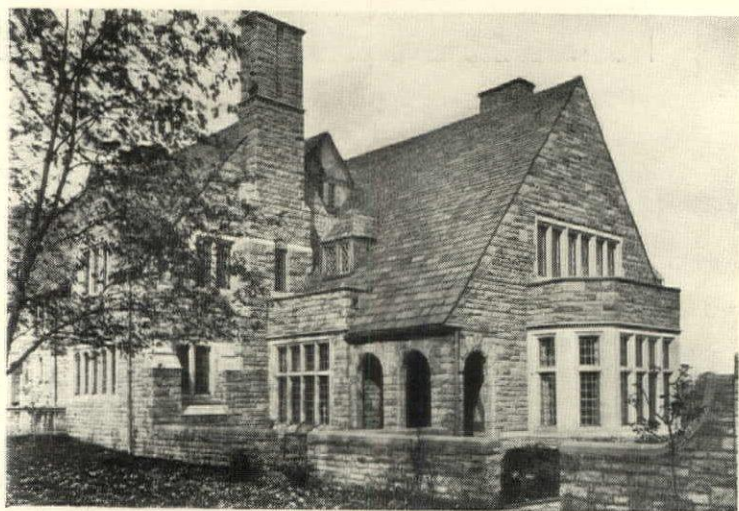
CHRISTIAN HERALD PRIZE DESIGNS

Twenty-two of the church designs submitted in the recent Christian Herald competition are published in a folder called, "The Crowning Glory of Your Church," by the Bangor Slate Association.



Telephones . . .

placed **W**here they will **C**ontribute most
to **E**ase and **C**omfort



In the residence of Mr. Howard F. Smith, Provencal Road, Grosse Pointe, Michigan, there are seven telephone outlets at convenient locations. They include one in the garage, and one in the children's wing of the house. RAYMOND CAREY, Architect, Detroit, Mich.

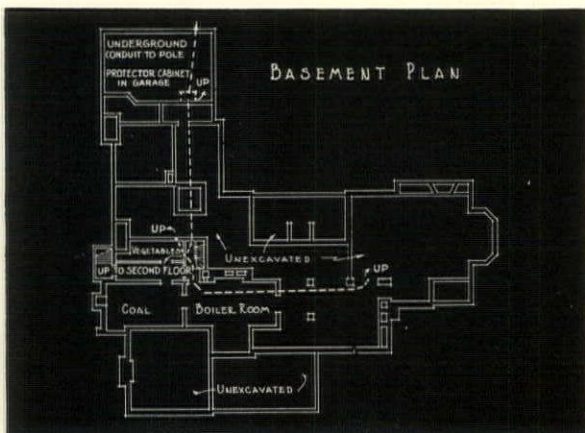
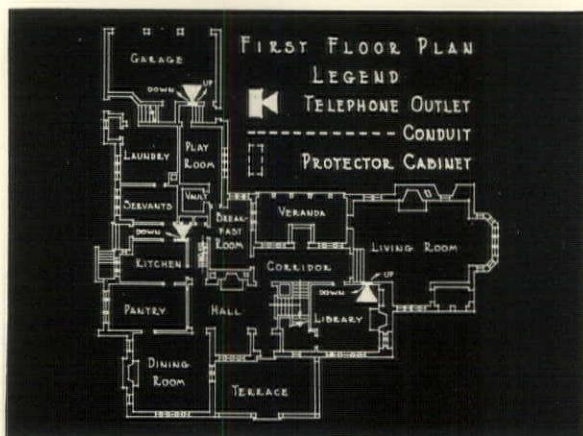
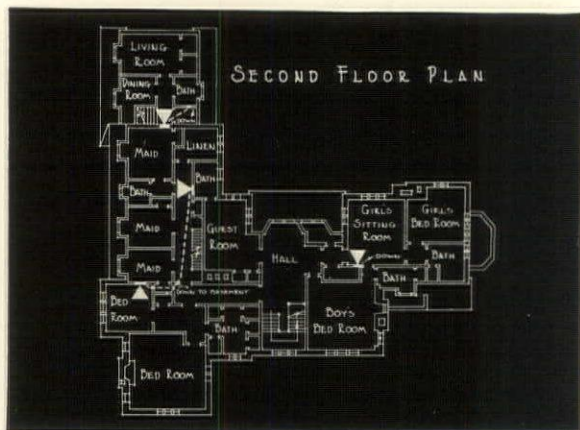
A FEW YEARS AGO a one-car garage . . . one bathroom . . . one telephone . . . were considered sufficient, even for a fairly large residence. Today's requirements are different. *Convenience* has become a dominant note in the design and the appointments of a home.

People want telephones in all the important rooms, placed where they will contribute most to ease and comfort. Many architects provide for this in their plans for new and remodeled residences by specifying conduit to those locations where telephones may be needed, initially and in the future.

Telephones can then be installed in as many of these locations as the occupant chooses, and the remaining outlets assure flexibility in expanding or re-arranging the service as may be desired.

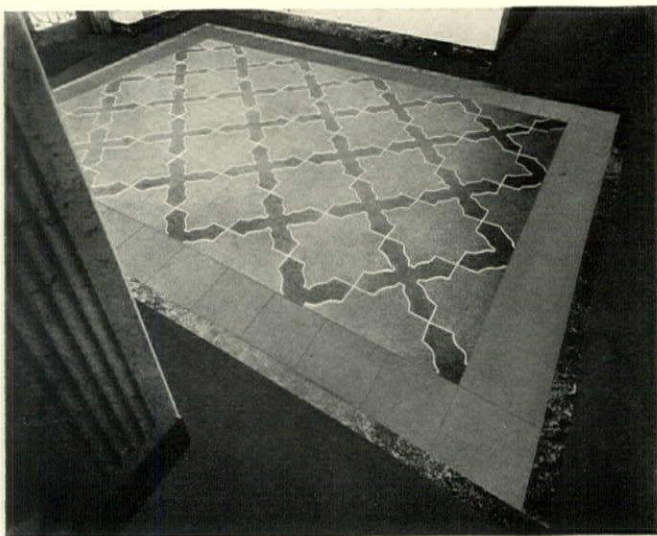
The improved appearance resulting from the concealment of wires within the walls and floors is a feature much appreciated by home owners.

Representatives of the local Bell Company will gladly confer with you and your clients in planning telephone arrangements. No charge is made. Just call the Business Office.





Dark green aluminum shingles used on the filling station of the Gulf Refining Co. at Lawndale, Pa. E. J. Krepley, architect



A ductile alloy was used in the terrazzo floor of the lobby of the New Kensington Research Building. Henry J. Hornbostel, architect

Architectural Uses of Aluminum

(Continued from page 50)

with aluminum cooking utensils. This heat transmitting quality makes it a suitable material for radiators, which may be designed with smaller and thinner sections, with a saving not only in weight but in space.

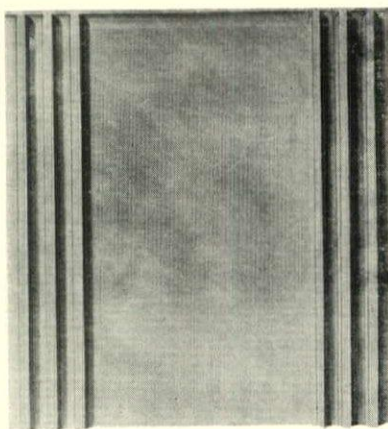
Aluminum roofing comes in two forms, sheet or shingle. Sheet roofing is handled like tin or copper, with standing, flat or lock seam joints. Shingles are made with a half-inch butt and a special type of lock joint that requires that the shingles be laid from ridge to eaves instead of in the ordinary way. The shingles can be furnished in natural finish, in baked enamel colors, or with an oxide coating closely resembling that of slate. A number of the new type aluminum shingles are being used in power houses and institutions, where the light weight of the material and its freedom from corrosion by gases make it a desirable roof covering.

Flashing, gutters and downspouts are also being made of aluminum, particularly in connection with aluminum roofing jobs. Such installations should be welded.

Window sills of aluminum offer a design advantage where it is desirable not to have too many horizontal lines, as with the Chrysler Building, New York. They cost no more than stone.

A sheet use is in copings, either plain or ornamental, of a length and general treatment as required by the design. Since aluminum needs no painting, upkeep is nil, and so the material is particularly suitable for places that may be difficult to get at for repair work.

Aluminum windows have been adopted as part of their



Spandrels of deplated finish used in the Koppers Building, Pittsburgh, were approximately five by five feet and 1/4 inch thick. The average weight was about 115 pounds. Graham, Anderson, Probst and White, architects. E. P. Mellon, advisory architect

line by several manufacturers. The material is cheaper than bronze or stainless steel and, being used in extruded shapes, sashes remain bright and are easily returned to their normal color should they become darker than desired through the accumulation of dirt. Door hardware and lighting fixtures are being made of aluminum for similar reasons.

Elevator doors of aluminum are declared to have an advantage in that their light weight makes them open and close more quickly. It takes less power to operate them and the wear is considered to be less, because of the lighter weight of the door reducing the shock of opening and closing.

The imperviousness of aluminum to moisture makes it a good material to use for mop strips or in bathrooms as trim, doors or windows

where it might be desirable or necessary to use metal.

In fact, aluminum has been used experimentally for water pipes due to its light weight and permanence, for which it is excellently suitable except in such locations as have alkaline water. It is also used for water supply and disposal in chemical laboratories where its freedom from corrosion by chemicals makes it most desirable.

Aluminum is so comparatively a recent metal in building work that new uses are continually being found for it. With the development of dyed and colored aluminum suitable for both exterior and interior use, and the opening of a factory for rolling structural shapes, it offers many possibilities to the architect in search of new structural and decorative effects.

VERSATILITY ««

One of the interesting things about the new Fenestra "Fencraft" Casements is the way they harmonize with different types of architecture. Notice their variety: Leaded with picturesque glass roundels in an English style house; with vertical muntins omitted in a Spanish type; and with a leading suggestive of Normandy. In the architect's capable hands, there is almost no end to the versatility of these better steel windows!

Hardware of solid bronze or nickel silver has Coinage, Scaly, Sand or Hammered finish. Inside screens are of bronze. The heavy construction favors glazing in leaded or plate glass where desired. Heavy, sherardized hinges are fitted with 100% bronze bearings. Each casement section is gauged for straightness. New catalogue ready.

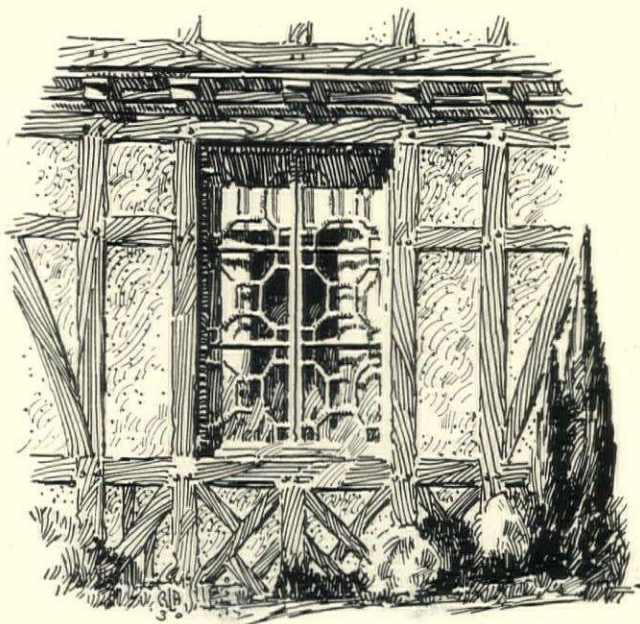
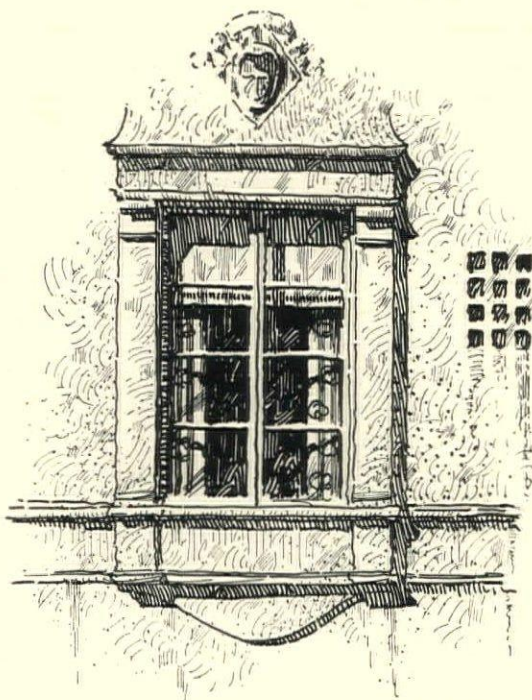
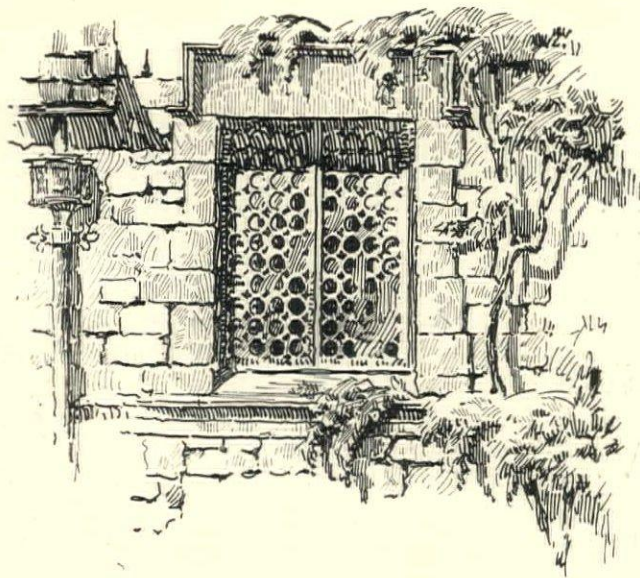
DETROIT STEEL PRODUCTS COMPANY

2288 East Grand Boulevard

Detroit, Michigan

Factories: Detroit, Mich., and Oakland, Calif.

Convenient Warehouse Stocks



Fenestra

FENCRAFT
CASEMENTS
(Screened)

Structural Glass

(Continued from page 61)

against the stone thrower and another is that glass of much thickness is just as durable as most of the materials now used for facing walls. We now use it for table tops and for wainscotes and other surfaces. Numerous means are also at our disposal to obtain privacy along with large glass areas so the burlesque proverb, "Those who live in glass houses should not take a bath in the day time," is of small moment.

WE have had glass buildings such as greenhouses and exhibition halls for some time. These have remained one-purpose buildings hardly adaptable for general use. I do not believe the glass buildings of the future will be developments along such lines. It is my opinion that the future will bring glass where we now have brick or stone masonry walls, terra cotta or metal spandrels, slate or composition roofs, plaster partitions and even concrete floors, beams and columns. Can we construct a building of reinforced glass as we now do of concrete? Our scientists have overcome greater problems than those now standing in the way of this.

While I have used the word "glass" I do not maintain that this future structural material will be glass as we know it today. It may either be a modification of this material minus some of the qualities we would like to eliminate or an entirely different product possessing many of the desired attributes of glass. It may, perhaps, be similar to Bakelite. Even today glass can be manufactured with qualities once thought unobtainable. Where before glass could not stand moderately high temperature or rapid changes of temperature, we now have cooking utensils of glass that prove highly satisfactory. Violet rays used to stop at the windows but we now have glass that permits practically all of them to pass through. High refraction glass, shatter-proof glass and sheet glass are other examples of modern inventive genius in glass production.

Glass, having so many desirable characteristics, will not readily be cast aside in favor of some newer material. With its imperviousness to water, gas and the action of most chemicals; its hardness and resistance to abrasion; its transparency and uniformity; and with its ability to take a high polish, innumerable shades of color and fine moldings, it will be difficult to improve upon. Though it is not now economically desirable, glass can today be reinforced and used structurally. Wire glass is a small scale example developed for a slightly different purpose. The reinforcing metal should have a high tensile strength, reasonable cost and a coefficient of expansion nearly equal to that of the glass. This should offer no great problem to our metallurgists. Since the reinforcing will be visible, it should be neatly milled and finished.

Proponents of functional architecture would have us show the framework of our structures, the skeleton beneath the skin, as it were. Why not carry this expression a bit further and show the reinforcing in the structural members, the very lines of stress themselves? Perhaps reinforcing bars, spirals, spacers and stirrups as now used are not things of beauty, but they have never been

designed with an eye toward appearances. It is maintained that the structural, the functional and the utilitarian have a beauty of their own. Visible reinforcement is then the quintessence of structural exposition.

Structural steel was long considered ugly and incapable of beautification except by concealment. We have, however, notable examples of roof trusses exposed to view, bridges and other structures where structural steel is the sole medium for pleasing and attractive designs. By welding the bars rather than by splicing by adjacent overlapping, the principal reinforcing is easily arranged into a pleasing design. Spirals and stirrups offer a more difficult problem, but they are not, after all, truly ideal reinforcing in that they relieve conditions of stress rather than follow the actual stress lines. If all tension stresses were shown by metal members graduated in size to the amount of stress they assumed, I am convinced a really satisfying design would result.

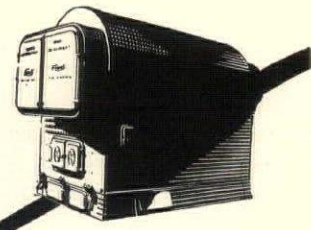
Spacing devices, since their function is apparent, would also work harmoniously into the design. More temperature reinforcing would be desirable than in concrete, but this, too, could be made into a pleasing pattern. Numerous small metal strands would be preferable, I believe, to the present rather haphazard method of placing temperature reinforcing. For shallow beams and for columns of tall or heavy buildings reinforcing for compression is, of course, necessary. To differentiate, this might be given a contrasting color or otherwise handled. Steel columns or other shapes, only slightly modified in the interest of aesthetics, would not be objectionable in the design.

Fairly large glass units can now be poured in factories equipped for such work and continuous pouring operations are now in use in several plants. Only economic considerations at present restrain us from developing mobile apparatus to accomplish the same purpose. It is not unreasonable to suppose that our future "glass" will have a lower melting point or be liquified by some other means so that its casting may be little different from the present method of pouring concrete.

It is possible to weld glass today, but so far as I am aware, present methods do not eliminate the jointing planes. If no truer welding is practicable or developed in the future, or no new transparent material brought forth, we may have to assemble units at the building and acknowledge our divisions by jointing as now done with stone and terra cotta. Perhaps these joints may be of a transparent mastic or cement serving much the same purpose as present-day masonry mortars. These joints might even be non-transparent without seriously detracting from the effect and purpose desired. In the latter case, units should extend entirely through the walls as otherwise light and vision would be obstructed. Expansion joints might have to be more numerous than is customary now, but their treatment would be much the same.

Through such developments walls, beams, floors, roofs and partitions could all be made as transparent as we desired. Windows as such could disappear, as the en-

ROSS



STEEL BOILERS

Architects, Engineers
and Heating Contractors
are using Ross Steel Heating Boilers
because they are superior in design,
easy to install, do not require frequent
attention and are quick steaming,
economical in operation and durable
in construction.

The FROST

**MANUFACTURING COMPANY
GALESBURG ILLINOIS**

tire structure would partake of the nature of windows. Openings for ventilation could be had, but only those for ingress and egress would be necessary. Artificial ventilation, with its cleansed and properly humidified air, its elimination of drafts, insects and odors, and its exact regulation of temperature in all seasons, is vastly superior to natural ventilation. We no longer need windows for this purpose, but the public demands natural sunlight and a bit of a view of outdoors. Office space, for instance, no matter how well artificially lighted and ventilated, is unattractive to tenants if remote from natural light.

Is it too much to hope that a transparent insulating material may be developed should our "glass" itself not be improved so as to have a lower transmission factor? Multiple air spaces would check heat losses, though to secure transparency the surfaces must be perfectly aligned, smooth and plane so as to reduce reflection at each change of medium through which the light rays pass. At worst, our radiation would be increased to provide for increased heat losses. To partially offset this there would be no infiltration losses from windows.

Not only would glass structures be well lighted by day, but at night they could be made a blaze of color and light. The use of colored light in decoration is now in its infancy. What a field for its development glass buildings would open up! Lighting fixtures, except where lamps were desired as furniture or ornaments, would all be in the walls, floors and ceilings. Neon tubes or other luminous units could be placed where desired for both interior and exterior lighting.

We probably would prefer that the major portions of our wall, roof and floor areas be translucent rather than transparent. Walls and ceilings might take on the appearance of stained glass while floors, for instance, would be bits of vari-colored glass bound together with a glass-like cement through which light filtered in both directions. Various devices such as screens and shades might easily be devised to regulate the visibility and the amount of light passing through the different glass members. I have in mind a much better and more flexible system which has other advantages as well. This idea is capable of an infinite variety of applications and is, I believe, entirely original.

My idea is to have thin spaces within all transparent elements connected by proper tubing to reservoirs and pumps. In and out of these spaces water or other liquid is pumped as desired. By varying the density of the fluid the amount of light passing through can be regulated and by changing its color any shade or hue may be obtained. The various elements of a building would be divided up into sections separately controlled while, if desired, certain sections could have multiple units for special effects.

Not only could the color scheme be changed at will, but life and movement could be given to the pigments as well. Among others are motion and intermingling of several colored liquids; color grading or stratifying of liquids of different specific gravity; ebulliting by air, carbonation or by chemical or electrical treatment, and precipitating flakes in colors contrasting with the liquid. Gases as well as liquids could be used to obtain smoke or cloud effects. To obtain mirrors, mercury or something similar could be introduced. The appearance of any jewel could be simulated since any color, degree of reflection or amount of translucency could be obtained by

changing the liquid and this could be done quickly and with infinite variety. Stage lighting methods would further increase the possibilities.

Complete buildings of glass will not, of course, be erected until considerable advancement has been made with certain elements which readily lend themselves to such treatment and where its advantages are most pronounced. Space limitations permit mention of but a few of the many of these which I have worked out in some detail, even to the mechanics of their operation. This latter I can not go into at all.

Merchants and the advertising industry would be quick to see the advantages of such construction for billboards, show windows and other displays where striking, living color effects are wanted. Besides its possibilities for stage and screen, it would offer interesting interior effects for theatres. Picture an interior dome with tubes or veins of living color radiating from its center or an external dome transformed into a gigantic jeweled lamp, glistening by day and brilliant with color at night. Domes, being entirely in compression, would offer only minor reinforcing problems. Spandrels and windows of office structures could be merged into one unit as we now like to make them appear.

In the future a school teacher could, in a moment, convert windows into blackboards and then into a silver screen for the showing of slides, moving pictures or television programs. A mother at work in one part of her home could, when she chose, keep an eye on her child at play in another, while with equal ease, she could ascertain how the meal was cooking, who was at the door and where she had mislaid some article. Numerous other seemingly fantastic illustrations could be given. Not only portions of buildings but table tops, stoves, refrigerators and other items of furniture and even plumbing fixtures and radiators are susceptible to similar treatment.

New Materials

(Continued from page 74)

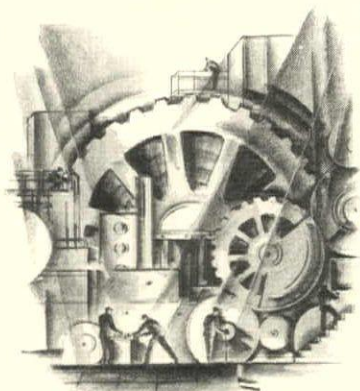
Metallic Paint that Resists Heat

A clear vehicle for mixing with aluminum bronze powder to use where exceptional resistance to heat is necessary has been announced by the Murphy Varnish Co., Newark, N. J., and is called Murphy Aluminum Heat Resistant. The product is intended for use on any metal object subject to heat, such as furnaces, boilers, radiators, motors, etc.

Colored Electric Wires

Electric wires furnished in eight different colors are now offered by the General Electric Co., Schenectady, N. Y. The use of different colored wires make it easier to make alterations when necessity requires, as there is no need for tracing circuit and testing lines.

The Le Brun Travelling Scholarship for 1930 has been awarded to Joseph B. Wertz of Clemson, S. C. This award is made annually by the New York Chapter for excellence in architectural design. First honorable mention to Miss Jean Brand, New York; and third honorable mention to N. J. Sapienza, also of New York.



What! —beauty from a machine?

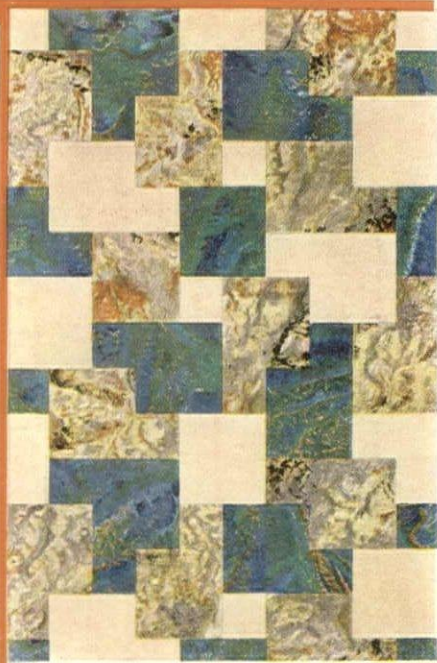
ON every hand, sorrowful philosophers are shaking their fingers—or fists—at the Machine. “This evil monster is turning us into a nation of Robots,” they sob. “It is killing Beauty.”

We wish these tearful gentlemen could see the new Karnean Marbled patterns in *Sealex* Inlaid Linoleum.

In these strangely beautiful designs, the machine has finally overcome its worst fault—*monotonous repetition*. Each marbled tile has spontaneity—individuality—delightful little details in coloring and marking that will not be duplicated no matter how long the machine runs.

In one tile, one subordinate color appears only in brief glimpses; in another, it strikes out as boldly as a jagged streak of lightning.

Please do not expect to find this “unpremeditated beauty”—this wonderful marble realism—in any other type of linoleum. Karnean Marbled effects are obtainable only in *Sealex* Linoleum, manufactured by Congoleum-Nairn Inc.



THIS is the “*Barcelona*” pattern (No. 3213) in *Sealex* Inlaid Linoleum. Tiles extraordinarily rich in color and unusual in shape give a very modern look to this distinctive design.

At the top of the page is reproduced a section (actual size) of this design. Observe the delicacy of the marbled effects—the pleasingly irregular veining—the little touches of orange sparkling out amid the darker greens and blues.

See next page

These new Sealex floors are practical as well as handsome



Sealex Linoleum and *Sealex* Treadlite Tile are useful wherever quietness and resilience are desirable. Their sphere ranges from the residence and smart shop to the office, hospital and school.

In pre-*Sealex* days, spots on linoleum floors must have been responsible for floods of bad language. When grease or ink or what-have-you fell on old-fashioned linoleum, millions of microscopic pores in the material would invite the liquid to step inside and make itself at home. This hospitality to

spots and stains was the only drawback to an otherwise perfect floor.

In linoleum manufactured by Congoleum-Nairn's exclusive *Sealex* Process, every one of these invisible pores has been *sealed*. Liquids can't soak in. Dirt won't grind in. Cleaning amounts to nothing more than a light easy mopping. This ease of cleaning means *lasting* beauty, as well as economy in maintenance cost.

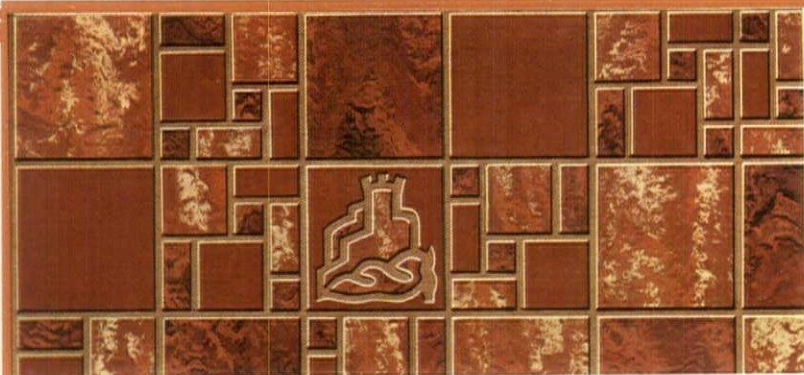
Sealex floors include a wide variety of patterns and types, only a few of which can be shown on this and the preceding page. May we send you our complete 1930 catalog?

CONGOLEUM-NAIRN INC., *General Office*, Kearny, N. J.
Branches in principal cities



Above is shown the "Virginian" (*Sealex* Linoleum No. 3227). Browns, golds and tans mingle delightfully in this lovely pattern, inspired by the beautiful walnut brown marble quarried in Virginia.

Each tile in this pattern is 9 by 9 inches. Obviously, this small illustration can not do full justice to the beauty of the veining and coloring.



Left: The warm red jasper colorings of "Camelot" (*Sealex* Embossed Inlaid Linoleum No. 2602) bespeak the old-fashioned hospitality and cheer.

Lower left: Light gray and verde antique blend beautifully with the excellent reproductions of serpentine marble found in "Cavalier" (*Sealex* Linoleum No. 3093).



WHEN *Sealex* floor materials are installed by an Authorized Contractor for Bonded Floors and according to Bonded Floors specifications, the completed floor carries a Guaranty Bond issued by U. S. Fidelity and Guaranty Co. Write for complete information about this expert installation service.

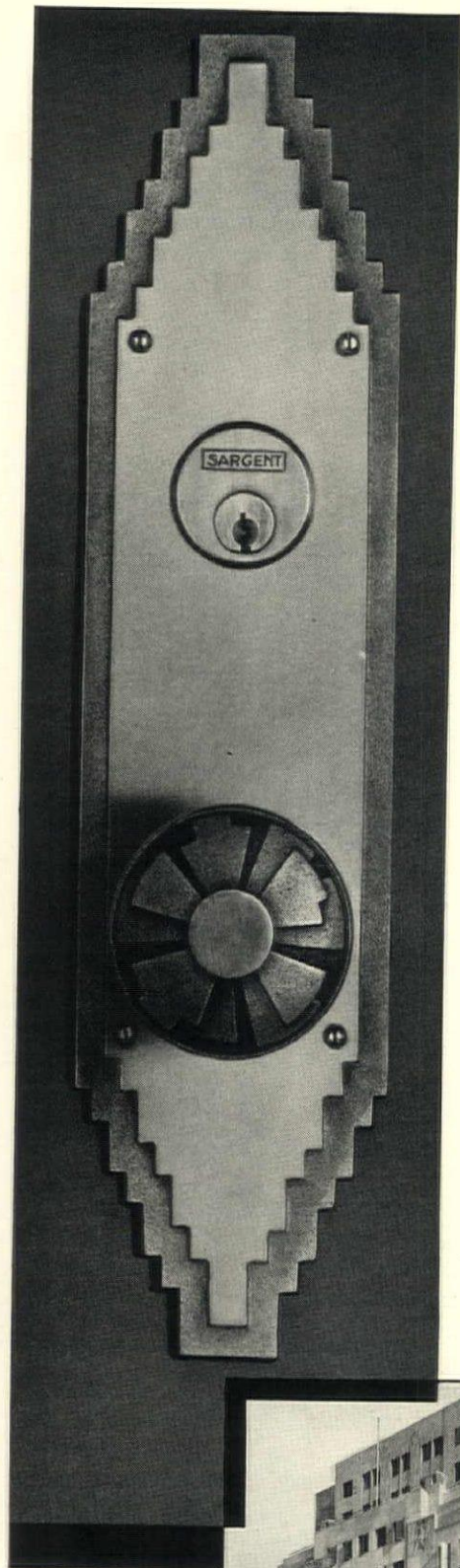


EXCELLENCE

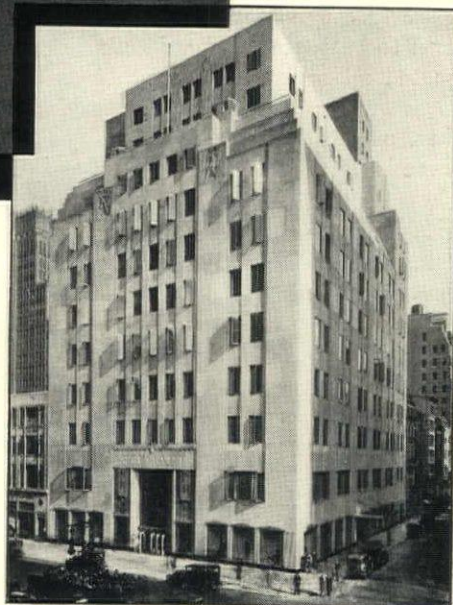
from many points of view

THE ARTIST appreciates its symmetry of mass, and its design so thoroughly modern throughout. The engineer recognizes its soundness of construction and its completeness of equipment. Owners, workers and customers delight in the perfect functioning of its moving parts. Here, in the Stewart Store, as in so many fine new structures, Sargent Hardware contributes beauty and usefulness.

Sargent designs are masterfully conceived. Authentic reproductions, artistic adaptations and strictly modern patterns offer a wide choice for every architectural style. Sargent materials are the finest—of solid brass or bronze. Sargent workmanship is expert, backed by generations of experience. Such outstanding qualities have placed Sargent Hardware in the country's finest buildings—residences, stores, hospitals, hotels, apartments; public, educational and office buildings. Sargent & Company, New Haven, Connecticut; 94 Centre Street, New York City; 150 North Wacker Drive (at Randolph), Chicago, Illinois.



At left is illustrated the special hardware design of the Sargent equipment in the Stewart Store, Fifth Avenue, New York, Warren & Wetmore, architects.



SARGENT

LOCKS AND HARDWARE

Things I Like About Architecture

(Continued from page 47)

point is meagre. The next best is then the praise of a client, or of a prospective or possible client. But praise of any kind is so satisfactory that it seems mean and niggardly, the sign of a small spirit, to appraise it. One becomes so enthused at the mere thought of it that other attractive things grow shadowy, and it becomes difficult to concentrate on them. But there are others surely. "The world is so full of a number of things. . . ."

ANOTHER of the things I like very much indeed, is broad-mindedness and liberality on the part of a client. It is a fine thing to hear a client say, "Now, Mr. La Beaume, I have no fixed appropriation for this building. I shan't ask you to tell me what each cubic foot of air in my building is worth. Realizing that air is the very breath of life I shall not hamper you, as I should not wish myself to be hampered. Let this thing be done right. I want you to enjoy the doing of it, as much as I hope to enjoy the possession of it." Are these not indeed noble words and is it any wonder that I rejoice anew each time I hear them? Age cannot wither nor custom stale their infinite propriety.

There can be no great art without sacrifice of some sort. And there are many clients who agree with this premise, but not all of them, alas, at least so I have been told, are willing to dedicate themselves and their fortunes whole-heartedly to the cause of beauty. When they do, therefore, it is quite natural that ". . . we should all be as happy as kings." Otherwise we should deserve, and richly deserve the term, "poltroon."

It is quite possible, also, that a client may have other than pecuniary charms. He, and I hasten to say he, may have been so engrossed in his own worthy affairs as to be unable to qualify as an expert in architecture. Such clients I value above pearls. Is there anything, I ask you, more dreary, more soul-deadening than to be forced to hear authorities quoted ad nauseum? I will answer my own question quickly by saying that, as far as my experience goes, there is not.

THE lady client who has been keeping a scrap-book is bad enough, but one can sometimes create a certain order out of her chaos. Her ragged little scraps of paper, torn with fine feminine frenzy from the advertising pages of the magazines, are like the pieces of a picture puzzle which she sweetly asks you to put together. Patiently you talk her away from the circular stairway with its cute little iron balustrade; and walk her away

from the elliptical arch leading to the drawing room. You tell her gently that the Old Stonesfield Slate floor and the Old Adam ceiling were never meant to marry and that they cannot possibly be happy together. You praise the kitchen cabinet, and the innovation closets, and the electric refrigerator, and the pretty linoleum, and promise her a green bath tub and a glass shower, and gradually the thing all works out very nicely. But I have a soft spot in my heart for the ladies who don't keep scrap-books, or who, if they ever did, have lost them.

The advertising experts claim that they are performing a holy mission in creating a consciousness of beauty in the popular intelligence. It may as well be admitted that many of their works justify this claim. Paint and plaster, to say nothing of countless other materials, afford them wonderful opportunities of shocking the public into an appreciative and humble attitude toward what is really good taste. I like what they are doing for, in this country, bad art, like bad government, must be very bad indeed before the reaction sets in.



David is so sure Goliath will fall

THERE are other things to be happy about in connection with the tantalizing practice of architecture, but in so short a space as I am allowed it is possible to mention only a few of them. I cannot, however, refrain from saying how much I like the increasing modesty of modern salesmanship. The tendency of the average salesman of building materials to understatement and brevity is one of the most delightful experiences of practice. The men who flock into our offices to offer their wares seem to know so well how crowded our days are that it is only with extreme difficulty that we can detain them long enough to find out what it is all about. They seem to sense as by some divine intuition that their particular product is not essential to the success of our building, that there are many others equally as desirable, and that the world will continue to wag on without their stuff. I cannot say how very much I like them for that.

And finally I am bound to say that I like a good deal of the work of my contemporaries. Much of it is better than the work of their immediate predecessors; and some of it does not suffer by comparison with the work of the ancients. Indeed it might almost be mistaken for it. As for the work of the future, I am eager to like that too, for the older I grow the more inclined I am to appreciate the stirring of new sap.



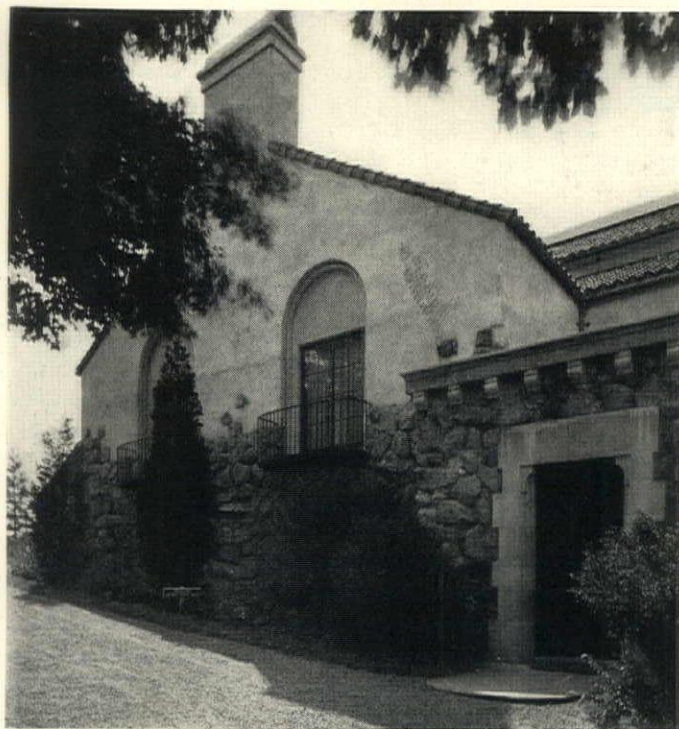
Interior Tennis Court of E. B. Schley, Far Hills, N. J.

“Metal Fittings by FISKE”

THE interior and exterior metal work on the enclosed tennis court of E. B. Schley at Far Hills, N. J., is another notable FISKE installation.

“Metal Fittings by FISKE” has become a familiar phrase among architects whose specifications always call for the *finest* in materials and workmanship. For they realize that by specifying FISKE they command the resources of an organization with over 70 years experience in this highly specialized work.

FISKE “craftsmen in metal” are prepared to carry through from pencil to metal every detail of original plans working in close cooperation with architect and builder. Write for illustrated catalogue of ornamental metal work.



Exterior View of Tennis Court. Hyde & Shepherd, Archts.

J.W. Fiske IRON
WORKS
80 Park Place ~ New York
ESTABLISHED 1858

SPECIALISTS IN ORNAMENTAL METAL WORK

The Man in the Street

(Continued from page 20)

and expensive detail. Hence, the headquarters of the Institute's public information system should be in Octagon House, and the Executive Secretary should be designated to make provision for supplying news. For this task he was eminently fitted. Being in touch with the most delicate problems which confront the Institute, he was able so to characterize the publicity content that serious mistakes were avoided, and the news matter issued was, on the whole, fairly representative of the Institute's aspirations.

In order to keep pace with the processes of journalism, an essential previously pointed out, the effort of the Executive Office had to be supplemented by a trained devotee of journalism, by expert ability. This journalist directed his work from New York, the one city of the United States from which national and international publicity may be best disseminated. This journalist worked under general instructions from the Executive Secretary, his special obligation being to vitalize abstract facts into concrete articles employing journalism's idiom and technique. The pages of the Journal of the Institute constituted a primary source of publicity material, and page proofs went promptly to our New York representative. The meetings of the Institute and of its Chapters were another source of material, which were most freely found in the channels of information converging at Octagon House.

In this scheme, the Committee on Public Information acted as the ultimate arbiter in questions which arose. It was the duty of the Chairman to confer primarily with the Executive Secretary of the Institute, and also with the publicity representative, as well as with both together, on matters of general publicity policy, the Committee sanctioning definite fields of public information, approving or disapproving cycles of news that were suggested, and in general determining from time to time the nature and treatment of news matter which was adopted as fixed news schedules. In sum, this Committee was the responsible liaison department between the Executive Secretary and the publicity representative regarded as a unit and the Institute. The annual report to the Institute on public information was a document emanating from the Committee on Public Information. By way of analogy, this is the system employed by the American Chemical Society and the American Engineering Council. The Chemical Society does not have a Committee on Public Information; the Engineering Council does.

The publicity of the American Institute of Architects is a substantial proposition. It should be remembered that the Institute's publicity is a national effort, and that to be successful it must reach remote towns of the country as well as the larger cities. It should be both general and special, penetrating not merely the real estate pages, but also the news columns. It should find a place in a very wide variety of publications, and should win recognition not only in the United States but abroad.

Much misapprehension exists regarding the nature of the "publicity" process. This process does not, as is

commonly supposed, mean the typing of huge amounts of news matter to be sent at will to newspapers and other periodicals. This method, though widely employed, is productive of great waste and reduces journalistic practice to the level of a mere mechanical operation. It embodies the hazard ordinarily associated with limited professional intelligence.

Publicity, in the sense in which the term is employed by the American Institute of Architects and similar professional organizations, should imply correlation with the usual processes of journalism. News is never manufactured nor hectically unearthed by appeals for written articles or by any divergence from the capacity of the Institute through its own activities to engender what is known as news. In other words, news channels itself the function of a publicity representative being, first, to identify news; second, to translate it into professional form; and, third, to disseminate it through the ordinary instrumentalities of newspaper making.

These instrumentalities are many and varied, and call for different treatment of the same story. For example if we deal with an event of national importance, the initial step would be to prepare a story for the New York morning newspapers, including the commercial publications and the daily trade journals. This story would be delivered by messenger, and in some cases, if time permitted, by mail.

THE same story would also go to the major press associations with headquarters in New York City, and to the correspondents of leading interior papers, whose offices are located in the editorial rooms of the larger New York dailies. The news matter handled by these correspondents is transmitted over a system of leased wires to such cities as Chicago, Los Angeles, Philadelphia, Boston and Toronto.

In the case of the Chicago Tribune, which is typical it is again relayed from Chicago to papers in Southern and Western cities whose correspondents are stationed in the office of the Chicago Tribune. These correspondents draw upon the entire news output of the Tribune just as the correspondents in New York draw upon the output of the New York papers, through a financial arrangement. Copies of the story we are discussing would also go to the news bureaus of the larger New York papers and directly to papers in nearby cities.

In the case of a story for Sunday publication, all this procedure would be involved and in addition special stories would be sent in advance to individual newspapers over a wide area.

Were our story calculated for afternoon publication resort must be had to briefer treatment, involving brisker idiom. A modified procedure is here used. Out of town correspondents are fewer in the afternoon than in the morning, and press associations would be the instrumentalities of national distribution. We must consider, too, the general story which can be printed at any time and which bears no "yesterday" or "today" earmark. In this type of story, in which the time element is not im-



Vertical Transportation for Hospitals

Hospital Elevators

must be—

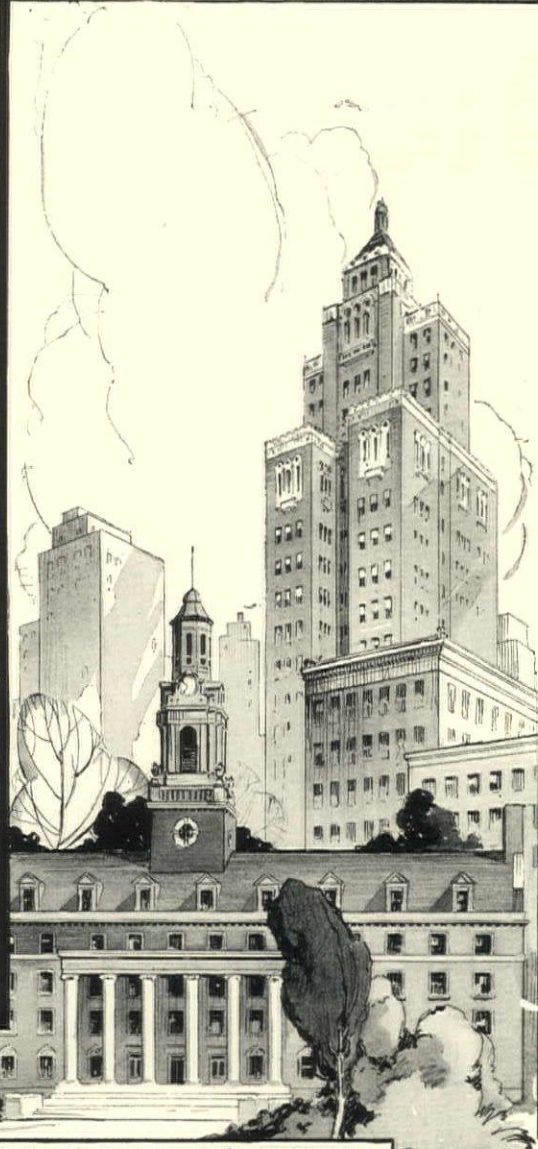
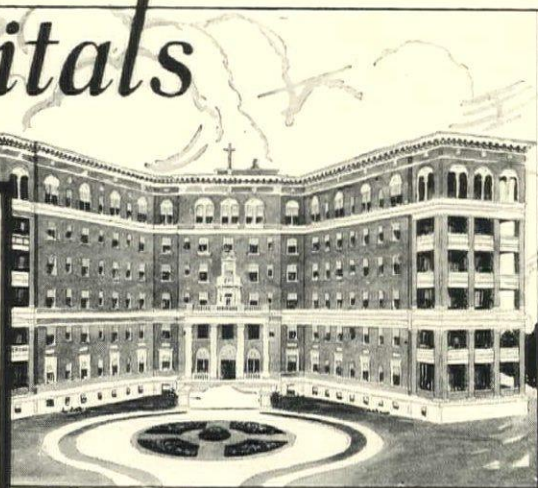
SAFE,

DEPENDABLE,

QUIET.

We have made a special study of the elevator requirements of hospitals—extending from the elevator machines to the cars, door-operating equipment and elevator entrances.

One contract with Otis, for all units comprising the complete elevator plant, assures correct operation and harmonious design.



OTIS ELEVATOR COMPANY

OFFICES IN ALL PRINCIPAL CITIES OF THE WORLD

portant, the manufacturing process must be utilized and on a larger scale, much of the copy being sent directly to the managing editors. A story like this, however, is available for the mail services of the press associations which distribute news by post to the papers which it serves throughout the country, ten days being the minimum period required to effect a so-called release.

Then there are special types of publications or departments of publications which are interested peculiarly in the news of architecture. There are also the foreign services, an example of which is *La Prensa*. This paper transmits news of international interest to Buenos Aires and from that point it is relayed throughout South America. Similar machinery is set in motion through the use of cable departments of the press associations and direct transmission.

NOW, these processes cannot be mechanically employed. To avoid waste, and to attain reasonable precision and surety of publication, long journalistic training is demanded. There are few more complex tasks than to publicize adequately and representatively the activities of an organization like the American Institute of Architects. Necessarily, this memorandum is fragmentary, for full explanation would require a text book. I have, however, tried to be reasonably clear with limited detail in order that both the opportunities and difficulties of the Committee's work may be more intelligently understood.

Continuing—Any estimate of the worth of the "Plan for the Education of the Public as to the Character and Value of Architectural Service" must recognize the distinction between news and advertising. It is a fundamental principle of newspaper-making that news channels itself. By this we mean that news is news wherever found. Should news arise in the profession of architecture, this news will be printed by the newspapers. But, obviously the newspapers have not the means of ascertaining when news appears in architecture, and even if they did, the news could not easily be identified when it did appear because of the lack of vigilance which must necessarily result from the separation of the newspaper organization and the source of architectural news. Even though architecture does continually produce news, therefore, it does not follow that this news will be printed

unless it is identified and transmitted to the press. To supply this link between the source of news and the publication of news, the American Institute of Architecture has organized publicity facilities in the nature of a News Service. There is no charge for news. There never is. The cost of publicity in this sense is an item incidental to a public service function of the Institute.

Advertising, on the other hand, deals primarily with the commercial aspects of social organization. The public can be educated through the advertising columns, but this method of publicity always implies bias of the advertiser. Advertising expresses the point of view of the author of the advertisement. News reflects the point of view of the newspaper. In advertising, the advertiser goes forward upon his own initiative. In news, the newspaper goes forward upon its initiative. In other words news calls for the exercise of a commercialized editorial function, which concededly is one of self-interest.

If advertising is to be included in any plan of publicity the sole question to be decided is whether architects are ready to overthrow a tradition which impresses architecture with the dignity and importance of an aristocratic profession and to substitute therefore a policy frankly commercial with which the world does not yet associate superior standards. Determination of this question depends upon the architect's own conception of his calling.

Further, it is perhaps reasonable to suppose that should architects indulge in nation-wide advertising in the manner suggested, the newspapers and other publications would print the news of architecture less freely. Education is not accomplished by a series of striking gestures. Rather, its ends are attained through the slow process of infiltration requiring persistence and patience. There is something durable about news.

In the above I have tried to point out the conclusions the committee arrived at and the general plan of procedure which they adopted and to explain the difference between news and advertising. What the future policy of the Institute will be as to publicity and advertising I cannot tell, but I hope that it will be based on a dignified presentation to the American public of what the architectural profession is doing and should do towards making our country livable and beautiful.

Criticism Might Help Architecture

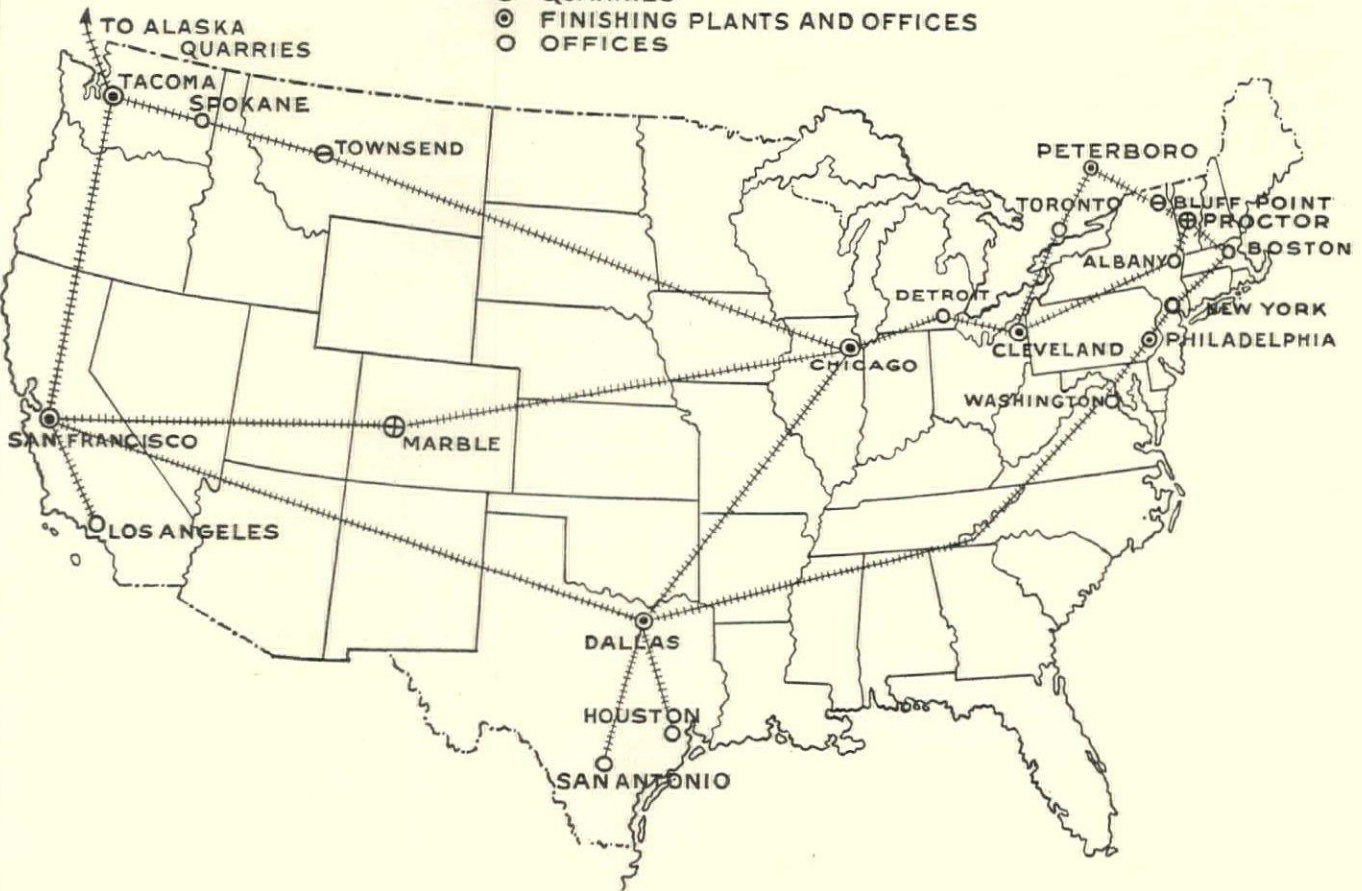
(Continued from page 41)

the making of drawings, but of the building itself none—none, that is, of the building as an artistic creation. He hears of it if the roof leaks or the building does not make enough money, but he can not read the minds of those who pass it. Is it small wonder that he, too, should heed the only criteria that are publicly valid; fashion and size?

Architectural criticism would help. Literary criticism, lax as it is in these days, has measurably raised the level of public taste, made the readers demand continually higher standards of exactness, vividness, beauty. At its worst it has at least prepared the reader by giving him a little idea of what a book is about so that he can approach it with open eyes and mind. But architecture he takes as it is thrust at him and around him; he buys a pig in a poke. It is only we, the architects, who can remedy this.

Let us but see ourselves as professional rather than business men, earning our living, not merely getting a profit, creating works of a difficult and noble art for the joy of mankind, not selling goods. Then we will come to welcome criticism, not resent it—at least to tolerate it and the temporary pain it may cost. Are architects smaller minded than authors? More fearful than musicians? Weaker than actors? The poor things! Servility and arrogance. Servility to the great god Business—arrogance to the critic and criticism. A beautiful attitude—let's change all this. Let some architectural magazine establish a column of sound and careful criticism of current work. Think of the controversies it would start and how vital and stimulating to us all such controversies might be! And, of course, there is the publicity game's old adage, "Every knock is a boost!"

- ⊕ QUARRIES AND FINISHING PLANTS
- ⊙ QUARRIES
- ⊗ FINISHING PLANTS AND OFFICES
- OFFICES



The Marble Trail

LIKE the westward march of the pioneers, the marble trail leads to the Pacific Coast. It also stretches up into Canada, even to far-away Alaska. Bases established at strategic points provide the building industry with a nation-wide service.

From our quarries in Vermont, New York, Colorado and Alaska, come many kinds of marble. This output is finished partly in Vermont, and partly in our

large city finishing plants. In addition to that, we finish and install all kinds of foreign marble.

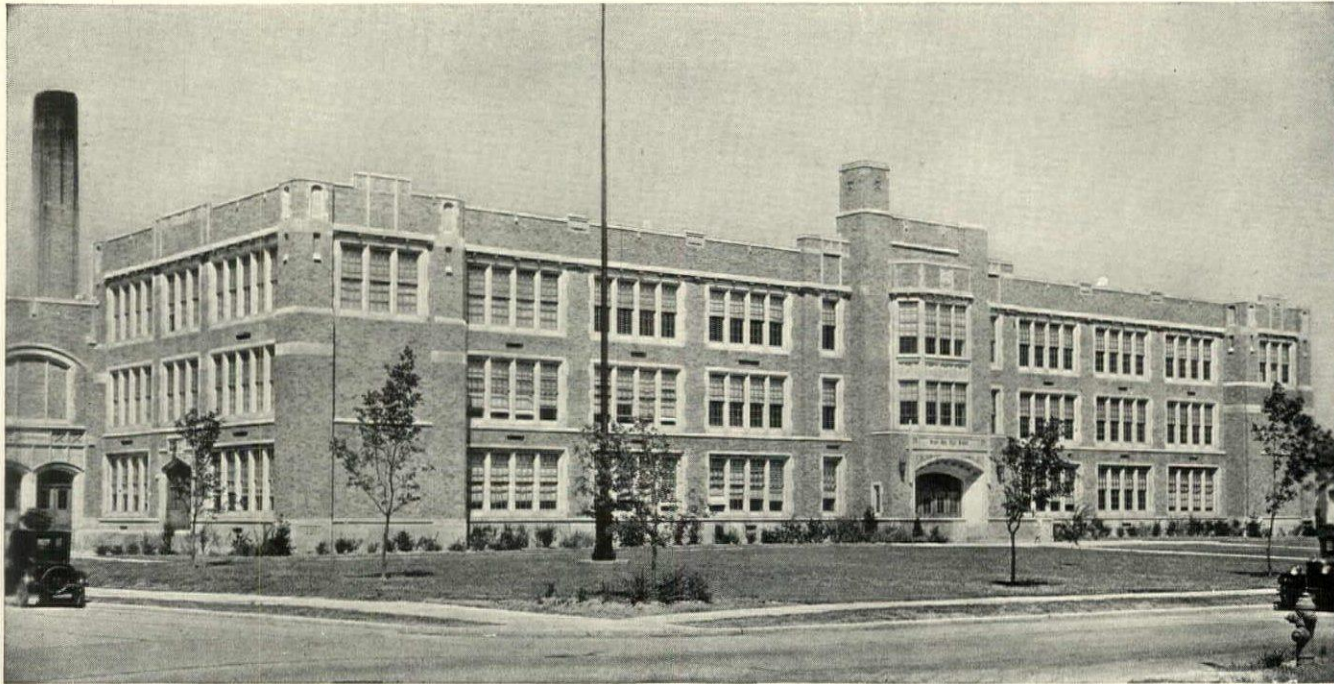
This means a complete service, one that reaches to all parts of the country. It means direct contact and ready information for architects and builders wherever they may be. In short, it means convenience, promptness and dependability.

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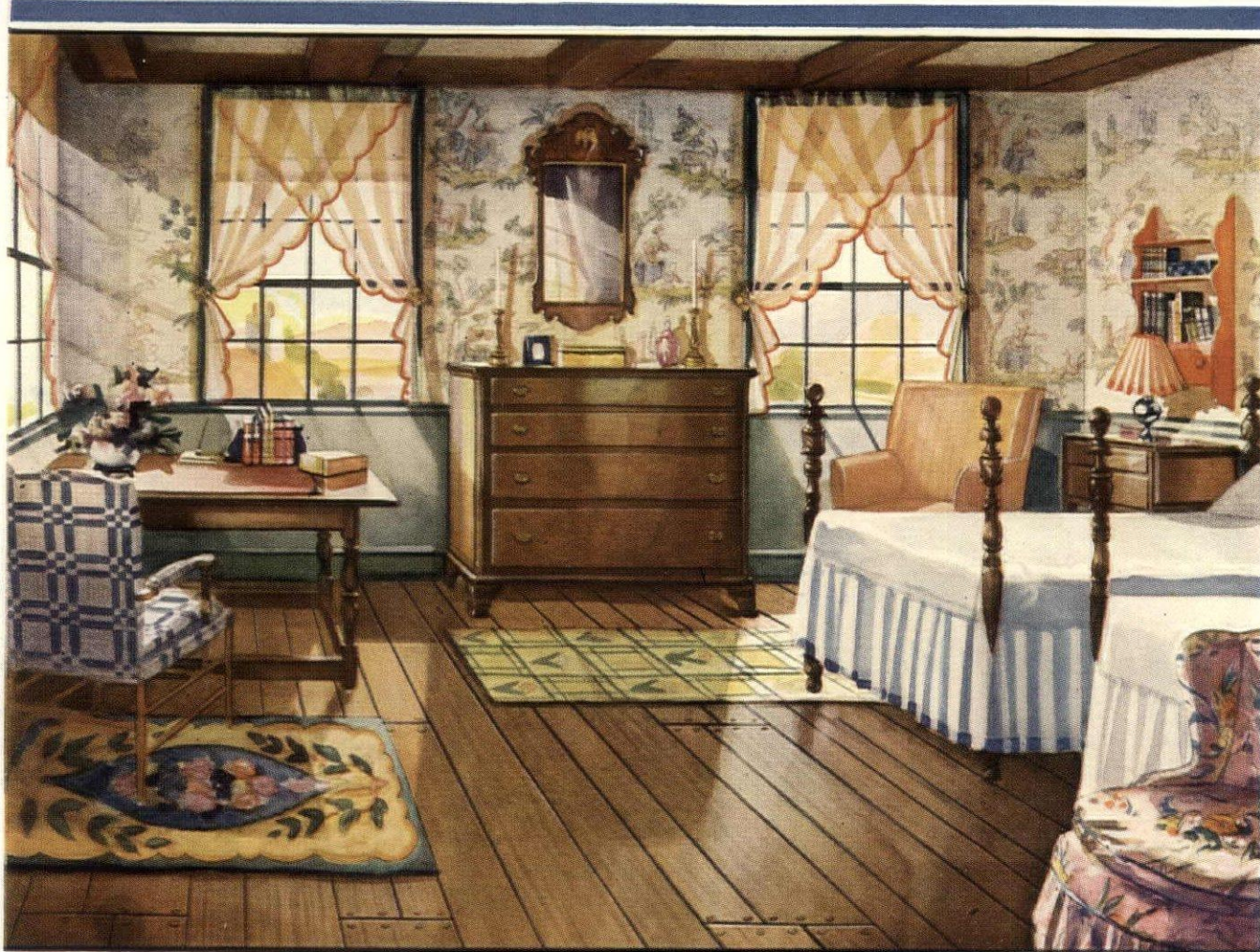
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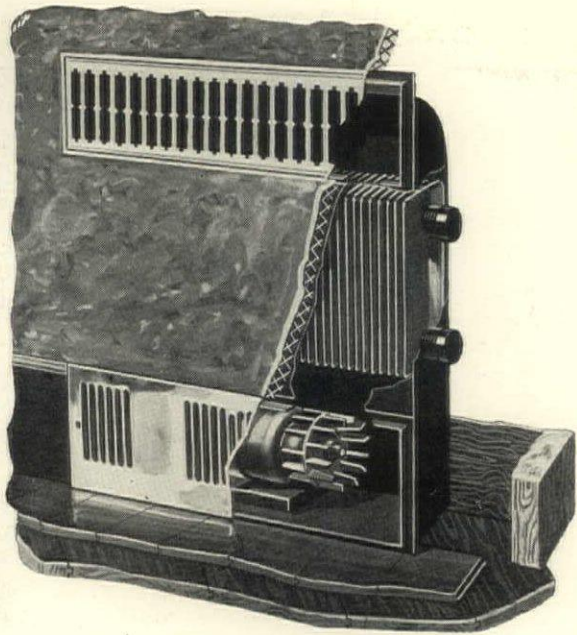
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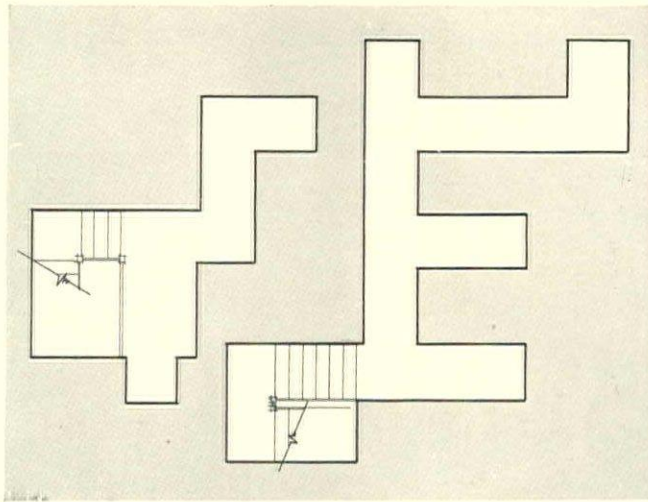
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A large amount of wall space in a second story hall is invariably an indication of poor planning

Waste Space

(Continued from page 33)

however, is the essence of good design in the small house.

Waste space, like any culprit, usually has distinctive markings, finger prints as it were. They are easily recognized and careful study will serve to eliminate the waste space they indicate. They are commonly most evident in bathrooms, halls, closets and occasionally in the principal rooms.

THE bathroom is the most costly room in the house even without the plumbing. If the bathroom is unnecessarily large the tile bill is needlessly increased, with no compensating advantage.

There are three practicable arrangements for a compact bathroom. One or another of them will nearly always fit any condition.

Number 6 is the smallest practicable bathroom accommodating the usual three fixtures. It is hardly suitable for a family bath because of its limited floor area. It is ideal, however, for a guest bathroom, if space is limited. It may often be worked into an old closet in a remodeling job, and is excellent as an extra bath. It may even be reduced a little in size by substituting a shower for the tub.

Number 7 is excellent as a general bathroom. The fixture arrangement is such as to provide economical roughing-in as well as the maximum of usable space. The size is ordinarily 5' x 8' or 40 sq. ft. It may be reduced a little, perhaps to 5' x 7' 6" or even seven feet, though eight feet is better. This arrangement permits of entrance from either of two sides, or there may be two entrances. It may therefore be used at times as a general bath and at others—by locking or omitting one door—as a private bath.

Number 8, while little more than a modification of No. 7, is commonly used as a communicating bath between two rooms. While there are objections to a bath of this type it is excellent when the rooms it serves are occupied by members of the same family, but when so used it should be supplemented by another bath available from the hall.

(Continued on page 98)

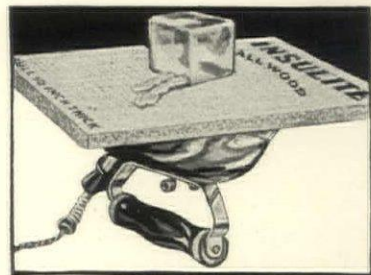
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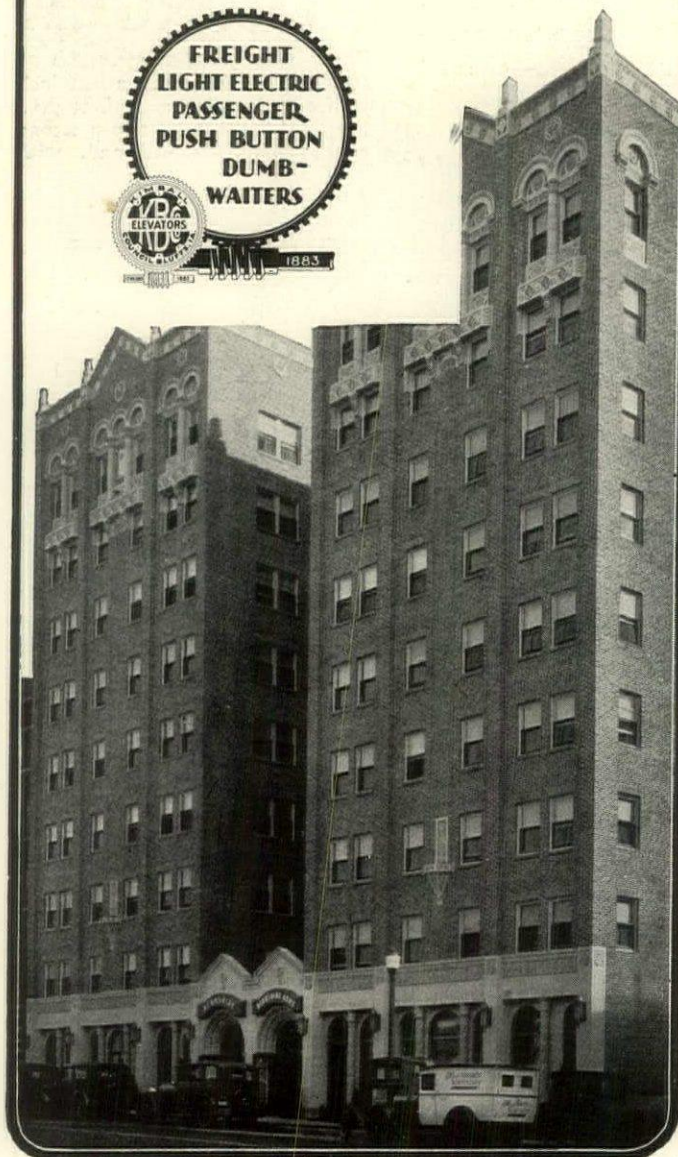
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If a larger room is wanted, the enlargement should be such as to increase the apparent size or spaciousness rather than merely to increase the floor space. Number 9 is a good example of a bathroom larger than 40 sq. ft. in which the increased area adds to the spacious appearance of the room.

All of the following examples, bathrooms 1 to 5 inclusive, are taken from a plan book issued by a well known plan bureau organized to provide high grade plans for those who cannot, or think they cannot, afford an architect. All of those rooms are awkward in shape, wasteful of space and have faults which could be eliminated by further study. Without exception they are from small houses in which, except for very good reasons, the bath should be kept within 40 sq. ft. All of these are at least 20 per cent larger.

Perhaps the most common fault is illustrated in Nos. 4 and 5. In this type the bath has to be reached by an extension or passage from the hall. This passage is rarely smaller than 3 feet square which makes the bath nearly 25 per cent larger than necessary. It adds to the cost of tile work, both for floor and wall, besides occupying more space, which together may amount to \$100.00 or more. Number 3 is an exaggerated case of the same sort of poor planning.

Study will nearly always permit the use either of one of the first three types or of the fourth if more room is wanted.

It may be thought that this is much ado about nothing, but an analysis of plans submitted in a recent small house contest, which was well sponsored and judged by outstanding architects whose names are nationally known, revealed eighteen bathrooms out of a total of thirty-one that were faulty in design so far as the efficient use of space is concerned. All but three of these were actually extravagant in the use of space. Only thirteen of the thirty-one could be considered economical in the use of space.

It is in the second floor hall that extravagance in space is sometimes very pronounced.

If we stop to analyze the purpose of a hall, we find that it is to provide access to the rooms from the head of the stairs. Theoretically it should be no larger than is necessary to provide wall space for a door to each room. In general it should be centrally located, rectangular approaching the square, and large enough to avoid being cramped. This shape facilitates the moving of furniture, tends toward roominess and usually results in an altogether practical arrangement. One should avoid plan arrangements that require long narrow halls. Serpentine halls that meander about the second floor to reach out-of-the-way rooms are inexcusable. Plan of house No. 2, Fig. 1, includes an excellent type of hall for a small house. It is roomy, yet is no larger than is necessary to reach the rooms adjoining it.

One of the best ways to bring home the absurdity to which designers will sometimes go in this matter of halls is to make a tracing of the hall omitting the rest of the house. The second floor hall from a service bureau plan is shown at the left of the illustration on page 96. It requires no comment! The hall from a plan which won first prize in a competition for small houses is shown to the right of this same illustration. The creator of this hall received (Continued on page 100)

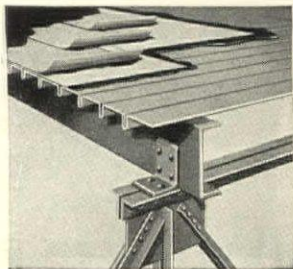
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\$1,000 for his originality. Turned on its side it might well pass for a modernistic conception of some prehistoric animal.

Whenever there is a large amount of wall space in a hall it is an invariable indication of wasted space.

If one will trace the outline of a room it will often reveal absurdities of design. In general a room should be rectangular approaching the square. On the other hand a square room is not usually as pleasing as one of other proportions, but too great length in proportion to width is also to be avoided. This is a common fault in living rooms. Alcoves or recesses are sometimes satisfactory provided they are of such shape and size as to receive the furniture intended for them. Too often they merely account for space left over which cannot be used in any other way.

Closets should not be permitted to obtrude themselves into a room. There should, of course, be at least one closet for every bedroom, and others for coats, linen, and so forth.

Every woman likes large closets and plenty of them; often, however, they are as large as rooms, in which case, like alcoves, they frequently represent space left over at a point which cannot be reached from the hall. They are shown on the plan as closets. Sometimes they are glorified as "dressingrooms." Too often the correct name is waste space.

While the housewife is always pleased to see a large closet, her enthusiasm would cool if she realized that this and other waste space in the plan may have cost a thousand dollars or more. Nor does she realize that such closets may become catch-alls that add to the labor of house cleaning.

Closets can nearly always be provided between rooms as in house No. 2, without the need of projecting them into bathrooms or other rooms.

There are many different ideas as to the proper size of a closet. A study of hook rail space in conjunction with a coat hanger rod, indicates that a closet about 3' square provides the best combination of small space with ample hanging facilities.

Waste space is not only expensive but avoidable. It is of common occurrence, easily recognized and may often determine whether a project is to go ahead or not. It is worth saving!

St. Louis Protects Buyer and Seller

(Continued from page 43)

contract and supervise the construction of a home. The Better Business Bureau therefore recommends that you engage the services of an architect to prepare plans and specifications, award the contract and supervise the construction of a home. It is true that many homes are built without the services of an architect—some with good results but many also with very unsatisfactory results. Have someone competent to advise you in building a home—someone without any financial interest in the contract whatsoever. Getting good advice before you start is always a paying investment."

The bureau's attitude towards stock plans is likewise of public interest and value:

"In order to promote the use of building materials

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WALLS can't read the advertising about the Plaster that goes on them, so they don't know what to expect of it. A wall just has to put up with the Plaster your contractor puts on—whether it makes the wall feel strong or puny. Whether it slips easily, or drags across with leaden feet. So let's leave this question of using Gypsteel Gypsum Plaster to the walls and ceilings.

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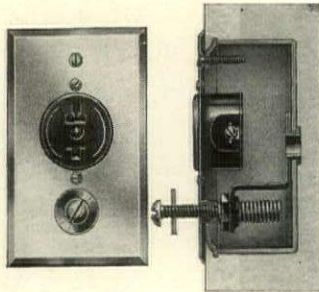


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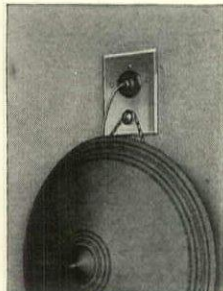
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and to encourage good architecture and construction many organizations distribute stock plans and specifications of small homes for a nominal charge. They are especially useful in presenting modern ideas in the preparation of the plan for your home. Like any other article that you buy ready-made, see that you get a fit. You may get satisfactory results without the aid of competent advice in building a home from stock plans and specifications. The safest procedure, however, is to engage the services of someone competent to advise with you. Be sure the plan is just what you want, because alterations on buildings made subsequent to the original plans are usually very costly."

It is interesting to note the attitude of the bureau towards awarding the contract to the low bidder, a practice which it discourages:

"Select a contractor whose reputation for good work and fair dealing is established. He may not be the lowest bidder but it may be the lowest bid all things considered. A very low bid in comparison has the same significance as a very low price on any piece of merchandise. There must be a reason for it, therefore investigate."

The Better Business Bureau of St. Louis is blazing a trail. It appears to be following a well thought out, intelligent plan of action. What it accomplishes will be watched with considerable interest throughout the United States. As the kinks are ironed out and experience in handling problems of the construction industry is gained, it is to be hoped that other Better Business Bureaus throughout the United States will take similar action.

BOOKS

Acoustics of Buildings

(Continued from page 72)

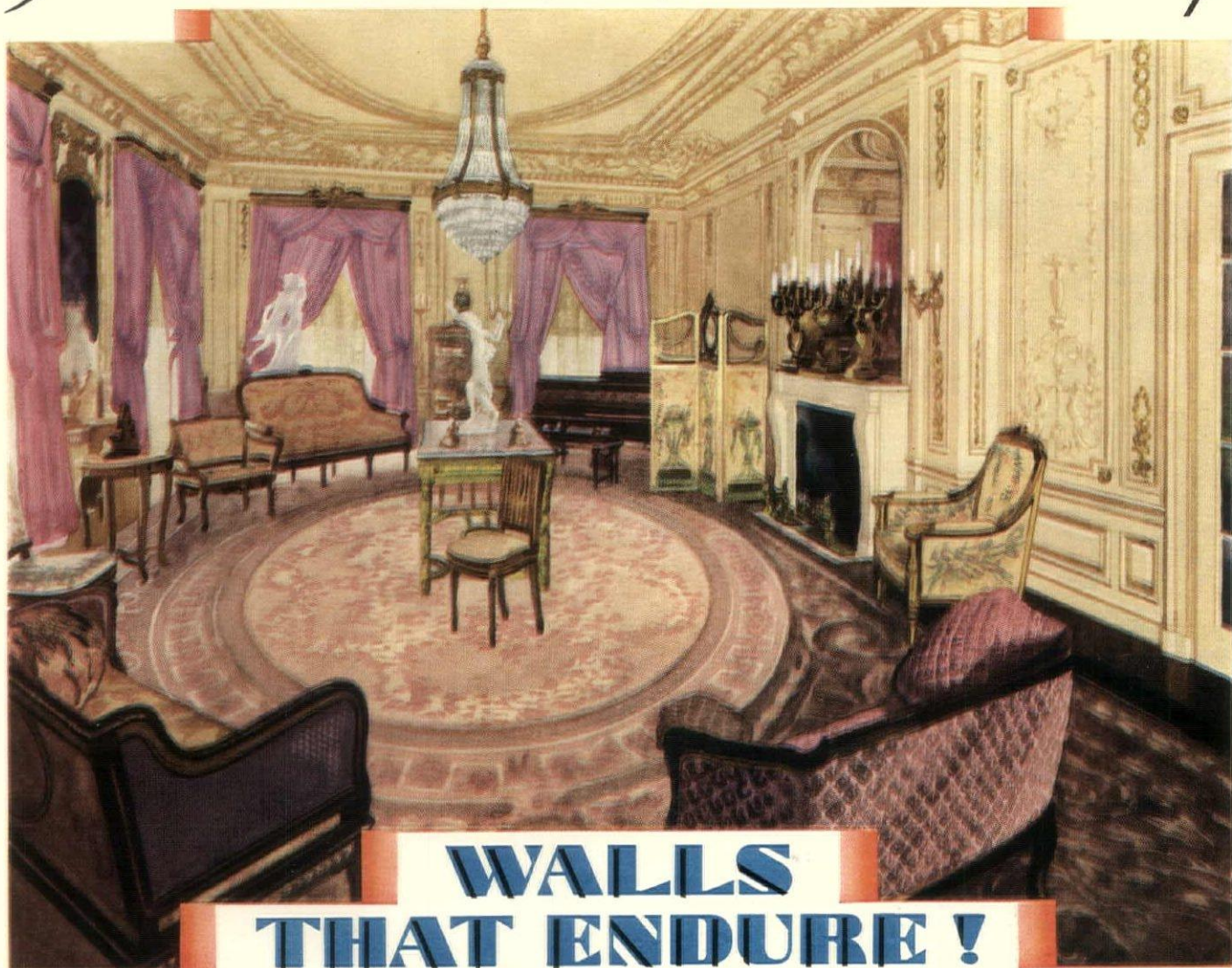
correction, illustrative causes of acoustic correction, soundproofing in buildings, experimental investigations of transmission of sound, examples of soundproof room, acoustic control of the ventilating system in a building, vibrations in buildings, and so on.

The book is well illustrated by photographs of auditoriums, diagrams and charts. The author is professor of experimental physics at the University of Illinois.

Conventions and Expositions

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| May 20 — October 1 | <i>Exhibition of Modern Industrial and Decorative Arts, Stockholm, Sweden.</i> |
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| May 26 — 30 | <i>International Congress of Building and Public Works, London.</i> |
| June 19 — 30 | <i>Pan-American Congress of Architects, Rio de Janeiro, Brazil.</i> |
| September | <i>International Architects' Congress, Budapest, Hungary.</i> |
| November 18 — 19 | <i>Art Exhibition, Royal Institute of British Architects, London.</i> |

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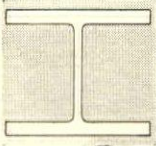
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**Kansas City Federal Reserve
Bank Building,
Kansas City, Missouri**

Recently—the Kansas City Federal Reserve Bank found it necessary to move their bond vaults from the 9th to the 6th floor. The original vaults, built six years ago, were constructed with a heavy steel reinforcing system, based on the idea of mass, only in overcoming burglarious, or mob attacks.

The architects in charge of remodeling, appreciating that progress moves ever forward, thoroughly investigated all forms of vault design. They sought not only ability to resist high explosive—but drills and torch as well.

As a result of this research, the Steelcrete principle was specified—assuring, in addition to extraordinary protection, remarkably low cost.

Here, again, is positive evidence of Steelcrete Superiority—one of many similar findings of leading architects and bankers. You are invited to send for their certified endorsements. Write today.

PROOF AGAINST



CUTTING FLAME DRILL EXPLOSIVES



VIEW OF
CONSTRUCTION

A partially concreted section of a minimum thickness Steelcrete Vault. This shows the rigid entanglement of interlocked steel which serves as the skeleton around and through which concrete is poured.

THE CONSOLIDATED EXPANDED METAL COMPANIES
Steelcrete Building, Wheeling, W. Va.

Branches:

Boston Cleveland Philadelphia Pittsburgh Chicago New York Buffalo



Bank

Vaults

OTHER STEELCRETE PRODUCTS FOR SAFETY

FRAMEBAR and Industrial Mesh for Window Guards . . . Industrial Mesh for Safety Guards and Partitions . . . Metal Lath . . . Expanded Metal Concrete Reinforcement



The value of light, air and cleanliness as a means of regaining health is expressed in the design of this sanitarium in Holland

Modern Architecture

(Continued from page 25)

the evolution of man's mode of life. A building cannot be successfully experimented with, altered, erased, redesigned even after years have elapsed, like a book or a musical composition, nor can it be destroyed and replaced as readily as a painting or even a piece of sculpture. Each building is in principle unchangeable and indestructible, at least over an appreciable period of time, and the next experiment can only be made on a new building in a new location. It is therefore essential that we shall evolve a common formula, and that every brain from the meanest to the greatest shall be focussed on a common problem, in order that, by our concerted effort, we may ultimately bring the architectural expression of our new era to a state of perfection comparable to that attained by the same method in the past. We are wasting our energies in vain imitations and adaptations, each of which can only be inferior to its ancient prototype.

The great imitators of the modern movement in architecture have not striven after originality for its own sake, to create a sensation, but have sought, on the contrary, a sane and logical formula to solve new problems, after recognizing that the ancient formulae were inadequate to our needs, both spiritual and material. They have attacked the question fundamentally and courageously, asserting their pride in man's progress toward the control of nature, and their conviction that new forms of greater comparative perfection in architecture are as much an

NEW McCRAY REFRIGERATORS

Backed by 40 Years' Experience

THE new series of McCray refrigerators, with gleaming all-porcelain interior and exterior, embody 40 years' experience in building the highest grade refrigerators for all purposes.

You realize how vital this experience is when you consider how much more there is in refrigerator building than appears on the surface. For, important as the exterior and interior are from the standpoint of fine appearance and sanitation, it is what lies between—in the wall construction that determines the efficiency and service of the refrigerator.

Every McCray is heavily insulated with pure corkboard, sealed with hydrolene cement, making perfectly air-tight joints. In every hidden detail the finest materials, and the most expert craftsmanship build staunchness into the McCray—the ability to resist heat, and retain cold.

It is this in-built quality which insures the efficient economical service always associated with the name McCray. Like the sterling mark on silver, the McCray nameplate has come to be recognized during these two-score years of quality manufacture, as the assurance of thorough-going value.

Whether used with ice or mechanical refrigeration of any type, the McCray delivers the same efficient service. And it should be re-

membered, too, that the character of service you get depends finally upon the refrigerator itself, regardless of the cooling method used.

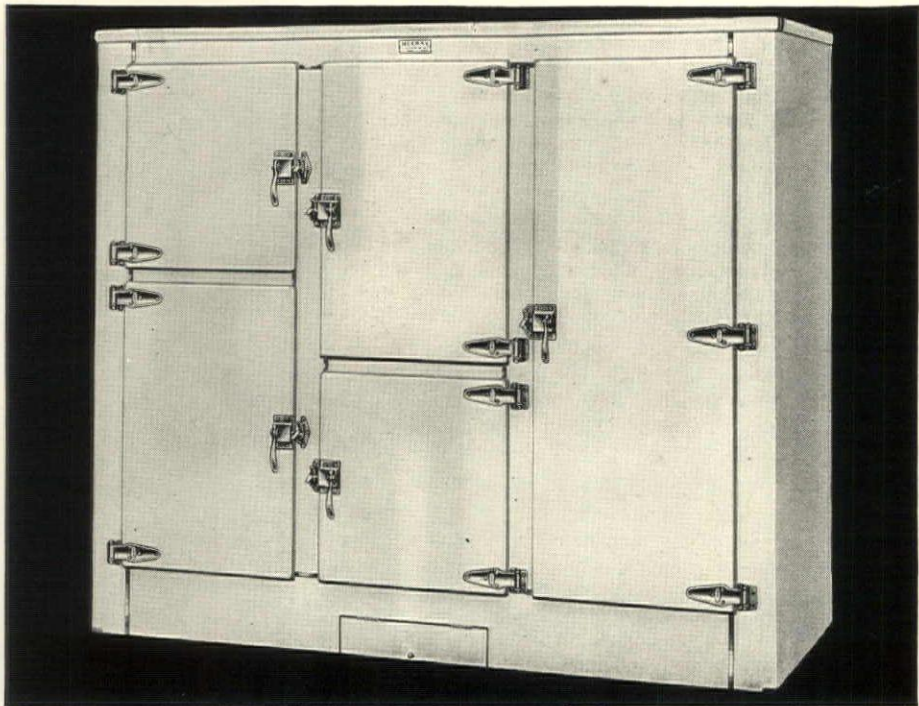
The McCray illustrated is the Model No. P332, one of a series of new All-Porcelain refrigerators for Hospitals, Schools, Institutions, Hotels, Restaurants — in fact wherever perishables must be

kept fresh in large quantities.

Architects, send now for latest catalogs showing all McCray models for every commercial purpose, and portfolio giving complete information. McCray builds to order to meet particular requirements. Send rough sketch and our engineering department will submit a proposal without obligation.

ALL McCRAY MODELS
MAY BE USED WITH
MECHANICAL
REFRIGERATION OF
ANY TYPE

McCray Refrigerator Sales Corporation, 61 Lake St., Kendallville, Ind.
Salesrooms in All Principal Cities. See telephone directory.



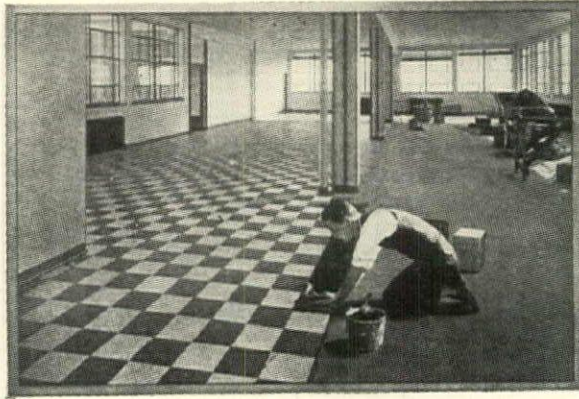
McCRAY REFRIGERATORS

WORLD'S LARGEST MANUFACTURER OF REFRIGERATORS FOR ALL PURPOSES

Sana-bestos Tiles

PATENTED

for Schools, Churches, Hospitals, Stores, Apartments, and Homes



The architect will be quick to recognize these desirable features of Sana-bestos Floor Tiles:

- Easily and quickly laid in plastic cement by the average workman.
- Moderate in first cost with no upkeep expense.
- Not affected by acids or alkalines.
- Stains and marks of cigarettes easily removed by washing with soap and water.
- Comfortable, non-slippery, resilient surface, that will not buckle, crawl, warp, wrinkle, loosen, or turn up at the corners.
- Never wears rough or gritty, and is never affected by traffic no matter how severe.
- A variety of color tones that harmonize with any artistic layout, including black, maroon, red, brown, green. Sana-bestos tiles are also manufactured in two color marble effects (but not in light colors.)

Sana-bestos Heavy Duty Tiles

Sana-bestos Tiles for industrial use are manufactured $\frac{1}{2}$ inch in thickness. They may be laid either in our special plastic cement or in concrete. When laid in concrete they can be used out of doors as well as indoors, with excellent results.

Sample tile and descriptive literature sent upon request

FRANKLYN R. MULLER, Inc.

Manufacturers of Asbestone and Sana-bestos Tiles

105 Madison St. Waukegan, Illinois

Established 1906

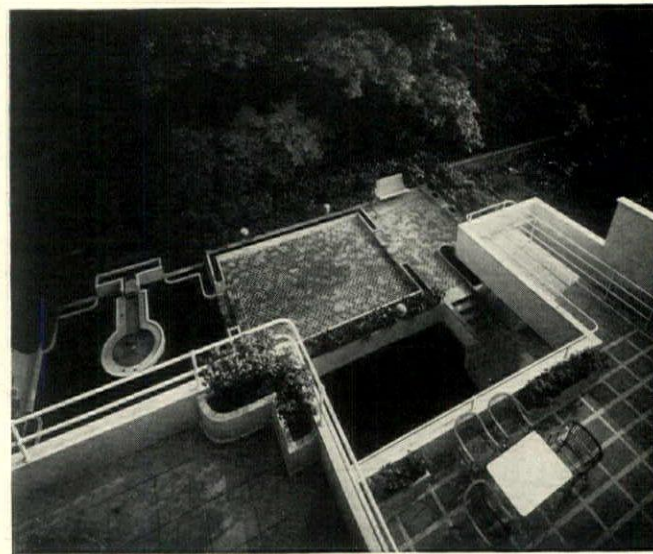


object of man's proper pursuit as new forms in mechanics, economics, philosophy, sociology, government and religion. Architectural form is, in fact, an inseparable concomitant of social progress. The "Congres International des Architectes Modernes," the association formed to advance the progress of modern architecture throughout the world, has taken its stand firmly on the basis as much of human as of esthetic progress, on the improvement of living conditions and on the ordering of our chaotic city life. It aims at more than a superficial beauty. It aims and is finding the means to create the permanent and esoteric beauty of character which, in buildings as in human beings, outweighs and outlasts mere beauty of feature.

The great stumbling block to the general acceptance of modern architecture appears to be what the man in the street chooses to call its ugliness. He will admit the illogical and timid character of much of the work of the immediate past, the imperious call of sociology, science and mechanics, the logic of the new forms, even their significance, he will plaintively conclude—what is to become of beauty, sentiment, tradition? To him I can only reply that he is deceived by an optical habit, a bidimensional point of view.

The stylistic traditions he so much admires in our present buildings are as empty of substance as the traditions which produced the less meticulously copied buildings of fifty years ago, which he looks on with such scorn, and in another fifty years another generation will look back on the Gothic and Classic theatricals of our churches, universities and places of business with the same disgusted astonishment that such a generation of Philistines could ever have existed. There is no end to this process of disillusionment except in the creation of a new organic tradition.

In Modern Architecture, I repeat, there is greater beauty than in stylistic architecture; the beauty of the functional and structural strength of character, instead of outward feature, based on true instead of false sentiment, and on the sound tradition of substance instead of the unsound tradition of form. Lastly, if the man in the street does not find modern architecture beautiful, neither does he find himself or any of his works beautiful, for modern architecture reflects his very image.



The tradition of natural gardens finds a new expression in the mechanistic age

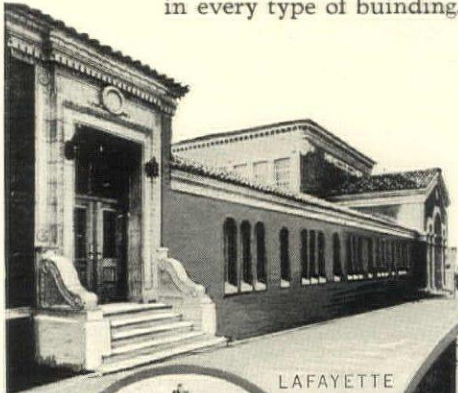
ILLINOIS HEATING SYSTEMS

in San Francisco Schools

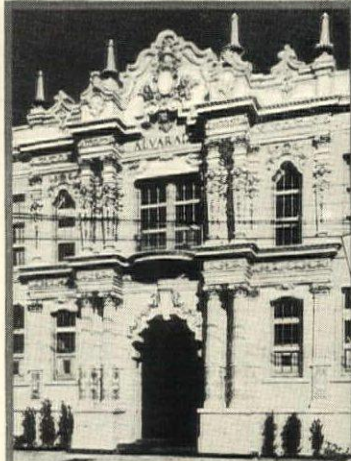
More than 150 schools and colleges in San Francisco and vicinity are equipped with ILLINOIS Heating Systems.

Also 31 hospitals—5 asylums and homes for the aged—13 clubs—20 hotels and apartments—14 theaters—16 banks—8 churches—48 office and store buildings—13 public buildings—15 telephone buildings.

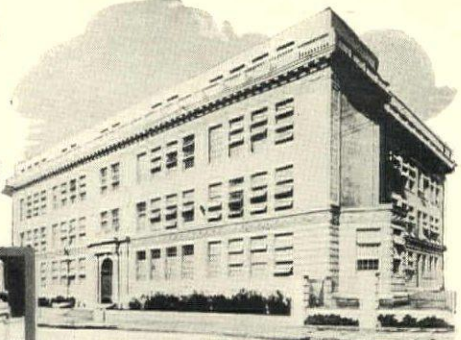
ILLINOIS Heating Systems afford the utmost in heating satisfaction in every type of building.



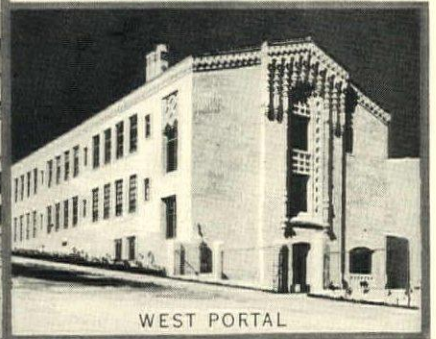
LAFAYETTE



ALVARADO



PACIFIC HEIGHTS



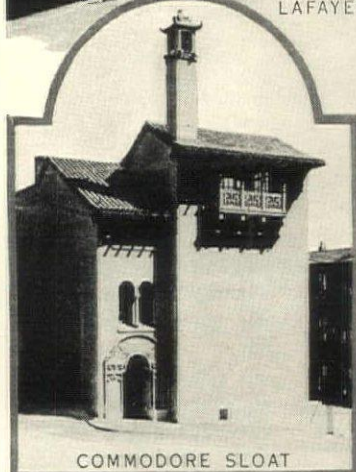
WEST PORTAL



MISSION HIGH



RAPHAEL WEILL



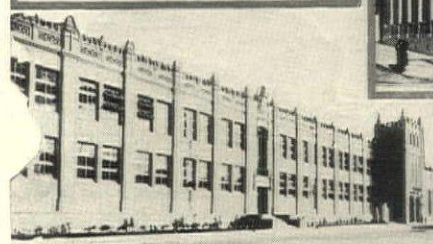
COMMODORE SLOAT



HIGH SCHOOL OF COMMERCE



FRANCISCO



ALAMO



GALILEO HIGH



DUDLEY STONE

REPRESENTATIVES IN 40 CITIES OF U.S.A.

ILLINOIS ENGINEERING COMPANY

ROBT. L. GIFFORD President

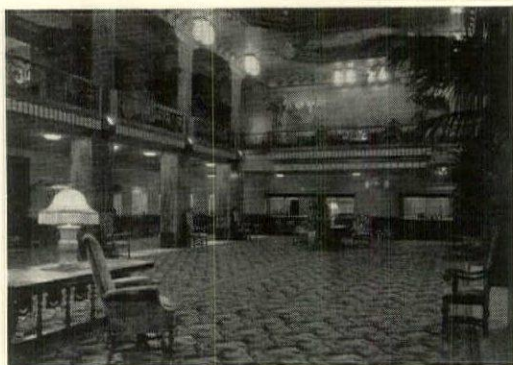
INCORPORATED 1900

CHICAGO



Sugarman and Berger
Architects
Wm. Bradley & Son
Marble Contractor

THE "NEW YORKER" LOBBY



THE Lobby of the New Yorker—
one of New York's most luxuriously
modern hotels is an outstanding example
of distinctive interiors obtainable by
blending Cardiff Green Marble with
other marbles.

Unusual care was taken in this interior
design to provide a warmth of welcome,
and friendliness in keeping with the gen-
eral atmosphere of a smart hotel.

The deep green color of Cardiff Green
marble, used as wainscoting and column
trim, adds a setting of quiet beauty, com-
fort and relaxation that fits the indi-
vidual mood of any guest.

THE CARDIFF GREEN MARBLE CO.

Quarry Office
Cardiff
Maryland

Sales Office
350 Madison Ave.
New York

What Architects Are Talking About

(Continued from page 59)

and to culminate in the harmony of the whole. Ornament is no extraneous or superfluous detail to be used, or abstained from, at will. It is inevitable."

INTERESTING statements concerning welding and steel floors were made by Lee H. Miller, chief engineer of the American Institute of Steel Construction, in the recent convention of that organization. They are:

"The progress of events indicates that welding is destined to one of two positions as relating to the structural steel industry. It may become a very valuable tool for the industry and assist in reducing the cost of certain operations that will enable us to carry our product into new markets. On the other hand if as an industry we resist its proper application and development there will certainly come into existence another sub-contractor between the fabricator and the general contractor. . .

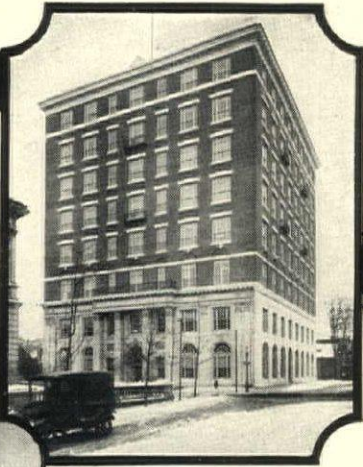
"Steel offers an opportunity for answering every problem that floor construction can present and at a cost that promises its universal use when the public becomes aware of its possibilities. For the Open Hearth charging floor it has met the severest service a floor can receive, and on the ocean liners it is combined with the most palatial environment we can devise. For residences its economy and value should make possible the introduction of steel frames in this vast market. For multiple story structures it will provide every function required of a floor and add a torsional rigidity which no other type can develop. It will reduce the dead floor load by about one-half and make it possible to add from 25% to 30% more stories without increasing foundation loads."

THAT income can be as accurately forecast as the construction cost of a building was stated by Preston M. Nolan, a Chicago real estate man, talking before the national convention of mortgage bankers. He said: "No counting of bricks can laugh off the vital essential of earnings. Don't let anyone tell you that earnings are impossible of accurate forecast. Income types, of course, vary as to desirability; some are more dependably calculatable than others. Many factors enter into the equation; size and strength of the city, choice of location, class of property and finally, almost equalling everything else in importance, the management ability of the institution to which is entrusted the financial happiness of the property owner."

A RESERVE bank for the New Jersey League of Building and Loan Associations is proposed by Judge John Warren, a former president of the League. The plan contemplates the creation of a credit pool of over thirty-five million dollars through each association depositing 3% of its paid-in-dues. Thus the associations will have enough liquid funds to easily meet maturities and withdrawals, and be independent of banks.

THE wonderful Mayan civilization may forever be a closed book, due to the misguided efforts of a well-meaning missionary who unfortunately once visited Central America. His diary says: "I collected 4,000 iniquitous books and burnt them in the public square of Tikal, much to the lamentation of the natives."

POISON gas has been used to kill parasites which were destroying the wooden staircase and the carved wood walls of an old German church. The church was made



New England Telephone Building, of Providence, R. I., equipped throughout with Te-pe-co Fixtures.



Simplified Installation With No Carrier

IF your plans require a floor-free closet and a pipe chamber is possible, you can't afford to overlook the Te-pe-co "Universal." It has all the sanitary features of the wall-hung closet plus a simplified installation that requires no carrier.

Of full syphon jet construction, the design of this beautiful sanitary fixture includes the extended lip feature and a large vent passage from the bowl, opening vertically into the pipe chamber.

Our Guarantee — We make but one grade of ware — the best that can be produced — and sell it at reasonable prices. We sell no seconds or culls.

Our ware is guaranteed to be equal in quality and durability to any sanitary ware made in the world.

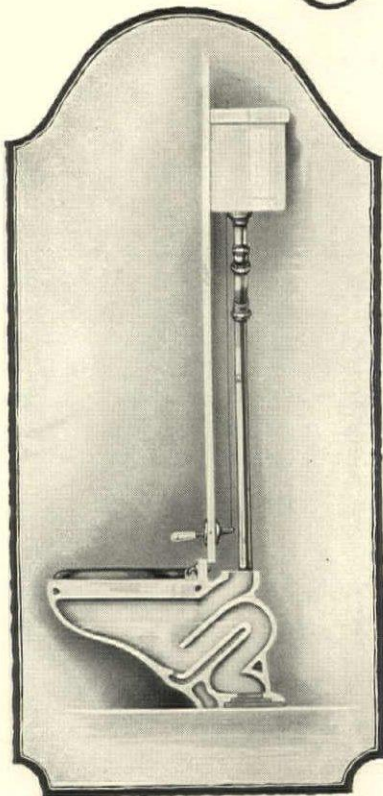
The Te-pe-co trade mark is found on all goods manufactured by us and is your guarantee that you have received that for which you have paid.

THE TRENTON POTTERIES COMPANY
TRENTON, NEW JERSEY, U. S. A.

National Showroom — New York City, 101 Park Ave., Entrance on 41st St.
Branch Offices — Boston, Philadelphia, San Francisco
Export Office: 115 Broad Street, New York City

TE-PE-CO

World's Largest Makers of All-Clay Plumbing Fixtures



The "Donovan" Safety Flange is employed on the Universal Closet as a means of connecting to the soil pipe—guaranteeing a perfect joint.

air-tight, filled with the gas for a week—and the bugs were dead. Human beings were not allowed admittance till three weeks after.

LOTTERIES were used to finance public improvements in seventeenth century England, and an old elm log that was part of a water system in London, financed that way, is being exhibited in New York. The system consisted of elm logs bored through to make a wooden pipe, the bore being concave at one end and convex at the other. The convex end of one log was fitted into the end of the concave adjoining log and a metal band placed around the joint. The pressure of water forced the wooden pipe against the metal band and thus made a tight connection. Clever people, those Englishmen.

THE discussion of glass houses and buildings has brought Frederick Keppler, of Long Island City, into the limelight as the originator of the idea. Plans for the new building to be erected by the Chanins on the site of the Century Theatre, New York, call for upper stories of glass and metal, and those for Frank Lloyd Wright's apartments for St. Marks-in-the-Bouwerie Church are said to provide for glass walls throughout.

AUTOMOBILES are tested on the roof of the monster plant of the Fiat company in Turin, Italy, which has all the appearance of a speedway built on a viaduct. The roof is, in effect, a racing track and serves the same purpose as the testing grounds of well known American automobile companies.

THE salvage value of the Hotel Majestic, New York, now being wrecked, will be less than one-half of one per cent, according to Irwin S. Chanin. Less than ten per

cent of the wrecking costs will be recovered through the sale of salvaged materials, largely due to the fact that otherwise useable materials have become obsolete and unmarketable.

FREDERICK A. WHITING has been appointed president of the American Federation of Arts with headquarters at Washington, D. C. He had been director of the Cleveland Museum of Art for the past seventeen years.

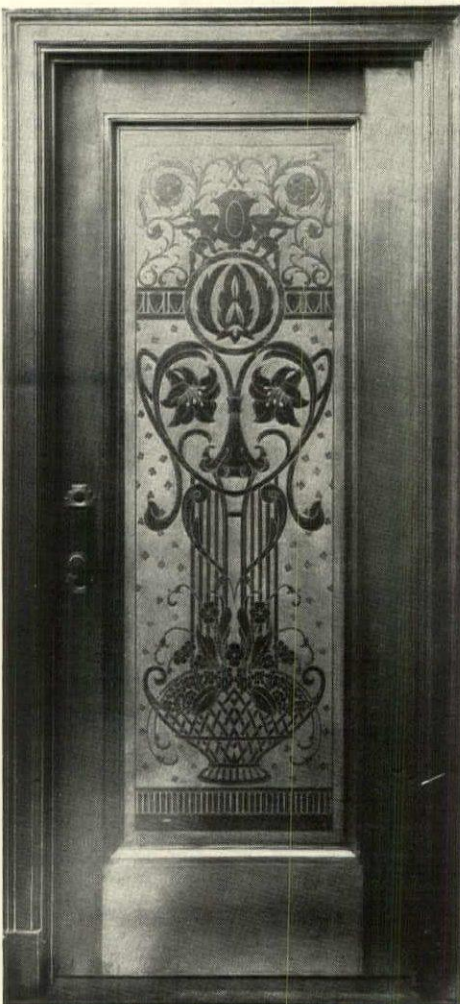
TULIPS will play an important part in the new landscaping program of the Chicago, Burlington & Quincy Railroad. Not only will they be planted around the stations in great quantities, but will be given to each passenger on a through train.

LICENSING of contractors was urged by William H. Gompert, architect, at a recent meeting. He said that the primary purpose of registering a broker is to enforce honesty and to establish responsibility in business dealings.

THE first annual exposition of work of Pittsburgh architects was held April 8-12 under the auspices of the Pittsburgh Chamber of Commerce. Various awards were made too late for notice in this issue.

GARAGE designers are noting that there seems to be a definite trend towards longer wheelbases and greater turning radius, according to the Ramp Buildings Corporation, New York. Consequently the necessary allowance will be made for this tendency in the newer structures.

THE American Society of Heating and Ventilating Engineers has moved to the New York Life Insurance Building at 51 Madison Avenue, New York, where it will occupy space on the thirty-first floor.



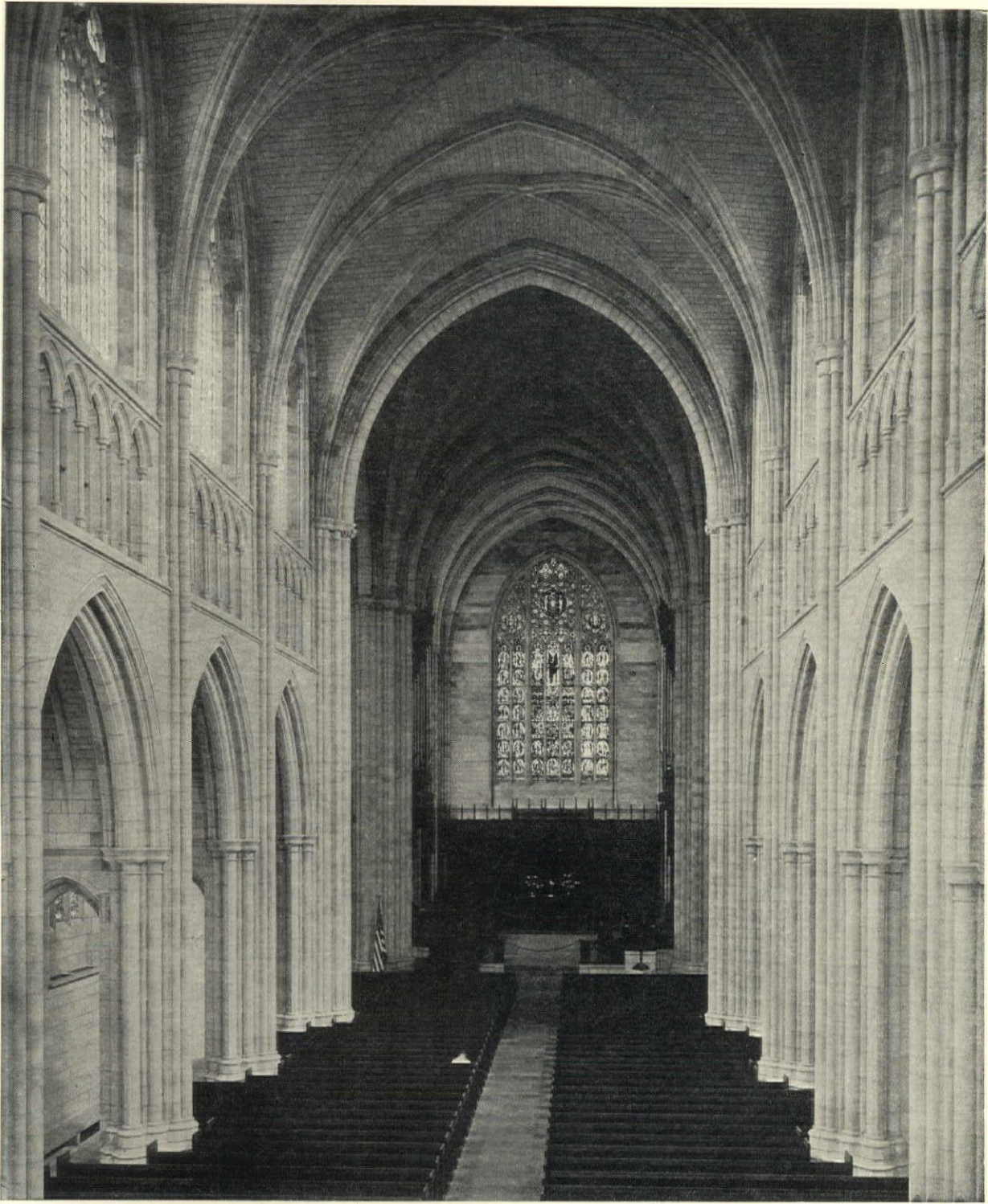
Doors of Etched Aluminum

In step with the modern trend toward the use of new metals in architecture, United now offers strikingly handsome doors of etched aluminum. The years take no toll of this permanent metal. The silvery polish and soft gray of aluminum permit effects of rare beauty and charm.

There are no restrictions upon the designer of such doors and no upkeep penalties for the user. They remain objects of permanent beauty. United also supplies panels of stainless steel, etched in any design, with plastic enamel background in color if desired.

Never has a wider range of decorative possibilities been available to the Architect. Further information on the use of white metals, as well as the conventional materials, will gladly be furnished upon request.

THE UNITED METAL PRODUCTS COMPANY
CANTON, OHIO.



PRINCETON UNIVERSITY CHAPEL
Princeton, New Jersey

Cram & Ferguson
Architects

ACOUSTICAL MASONRY VAULTING

Vaulted Ceilings of Guastavino Timbrel Tile Construction with soffit of AKOUSTOLITH Sound Absorbing Artificial Stone. Side walls lined with similar AKOUSTOLITH in large size units to simulate stone ashlar.

R. GUASTAVINO COMPANY

40 COURT ST., BOSTON, MASS.

225 WEST 34TH STREET, NEW YORK, N. Y.

R. GUASTAVINO CO. OF CANADA, Ltd.
New Birks Building, Montreal, P. Q.

GYPSUM building materials shall not be called "lumber," according to a recent decision of the Federal Trade Commission concerning the Rockwood Corporation, St. Louis. This company was ordered to cease "using the word 'lumber' or the words 'Rockwood Lumber' in catalogs, pamphlets or advertising matter used in the offering for sale or sale in interstate commerce of gypsum products or gypsum building materials unless and until the word 'lumber' and of the words 'Rockwood Lumber' are qualified by the use of the word 'gypsum' or some other word or words equally explanatory in lettering equally as conspicuous as the word 'lumber.'"

KANSAS CITY, MO., will soon have an art museum, for which fourteen million dollars is available.

A NOISE filter is now being perfected which will be placed in windows and not only keep the uproar of the street from the ears of those indoors, but also remove dust and dirt from incoming air, according to R. F. Norris, acoustical engineer for the Burgess Laboratories, in speaking before the members of the Illinois Society of Architects. He explained that most offices are noisy because their walls and floors have no sound absorbing qualities, sound often coming in and reverberating until it is five times as noisy inside the building as outside.

PURCHASING power of wages in some European countries has increased as fast and in some cases faster than that of American wages, according to the National Industrial Conference Board, Inc. The increase of hourly wages, since the war, is 44% and the weekly wages is 35%. The smaller increase in weekly earnings may be attributed to fewer working hours per week.

FIRE losses in the two hundred odd cities participating in the recent national fire waste prevention competition showed an average decrease of more than twenty per cent, a substantial decrease for the first time. Fire protection agencies are urging more fire-safe construction, declaring that the place to provide against fire is at the drafting board.

THE Extension Division of the University of Minnesota is considering the establishment of two correspondence courses in advanced reinforced concrete design. Each course would consist of sixteen lessons.

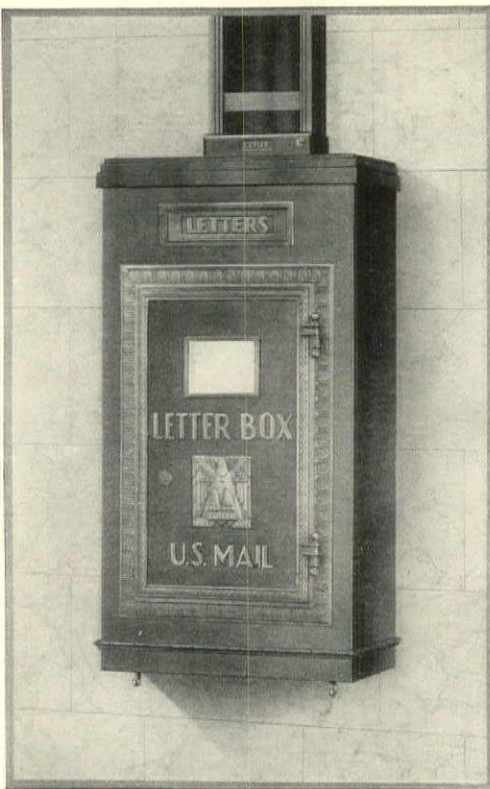
DEATHS

GEORGE WASHINGTON SMITH, a prominent architect of southern California, died March 15 in Santa Barbara. He was a native of Pennsylvania, a graduate of Harvard, and went to California in 1914. He is said to have inaugurated the Hispanic design in California houses.

AUGUSTUS HOWE died in Yonkers, February 28. He had retired from the practice of architecture at the age of sixty-one. He was a graduate of Cornell University.

HERBERT A. SCHMIDT, a California architect, and a graduate of the University of Pennsylvania, dropped dead February 27 as he rose to speak at a dinner at which he was the featured speaker.

JOHN A. CREUTZER, a prominent architect of Seattle, Wash., is dead of heart disease. He had designed the Medical-Dental building, the Swedish Tabernacle, and a number of other prominent structures in Seattle.



No. 4054

THE CUTLER MAIL CHUTE

Combines in the perfected Model F the result of long experience in meeting the exacting requirements of public use under Post Office Regulations—and the latest architectural development.

Simple and substantial in construction, durable in finish; with an interesting series of stock and semi-stock Mail Boxes of marked individuality from which to select.

Also intelligent and appreciative execution of special designs in any metal desired.

Correspondence invited.

THE CUTLER MAIL CHUTE CO.

GENERAL OFFICES AND FACTORY
ROCHESTER, NEW YORK



Comfort comes *first* with these clients

*They accept your judgment
without question when you specify
Armstrong's Corkboard*

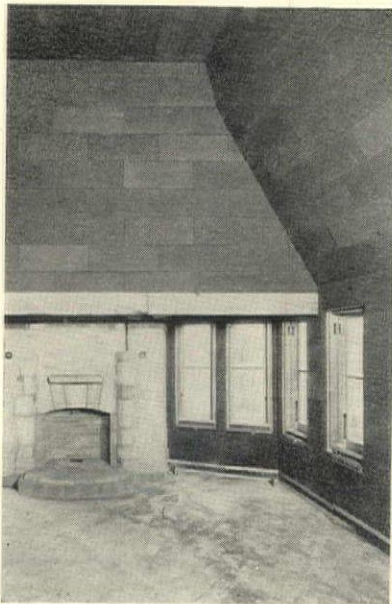
PARTICULAR clients want the very best. Beauty—yes! Convenience—yes! Comfort—most of all! Which means, for one thing, corkboard insulation in their homes. These are clients who are not content with half-way measures when they understand the advantages of insulation.

Comfort is *built in* when walls and ceilings are insulated with Armstrong's Corkboard. The house is protected against outside temperatures. Every room is as pleasantly comfortable in January as it is in June. Constant temperatures are easily maintained. The cork-lined house is warm in winter and cool in summer.

Because Armstrong's Corkboard is insulation that can be applied in thicknesses that are really adequate, the maximum of year-round comfort is assured. Heating is made easier and more uniform. Drafts are eliminated. Street sounds are shut out. And in summer, rooms are easily kept many degrees below outside temperatures.

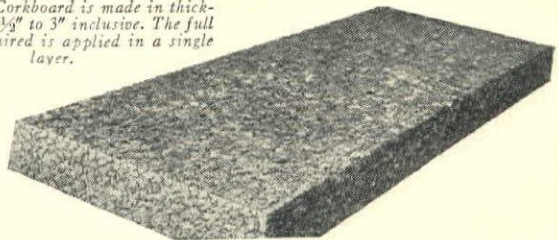
Clients who must scrutinize cost, and even well-to-do clients, will be interested to know that the initial cost of Armstrong's Corkboard is soon repaid by the saving in fuel dollars. This ideal insulation is fire retarding. It will not deteriorate. It will not swell, shrink, or buckle. It is a perfect plaster base, and is easily erected in any type of construction. Are you planning a home for particular clients? Estimates on the insulation will be supplied promptly and without obligation. Armstrong Cork & Insulation Company, 936 Concord Street, Lancaster, Pa.

*Well-to-do clients will
happily pay for insulation
that gives comfort.*



*In town or country house,
1 1/2" thickness of Arm-
strong's Corkboard for
walls and 2" for roofs or
ceilings is adequate for
average conditions.*

*Armstrong's Corkboard is made in thick-
nesses from 1 1/2" to 3" inclusive. The full
thickness required is applied in a single
layer.*



Armstrong's Corkboard Insulation

Adequate Insulation for Comfortable Homes

PERSONALS

LANCELOT SUKERT, A. I. A., and G. Frank Cordner, A. I. A., have entered into partnership with offices at 301-303 Architects' Building, Detroit, Michigan. Mr. Sukert is President and Mr. Cordner is Secretary of the Michigan Society of Architects.

WILLIAM J. CREIGHTON, A. I. A., formerly of La Farge, Clark & Creighton, has moved his office to 101 Park Avenue, New York City.

THE partnership of Stanhope & Bennett has been dissolved and A. Burton Stanhope will continue practice at the Equitable Building, Wilmington, Delaware, under the name of A. Burton Stanhope & Associates.

HUGH R. DAVIES, A. I. A., has just completed and moved into his new studio at 430 East Ocean Avenue, Los Angeles.

VICTOR N. J. JONES has become a member of the firm of McClelland & Pinneh, architects, which hereafter will be known as McClelland, Pinneh & Jones, with offices at 501 Republic Building, Seattle, Wash.

WATT & BLACKWELL have removed their offices to the second floor of the Victor Building, 288 Dundas Street, London, Ontario.

BULLETINS

"COMPARATIVE STRENGTH Properties of Woods Grown in the United States" is the title of technical bulletin No. 158, issued by the United States Department of Agriculture, Washington, D. C. The author is L. J. Markwardt, and the price is ten cents.

"THERMAL Insulation of Buildings" is the name of a new booklet issued by the United States Chamber of Commerce and for sale by the superintendent of documents, Wash-

ton, D. C. Price, five cents. The insulating properties of a number of general classes of insulating and building materials are given, together with the probable fuel savings resulting from the use of such materials.

PROTECTION of log cabins, rustic work and unseasoned woods from injurious insects is described in "Farmers' Bulletin No. 1582," issued by the United States Department of Agriculture, Washington, D. C., which says: "It has been found that by cutting the trees at certain seasons and by treating the wood with preventive and remedial substances practically all such insect damage can be prevented or checked." The bulletin tells how. Price five cents.

CORRECTIONS

FREDERICK PUTNAM PLATT, of F. P. Platt & Bro., architects, was the designer of the Fountain of Light installed in the display room of the Westinghouse Lighting Institute, illustrated on page forty-three of the February issue of THE AMERICAN ARCHITECT.

THE block print in color of Gattiers, France, by Norma Bassett Hall, which was reproduced on page 36 of the April issue of THE AMERICAN ARCHITECT, was through the courtesy of Goodspeed's Bookshop, Boston.

IN the article, "Planned to Make Newspaper Work Easy," which described the Detroit Times Building, and appeared in the March issue of THE AMERICAN ARCHITECT, the flooring referred to as creosoted wood blocks was not that of Carter Bloxonend, which is a built-up end grain wood flooring and not loose blocks.

THE code on the proper selection, installation and maintenance of walkway surfaces, developed by the American Standards Association and mentioned on page 100 of the April issue, has not received final action as yet and so an authorized final draft is not yet available.

Greater New York's Largest Hotel



ST. GEORGE
Clark St. Express Station
7th Ave. Interboro Subway
West St. 4 Minutes
Times Square 15 Minutes

the St. George, like many other modern buildings, has the wiring system protected entirely by **LORICATED CONDUIT**

EMERY ROTH, Architect

O'BERG, BLUMBERG & BLEYER,
Electrical Contractors



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