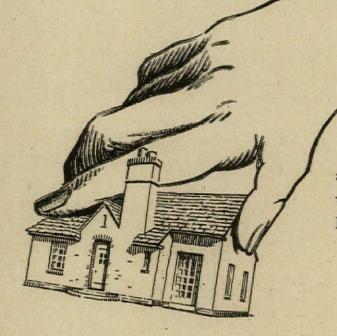
ARCHITECTURAL FORUM



IN TWO PARTS

PART ONE
ARCHITECTURAL DESIGN
FEBRUARY
1929

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Any moderate-price residence may be raised to a higher level, a higher class, in beauty, in value, and in *permanence* of beauty and value, by means of Sheldon's Heather Combination.

That is a roof of comparatively low cost, but possessing all the qualities that make a Sheldon Slate Roof one of "eternal beauty." See it in natural colors on page A-495 of Sweet's; or we'll be happy to send you that page and the other pages showing Sheldon Slate Roofs in colors. For that, and for *anything* else in connection with the use of slate, we hold ourselves at your service.



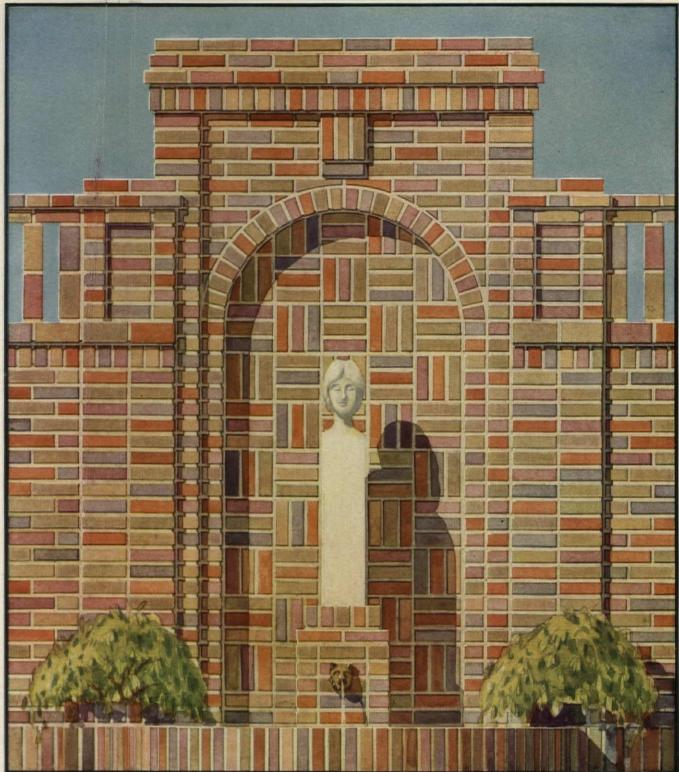
F.C. SHELDON SLATE Co. General Offices, Granville, N.Y.

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Face Brick. This suggestion for their use in a garden wall is one of several blends that might be employed.

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SECOND ANNUAL COMPETITION FOR THE

A. W. BROWN TRAVELLING SCHOLARSHIP

Announcement is made this month through the architectural press of the second annual competition open to architects and architectural draftsmen for the award of THE A. W. BROWN TRAVELLING SCHOLARSHIP, a memorial to the late A. W. Brown who was for many years President of Ludowici-Celadon Company and a leader in the manufacture of roofing tile.

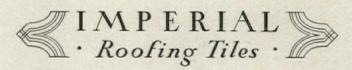
Believing in the importance to the architect of a thorough knowledge of the various materials which go to make up a completed work of architecture, Ludowici-Celadon Company is continuing this scholarship with the hope that it will offer advantages for detailed study of the uses of materials and especially of tile roofs.

The scholarship was established in consultation with the American Institute of Architects and, through its president, a member of the Committee on Education and a member of the Committee on Allied Arts have been appointed to act with the architectural adviser as a special committee to conduct the competition and to have charge of the scholarship.

Ludowici-Celadon Company has made an agreement with the American Institute of Architects to provide the funds necessary to conduct the competition for the selection of a worthy and deserving beneficiary and further to pay to them the sum of two thousand dollars to be used in defraying the expenses of the beneficiary during a year of travel and study in Europe, and also five hundred dollars to be distributed as three additional prizes.

While there will be no restrictions as to the type of architecture which the holder of the scholarship shall study or the exact places he shall visit, he will be required to prepare at least two envois consisting of measured drawings of buildings on which burned clay has been used for roofing. It is hoped, by thus emphasizing in the work of this student the particular craft which the donors represent, that this scholarship will prove a real aid in establishing a better understanding of the use and necessary qualities of burned clay.

Programs will be mailed from New York City on or about March 1st, 1929, and the drawings are to be delivered on April 1st, 1929. Further details concerning the competition will be found in the editorial pages of this magazine. Those wishing to compete should apply for blanks to the secretary of the committee, Wm. Dewey Foster, 25 West 45th Street, New York City.



LUDOWICI-CELADON . COMPANY



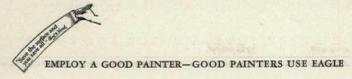
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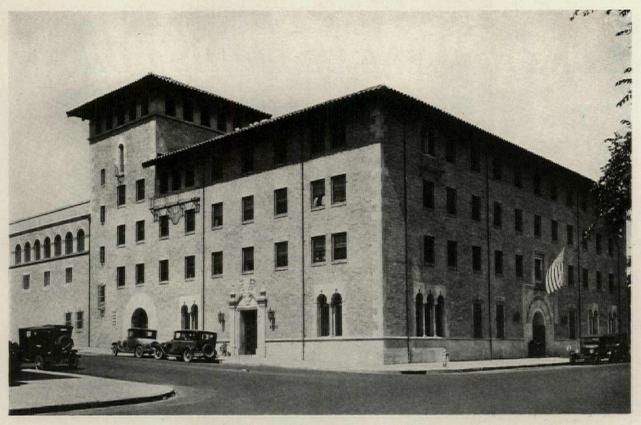
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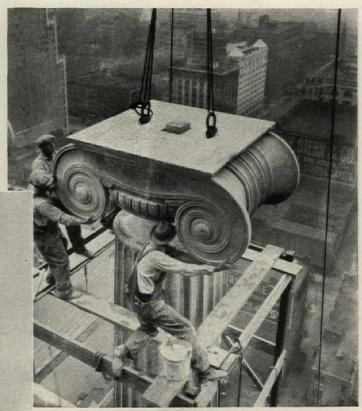
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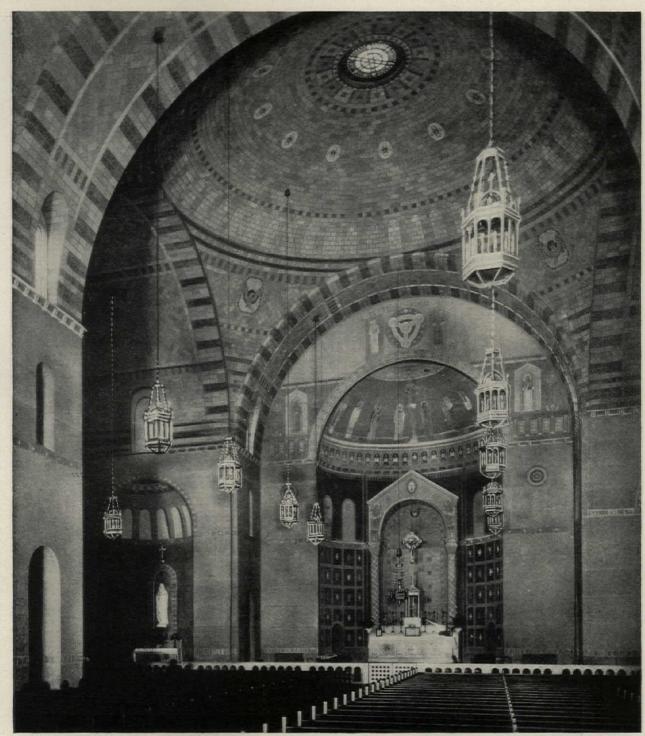
The same age-worn effect that is expressed in the form and texture of these tiles, is wrought with equal fidelity in their gently modulated coloring. An almost unlimited variety of delicate and subdued color tones have been softly blended in each shingle. Lilacs, dusky purples, hues of rare burgundy, browns, the salmon reds, straw yellows and cool moss greens are all present in a roof of HEINZ PLYMOUTH TILE.

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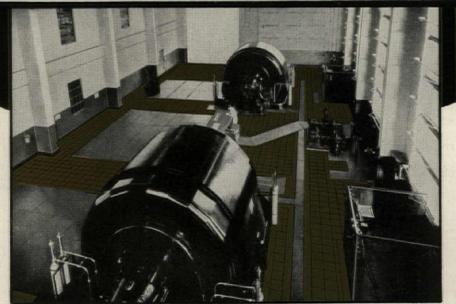
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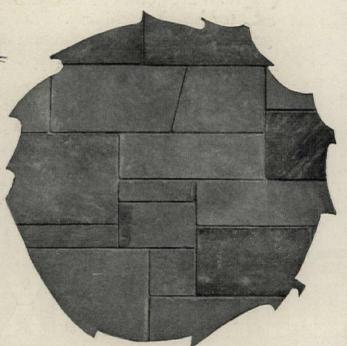
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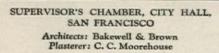
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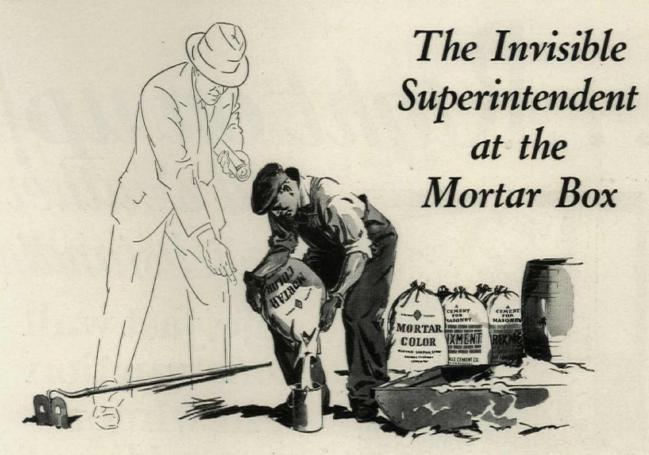
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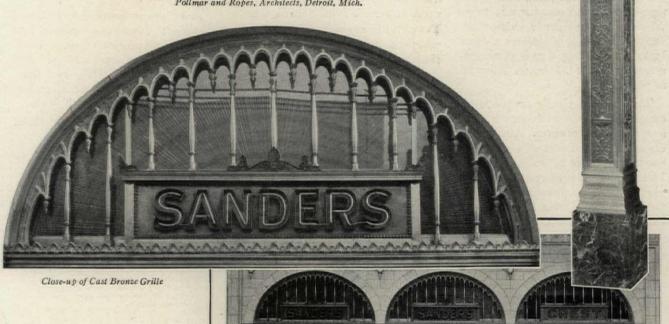
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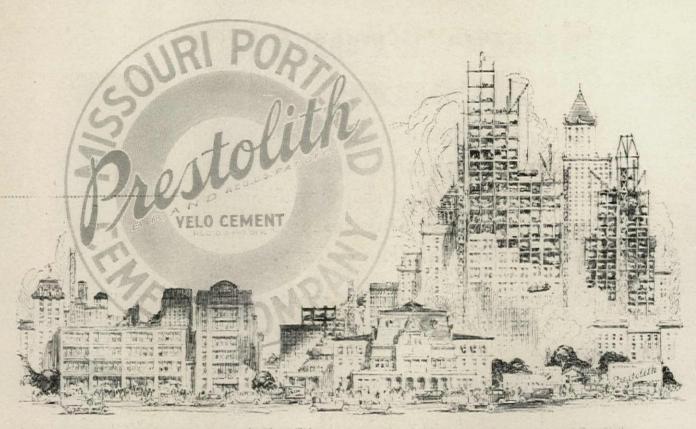
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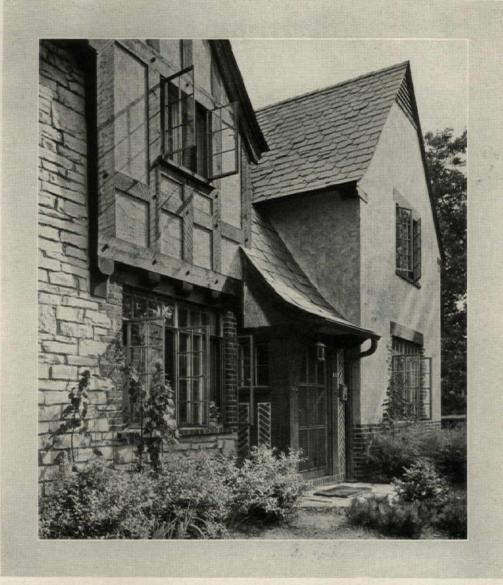
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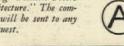
A cozy New England style cottage A cocy New England style cottage decorated in the quiet good taste of the period it typifies. And note how the Armstrong Embassed Floor in a rich terra cotta puts the decorations on friendly terms and binds both rooms into one large, very liveable area.

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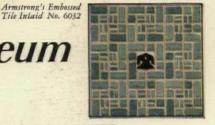
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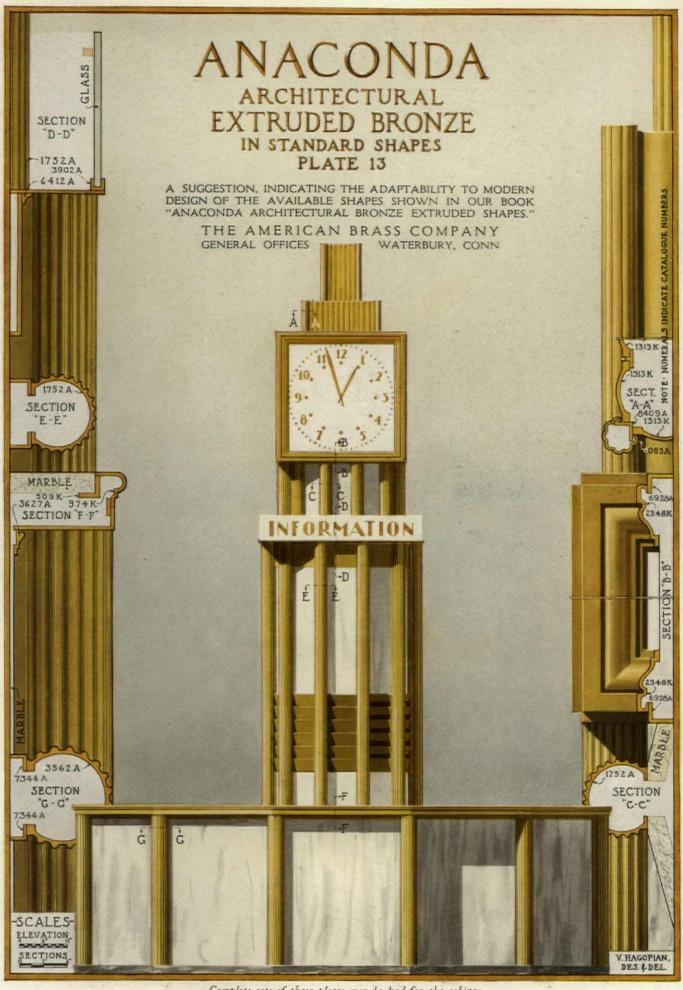
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The interestand comments of members of the Architectural Profession will be much appreciated.

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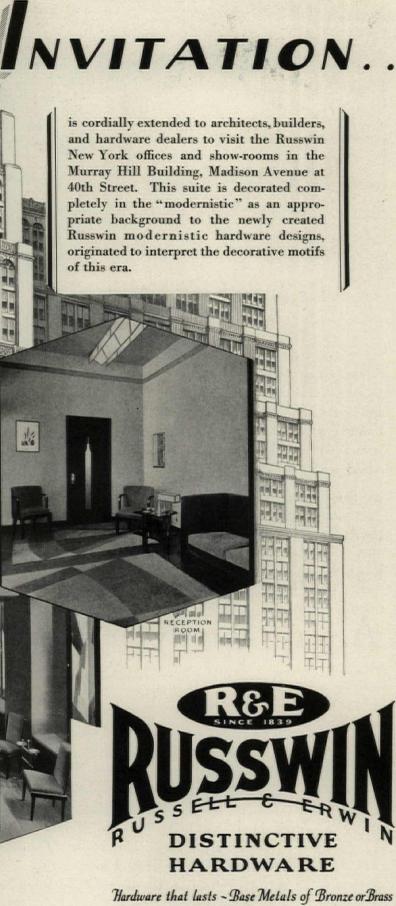
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BOOK DEPARTMENT

THE PERIOD OF WREN AND THE EARLY GEORGES

A REVIEW BY CLIFFORD WAYNE SPENCER

NO period of architectural history has had a greater influence on the domestic architecture of the world than that of the part of the eighteenth century which has come to be known as the "Georgian" period. This is particularly true of English and American homes of the upper and middle classes. This period marked the transition between the ages of feudalism and commercialism in the economic system, and the everyday life of the people was characterized by comparative peace and

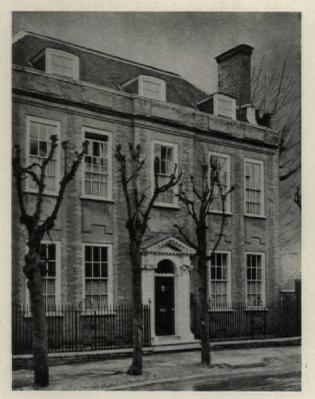
tranquillity. It was an age when the bulk of the well-todo lived simply and quietly in the country, and the home assumed a paramount position in the thoughts of the people. Another factor which added greatly to the excellence of the type of dwelling developed during that era was the high quality of skilled labor available. Artisans looked upon their work as an art, and the carpentry and ironwork as well as the masonry that went into the making of these houses were perfect in every detail. And so it is but natural in this present age of rush and turmoil, of low cost production and slipshod methods, that when a man wishes to plan a home of particular fineness and dignity, he should turn for inspiration and precedent to the rich traditions of the early Georgian period, as they are exemplified in the

fine old houses scattered throughout the English countryside, and in Virginia and the older colonies in our own country, where many old homes are still existing.

It has been said that Sir Christopher Wren was the man who gave the English touch to Renaissance architecture, and his influence is to be found in houses built throughout the whole period, for he was particularly fortunate in being followed by a number of highly skilled artisans and builders who emulated his style and carried on his ideals without displaying the bad taste which so often results from attempts to copy the work of a master. Unlike the work of Inigo Jones, Wren's building was more influenced by French than by Italian ideas, and it was still further enriched by the brickwork of the Dutch influence, fostered during the reigns of the late

Stuart sovereigns. In the use of this brickwork in connection with Portland and other stone, Wren was particularly successful, and this sort of work became one of the outstanding features of the Georgian style. Another thing about the work of Wren which makes it particularly adaptable and desirable as precedent for present-day dwellings was his genius for achieving beauty at a comparatively low cost. He attained his effects, "not by expensive elaboration, but by the careful proportioning of

the various parts, by concentration of ornament in the most telling positions, or by one outstanding feature in the design." His influence continued to be paramount in architectural design throughout the Georgian period, and even long after his death the Wren type of house with its stately square façade, the entrance enriched by an adaptation of one of the classic orders, its sashed windows with broad glazing bars and frames but little recessed from the masonry, forming a well ordered and pleasing pattern on the conventional squareness of the brick exterior, became standard for English and Colonial houses of the better class. Other features characteristic of this type of house are the walled forecourt with its gateway of substantial but ornamental metal, the pitched tile roof rising from a bracketed wood



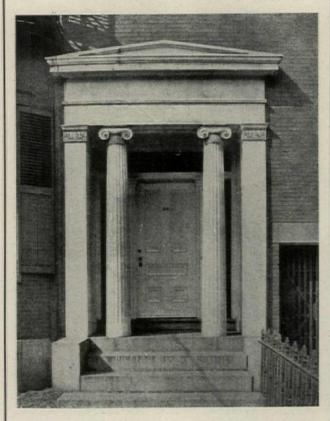
"The Barons," Reigate, Surrey From "Houses of the Wren and Early Georgian Periods"

cornice, and on the interior the painted wood paneling extending from floor to ceiling, with perhaps the greatest interest centered in the stair hall where a flight of graceful steps mounts upward with its profusely clustered balusters and richly carved string facing, giving an impression of great strength and richness to the whole.

In seeking an understanding of the characteristics of any particular type of architecture or art it is always well to look to the examples which were wrought early in the history of that particular school. It seems that in the work of the early masters it is much easier to distinguish the fundamentals underlying the general effect than it is to discover these same fundamentals in the work of the later artists and builders. In the later examples some of the original purity has been sacrificed to An Authoritative Work on

"THE GREEK REVIVAL"

By HOWARD MAJOR



THE search for effective types of architecture for domestic use led logically to the re-discovery of the style known as the "Greek Revival." In the hands of a few particularly skillful architects it is being used with marked success, their use being based largely upon study of such examples as have survived the period, just prior to the Civil War, when use of the type was widespread throughout the United States. It is an entirely American style, founded not upon a following of current English architecture but upon a study by Americans of classic types adapted to domestic uses.

Mr. Major's excellent work is the result of a careful study of the style as it was interpreted in the North and East, and particularly in the South. The illustrations of exteriors and interiors are full of suggestions for anyone seeking a variety of architecture bold, simple and effective, which supplies a fitting background for life in America. The book is richly illustrated, and shows existing work, large as well as small, in both city and country.

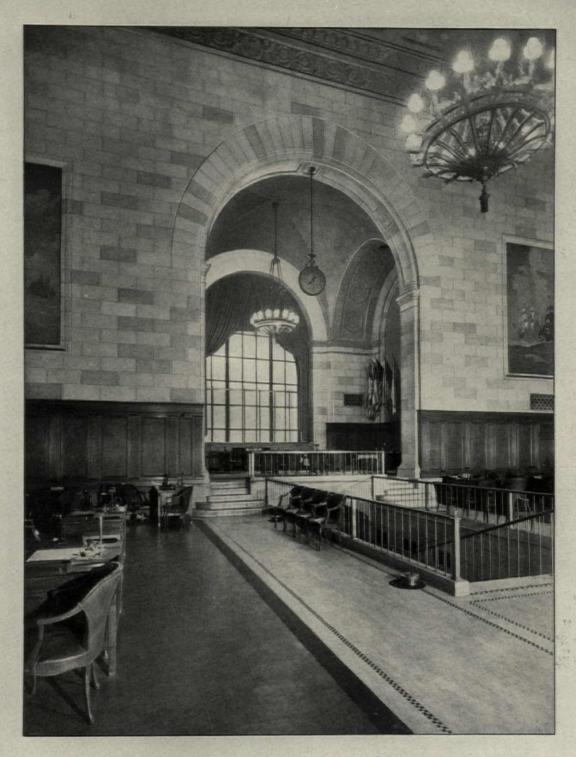
236 Pages; 71/2 x 103/4 inches. Price \$15

THE ARCHITECTURAL FORUM
383 MADISON AVENUE NEW YORK

personal characteristics, and other schools of design and thought have often had a modifying effect on the design. So in seeking precedent for the so-called Colonial type of architecture which is so popular at the present time it is well to first study this type of building at its source, —in other words, in the houses of the early Georgian period in England. A series of illustrations and measured drawings of such houses is presented in a new book entitled, "Houses of the Wren and Early Georgian Periods," by Tunstall Small and Christopher Woodbridge.

In this collection there are presented eleven of the finest examples of this type of house to be found in all England. In most instances they have the advantage of not having been over-photographed, so that even those who have traveled extensively in England as well as those who have made careful study of the published material on this type of house will find much fresh inspiration and many new ideas in the pages of this book. The introduction, written by William G. Newton, F.R.I.B.A., furnishes the correct historical background for the subject matter, and gives an interesting insight into the conditions under which this type of architecture was evolved. With the exception of one house which is located in Essex, the examples are all taken from London or Surrey, and in most cases they are set back from the street but a short distance, the intervening space being occupied by a forecourt surrounded by a brick wall or an iron fence. Illustrations and measured drawings of these fences add greatly to the interest and value of the book. The collection of measured details is especially attractive and will be of incalculable value to the architect in his every-day practice. Several of these are shown in connection with each house and add greatly to the usability of the illustrations themselves, which include close-ups of the more interesting details. In some cases general views of the houses are shown, but for the most part the selection of illustrations and drawings given, make the book valuable as a source of material in designing the detail of this type of house, rather than as a guide to laving out and designing the entire building. In looking over these illustrations one is struck by their resemblance to many of the examples of Georgian Colonial architecture to be found throughout the older sections of the United States. This is a testimonial to the faithful way in which the skilled artisans and builders who came to America from England in the eighteenth century carried on the traditions of Wren and the English Georgian builders. These houses are especially plentiful in Virginia and some of the southern colonies and have furnished much of the inspiration that has gone into modern adaptations of the Georgian style in this country.

A brief description of some of the houses included may be of interest in giving an idea of the scope and completeness of the work. Nos. 37 and 39 Stepney Green, London, is a fine old house which because of its isolated location in a former fashionable suburb of London is little known. Perhaps the most striking feature of this particular house is the attractive hooded entrance doorway, reached by a flight of steps with a graceful iron handrail from the forecourt which is divided off from the street by a dwarfed brick wall surmounted by a substantial and interesting iron fence. The house is presented by a half-tone and measured drawing of the main façade, and a close-up of the front door already mentioned, accompanied by detail drawings of the doorway



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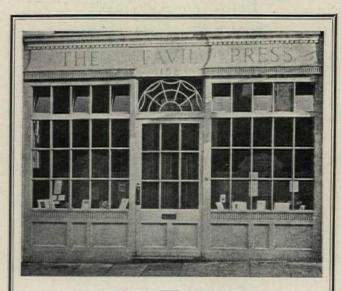
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104 pp., 93/4x12 inch. Price \$7.50

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and iron baluster. On the interior the stair hall is especially interesting, as is usually the case with this type of house. A general view of this is shown and is augmented by two close-up views of the staircase, showing clearly the richly carved balusters and string consoles.

Line drawings and details of these features make them readily available for use in prospective buildings. "The Barons," Reigate, Surrey, is a charming old house built directly on the street and having no forecourt, but having a simple, well arranged iron fence across the front. The entrance doorway is a fine example of the use of the Ionic order in Georgian detail. The effect of stateliness in the façade is enhanced by the use of continuous vertical panels of contrasting shades of brick and this instance gives a good illustration of the way in which the Georgian builders attained pleasing effects by this means. The heavy brick cornice of the front façade is not returned across the end elevations, but these ends are made interesting and pleasing by means of ramped walls on either side of the double chimney stacks. The interior of this building is also full of interesting detail which is illustrated in half-tone and line drawings. The descriptions of these houses deal with but two of the many fine examples of Georgian architecture shown in this work, but as is always the case in regard to volumes of this kind, it really must be seen to be appreciated.

HOUSES OF THE WREN AND EARLY GEORGIAN PERIODS. By Tunstall Small and Christopher Woodbridge. 139 pp., 10 x 13 ins. Price \$10. William Helburn, Inc., New York.

LONG before man could read or write he made use of the language of symbols,—a story told by a familiar sign that could be read at a glance without the help of the printed word. It is a language of universal significance, and therefore of value in all ages from pagan times to the present. Even today we use symbols. The red flag fluttering by the side of the road or the red lantern hung out at night means danger. Crossed boards mean a railroad crossing; the striped pole indicates the barber shop. The federal government has its flags and seals. Such things are of value, not for their beauty and artistry, but for their significance, and the stories they tell. Symbols should be instructive, not merely ornamental; they have been used in all ages because of their powerful educational value.

But it was the mediæval centuries that were the golden age of symbolism, as Mr. Webber makes clear in his volume. At that time books were so precious and rare that the masses had no access to them. Made and lettered by hand, they were so priceless that they were kept chained to the reading desk, just as a cup is chained to the pump,—that no one might run away with it. Few but the clergy could read and write. Religion was taught to the people only as it was pictured in the sculpture or painted glass of their churches. And because religion was their passion, symbols of profound significance blazed through the stained glass windows or were carved in wood and stone on the walls until every cathedral was a great colorful picture book. The churches thus became schools as well as places of worship.

The outgrowth of this was cathedrals of unparalleled beauty at Chartres, Amiens, and Paris; Exeter, St. Michael's, at Hildesheim, and many early Byzantine churches. Chartres, with its 1,500 symbolic figures, its 130 matchless windows was and is a stupendous, magnificently illustrated book wherein the devout worshipers of those

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Top: Marble-ized Cork-Composition Tile in reception room, Murray, Aldrich & Roberts, Counselors at Law.

Left: Bonded Floor of Battleship Linoleum in working spaces of Equitable Trust Co.

Extreme left: Bonded Floor of Battleship Linoleum in vaults of Equitable Trust Co.

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days read their sacred and ecclesiastical history. Here were religious symbols in their purest, most spiritual form. For a symbol should be representative of something,-not a representation. The Lamb of God (Agnus Dei) symbol of Our Lord, should not be a realistic little woolly lamb but one of conventional design. It should be significant of the idea it stands for, not a photographic likeness of it. The mediæval artist and craftsman emphasized the spiritual qualities in these symbols. The appeal was to man's inner or devotional nature, not to his admiration as an art critic. The angels' pictures on stained glass windows were majestic beings, sexless and beardless, carrying the lyre or else the lily symbolical of purity. Cherubim were noble figures whose color was sapphire blue, with four wings "full of eyes" and "hands the likeness of a man." But with the dawn of the Renaissance the spiritual quality began to recede. The paintings and carvings on the walls, the color pictures in the windows became realistic, clever and emotional. "The church decorations of that age are remarkably fine," says Mr. Webber, "from the standpoint of color, anatomy and chiaroscuro, but from a religious viewpoint, their value was greatly weakened. It was when angels degenerated into plump females with pretty faces devoid of character, clad in flowing robes that carefully recorded all the charms and curves of womanly anatomy." It was when cherubs became "chubby infants with mischievous faces" that symbols lost their pristine value and purity and were frankly misused. It was not merely bad painting, he insists; it was also bad theology. The result was chapels or churches of such "over-ripe magnificence as Sainte Chapelle, Rouen and Troyes and the

nineteenth century stiffness of Cologne." This tendency, he explains, has continued until much of the modern stained glass, especially that of the "picture window sort" has reached a stage of "commercialized vulgarity and elaboration that staggers one's vocabulary of opprobrious epithets." As symbols became emotional and sentimental rather than spiritual, art degenerated.

Thus, in his volume, "Church Symbolism," Mr. Webber makes bold to challenge the belief that the middle ages were the dark ages. If they were devoid of artistic inspiration, how could such achievements as Chartres, Reims and Amiens have emerged from them? At least the artists and craftsmen of those days understood symbolism in its most profound significance and executed it with a dignified purity which has since been unrivaled. A book on church symbolism, he explains in his preface, should be like a dictionary. It must contain all religious symbols, whether or not their meaning is in harmony with one's own creed and belief, just as a telephone directory would be useless if it contained only the names of one's friends and omitted all those of whom one did not approve. Therefore he has included a more or less detailed list of both old and new testament symbols, even those which at some age or other have been considered idolatrous. Most of these are illustrated by plates and contain interesting facts as to their origin and significance. Yet the book is by no means only a dictionary or glossary. Its major theme is a plea for the freer, purer, use of symbols in present-day church architecture,—an argument in behalf of more and more beautiful churches.

CHURCH SYMBOLISM. By F. R. Webber. 395 pp., 7 x 10 ins. Price \$7.50. J. H. Jansen, Cleveland.

The Smaller Houses and Gardens of Versailles

By Leigh French, Jr. and Harold D. Eberlein

FOR the moderate-sized American suburban or country house there is nothing to follow in the way of a type at once more beautiful and more practical than the seventeenth and eighteenth century French houses of the same kind. The type possesses that graceful balance in the way of exterior design and that slight degree of formality of interior which is being expressed in current domestic work of the same character, and from all the domestic buildings of seventeenth and eighteenth century France there is nothing which offers a more fruitful basis for study than the smaller villas built near Versailles for the attendants of the French court. These buildings possess in an unusual degree just those qualities in the matter of design now most sought for in America.



202 Pages, 93/4 x 113/4 Inches. Price \$6.

THIS volume, prepared by two students of French and American architecture, is a practical study into the adaptation of the simpler French forms to American conditions. There is not one of the many villas illustrated which does not afford abundant suggestion in the way of exteriors to present-day architects, and the interiors with their simple and graceful disposition of wall paneling, mantels, and stairways abound with suggestions for working out interiors to accord with the expression given by the buildings' exteriors. Plans in many instances are easily adapted for use today, and the arrangements of the gardens and other outdoor areas offer suggestions for making these important adjuncts to American suburban or country houses heighten the character and interest of the buildings themselves.

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How a window shade roller ruined the social career of W. Winternitz

WILLARD WINTERNITZ was in the seventh heaven. At last, he had been invited to tea at the Van Allrich's—and Mrs. Van was showing him her famous collection of Early American furniture and glass.

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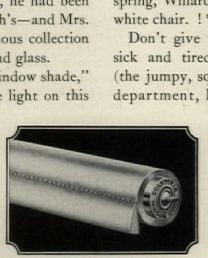
lovely bit of Stiegel glass."

He touched the shade. Bing!—up it flew to the ceiling. The cord wrapped itself around the roller.

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EDWARD P. YORK

O NCE again the architectural press is called upon to chronicle the passing of a distinguished member of the profession in recording the recent demise of Edward Palmer York, senior member of the firm of York & Sawyer. Born in 1865 at Wellsville, N. Y., he studied architecture at Cornell University before entering the office of McKim, Mead & White, where for some eight years he worked as a personal assistant to the late Stanford White, engaged, in addition to work on many other buildings, upon the designing of the residence of the late Levi P. Morton, Fifth Avenue and 53rd Street, which was torn down some years ago.

Mr. York's practice as an architect might be said to have been begun when in 1908 he won a competition for the design of the Rockefeller Recitation Hall at Vassar. During the many years when he was a partner of the firm of York & Sawyer, a great number of important projects were under his direct charge; among them were the widely known Bowery Savings Bank and the almost equally famous Fifth Avenue Hospital, and the beautiful building of the Academy of Medicine, in New York; the structure occupied by the Central Savings Bank, Broadway at 73rd Street, New York, is also his work. Recently he designed the group of buildings intended for the engineering school of his old University, Cornell; he was looking forward with the greatest interest to the construction of the new building for the Department of Commerce in Washington, the contract drawings for which had been recently approved by Mr. Hoover, and he was to have assisted on January 14, at the ceremonies of opening the Euthenics Building at Vassar, which he had just completed. The Forum must also mention the distinguished group of buildings for the law department of the University of Michigan, donated by W. W. Cook, which was also the work of Mr. York Always quiet, very retiring and modest, he was a man of studious but broad tastes. Archæology interested him enormously, and he intended to see Egypt and Mesopotamia next year. He was a member of the Numismatic Society and could always produce from pocket or drawer a coin of more than usual beauty in design or execution or having a fine patina. Mr. York was also a member of many clubs.

His death means not only a loss to his family, his partners and profession and to his friends, but to a host of acquaintances, fellow club members, and to members of the building trades, all of whom will miss his cheerful humor, his unfailing sympathy and helpfulness and his refreshing point of view, always original, freshly presented, and in language never anticipated. The country has had few architects who have given more to their communities.

THE PRIX DE ROME

THE American Academy in Rome has announced its annual competitions for fellowships in architecture, landscape architecture, painting, and sculpture. In architecture the William Mead Fellowship is to be awarded; in landscape architecture the fellowship is provided by the Garden Club of America Fund; the fellowship in sculpture is supported by the Rinehart Scholarship Fund of the Peabody Institute of Baltimore.

The competitions are open to unmarried men, not over 30 years of age, who are citizens of the United States. The stipend of each fellowship is \$1500 a year for three years, with allowances of \$500 for transportation to and from Rome and \$150 to \$300 for materials and incidental expenses. Residence and studio are provided at the Academy, and the total estimated value of each fellowship is about \$2500 a year. The Grand Central Art Galleries, New York, will present free membership in the Galleries to the painter and sculptor who win the Rome Prize and fulfill the obligations of the fellowships.

Applications will be received until March 1. Circulars of information and application blanks may be secured by addressing Roscoe Guernsey, Executive Secretary, American Academy in Rome, 101 Park Avenue, New York, who is in charge of the competition, and from whom any desired data may be had.

BROWN TRAVELING SCHOLARSHIP COMPETITION

NNOUNCEMENT is made of the second annual competition for the selection of a beneficiary of the A. W. Brown Traveling Scholarship, this competition to be held under the direction of a committee of the American Institute of Architects. Programs will be mailed to applicants about March 1, 1929, drawings to be delivered on April 1, 1929. This scholarship is the gift of the Ludowici-Celadon Company and is a memorial to the late A. W. Brown, who was for many years president of that company and a leader in the manufacture of roofing The value of the scholarship is \$2000, to be used toward defraying the expenses of a year of travel and study in Europe by an architect or an architectural draftsman. Traveling expenses between the winner's place of residence and New York will be paid in addition to this amount. An award of \$250 will be made to the individual whose design is placed second in the competition; \$150 to the competitor whose design is placed third; and \$100 to the individual whose design is fourth. Those wishing to compete should write for application blanks to the secretary of the committee. William Dewey Foster, 25 West 45th Street, New York.



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CONTENTS THE ARCHITECTURAL FORUM FEBRUARY 1929

PART ONE—ARCHITECTURAL DESIGN

Cover Design: One View of Medical Center, New York		Rudolf Steiner Clinic, The Hague Jan W. E. Buijs	57, 58
From a Water Color by Edward A. Batt The Editor's Forum Pag	ge 35	Apartment House, Amsterdam Peter Kramer	59
The Pan-Hellenic Building, New York From a Water Color by George B. Coombe Frontis	spiece	Apartment Houses, Amsterdam S. de Klerck	60-63
PLATE ILLUSTRATIONS Architect	Plate	S. UE ALETCE	
House of Roscoe H. Hupper, Esq., New York Greville Rickard	33	Olympic Stadium, Amsterdam Jan Wills	64
Alabama Power Co. Building, Birmingham 3-Warren, Knight & Davis	4, 35	LETTERPRESS Author	Page
Clara Ford Nurses' Home, Detroit Albert Kahn, Inc.	36-42	Two Cornish Fishing Villages R. Randal Phillips	153
First National Bank, Azusa, Cal. Robert H. Orr	43-45	Detroit Institute of Arts Richard F. Bach	193
Essex County Hall of Records, Newark Guilbert & Betelle	16-48	Modern Architecture in Holland Edwin A. Horner	203
"Zonnestraal" Sanatorium, Hilversum, Holland Duiker & Bijvoet	50	Rejuvenescence of Wrought Iron W. Francklyn Paris	241
Post and Telegraph Building, Haarlem J. Crouwel	51-56	The Bagatelle, Paris Katharine Stanley-Brown	249
PART TWO—ARCHITECTURAL ENGINEERING AND BUSINESS			
Winter Construction From a Photograph by Leicester K. Davis Frontis.	piece	Determining Fuel Requirements by the Degree- Day Method	275
LETTERPRESS Author	Page	P. E. Fansler	
The Architect's Part in Winter Construction Leicester K. Davis	257	The Client, The Architect and The Contractor Clinton H. Blake	283
Paint on Concrete Surfaces E. L. Caldwell and James E. Foster	263	Aërial Drafting H. G. Hall	287
School Construction and Modern Education J. Cayce Morrison	267	Sanitary Design in Modern Buildings Harold L. Alt	291
Recognition of Craftsmanship William O. Ludlow	273	Supervision of Construction Operations Wilfred W. Beach	297

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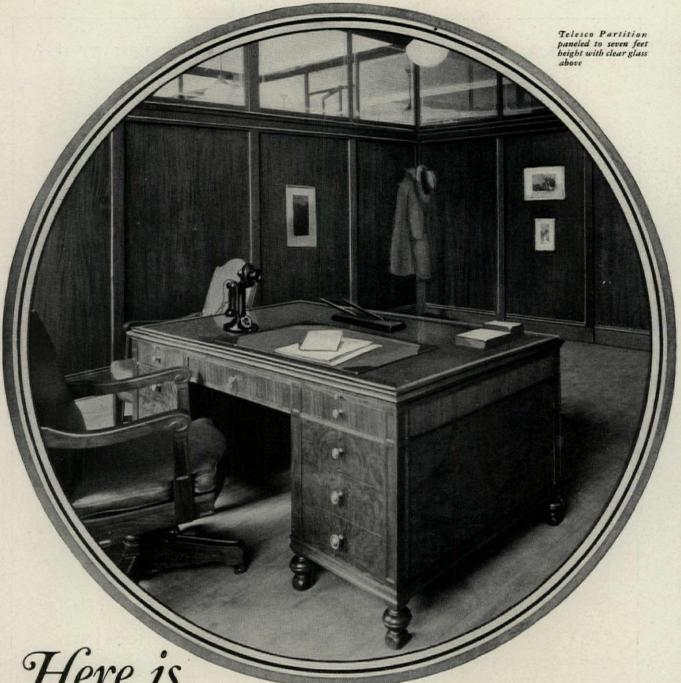
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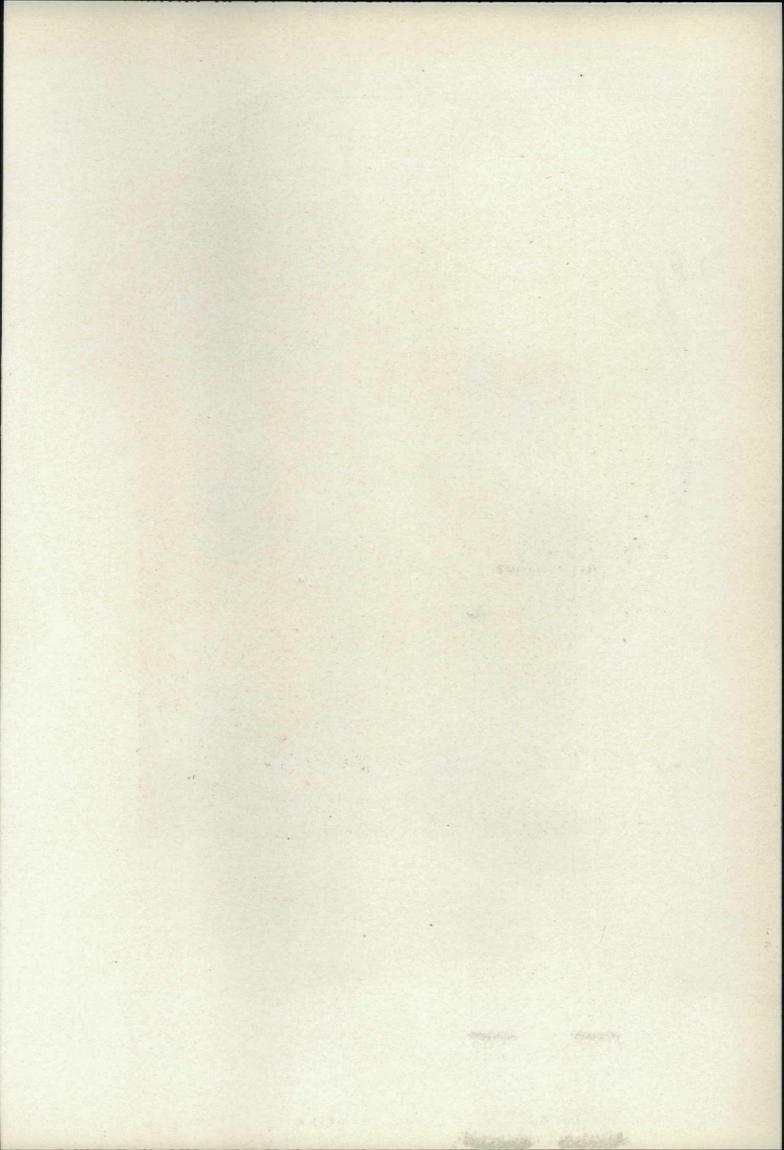
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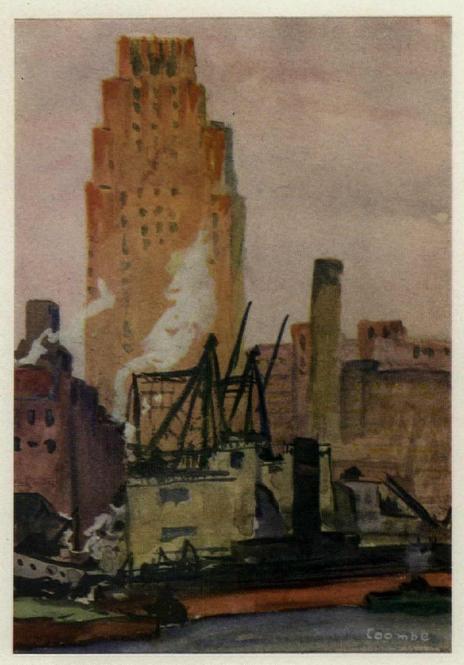
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THE PAN-HELLENIC BUILDING, NEW YORK JOHN MEAD HOWELLS, ARCHITECT

From a Water Color Sketch by George B. Coombe

The Architectural Forum

ARCHITECTURAL FORUM

VOLUME L

NUMBER TWO



TWO CORNISH FISHING VILLAGES

BY

R. RANDAL PHILLIPS

AS one leaves Hampshire and Wiltshire behind and reaches the rich, rolling land of Devon, one becomes conscious of a distinct change, alike in the landscape and the houses. This is the beginning of the West Country. There is a peculiar charm about it, and a varying interest. The villages of Devonshire, with their old whitewashed walls and thatched roofs, racy of the soil, are part of a mellow setting marked by luxuriant woodland and cultivated fields. In Cornwall the scene changes. This is a country of rugged outline, bleaker in aspect, yet possessing an individual attraction, a land of rocks and minerals, with but a sparse covering of soil to give that richness of landscape which distinguishes other counties of southern England. It is the coast line in Cornwall that lures the eye. Ensconced in coves and little harbors is many a delightful fishing village. Among them are Polperro and Cadgwith, the former about 20 miles west of Plymouth, the latter about the same distance west of Falmouth, and only a few miles from the "Lizard," which is the southernmost point of England. Both are off the beaten track, and until the last few years,-since the coming of the inexpensive car,-were practically unknown to the outer world. Thus they have preserved themselves intact, living descendants of centuries ago, -fishing villages of simple character, possessing the charm inherent in simple things.

They are remarkably similar in their general aspect, for each is situated at the foot of a narrow valley, with high rocky coast hemming in the seaward entrance, and in each is a spur that juts out at the center, giving protection to the harbor in the case of Polperro, and to the cove in the case of Cadgwith. Polperro has the more rugged setting, and its charm is of a rather austere kind; Cadgwith is softer in its appeal, and the comparison is borne out by the houses no less than by the setting in each case. In Polperro we find all the houses built of local stone, and roofed with either this or with slates covered with a "slurry" of thin cement, which gives to the whole aspect of the village a grayish tone. Cadgwith, on the other hand, reminds one of Devonshire, for its old

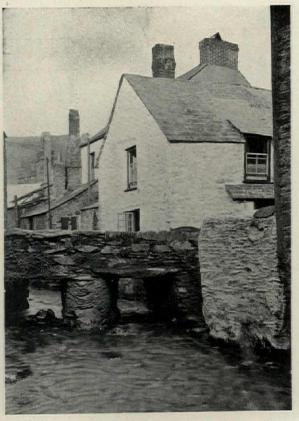
houses are built either of stone or cob (or a mixture of the two) and roofed with thatch, the wall faces being either whitewashed or ocher-colored.

Both of these two old fishing villages have one dominant characteristic, - a haphazard grouping of the houses, and their placing primarily to secure coziness and comfort. The idea of "building for the view," on high ground where all the inclemencies of the weather are suffered as a penalty for the fine prospect that may be enjoyed, is quite modern. The old people never did this sort of thing. The churches were the only buildings that were set high and exposed, and this was done in large measure because the church towers served as landmarks. The people put their houses in sheltered places, and so it is that at Polperro and Cadgwith the old houses huddle together in the bosom of the valley, where they get the utmost shelter from wind and rain. At Cadgwith, too, this main endeavor is further illustrated by their placing in regard to aspect. The cove faces southeast, and all the houses are set end-on to the cove. If Cadgwith were a modern place, of course the houses would be turned so that their fronts looked seaward. But the old people who built these houses,-probably two or three hundred years ago. -believed that it was better to have the blank gable ends as buffers to bad weather. This deliberate choice, and the making of their rooms with small windows set in very thick walls, resulted in less sunlight and air inside the houses than we should consider essential today, but to people who spent the greater part of their waking hours in the open air it was obviously a small matter in comparison with the conditions that prevail, say, in a working class urban population of our own time, with men and women engaged in indoor work.

These Cornish houses are almost invariably single-room deep. On the ground floor there are generally two rooms separated by a passage that leads in from the entrance door, with the staircase at the end of the passage, giving access to two or three bedrooms on the next floor. The rooms are rather low (about 7 feet high) and are beamed across, with the beams left exposed. One



FISHERMEN'S COTTAGES, POLPERRO



THE BROOK, POLPERRO



A NARROW, WINDING STREET, POLPERRO



A WAY UP TO THE CLIFF WALK, POLPERRO



OLD HOUSES OF EAST CLIFF, POLPERRO



A TURNING OFF THE MAIN STREET, POLPERRO

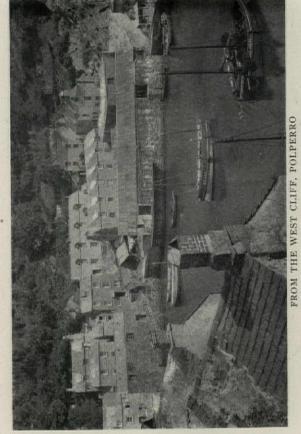


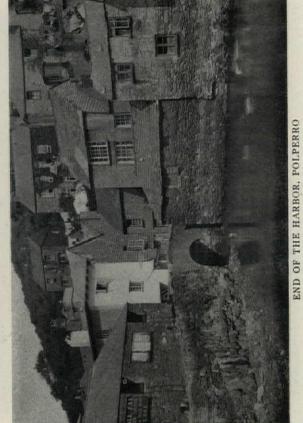
A COTTAGE DOORWAY, CADGWITH

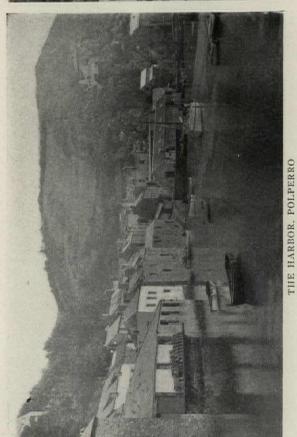


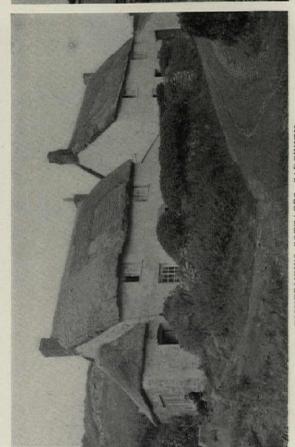
OLD THATCHED ROOFS, CADGWITH

Dayley Missing

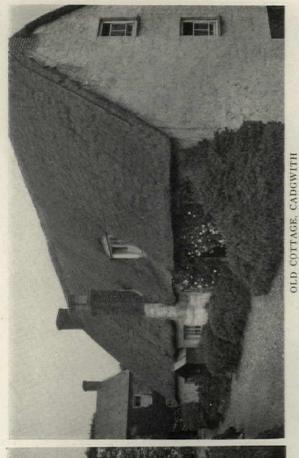


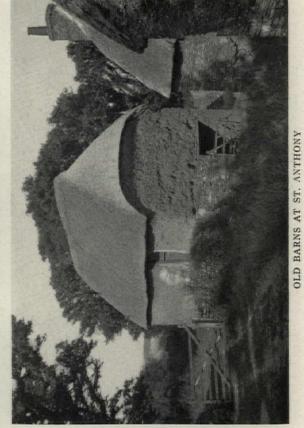


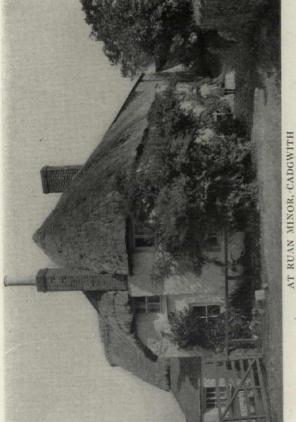




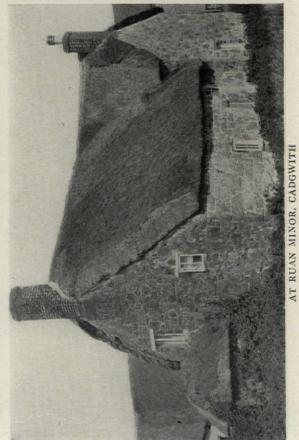
FISHERMEN'S COTTAGES, CADGWITH



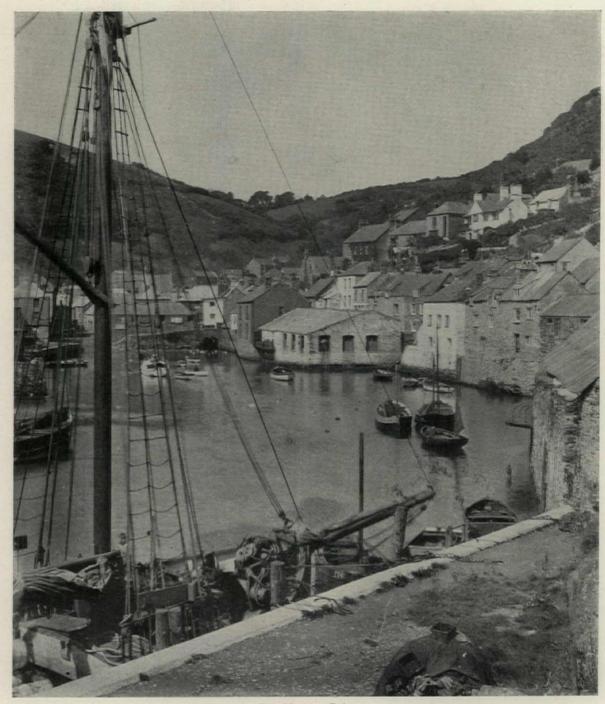




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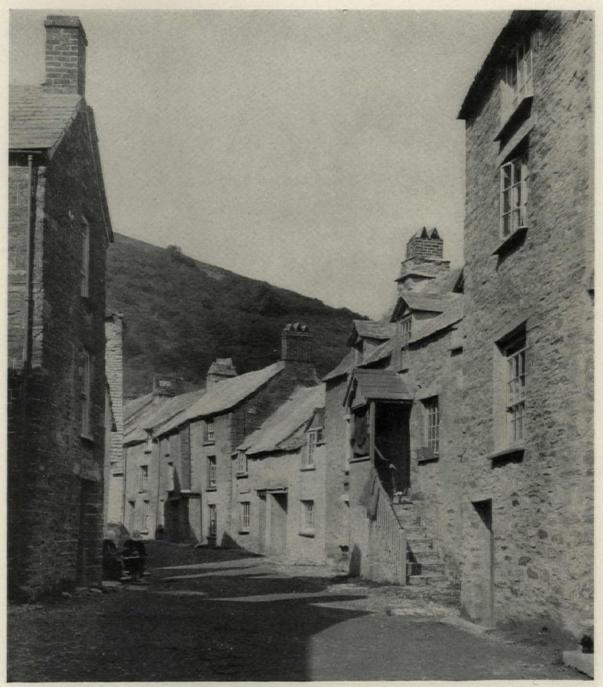
Bearings contaction



The Harbor, Polperro

of the two ground floor rooms is the common living room-kitchen, the other being a sort of parlor. It is very rarely that one finds the fireplaces in their original condition, for newer methods of cooking have spread to these out-of-the-way places, just as they have affected urban houses. The old fireplaces were of the familiar open kind, with wood fires burning on the hearths, and very ample chimney flues going straight up to the tops of the stacks. The old openings have in later days been filled in, and the common fitment is a West

Country range, consisting of a high-set fire with a removable ashpan below it and an oven on the right. The range is bedecked with brass knobs and rails, and the housewives take particular pride in keeping these bright and shining. Incidentally it may be mentioned that the range is amply efficient. There is, of course, no such thing as hotwater supply, but the fisher folk seem to get on quite well without it; indeed the common practice is for domestic ablutions to be carried out in a pail on the garden wall! This custom still obtains.



Street Leading Up From Harbor, Polperro

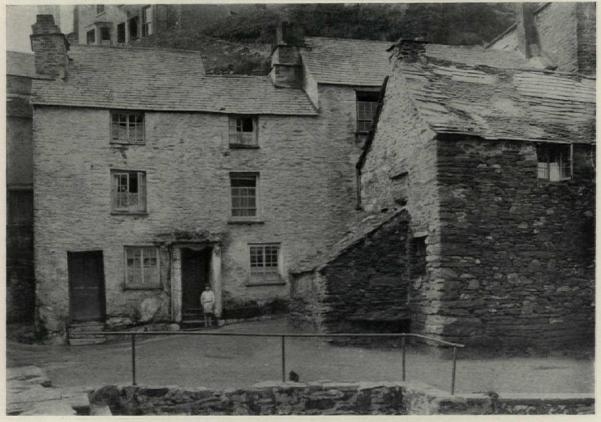
Pilchards used to provide the great catch for Cornish fisher folk, but in recent years, due probably to the operation of steam trawlers, the fish have gone away from many places. In former days the catching and salting of pilchards formed quite an extensive industry, and in many old houses, especially those at Polperro, we find underground places where the salting was carried out. Another feature of some houses is the provision of an outside staircase,—an inconvenient arrangement to modern eyes, but one which enabled the utmost use to be made of the small space

enclosed by the cottage walls. The latter are roughly built, often with large blocks in random courses, and the time-honored practice is to give the whole face of the house a wash of lime. Occasionally we see all the jointing lines picked out with a dark mortar or paint, but this is only one more instance where a bad modern practice has followed the decline of tradition in house building. As regards the windows, these originally were latticed, but very few old lattices have survived. In their places are often seen windows consisting of two sashes,—one fixed, one sliding.

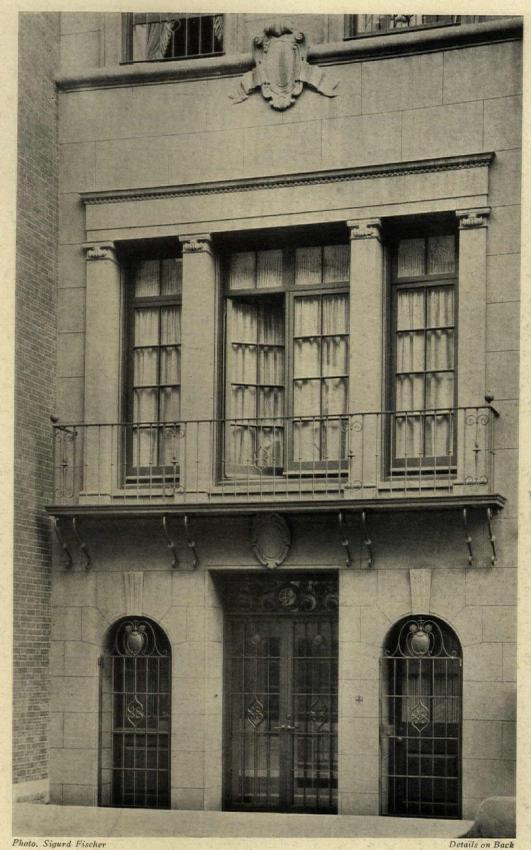
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OLD COASTGUARD COTTAGES AT ST. ANTHONY



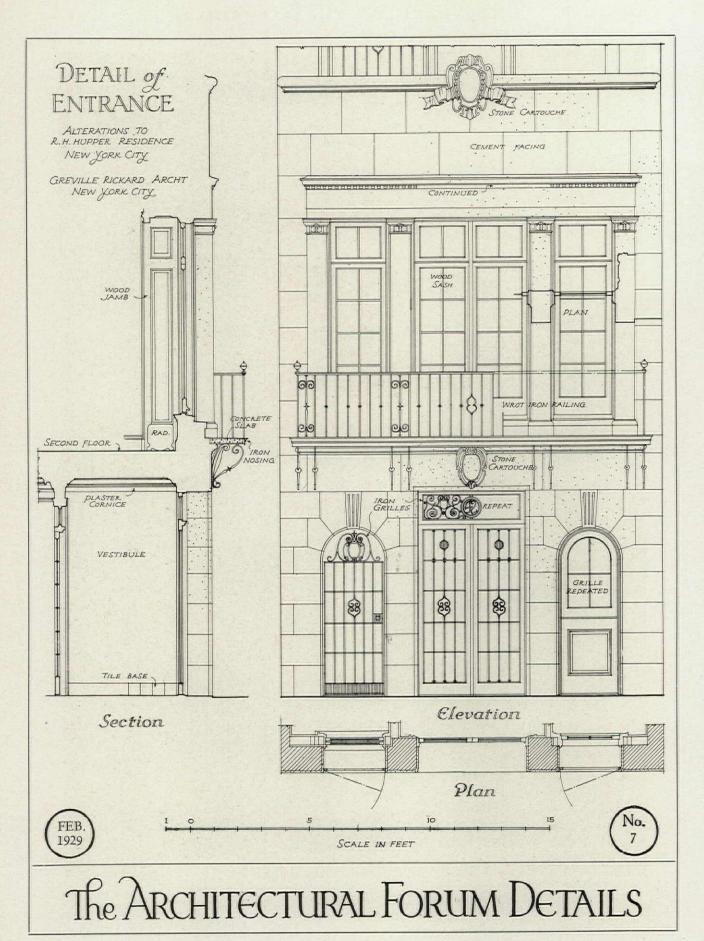
OLD HOUSES BY THE HARBOR, POLPERRO



HOUSE OF ROSCOE H. HUPPER, ESQ., NEW YORK GREVILLE RICKARD, ARCHITECT

The comment of the same

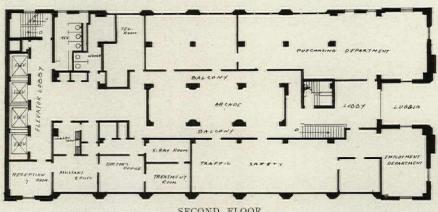
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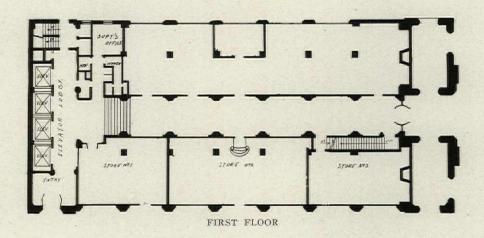


Photos. Tebbs & Knell, Inc.

ALABAMA POWER CO. BUILDING, BIRMINGHAM WARREN, KNIGHT & DAVIS, ARCHITECTS





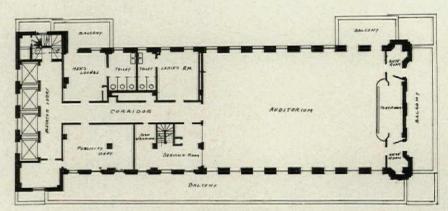


PLANS: ALABAMA POWER CO. BUILDING, BIRMINGHAM WARREN, KNIGHT & DAVIS, ARCHITECTS

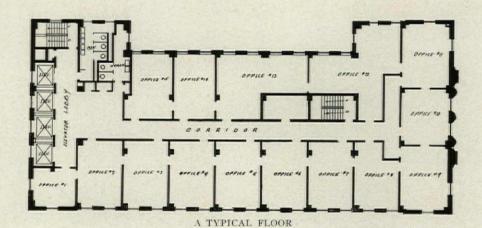


Plans on Back

ALABAMA POWER CO. BUILDING, BIRMINGHAM WARREN, KNIGHT & DAVIS, ARCHITECTS



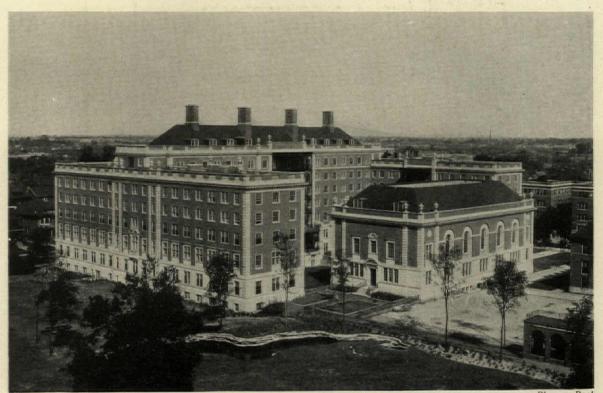
TOP FLOOR



PLANS: ALABAMA POWER CO. BUILDING, BIRMINGHAM WARREN. KNIGHT & DAVIS, ARCHITECTS

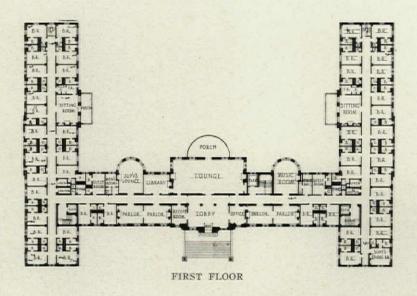


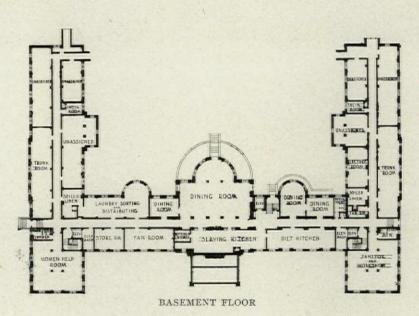
FRONT ELEVATION



Photos. Thomas Ellison

GENERAL VIEW
CLARA FORD NURSES' HOME, DETROIT
ALBERT KAHN, INC., ARCHITECTS





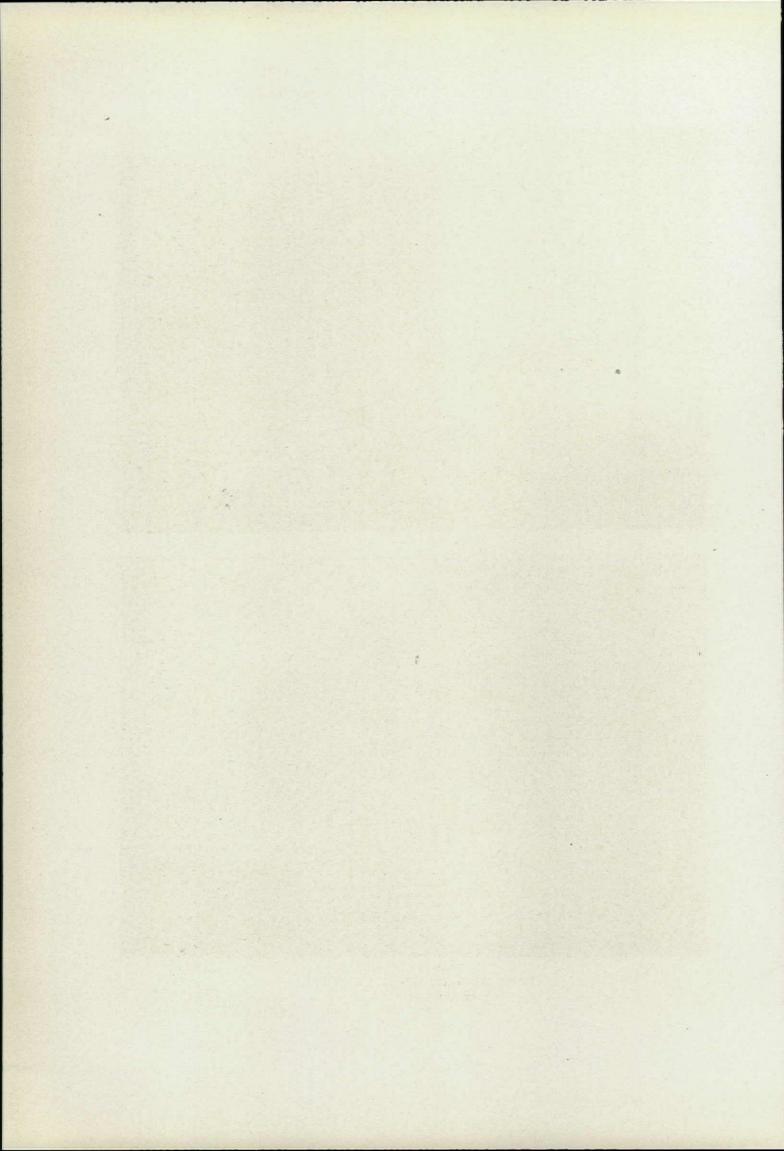
PLANS: HENRY FORD NURSES' HOME, DETROIT ALBERT KAHN, INC., ARCHITECTS



FRONT ELEVATION



TRAINING SCHOOL CLARA FORD NURSES' HOME, DETROIT ALBERT KAHN, INC., ARCHITECTS

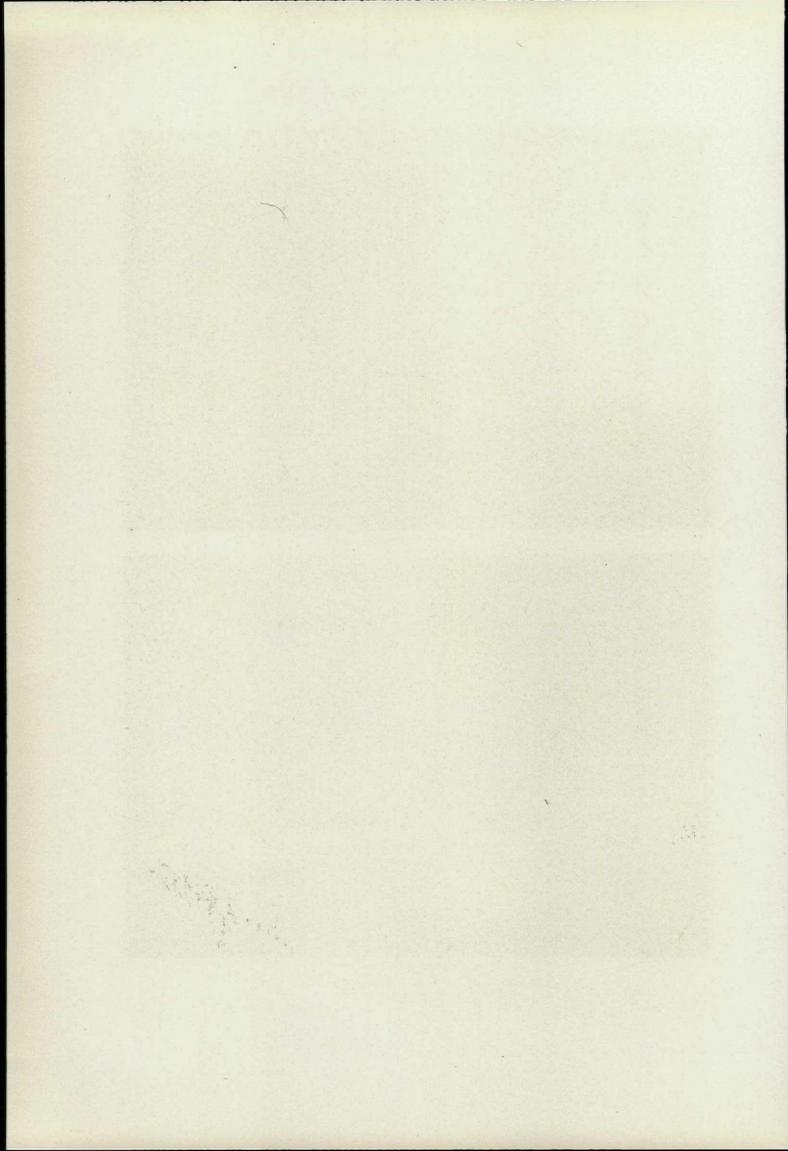




MAIN LOUNGE ROOM

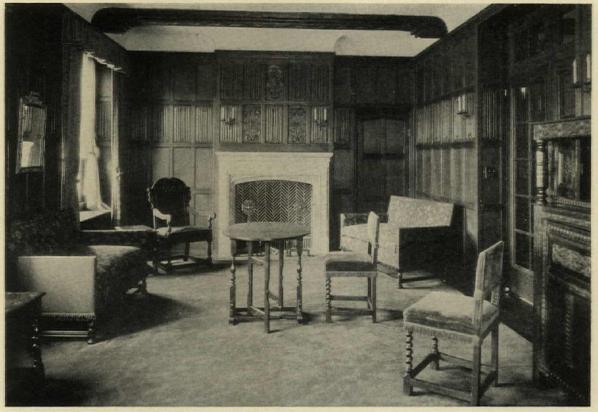


SUPERVISOR'S LOUNGE CLARA FORD NURSES' HOME, DETROIT ALBERT KAHN, INC., ARCHITECTS

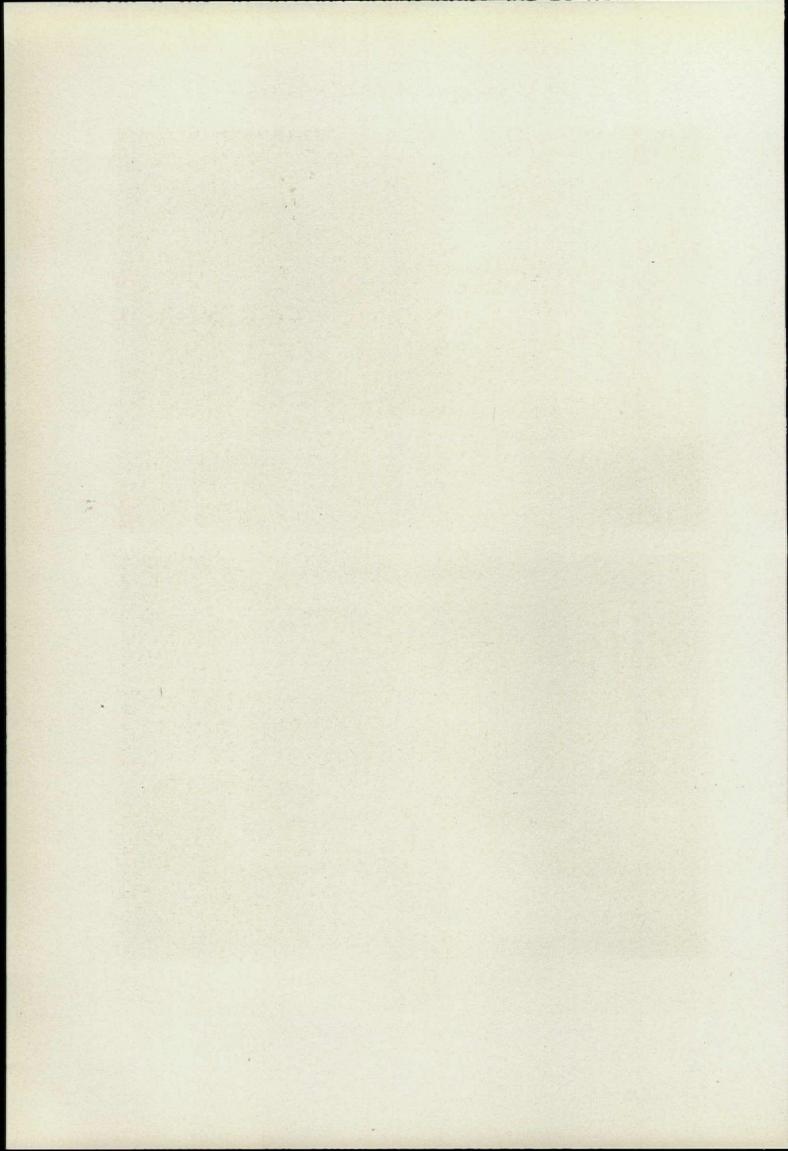




SMALL PARLOR



SMALL RECEPTION ROOM CLARA FORD NURSES' HOME, DETROIT ALBERT KAHN, INC., ARCHITECTS

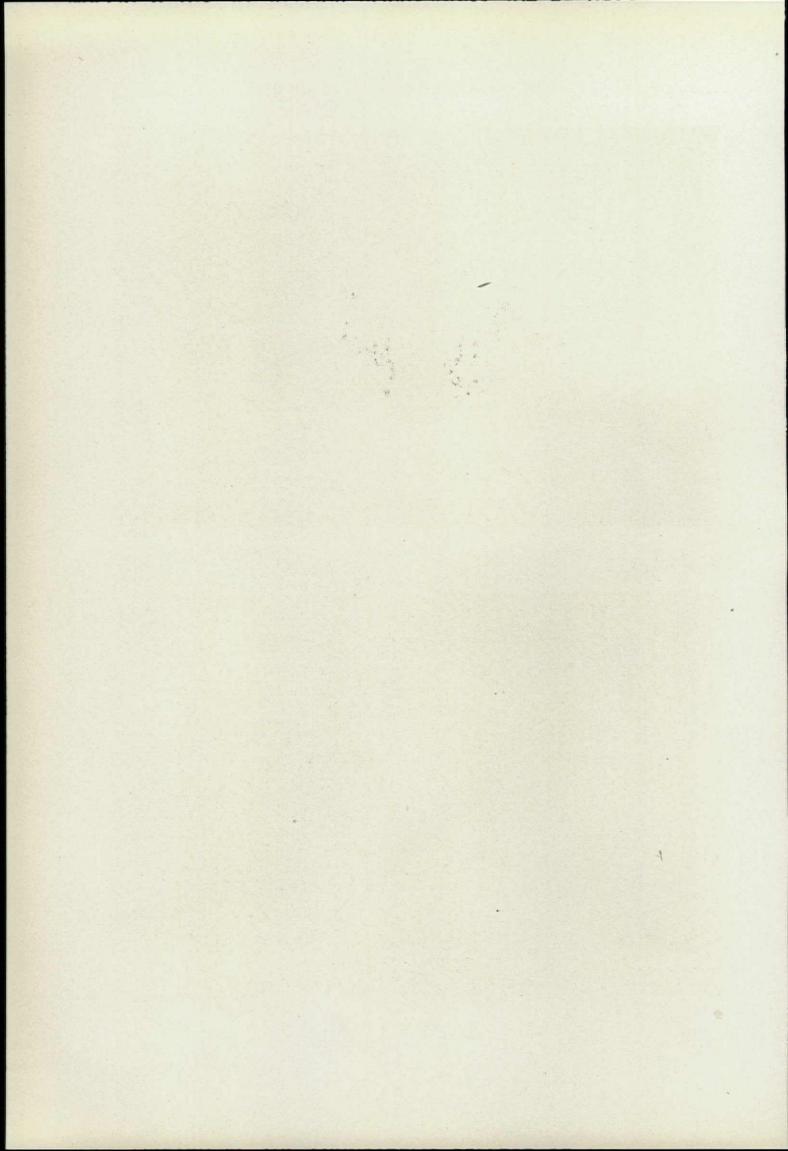


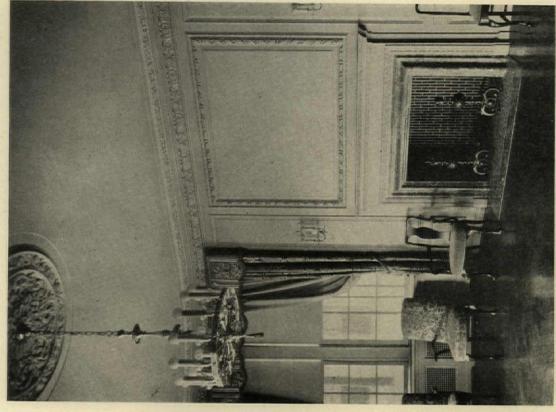


AUDITORIUM, TRAINING SCHOOL



SWIMMING POOL, TRAINING SCHOOL CLARA FORD NURSES' HOME, DETROIT ALBERT KAHN, INC., ARCHITECTS



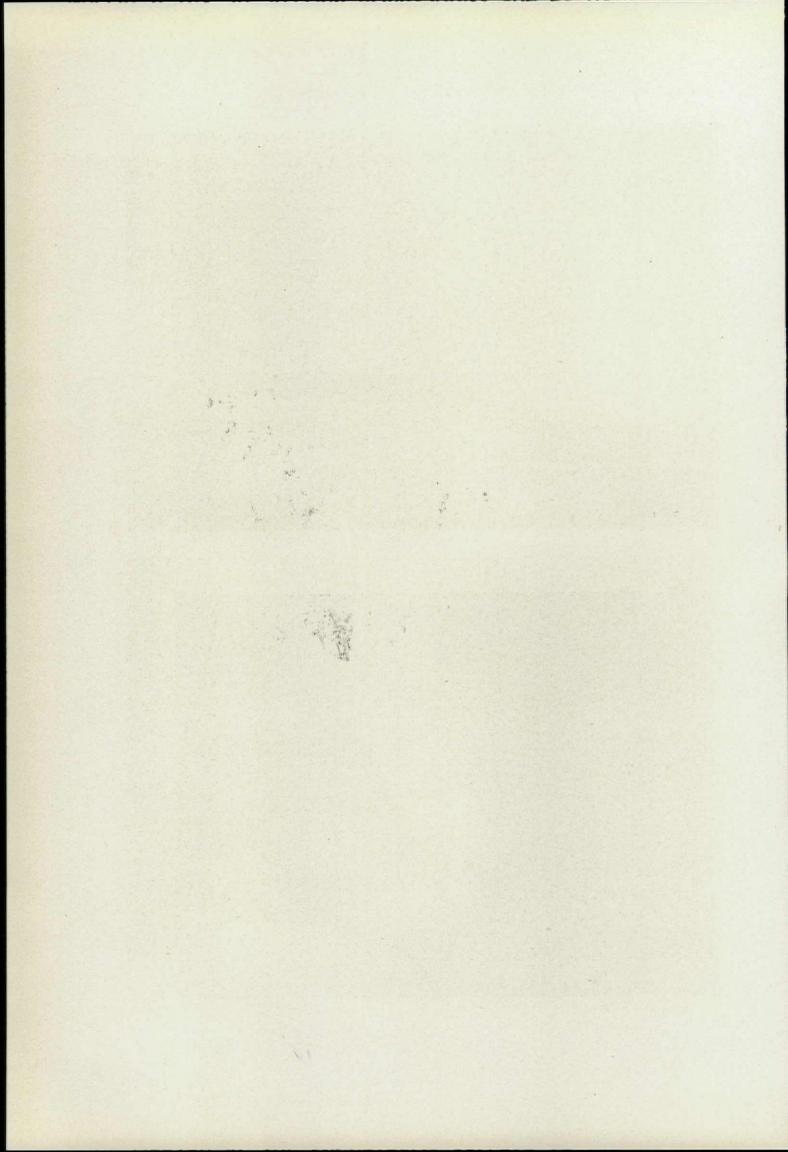


MUSIC ROOM



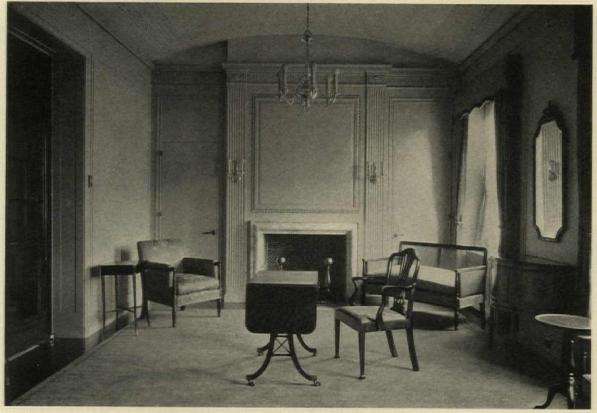
LIBRARY

CLARA FORD NURSES' HOME, DETROIT ALBERT KAHN, INC., ARCHITECTS

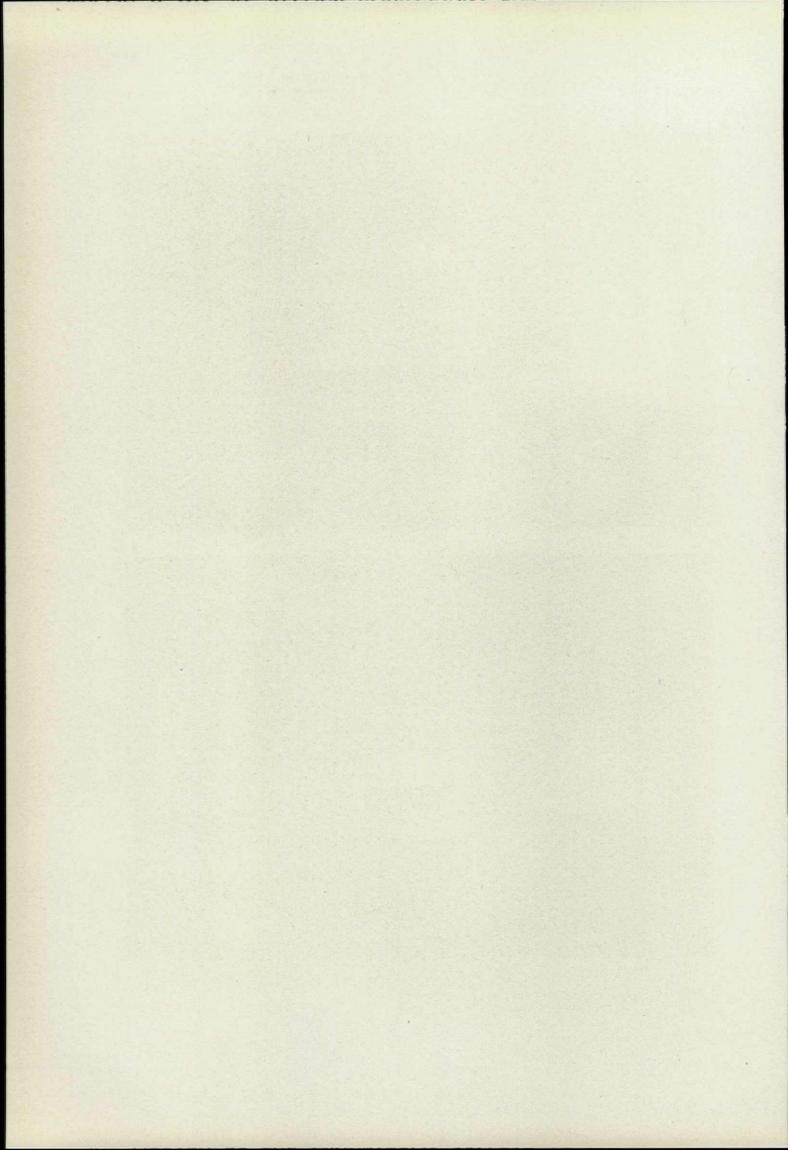


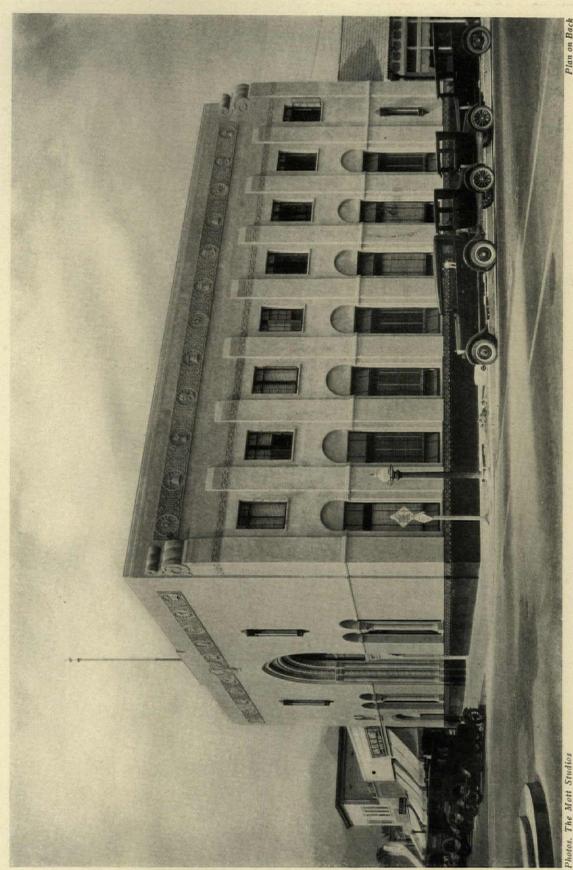


DINING ROOM

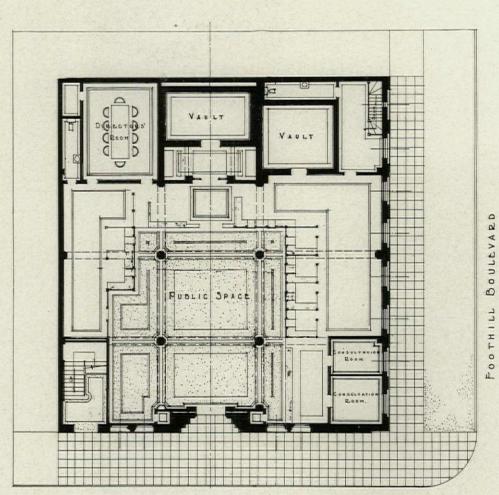


SMALL PARLOR CLARA FORD NURSES' HOME, DETROIT ALBERT KAHN, INC., ARCHITECTS





FIRST NATIONAL BANK, AZUSA, CAL. ROBERT H. ORR. ARCHITECT

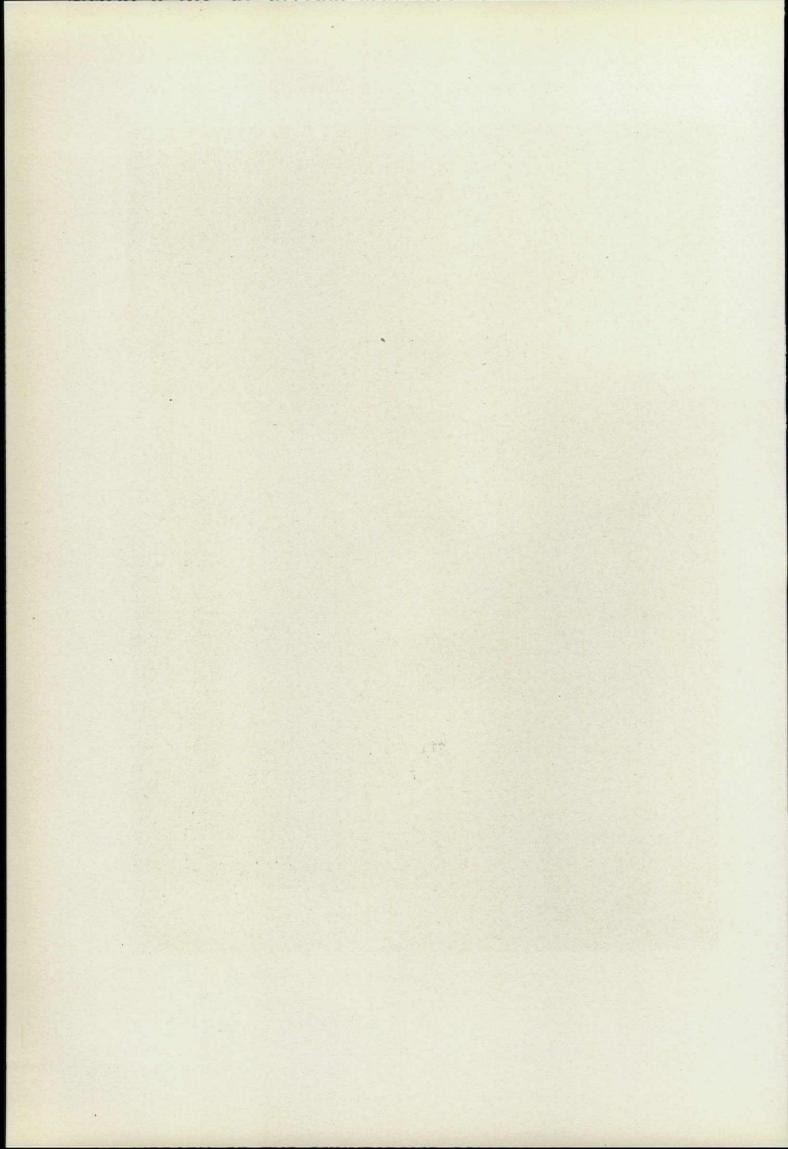


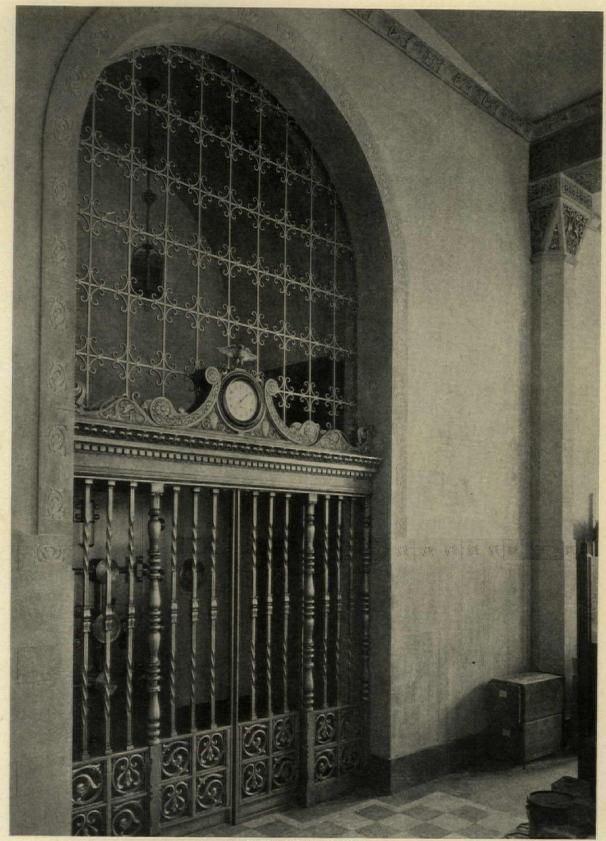
AZUSA AVENUE

PLAN: FIRST NATIONAL BANK, AZUSA, CAL. ROBERT H. ORR, ARCHITECT

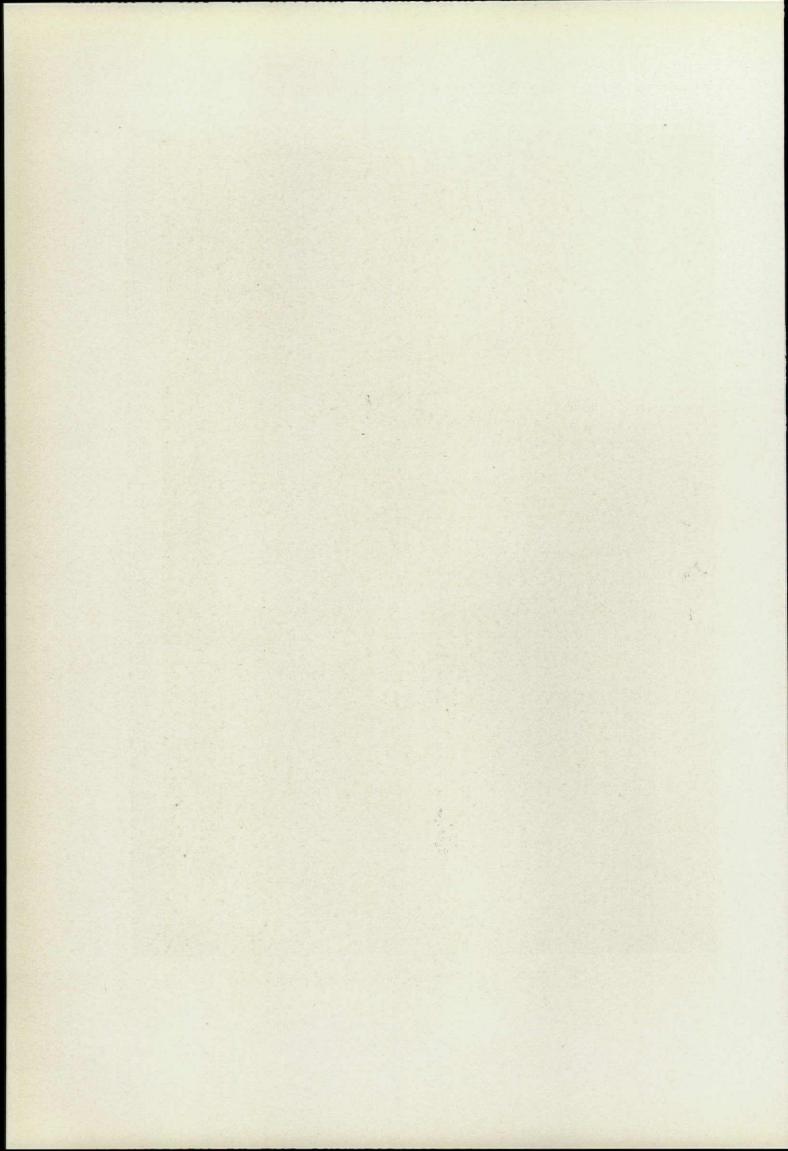


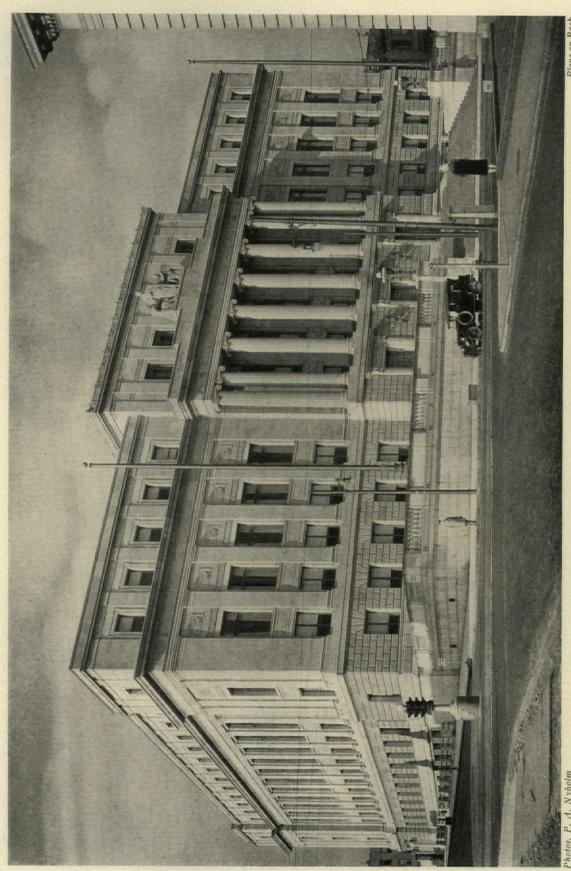
MAIN ENTRANCE FIRST NATIONAL BANK, AZUSA, CAL. ROBERT H. ORR, ARCHITECT



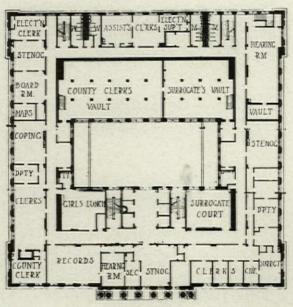


ENTRANCE TO VAULT FIRST NATIONAL BANK, AZUSA, CAL. ROBERT H. ORR, ARCHITECT

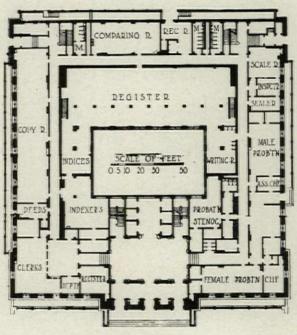




ESSEX COUNTY HALL OF RECORDS, NEWARK GUILBERT & BETELLE, ARCHITECTS

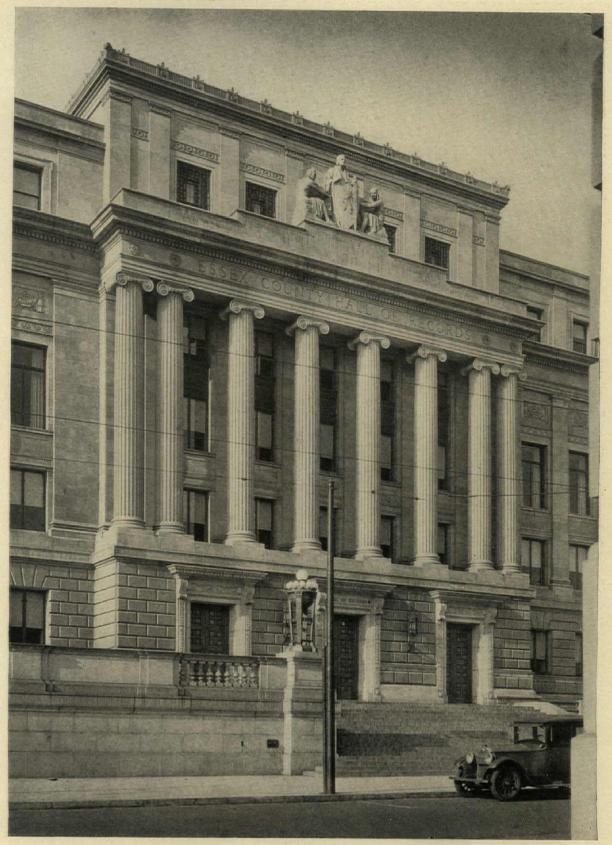


SECOND FLOOR

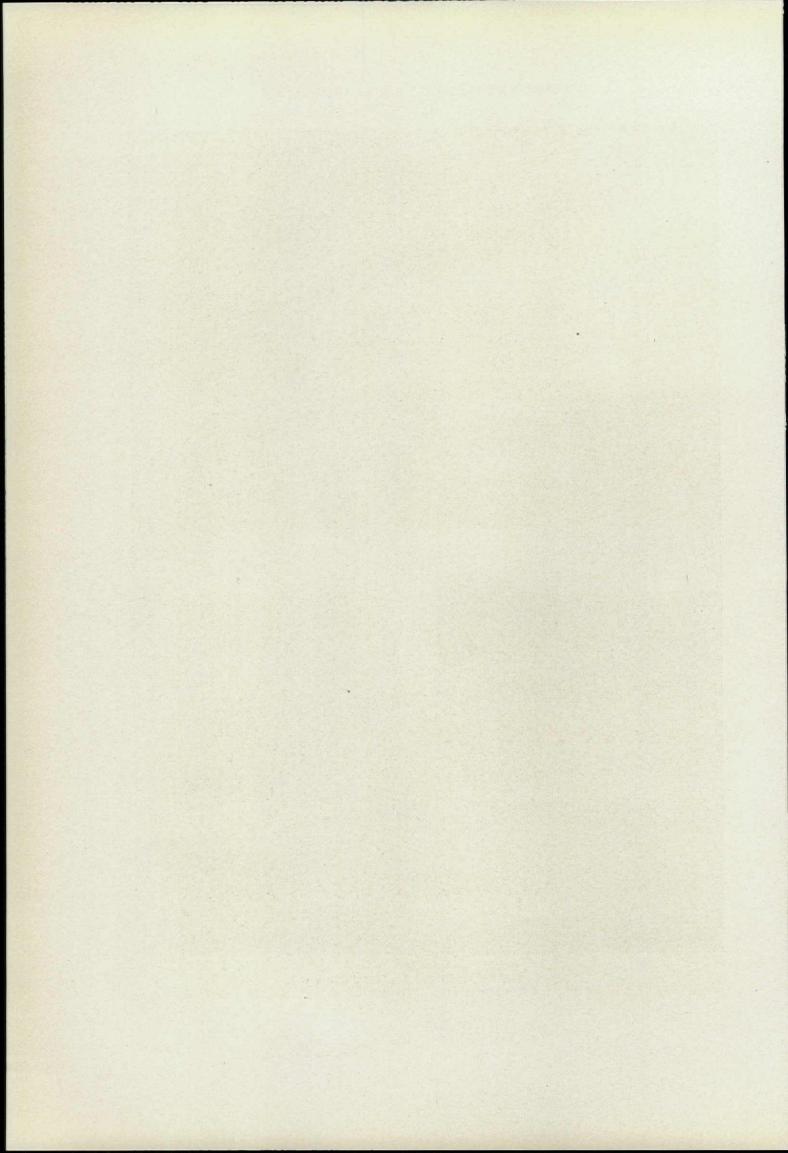


FIRST FLOOR

PLANS: ESSEX COUNTY HALL OF RECORDS, NEWARK GUILBERT & BETELLE, ARCHITECTS



CENTRAL BAY ESSEX COUNTY HALL OF RECORDS, NEWARK GUILBERT & BETELLE, ARCHITECTS

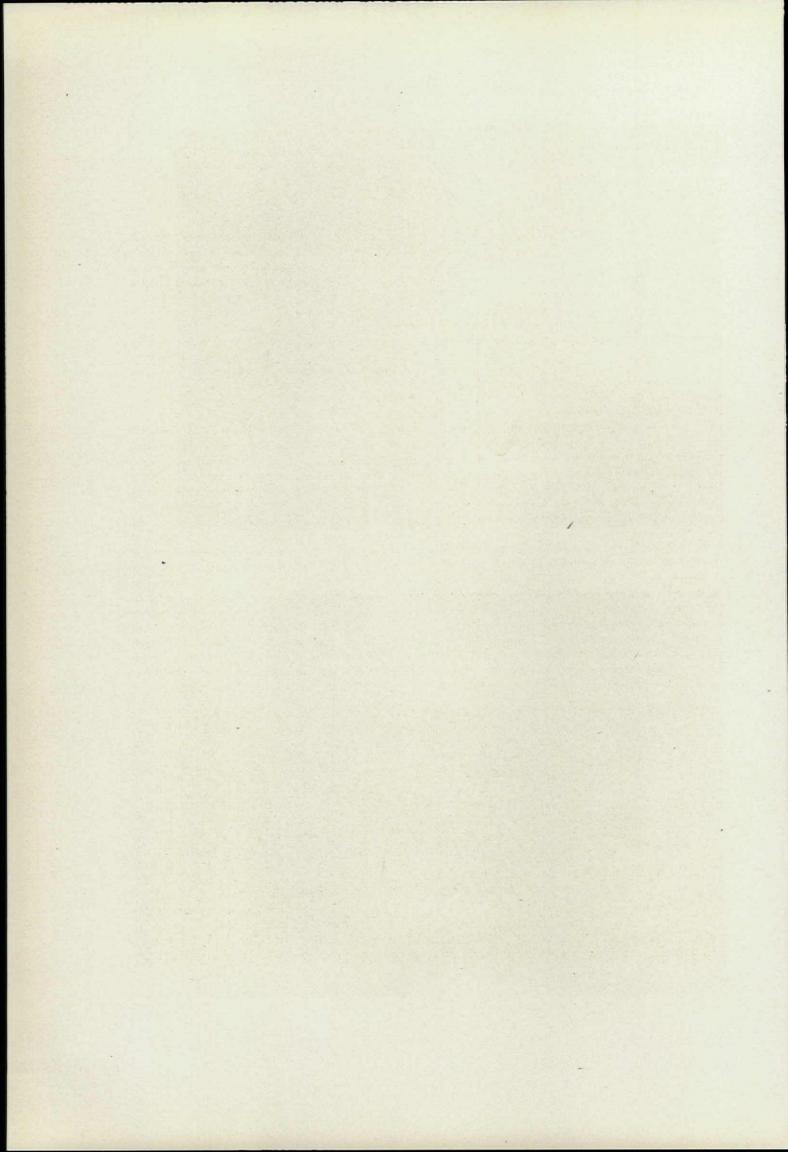




GRAND JURY ROOM

ESSEX COUNTY HALL OF RECORDS, NEWARK GUILBERT & BETELLE, ARCHITECTS





THE DETROIT INSTITUTE OF ARTS

WITH PREFATORY NOTES ON PHASES OF MUSEUM THEORY AND PRACTICE DEMONSTRATED IN ITS NEW BUILDING

BY

RICHARD F. BACH
OF THE METROPOLITAN MUSEUM OF ART

I is a curious anomaly that an architect may reasonably be expected to design his building "from the inside out," but in its erection must build "from the outside in," the interior frequently being considered a legitimate stamping ground for decorators, painters and other artists, building committees, politicians and interested parties generally, not excluding the prospective occupants themselves. There are exceptions—usually public buildings of various kinds, churches, railway stations, sometimes libraries or schools-in which the word of the architect is definitive within the edifice as well as in its exterior. There is, however, but one kind of building in which his skill in design may be,-in fact, under certain conditions definitely must be,-called upon to furnish both background and complement for inanimate occupants, these varying endlessly as to the time of their origin, as to type, yet necessarily brought into harmony within their own ranks and with their new domicile.

This difficult task and real opportunity for thoughtful design is found only in the museum. Museums have much in common as to work and public relationships, whether they are devoted to art, science, history, civilization, engineering or industry, or to any one of the individual arts, sciences, processes or kinds of human effort or education which these embrace. Generalizations on the broad subject would be illuminating, and once made—as they are bound to be by practical

demonstration of theory in numerous museum buildings now under way—may well constitute a workable point of departure for any discussion of museum buildings. Our interest here is in the museum of art, and particularly in one interpretation or expression of its cardinal function of effectual exhibition.

Now, whether or not the architect is called upon, in the museum of art, only for impressive architectonic effects in formal, public or semipublic interiors; whether his meticulous orders, studied ornament and stylistically accurate cornices are to be limited to vestibules, stairways and loggias; or whether he is enlisted as an auxiliary in the actual installation of exhibits, will depend upon two things: first, the school of museum theory and practice favored by the staff of the institution in question; second, the capacity of the architect himself to appreciate the needs and functions of museums and his ability to interpret the theory of display to be carried out. On the latter of these considerations much might be, and elsewhere has been, said. We take refuge in the comprehensive and accurate statement by Henry W. Kent, Secretary of The Metropolitan Museum of Art, in The Forum for December, 1927. Suffice it here to say that in the degree that museums in their new guise, namely, as elements in the cultural (educational as well as inspirational) upbuilding of the community, become more numerous and effective, the architect will be relied upon to



The Detroit Institute of Arts
Paul Philippe Cret and Zantzinger, Borie & Medary, Architects

interpret satisfactorily their new functions and in his buildings to make feasible their difficult and now widely diversified activities. At present, with the customary brilliant exceptions, the architect has barely touched the problem; its growing insistence and the progress of thought on the subject generally will without question stimulate his interest and prompt his observation and study. For museums are destined to figure largely in our roster of new buildings, and they offer him a functional problem as practical and often as troublesome as that of the library or the school building; and they may, ere long, be included in the list of institutions which have taken cover in the tall building type. The possibilities of plan, design, illumination and so on offered by this pros-

pect are alluring, to say the least.

Museum Display and Interior Design. Our other consideration is here especially significant, since the new building of the Detroit Institute of Arts is a definite demonstration of a type of display in which a skillful architect has been the abetter. This aspect of the general problem of museum design is of paramount importance to architects, not only because it may affect, -indeed materially control,-all or most of the interior design of art museum buildings, but also because the type of display favored at Detroit makes undeniable demands upon the architect to understand fully certain phases of museum theory. A word or two regarding these may be appropriate at this point. Museums have their business and their administration, their practice and their theories as do other forms of organized human effort. But as institutions of public service, museums have only recently come into the running. They are now developing a technique and methodology, to borrow good words from other fields, and these are calculated to serve as guides for the architect as well as for the museum official.

There is not in the vocabulary of museum work an equivalent in value to words like "teacher" or "educator" or "librarian," whose meaning is publicly understood,-no word to replace the ponderous description "museum worker," nor is there a general word to cover the whole field of museum work, acquisition, exhibition, management, education. The most important dictionaries give us only words like "museology," which means the science of arranging museums, or "museography," the scientific description of the contents of museums, or "museographist," one who writes on or classifies museum objects. In fact, the word museum itself, which we use to cover all types, in England, for instance, does not include "art galleries" where pictures are shown. This inadequacy of the language may imply lack of understanding of the type of building and work which the word museum connotes, or it may indicate nothing more than inexperience. Both would seem to be true, and the correction of the latter is making rapid strides to remedy the failings of the former. The statement is included here only to emphasize in fact of the youth of the museum of art in its current conception.

The firstlings of the museum of art are to be found in private collections, and these are hardly poor men's playthings. Such collections imply important buildings, usually the palace, hotel, palazzo, villa or other residence of the owner, wherein he disposed his treasures to suit his taste or fancy and no doubt with an eye to making upon those who saw them such impression as was desirable of the owner's wealth, power and connoisseurship. Exhibition or display technique was not known and hardly necessary, public responsibilities non-existent. Larger palaces, to be sure, displayed important items in semi-public halls or galleries, using that term in its earlier meaning; but the decorative features had no different significance in the Palazzo Farnese than they had in the House of Pansa or the Temple of Luxor.

Due to various causes, among them war, revolution, confiscation, pillage and other expressions of international amity, many of these collections came into public hands, the method and tradition of housing them already established by their history. Many remained in their original palaces and were there added to. Slowly, very slowly, a theory of display was developed out of the facts of the material. Important buildings could not be abandoned, and new ones were too expensive. So we find various expedients relied upon to render the crowded objects visible, let alone to exhibit them well. Exigencies of space and, in general, the use of private living quarters for public display space, gave birth certainly to one museum feature of doubtful value that has run amuck in most museum plans and has cost endless sums in upkeep,-namely, the skylight. In fact, the type of reasoning, or lack of it, which prompts architects to think of museum and skylight as essential to each other, certainly of the former as inconceivable without the latter, might be text for an ample discourse on the reasonableness of design in architecture. The skylight was in the beginning and must remain, either a compromising makeshift or a basic error, depending on where it is found, and its feasibility in museums erected now should be carefully studied and thoughtfully restricted.

Period Style Display. The nineteenth century worked manfully at the task of devising ways and means of suitable display for this transferred material, expressing its findings in various directions indicated by possible answers to such leading questions as these: Shall objects be classed by material, by style, by race, or by cultural ori-

gin? Shall we have an orderly phalanx of pottery, another of wood and a third of metal, or shall we permit these to form a stylistic trio? Or, eschewing both alternatives, shall we favor a third which insists upon a harmonizing of these elements in an interior actually old, or designed in terms of the old, to give to the objects displayed a local habitation and a name? Which of these methods is or can be made the most intelligible to the public as expressive of the artistic aspect of a culture, itself the legacy of a given race or nation and of a given time or style?

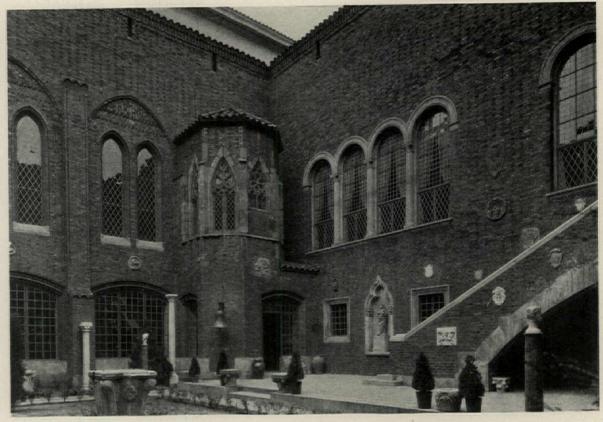
While these questions sought answer in the administration of older material, another influence was also at work, namely, the wave of interest in public education and that special phase of it fostered by Pestalozzi and others, from whom dates the importance given to "object lesson material" in teaching. Such material falls immediately into the museum collection class, and we find the idea of object teaching and the idea of the museum as a collection of demonstration material linked together in the new interpretation of public education. This received its greatest impetus in Germany and Switzerland, later in Scandinavian countries, and in its train followed the establishment of several important institutions.

On the art side the new concept favored the type of display which showed all objects as nearly as possible in their cultural relationships, conceiving of design in all forms as the servant of civilization, not only as its record. Outstanding examples of the type are the Swiss National Museum at Zurich, and the Bavarian National Museum at Munich, the one with 62 and the other with 76 exhibition units, such units being rooms, courts, chapels or other unified displays, many of them including the actual wall and ceiling paneling, fireplaces and other architectural features, these constituting the dated background for a room arrangement with portable objects of like provenance. Other important buildings falling in the same class are those, in Germany, at Darmstadt, Lubeck, Magdeburg, and that at Nuremburg, founded in 1852, and housed in a suppressed Carthusian monastery since 1857; extensions erected 1866-1902. Other buildings of this class are at Copenhagen, Denmark; Stockholm, Sweden; Bygd, Norway.

In connection with these installations it should be borne in mind that any surplus of objects still can find place in other preferably adjacent galleries, where they may be grouped according to material or by any other one-line classification. Again, that when enough entire rooms are not available, or even in addition to these, period style groupings in alcoves as shown on three sides of a room, or else smaller concerted displays of culturally related objects may be arranged, these

being sometimes relied upon more or less as footnotes to the historic rooms. There is the further practice, frequently resorted to in the collections mentioned, of designing a new environment; in other words, a new interior in accord with the old objects displayed within it. In such cases the designer may find it possible to use reproductions of mouldings and other items, or he may count upon his own skill as an interpreter of the historic style required, designing in that vein without measured duplication. In the Detroit Institute of Arts use of this last mentioned method is well illustrated and handled with consummate skill, and to that extent we may consider the new Detroit building a calculated demonstration of what has hitherto been generally known as the German method of period room or period style display. It should be remembered, however, that the method followed at Detroit has also been demonstrated elsewhere in this country. Period style groupings have long been used at the Metropolitan Museum of Art, for instance in certain of its galleries devoted to the decorative arts, while a number of actual rooms of various periods have also been installed. But the best example of the method is, of course, the American Wing, opened in 1924, which contains actual rooms, with furnishings, as well as period style displays in adjacent "feeder" galleries, in which the concerted arrangement of objects of various types is shown against a background whose effect is achieved with the aid of duplicates of historic architectural details.

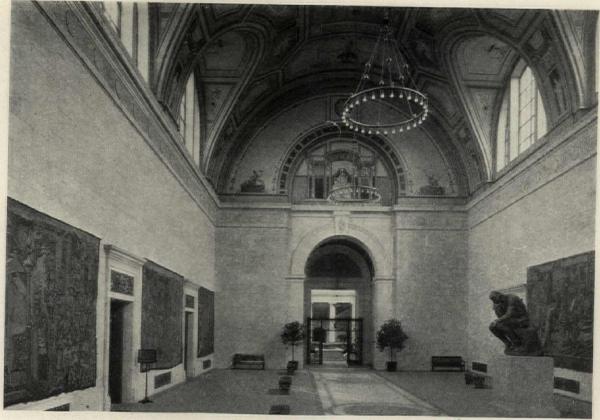
For inaugurating this type of display in terms of indigenous material in the United States the honor goes to the Essex Institute, in Salem, Mass., which installed a series of early American period rooms in 1907 and in the following year moved to its own grounds a seventeenth century house destined for demolition. An extension of this principle, though not intimately related to the present matter, is the actual preservation and rehabilitation of old houses, making museums of these so as to present therein the life picture of their day. This is the case in certain degree with regard to many "national monuments" abroad, such as various chateaux and palaces in France and elsewhere, where room arrangements are preserved. In this class belong also a number of buildings in this country maintained by societies, such as the Society for the Preservation of New England Antiquities, which controls some 12 old housemuseums, all furnished; by city or state governments, as in the case of the New York City Hall or the Schuyler Mansion at Albany, or by other agencies. In 1904 the Rhode Island School of Design, at Providence, built a Georgian dwelling (Stone, Carpenter & Willson, architects) as a setting for the Pendleton Collection. While the Essex



COURTYARD



GALLERY OF CONTEMPORARY AMERICAN ART



MAIN HALL



HALL OF EARLY CHRISTIAN ART

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displays are actual, as is the case in the Metropolitan's American Wing rooms, the Providence setting definitely followed the type of display shown in many of the rooms at Munich and Zurich and now again shown so well at Detroit. The important consideration is, to be sure, that the architect of today has designed a new setting in an older vein and so has provided an appropriate harmonizing background or interior for a concerted display of objects disposed as nearly as possible in their life relationships. The task in the end is one primarily not only for the museum director or staff, but as thoroughly one for the closely collaborating architect, who truly designs and executes his building "from the inside out." So, if the point is raised: why all this preamble about museum installation?—is that the architect's function?-our answer is that it may be and often has been a large part of the architect's function and, in sober fact, in the Detroit Institute of Arts it is. What is more, in a museum of art, most of the interior is installation in some form; so what better can the designer of such buildings do than study the museum man's point of view, which must regard the galleries as but portions of a picture, to be completed by displays to be made there?

The Building: Exterior, General Plan and Larger Interiors. The Institute of Arts at Detroit is noteworthy, however, for more than its method of exhibit installation. There are the item of its exterior design, the item of its functional plan, and the item of its general effectiveness as an opportunity for those pleasurable reactions which are the soul and substance of art anyhow. The building itself is highly successful as a civic monument. It is of Vermont marble and was erected at a cost of something over four millions, the sum defrayed out of general taxation. How many cities can boast of similar enterprise? This may account, in part, for the fact that the new building savors a little of splendor. It is of the city, for the city, by the city, and by this token Detroit seems, at least, to throw the gauntlet to other communities of like or even greater size. The consummation of 20 years' endeavor, the perpetuation of a project launched 41 years ago under the name of the Detroit Museum of Art and now under its present ægis set up in a public building as a department of the city's work, Detroit finds this result of its striving a satisfying and impressive edifice, notably in its relation to the Public Library (Cass Gilbert, architect), completed in 1921, which faces it across a wide avenue and with which the new Institute constitutes a distinctive "point" in the city's plan, a center of arts and letters.

The building is assuredly inviting, though without humility; it beckons but does not appeal. It gives at once the impression of a most carefully studied exterior which has been permitted to evolve slowly out of proposed use and other practical conditions, to meet which a plan and interior had first to be wisely conceived and acutely adjusted. In brief, it is what might be termed a functionally expressive design-and what else can good design in architecture be? The effect is that of a one-story structure simply treated and on a scale best described by the hackneved word "grand," which has in its architectural use a real meaning. In fact, the true merit of this scale will not be fully appreciated until landscaping, adjacent building or other features have been developed to afford workable comparisons. A nearby apartment hotel seems mincing and overcrowded with detail, with its necessarily numerous windows. Broad values of mass and planes have told their story becomingly. Barring the Ionic entrance order, ornament has been sharply limited to rare accents in key blocks, corners of string courses and the like, while the great spread of the building-it has a frontage of over 300 feet-is enhanced by the parallel horizontals of a fine rustication, and the openings further accented by iron gates, balconies and grilles in reserved treatment.

The style would be described as Italian Renaissance modified, which means revised, modernized, applied to new ends. A Beaux Arts strain is apparent, suggesting the training of the designer, yet the resultant effect is developed by thoughtful handling, as that of an American building of 1927. The stylistic merit of the whole lies in this interaction of strains and offers another proof of the gradual and highly intelligent modification of the traditional motif, wherein lies any true advantage that may be credited to a conservative attitude toward past "periods." So here, without loss of regard for the formulary of the Italian Renaissance, which contributes to the design what may be called an artistic stability. we have the definite indication of present activity, immediate public utility, strength of purpose, all of which are characteristic of the sanest modernism.

The plan is disposed according to a basic scheme of classification of art for museum purposes, as visualized by the director. This accounts for an American section, an European section and an Asiatic section, each of which is provided for in a block or mass of the building. The major axis from the entrance is that of a main hall or concourse, continues through one of these principal blocks, namely, the Asiatic, and is stopped against a theater set at right angles to it; while the American and European blocks flank the hall.

The European galleries occupy all four sides of a rectangle and following around to the right from the entrance hall and as a chronological

sequence circumscribe a courtyard, the ground of which is the basement level of the building. The courtyard itself is an outdoor exhibition space. Its brick walls and openings are treated exteriorly to suggest the period style rooms shown within, while at the same time offering adequate background for various well curbs, columns and other objects of stone and metal exhibited there. So we have a Gothic wall with pointed arches and buttresses to aid the effect of an antique chapel, projecting from it; also a Renaissance wall with Italian stone-framed openings, and door giving upon a stairway to the court level; and on another side there are a Flemish type rectangular oriel and a series of circular brick openings. The brick cornice also varies. Diverse elements, never so on their own soil but usually at odds when recreated out of new material, have been most skillfully blended. One notes at once the practice established in similar courtyards at Munich, Darmstadt, Zurich and elsewhere, a fact which does not in the least dim the real achievement of director and architect in the present case.

In the left flanking block, assigned to American art, the courtyard is replaced by a group of three galleries devoted to temporary exhibitions, while in the block at the rear, containing chiefly Asiatic art (though there is an overflow of European and Near Eastern material), the galleries are disposed about a Baroque garden.

This is entered from the main hall through an exceptionally good iron gate by Caldwell, an old possession of the museum, while at its far end there is a loggia with a fine stairway, its halfway landing allowing height for a passage to the theater beyond. The stairway, with rail by Yellin, who has done numerous other metal items which may be construed as decorative elements of the architect's design, admits to smaller galleries, the only rooms above the main floor. These are to be devoted to modernist art, which has been segregated as though for a period of acclimation or perhaps,—according to Darwinian precepts,—to give sway to the law of natural selection!

In the garden the ornament of masks, inverted consoles, rockwork, pilaster caps, grilles and finely scaled mouldings is overborne by a fountain of exuberant proportions, which takes up much of the floor area. Its size is no doubt accounted for in part by the conception of the garden as a sort of atrium, in which the fountain figures as the pool or impluvium; its lines do seem to carry upward quite reasonably to the rectangular opening formed by projecting ends of concrete beams moulded and colored to simulate ancient wood; the rectangular ceiling opening itself is filled in by a tent cloth in mustard color with blue border, suspended from rods at the short ends of the rectangle and masking most of the skylight. De-

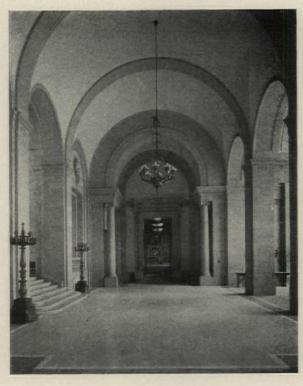
spite the presence of several ceramic items, not in the architect's conception, and which do not help the color of the scheme, the garden is not at the moment primarily an exhibition space. An interesting note is the fact that the wall above the beam ceiling level and supporting the skylight has been painted a light blue; in other words, treated to please the spectator. It is not fair of course to compare the Baroque garden on any terms with the courtyard, which was conceived at the outset as an open air gallery and beside which it is bound to seem showy. As part of the main axis vista, however, it falls logically into place and is pleasing.

The main hall is glorious with color, its vault and penetrations decorated in a manner possibly best described as "Pompeian to Adam," for there is much of the latter's sobriety and calm despite the still very fresh color and the strongly Pompeian sophistication of the ornament. This great central space has yet to gain the tone that only age can contribute, when surface brilliance has gone from the color, which now draws the eye too suddenly upward, and when walls and pavement have mellowed. The architecture will then serve as a unifying background for the tapestries, large sculpture and other sizable pieces to be shown here. The general proportions of this interior are superb and of imposing dignity, yet not lacking the least in friendliness. The room fulfills its chief function; while impressing the visitor with its grandeur and quality, it still draws him on.

Another highly effective feature is the unit composed of vestibule and entrance hall. Three great arches constitute the former, carrying through the entrance motif. At right and left are a check room and an information and sales desk. The entrance hall is groined; two short barrel vaults at its ends are supported by a fine Ionic order.

In the arrangement of floor levels in the building this entrance hall is an intermediate landing. There is a flight of steps at the entrance, and from the entrance hall other flights lead left and right to gallery circuits and straight ahead to the main hall, while other stairways give upon corridors on the basement floor.

The Galleries. The main floor galleries present a stimulating variety and vista. Architect and staff have collaborated to produce a chronologic sequence of historic pictures. Endless study of detail is evident on all sides, so that one finds real pleasure in the completeness of each stylistic illustration. Rooms are conceived not only as entities correct in all their parts and relationships as to period, but also as individual problems in interior design. There is color galore, all in key, all in style, and, with negligible exceptions, all thoroughly satisfying. Nor is this the only scheme of variegation. Different styles mean different floors; high, low,







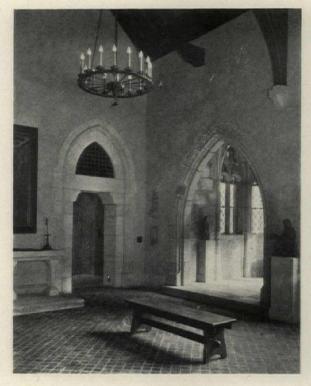
Loggia of the Rear Garden

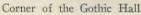
vaulted or beamed ceilings; mouldings of changing profile; door frames to accord; wall coverings in varied hue and texture;-throughout there is the appearance of the utmost freedom and flexibility which contributes, for the visitor, the fascination of uncertainty as he goes from room to room. Two wood floors in adjacent rooms, for instance, will be laid in different pattern; two ceilings in rooms of one style will be designed one as a groined, the other as a barrel vault. Even ventilator grilles and visitors' benches change shape and color to fit room styles. The significance of all this is emphasized by the fact that the objects shown are of many kinds and materials, but have been grouped in their one-time life relationships and given solidarity by the architect's stylistic interpretation of the room setting.

Excepting the three temporary exhibition galleries and one or two spaces at angles in the plan, all these rooms are sidelighted, a departure that will merit close observation. The window opening becomes a constant of light measurement, and feasible room sizes are thus determined. Yet, despite this definite control, rooms of nearly identical sizes give the effect of having quite different proportions; others are worked out as multiples of the basic unit, which is about 24 by 28 feet. The circulatory system of galleries, the course of art flowing through rooms arranged in series, is eminently sensible and instructive, the building itself becoming a textbook in period design. The

itinerary, begun at the right of the entrance hall, carries one first around the open court, next to the rear around the garden, then forward again to pass around the American circuit; things of most recent production, and especially loans, being sought in the galleries of temporary exhibitions. Here classic Greek motifs in a wide frieze establish a quiet background that even the Da-daist of a minute ago could hardly object to, in view of the possibilities of contrast with it, while in the gallery of twentieth century American art the ceiling borders and other features have been concocted out of the prevailing feeling and elements of current American decorative art.

Of special interest here also are one or two specific items of installation. There is shown a two-story early American house, the whole facade of which (a copy) has been included. The upper floor of this is reached by its own original stairway. The house is a unit, and its one door is both entrance and exit. The visitor is thus placed definitely in the environment to which the house belongs. Before it, as though on a street, he may pass the house and go on to other galleries. A somewhat similar scheme is followed in a French eighteenth century room. Being too small to fill the gallery, it was set away from the window, which would have given too strong a light. The space between the room and the outer wall is treated as a trellised enclosure suggesting a garden; this, illuminated from the large window,







Detail of the Garden

is seen through the smaller opening of the old room and gains the effect of outdoor brilliance. These are but indications of the degree of skill and the thoughtful care which have everywhere inspired the work of both staff and architect. The lesson of German and Swiss period style method has been assimilated, improved upon, and entirely adjusted to current American need.

Lower Floor, Utilities, Theater. But the functional aspect of the modern museum plan is tested not only by galleries but also, and perhaps more severely, by the administrative and "housekeeping" arrangements. The disposition of these facilities on the ground floor of the Detroit building is illuminating as indicating a type plan first given definite form in the Cleveland Museum of Art, erected 1915-16 (Hubbell & Benes, architects). There are here a special business entrance and a shipping entrance. The former gives upon two corridors at right angles; at the point of meeting is an information and control desk, with telephone switchboard. On one corridor a row of offices includes in planned sequence the director's office, trustees' meeting room, and quarters for several curators. On the other, again in studied sequence, appear the secretary's office, general clerical office and the registrar's office. These two series complete two sides of the plan under the left main mass of the building, the third side being devoted to a textile file, exhibition and study room. The central space directly beneath the

temporary exhibition rooms is given to a lecture hall, with a seating capacity of 500 and with booth and equipment for stereopticon and motion picture projection. The decorative scheme here is slightly modernist, pleasingly so. There are two entrances to this hall, giving upon a corridor from which wide doors lead to a large circulation area and exhibition space at the center of the building, just under the main hall, windows toward the opposite side opening upon the outward court. Two additional exits are provided flanking the stage. The lecture hall is completely encircled by corridors, the party walls at the sides of the room being pierced by a row of heavily curtained French windows. Checking-, smoking- and rest-rooms, with toilets, are readily accessible, placed just under the entrance hall.

Around the courtyard we account for the library, convenient to the stairway, and also for print study and storerooms and for print exhibition space. There are here, on two sides of the court, two long galleries devoted to exhibition material classed as prehistoric and as ethnographic, neither of which could logically find a place in the main floor sequences. On the third side is a series of study rooms for European art, especially necessary in a museum arrangement of this sort where all material of a kind on hand cannot be shown, because the principal concern in the main galleries is the complete period style disposition. These study rooms will be the haven of

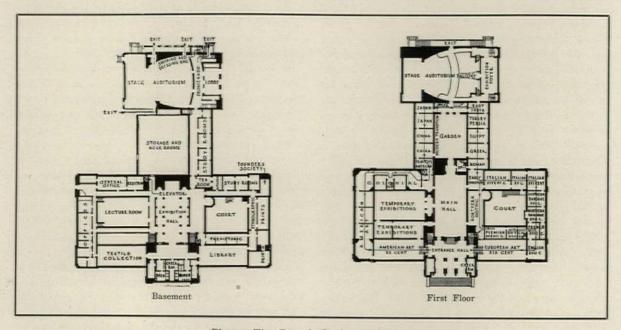
persons specially interested in specific types of material, such as, for instance, metalwork. A similar series, for Asiatic art, runs directly beneath the galleries devoted to this field. Just at the angle of the building provision is made for a public tea room and kitchen. Under the Baroque garden there is a large space for dark storage, and elsewhere on lower levels additional rooms are available for box storage, and space is allowed for a staff lunch room and kitchen. In various parts of the attic level a number of lofts offer further space for object storage, as well as accommodations for a photographic studio. Deliveries pass the offices of secretary and registrar and are made under control of the superintendent, whose office is adjacent to that of the registrar. A raised loading platform gives access to a spacious receiving room, where objects are unpacked and inspected and from which an adequate freight elevator carries them to all levels of the building.

Under the ground floor level various utilitarian purposes are met,—a plenum chamber is under the lecture hall, and under the main storage room is equipment for vacuum cleaner, current control, ventilating and air washing and humidifying apparatus, the latter again for the lecture hall. Heat and current are obtained from outside sources. Ventilating and humidifying equipment for the galleries is placed in an attic loft. Artificial lighting throughout is of total-direct type, in some cases as on pictures supplemented by individual reflectors. Wherever glass ceilings are required these are contrived as removable units and effective spots of interest obtained by cut and matched

sections in pleasing patterns. At the rear of the building, facing on another street, a well equipped theater completes the plan. This is calculated to meet a community need, not only for dramatic performances but also for concerts and important meetings. It contains a large organ. The interior is quiet, tasteful and impressive; the exterior profits by a seemliness which brings it into pleasing continuity with the museum structure itself. On the balcony level is an exhibition foyer.

The merits of the Detroit Institute are many; the promise of its usefulness is large. It has certain great advantages:—a really functional plan; a well conceived and well maintained display method; a fine building, historic yet modern; a reasonableness and simplicity of arrangement; an appropriateness of interior design; a well studied regard for the practical utilities of administration and technical services. Some may well say that the scheme of gallery installations suggests that of the Munich Museum or that the general character or "feeling" of the whole interior suggests the Darmstadt Museum. In the final analysis we say with conviction that this building and its collections as they now stand have made a distinct contribution to museum theory and practice in the United States; have in truth made fact out of much that could hitherto be classed only as ex-

Pope, in the "Essay on Man," writes: "Charms strike the sight, but merit wins the soul." There are charms here, many of them, and they register well, but the basic merit of the Detroit Institute and of the idea it represents is real and inspiring.



Plans: The Detroit Institute of Arts

Paul Philippe Cret and Zantzinger, Borie & Medary, Architects

MODERN ARCHITECTURE IN HOLLAND

TEXT BY EDWIN A. HORNER PHOTOGRAPHS BY SIGURD FISCHER

O the average American who pictures Holland as a land of windmills, wooden shoes and Delft pottery, it will no doubt be a revelation to learn that in her principal cities during recent years there has been a volume of building activity sufficient to open the eyes of the most ambitious real estate operators on Long Island. Her prosperity, a result of her having rich colonial possessions and on account of her neutral attitude during the World War, is evident at every turn, and her architects are contributing much toward the development of a logical modern architecture.

In attempting to present a comprehensive impression of the best of the modern architecture in Holland, Sigurd Fischer and I soon found ourselves confronted with a task which was out of all proportion to the amount of time at our disposal. Arriving in Rotterdam on July 24, 1928, it had been our intention to set out at once for Amsterdam, and after spending a week in that city to proceed by motor into Germany and the Scandinavian countries. However, difficulties which arose over failure of automobile insurance papers to arrive necessitated a delay of several days, which though at first disconcerting enabled us to become fully familiar with the building situation in Holland and prevented our doing it the injustice of neglecting it. Even then, we learned of several excellent examples of architecture which it was impossible for us even to see.

There is today much talk about a new, a modern architecture which will be a true expression of both function and construction. In the beginning all buildings, whether for shelter or worship, were purely utilitarian structures. As man developed, his temples and tombs became more refined in proportions and were embellished with ornament, culminating in the perfection of the Greek orders. These were a true expression of the logical use of the materials at hand to solve the problems of shelter and protection with the utmost possible beauty. Today our lives are more complex, and our requirements more numerous, with a corresponding increase in the number, nature and uses of materials at our disposal. Nevertheless, the same principle still applies to an even greater extent, that architecture in most cases is primarily functional and secondly æsthetic; a structure must first economically serve the purpose for which it is intended, and in so doing be a pleasure to the eye. In Holland at present there exists a group of architects who, in creating new designs, hold uppermost in mind two qualities,namely, logic and simplicity. The extremists of On the more important street the plan breaks

this group go so far as to contend that nothing that is not absolutely essential to the function of a building should be included in its design; that there should be no ornament whatsoever. This idea is consistent with the theory behind the modernist movement that, in order to produce a new architecture which will be appropriate to our time, we must begin with the barest necessities and evolve a new style. Fortunately, however, the Dutch architects have thus far been prudent in acting upon this theory, for, unlike the modernist, they take into account the fact that architectural styles are not the product of a lifetime or of a generation, and that to discard all knowledge derived from precedent is sheer folly. In addition to applying logic and simplicity in the individual unit, the Dutch architects, and likewise the German, are giving a great deal of attention to city planning. Mr. Van Esteren, of The Hague, who is among the leaders in the modern movement and who has recently been awarded the commission to revise the plan of Unter den Linden, in Berlin, points out the importance which is being given to the effect of the group or ensemble, both in form and color. Interviews with several of the prominent Dutch architects produced a unanimity of opinion regarding the lack of uniformity in the architecture of New York and showed a preference for the rows of high-stoop brown-stone houses with their backyard courts and the plain shafts of some of our tall buildings because of their simple truthfulness. A strong criticism was expressed on the superimposing of "European castles" and classic temples on the tops of otherwise good skyscrapers, and in a number of cases the Medical Center, in New York, by James Gamble Rogers, was commended as an example of the possible pleasing aspect that could be attained throughout a great city by the proper handling of plain masses, giving them solidity and dignity.

The most conspicuous phase of this city planning trend in Holland is in a number of cooperative groups of attached and semi-attached residences in such cities as Amsterdam, Haarlem, The Hague and Scheveningen. These are, as a rule, municipally owned and leased to individual tenants for nominal rentals. A very charming example of this type of city planning is the group of cooperative dwellings in Haarlem, by Mr. van Loghem. These are designed for the middleclass tenant and comprise a group of 52 houses or attached units, planned about a central court, the whole scheme occupying a fair-sized city block.



Pavilion No. 2, "Zonnestraal," Hilversum Duiker & Bijvoet, Architects

back to form an open court, which lends dignity to the principal approach to the group. In the center of the court facade access is to be had to the inner court through an arched gateway over which hangs a most delightful little balcony. The architecture throughout is the essence of simplicity,-plain mouldings, excellent proportions and an effective use of color being the outstanding features. Not the least of the charm of the whole composition is in the roofs of gray tile, a material that is very much favored for this purpose in Holland. Another example of a similar group is the block of workmen's dwellings in Scheveningen by Mr. Zwart, of The Hague. Here a school is made the center of interest in the plan, and the group is arranged about two courts, one of which serves as a back yard for utilitarian purposes. In the ground stories of some of the units there are shops and stores. A rather unusual and unique residential block has been done by S. de Klerck, in Amsterdam, consisting of an entire city block of tenement dwellings. The colors of mellow red brick and roofing tile and the deep and unusual shadows cast by irregular projections are quite interesting, but one is inclined to wonder at the logic behind the tall pyramidal turret, and the cigar-shaped bay window hanging on the corner!

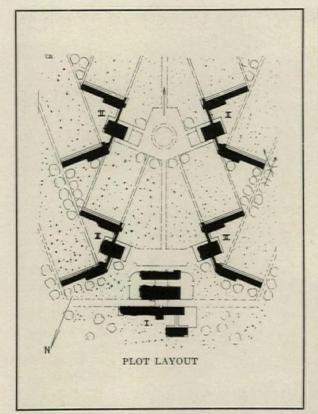
The first building to attract our attention as being a product of the modern trend in Holland was the Catholic parochial school for boys in Rotterdam. The architect, P. G. Buskens, of Rotterdam, by the skillful use of masses and the discreet placing of a few colorful ornaments in terra cotta, has produced a building that is most pleasing in effect. Just the right amount of interest is added to the design by the simple means of employing projecting brickwork at corners and in window panels. At Hilversum, W. M. Dudok has done a number of very good schools, illustrations of which may be shown in these pages. Here again we find the interest of the design contributed largely by the effective use of mass and color, with the simplest of ornament used sparingly. Mr. Dudok frequently protects the entrances to his schools

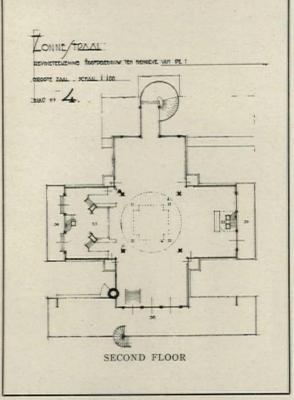


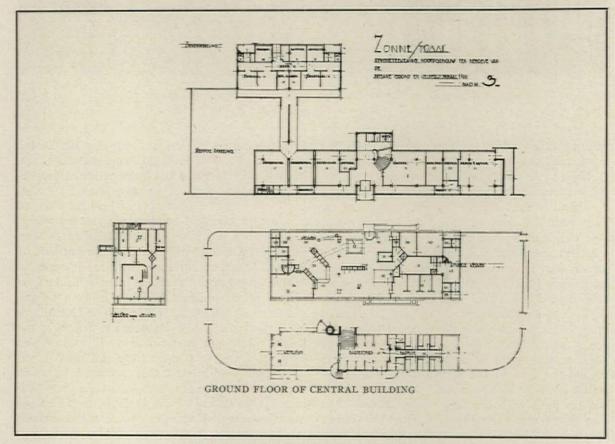
Dining Room, Central Building No. 1, "Zonnestraal," Hilversum Duiker & Bijvoet, Architects

with a concrete slab porch roof, supported on two sides, with the opposite corners projecting as a cantilever. Although in one or two instances the result is not unpleasant, one somehow feels that the detail is used chiefly for effect, and that at least ostensible support under the corner would ease the mind of the average layman who approaches the entrance. In the corridors of his schools Mr. Dudok has used wainscoting of buff brick with base courses and caps of the same brick dipped in hot tar. End joints of all courses are butt joints with no mortar showing, the bricks being beveled back from the exposed corners to permit actual mortar joints. The cap course of black or tar-dipped brick projects about 1 inch beyond the face of the wainscoting to take the plaster above, which is applied on common brick laid up flush with the face of the wainscoting. The floors are of white tile about 10 inches square with black borders on the classroom sides and with each classroom door emphasized by a break in this border strip. The Badhuis or public bathhouse, at Hilversum, is also by Mr. Dudok and is designed in much the same manner as are his schools. Here he has employed well proportioned masses, a clever arrangement of ventilating louvers, and a few spots of brilliant color to produce an excellent building of great simplicity.

Reference has here in several instances been made to the use of color as an important part of modern Dutch architecture. Too much emphasis cannot be put upon this, for it is the skillful use of strong color combinations that lends a unique charm to everything in Holland. The Dutch have been past masters of its use, as shown in the bright colors and immaculate condition in which they paint and keep their river and canal craft. They now have brought this medium into use in their architecture as an inexpensive means of enhancing the beauty of flat surfaces, to the consequent elimination of unnecessary ornament and mouldings. Combinations of such colors as yellow, gray and orange; green, gray and black; blue, with touches of red and yellow; black with







PLANS: "ZONNESTRAAL," HILVERSUM DUIKER & BIJVOET, ARCHITECTS



STAIRCASE, CENTRAL BUILDING NO. 1, "ZONNESTRAAL," HILVERSUM DUIKER & BIJVOET, ARCHITECTS

touches of one or two contrasting colors, are very pleasing on plain slab doors and on wood trim, both exterior and interior. The Central Post and Telegraph Building in Rotterdam, although completed in 1923, may be included in our discussion of modern architecture. The building is constructed in two units; the great hall, which is of reinforced concrete throughout, was designed by J. Huisman and is structurally independent of the main office building by which it is surrounded. The main building is by Mr. Bremer, now city architect of The Hague. The chief architectural interest in this building is the manner in which the structural concrete has been treated to produce an excellent vaulted interior. Dark glazed terra cotta in interesting geometrical designs has been effectively used in the lower portions of the walls. Another building for much the same purpose, but designed in an entirely different spirit, is the new Post and Telegraph Building at Haarlem, designed by J. Crouwel, of Amsterdam. This is, in my opinion, one of the very best examples in Holland of the skillful use of mere materials of construction, such as brick and metal sash, to form an interesting and pleasing composition, with only a few bits of well executed sculptural ornament. There is a simple dignity about the building which is in keeping with the function which it serves. Diagonally across from the Post and Telegraph Building in Haarlem is the Nationale Bankvereeniging, by H. F. Mertens, architect and engineer. Though not essentially modern in the strictest sense of the word, this structure illustrates the possibilities in the use of brick offset by well designed sculptured ornament. The interiors in plain plaster with green glazed terra cotta wainscots are exceedingly simple, but in good taste for a small banking office. In Haarlem there is also a small church of quite unusual design, the Kapel Nieuw Vredenhof, by H. Korringa. In plan, the auditorium is essentially an isosceles triangle with the rostrum at the apex and the base angles cut away, a shape which presents an interesting problem in roofing. The solution is successful, lending a unique charm to this little chapel in its wooded surroundings. Here again we have simplicity, logic and a careful selection of the quality of color and texture of materials playing the chief roles in the creation of a good building. church of similar interest from the standpoint of irregularity of masses is the First Church of Christ, Scientist, at The Hague. The architect, H. P. Berlage, has used green prism glass, laid up in mortar with the brickwork as a means of lighting the auditorium. In the building for the Rudolf Steiner Klinik, at The Hague, another phase of the modern trend is illustrated. In his effort to make the building fit into the landscape

on a site which in irregular plan and contour forms a promontory in relation to its surroundings, the architect, Jan. W. E. Buijs, has accomplished quite an extraordinary result. This idea of fitting architecture into the landscape is no doubt inspired by the work of Frank Lloyd Wright, who is held in great esteem in Holland.

Outside of Hilversum, hidden away in timberland, is one of the very best of the modern buildings of Holland. Zonnestraal, the tubercular sanitorium designed by Duiker & Bijvoet, of Amsterdam, may at first glance convey to the conservative mind an impression of extreme modernism. Consideration of the nature of the problem, however, convinces one of the absolute logic behind every detail of this excellent group of buildings. An institution for the treatment of a disease requiring for its treatment fresh air, sunshine and cleanliness, has been done in immaculate white with a maximum area of glass in movable units. The plan is so arranged that all wards and private rooms command a clear vista over wooded land, at the same time permitting the sunlight to reach all patients' rooms to a maximum degree in winter, when it is most needed. Also at Hilversum, Mr. Dudok has built two very good residences,-his own and another very similar in design on an adjoining lot. These houses, which would fall in the \$50,000 class in the United States, were built at a cost of 25,000 guilders, or \$10,000. This is partly accounted for by the fact that a skilled laborer in Holland receives a wage of five guilders a day, or about \$2.

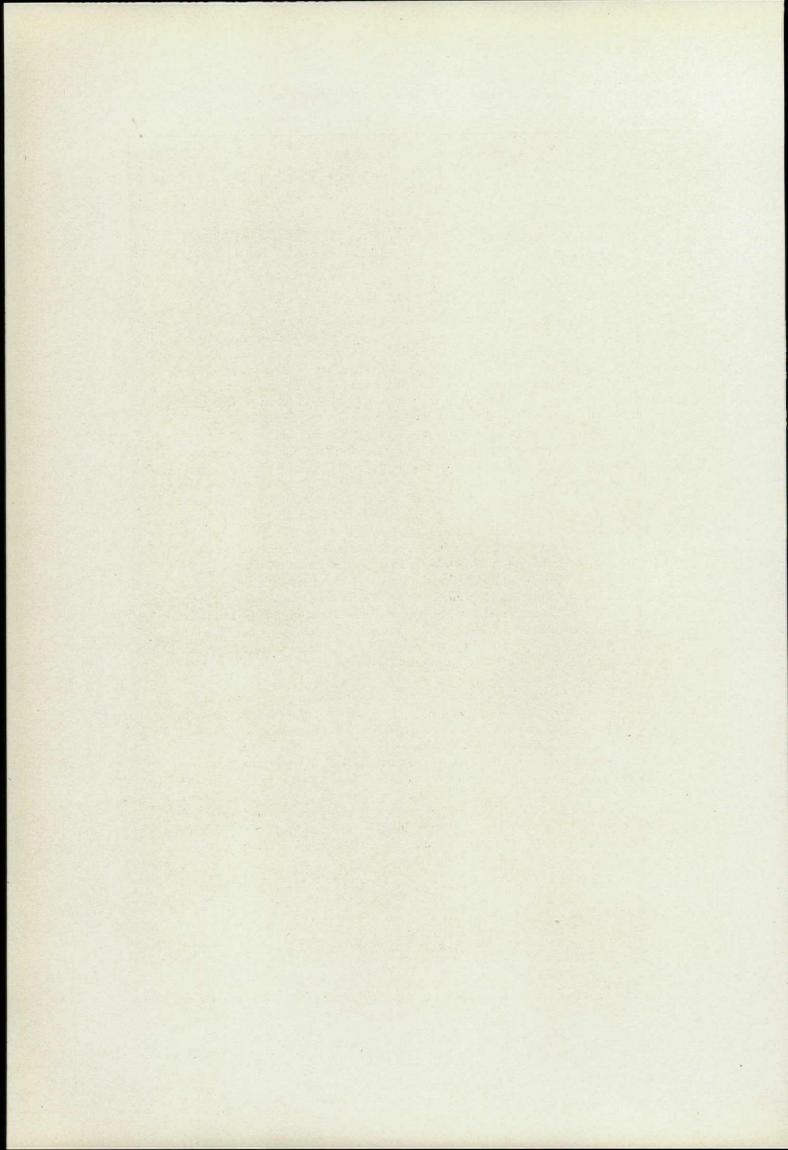
In the art of planning, the architects of Europe may well afford to study American methods, for their plans are often quite naïve in the inefficient and impractical arrangement of space and fixtures. But in the art of creative design we in America will do well to heed the work of our contemporaries on the continent, for they are achieving a truly new architecture. This development is especially true of Holland, Germany and France; and while we may hesitate to accept as art many of the results of their efforts, our urban population will appreciate their attempt to cope with the battle between ideas and materials. In his sketch of a plan for Paris, Le Corbusier says: "The new event is the machine, which has reconstructed modern society from the ground up. However, we have not yet measured its significance. A revolution opposed to all previous centuries! No revolutionary spirit reigns, but we stand in the presence of revolutionary relations. We will formulate no revolutionary solutions, but will adjust ourselves to a revolutionary state of affairs. If this adjustment does not soon take place, the growing sickness now threatening us will injure, even if it does not shatter social life."

Twentieth Century European Architecture

IVE years ago the late editor of THE ARCHITECTURAL FORUM, Albert J. Mac-Donald, together with Paul J. Weber of Boston, one of the leading architectural photographers in this country, spent four months in Europe securing a collection of unusual photographs of the best architecture of the past, many of which have been published from time to time as The Forum Studies of European Precedent. Five years have brought a great change in the architecture of this country as well as of Europe. A new expression in design, characteristic of the civilization of this age, is slowly but surely asserting itself,-an expression largely freed from the influence of the architecture of the past, and possessing a greater freedom, simplicity, logic and fitness than any architectural style in over a century. This new architecture should not be termed "modern," as it is modern only in the sense that it is the work of the present age. It is more truly the architecture of this twentieth century, evolved and produced by the requirements, the custom and the taste of the civilization of today, an age of great commercial, scientific and mechanical development, an age of high mental pressure and great physical strain, an age of tremendous wealth and unlimited possibilities. It is inevitable that this new era should demand and produce in all the arts an expression, individual, original and thoroughly characteristic. In Germany and Austria this breaking away from precedent first became evident, later gaining impetus in Holland, Sweden and Finland, and finally it has been embraced by all the spirited younger architects and designers of France, where work is being done so radical in character as to challenge the understanding and criticism of the more conservative members of the profession throughout the world.

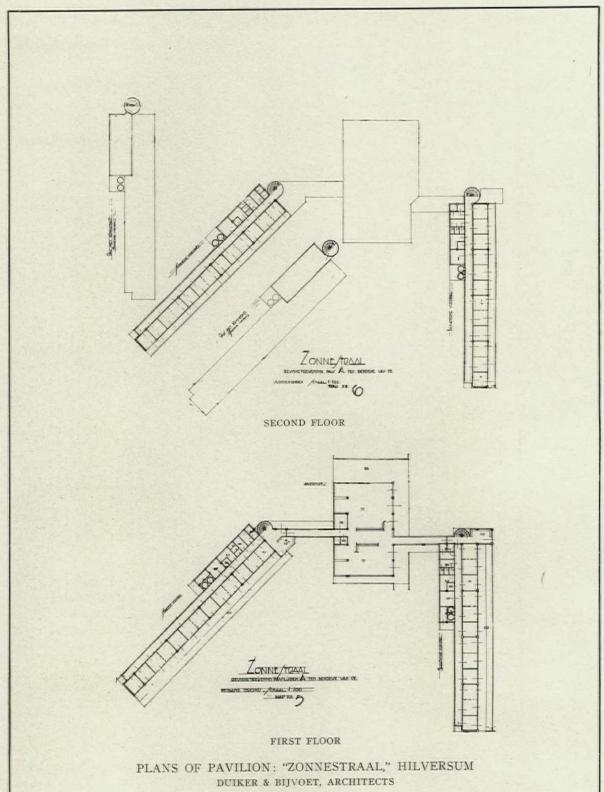
Realizing the tremendous influences rapidly changing the character of all the arts, and the great interest being taken by American architects in the new architectural expression, the editor of The Architectural Forum last summer commissioned Sigurd Fischer, one of the foremost architectural photographers and critics in this country, to visit Europe and make a series of photographic studies of the best and most interesting examples of the new architecture of Holland, Denmark, Germany and Sweden. It is now our pleasure to present as the first of this series of illustrations of twentieth century European architecture, a group of recent buildings in Holland, in which the new architectural expression is brought out in a definite and consistent manner. During the present year, in each of the regular issues of The Architectural Forum, this series of remarkable studies of recent European architecture will be continued.

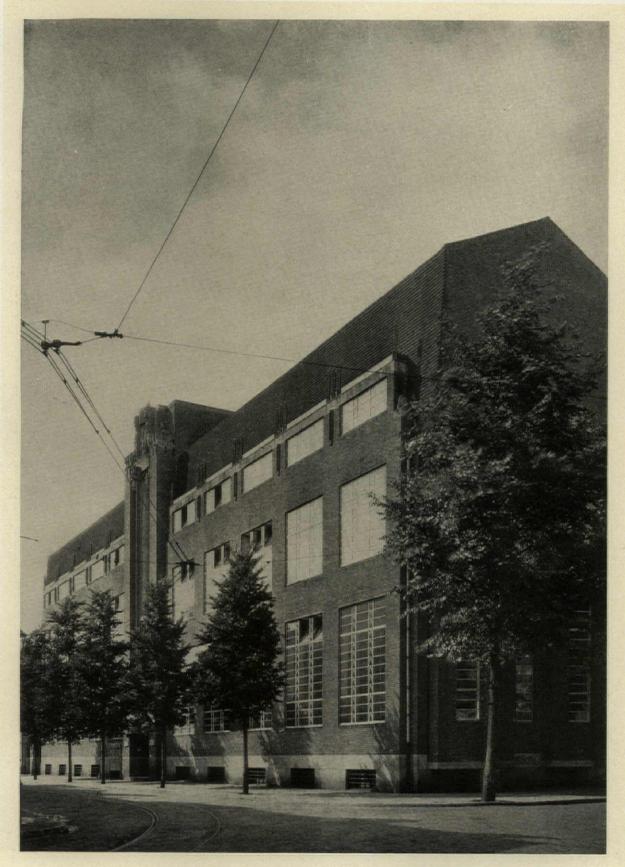
PARKER MORSE HOOPER



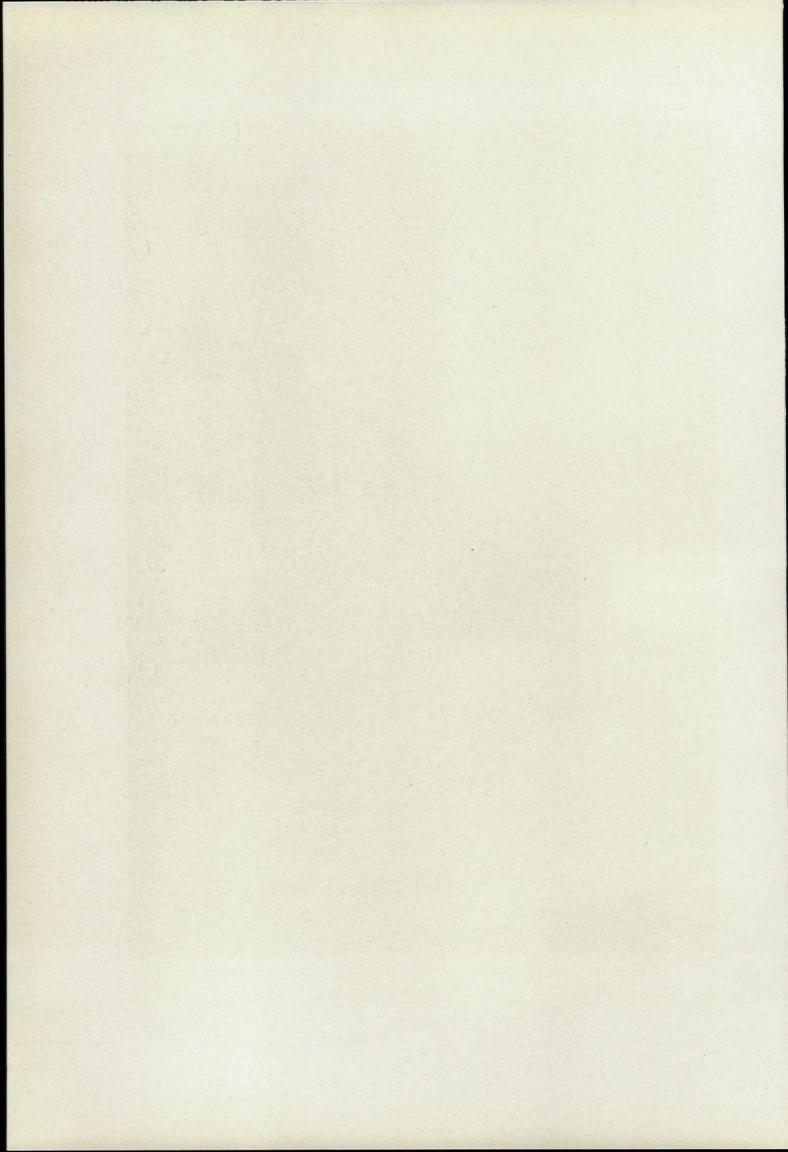


Photos. Sigurd Fischer Plans on Back SOUTH FACADE OF CENTRAL BUILDING No. 1, "ZONNESTRAAL, HILVERSUM DUIKER & BIJVOET, ARCHITECTS



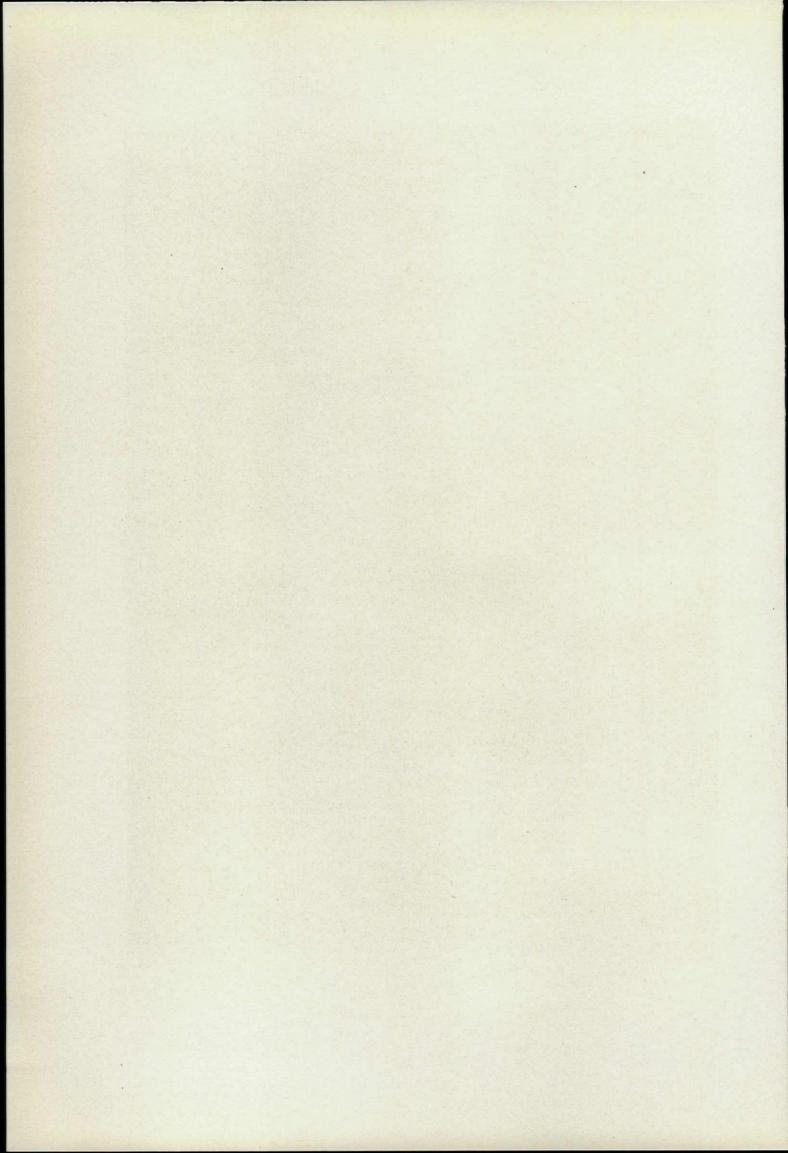


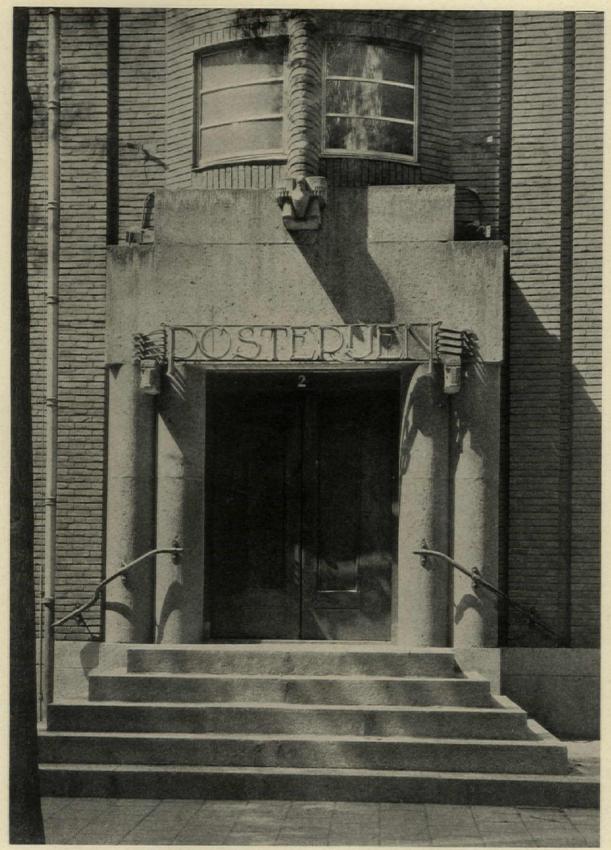
POST AND TELEGRAPH BUILDING, HAARLEM J. CROUWEL, ARCHITECT



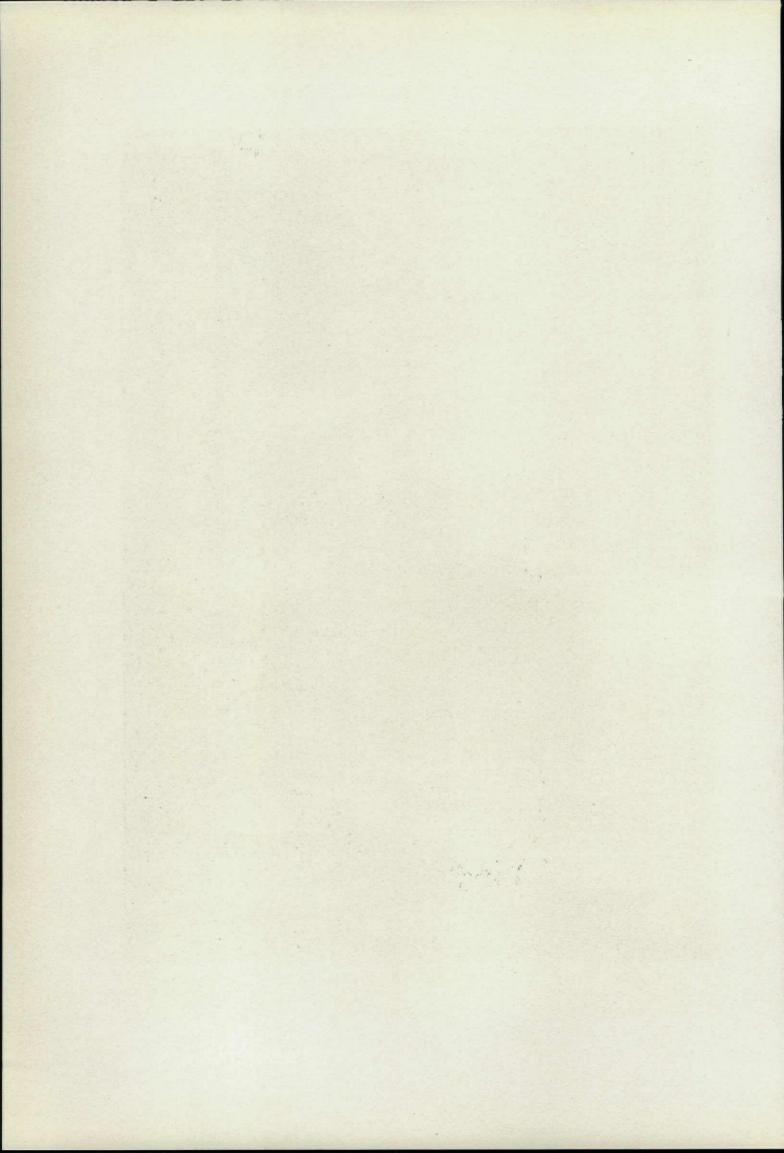


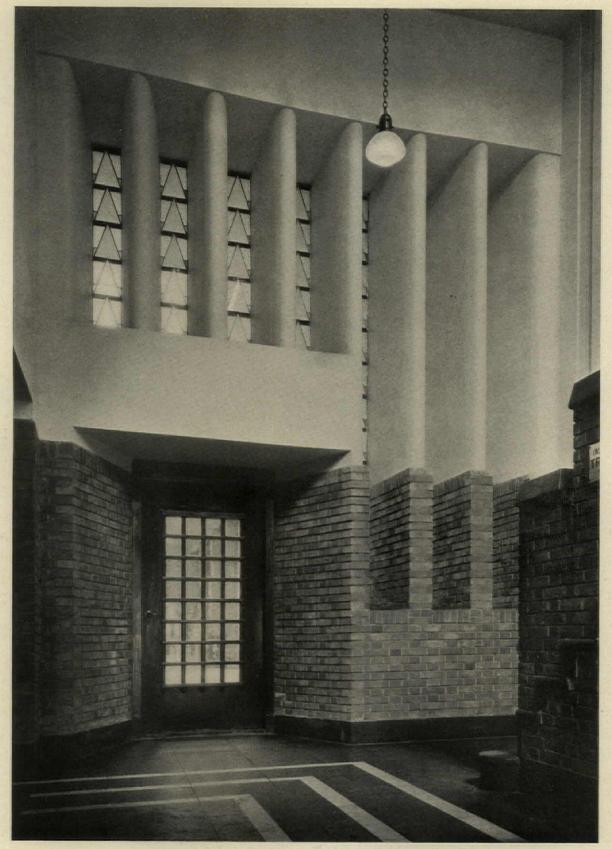
ENTRANCE TO POST OFFICE, POST AND TELEGRAPH BUILDING, HAARLEM J. CROUWEL, ARCHITECT



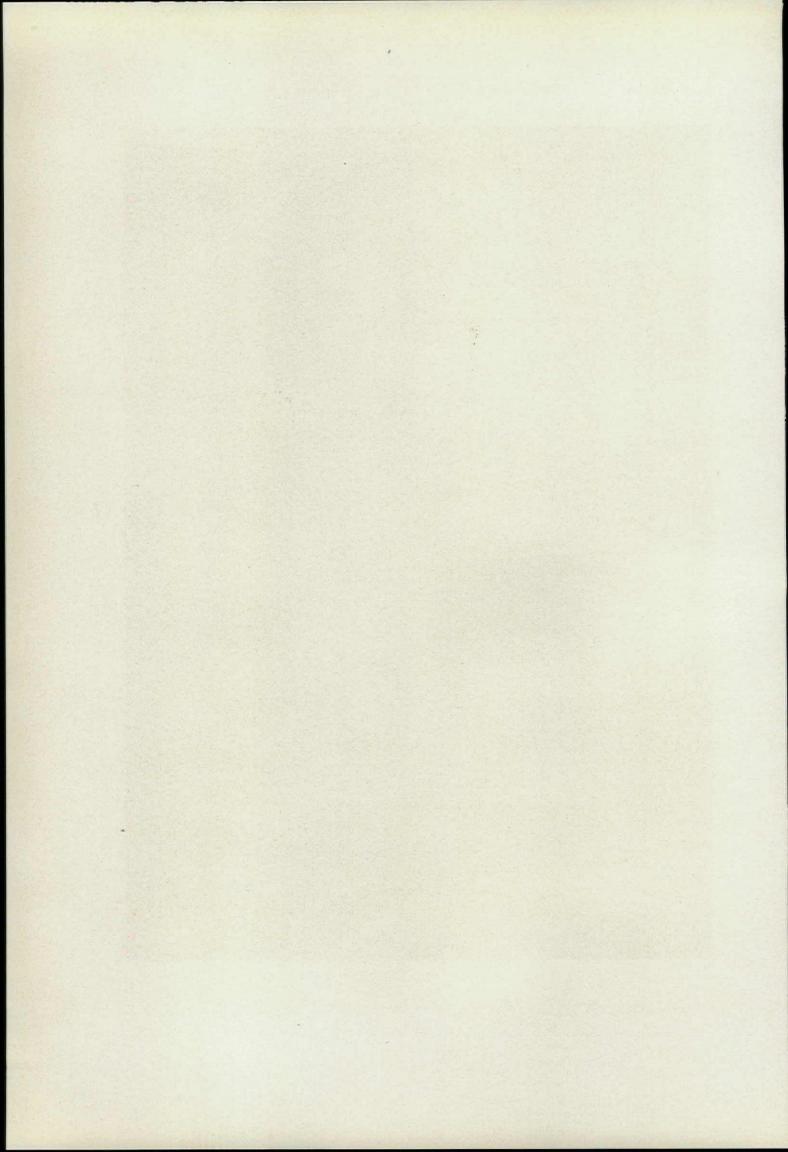


ENTRANCE TO EXECUTIVE OFFICES, POST AND TELEGRAPH BUILDING, HAARLEM J. CROUWEL, ARCHITECT



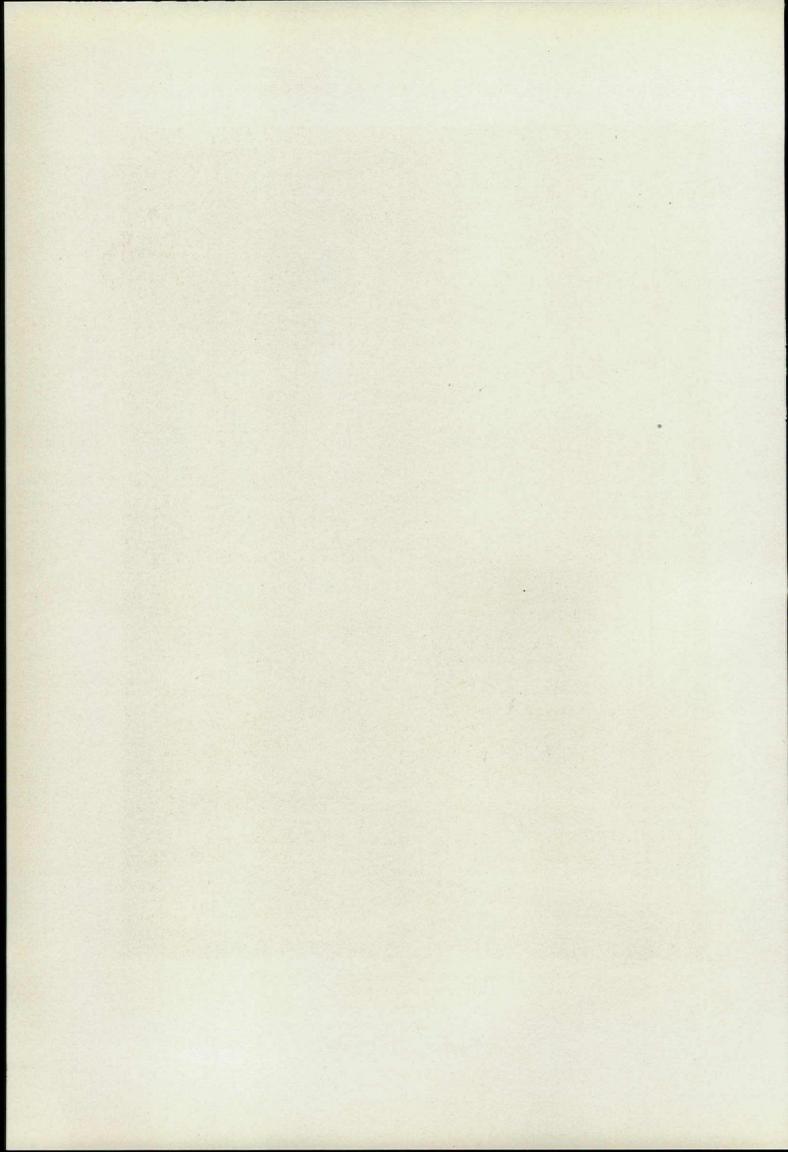


STAIR HALL, POST AND TELEGRAPH BUILDING, HAARLEM J. CROUWEL, ARCHITECT



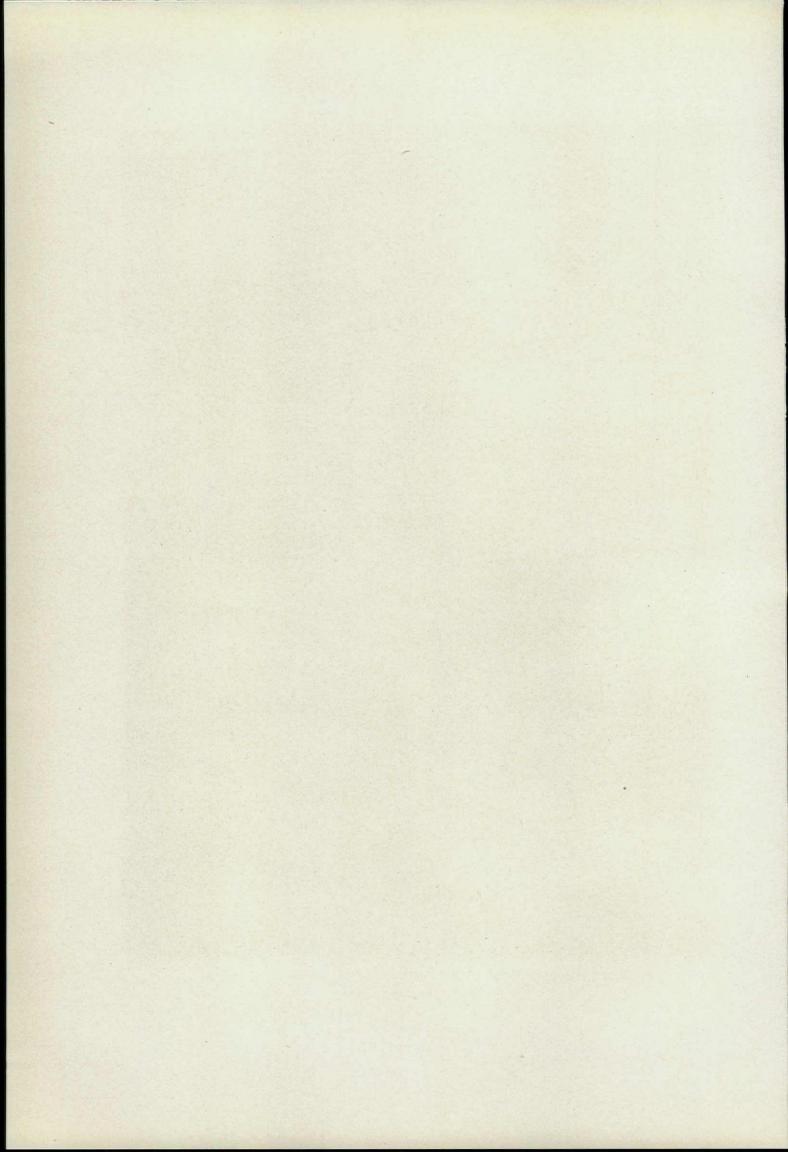


BAY WINDOW, POST AND TELEGRAPH BUILDING, HAARLEM J. CROUWEL, ARCHITECT



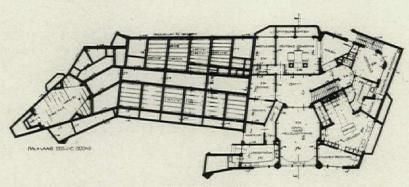


INTERIOR OF POST OFFICE, POST AND TELEGRAPH BUILDING, HAARLEM J. CROUWEL, ARCHITECT

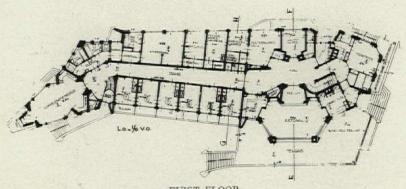




Plans on Back RUDOLF STEINER CLINIC FOR NERVOUS AND MENTAL DISEASES, THE HAGUE JAN W. E. BUIJS, ARCHITECT



SECOND FLOOR



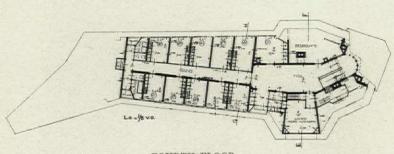
FIRST FLOOR

PLANS: RUDOLF STEINER CLINIC, THE HAGUE JAN W. E. BUIJS, ARCHITECT

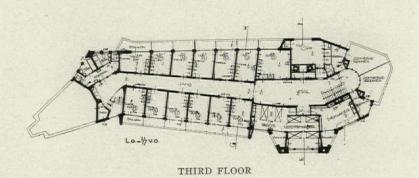


DETAIL OF BAY, RUDOLF STEINER CLINIC, THE HAGUE JAN W. E. BUIJS, ARCHITECT

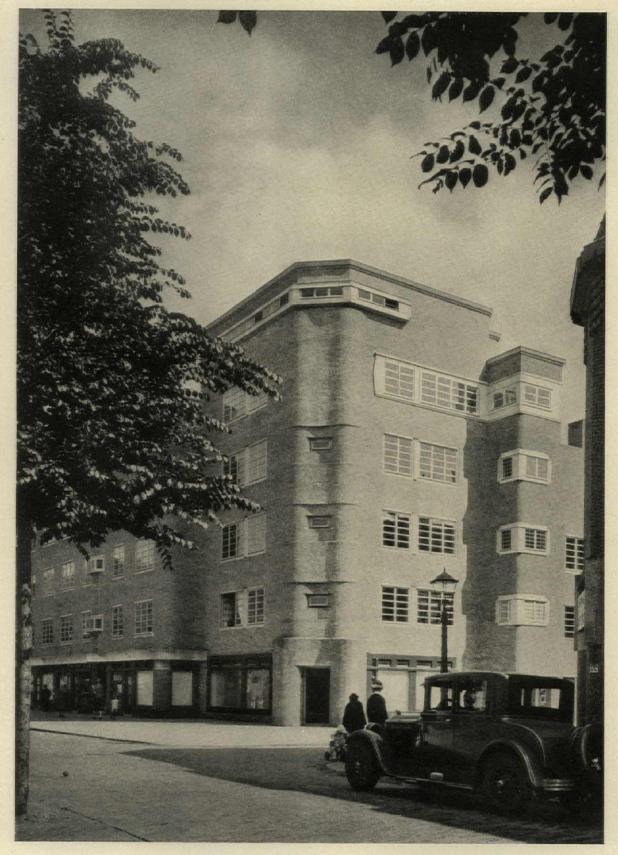
Plans on Back



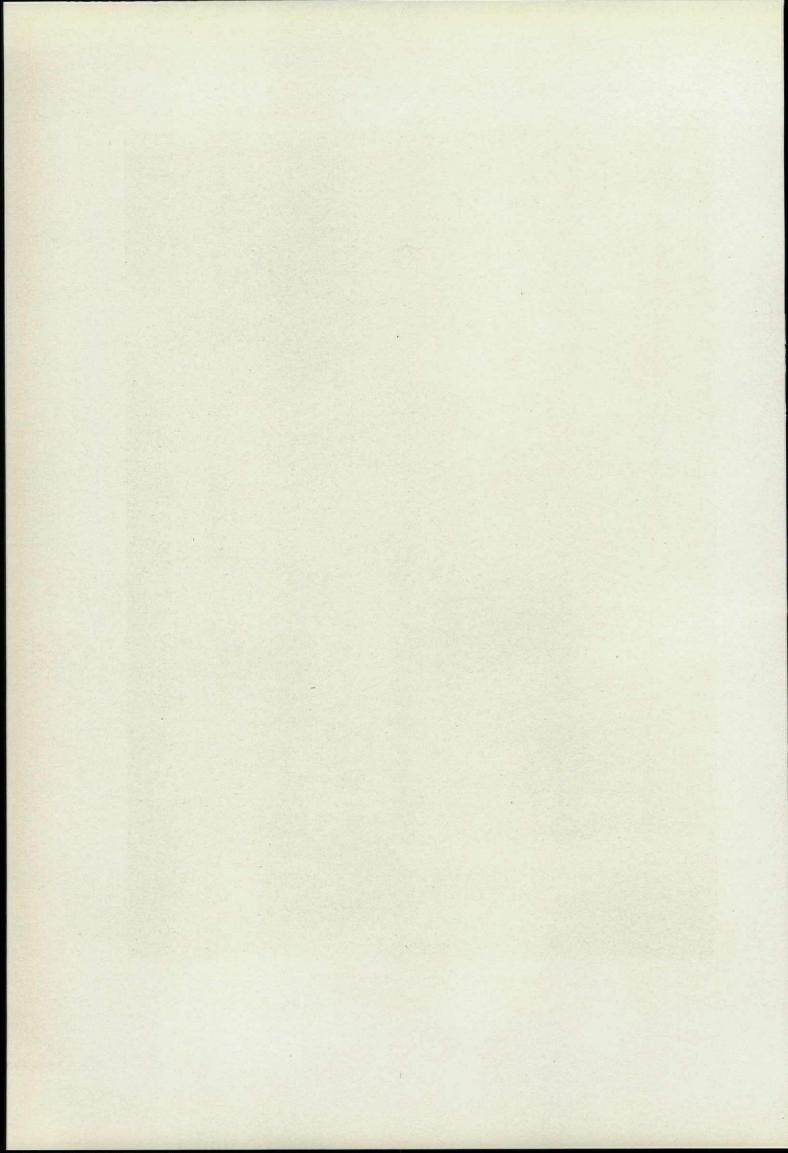
FOURTH FLOOR



PLANS: RUDOLF STEINER CLINIC, THE HAGUE JAN W. E. BUIJS, ARCHITECT

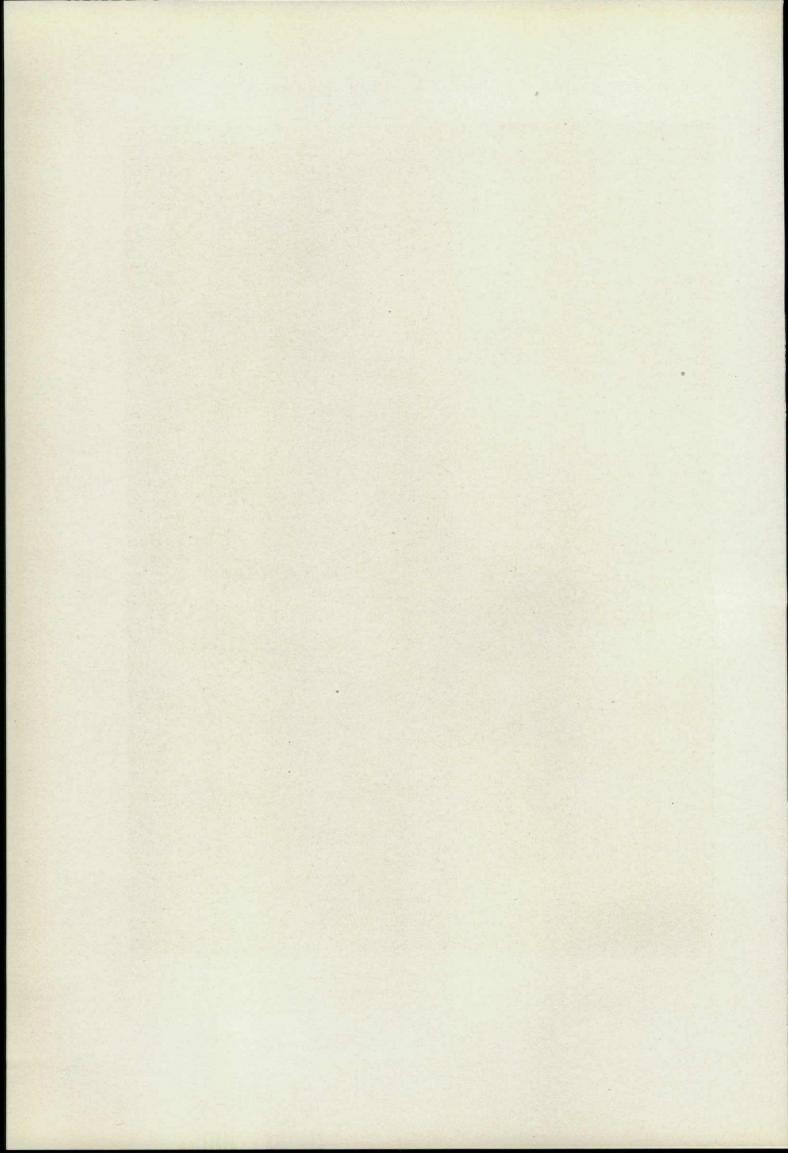


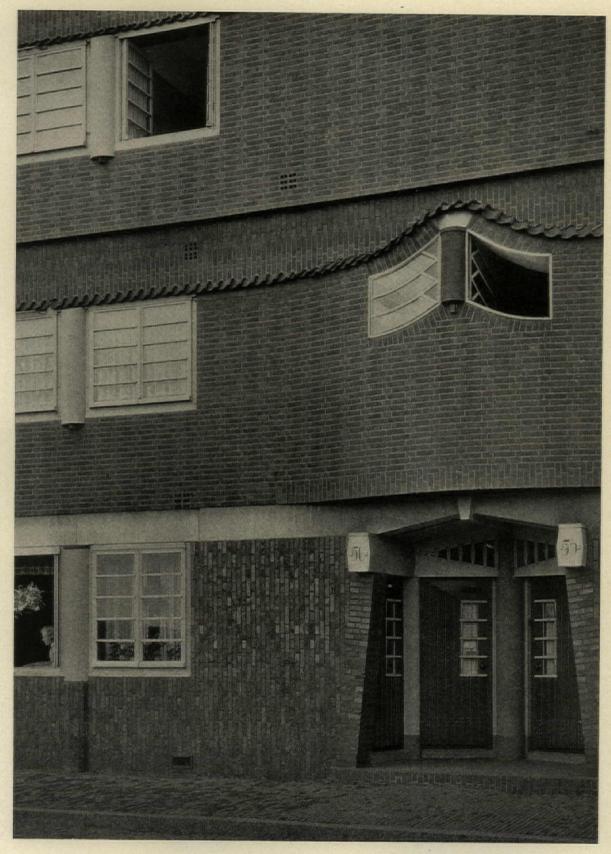
APARTMENT HOUSE, AMSTERDAM PETER KRAMER, ARCHITECT



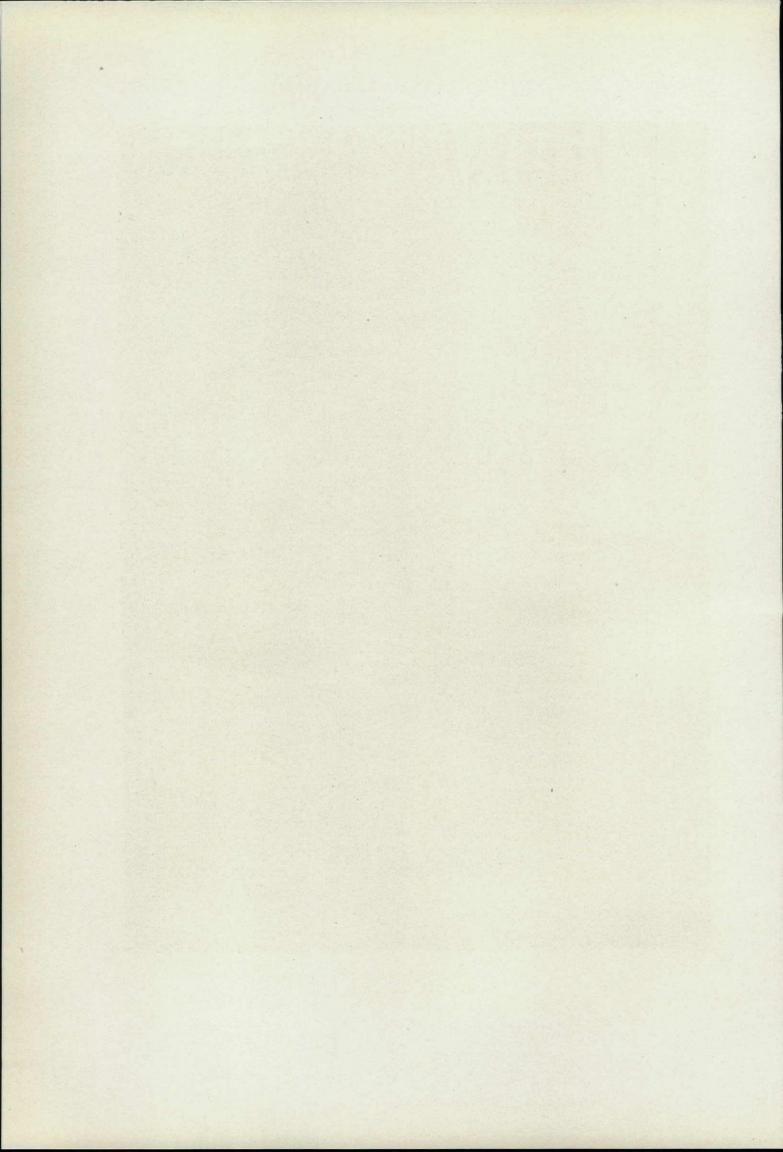


APARTMENT HOUSE, AMSTERDAM S. DE KLERCK, ARCHITECT



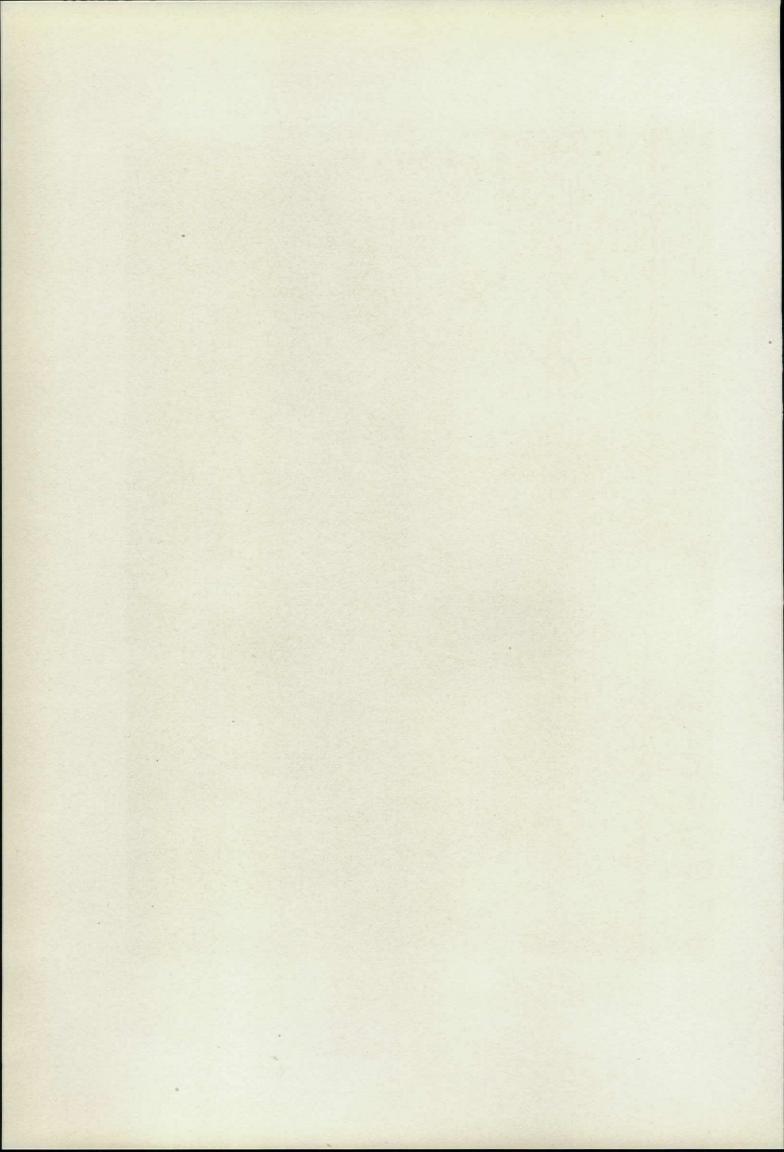


DETAIL, APARTMENT HOUSE, AMSTERDAM S. DE KLERCK, ARCHITECT



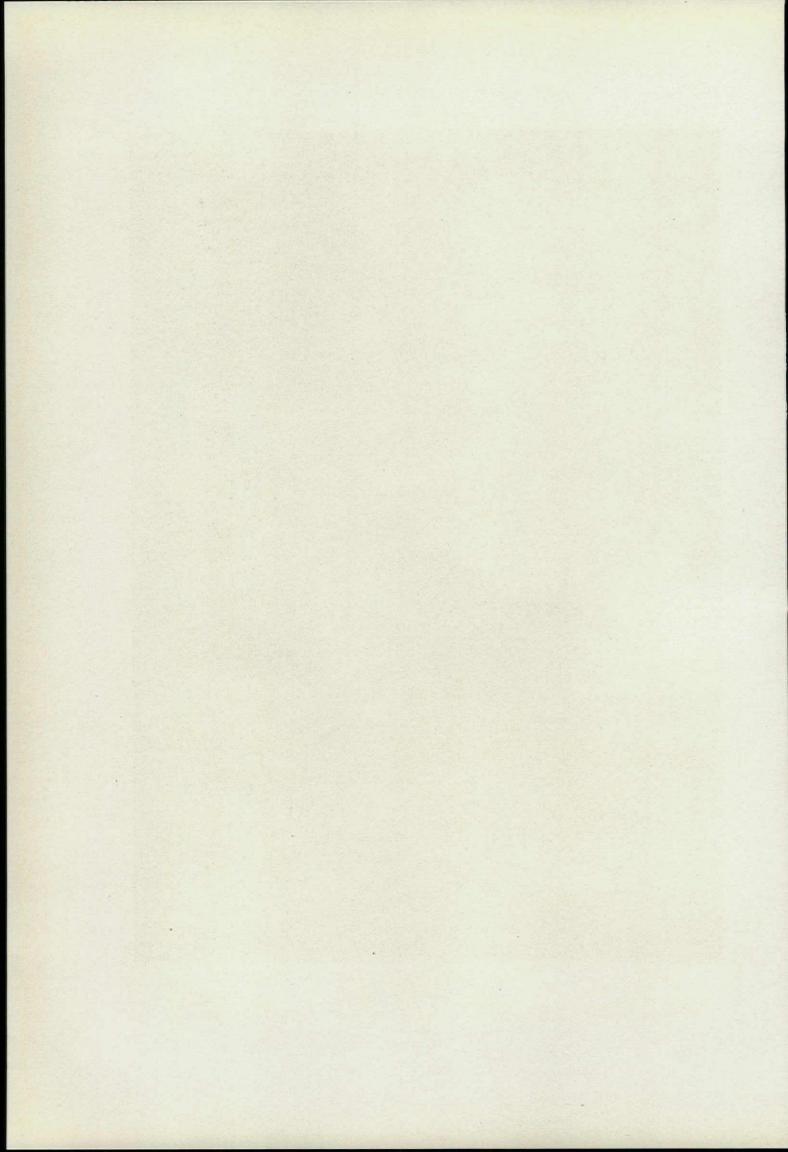


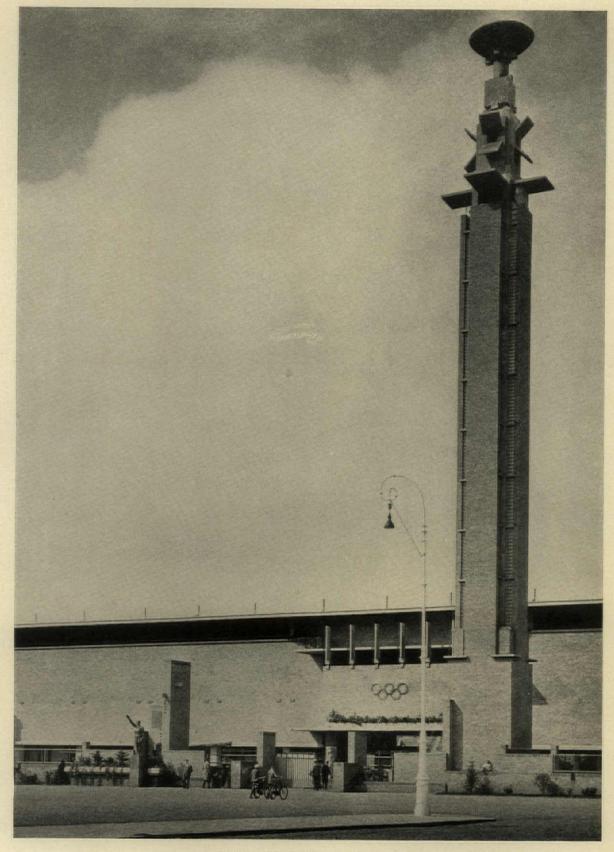
DETAIL, APARTMENT HOUSE GROUP, AMSTERDAM S. DE KLERCK, ARCHITECT



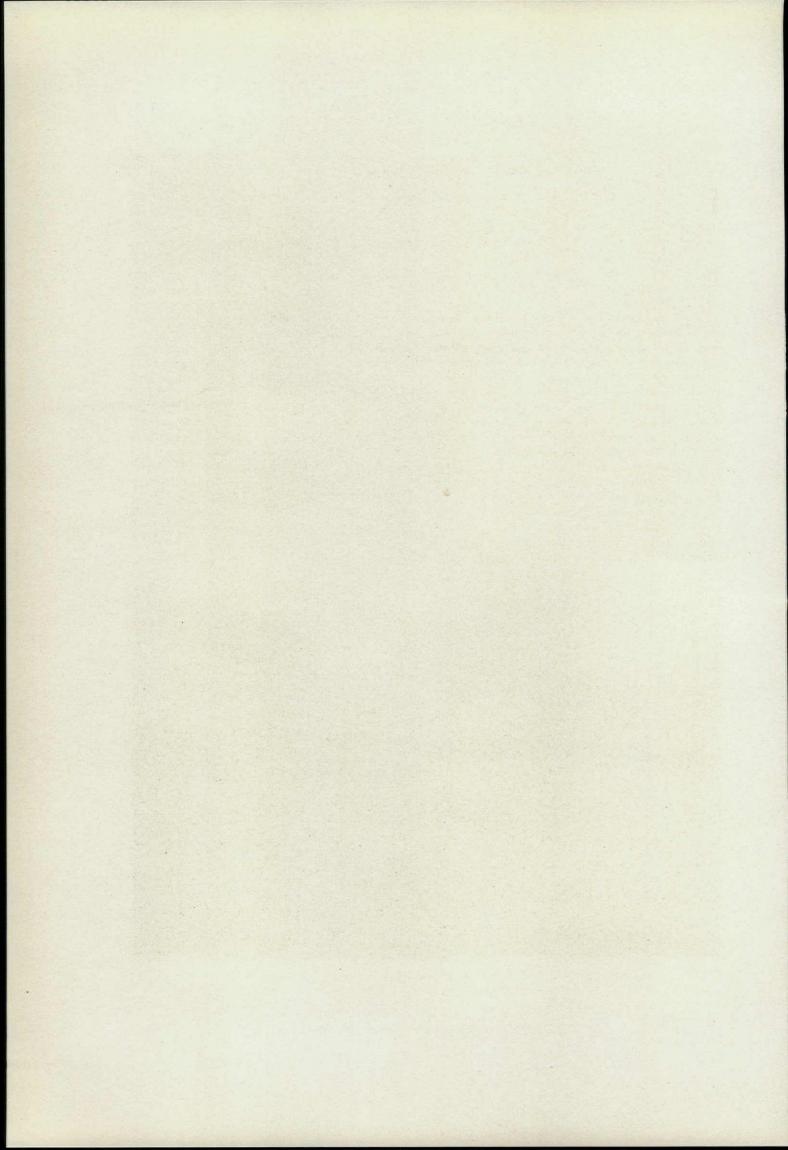


SCHOOL IN APARTMENT HOUSE GROUP, AMSTERDAM S. DE KLERCK, ARCHITECT





OLYMPIC STADIUM, AMSTERDAM JAN WILLS, ARCHITECT



THE REJUVENESCENCE OF WROUGHT IRON

PART TWO

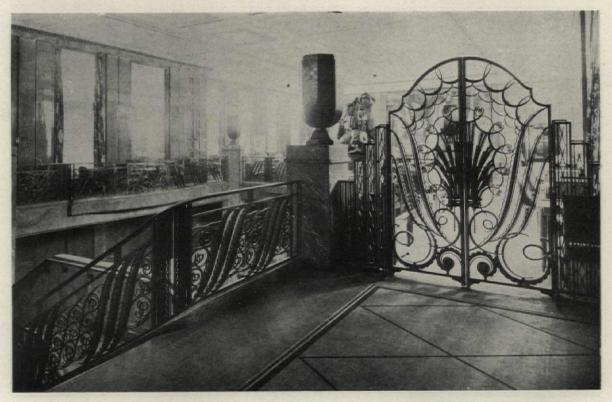
BY

W. FRANCKLYN PARIS

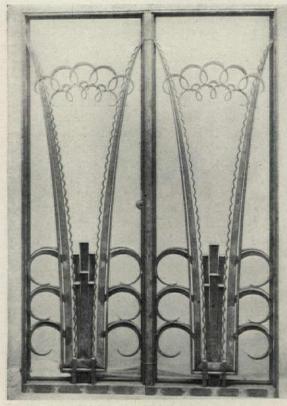
IN the January issue of THE FORUM something was said regarding the excellent metal work being produced by the French ferronniers and the striking beauty of many of the effects which they secure. One of these effects, which is of particular interest, is used by Brandt in many of his pieces where gold and silver contrasts are graded through oxidation as in the door, "Les Cigognes," where a Japanese flavor is imparted by three storks in flight, and the supple and pliant composition, "Les Bouquets," where light and shade effects are obtained by roughening some of the surfaces so that they may catch the light at certain angles. Where the door is to be exposed to the weather, Brandt's forge work is more massive, and the iron is allowed to show the marks of the hammer, as in one outer door in which pine needles and cones are used as a decorative motif. If the door's function is to be performed indoors, the metal is smooth and polished as in a dining room door picturing grapes clambering up a trellis. Brandt also executes designs commissioned by architects and decorators, and his role then becomes that of manufacturer, when credit or blame for the visual effect produced must proper-

ly belong to the designer or the composer, and not to the ferronnier. The stair rail executed for Paul Poiret shows at once that it is not the brain child of Brandt. It is the conception of the famous brothers Perret, the architects of that ultra-modern church of Raincy, which created a sensation in the architectural world some five years ago. Messrs. A. and G. Perret are radicals in art, and in their warfare against tradition and routine they have committed many geometrical atrocities.

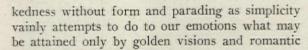
The public has been reproached so severely for having laughed or hissed in a few celebrated cases when it should not have done so, that it now maintains a prudent silence when confronted by hideous "art" committed under the alibi of "originality." Some of the modernists have taken advantage of this attitude of the general public and,—to use a picturesque colloquialism,—have "gotten away with murder." The theory that "loveliness needs not the foreign aid of ornament but is, when unadorned, adorned the most," is all very well, but when carried to extremes it yields an architecture of sharp angles, when packing cases piled one atop of another take the place of line, of balance and proportion, and where na-

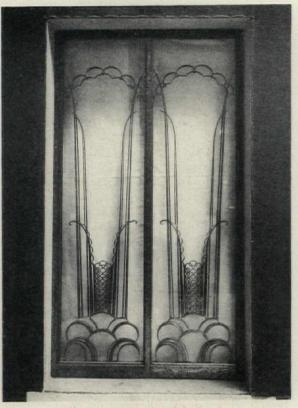


Rail and Gates, Grand Staircase, French Line S.S. "Ile de France"
Designed by Raymond Subes. R. Bouwens de Boijen, Architect



Gates, S.S. "He de France" Designed by Raymond Subes. R. Bouwens de Boijen, Architect



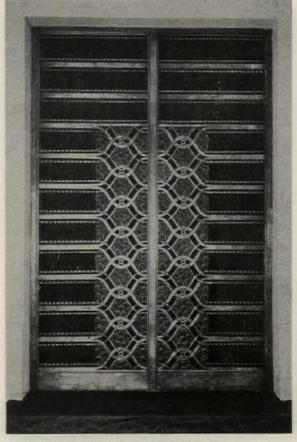


Grille Suggesting a Fountain
Designed and Executed by Raymond Subes

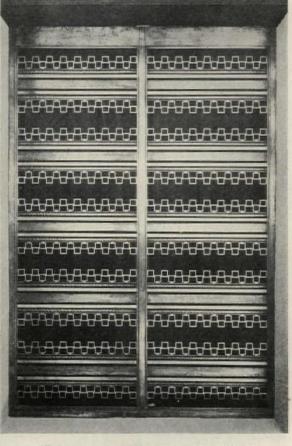
dreams. The Perrets and the Mallet-Stevenses and other apostles of the straight line no longer make a noise when they explode, however, and



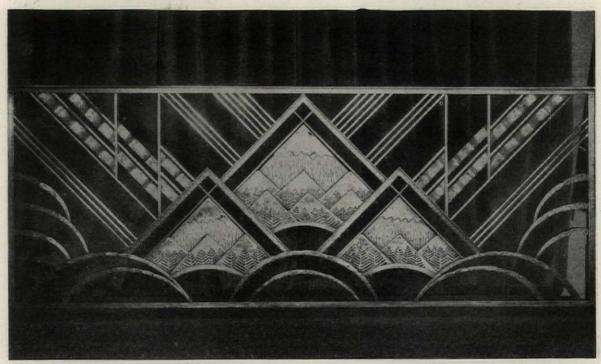
Communion Rail, Chapel on French Line S.S. "Ile de France" Designed by Raymond Subes. R. Bouwens de Boijen, Architect



GRILLE FROM SALON DES ARTISTES
DESIGNED BY RAYMOND SUBES
M. HENNEQUET, ARCHITECT



GRILLE IN BRONZE FOR DOORWAY
DESIGNED BY M. PATOUT, ARCHITECT
EXECUTED BY RAYMOND SUBES



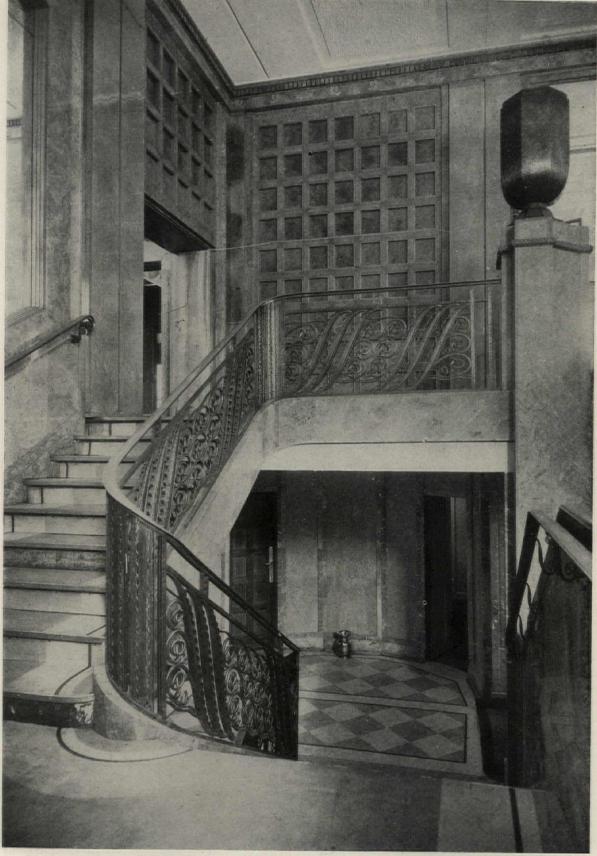
BALCONY RAILING FOR THE PARAMOUNT THEATER, PARIS M. MORGEAND, ARCHITECT

the extremists are all putting plenty of water into their wine. The tendency is still toward a virile style as contrasted with the effeminate expression prevalent under Louis XV, but as Nature has created very few square leaves on very few perfectly perpendicular trees, very few trapezoid men and women, and even fewer octagonal or rectangular clouds, the curve has come once more into favor. How much can be done with it, without abandoning the modern feeling, is exemplified in a baluster of wrought iron and bronze for a music room in Nice, where dancing figures are set in a delicate iron tracery of graceful volutes, and in an interior door, where conventional flowers are disposed in the intervals left by serpentine vines, crinkled and curly, all this in metal.

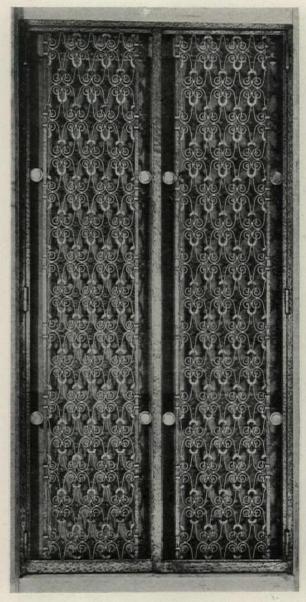
Space is lacking here in which to illustrate and analyze the work of all the ferronniers who are bringing fresh luster to the art of metal working in France, but in order to portray the diversity of expression that may exist among them, a few examples of the work of Raymond Subes may prove of value. Subes, like Brandt, is a disciple of Robert, but his mood is less sprightly than Brandt's, -more austere. He uses welding, but likes to leave on his metal the impress of the hammer. He seems to employ the modern technique with reluctance and to shun polished and finished effects. One of his latest productions, a balustrade for the Paramount Theater now being built in Paris, reflects his fondness for massive effects and rough surfaces. He is frequently employed to materialize the conceptions of others, but generally the architects who patronize him do so because they like his solidity of expression. Those who want delicacy or lightness generally commission Brandt



Grille Designed and Executed by Raymond Subes

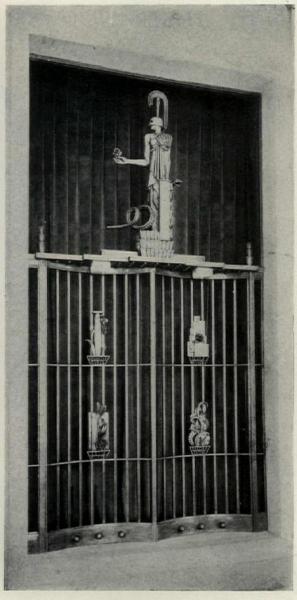


STAIR RAIL, FRENCH LINE S.S. "ILE DE FRANCE" DESIGNED BY RAYMOND SUBES. R. BOUWENS DE BOIJEN, ARCHITECT



Door Grille
Designed and Executed by Raymond Subes

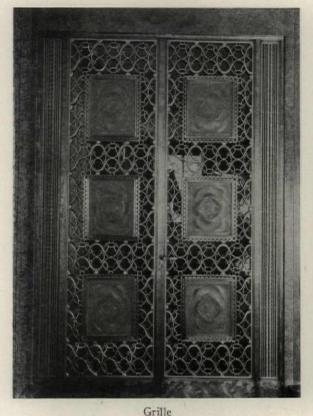
or Szabo to express it for them. Subes is for severity, for martele effects, for straight lines and geometrical simplicity. His work on the French liner, Ile de France, shows that he can employ the sinuous when the occasion requires it. The S.S.S. motif utilized in the balustrade and stair rail is inspired by the undulating movement of the ocean wave. The swelling effect, the sweep of the sea, is well expressed. His treatment of the altar rail and grille to the chapel of the ship reveals his fondness for rough-hewn metal. Occasionally he forgets that meuble signifies "mobile," and some of his furniture is so ponderous as to be doomed to immobility. He is the perpetrator of a folding screen in metal, a paravent, literally, a shield against drafts, which not only keeps off the wind



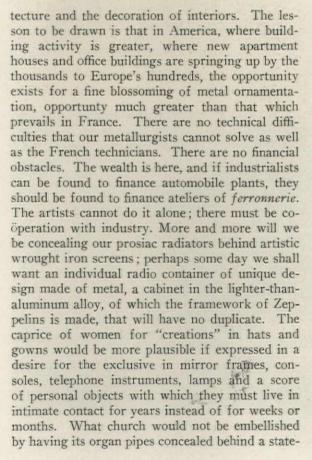
Entrance Gates
Designed by Raymond Subes, M. Expert, Architect

but which could easily keep off the outpourings of a machine gun! Why a windshield should be made of armor plate is one of the mysteries of the age. It is so heavy that two strong men are needed to move it! Lest the reader be left with an impression of clumsiness and a feeling of malappropriate treatment, however, we illustrate an outer door in which are embodied the artist's mastery of the new technique and his feeling for curvilinear ornamentation. The framed panels are of opaque pressed glass, and the effect produced is festive and airy, appropriate to its use.

What the ferronniers of France are doing in the lesser field of lamps and lighting fixtures, locks and door handles is just as admirable as what they are doing in the larger field of archi-



Designed and Executed by Raymond Subes

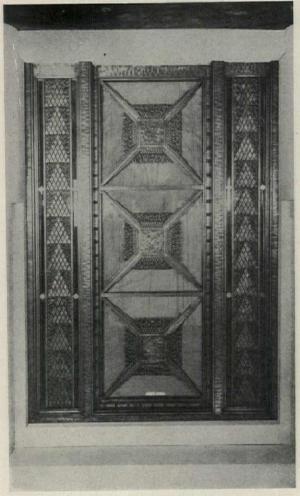




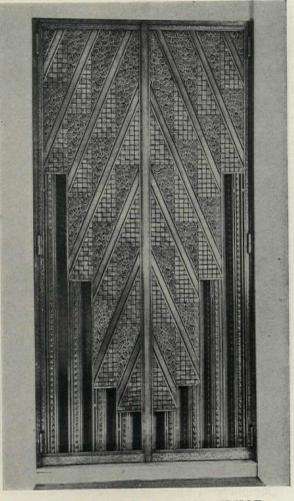
Designed and Executed by Edgar Brandt

ly wrought iron screen, or a bronze and copper grille with sculptured figures set in, as in Brandt's "Age d'Or" gate? Think of all the elevator cages, the shop window back drops, the porch balusters that could have individuality. What Daniel Chester French and Andrew O'Connor did in stone for the portico of St. Bartholomew's, some ferronnier can do in metal for the entrance to a bank or a hotel. The Fifth Avenue shop that would have a personal, unique, exclusive, distinctive, wrought iron screen against which to display its wares, would acquire a certain individuality.

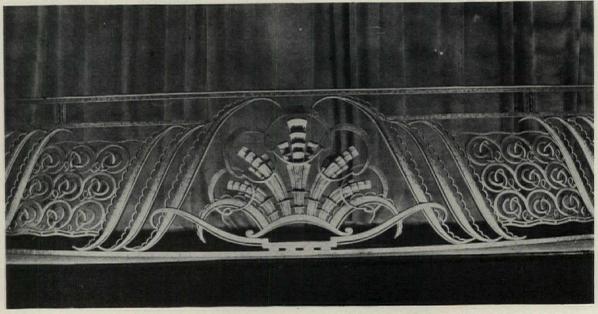
The possibilities are endless. Perhaps we have not the craftsmen-artists to execute all the work that might reasonably be expected. We have, however, able architects and artistic designers in whom the sense of ornament is highly developed who could draw cartoons for execution by the ferronniers. The limitations to expression in metal have been removed. The time element no longer exists. Almost anyone with a sense of proportion and an eye for beauty can design a pattern that will be translatable into iron, if he will observe the rule of fitness to purpose. There are nameless graces which no methods teach, but where the will exists a way is generally found. The hour is propitious for the flowering of ferronnerie in America if desire for this blossoming is given expression by architects and decorators.



DOOR FROM THE SALON DES ARTISTES
DESIGNED AND EXECUTED BY RAYMOND SUBES



UNUSUAL BRONZE DOOR GRILLE
DESIGNED AND EXECUTED BY RAYMOND SUBES



DETAIL OF THE STAIR RAIL, FRENCH LINE, S.S. "ILE DE FRANCE"
DESIGNED AND EXECUTED BY RAYMOND SUBES

THE BAGATELLE

BY

KATHARINE STANLEY-BROWN

X/E pass the marvelous iron grille whose black curves throw wavering shadows across the sun-streaked lawn, pass the gay little pavilion (can one believe it ever housed anything as prosaic as a guard?) and are in the gardens of the Bagatelle, gardens that, filled as they are now with riotous children and toddling babies, seem never to have lost their dignity and their stately grace, which, with a touch of irrepressible gaiety as well, was their legacy from the eighteenth century. The path meanders past tall oaks, trees of boxwood trained into unusual shapes, lindens with mossy trunks, and pink horse chestnuts, and where the ground is bare beneath the shadows, glossy ivy clusters in wide circles. We pass a little gate, a broken tower, and a stone door with some carving of the thirteenth century. They are all incidental in the gardens, like the grotto of the philosopher, the tall and rather grotesque water tower, the arched bridges over infinitesimal pools, surprises for the eye, fabrications which by their very artificiality cast a wider dignity upon the giant oaks and the quiet lawns. The path winds past the stables, no longer used for horses, but transformed now into a chic little tea house, La Roseraie, where, while one eats ices and munches petits-fours, the eye is constantly delighted by the gardens beyond. The end of the orangerie is visible, as is also the tiny picking garden, outlined by hedges lower than the general level of the grounds, whose ascending steps are marked by sky blue Italian pots full of passion flowers. The drinking fountains beside the stable doors have undergone a transformation also. They are filled with petunias, which blow softly back and forth in the gentle August breeze.

Summer in France! Delicious, sun-filled air drifting lightly past one, great bundles of white clouds in the blue clear sky above, and the Bagatelle, that charming plaything of the eighteenth century, which remains untouched, delicate and rare, in the midst of its gorgeous gardens. That tiny, buff colored chateau, its windows gay with overhanging white swags of fruit and flowers, seems just the building to find in the midst of so much beauty, just the plaything to expect. It is approached formally. Two small square gate houses, one boasting a clock, the other a compass, open upon a graveled court of honor. Between the little buildings two tall horse chestnuts rise by intention or training to exactly the same height. Terraces extend around the court of honor, their low walls with their ivy-covered windows concealing rooms approached on a lower

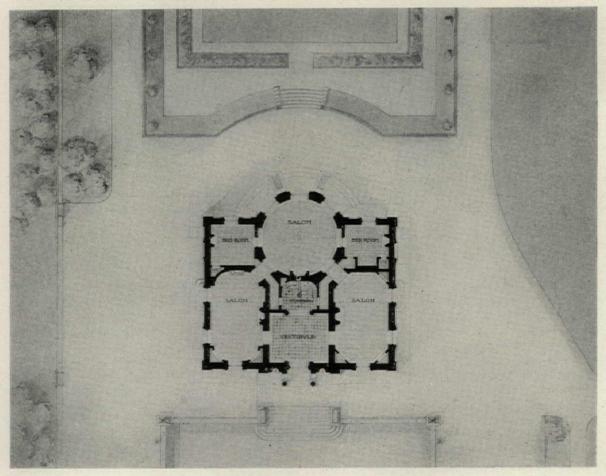
level, where domestics could be housed. On the right of the court is the little museum, built in the nineteenth century, but, charming as it is, we scarcely notice it, for at the end of the graveled stretch, square and shining in the sun, is the delicious, symmetrical, charming facade of the Bagatelle. The entrance doorway is flanked with pink marble pillars, the iron railing above is a miracle of design. High up on the facade the words Parva sed Apta are painted in gold across a black band. "Little but just right," it might be freely translated, remembering Peter Ibbetson and his beautiful little Mimsey Seraskier who lived in a house of that name. The two wings adjoining the central pavilion are scarcely wider than their single windows, and the whole building is crowned with the most charming copper dome, rising in shell-like form to a crest, a circle of swags and lions' heads. A tiny flag-pole rises from the center of this dome. Does it fly a pennant sometimes with the fleur-de-lis of France, I wonder? It would seem appropriate to find the colors royal here. For it is just the resting place for a queen, that queen whose tiny feet had led her through a life which knew naught save "Pelegance, l'amour, le chic." To take her through her last months, to behead her, these indeed were inappropriate gestures, sufficiently cruel for those of lesser clay. It was to rest her, to please her, that the Bagatelle was built.

On October 22, 1777, the Comte d'Artois, he who was later to be Charles X, wagered a million francs with his pretty sister-in-law, Marie Antoinette, that before she returned from Choisy, where they were residing, to her palace at Versailles, just nine weeks from then, he would offer her a perfect little gem of a house in which to break her journey. The queen, incredulous, took up the bet. Indeed, and who would not? Sixtyfour days! She knew the Comte d'Artois had recently bought the Bagniole, a dilapidated little thatched roof house in a lovely park on the edge of the Bois de Boulogne, which, though made famous by the excesses of its occupants under the Duchesse d'Estrees, the Prince de Chimay, and others, had been allowed to fall into complete disrepair. But that he, a mere lad of 17, could rebuild this, not alone rebuild, but decorate and furnish it and make it fit for the Queen of France to spend the night in, was incredible. And in 64 days! She had no worries about her wager!

The Comte d'Artois lost no time. He made his bet on the 22nd of October. On the morning of the next day 900 men were assembled and ready to start work on his casin as he called it, or little house. As the workmen hammered and sawed, the Comte's friends assembled on the terrace to see the marvel grow. He pointed his cane at it, and laughed: "It's nothing, a mere bagatelle!" and the name has clung to it ever since. His architect, Belanger, a great favorite at court, the originator of a thousand royal fetes and spectacles, fell into the spirit of the scheme at once,something rare, something tiny, and yet not too gorgeous for its rural setting. He laid out his plans, and surrounded himself with artists. Dussaulx came to paint arabesques on the delicate white and gold panels of the tiny rooms; L'Huillier's chisel rang as the nymphs and sphinxes took their places; Gouthiere contributed ten charming fireplaces with mantels in marble and bronze, long since celebrated. A Scotch gardener, Blaikie, laid out the lawns and pools and copses after the English fashion, but he cooperated with the French gardener, Chalgrin, to the extent of accepting his extraordinary suggestion that they plan the vistas after some of Hubert Robert's pictures. Chalgrin planned too the formal oblong garden plot behind the house. Its delicious

straight lines of roses and tall leaden jars lead beautifully from the terrace with its sphinxes and cupids toward the willfulness of the pools and grottos and lawns beyond. All this was most expensive and most difficult to arrange, but the Comte's mind and heart were set on winning his wager and achieving his "bibelot." He resorted to strategy, certainly strategy not admirable even in those less circumscribed days. Not being able to secure enough of the necessary building materials, he ordered regiments of Swiss guards to station themselves at the gates of Paris and seize whatever came in that might be of use to them. To be sure the material was paid for on the spot, but as it had already been paid for in other quarters and naturally had its own destination, the complications were immense. However, nothing daunted the Comte, who ordered the laborers to work in shifts both day and night, so that in exactly nine weeks the Bagatelle was completed. To be sure it cost the Comte three million francs, but he had the queen's million, lost on her wager, to help him with the debt.

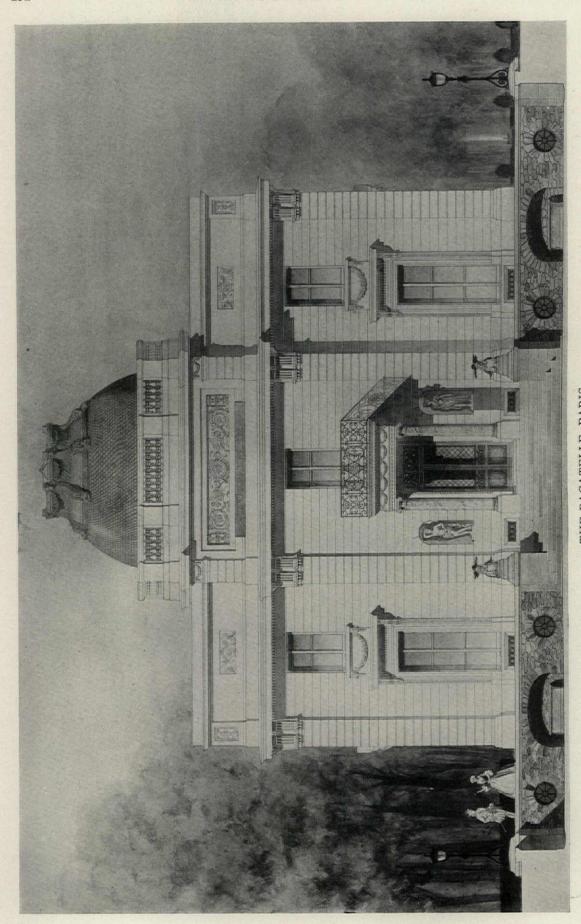
The Bagatelle was complete, the wager won, but sickness and mourning at court delayed the visit



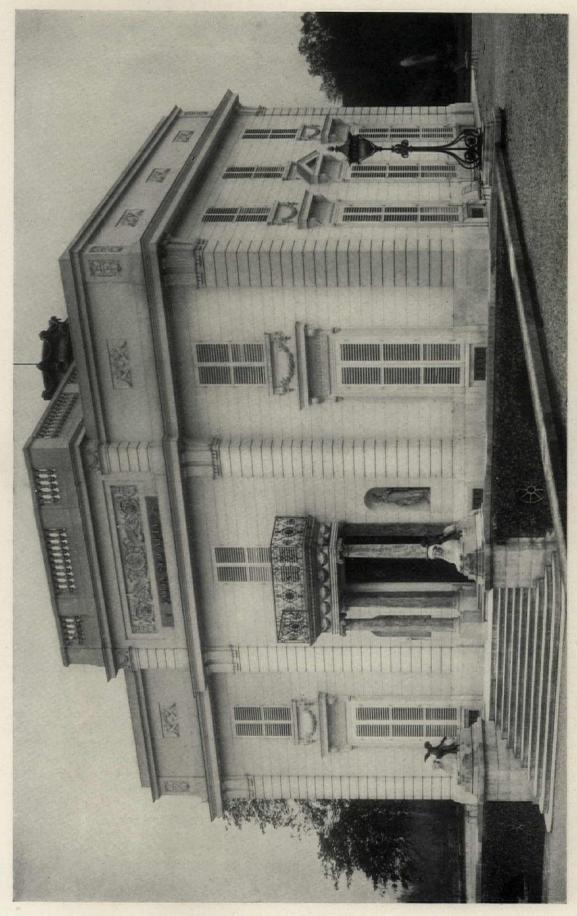
Plan of Ground Floor, the Bagatelle, Paris F. J. Belanger, Architect From a Drawing by Rudolph Stanley-Brown



MAIN FACADE, THE BAGATELLE, PARIS F. J. BELANGER, ARCHITECT



THE BAGATELLE, PARIS
F. J. BELANGER, ARCHITECT
FROM A RENDERED DRAWING BY RUDOLPH STANLEY-BROWN



MAIN FACADE, THE BAGATELLE, PARIS F. J. BELANGER, ARCHITECT

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East Facade of the Bagatelle

of the queen until May, 1778. On the 23rd of that month the Comte d'Artois offered the Queen Marie Antoinette a fete, "Rose and Colas," an opera-comique by Sedaine to be given in the gardens of the Bagatelle. Members of the court took part, and the queen herself impersonated a lady's maid. At one point in the progress of the piece, when there was a slight hesitation at the end of a speech by the queen, a whistle was heard. The queen, glancing toward the king, and recognizing him as the disturber, advanced to the edge of the stage, addressing him thus: "Monsieur, since you do not approve of my acting, will you not have the kindness to depart? They will give you back your money at the gate." The king, the chronicles read, was ashamed of himself, and demanded her pardon.

The Revolution struck the *Bagatelle* like a cyclone, as it so cruelly did to so much that was lovely in France. The statues were broken, the paintings and friezes were defaced, the gardens trampled upon. The methods of the Comte d'Artois, flown to Turin to save his own skin, had had too much publicity. His *folie* was not allowed to escape. Soldiers camped on the grounds, rare plants were dug up and removed,

and the estate was decreed by the convention to be a public playground, a place pour les jouissances du peuple. The château itself by 1806 had degenerated into a mediocre cabaret. In June of the same year, however, the Emperor Napoleon, installing law and order in his triumphant wake, bought the Bagatelle for 321,206 francs, "which includes the mirrors and the chandeliers." Napoleon made many necessary repairs, filled the forest with game and deer, and in the next few years dined there often or attended the carefully selected receptions which the Empress Josephine, assisted by her friend Tallien, loved to arrange. With the banishment of Josephine, and the arrival of Marie Louise and the little Roi de Rome. the Bagatelle became almost a "royal" nursery. The adored child was taken daily to the gardens for his airings, and when he was old enough to walk, he promenaded the length of the court between rows of guards who stood at rigid attention while he pattered innocently by. There too it was, in one of the tiny boudoirs adjoining the central circular salon, that the affecting first meeting between the ex-Empress Josephine and the little roi took place. Napoleon and Marie-Louise could fear no evil from one who had loved



Gate of Honor and Entrance Pavilion, the Bagatelle

and suffered as had Josephine. They granted her request to see this baby of 19 months, of whom she herself in the days when she was Napoleon's wife had so prayed to be the mother. So the meeting was arranged to take place at the *Bagatelle*. The records say that she entered, "all trembling with emotion," and kneeling before the imperial infant, who lay across the knees of the Comtesse de Montesquieu, his governess, "tenderly and longingly kissed his tiny hands and golden curls, then rushed from the room in sobs."

At the return of the Bourbons, the Bagatelle was given to the Duc de Berry, in whose hands it became a hunting lodge popular among the courtiers of the restoration. A card still exists inviting a guest to hunt: "Monsieur the Duke of Berry will hunt the fallow-deer in the Bois de Boulogne the tenth of this month. M...... is invited by His Royal Highness to present himself at the Bagatelle and partake of refreshments after the hunt. Signed, Comte de Nantouillet. (The breakfast will be at ten hours and a half.)"

In 1835 the *Bagatelle* came into the possession of a rich Englishman, Richard Seymour, the Marquis of Hertford, who in the years that followed restored it, not into its original form, which was literally impossible, but into a gracious and beautiful dwelling place. Augustin and the brothers

Adam were brought in to decorate the boudoir panels, of which the original paintings had been executed by Dussaulx and Dugourre. The rooms were embellished with pictures, vases, and objects of rare workmanship; 150,000 square metres were added to the property, the orangerie was built, and all was in perfect order when the first important visitor, Queen Victoria, arrived. The art collection eventually became so vast that when, on the death of his illustrious father, Lord Wallace received the Bagatelle as part of his inheritance, he found it necessary to construct the little museum at the right of the court to contain it. Again the circular salon, the tiny boudoirs, the dining room and the billiard room were restored to their shining gold and white simplicity. Lord Wallace's decorators removed all art works of inappropriate periods, and when after his death the French government bought the Bagatelle, it acquired as perfect an example of the style of the period of Louis XVI as is to be found in France. The swags, the wreaths, the designs in general have that tendency toward the purer Italian Renaissance forms which is found throughout France in the work of this period. Only in the fireplaces, charming in design and symbolism as they are, do we feel some lingerings of the Baroque and the heavier style of the period



The Grand Salon of the Bagatelle

just over. The handles and the hinges of gilt bronze are all delicate and true to the time, as are also the checker-board marble floors, the hanging staircase, and the white and gold panels picked out in color. The stone sphinxes that guard the doors are charming reminders of the eighteenth century. Their lions' flanks are draped with elaborate covers, and their women's heads are adorned with what appear to be curled and powdered wigs. On their backs alight, for an instant it seems, puzzled and decorative cupids whose hands caress the anomalies beneath them.

In the formal garden, too, are small cupids astride high leaden jars. Impudently, chin in hand, they stare across their vases at each other. The garden's oblong space is edged with rows of flowers. Pink, red and white geraniums mingle in charming complexity. The little standard rose trees that rise from the central beds open red, magenta, or yellow petals to the August sun. It is indifferent to the gardeners of the Bagatelle what colors may blend or not blend. The effect is riotous, elegant, charming, in fact exactly the note to have been struck in an eighteenth century garden. The colors from the lily pond beyond are gorgeous also. Across the pool there is a

stone grotto where water drips from cool, mysterious little crevices, while in the foreground are all the varieties of water lilies. Exotic and colorful, they line the edge. Even the labels giving their names, a legacy from the naturalist, Monsieur Gravereau, who made the gardens of the Bagatelle after the government acquired them into a veritable floral fairy land, are inspiring: Somptosa, Virginalis, Vesuve, Hermine, Superbe.

The gate lodge clock clangs a leaden double note. Sixteen hours. The good bourgeois droop in their seats. The children watch the gold fish which alternately loiter and dart about the garden pool. Shadows crawl across the lawn. The tiny round pavilion, whose latticed arches are filled with glass, catches some glints of the falling sun. It is just large enough to accommodate a tea table for two. How Count Fersen, who died to save her pretty head, would have loved to sit here and pour the tea in his queen's exquisite cup! The fleur-de-lis, the crown, the initials of the queen would all have been on that cup, made in Sevres, perhaps, a half-mile down the river. How the lackeys and the waiting maids must have rushed to unpack the queen's boxes! The coach, rattling into the court, waiting while out they tumbled.

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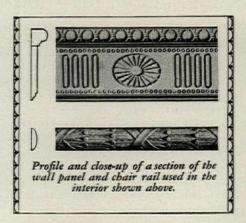
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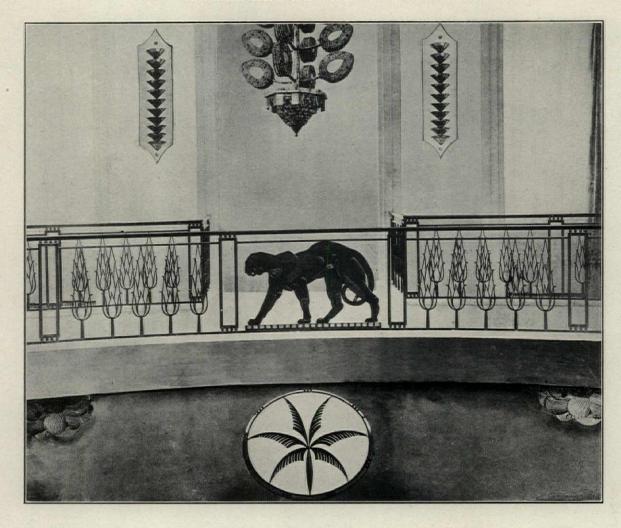
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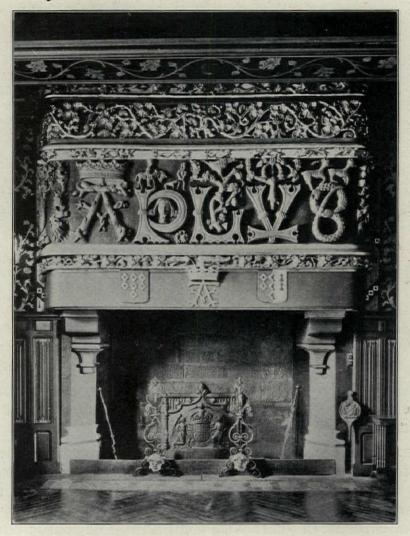
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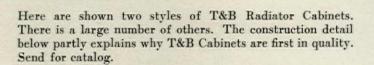
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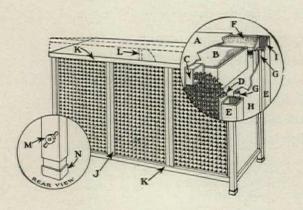
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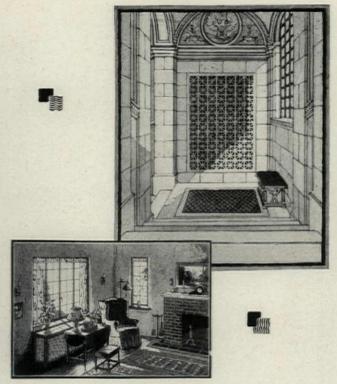




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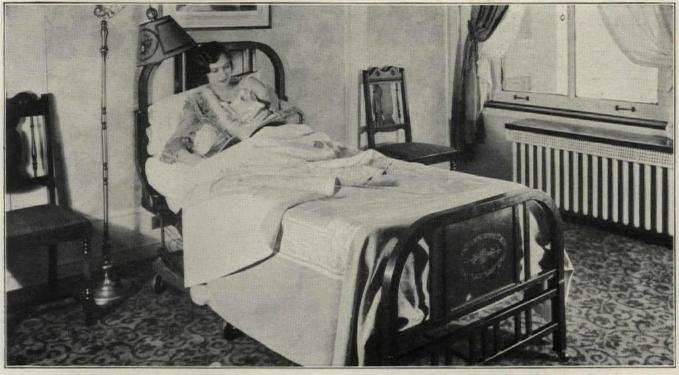
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With a touch of the hand the Warwick is down ... a real bed in every respect . . . ready to furnish the user with the utmost in sleeping accommodation. The parlor by day becomes a bedroom by night in thirty seconds

Whenever the user is ready to retire, the Warwick Bed rolls easily out of the closet to any desired part of the room. The large rubberoid castors make no sound . . . cannot damage rugs or carpets



THE "WHITE" DOOR BED COMPANY

40 East 49th Street, New York City Western Office: 130 North Wells Street, Chicago Sales Agents in Principal Cities

WARWICK ROLLER BED



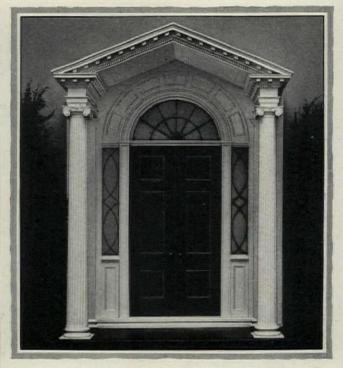
Pondosa Pine is the <u>logical</u> soft wood for you to specify

PONDOSA PINE is suitable for practically every building purpose. Every job where a dependable, light softwood is needed, is a job for this popular pine.

Every single stick is well seasoned, and easy to work. Every stick comes ready for the plane and saw. Pondosa takes paint beautifully and holds it. And the finished job retains its smooth, satiny surface against all sorts of weather and wear. In short, Pondosa Pine has all the qualities that make for a versatile, all-purpose softwood.

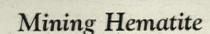
Pondosa Pine is trade-marked on the end grain. There is an abundant timber supply and ample mill stocks in shipping condition. Western Pine Manufacturers Association of Portland, Oregon.

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Entrance to old Bristol House, New Haven, Connecticut, now in the Metropolitan Museum

ARCHITECTS may specify entrances for their Colonial homes and other buildings that are practically duplicates of the Bristol House (shown above) and other famous doorways. In two new booklets is shown a notable group of such entrances and columns. Write for booklets I53 and 147. No charge. HARTMANN-SANDERS CO., 2151 Elston Ave., Chicago. Eastern Office and Showroom: 6 East 39th St., New York City.



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As far back as pre-Civil War days, iron ore was first mined in the vicinity of Clinton, New York. In those days, the mining was comparatively inexpensive, for the ore body lay close to the surface. As the vein went deeper, the cost of mining became so great that the production of ore for iron manufacturing was necessarily abandoned. But Clinton Hematite Red ore had such a superior color tone and staining power, that it became a valuable pigment in the manufacture of Mortar colors.

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Add to its superior color value, staining strength and permanence given by Nature, the scrupulous care in manufacture plus expert testing of the finished product—and you have the reason for Clinton Mortar Colors being the logical choice of architects for nearly a half century.

Color samples of Clinton Mortar Colors, with complete information regarding their use, sent upon request.

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Clinton Mortar Clors

Curtis offers for 1929 AUTHENTIC REPRODUCTIONS of the most beautiful woodwork designs from historic America

From a house made famous by

GENERAL WASHINGTON comes this beautiful mantel design

Few houses in America are richer in historical significance than the old Joseph Webb house, which was built in 1752, and is still standing in Wethersfield, Connecticut. It was in this house that General Washington held a council of war with the Count de Rochambeau and the Marquis de Chastellux, in May, 1781, which eventually led to the capture of Cornwallis at Yorktown.

And here is the mantel in the dining room of the old Webb house, faithfully reproduced by Curtis, for modern homes. Every detail is here: the delicately molded frame, the gracefully shaped frieze, the dentil molding and the shallow shelf of unusual charm. The mantel (C-6057) is made in white pine and can, like the original, be painted. It is also beautiful when oiled, stained, waxed or finished natural. The shelf is 6 feet, 65% inches long overall, 4 feet, 5½ inches left; 5¼ inches deep; the wood opening is 4 feet, 2 inches wide, 3 feet, 1 inch high. Price, unpainted only \$33.76! Other reproductions of famous old pieces of woodwork included in the Curtis line: Mantel from the Vernon house, in 1758; stairwork from the Burlington



County Court House, 1796; stair parts from the William Judson house, 1723, and the George Read II house, 1791-1801; also mantels and stairwork drawn from English inspiration.

Mantels, doorways, stairwork . . . faithfully copied from old Colonial and Early American houses . . . are being made available in limited quantities and at prices gratifyingly low

IMAGINE being able to give your clients—at prices they can afford—reproductions of woodwork from some of the finest old homes in America!

Now it can be done through new additions to the Curtis line. Here is one of them—a reproduction of the dining room mantelpiece in the old Joseph Webb house at Wethersfield, Conn.

This design has been produced in limited quantities and can be purchased through Curtis dealers prior to May 1, 1929, for only \$33.76!

This mantel will be one of the most distinguished architectural details that you can put in a house—and the years to come will enhance its value.

The Webb mantel is one of a large line of authentic woodwork reproductions, made of selected wood, and executed by craftsmen long skilled in the best cabinetwork and joinery. Doors,

windows, frames, stairwork, porchwork and interior trim are other items equally authentic in design and workmanship, which can be purchased from any Curtis dealer. Visit Curtis Woodwork, Inc., Display Rooms and Sales Office, Room 201, 9 East 41st St., New York City. Chicago Display Rooms, Curtis Door & Sash Co., 1414 So. Western Avenue, Chicago, Ill.

The Curtis Companies Service Bureau 953 Curtis Building, Clinton, Iowa

CURTIS WOODWORK

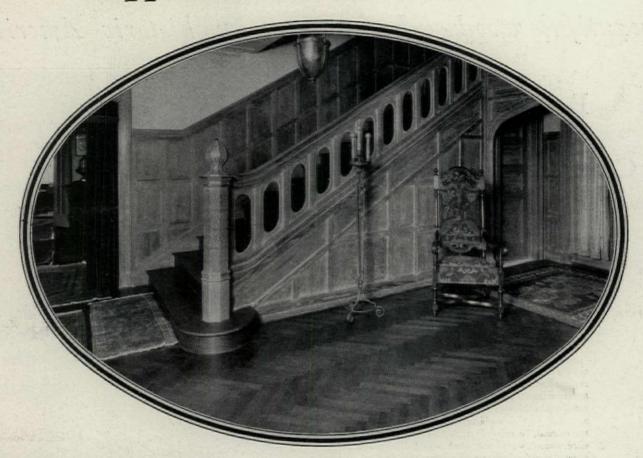
This trade-mark appears only on Curtis Woodwork and no item of woodwork that does not bear this mark is genuine Curtis Woodwork. For your own protection, be sure this mark is on each piece.

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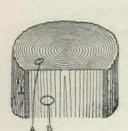
Curtis Companies, Inc., Clinton, Ia.; Curtis Bros. & Co., Clinton, Ia.; Curtis & Yale Co., Wausau, Wis.; Curtis Sash & Door Co., Sioux City, Ia.; Curtis, Towle & Paine Co., Lincoln, Nebr.; Curtis Door and Sash Co., Chicago, Ill.; Curtis-Yale-Holland Co., Minneapolis, Minn. and Curtis, Towle & Paine Co. Topeka, Kansas.

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Manufactured Exclusively from Appalachian Oak



Exclusive Quality for Your Distinctive Homes



Slow growth, dependent on ideal climate, soil and drainage in the Appalachian Highlands, causes narrow annular growth rings (A), which in turn produce close grain (B), resulting in a fine-grained floor.

Fundamental to the acknowledged superiority of Ritter Flooring is the inherent quality of the wood itself. Every foot of it is cut from Appalachian Highland Oak that has grown slowly, uniformly, under ideal conditions of climate, soil and drainage.

In addition to these natural conditions are the controlled conditions under which the lumber is fabricated, seasoned, annealed and handled, all of which are responsible for the commercial excellence

of which the name of Ritter is symbolic.

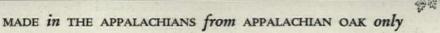
The skill with which every manufacturing operation is conducted, the exacting thoroughness of multiple inspection, the scrupulous care with which Ritter Flooring is graded for quality, all combine to augment and enhance its architectural acceptability.

To the architect this means better results and lasting satisfaction without the annoyances and delays incident to the use of cheaper materials.

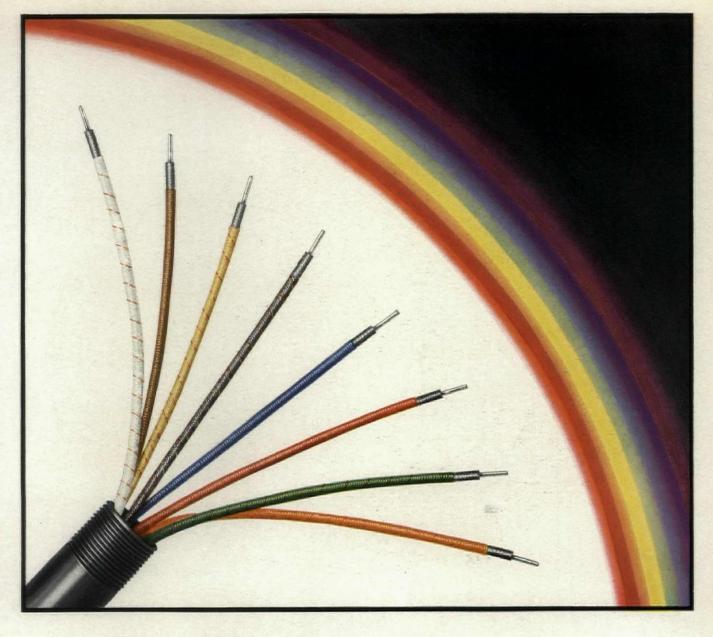
For additional information see either Sweet's or Architects' Manual

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These colored wires simplify changes and additions to wiring systems

When you specify the Rainbow Line of "U.S." Paracore Wires, you provide a permanently marked system of wiring.

During the life of your building, alterations and additions may be necessary. The use of colored wires will enable you or your client to effect these alterations with a minimum of tearing out and rebuilding. They eliminate circuit tracing and line testing. Circuits can be analyzed from wire colors as though they were blue prints.

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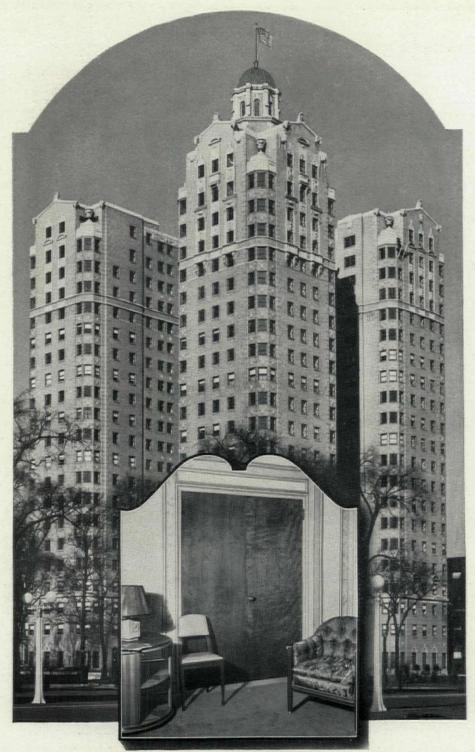
"U. S." Paracore Wires—Rainbow Finish—can be furnished from size No. 18 A.W.G. to 1,000,000 C.M.

Judge the many advantages of this outstanding line for yourself. Samples on request. Please address inquiries to Room 405 of the New York office, or to the "U. S." Branch nearest you.

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THIS is another impressive example of the preference given sanitary, sound- and fire-resisting Roddis Flush Doors. The genuine quality and exceptional beauty of Roddis Doors, and the complete cross unit, five layer, solid construction are more and more being recognized as superior: and the cost of Roddis Doors is in line with that of the ordinary. Interesting literature, sent on request, fully explains the greater value of Roddis Flush Doors for all buildings.

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Flush Doors. Hooper & Janusch,
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MANUFACTURER OF FLUSH, FRENCH, PANEL AND CUSTOM BUILT DOORS

Selected List of Manufacturers' Publications

FOR THE SERVICE OF ARCHITECTS, ENGINEERS, DECORATORS, AND CONTRACTORS

The publications listed in these columns are the most important of those issued by leading manufacturers identified with the building industry. They may be had without charge, unless otherwise noted, by applying on your business stationery to *The Architectural Forum*, 383 Madison Ave., New York, or the manufacturer direct, in which case kindly mention this publication.

R. Guastavino Co., 40 Court St., Boston. Akoustolith Plaster. Brochure, 6 pp., 8½ x 11 ins. Important data on a valuable material.

U. S. Gypsum Co., 205 W. Monroe St., Chicago, Ill.
A Scientific Solution of an Old Architectural Problem. Fol 6 pp., 8½ x 11 ins. Describes Sabinite Acoustical Plaster. Folder,

AIR FILTERS

Staynew Filter Corporation, Rochester, N. Y.
Protectomotor High Efficiency Industrial Air Filters. Booklet,
20 pp., 8½ x 11 ins. Illustrated. Data on valuable detail of
apparatus.

Making the Most of Your Protectomotor. Folder, 6 pp., 3½ x 6½ ins. Illustrated.

The Protectomotor Industrial Air Filter. Folder, 6 pp., 4 x 9 ins. Illustrated.

Introducing the Model C. P. Pipe Line Filter. Folder, 8 pp., 4 x 9 ins. Illustrated.

ASPHALT

Barber Asphalt Company, New York, Philadelphia, Chicago, Pitts-burgh, Kansas City, St. Louis, San Francisco. Specifications for Applying Genasco Asphalt Mastic. Booklet, 16 pp., 8 x 9 ins.

Genasco Trinidad Lake Asphalt Mastic. Brochure, 32 pp., 6 x 9 ins-

Specifications for Applying Genasco. Booklet, 16 pp., 8 x 101/2 ins.

BATHROOM FITTINGS

A. P. W. Paper Co., Albany, N. Y.
Onliwon for Fine Buildings. Folder, 8 pp., 3½ x 6 ins. Illustrated. Deals with toilet paper fittings of metal and porcelain.
Architects' File Card. 8½ x 11 ins. Illustrated. Filing card on toilet paper and paper towel cabinets.
A Towel Built for Its Job. Booklet, 8 pp., 4½ x 9½ ins. Illustrated. Paper Towel System and Cabinets.
Cabinets and Fixtures. Booklet, 32 pp., 5½ x 4¾ ins. Illustrated. Catalog and price list of fixtures and cabinets.

BRICK

American Face Brick Association, 1751 Peoples Life Building, Chicago, Ill.

Chicago, III.

Brickwork in Italy. 298 pp., size 7½ x 10½ ins., an attractive and useful volume on the history and use of brick in Italy from ancient to modern times, profusely illustrated with 69 line drawings, 300 half-tones, and 20 colored plates with a map of modern and XII century Italy. Bound in linen. Price now \$3.00, postpaid (formerly \$6.00). Half Morocco, \$7.00.

Industrial Buildings and Housing. Bound Volume, 112 pp., 8½ x 11 ins. Profusely illustrated. Deals with the planning of factories and employes' housing in detail. Suggestions are given for interior arrangements, including restaurants and rest rooms. Price now \$1.00, postpaid (formerly \$2.00).

Common Brick Mfrs. Assn. of America, 2134 Guarantee Title Bldg., Cleveland.

Brick; How to Build and Estimate. Brochure, 96 pp., 8½ x 11 ins. Illustrated. Complete data on use of brick.

The Heart of the Home. Booklet, 24 pp., 8½ x 11 ins. Illustrated. Price 25 cents. Deals with construction of fireplaces and chimneys.

Skintled Brickwork. Brochure, 16 pp., 8½ x 11 ins. Illustrated. Tells how to secure interesting effects with common brick. Building Economy. Monthly magazine, 22 pp., 8½ x 11 ins. Illustrated. \$1 per year, 10 cents a copy. For architects, builders and contractors.

Carney Company, The, Mankato, Minn.

A Remarkable Combination of Quality and Economy. Booklet, 20 pp., 8½ x 11 ins. Illustrated. Important data on valuable material.

Kosmos Portland Cement Company, Louisville, Ky.
Kosmortar for Enduring Masonry. Folder, 6 pp., 3½ x 6½ ins.
Data on strength and working qualities of Kosmortar.

Kosmortar, the Mortar for Cold Weather. Folder, 4 pp., 336 x 6½ ins. Tells why Kosmortar should be used in cold weather.

Louisville Cement Co., 315 Guthrie St., Louisville, Ky.

BRIXMENT for Perfect Mortar. Self-filing handbook, 8½ x 11 ins. 16 pp. Illustrated. Contains complete technical description of BRIXMENT for brick, tile and stone masonry, specifications, data and tests.

Missouri Portland Cement Company, St. Louis, Kansas City, Memphis.

Twenty-four Hour Cement. Booklet, 16 pp., 8½ x 11 ins. Illustrated. Data on a cement which makes a quick-drying concrete. Precautions for Concrete Paving Construction in Cold Weather. Folder, 4 pp., 6 x 9 ins.

CEMENT—Continued

Design and Control of Concrete Mixtures. Booklet, 32 pp., 8½ x 11 ins. Illustrated.

Concrete Paving Construction in Hot Weather. Booklet, 11 pp., 6 x 9 ins. Illustrated.

Portland Cement Association, Chicago, Ill.
Concrete Masonry Construction. Booklet, 48 pp., 8½ x 11 ins.
Illustrated. Deals with various forms of construction.
Town and Country Houses of Concrete Masonry. Booklet, 20 pp.,
8½ x 11 ins. Illustrated.

Facts About Concrete Building Tile. Brochure, 16 pp., 8½ x 11 ins. Illustrated.

The Key to Firesafe Homes. Booklet, 20 pp., $8\frac{1}{2}$ x 11 ins. 'Illustrated.

Design and Control of Concrete Mixers. Brochure, 32 pp., 8½ x 11 ins. Illustrated.

Portland Cement Stucco. Booklet, 64 pp., 81/2 x 11 ins. Illus-

Concrete in Architecture. Bound Volume, 60 pp., $8\frac{1}{2}$ x 11 ins. Illustrated. An excellent work, giving views of exteriors and

CONCRETE BUILDING MATERIALS

Kosmos Portland Cement Company, Louisville, Ky.
High Early Strength Concrete, Using Standard Kosmos Portland
Cement. Folder, 1 page, 8½ x 11 ins. Complete data on securing
high strength concrete in short time.

CONCRETE COLORINGS

The Master Builders Co., 7016 Euclid Ave., Cleveland.
Color Mix, Colored Hardened Concrete Floors (integral). Brochure, 16 pp., 8½ x 11 ins. Illustrated. Data on coloring for floors.

Concrete Surface Hardener in Colors. Folder, 4 pp., s. Illustrated. Data on a new treatment. Dychrome. 8 x 11 ins.

CONSTRUCTION, FIREPROOF

Master Builders Co., Cleveland, Ohio.
Color Mix. Booklet, 18 pp., 8½ x 11 ins. Illustrated. Valuable data on concrete hardener, waterproofer and dustproofer in

National Fire Proofing Co., 250 Federal St., Pittsburgh, Pa. Standard Fire Proofing Bulletin 171. 8½ x 11 ins., 32 pp. Illustrated. A treatise on fireproof floor construction.

North Western Expanded Metal Co., 1234 Old Colony Building, Chicago, Ill.

North Western Expanded Metal Co., 1234 Old Colony Building, Chicago, Ill.

North Western Expanded Metal Products. Booklet, 8½ x 10¾ ins. 16 pp. Fully illustrated, and describes different products of this company, such as Kno-burn metal lath, 20th Century Corrugated. Plaster-Sava and Longspan lath channels, etc.

A. I. A. Sample Book. Bound volume, 8½ x 11 ins., contains actual samples of several materials and complete data regarding their use.

CONSTRUCTION, STONE AND TERRA COTTA

Cowing Pressure Relieving Joint Company, 100 North Wells St., Chicago, Ill.

Pressure Relieving Joint for Buildings of stone, terra cotta or marble. Booklet, 16 pp., 8½ x 11 ins. Illustrated. Deals with preventing cracks, spalls and breaks.

DAMPPROOFING

The Master Builders Co., 7016 Euclid Ave., Cleveland.

Waterproofing and Dampproofing Specification Manual. Booklet,
18 pp., 8½ x 11 ins. Deals with methods and materials used.

Waterproofing and Dampproofing. File. 36 pp. Complete descriptions and detailed specifications for materials used in building and concrete.

Sonneborn Sons, Inc., L., 116 Fifth Ave., New York.
Specification Sheet, 8½ x 11 ins. Descriptions and specifications of compounds for dampproofing interior and exterior surfaces.

The Vortex Mfg. Co., Cleveland, Ohio.
Par-Lock Specification "Forms A and B" for dampproofing and plaster key over concrete and masonry surfaces.

Par-Lock Specification "Form J" for dampproofing the wall surfaces that are to be plastered.

Par-Lock Dampproofing. Specification Forms C, F, I and J Sheets 8½ x 11 ins. Data on gun-applied asphalt dampproofing for floors and walls.

DOORS AND TRIM, METAL

The American Brass Company, Waterbury, Conn.

Anaconda Architectural Bronze Extruded Shapes. Brochure,
180 pp., 8½ x 11 ins., illustrating and describing more than
2.000 standard bronze shapes of cornices, jamb casings, mould-

SELECTED LIST OF MANUFACTURERS' PUBLICATIONS—Continued from page 59

DOORS AND TRIM, METAL-Continued

Richards-Wilcox Mig. Co., Aurora, III.
Fire-Doors and Hardware. Booklet, 8½ x 11 ins. 64 pp. Illustrated. Describes entire line of tin-clad and corrugated fire doors, complete with automatic closers, track hangers and all the latest equipment—all approved and labeled by Underwriters' Laboratories.

Truscon Steel Company, Youngstown, Ohio.
Copper Alloy Steel Doors. Catalog 110. Booklet, 48 pp., 8½ x 11 ins. Illustrated.

DOORS, SOUNDPROOF

Irving Hamlin, Evanston, Ill.

The Evanston Soundproof Door. Folder, 8 pp., 8½ x 11 ins.

Illustrated. Deals with a valuable type of door.

DUMBWAITERS

Sedgwick Machine Works, 151 West 15th St., New York.
Catalog and Service Sheets. Standard specifications, plans and prices for various types, etc. 4½ x 8½ ins. 60 pp. Illustrated.
Catalog and pamphlets, 8½ x 11 ins. Illustrated. Valuable data on dumbwaiters.

ELECTRICAL EQUIPMENT

Baldor Electric Co., 4358 Duncan Avenue, St. Louis, Mo.
Baldor Electric Motors. Booklet, 14 pp., 8 x 10½ ins. Illustrated.
Data regarding motors.

General Electric Co., Merchandise Dept., Bridgeport, Conn.
Wiring System Specification Data for Apartment Houses and
Apartment Hotels. Booklet, 20 pp., 8 x 10 ins. Illustrated.

"Electrical Specification Data for Architects." Brochure, 36 pp.,
8 x 10½ ins. Illustrated. Data regarding G. E. wiring materials and their use.

"The House of a Hundred Comforts." Booklet, 40 pp., 8 x 10½

rials and their use.

"The House of a Hundred Comforts." Booklet, 40 pp., 8 x 10½ ins. Illustrated. Dwells on importance of adequate wiring.

Pick & Company, Albert, 208 West Randolph St., Chicago, Ill. School Cafeterias. Booklet, 9 x 6 ins. Illustrated. The design and equipment of school cafeterias with photographs of installation and plans for standardized outfits.

Westinghouse Electric & Mfg. Co., East Pittsburgh, Pa. Electric Power for Buildings. Brochure, 14 pp., 8½ x 11 ins, Illustrated. A publication important to architects and engineers.

Nariable-Voltage Central Systems as applied to Electric Elevators. Booklet, 12 pp., 8½ x 11 ins. Illustrated. Deals with
an important detail of elevator mechanism.

Modern Electrical Equipment for Buildings. Booklet, 8½ x 11
ins. Illustrated. Lists many useful appliances.

Electrical Equipment for Heating and Ventilating Systems.
Booklet, 24 pp., 8½ x 11 ins. Illustrated. This is "Motor
Application Circular 7379."

Mestinghouse Paralhogyals and Cabinets (Catalog 42.A). Booklet

Westinghouse Panelboards and Cabinets (Catalog 42-A). Booklet, 32 pp., 8½ x 11 ins. Illustrated. Important data on these 32 pp., 8½ x 11 ins. details of equipment.

Beauty; Power; Silence; Westinghouse Fans (Dealer Catalog 45).
Brochure, 16 pp., 8½ x 11 ins. Illustrated. Valuable information on fans and their uses.
Electric Range Book for Architects (A. I. A. Standard Classification 31 G-4). Booklet, 24 pp., 8½ x 11 ins. Illustrated. Cooking apparatus for buildings of various types.

Westinghouse Commercial Cooking Equipment (Catalog 280). Booklet, 32 pp., 8½ x 11 ins. Illustrated. Equipment for cooking on a large scale.

Electric Appliances (Catalog 44-A). 32 pp., 8½ x 11 ins. Deals with accessories for home use.

ELEVATORS

Otis Elevator Company, 260 Eleventh Ave., New York, N. Y.
Otis Push Button Controlled Elevators. Descriptive leaflets, 8½
x 11 ins. Illustrated. Full details of machines, motors and
controllers for these types.

controllers for these types.

Otis Geared and Gearless Traction. Elevators of All Types. Descriptive leaflets. 8½ x 11 ins. Illustrated. Full details of machines, motors and controllers for these types.

Escalators. Booklet. 8½ x 11 ins. 22 pp. Illustrated. Describes use of escalators in subways, department stores, theaters and industrial buildings. Also includes elevators and dock elevators.

Richards-Wilcox Mfg. Co., Aurora, Ill.
Elevators. Booklet. 8½ x 11 ins. 24 pp. Illustrated. Describes complete line of "Ideal" elevator door hardware and checking devices, also automatic safety devices.

Sodowick Machine Works. 151 West 15th St., New York, N. Y.

Sedgwick Machine Works, 151 West 15th St., New York, N. Y. Catalog and descriptive pamphlets, 4½ x 8½ ins., 70 pp. Illustrated. Descriptive pamphlets on hand power freight elevators, sidewalk elevators, automobile elevators, etc.

Catalog and pamphlets, $8\frac{1}{2} \times 11$ ins. Illustrated. Important data on different types of elevators.

Otis Elevator Company, 260 Eleventh Ave., New York, N. Y. Escalators. Booklet, 32 pp., 8½ x 11 ins. Illustrated. A valuable work on an important item of equipment.

FIREPLACE CONSTRUCTION

H. W. Covert Company, 243 East 44th Street, New York, N. Y. Covert Fireplace Construction. Booklet, 12 pp., 8½ x 11 ins. Illustrated. Valuable data on an important topic.

FIREPROOFING

Concrete Engineering Co., Omaha, Nebr.

"Handbook of Fireproof Construction." Booklet, 54 pp., 8½ x 11 ins. Valuable wrk on methods of fireproofing.

North Western Expanded Metal Co., 407 South Dearborn St., Chicago, Ill.

A. I. A. Sample Book. Bound volume, 8½ x 11 ins. Contains actual samples of several materials and complete data regarding their use.

ing their use.

FLOOR HARDENERS (CHEMICAL)

Master Builders Co., Cleveland, Ohio.
Concrete Floor Treatment. File, 50 pp. Data on securing hard-ened dustproof concrete.

Concrete Floor Treatments—Specification Manual. Booklet, 24 pp., 8½ x 11 ins. Illustrated. Valuable work on an important subject.

Sonneborn Sons, Inc., L., 116 Fifth Ave., New York, N. Y.
Lapidolith, the liquid chemical hardener. Complete sets of specifications for every building type in which concrete floors are used, with descriptions and results of tests.

FLOORS-STRUCTURAL

Truscon Steel Co., Youngstown, Ohio.

Truscon Floretyle Construction. Booklet, 8½ x 11 ins., 16 pp. Illustrations of actual jobs under construction. Lists of properties and information on proper construction. Proper method of handling and tables of safe loads.

Structural Gypsum Corporation, Linden, N. J. Gypsteel Pre-cast Fireproof Floors. Booklet, 36 pp., 8½ x 11 ins. Illustrated. Data on flooring.

FLOORING

Armstrong Cork Co. (Linoleum Division), Lancaster, Pa.
Armstrong's Linoleum Floors. Catalog, 8½ x 11 ins., 44 pp. Color
plates. A technical treatise on linoleum, including table of
gauges and weights and specifications for installing linoleum
floors. Newly revised, February, 1929.

Armstrong's Linoleum Pattern Book, 1929. Catalog, 9 x 12 ins.,
44 pp. Color plates. Reproduction in color of all patterns of
linoleum and cork carpet in the Armstrong line.

Linoleum Layer's Handbook. 5 x 7 ins., 36 pp. Instructions for linoleum layers and others interested in learning most satisfactory methods of laying and taking care of linoleum.

Enduring Floors of Good Taste. Booklet, 6 x 9 ins., 48 pp. Illustrated in color. Explains use of linoleum for offices, stores, etc., with reproductions in color of suitable patterns, also specifications and instructions for laying.

Blabon Company, Geo. W., Nicetown, Philadelphia, Pa.
Planning the Color Schemes for your Home. Brochure illustrated in color; 36 pp., 7½ x 10½ ins. Gives excellent suggestions for use of color in flooring for houses and apartments.

Handy Quality Sample Folder of Linoleums. Gives actual samples of "Battleship Linoleum," cork carpet, "Feltex," etc.

Blabon's Linoleum. Booklet illustrated in color; 128 pp., $3\% \times 8\%$ ins. Gives patterns of a large number of linoleums.

Blabon's Plain Linoleum and Cork Carpet. Gives quality samples, 3 x 6 ins. of various types of floor coverings.

Bonded Floors Company, Inc., 1421 Chestnut St., Philadelphia, Pa. A series of booklets, with full color inserts showing standard colors and designs. Each booklet describes a resilient floor material as follows:

Battleship Linoleum. Explains the advantages and uses of this durable, economical material.

Marble-ized (Cork Composition) Tile. Complete information on cork composition marble-ized tile and many artistic effects obtainable with it.

Treadlite (Cork Composition) Tile. Shows a variety of colors and patterns of this adaptable cork composition flooring.

Natural Cork Tile. Description and color plates of this super-quiet, resilient floor.

Resilient Floors in Schools. Resilient Floors in Stores. Resilient Floors in Hospitals. Resilient Floors in Offices. Resilient Floors in Apartments and Hotels. Booklets, 8 pp., 8½ x 11 ins. Illustrated.

Specifications for Resilient Floors. Leather bound booklet, 48 pp., 8½ x 11 ins. Illustrated. Practical working specifications for installing battleship linoleum, cork composition tile and cork

Carter Bloxonend Flooring Co., Keith & Perry Bldg., Kansas City,

Bloxonend Flooring. Booklet, 3½ x 6½ ins. 20 pp. Illustrated. Describes uses and adaptability of Bloxonend Flooring to concrete, wood or steel construction, and advantages over loose wood blocks.

wood blocks.

File Folder, 93\(\) x 113\(\) ins. For use in connection with A. I. A. system of filing. Contains detailed information on Bloxonend Flooring in condensed loose-leaf form for specification writer and drafting room. Literature embodied in folder includes standard Specification Sheet covering the use of Bloxonend in general industrial service and Supplementary Specification Sheet No. 1, which gives detailed description and explanation of an approved method for installing Bloxonend in gymnasiums, armories, drill rooms and similar locations where maximum resiliency is required.

Cellized Oak Flooring, Memphis, Tenn. Style in Oak Floors. Booklet, 16 pp., 6 x 9 ins. Illustrated.



Which of these materials would you select?



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THE CARNEY COMPANY
DISTRICT SALES OFFICES: CHICAGO CINCINNATI DETROIT ST. LOUIS MINNEAPOLIS
MILLS: MANKATO AND CARNEY, MINN.

Cement Makers Since 1883



Specifications
1 part Carney Cement to 3 parts sand.

SELECTED LIST OF MANUFACTURERS' PUBLICATIONS—Continued from page 60

FLOORING-Continued

Thomas Moulding Floor Co., 165 W. Wacker Drive, Chicago. Better Floors. Folder, 4 pp., 11½ x 13¾ ins. Illustrated. for office, administration and municipal buildings.

Better School Floors. Folder, 4 pp., 111/4 x 133/4 ins. Illustrated.

Characteristics, Specifications and Uses. Brochure, 16 pp., 11½ x 13¾ ins. Illustrated. Data on floors.

Structural Gypsum Corporation, Linden, N. J.

Gypsteel Pre-cast Fireproof Floors. Booklet, 36 pp., 8½ x 11 ins. Illustrated. Data on floorings.

ins. Illustrated. Data on floorings.

U. S. Gypsum Co., Chicago.

Pyrobar Floor Tile. Folder, 8½ x 11 ins. Illustrated. Data on building floors of hollow tile and tables on floor loading.

United States Quarry Tile Co., Parkersburg, W. Va.

Quarry Tiles for Floors. Booklet, 120 pp., 8½ x 11 ins. Illustrated. General Catalog. Details of patterns and trim for floors. Art Portfolio of Floor Designs. 9¼ x 12¼ ins. Illustrated in colors. Patterns of quarry tiles for floors.

S. Rubber Co., 1790 Broadway, New York, N. Y. Period Adaptations for Modern Floors. Brochure, 8 x 11 ins., 60 pp. Richly illustrated. A valuable work on the use of rubber tile for flooring in interiors of different historic styles.

FURNITURE

American Seating Co., 14 E. Jackson Blvd., Chicago, Ill.

Ars Ecclesiastica Booklet, 6 x 9 ins., 48 pp. Illustrations of church fitments in carved wood.

Theatre Chairs. Booklet, 6 x 9 ins., 48 pp. Illustrations of theatre chairs.

Kittinger Co., 1893 Elmwood Ave., Buffalo, N. Y.
Kittinger Club & Hotel Furniture. Booklet, 20 pp., 6½ x 9½
ins. Illustrated. Deals with fine line of furniture for hotels,
clubs, institutions, schools, etc.

clubs, institutions, schools, etc.

Kittinger Club and Hotel Furniture. Booklet, 20 pp., 6 x 9 ins.

Illustrated. Data on furniture for hotels and clubs.

A Catalog of Kittinger Furniture. Booklet, 78 pp., 11 x 14 ins.

Illustrated. General Catalog.

McKinney Mfg. Co., Pittsburgh, Pa.

Forethought Furniture Plans. Sheets, 6¼ x 9 ins., drawn to

¼-inch scale. An ingenious device for determining furniture arrangement.

ew York Galleries, Madison Avenue and 48th Street, New York. A Group of Distinguished Interiors. Brochure, 4 pp., 8¾ x 11¾ ins. Filled with valuable illustrations.

GARAGES

Ramp Buildings Corporation, 21 East 40th St., New York, N. Y. Building Garages for Profitable Operation. Booklet, 8½ x 11 ins. 16 pp. Illustrated. Discusses the need for modern mid-city parking garages, and describes the d'Humy Motoramp system of design, on the basis of its superior space economy and features of operating convenience. Gives cost analyses of garages of different sizes, and calculates probable earnings.

Garage Design Data. Series of informal bulletins issued in loose-leaf form, with monthly supplements.

GLASS CONSTRUCTION

Adamson Flat Glass Co., Clarksburg, W. Va. Quality and Dependability. Folder, 2 pp., 8½ x 11 ins. Illus-trated. Data in the company's product.

Libbey-Owens Sheet Glass Co., Toledo, Ohio.
Flat Glass. Brochure, 12 pp., 5% x 75% ins. Illustrated. History of manufacture of flat, clear, sheet glass.

GREENHOUSES

King Construction Company, North Tonawanda, N. Y.
King Greenhouses for Home or Estate. Portfolio of half-tone prints, varnishes, 8½ x 10½ ins.

William H. Lutton Company, 267 Kearney Ave., Jersey City, N. J.
Greenhouses of Quality. Booklet, 50 pp., 8½ x 11 ins. Illustrated. Conservatories making use of Lutton Patented Galvanized Steel V-Bar.

HARDWARE

P. & F. Corbin, New Britain, Conn.
Early English and Colonial Hardware. Brochure, 8½ x 11 ins.
An important illustrated work on this type of hardware.
Locks and Builders' Hardware. Bound Volume, 486 pp., 8½ x 11 ins. An exhaustive, splendidly prepared volume.
Colonial and Early English Hardware. Booklet, 48 pp., 8½ x 11 ins. Illustrated. Data on hardware for houses in these styles.
Cutler Mail Chute Company, Rochester, N. Y.
Cutler Mail Chute Model F. Booklet, 4 x 9¼ ins., 8 pp. Illustrated.

trated.

McKinney Mfg. Co., Pittsburgh, Pa.

Forged Iron by McKinney. Booklet, 6 x 9 ins. Illustrated.

Deals with an excellent line of builders' hardware.

Forged Lanterns by McKinney. Brochure, 6 x 9 ins. Illustrated, Describes a fine assortment of lanterns for various uses.

Richards-Wilcox Mfg. Co., Aurora, III.

Distinctive Garage Door Hardware. Booklet, 8½ x 11 ins., 66 pp.

Illustrated. Complete information accompanied by data and
illustrations on different kinds of garage door hardware.

Distinctive Elevator Door Hardware. Booklet, 90 pp., 10½ x 16
ins. Illustrated.

ussell & Erwin Mfg. Co., New Britain, Conn. Hardware for the Home. Booklet, 24 pp., 3½ x 6 ins. Deals with residence hardware.

Door Closer Booklet. Brochure, 16 pp., 3½ x 6 ins. Data on a valuable detail.

Garage Hardware Booklet, 12 pp., 3½ x 6 ins. Hardware intended for garage use.

HARDWARE-Continued

Famous Homes of New England. Series of folders on old homes and hardware in style of each.

HEATING EQUIPMENT

American Blower Co., 6004 Russell St., Detroit, Mich.
Heating and Ventilating Utilities A binder containing a large
number of valuable publications, each 8½ x 11 ins., on these
important subjects.

Important subjects.

American Radiator Company, The, 40 West 40th St., N. Y. C. Ideal Boilers for Oil Burning. Catalog 5½ x 8½ ins., 36 pp. Illustrated in 4 colors. Describing a line of Heating Boilers especially adapted to use with Oil Burners.

Corto—The Radiator Classic. Brochure, 5½ x 8½ ins., 16 pp. Illustrated. A brochure on a space-saving radiator of beauty and high efficiency.

and high efficiency.

Ideal Arcola Radiator Warmth. Brochure, 6½ x 9½ ins. Illustrated. Describes a central all-on-one-floor heating plant with radiators for small residences, stores, and offices.

How Shall I Heat My Home? Brochure, 16 pp., 5¾ x 8½ ins. Illustrated. Full data on heating and hot water supply.

New American Radiator Products. Booklet, 44 pp., 5 x 7¾ ins. Illustrated. Complete line of heating products.

A New Heating Problem. Brilliantly Solved. Broadside, 4 pp., 10¾ x 15 ins. Illustrated. Data on the IN-AIRID invisible air valve.

In-Airid, the Invisible Air Valve. Folder, 8 pp., $3\frac{1}{2}$ x 6 ins. Illustrated. Data on a valuable detail of heating.

The 999 ARCO packless Radiator Valve. Folder, 8 pp., $3\frac{1}{2}$ x 6 ins. Illustrated.

James B. Clow & Sons, 534 S. Franklin St., Chicago, Ill.
 Clow Gasteam Vented Heating System. Brochure, 24 pp., 8½ x
 11 ins. Illustrated. Deals with a valuable form of heating equipment for using gas.

equipment for using gas.

A. Dunham Company, 450 East Ohio St., Chicago, Ill.

Dunham Radiator Trap. Bulletin 101, 8 x 11 ins., 12 pp. Illustrated. Explains working of this detail of heating apparatus.

Dunham Packless Radiator Valves. Bulletin 104, 8 x 11 ins., 8 pp. Illustrated. A valuable brochure on valves.

Dunham Retu.n Heating System. Bulletin 109, 8 x 11 ins. Illustrated. Covers the use of heating apparatus of this kind.

Dunham. Vacuum Heating System. Bulletin 110, 8 x 11 ins., 12 pp. Illustrated.

The Dunham Differential Vacuum Heating System. Bulletin 114, Brochure, 12 pp., 8 x 11 ins. Illustrated. Deals with heating for small buildings.

The Dunham Differential Vacuum Heating System. Bulletin 115.
Brochure, 12 pp., 8 x 11 ins. Illustrated. Deals with heating for large buildings.

The Fulton Sylphon Company, Knoxville, Tenn.

Sylphon Temperature Regulators. Illustrated brochures, 8½ x

11 ins., dealing with general architectural and industrial applications; also specifically with applications of special instruments.

Sylphon Heating Specialties. Catalog No. 200, 192 pp., 3½ x 6¾ ins. Important data on heating.

T. Johnson Co., Oakland, Calif.
Bulletin No. 4A. Brochure, 8 pp., 8½ x 11 ins. Illustrated.
Data on different kinds of oil-burning apparatus.

Bulletin No. 31. Brochure, 8 pp., 8½ x 11 ins. Illustrated. Deals with Johnson Rotary Burner with Full Automatic Control.

Kewanee Boiler Corporation, Kewanee, Ill.

Kewanee on the Job. Catalog, 8½ x 11 ins., 80 pp. Illustrated. Showing installations of Kewanee boilers, water heaters, radiators, etc.

Catalog No. 78, 6 x 9 ins. Illustrated. Describes Kewanee Firebox Boilers with specifications and setting plans.

Catalog No. 79, 6 x 9 ins. Illustrated. Describes Kewanee power boilers and smokeless tubular boilers with specifications.

May Oil Burner Corp., Baltimore, Md.
Adventures in Comfort. Booklet, 24 pp., 6 x 9 ins. Illustrated.
Non-technical data on oil as fuel.

Taking the Quest out of the Question. Brochure, 16 pp., 6 x 9 ins. Illustrated. For home owners interested in oil as fuel.

McQuay Radiator Corporation, 35 East Wacker Drive, Chicago, Ill. McQuay Visible Type Cabinet Heater. Booklet, 4 pp., 8½ x 11 ins. Illustrated. Cabinets and radiators adaptable to decorative enhances. ins. Illustra.

McQuay Concealed Radiators. Brochure, 4 pp., 8½ x 11 ins. Illustrated.

McQuay Unit Heater. Booklet, 8 pp., $8\frac{1}{2}$ x 11 ins. Illustrated. Gives specifications and radiator capacities.

Nash Engineering Company, South Norwalk, Conn.

No. 37. Devoted to Jennings Hytor Return Line Vacuum Heating Pumps, electrically driven, and supplied in standard sizes up to 300,000 square feet equivalent direct radiation.

No. 16. Dealing with Jennings Hytor Air Line Heating Pumps. No. 17. Describing Jennings Hytor Condensation Pumps, sizes up to 70,000 square feet equivalent direct radiation.

No. 25. Illustrating Jennings Return Line Vacuum Heating Pumps. Size M, for equivalent direct radiation up to 5,000 square feet.

National Radiator Corporation, Johnstown, Pa.

Aero Radiators; Beauty and Worth. Catalog 34. Booklet, 6 x 9 ins., 20 pp., describing and illustrating radiators and accessories. Six Great Companies Unite to Form a Great Corporation. Booklet, 28 pp., 8½ x 10½ ins. Illustrated. Valuable data on heating.



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SELECTED LIST OF MANUFACTURERS' PUBLICATIONS—Continued from page 62

HEATING EQUIPMENT-Continued

Oil Heating Institute, 420 Madison Ave., New York, N. Y.
What About the Supply of Oil Fuel? Booklet, 16 pp., 5½ x 8
ins. Illustrated.

Petroleum Heat & Power Co., 511 Fifth Avenue, New York, N. Y. Heating Homes the Modern Way. Booklet, 8½ x 11¾ ins. Illustrated. Data on the Petro Burner.

Residence Oil Burning Equipment. Brochure, 6 pp., 8½ x 11 ins. Illustrated. Data regarding Petro Burner in a bulletin approved by Investigating Committee of Architects and Engineers.

Petro Mechanical Oil Burner & Air Register. Booklet, 24 8½ x 11 ins. Illustrated. Data on industrial installations Petro Burners.

Present Accepted Practice in Domestic Oil Burners. Folder, 4 pp., 8½ x 11 ins. Illustrated. A reprint from Heating and Ventilating Magazine.

Sarco Company, Inc., 183 Madison Ave., New York City, N. Y.
Steam Heating Specialties. Booklet, 6 pp., 6 x 9 ins. Illustrated,
Data on Sarco Packless Supply Valves and Radiator Traps
for vacuum and vapor heating systems.

for vacuum and vapor heating systems.

Equipment Steam Traps and Temperature Regulations. Booklet, 6 pp., 6 x 9 ins. Illustrated. Deals with Sarco Steam Traps for hospital, laundry and kitchen fixtures and the Sarco Self-contained Temperature Regulation for hot water service tanks.

Spencer Heater Co., Williamsport, Pa.
Catalog. Booklet, 20 pp., 6½ x 9 ins. Illustrated. Complete line of magazine feed cast iron sectional and steel tubular heaters. The Fire that Burns Uphill. Brochure, 24 pp., 6½ x 9½ ins. Illustrated in color. Magazine feed heaters for steam, vapor and hot water heating.

B. F. Sturtevant Company, Hyde Park, Boston, Mass. Tempervane Heating Units. Catalog 363. Booklet, 44 pp., 8½ x 11 ins. Illustrated. Data on "Heating Every Corner with Maximum Economy."

Trane Co., The, La Crosse, Wis.

Trane Co., The, La Crosse, Wis.
 Bulletin 14, 16 pp., 8½ x 10½ ins. Covers the complete line of Trane Heating Specialties, including Trane Bellows Traps, and Trane Bellows Packless Valves.

Bulletin 20. 24 pp., 8½ x 10½ ins. Explains in detail the operation and construction of Trane Condensation. Vacuum, Booster, Circulating, and similar pumps.

How to Cut Heating Costs. Booklet, 18 pp., 8½ x 11 ins. Illustrated.

HOSPITAL EQUIPMENT

The Frink Co., Inc., 369 Lexington Ave., New York City.

Catalog 426. 7 x 10 ins., 16 pp. A booklet illustrated with photographs and drawings, showing the types of light for use in hospitals, as operating table reflectors, linolite and multilite concentrators, ward reflectors, bed lights and microscopic reflectors, giving sizes and dimensions, explaining their particular fitness for special uses.

Holophane Company, 342 Madison Avenue, New York. Lighting Specific for Hospitals. Booklet, 30 pp., 8½ x 11 ins. Illustrated.

The International Nickel Company, 67 Wall St., New York, N. Y.
Hospital Applications of Monel Metal. Booklet, 8½ x 11½ ins.,
16 pp. Illustrated. Gives types of equipment in which Monel
Metal is used, reasons for its adoption, with sources of such

The Pick-Barth Companies, Chicago and New York.

Some Thoughts About Hospital Food Service Equipment. Booklet, 22 pp., 7½ x 9¼ ins. Valuable data on an important subject.

Wilmot Castle Company, Rochester, N. Y.
Sterilizer Equipment for Hospitals. Book, 76 pp., 8½ x 11 ins.
Illustrated. Gives important and complete data on sterilization of utensils and water, information on dressings, etc.

Sterilizer Specifications. Brochure, 12 pp., 8½ x 11 ins. Practical specifications for use of architects and contractors.

Architects' Data Sheets. Booklet, 16 pp., 8½ x 11 ins. Illustrated. Information on piping, venting, valving and wiring for hospital sterilizer installations.

Hospital Sterilizing Technique. Five booklets, 8 to 16 pp., 6 x 9 ins. Illustrated. Deals specifically with sterilizing instruments, dressings, utensils, water, and rubber gloves.

HOTEL EQUIPMENT

Pick & Company, Albert, 208 West Randolph St., Chicago, Ill. Some Thoughts on Furnishing a Hotel. Booklet, 7½ x 9 ins. Data on complete outfitting of hotels.

INCINERATORS

Home Incinerator Co., Milwaukee, Wis.
The Decent Way. Burn it with Gas. Brochure, 30 pp., 5½ x 7½ ins., inside. Illustrated. Incinerator sanitation equipment for residence use.

A. I. A. File, 12 pp., 8¾ x 10¾ ins., inside. Suggestions for architect on incineration, showing installation and equipment. Specialized Home Comforts Service Plan Book. 40 pp., 8½ x 11 ins., inside. Illustrated. A complete outline of the many advantages of incineration.

vantages of incineration.

Blue Star Standards in Home Building, 16 pp., 5½ x 8½ ins., inside. Illustrated. Explaining fully the Blue Star principles, covering heat, incineration, refrigeration, etc.

Kerner Incinerator Company, 715 E. Water St., Milwaukee, Wis. Incinerators (Chimney-fed). Catalog No. 15 (Architect and Builders' Edition). Size 8½ x 11 ins., 16 pp. Illustrated. Describes principles and design of Kernerator Chimney-fed Incinerators for residences, apartments, hospitals, schools, apartment hotels, clubs and other buildings. Shows all standard models and gives general information and working data.

INCINERATORS-Continued

CINERATORS—Continued

Sanitary Elimination of Household Waste. Booklet, 4 x 9 ins.

16 pp. Illustrated. Gives complete information on the Kernerator for residences.

Garbage and Waste Disposal for Apartment Buildings. Folder, 8½ x 11 ins., 16 pp. Illustrated. Describes principle and design of Kernerator-Chimney-fed Incinerator for apartments and gives list of buildings where it has been installed.

Sanitary Disposal of Waste in Hospitals. Booklet, 4 x 9 ins., 12 pp. Illustrated. Shows how this necessary part of hospital service is taken care of with the Kernerator. Gives list of hospitals where installed.

The Kernerator (Chimney-fed) Booklet. Catalog No. 17, 20 pp., 8½ x 11 ins. Illustrated. Data on a valuable detail of equipment.

INSULATION

Armstrong Cork & Insulation Co., Pittsburgh, Pa.
The Insulation of Roofs with Armstrong's Corkboard. Booklet.
Illustrated. 7½ x 10½ ins., 32 pp. Discusses means of insulating roofs of manulacturing or commercial structures.

Insulation of Roofs to Prevent Condensation. Illustrated booklet, 7½ x 10½ ins., 36 pp. Gives full data on valuable line of roof insulation.

Filing Folder for Pipe Covering Data. Made in accordance with A. I. A. rules.

"The Cork-lined House Makes a Comfortable Home." 5×7 ins. $32 \,$ pp. Illustrated.

Armstrong's Corkboard. Insulation for Walls and Roofs of Buildings. Booklet, 66 pp., 9½ x 11¼ ins. Illustrates and describes use of insulation for structural purposes.

Cabot, Inc., Samuel, Boston, Mass.
Cabot's Insulating Quilt. Booklet, 7½ x 10½ ins., 24 pp. Illustrated. Deals with a valuable type of insulation.
Celite Products Co., 1320 South Hope St., Los Angeles, Calif. Insulation of Breechings and Stacks. Folder, 2 pp., 8½ x 11 ins. Illustrated.

Structural Gypsum Corporation, Linden, N. J. Heat Insulation Value of Gypsteel. Folder, 4 pp., 8½ x 11 ins. Brochure, by Charles L. Norton, of M. I. T.

Bates Expanded Steel Truss Co., East Chicago, Ind. Catalog No. 4. Booklet, 32 pp., 8½ x 11 ins. Illustrated. Gives details of truss construction with loading tables and specifica-

KITCHEN EQUIPMENT

The International Nickel Company, 67 Wall St., New York, N. Y. Hotels, Restaurants and Cafeteria Applications of Monel Metal. Booklet, 8½ x 11 ins., 32 pp. Illustrated. Gives types of equipment in which Monel Metal is used, with service data and sources of equipment.

and sources of equipment.

Pick & Company, Albert, 208 W. Randolph St., Chicago, Ill.
School Careteria Portfolio, 11 x 17 ins., 44 pp. Illustrated. An
exhaustive study of the problems of school feeding, with copious illustrations and blue prints. Very valuable to the archi-

School Cafeterias. Booklet, 6 x 9 ins. Illustrated. The design and equipment of school cafeterias with photographs of installation and plans for standardized outfits.

LABORATORY EQUIPMENT

Alberene Stone Co., 153 West 23rd Street, New York City. Booklet, 8¼ x 11¼ ins., 26 pp. Stone for laboratory equipment, shower partitions, stair treads, etc.

Duriron Company, Dayton, Ohio.

Duriron Acid, Alkali and Rust-proof Drain Pipe and Fittings.

Booklet, 8½ x 11 ins., 20 pp. Full details regarding a valuable form of piping.

LANTERNS

Todhunter, Arthur, 119 E. 57th St., New York, N. Y.
Hand-wrought Lanterns. Booklet, 5¼ x 6¼ ins., 20 pp. Illustrated in black and white. With price list. Lanterns appropriate for exterior and interior use, designed from old models and meeting the requirements of modern lighting.

LATH, METAL AND REINFORCING

National Steel Fabric Co., Pittsburgh, Pa.

Better Walls for Better Homes. Brochure, 16 pp., 73/4 x 113/4 ins.

Illustrated. Metal lath, particularly for residences.

Steeltex for Floors. Booklet, 24 pp., 8½ x 11 ins. Illustrated. Combined reinforcing and form for concrete or gypsum floors and roofs.

Steeltex Data Sheet No. 1. Folder, 8 pp., 8½ x 11 ins. Illustrated. Steeltex for floors on steel joists with round top chords.

Steeltex Data Sheet No. 2. Folder, 8 pp., 8½ x 11 ins. Illustrated. Steeltex for floors on steel joists with flat top flanges. Steeltex Data Sheet No. 3. Folder, 8 pp., 8½ x 11 ins. Illustrated. Steeltex for folders on wood joists.

North Western Expanded Metal Co., 1234 Old Colony Building, Chicago, Ill.

Chicago, III.

North Western Expanded Metal Products. Booklet, 8½ x 10¾ ins., 20 pp. Fully illustrated, and describes different products of this company, such as Kno-burn metal lath, 20th Century Corrugated. Plasta-saver and longspan lath channels, etc. Longspan ¼-inch Rib Lath. Folder, 4 pp., 8½ x 11 ins. Illustrated. Deals with a new type of V-Rib expanded metal.

A. I. A. Sample Book. Bound volume, 8½ x 11 ins. Contains actual samples of several materials and complete data regarding their use.

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The builders are Starrett Bros., Inc.

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SELECTED LIST OF MANUFACTURERS' PUBLICATIONS—Continued from page 64

LATH, METAL AND REINFORCING-Continued

Norwest Metal Lath. Folder, 8½ x 11 ins. Illustrated. Data on Flat Rib Lath.

Truscon Steel Company, Youngstown, Ohio.
Truscon 34-inch Hy-Rib for Roofs, Floors and Walls. Booklet, 8½ x 11 ins., illustrating Truscon 44-inch Hy-Rib as used in industrial buildings. Plates of typical construction. Progressive steps of construction. Specification and load tables.

LAUNDRY CHUTES

The Pfaudler Company, 217 Cutler Building, Rochester, N. Y.
Pfaudler Glass-Lined Steel Laundry Chutes. Booklet, 5½ x 7½
ins., 16 pp. Illustrated. A beautifully printed brochure describing in detail with architects' specifications THE PFAUDLER GLASS-LINED STEEL LAUNDRY CHUTES. Contains
views of installations and list of representative examples.

LAUNDRY MACHINERY

American Laundry Machinery Co., Norwood Station, Cincinnati, Ohio. Functions of the Hotel and Hospital Laundry. Brochure, 8 pp., 8½ x 11 ins. Valuable data regarding an important subject. Troy Laundry Machinery Co., Inc., 9 Park Place, New York City. Laundry Machinery for Large Institutions. Loose-leaf booklet, 50 pp., 8½ x 11 ins. Illustrated.

Laundry Machinery for Small Institutions. Loose-leaf brochure, 50 pp., 8½ x 11 ins. Illustrated.

Accessory Equipment for Institutional Laundries. Leather bound book, 50 pp., 8½ x 11 ins. Illustrated.

Dry Cleaning Equipment for Institutional Purposes. Brochure, 50 pp., 8½ x 11 ins. Illustrated.

LIBRARY EQUIPMENT

Art Metal Construction Co., Jamestown, N. Y.
Planning the Library for Protection and Service. Brochure,
52 pp., 8½ x 11 ins. Illustrated. Deals with library fittings
of different kinds.

Library Bureau Division, Remington Rand, N. Tonawanda, N. Y. Like Stepping into a Story Book. Booklet, 24 pp., 9 x 12 ins. Deals with equipment of Los Angeles Public Library.

LIGHTING EQUIPMENT

The Frink Co., Inc., 369 Lexington Ave., New York, N. Y. Catalog 415, 8½ x 11 ins., 46 pp. Photographs and scaled cross-sections. Specialized bank lighting, screen and partition reflectors, double and single desk reflectors and Polaralite Signs. Holophane Company, Inc., 342 Madison Ave., New York. The Lighting of Schools; A Guide to Good Practice. Booklet. 24 pp., 8½ x 11 ins. Illustrated.

Lighting Specifications for Hospitals. Brochure, 30 pp., $8\% \times 11$ ins. Illustrated.

Industrial Lighting. Bulletin 448A. Booklet, 24 pp., 81/2 x 11 ins.

Holophane Catalog. Booklet, 48 pp., 8½ x 11 ins. Combination catalog and engineering data book.

The Lighting of Schools. A Guide to Good Practice. Booklet, 24 pp., 8½ x 11 ins. Illustrated.

Smyser-Royer Co., 1700 Walnut Street, Philadelphia.

Catalog "J" on Exterior Lighting Fixtures. Brochure, illustrated, giving data on over 300 designs of standards, lanterns and brackets of bronze or cast iron.

Todhunter, 119 East 57th St., New York, N. Y.
Lighting Fixtures, Lamps and Candlesticks. 24 pp., 8½ x 11 ins.
Illustrated. Fine assortment of lighting accessories.

Westinghouse Electric & Manufacturing Co., East Pittsburgh, Pa.
Industrial Lighting Equipment. Booklet, 32 pp., 8½ x 11 ins.
Illustrated.

Commercial Lighting. Brochure, 24 pp., 81/2 x 11 ins. Illus-

Airport and Floodlighting Equipment. Booklet, 20 pp., 8½ x 11 ins. Illustrated.

LUMBER

National Lumber Mfrs. Assn., Washington, D. C. Use of Lumber on the Farm. Booklet, 38 pp., 8½ x 11 ins. Illustrated.

MAIL CHUTES

Cutler Mail Chute Company, Rochester, N. Y.
Cutler Mail Chute Model F. Booklet, 4 x 91/4 ins., 8 pp. Illus-

MANTELS

Arthur Todhunter, 119 E. 57th St., New York, N. Y.
Georgian Mantels. New Booklet, 24 pp., 534 x 634 ins. A fully
illustrated brochure on eighteenth century mantels. Folders
give prices of mantels and illustrations and prices of fireplace equipment.

MARBLE

The Georgia Marble Company, Tate, Ga., New York Office, 1328 Broadway.

Broadway.

Why Georgia Marble Is Better. Booklet, 33% x 6 ins. Gives analysis, physical qualities, comparison of absorption with granite, opinions of authorities, etc.

Convincing Proof. 33% x 6 ins., 8 pp. Classified list of buildings and memorials in which Georgia Marble has been used, with names of Architects and Sculptors.

Hurt Building, Atlanta; Senior High School and Junior College, Muskegon, Mich. Folders, 4 pp., 8½ x 11 ins. Details.

Central Alloy Steel Corporation, Massillon, Ohio.
Sheet Iron Primer. Booklet, 64 pp., 5½ x 7¾ ins. Illustrated.
The Path to Permanence. Brochure, 52 pp., 8½ x 11 ins. Illustrated.
Data on sheet iron.

The Choice of a Metal. Booklet, 3 x 6¼ ins., 166 pp. Illustrated. Monel Metal—its qualities, use and commercial forms, briefly described.

MILL WORK-See also Wood

Curtis Companies Service Bureau, Clinton, Iowa.

Architectural Interior and Exterior Woodwork. Standardized Book, 9 x 11½ ins., 240 pp. Illustrated. This is an Architects' Edition of the complete catalog of Curtis Woodwork, as designed by Trowbridge & Ackerman. Contains many color plates.

Better Built Homes. Vols. XV-XVIII, incl. Booklet, 9 x 12 ins., 40 pp. Illustrated. Designs for houses of five to eight rooms, respectively, in several authentic types, by Trowbridge & Ackerman, architects for the Curtis Companies.

urtis Details. Booklet, 19½ x 23½ ins., 20 pp. Illustrated. Complete details of all items of Curtis woodwork, for the use of architects. Curtis Details.

of architects.

Hartmann-Sanders Company, 2155 Elston Ave., Chicago, Ill.
Column Catalog, 7½ x 10 ins., 48 pp. Illustrated. Contains prices on columns 6 to 36 ins. diameter, various designs and illustrations of columns and installations.

The Pergola Catalog, 7½ x 10 ins., 64 pp. Illustrated. Contains illustrations of pergola lattices, garden furniture in wood and cement, garden accessories.

Klein & Co., Inc., Henry, 11 East 37th St., New York, N. Y. Two Driwood Interiors. Folder, 4 pp., 6¼ x 9 ins. Illustrated. Use of moulding for paneling walls.

A New Style in Interior Decoration. Folder, 4 pp., 6¼ x 9 ins. Illustrated. Deals with interior woodwork.

Illustrated. Deals with interior woodwork.

Driwood Period Mouldings in Ornamented Wood. Booklet, 28 pp., 8½ x 11 ins. Illustrated.

How Driwood Period Mouldings in Ornamented Wood Set a New Style in Decoration. Folder.

Roddis Lumber and Veneer Co., Marshfield, Wis. Roddis Doors. Brochure, 24 pp., 5½ x 8½ ins. Illustrated price list of doors for various types of buildings.

Roddis Doors, Catalog G. Booklet, 184 pp., 8½ x 11 ins. Completely covers the subject of doors for interior use.

Roddis Doors for Hospitals. Brochure, 16 pp., 8½ x 11 ins. Illustrated work on hospital doors.

Roddis Doors for Hotels. Brochure, 16 pp., 8½ x 11 ins. Illustrated work on doors for hotel and apartment buildings.

MORTAR AND CEMENT COLORS

Clinton Metallic Paint Co., Clinton, N. Y.

Clinton Mortar Colors. Folder, 8½ x 11 ins., 4 pp. Illustrated in colors, gives full information concerning Clinton Mortar Colors with specific instructions for using them.

Color Card. 3½ x 6½ ins. Illustrates in color the ten shades in which Clinton Mortar Colors are manufactured.

Something New in Stucco. Folder, 3½ x 6 ins. An interesting folder on the use of coloring matter for stucco-coated walls.

ORNAMENTAL PLASTER

A Book of Old English Designs. Brochure, 47 plates, 12 x 9 ins. Deals with a fine line of decorative plaster work.

Architectural and Decorative Ornaments. Cloth bound volume, 184 pp., 9 x 12 ins., 18 plates. Price, \$3.00. A general catalog of fine plaster ornaments.

Geometrical ceilings. Booklet. 23 plates. 7 x 9 ins. An important work on decorative plaster ceilings.

PAINTS, STAINS, VARNISHES AND WOOD FINISHES

Cabot, Inc., Samuel, Boston, Mass.
Cabot's Creosote Stains. Booklet, 4 x 8½ ins., 16 pp.

National Lead Company, 111 Broadway, New York, N. Y. Handy Book on Painting. Book, 5½ x 3¼ ins., 100 pp. Gives directions and formulae for painting various surfaces of wood, plaster, metals, etc., both interior and exterior.

Red Lead in Paste Form. Booklet, 61/4 x 31/2 ins., 16 pp. Illustrated. Directions and formulae for painting metals.

Came Lead. Booklet, 6 x 8¾ ins., 12 pp. Illustrated. Describes various styles of lead cames.

various styles of lead cames.

Pratt & Lambert, Inc., Buffalo, N. Y.
Specification Manual for Paint, Varnishing and Enameling,
Booklet 38 pp., 7½ x 105% ins. Complete specifications for
painting, varnishing and enameling interior and exterior wood,
plaster, and metal work.

Sherwin-Williams Company, 601 Canal Rd., Cleveland, Ohio.
Painting Concrete and Stucco Surfaces. Bulletin No. 1. 8½ x 11
ins. 8 pp. Illustrated. A complete treatise with complete
specifications on the subject of Painting of Concrete and Stucco
Surfaces. Color chips of paint shown in bulletin.

Enamel Finish for Interior and Exterior Surfaces. Bulletin No.
2, 8½ x 11 ins. 12 pp. Illustrated. Thorough discussion, including complete specifications for securing the most satisfactory enamel finish on interior and exterior walls and trim.

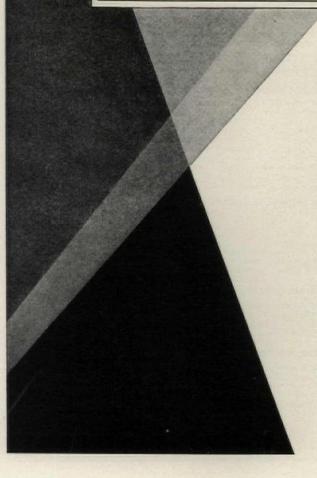
Painting and Decorating of Interior Walls. Bulletin No. 3.

Painting and Decorating of Interior and exterior walls and trim. Painting and Decorating of Interior Walls. Bulletin No. 3. 8½ x 11 ins. 20 pp. Illustrated. An excellent reference book on Flat Wall Finish, including texture effects, which are taking the country by storm. Every architect should have one on file.





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SELECTED LIST OF MANUFACTURERS' PUBLICATIONS—Continued from page 66

PAINTS, STAINS, VARNISHES and WOOD FINISHES-Continued

Protective Paints for Metal Surfaces. Bulletin No. 4. 8½ x 11 ins. 12 pp. Illustrated. A highly technical subject treated in a simple, understandable manner.

Sonneborn Sons, Inc., L., Dept. 4, 116 Fifth Avenue, New York. Paint Specifications. Booklet, 8½ x 10¾ ins. 4 pp.

U. S. Gutta Percha Paint Co., Providence, R. I. Barreled Sunlight. Booklet, 8½ x 11 ins. Data on "Barreled Sunlight" with specifications for its use.

light" with specifications for its use.

Valentine & Co., 456 Fourth Ave., New York.

How to Use Valspar. Illustrated booklet, 32 pp., 3½ x 8 ins.

Deals with domestic uses for Valspar.

How to Keep Your House Young. Illustrated brochure, 24 pp., 7 x 8½ ins. A useful work on the upkeep of residences.

Architectural Four-Hour Varnishes and Enamels. Booklet, 8 pp., 4½ x 6 ins. Data on a useful line of materials.

A. P. W. Paper Co., Albany, N. Y.

"Here's a Towel Built for Its Job." Folder, 8 pp., 4 x 9 ins.

Deals with "Onliwon" paper towels.

PARCEL DELIVERY DEVICES

Receivador Sales Company, Grand Rapids, Mich.
Architects' Portfolio. Booklet, 12 pp. 8½ x 11 ins. Illustrated.
Deals with delivery problems and their solution.

Circle A. Products Corporation, New Castle, Ind.
Circle A. Partitions Sectional and Movable. Brochure. Illustrated. 8½ x 11½ ins. 32 pp. Full data regarding an important line of partitions, along with Erection Instructions for partitions of three different types.

Hauserman Company, E. F., Cleveland, Ohio.
Hollow Steel Standard Partitions. Various folders, 8½ x 11 ins.
Illustrated. Give full data on different types of steel partitions, together with details, elevations and specifications.

tions, together with details, elevations and specifications.

Improved Office Partition Company, 25 Grand St., Elmhurst, L. I. Telesco Partition. Catalog. 8½ x 11 ins. 14 pp. Illustrated. Shows typical offices laid out with Telesco partitions, cuts of finished partition units in various woods. Gives specifications and cuts of buildings using Telesco.

Detailed Instructions for erecting Telesco Partitions. Booklet. 24 pp. 8½ x 11 ins. Illustrated. Complete instructions, with cuts and drawings, showing how easily Telesco Partition can be erected.

Richards, Wilcox Mar. Co. Appears 11.

Richards-Wilcox Mfg. Co., Aurora, Ill. Partitions. Booklet. 7 x 10 ins. 32 pp. Illustrated. Describes complete line of track and hangers for all styles of sliding parallel, accordion and flush door partitions.

S. Gypsum Co., Chicago, Ill.

Pyrobar Partition and Furring Tile. Booklet. 8½ x 11 ins. 24

pp. Illustrated. Describes use and advantages of hollow tile pp. Illustrated. Defor inner partitions.

American Brass Company, Waterbury, Conn.

Bulletin B-1. Brass Pipe for Water Service. 8½ x 11 ins. 28 pp. Illustrated. Gives schedule of weights and sizes (L.P.S.) of seamless brass and copper pipe, shows typical installations of brass pipe, and gives general discussion of the corrosive effect of water on iron, steel and brass pipe.

American Rolling Mill Company, Middletown, Ohio.

How ARMCO Dredging Products Cut Costs. Booklet, 16 pp., 6 x 9 ins. Data on dredging pipe.

Clow & Sons, James B., 534 S. Franklin St., Chicago, Ill. Catalog "A." 4 x 16½ ins. 700 pp. Illustrated. Shows a full line of steam, gas and water works supplies.

Cohoes Rolling Mill Company, Cohoes, N. Y. Cohoes Pipe Handbook. Booklet, 40 pp., 5 x 7½ ins. Data on wrought iron pipe.

Duriron Company, Dayton, Ohio.
Duriron Acid, Alkali, Rust-proof Drain Pipe and Fittings. Booklet, 20 pp., 8½ x 11 ins., illustrated. Important data on a valuable line of pipe.

National Tube Co., Frick Building, Pittsburgh, Pa.

"National" Bulletin No. 2. Corrosion of Hot Water Pipe, 8½ x 11 ins. 24 pp. Illustrated. In this bulletin is summed up the most important research dealing with hot water systems. The text matter consists of seven investigations by authorities on this subject.

this subject.

"National" Bulletin No. 3. The Protection of Pipe Against Internal Corrosion, 8½ x 11 ins. 20 pp. Illustrated. Discusses various causes of corrosion, and details are given of the deactivating and deaerating systems for eliminating or retarding corrosion in hot water supply lines.

"National" Bulletin No. 25. "National" Pipe in Large Buildings. 8½ x 11 ins. 88 pp. This bulletin contains 254 illustrations of prominent buildings of all types, containing "National" Pipe, and considerable engineering data of value to architects, engineers, etc.

fodern Welded Pipe. Book of 88 pp. 8½ x 11 ins., profusely illustrated with halftone and line engravings of the important operations in the manufacture of pipe.

PLASTER

Best Bros. Keene's Cement Co., Medicine Lodge, Kans.
Information Book. Brochure, 24 pp., 5 x 9 ins. Lists grades of plaster manufactured; gives specifications and uses for plaster.

Plasterers' Handbook. Booklet, 16 pp., 3½ x 5½ ins. A small manual for use of plasterers.

PLASTER-Continued

Interior Walls Everlasting. Brochure, 20 pp., 6¼ x 9¼ ins. Illustrated. Describes origin of Keene's Cement and views of buildings in which it is used.

PLUMBING EQUIPMENT

C. F. Church Mfg. Co., Holyoke, Mass.
Catalog S. W.-3. Booklet, 96 pp., 734 x 10½ ins. Illustrated.
Data on Sani-White and Sani-Black toilet seats.

Clow & Sons, James B., 534 S. Franklin St., Chicago, Ill.
Catalog "M." 914 x 12 ins. 184 pp. Illustrated. Shows complete line of plumbing fixtures for Schools, Railroads and Industrial Plants.

Crane Company, 836 S. Michigan Ave., Chicago, Ill.
Plumbing Suggestions for Home Builders. Catalog. 3 x 6 ins.
80 pp. Illustrated.

80 pp. Illustrated.
Plumbing Suggestions for Industrial Plants. Catalog. 4 x 6½ ins. 34 pp. Illustrated.
Planning the Small Bathroom. Booklet. 5 x 8 ins. Discusses planning bathrooms of small dimensions.

John Douglas Co., Cincinnati, Ohio.
Douglas Plumbing Fixtures. Bound Volume. 200 pp. 8½ x 11 ins. Illustrated. General catalog.

Another Douglas Achievement. Folder. 4 pp. 8½ x 11 ins. Illustrated. Data on new type of stall.

Hospital. Brochure. 60 pp. 8½ x 11 ins. Illustrated. Deals with fixtures for hospitals.

Duriron Company, Dayton, Ohio.
Duriron Acid, Alkali and Rust-Proof Drain Pipe and Fittings.
Booklet, 3½ x 11 ins., 20 pp. Full details regarding a valuable form of piping.

Imperial Brass Mfg. Co., 1200 W. Harrison St., Chicago, Ill. Watrous Patent Flush Valves, Duojet Water Closets, Liquid Soap Fixtures, etc. 8½ x 11 ins., 136 pp., loose-leaf catalog, showing roughing-in measurements, etc.

Maddock's Sons Company, Thomas, Trenton, N. J.
Catalog "K." 7% x 10% ins., 242 pp. Illustrated. Complete data
on vitreous china plumbing fixtures with brief history of Sani-

Speakman Company, Wilmington, Del. Catalog K. Booklet, 150 pp., 8½ x 10% ins. Illustrated. Data on showers and equipment details.

Trenton Potteries Company, Trenton, N. J.
The Blue Book of Plumbing. Bound volume, 182 pp., 8½ x 10½ ins. Illustrated.

Kewanee Private Utilities Co., 442 Franklin St., Kewanee, Ill.
Bulletin E. 734 x 1014 ins. 32 pp. Illustrated. Catalog. Complete descriptions, with all necessary data, on Standard Service Pumps, Indian Brand Pneumatic Tanks, and Complete Water Systems, as installed by Kewanee Private Utilities Co.

The Trane Co., La Crosse, Wis.

Trane Small Centrifugal Pumps. Booklet. 334 x 8 ins. 16 pp. Complete data on an important type of pump.

Weil Pump Co., 215 W. Superior St., Chicago, Ill.

Pumps. Booklet, 834 x 11 ins. Illustrated. Individual bulletins with specifications on sewage ejectors, and bilge, house, condensation, booster and boiler feed pumps.

RADIO EQUIPMENT

Radio Corporation of America, Woolworth Building, New York City, N. Y.

. C. A. Antenna Distribution System for Multiple Receivers. Booklet, 16 pp., $8\frac{1}{2} \times 11$ ins. Illustrated. Apparatus for apartment houses and similar large buildings.

t. C. A. Centralized Radio Receiving Equipment, Brochure, 8 pp. 9 x 11 ins. Illustrated. Radio equipment for hotels, hospitals, etc.

Ramp Buildings Corporation, 21 East 40th St., New York, N. Y. Building Garages for Profitable Operation. Booklet. 8½ x 11 ins. 16 pp. Illustrated. Discusses the need for modern mid-city, parking garages, and describes the d'Humy Motoramp system of design, on the basis of its superior space economy and features of operating convenience. Gives cost analyses of garages of different sizes, and calculates probable earnings. Garage Design Data. Series of informal bulletins issued in loose-leaf form, with monthly supplements.

REFRIGERATION

The Fulton Syphon Company, Knoxville, Tenn.

Temperature Control of Refrigeration Systems. Booklet, 8 pp., 8½ x 11 ins. Illustrated. Deals with cold storage, chilling of

REINFORCED CONCRETE-See also Construction, Concrete

North Western Expanded Metal Company, Chicago, Ill.
Designing Data. Book. 6 x 9 ins. 96 pp. Illustrated. Covers
the use of Econo Expanded Metal for various types of reinforced concrete construction.

Longspan 34-inch Rib Lath. Folder 4 pp., 8½ x 11 ins. Illustrated. Deals with a new type of V-Rib expanded metal.

Truscon Steel Company, Youngstown, Ohio.
Shearing Stresses in Reinforced Concrete Beams. Booklet. 8½ x 11 ins. 12 pp.

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plastic paint can be used to give a complete finish and one which is thoroughly washable.

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DUTCH BOY WHITE-LEAD

SELECTED LIST OF MANUFACTURERS' PUBLICATIONS—Continued from page 68

ROOFING

The Barrett Company, 40 Rector St., New York City.

Architects' and Engineers' Built-up Roofing Reference Series;

Volume IV Roof Drainage System. Brochure, 64 pp., 8½ x

11½ ins. Gives complete data and specifications for many details of roofing.

Heinz Roofing Tile Co., 1925 West Third Avenue, Denver, Colo. Plymouth-Shingle Tile with Sprocket Hips. Leaflet, 8½ x 11 ins. Illustrated. Shows use of English shingle tile with special hips. Italian Promenade Floor Tile. Folder, 2 pp., 8½ x 11 ins. Illustrated. Floor tiling adapted from that of Davanzati Palace. Mission Tile. Leaflet, 8½ x 11 ins. Illustrated. Tile such as are used in Italy and southern California.

Georgian Tile. Leaflet, 8½ x 11 ins. Illustrated. Tiling as used in old English and French farmhouses.

Ludowici-Celadon Company, 104 So. Michigan Ave., Chicago, Ill.

"Ancient" Tapered Mission Tiles. Leaflet. 8½ x 11 ins. 4 pp.
Illustrated. For architects who desire something out of the
ordinary this leaflet has been prepared. Describes briefly the
"Ancient" Tapered Mission Tiles, hand-made with full corners
and designed to be applied with irregular exposures.

Structural Gypsum Corporation, Linden, N. J.
Relative Effectiveness of Various Types of Roofing Construction in Preventing Condensation of the Under Surface. Folder, 4 pp., 834 x 11 ins. Important data on the subject.

Gypsteel Pre-cast Fireproof Roofs. Booklet, 48 pp., 8½ x 11 ins. Illustrated. Information regarding a valuable type of roofing.

. S. Gypsum Co., Chicago, Ill.

Pyrobar Roof Construction. Booklet. 8 x 11 ins. 48 pp. Illustrated. Gives valuable data on the use of tile in roof construction.

heetrock Pyrofill Roof Construction. Folder, 8½ x 11 ins. Illustrated. Covers use of roof surfacing which is poured in

SEWAGE DISPOSAL

Kewanee Private Utilities, 442 Franklin St., Kewanee, Ill.
Specification Sheets. 73/4 x 103/4 ins. 40 pp. Illustrated. Detailed drawings and specifications covering water supply and sewage disposal systems.

American Brass Co., The, Waterbury, Conn.
Facts for Architects About Screening. Illustrated folder, 9½ x 11¾ ins., giving actual samples of metal screen cloth and data on fly screens and screen doors.

Athey Company, 6015 West 65th St., Chicago, Ill.

The Athey Perennial Window Shade. An accordion pleated window shade, made from translucent Herringbone woven Coutil cloth, which raises from the bottom and lowers from the top.

It eliminates awnings, affords ventilation, can be dry-cleaned It eliminates awnings, affe

Orange Screen Co., Maplewood, N. J.
Orsco Aluminum Screens. Booklet, 8 pp., 8 x 11 ins. Illustrated.
Data on a valuable line of screens.

Screens and Other Products. Brochure, 20 pp., 8 x 11 Illustrated. Door and window screens and other hardware.

SHADE CLOTH AND ROLLERS

Columbia Mills, Inc., 225 Fifth Avenue, New York, N. Y. Window Shade Data Book. Folder, 28 pp., 8½ x 11 ins. Illustrated.

SHELVING-STEEL

David Lupton's Sons Company, Philadelphia, Pa. Lupton Steel Shelving. Catalog E. Illustrated brochure, 40 pp. 85% x 11 ins. Deals with steel cabinets, shelving, racks, doors, partitions, etc.

SOUND DEADENER

Cabot, Inc., Samuel, Boston, Mass.

Cabot's Deadening Quilt. Brochure, 7½ x 10½ ins., 28 pp. Illustrated. Gives complete data regarding a well-known protection against sound.

STEEL PRODUCTS FOR BUILDING

Bethlehem Steel Company, Bethlehem, Pa.
Steel Joists and Stanchions. Booklet, 72 pp., 4 x 6¾ ins. Data for steel for dwellings, apartment houses, etc.

Steel Frame House Company, Pittsburgh, Pa. (Subsidiary of Mc-Clintic-Marshall Corp.) Steel Framing for Dwellings. Booklet, 16 pp. 8½ x 11 ins. Illustrated

Illustrated.

Steel Framing for Gasoline Service Stations. Brochure, 8 pp. 8½ x 11 ins. Illustrated.
Steel Frame Standard Gasoline Service Stations. Booklet, 8 pp. 8½ x 11 ins. Illustrated. Three standard designs of stations.

Westinghouse Electric & Mfg. Co., East Pittsburgh, Pa.
The Arc Welding of Structural Steel. Brochure, 32 pp., 8½ x 11 ins. Illustrated. Deals with an important structural process.

STONE. BUILDING

Indiana Limestone Company, Bedford, Ind.
Volume 3, Series A-3. Standard Specifications for Cut Indiana Limestone work, 8½ x 11 ins. 56 pp. Containing specifications and supplementary data relating to the best methods of specifying and using this stone for all building purposes.

STONE. BUILDING-Continued

Volume 1. Series B. Indiana Limestone Library, 6 x 9 ins. 36 pp. Illustrated. Giving general information regarding Indiana Limestone, its physical characteristics, etc.

Volume 4. Series B. Booklet. New Edition. 8½ x 11 ins. 64 pp. Illustrated. Indiana Limestone as used in Banks.

Volume 5. Series B. Indiana Limestone Library. Portfolio. 11½ x 8¾ ins. Illustrated. Describes and illustrates the use of stone for small houses with floor plans of each.

Volume 6, Series B-Indiana Limestone School and College Buildings. 8½ x 11 ins., 80 pages, illustrated.

Volume 12. Series B—Distinctive Homes of Indiana Limestone. 8½ x 11 ins., 48 pages, illustrated.

Old Gothic Random Ashlar. 81/2 x 11 ins., 16 pages. Illustrated.

STORE FRONTS

Brasco Manufacturing Co., 5025-35 South Wabash Avenue, Chicago,

Catalog No. 31. Series 500. All-Copper Construction. Illustrated brochure. 20 pp. 8½ x 11 ins. Deals with store fronts of a high class.

Brasco Copper Store Fronts. Catalog No. 32. Series 202.

Brasco Standard Construction. Illustrated brochure. 16 pp. 8½ x 11 ins. Complete data on an important type of building.

Detail Sheets. Set of seven sheets; printed on tracing paper, showing full sized details and suggestions for store front designing, enclosed in envelope suitable for filing. Folds to 8½ x 11 ins.

Davis Solid Architectural Bronze Sash. Set of five sheets, printed on tracing paper, giving full sized details and suggestions for designing of special bronze store front construction, enclosed in envelope suitable for filing. Folds to 8½ x 11 ins.

The Kawneer Company, Niles. Mich.

Store Front Suggestions. Booklet, 96 pp., 6 x 8½ ins. Illustrated. Shows different types of Kawneer Solid Copper Store Fronts.

Catalog K. 1927 Edition. Booklet, 32 pp., 8½ x 11 ins. Illustrated. Details of Kawneer Copper Store Fronts.

Detail Sheets for Use in Tracing. Full-sized details on sheets

Kawneer Construction in Solid Bronze or Copper. Booklet, 64
pp., 8½ x 11 ins. Illustrated. Complete data on the subject.

Modern Bronze Store Front Co., Chicago Heights, Ill.
Introducing Extruded Bronze Store Front Construction. Folder,
4 pp., 8½ x 11 ins. Illustrated. Contains full sized details of
metal store fronts.

Zouri Drawn Metals Company, Chicago Heights, Ill.
Zouri Safety Key-Set Store Front Construction. Catalog. 8½ x
10½ ins. 60 pp. Illustrated. Complete information with detailed sheets and installation instructions convenient for architects' files.

International Store Front Construction. Catalog. 8½ x 10 ins. 70 pp. Illustrated. Complete information with detailed sheets and installation instructions convenient for architects' files.

TELEPHONE EQUIPMENT

New York Telephone Co., 195 Broadway, New York.
Planning for Home Telephone Conveniences. Booklet, 52 pp., 8½ x
11 inches. Illustrated.

Planning for Telephones in Buildings. Brochure, 74 pp., 8½ x 11 inches. Illustrated.

TERRA COTTA

National Terra Cotta Society, 19 West 44th St., New York, N. Y. Standard Specifications for the Manufacture, Furnishing and Setting of Terra Cotta. Brochure. 8½ x 11 ins. 12 pp. Complete Specification, Glossary of Terms Relating to Terra Cotta and Short Form Specification for incorporating in Architects' Specification.

Color in Architecture. Revised Edition. Permanently bound volume, 9½ x 12½ ins., containing a treatise upon the basic principles of color in architectural design, illustrating early European and modern American examples. Excellent illustrations in color.

Present Day Schools. 8½ x 11 ins. 32 pp. Illustrating 42 examples of school architecture with article upon school building design by James O. Betelle, A. I. A.

Better Banks. 8½ x 11 ins. 32 pp. Illustrating many banking buildings in terra cotta with an article on its use in bank design by Alfred C. Bossom, Architect.

TILE, HOLLOW

National Fire Proofing Co., 250 Federal St., Pittsburgh, Pa. Standard Wall Construction Bulletin 174. 8½ x 11 ins. 32 pp. Illustrated. A treatise on the subject of hollow tile wall construction.

Standard Fireproofing Bulletin 171. 8½ x 11 ins. 32 pp. Illustrated. A treatise on the subject of hollow tile as used for floors, girder, column and beam covering and similar construction.

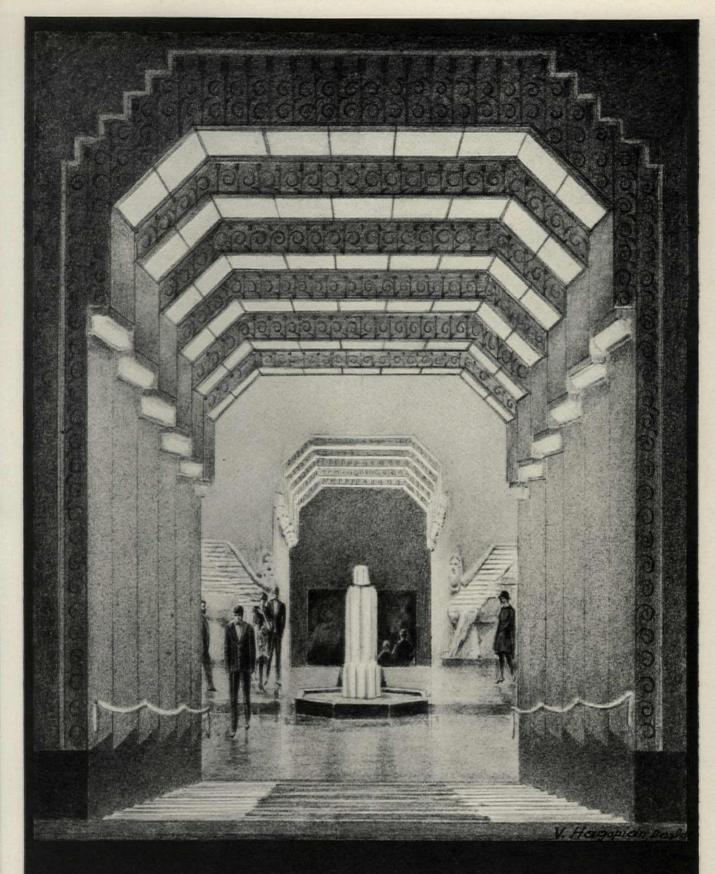
Natco Double Shell Load Bearing Tile Bulletin. 81/2 x 11 ins.

6 pp. Illustrated.

Natco Unibacker Tile Bulletin. 8½ x 11 ins. 4 pp. Illustrated.

Natco Header Backer Tile Bulletin. 8½ x 11 ins. 4 pp. Illustrated.

Natcoflor Bulletin. $8\frac{1}{2} \times 11$ ins. 6 pp. Illustrated. Natco Face Tile for the Up-to-Date. Farm Bulletin. $8\frac{1}{2} \times 11$ ins.



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SELECTED LIST OF MANUFACTURERS' PUBLICATIONS—Continued from page 70

TILES

Kraftile Company, Niles, Calif.
High Fired Faience Tile. Booklet. 32 pp. 8½ x 11 ins. Illustrated. Presents a fine line of tiles for different purposes.

United States Quarry Tile Co., Parkersburg, W. Va.
Quarry Tiles for Floors. Booklet, 120 pp., 8½ x 11 ins. Illustrated. General catalog. Details of patterns and trim for floors.

Art Portfolio of Floor Designs. 91/4 x 121/4 ins. Illustrated in colors. Patterns of quarry tiles for floors.

VALVES

Crane Co., 836 S. Michigan Ave., Chicago, Ill.
No. 51. General Catalog. Illustrated. Describes the complete
line of the Crane Co.

C. A. Dunham Co., 450 East Ohio St., Chicago, Ill. The Dunham Packless Radiator Valve Brochure, 12 pp., 8 x 11 ins. Illustrated. Data on an important type of valve.

Jenkins Bros., 80 White St., New York, N. Y.

The Valve Behind a Good Heating System. Booklet. 4½ x 7½ ins. 16 pp. Color plates. Description of Jenkins Radiator Valves for steam and hot water, and brass valves used as boiler connections.

Jenkins Valves for Plumbing Service. Booklet. 4½ x 7¼ ins. 16 pp. Illustrated. Description of Jenkins Brass Globe, Angle Check and Gate Valves commonly used in home plumbing, and Iron Body Valves used for larger plumbing installations.

VENETIAN BLINDS

Burlington Venetian Blind Co., Burlington, Vt.
Venetian Blinds. Booklet. 7 x 10 ins., 24 pp. Illustrated. Describes the "Burlington" Venetian blinds, method of operation, advantages of installation to obtain perfect control of light in the room.

VENTILATION

American Blower Co., Detroit, Mich.
American H. S. Fans. Brochure, 28 pp., 8½ x 11 ins. Data on an important line of blowers.

Duriron Company, Dayton, Ohio.

Acid-proof Exhaust Fans. Folder. 8 x 10½ ins. 8 pp. Data regarding fans for ventilation of laboratory fume hoods.

Specification Form for Acid-proof Exhaust Fans. Folder, 8 x 10½ ins.

Staynew Filter Corporation, Rochester, N. Y.
Protectomotor High Efficiency Industrial Air Filters. Booklet.
20 pp., 8½ x 11 ins. Illustrated. Data on valuable detail of apparatus.

WATERPOOFING

Master Builders Company, Cleveland, Ohio.
Waterproofing and Dampproofing and Allied Products. Sheets in loose index file, 9 x 12 ins. Valuable data on different types of materials for protection against dampness.

Waterproofing and Dampproofing File. 36 pp. Complete descripions and detailed specifications for materials used in building with concrete.

Sommers & Co., Ltd., 342 Madison Ave., New York City.
"Permantile Liquid Waterproofing" for making concrete and cement mortar permanently impervious to water. Also circulars on floor treatments and cement colors. Complete data and specifications. Sent upon request to architects using business stationery. Circular size, 8½ x 11 ins.

Sonneborn Sons, Inc., L., 116 Fifth Ave., New York, N. Y. Pamphlet. 334 x 834 ins. 8 pp. Explanation of waterproofing principles. Specifications for waterproofing walls, floors, swimming pools and treatment of concrete, stuceo and mortar.

The Vortex Mfg. Co., 1978 West 77th St., Cleveland, Ohio. Par-Lock Specification "Form D" for waterproofing surfaces to be finished with Portland cement or tile.

Par-Lock Specification "Forms E and G" membrane waterproofing of basements, tunnels, swimming pools, tanks to resist hydrostatic pressure.

Par-Lock Waterproofing. Specification Forms D, E, F and G. Sheets, 8½ x 11 ins. Data on combinations of gun-applied asphalt and cotton or felt membrane, built up to suit requirements.

Par-Lock Method of Bonding Plaster to Structural Surfaces. Folder, 6 pp. 8½ x 11 ins. Official Bulletin of Approved Products—Investigating Committees of Architects and Engineers.

WEATHER STRIPS

Athey Company, 6035 West 65th St., Chicago, Ill.

The Only Weatherstrip with a Cloth to Metal Contact. Booklet.

16 pp., 8½ x 11 ins. Illustrated. Data on an important type of weather stripping.

WINDOWS

The Kawneer Company, Niles, Mich.
Kawneer Solid Nickel Silver Windows. In casement and weighthung types and in drop-down transom type. Portfolio, 12 pp., 9 x 11½ ins. Illustrated, and with demonstrator.

David Lupton's Sons Company, Philadelphia, Pa.
Lupton Pivoted Sash. Catalog 12-A. Booklet, 48 pp., 85% x 11 ins.
Illustrates and describes windows suitable for manufacturing buildings.

WINDOWS, CASEMENT

Crittall Casement Window Co., 10951 Hearn Ave., Detroit, Mich. Catalog No. 22. 9 x 12 ins. 76 pp. Illustrated. Photographs of actual work accompanied by scale details for casements and composite steel windows for banks, office buildings, hospitals and residences.

Hope & Sons, Henry, 103 Park Ave., New York, N. Y. Catalog. 12½ x 18½ ins. 30 pp. Illustrated. Full size details of outward and inward opening casements.

The Kawneer Company, Niles, Mich.
Kawneer Solid Nickel Silver Windows. In casement and weighthung types and in drop-down transom type. Portfolio, 12 pp., 9 x 11½ ins. Illustrated, and with demonstrator.

David Lupton's Sons Company, Philadelphia, Pa. Lupton Casement of Copper Steel. Catalog C-217. Booklet, 24 pp. 8% x II ins. Illustrated brochure on casements, particularly for residences.

Lupton Heavy Casements. Detail Sheet No. 101, 4 pp., 8½ x 11 ins. Details and specifications only.

Richards-Wilcox Mfg. Co., Aurora, Ill.

Casement Window Hardware. Booklet, 24 pp., 8½ x 11 ins. Illustrated. Shows typical installations, detail drawings construction details, blue-prints if desired. Describes AIR-way Multifold Window Hardware.

Architectural Details. Booklet. 8½ x 11 ins. 16 pp. Tables of specifications and typical details of different types of construction.

List of Parts for Assembly. Booklet. 8½ x 11 ins. 16 pp. Full lists of parts for different units.

WINDOW SHADES AND ROLLERS

Columbia Mills, Inc., 225 Fifth Avenue, New York, N. Y. Window Shade Data Book. Folder, 28 pp., 8½ x 11 ins. Illustrated.

WINDOWS, STEEL AND BRONZE

David Lupton's Sons Company, Philadelphia, Pa.

A Rain-shed and Ventilator of Glass and Steel. Pamphlet, 4 pp.,

856 x 11 ins. Deals with Pond Continuous Sash. Sawtooth
Roofs, etc.

How Windows Can Make Better Homes. Booklet. 3½ x 7 ins. 12 pp. An attractive and helpful illustrated publication on use of steel casements for domestic buildings.

Truscon Steel Company, Youngstown, Ohio.

Drafting Room Standards. Book. 8½ x 11 ins. 120 pages of mechanical drawings showing drafting room standards, specifications and construction details of Truscon Steel Windows, Steel Lintels, Steel Doors and Mechanical Operators.

Truscon Solid Steel Double-Hung Windows. 24 pp. Booklet. 8½ x 11 ins. Containing illustrations of buildings using this type of window. Designs and drawings of mechanical details.

Continuous Steel windows and Mechanical Operators. Catalog 126. Booklet, 32 pp., 8½ x 11 ins. Illustrated.

WOOD-See also Millwork

American Walnut Mfrs. Association, 618 So. Michigan Blvd., Chicago, Ill.

American Walnut. Booklet, 7 x 9 ins. 46 pp. Illustrated. A very useful and interesting little book on the use of walnut in Fine Furniture with illustrations of pieces by the most notable furniture makers from the time of the Renaissance down to the present.

"American Walnut for Interior Woodwork and Paneling." 7 x 9 ins. Pages illustrated. Discusses interior woodwork, giving costs, specifications of a specimen room, the different figures in Walnut wood, Walnut floors, finishes, comparative tests of physical properties and the advantages of American Walnut for woodwork.

Curtis Companies Service Bureau, Clinton, Iowa.

Better Built Homes. Vols. XV-XVIII, incl. Booklet. 9 x 12 ins.

40 pp. Illustrated. Designs for houses of five to eight rooms, respectively, in several authentic types, by Trowbridge & Ackerman, architects, for the Curtis Companies.

National Lumber Mfrs. Assn., Washington, D. C. Airplane Hangar Construction. Booklet, 24 pp., 8½ x 11 ins. Use of lumber for hangars.



Style, permanence, and economy combined in a design oak floor

Architects may now specify a floor guaranteed by *CELLized Oak Flooring Inc., when laid by approved *CELLized flooring contractors

OAK floor blocks, each a complete unit of three or more oak flooring strips, splined together, are laid in EVERBOND, a plastic cement, without nails, directly over concrete

634 inch block or wood subfloor, as rapidly as regular strip flooring. Squeaking is eliminated, and the floor is sound deadening, as EVERBOND is a non-vibrating medium.

For the first time an architect may specify a design floor of *CELLized unit blocks, suitable for apartments, schools, hotels, offices, etc., as well as homes, laid by a contractor who specializes in this type of flooring.

The *CELLizing process protects against the expansion or contraction to which untreated wood floors are subject after laying. It also improves the finish and necessitates less finishing material. The cost of this permanently beautiful floor is but little more than strip flooring, and less than many perishable floor coverings.

*CELLized oak floor blocks are sold through lumber dealers everywhere; manufactured by BRADLEY LUMBER CO. of Arkansas, Warren, Ark. . Memphis, Tenn. E. L. BRUCE COMPANY THE LONG-BELL LUMBER CO., Kansas City, Mo.

ARKANSAS OAK FLOORING CO., Pine Bluff, Ark. TENNESSEE OAK FLOORING CO., Nashville, Tenn. NASHVILLE HDW. FLOORING CO. Nashville, Tenn.



*CELLized oak floor blocks are complete square units, in three sizes: 63/4-in., 9-in., and 111/4-in. squares in all grades. Each block is full 18 thickness, of 3 or more oak strips splined together. Side and end matched.



See our catalog in Sweet's: 23rd edition.



Georgian Arms Apartments, Peoria, Illinois. Jamieson & Harrison, Peoria, Architects

*CELLizing is a chemical, deep-cell treat which prothe wood against shrinkage or expansion and against damage by wood boring insects, and decay.

*CELLized oak floor blocks are guaranteed by *CELLized Oak Flooring Inc., when laid by approved and licensed flooring contractors. The names of those licensed to use this label in your locality will be supplied upon request.





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PLANNED LIGHTING is the name given to artificial lighting installations
PLANNED by HOLOPHANE LIGHTING ENGINEERS for SPECIFIC
APPLICATION and employing HOLOPHANE LIGHTING SPECIFICS.

A HOLOPHANE LIGHTING SPECIFIC is a device for distributing the light of the lamp exactly as required by a SPECIFIC set of conditions. Holophane Company, Inc., 342 Madison Avenue, New York.

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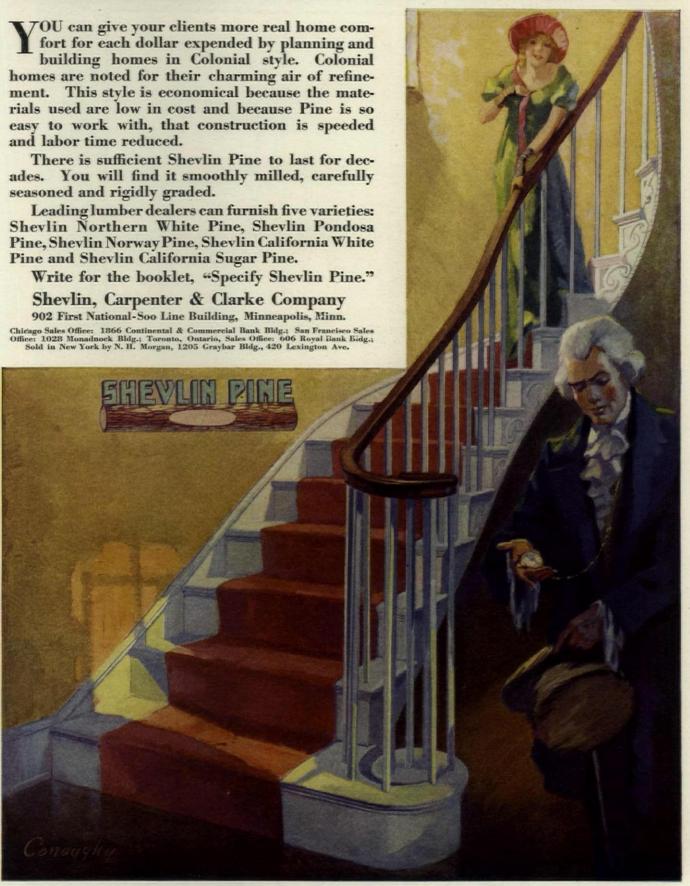
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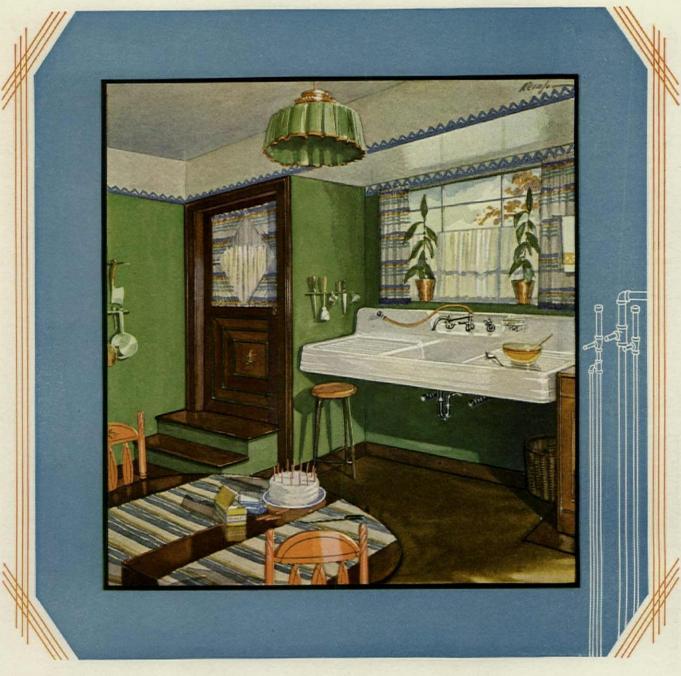
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Colonials Are Economical



You may wish to save for your files this illustration of the graceful stairway in the Nickels-Sortwell House, a Pine home built in 1807 at Wiscasset, Maine.



ONLY in a rambling old house remodeled could a kitchen like this be found, full of memories of ourselves asking for tastes while mother prepared a holiday dinner. Now without sacrificing, indeed greatly enhancing, its heart-warming friendliness has been added the color and convenience of today. In the roomy Corwith sink, placed just the right height from

the floor, its chromium-plated fittings readily at hand yet out of the way in a recess, is summed up the latest ideas in kitchen plumbing. For other plumbing and decorative suggestions, write for the architect's edition of New Ideas for Bathrooms, planned with blue prints, wall elevations, and full details of arrangement and equipment, to be of great practical aid.

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2500 Pounds Pressure



Mt. Sinai Hospital, Cleveland, Ohio. Chas. R. Greco, Boston, Architect.
Frank E. Chapman, Consultant.

Hospital Lighting Shows Trend Toward Color!

("Prose and poetry have made the white hospital wall traditional. Up to a few short years ago, white was considered the only acceptable color to be used. Quite aside from the harmful effect on the patients (and this harm it has been definitely demonstrated is not subject to discussion) was the unfortunate effect that this hyper-aseptic atmosphere created on everyone. The acceptance of color and the introduction of warm color schemes into the institution, to my mind, is one of the main things which have come out of the last ten years of thought in hospital planning."—Frank Chapman, Architects' Consultant, in Architectural Forum for December.

Cremax Globes are contributing their share to the conversion of the modern hospital from its cold white past to its warm, colorful present. Cremax transmits a soft, cream-colored quality of light, free from cold tones of green, and without the slightest suggestion of glare. Yet the light from Cremax Globes is abundant—adequate for every purpose.

A demonstration of Cremax for any type of structure will be made on request. Macbeth-Evans Glass Company, Department J, Charleroi, Pa.

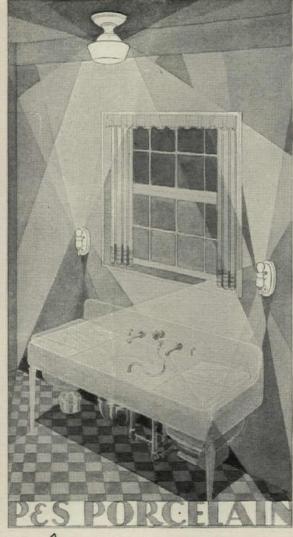


Cremax Globe No. 5130 installed in Mt. Sinai Hospital

CREMAX
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Few fixtures so readily and perfectly blend with modern decoration as do P&S Alabax lighting units of porcelain. Furnished in plain white or in a variety of harmonizing shades, the colors are "fired in" the porcelain to endure, and to retain their lustre in every climate.

P&S Alabax fixtures are instantly cleanable with a damp cloth. An inconspicuous convenience outlet is a feature of many of the wall brackets, assuring light and extra service for electrical appliances from the same fixture.

A brochure showing P&S Alabax fixtures in their full colors will be sent for your files, upon request.

PASS & SEYMOUR, INC.

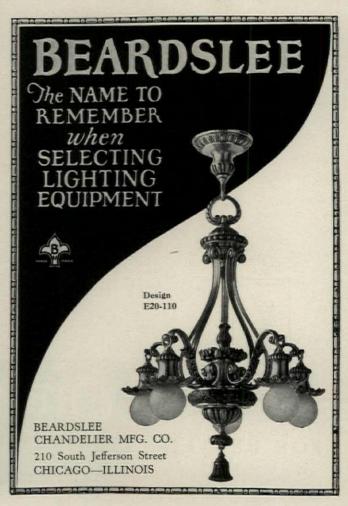
Division E Solvay Station Syracuse, N. Y.



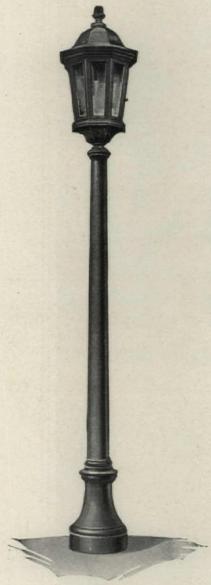
ALABAX
LIGHTING FIXTURES







Ninety Years of Craftsmanship is Expressed in Smyser-Royer Fixtures



No. 433 Scale: 3/4"=1'0" 8' high overall



I NSPECTION of Smyser-Royer Exterior Lighting installations reveals the culmination of ninety years of progress in iron-working craftsmanship.

The grace and accuracy of design, plus rugged durability, reflect the close cooperation that has existed between Smyser-Royer and the leading architects of the country.

Smyser-Royer installations now in existence stand as evidence of an ability to handle all types of exterior lighting contracts.



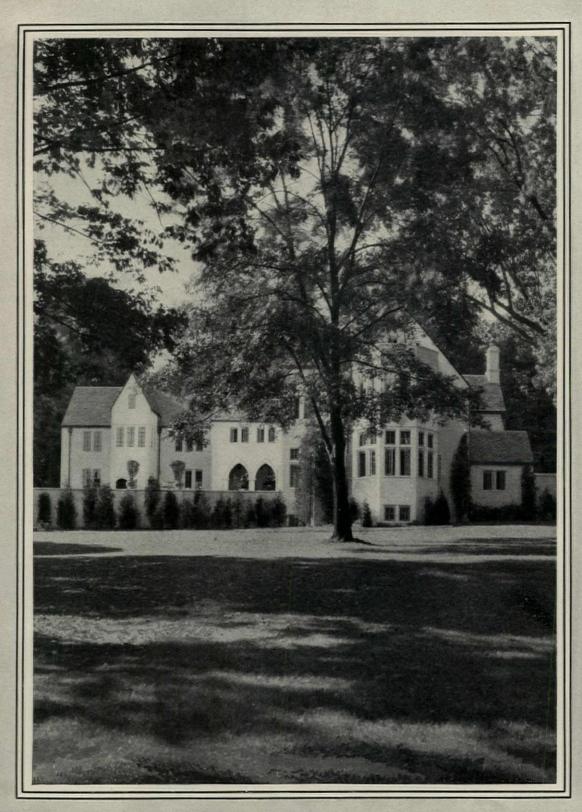
Catalog "J" is a complete treatise on exterior lighting fixtures. It illustrates over 300 designs. On request, a copy will be sent to recognized lighting fixture dealers and architects, if applied for on business stationery or business card is included.

Lamp Posts -:- Lanterns -:- Brackets

SMYSER-ROYER COMPANY

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This mansion is built of cinder concrete masonry units, the exterior finished with a special oil paint. Mortar joints are visible. The interior is unplastered—its beauty achieved by decoration applied directly to the masonry. Residence of Henderson Gilbert, Esq., Bowmansdale, Penna.—Alfred Hopkins, New York City, Architect.

CONCRETE FOR PERMANENCE and Firesafety



All walls of this attractive city home are of concrete masonry with white portland cement stucco exterior, except the tower which has natural stone facing. Residence of J. P. Bowen, Esq., Grosse Pointe, Michigan.—Wallace Frost, Detroit, Architect.

Homes of Charm and Beauty in Concrete Masonry

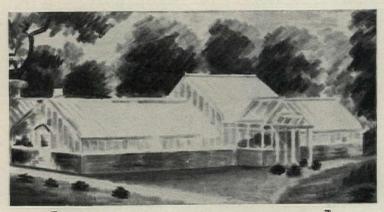
For the formal mansion on the country estate—or the town house—modern concrete masonry construction offers equal and definite advantages.

In large homes or small, concrete permits unique beauties of design and finish both exterior and interior. It provides absolute fire safety. It minimizes upkeep expense. Its cost per cubic foot is moderate, permitting important economies whatever the size of the dwelling.

Architects who are interested in the modern trend in the use of concrete for homes are invited to write for full information. The architectural possibilities of concrete are virtually unlimited. Interesting studies and illustrations await your request.

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Guessing at Greenhouses is Dangerous



This beautiful greenhouse we built on Sapeloe Island, a lovely spot in the Atlantic Ocean, off the coast of Georgia. The owner is Mr. Howard E. Coffin.

Send for our catalogue which shows greenhouses built on some of the nation's most famous estates, of which the illustration is an example.

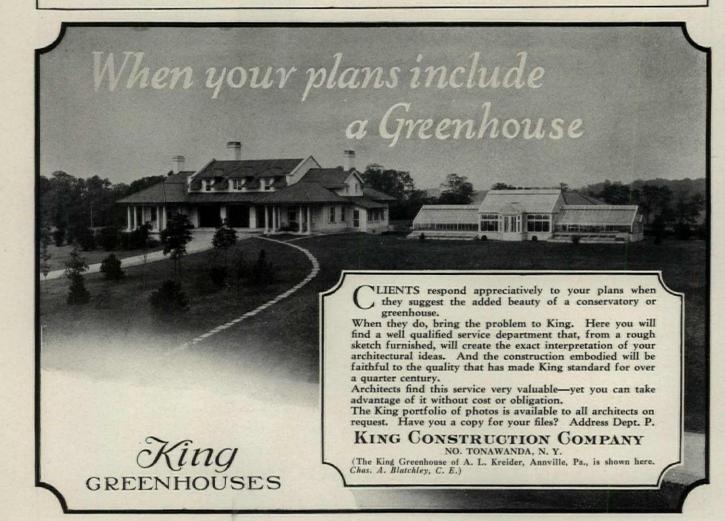
Lutton Solar V=Bar Construction Takes Out The Guess

THE disappointments caused by poor material and construction and lack of finish can be avoided in the choice of a greenhouse—if it is a Lutton Solar V-Bar. Due to thirty years of experience, the fine quality of our materials and the high standards set in every detail (all steel is galvanized after fabrication), Lutton Solar V-Bar Greenhouses have come to be regarded as "specification" products among certain well-known architects and landscape designers.

WM. H. LUTTON COMPANY, INC.

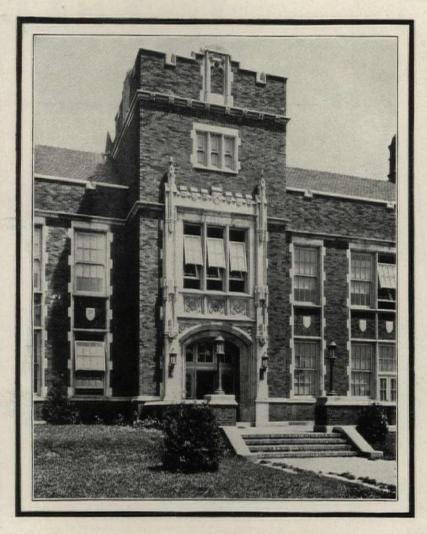
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JERSEY CITY, NEW JERSEY



LIBBEY OWBNS

FLAT DRAWN CLEAR SHEET GLASS





BENJAMIN BOSSE HIGH SCHOOL

Evansville, Indiana

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Architects

Glazed with Libbey-Owens Glass

LIBBEY-OWENS
"A" quality labeled glass has
won the enthusi-

astic support of leading architects everywhere because it represents to an unusual degree the

THE LIBBEY-OWENS SHEET GLASS CO. TOLEDO, OHIO

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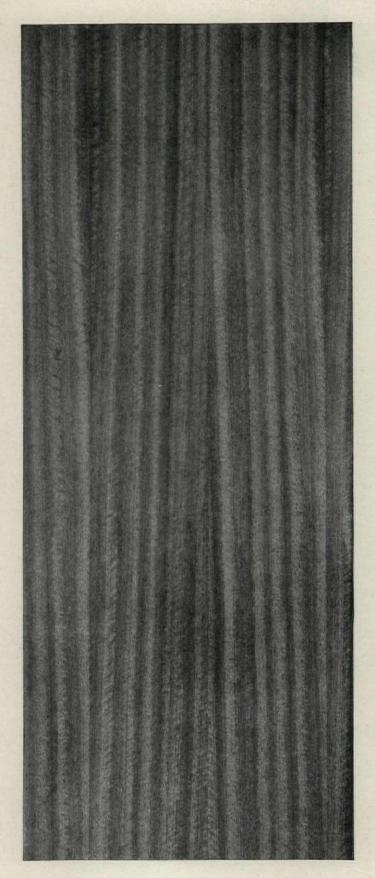
Please send me your new booklet on Flat Glass.

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Address

an unusual degree the architecturally ideal combination of utility and beauty.

The Libbey-Owens Sheet Glass Co.
Toledo, Ohio



How would you design a door of this beautiful hardwood? Its natural shades are rich dark red, or light red. The narrow ribbon grain is typical of the finer mahogany. Philippine Laminex, although used for years in cabinet wood, has only recently become available for building. On the Pacific Coast, today, it is proving a sensation



These Awards in Cash

\$500.00 for the clearest concept of tomorrow's door design (winner of this prize not eligible for additional award in the following competition)

\$150.00 for the best new door design for a home \$50.00 for the second best door design for a home

\$150.00 for the best new door design for a commercial building \$50.00 for the second best door design for a commercial building

Conditions of the Competition

The Jury of Awards: Mr. William Zorach, sculptor, New York; Mr. Henry S. Churchill of Thompson & Churchill, architects, New York; Mr. Howard Raftery of Frazier & Raftery, architects, Chicago. There will be no appeal from the decisions of this Jury. If, however, two contestants are deemed equally worthy of any award, both will receive the full amount of that award.

Prize Payments: The Wheeler, Osgood Company will pay the winners immediately after receiving the Jury's judgment.

Requirements: Designs must be for interior doors and of a nature fitted to the use of Philippine Laminex. Door trim in this competition considered a part of the door design.

Drawings may be in line or wash, or both. Indicate all scales graphically.

To preserve the anonymity of drawings, each is to be signed with a nom de plume or other identifying device which is also to be written on the outside of a plain white envelope containing the competitor's name and address.

Drawings may be sent flat or rolled and are to be addressed to The Wheeler, Osgood Company, Dept. of Design, Tacoma, Washington.

The competition closes at midnight, April 31, 1929, at the above address. No entries received after that time can be considered.

Designs awarded prizes become the property of The Wheeler, Osgood Company for publication or any other use. Other drawings will be returned to the senders if requested and return postage is included.

Tomorrow's Door!

ARCHITECT IN AMERICA CAN BEST ENVISION IT?

\$5000 will be awarded him, \$900 in all to winners of a competition on designs for interior doors of beautiful Philippine Laminex

HERE is a competition worthy of your thought. Announced last month, it has caught the attention of architects, designers and editors all over the country.

Embracing door design as conceived today, it holds the greater interest of speculation upon the interior door of tomorrow.

And that is not idle speculation. Door proportions, door designs even now are radically changed for "modern" homes. Surely we may expect something new in future office buildings that may pyramid a hundred stories above the city streets.

And so we seek now the door of tomorrow, inviting architects everywhere to put down their ideas of it.

A New Wood to Work With

In this competition you have, too, the inspiration of working with a new wood—the wood of tomorrow, Philippine Laminex.

Used for some years by cabinet makers, put into wider uses only recently by Pacific Coast architects, Philippine Hardwood is just now being made available to architects and builders everywhere.

Displaying the narrow ribbon grain of fine mahogany, in either light or dark red natural shades, yet costing considerably less than mahogany heretofore used, Philippine Laminex will charm you with its beauty and will impress you with its practicability.

It is to reveal the magnificent possibilities of this wood that this competition is being held. As pioneer importers of Phil-

As pioneer importers of Philippine Hardwood, as the largest door manufacturers in the world, we cordially invite you to share in those discoveries.

Your better knowledge of Philippine Laminex will doubtless lead you into its specification for some local job, give you the honor of introducing it into your community.

But, more than that, we would like you to share in the creation of a Philippine Laminex door that will establish a new note in the beauty of its conception, in the purity of its design.

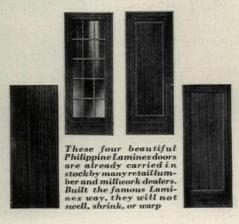
For the best such design we shall pay \$500.00 in cash.

Winning that prize, you will not be eligible for award in the two following classifications, but failing in competition for the grand prize, you may win \$150.00 for the best new door design for a home or \$50 for the second best design. Or you may win \$150.00 for the best new door design for a commercial building or \$50 for the second best design.

The rules are simple, established only in fairness to all contestants. Notable judges have been selected. There is time for you to study the problem thoroughly if you start now.

Ask a local millwork dealer to show you Philippine Laminex or send the coupon for a free sample and descriptive literature. Do it today.

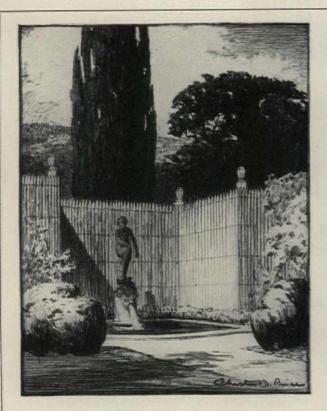
THE WHEELER, OSGOOD Co. Largest door manufacturers in the world. Creators of the famous LAMINEX DOORS of Fir and Laminex products of PHILIPPINE HARDWOOD.



The Wheeler, Osgood Co. Dept.F-29, Tacoma, Washington.

I think I will enter your competition for new door designs. Please send me a free sample of Philippine Laminex and descriptive literature.

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This FENCE adds Beauty and Charm

Where a note of genuine distinction is required in any setting, the introduction of this lovely French fence will give the effect desired—quickly, easily, economically.

It serves a multitude of uses — from framing a formal garden to enclosing a large estate or screening a laundry yard. And it fits in with any style or period!

DUBOIS Woven Wood Fence

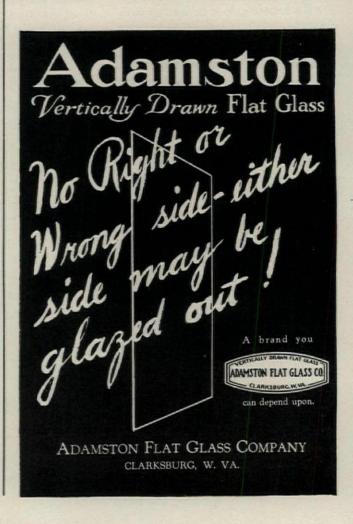
There is only one Dubois; it is made by hand in France of split, live, chestnut saplings woven closely together with heavy, rust-proof Copperweld wire. Comes in 5 ft. sections ready to erect, and in three heights: 6' 6", 4' 11" and 3' 10". Send for free Album of photographs, with construction details and prices.

See the Dubois Exhibit at the Chicago Garden and Flower Show, Feb. 23rd – March 3rd.

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AN

APARTMENT IN TRUE ENGLISH STYLE

by

ROBERT DE GOLYER

SET deep in the Bedford limestone facade—Fenestra Casements accent the modified Tudor Gothic style of this distinguished new Chicago apartment building. They give the exterior the stately charm of an old English manor; add sunlit beauty and supreme comfort to the interior.

Because they are built of narrow, solid steel bars, Fenestra Casements provide more light in the same sized window opening, or the same amount of light in a smaller sized window opening. This is a tremendous advantage in the conservation of wall space so necessary in most apartments.

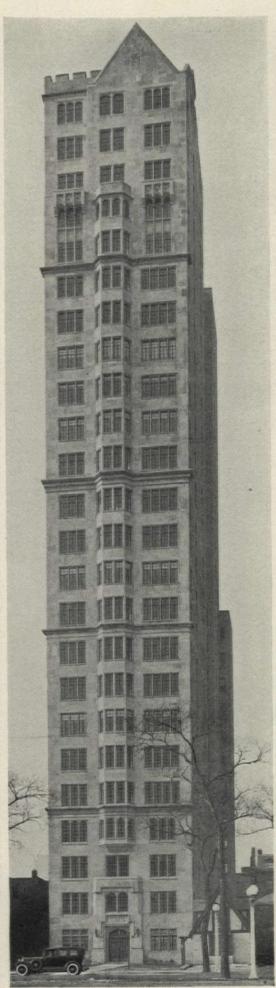
More light, better control of ventilation, easy washing from within and inside screens which protect the draperies are only a few of the reasons why discriminating architects specify Fenestra Casements. These all steel windows open wide at a finger touch yet close snug against cold and storm—all without warping, shrinking, sticking or rattling. They offer unlimited possibilities for attractive decorating effects.

Fenestra Casements simplify the architect's design problem, too. For they lend themselves to endless interesting groupings. And that is a wonderful advantage in developing a satisfying elevation for a twenty-four story building such as this.

To give the architect every possible aid, the complete Fenestra Blue Book has been included in Sweet's catalogue.

DETROIT STEEL PRODUCTS COMPANY 2284 East Grand Boulevard, Detroit, Michigan Factories: Detroit, Mich., and Oakland, California. Convenient warehouse stocks.





An apartment building at 1430 Lake Shore Drive, Chicago.

Robert S. De Golyer & Company, Architects



Shady-way Awning Division,
SHANKLIN MANUFACTURING CO., Inc.
2791 S. Eleventh Street, Springfield, Illinois
Without obligation on my part please send me FREE Awning Booklet with nine exceptional features.

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These Bakelite Molded Door Knobs are made in standard sizes by National Brass Co., Grand Rapids, Mich.

Rustless, stainless, strong and attractive Bakelite Molded Door Knobs

DOOR KNOBS are in constant, daily use.

Lacquer quickly wears off metal knobs.

making them spotty and shabby and an easy
prey to corrosion. Bakelite Molded door
knobs have a permanent, wear-proof finish
which is unharmed by time, climate or rough
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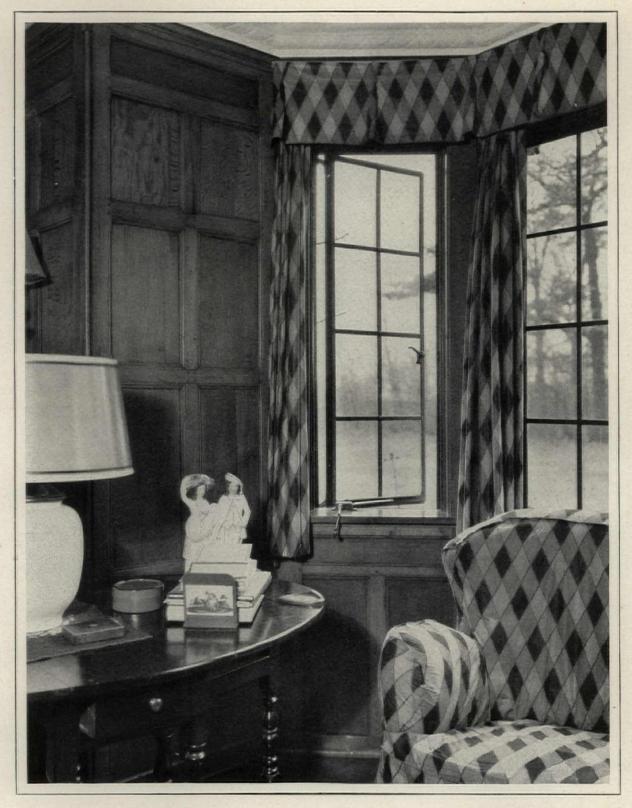
Bakelite Molded door knobs are hard, may be washed like glass, but unlike that material they are not brittle. While at present the standard colors are burled walnut and black, a variety of other colors are available on order. These include colors to match various wood and metal finishes.

These Bakelite Molded door knobs represent a distinct advance in the development of modern door hardware, and merit the investigation and consideration of the architectural profession.

BAKELITE CORPORATION

247 Park Avenue. New York, N. Y. Chicago Office. 635 W. 22nd Street BAKELITE CORP. OF CANADA, LIMITED 166 Dufferin Street Toronto, Canada

BAKELITE THE MATERIAL OF BA THOUSAND USES



In beautiful window settings, Win-Dor casement operators perform their function of definite utility without obtrusiveness. The casements are controlled in any open position (through the screen). They open

THE CASEMENT HARDWARE CO.
Casement Hardware Headquarters



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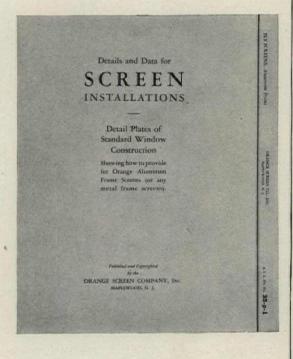
silently, easily and, when closed, the sash are positively locked. Win-Dor hardware makes casement windows as convenient as they are beautiful and wins your clients' appreciation. The Win-Dor catalog is in Sweet's.

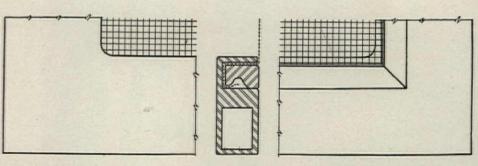
402-P NORTH WOOD STREET Chicago + + + + Illinois

Over 20 detailed drawings of Standard Windows

showing how to detail these windows to accommodate any metal frame screen installation

This catalogue, which will be distributed to architects' and engineers' offices as soon as it is completed, contains valuable data on metal frame screen installations. A portfolio secured to the back cover of this catalogue contains two complete sets of window detail plates. These plates cover every standard type of window detail, and will be valuable to draftsmen requiring details showing good practice in window construction, as well as showing metal frame





F.S. Section, and elevations of extruded Aluminum Frame Screen with Welded corners . . . section and elevation at right show mortised lock moulding which holds screen cloth in vise-like grip.

ORANGE SCREEN COMPANY

515 Valley Street

screen installations.

Maplewood, New Jersey



Write to our Maplewood, New Jersey, office for information or estimates, and we shall instruct our nearest branch office to take care of your inquiry.



Special Alloy Developed by the Aluminum Company of America

These screens are made of extruded bars of aluminum. A special alloy developed for our use by the Aluminum Company of America, and which is one of the strongest non-ferrous materials made. Because of its lightness and the many structural advantages aluminum such as is used in our screen frames is used extensively in the construction of air-craft.

Economy in the Use of Aluminum Frame Screens

Given reasonable care, these aluminum frame screens will last as long as the building in which they are installed. They are easily taken down in the fall for storage and easily and quickly put back into the windows in the spring. The additional cost of our aluminum frame screens over a good grade of wood frame screen is almost negligible when compared to the total cost of the building in which it is installed. For instance:



Orange Aluminum Frame Screens fitted out with the best grade of Anaconda Bronze Wire Screen cloth installed in this cottage costs about \$50.00 more than a good grade of wood frame screen installation.



Orange Aluminum Frame Screens fitted out with best grade of Anaconda Bronze Wire Screen cloth installed in this medium sized house costs about \$100.00 more than a good grade of wood frame screen instal-



And Orange Aluminum Frame Screens fitted out with best grade of Anaconda Bronze Wire Screen cloth installed in this country residence, do not increase the cost more than \$200.00 over a good grade of wood frame screen installation.

Nineteen Years of Manufacturing Experience

Orange Aluminum Frame Screens are manufactured and sold on a guarantee by the Orange Screen Company, a company which is backed up by financial responsibility and nineteen years of manufacturing experience. 1904

T WAS IN FEBRUARY

1904 that the late Charles P. Dahlstrom and his associates organized the Dahlstrom Metallic Door Company... an act of pioneering that founded a new industry... creating entirely new tools for the architect's hand.

Through the dark uncertainties of pioneer days . . . the difficulties of treading paths utterly new . . . this organization was guided by a single ideal . . . an ideal that has made the name Dahlstrom the greatest in Hollow Metal.

For, the finest of materials...unequaled workmanship and design... are to Dahlstrom more than mere words. They are the motivating influence of every act... the concrete reason for Dahlstrom dominance... the keynote of a quarter century of progressive leadership.

To the users of Dahlstrom products, this ideal translates itself in terms of longer life...lower upkeep... better fire proofing...lower depreciation... factors that add value to every Dahlstrom equipped building... factors that have made Dahlstrom the standard of value for the Hollow Metal industry.

DAHLSTROM METALLIC DOOR CO.

JAMESTOWN, NEW YORK

New York · Chicago · Los Angeles · Detroit · Dallas

"No building is more fireproof than its doors and trim". DAHLSTROM



REVIEWS OF MANUFACTURERS' PUBLICATIONS

PITTSBURGH REFLECTOR CO., 304 Ross Street, Pittsburgh. "Permaffectors." An adjunct for improved lighting.

In planning lighting of many kinds it is necessary to make considerable use of reflectors, their function being to conserve the light and to force its full power in the direction desired. Thus display windows are illuminated from sources which are concealed but which direct the light into the windows' area; picture galleries, theaters and certain parts of churches are also lighted, the reflector often taking the form of what is known as a "spotlight." This booklet deals with the "Permaflector," defined as being "a silver-plated glass reflector with the permanent reflecting surface made only by the Pittsburgh Reflector Co." The text goes quite fully into describing the Permaflector and into telling of the study, experiment and research which resulted in its manufacture, and it illustrates the different forms, shapes, sizes, etc., in which it is to be had. It also describes the purposes to which each of the forms is adapted, and it contains illustrations of buildings in which the Permaflector is being used,—for lighting hotels, churches, auditoriums, banks, art galleries, etc.

FRANK ADAM ELECTRIC CO., St. Louis. "The Control of Lighting in Theaters." Importance of proper lighting.

The gorgeously bewildering effects which are presented by the opera and theater are due very largely to the skill with which lighting problems are solved. The average layman has little idea of the complexity of the mechanism which is necessary to produce upon the stage the effect of moonlight, starlight or sunlight, but architects who have planned theaters well know the intricacy of the subject and realize that much of the success of a theater depends upon its lighting,—and every department must be lighted, from the marquise which shelters the entrance to the most insignificant dressing room or storage space. "Painted scenery can approximate the real to a certain extent, but it is almost a total failure without proper lighting. Artists can paint the effect of light but have never been able to put luminosity into pigments. Light is light and cannot be imitated,—it can only be produced and controlled to lend its beauty to scenic splendor and make real the painted castles of the theater." This brochure, issued by a firm which has made a successful specialty of theater lighting, deals with the problem. It explains by means of illustrations, diagrams and plans the approved method of lighting and gives a list of theaters and opera houses in which the firm's equipment has been installed.

AMERICAN BLOWER CORPORATION, Detroit. "Sirocco Unit Heaters." Equipment for ventilating and heating.

With the immense improvement which during the last few years has been made in various forms of equipment, and along with advance which has placed both heating and ventilating upon a basis which is almost, if not entirely, scientific, there has gone a vast amount of experiment and research,-the research and experiment no doubt being responsible for the improvement. It has been abundantly proved, for one thing, that atmospheric conditions have a decided effect upon the work done by the people who occupy an area, and this has sometimes led to an effort to determine (1) the cost of equipment to produce certain ideal atmospheric conditions, and (2) the value in dollars and cents of work done in such an area under these ideal conditions over the value of work done in the same area minus the equipment necessary to produce the ideal conditions. This is a subject which is eminently practical rather than theoretical or academic, and to the architect, engineer or builder concerned with determining the exact status of the matter, this browith determining the exact status of the matter, this brochure issued by the American Blower Corporation would be interesting if not invaluable. It deals with the "Sirocco Unit Heater," the word "Sirocco" being "the Arabic name for the warm driving winds of the desert," the logical inference being that the "Sirocco Heater" ventilates as well as heats. The book is filled with data of incalculable value to heats and diagrams of various architects, engineers and builders, and diagrams of various kinds make plain the value of this particular form of equipment in any place where the obtaining of heating and venti-lating is of importance, and they are important everywhere.

DOT LUBRICATING EQUIPMENT COMPANY, Cambridge, Mass. "Little Journeys in Dot Lubrication."

It can be readily understood that if machinery of any kind is to be maintained in condition which makes for smooth working, its bearings must be kept properly lubricated. "Grease is one of the greatest travelers in the world of industry, and it has to be a good traveler. Upon it falls the heavy responsibility of keeping the bearings of millions of costly machines working smoothly and safely. So, grease must travel into those bearings under the best conditions that modern science can provide. Then, if the bearings are of the ball or roller types, with which more and more machines are being equipped every day, the amount of travel that the grease sustains is incalculable." This little folder describes and illustrates the excellent lubricating equipment made by this Cambridge firm. For use with different kinds of machinery, there are various details which supply lubrication,—barrel pumps, hand guns, filling tanks, etc.,—and the details are fully described, while illustrations show them being used in the proper way. The booklet is of course of great value.

HOLOPHANE COMPANY, INC., 342 Madison Avenue, New York. "Industrial Lighting; Holophane Specifics."

Great as has been the improvement in actual construction during recent years, it has been no more marked than improvement in the way of planning and installing the equipment which is necessary to fit a structure for the purpose intended. In no class of buildings has this improvement been more striking than in structures for industrial or manufacturing purposes. These pages of The Architectural Forum are constantly calling the attention of architects, engineers and builders to advanced forms of heating and ventilating and to the use of improved materials for floors, walls, etc., and this particular brochure deals with the lighting of industrial structures, extremely important, since without adequate lighting even the best of structures with the utmost in the way of equipment has but diminished value. The booklet, like all the publications of the Holophane Company, Inc., is well illustrated with interiors which are shown to be well lighted by the equipment which the firm has supplied and installed,-interiors of widely differing kinds,-and to give a further idea of the wide range of building types to which these forms of illumination are adapted there is given an extensive list of well known manufacturing and business concerns whose structures of one sort or another are so lighted.

CLAY PRODUCTS COMPANY, INC., Brazil, Ind. "Ar-Ke-Tex, the Standard of Textured Tile."

Tiling is being so extensively used for many purposes, for exterior as well as for interior uses, that any advance in the way of introducing new forms of tiling or new surface finishes is certain to be of wide interest to architects. This booklet illustrates an assortment of tile which in addition to being of excellent colors are of attractive textures, all this being had without any sacrifice of the structural strength which, of course, is quite necessary. "Ar-Ke-Tex Tile is a facing tile and has been evolved from hollow building tile just as face brick was evolved from common brick. Already, the demand for this new finished masonry material is widespread, due to its added construction features as well as to the economy of its use. Ar-Ke-Tex Tile combines the many advantages of a hollow building tile with surface textures of ceramic beauty. Ar-Ke-Tex is now available in salt glazed (Insul-Glaz), smooth unglazed buff gray (Caentile), mottled cream brown (Mottled Tile), and cream gloss (Cream Gloss Tile) finishes. The excellence of the finishes in quality and appearance, makes Ar-Ke-Tex Tile acceptable for the high-est class of projects. Because of its economy, Ar-Ke-Tex Tile is just as suitable for work where low price is the prime consideration. Ar-Ke-Tex Tile is used principally as an interior treatment, although in many instances an exterior treatment has proved completely satisfactory." The brochure carries illustrations in color which prove the excellence of both colors and texture, and detail sheets show the use of the tile for facing walls, the tile to be used at corners surfaced accordingly. This material is of value in several ways.

HOPE'S CASEMENTS



San Diego Art Gallery, California. W. S. Johnson, Archt.

THE FINEST BUILDINGS THROUGHOUT THE WORLD ARE FITTED WITH HOPE'S

· METAL WINDOWS ·

HENRY HOPE & SONS 101 PARK AVENUE · NEW YORK

REVIEWS OF MANUFACTURERS' PUBLICATIONS

NEW YORK TELEPHONE COMPANY. "Planning for Telephones in Buildings." Importance of proper installing.

Of the countless details of equipment which are required in a large building, there is probably none more complicated than the wiring for telephone service. It is necessary that an accurate survey be made to determine just what the demand will be and that the wiring be laid while the structure is in course of erection, since otherwise floors and walls must be torn up to permit the placing of cables and wires. To make the problem as simple of solution as possible, the New York Telephone Company issues this booklet "for the use of architects, engineers, builders and owners." It explains the details of telephone engineering for larger buildings and there are particular suggestions regarding construction problems involving cable terminal frames, vertical risers, conduits, splicing closets, distributing terminal cabinets, underfloor duct systems, base raceways, moulding raceways and facilities for public telephones. The booklet has many drawings and diagrams that illustrate in detail the construction methods that have been found best by the telephone engineers after collating and studying the experience of thousands of architects and builders. The booklet will be furnished upon request, and the company's engineers are always ready to coöperate with architects and engineers in regard to construction.

THE JOSAM MANUFACTURING CO., Michigan City, Ind. "Josam Products." A booklet on details of plumbing.

Some one has said within the last year or two that if there is one single thing which symbolizes or represents the American idea of complete practicality, that one thing is plumbing. But as any architect, builder or engineer well knows, the excellence of American plumbing is by no means the result of using aimless, hit-or-miss methods but is the outcome of patient, diligent research and experiment supplemented by full use of the resources of manufacturers who have made good use of what experiment and research placed at their disposal. How well manufacturers have made use of their opportunities is more than suggested by this brochure which illustrates and lists the large number of plumbing details manufactured and sold by the Josam Manufacturing Company,-drains and traps, interceptors, shock absorbers, swimming pool equipment, steam water heaters, closet bends and fittings, check valves, expansion joints, solid pipe connectors, and other details which it would require considerable space merely to name. The preface to the brochure says that "Josam products are built by practical men who know the rigid requirements of the various plumbing and building codes, and who can look back on 35 years of experience in the plumbing field. The last 14 years have been intensively devoted to studying the needs of the building industry in relation to such products as can be produced in our plants."

STEEL FRAME HOUSE COMPANY, Pittsburgh. "Steel Framing for Dwellings." Use of steel for small buildings.

Use of steel for framing buildings has been largely responsible for a complete change in methods of construction during the past few decades. Steel framing, to be sure, has been used chiefly for large buildings,—skyscrapers, which tower skyward,—but there exists no reason why steel should not be used for framing buildings of other kinds and of smaller sizes. "The application of 'steel framing' is not limited to residences, but is being used with equal success and economy in the construction of garages, filling stations, small school houses, small apartments, farm buildings and other similar structures. The first cost of 'steel framing' is slightly higher than that of wood, but the saving in labor and the rapidity with which it can be erected offset the difference in material cost not to mention the added degree of permanence, rigidity, fire safety and freedom from shrinkage. Considering the fact that two-thirds of the entire cost of a building is for labor, the advantages of steel construction are apparent." "The Steel Frame House Company, a subsidiary of one of the largest steel fabricating companies in the world, has developed the most practical system of steel house framing ever introduced. This ingenious system makes it possible to produce standard steel frame members at such a low cost that a steel-framed house is within reach of every modern home builder, with all of its advantages."

HOME INCINERATOR COMPANY, Milwaukee. "Burn It With Gas; the Decent Way."

With the progress into popular favor of sanitary principles, quite a number of probable sources of disease have disappeared. Modern plumbing has brought about the doing away with some of these sources, and the now all but general use of the automobile and the consequent disappearance of the stable have meant the abolishment of others. And high in favor is the useful incinerator for burning, easily and quickly, the garbage which would otherwise be collected in cans, to form breeding places for flies, germs and vermin. This particular brochure deals with the "Incinor," a "perfected gas-burning device for destroying garbage. Within a few minutes the Incinor burns garbage, rubbish and trash into a fine, powder-like, sterilized ash. As much as three bushels of garbage burns into a few handfuls of ashes. The Incinor can be installed in any home, old or new. It is a machine,—and goes in with no more bother than installing a gas range. It is usually placed in the basement. A simple connection with your gas, another with the flue of your heating plant, and the Incinor is ready for service. The cost of operating the Incinor is within the means of every household,—a few pennies per day. It is not necessary to burn the Incinor every day, except for large families.

NATIONAL TUBE COMPANY, Pittsburgh. "A Clipping, a Letter, and a Fact or Two."

There is perhaps no one detail connected with building which is more vexatious to architects, and both vexatious and costly to owners of buildings than the deterioration of piping. Where pipes or conduits for electrical wires or for water and gas lines are embedded in walls or floors which are often of masonry or concrete, it is of course impossible to reach them without tearing up the floors or walls at great inconvenience and almost prohibitive cost, and yet unless the pipes are reached they cannot be replaced. The only way to avoid trouble is to use in the first place pipe which is not subject to corrosion and the other ills which attack metal piping. This brochure deals with the piping supplied by the National Tube Co., made by processes developed by Dr. Frank N. Speller. "Pipe is formed by rolling a steel plate into circular form and welding it. Under the old process, the heavy blue scale which formed on the surface of the pipe as the steel cooled, greatly accelerated pitting. An electric current was formed between the scale and the pipe steel which ate into the metal and caused a rust pit. Under this process, the pipe is made somewhat larger than the size required. The temperature of the pipe is allowed to drop from 2,500° to about 1,800°, or until the scale becomes set and brittle. The pipe is then forced through rolls which break off the scale and reduce the section's size."

RADIO CORPORATION OF AMERICA, Woolworth Building, New York, "Centralized Radio Receiving Equipment."

In hotels, hospitals, apartment houses and buildings of other kinds the supplying to the occupants of music and other forms of entertainment by means of radio has become general. This of course requires the use of appropriate equipment, and to supply such equipment is the business of the Radio Corporation of America. "The centralized radio system described in this booklet consists of a central installation for receiving and amplifying programs for distribution to headsets, loudspeakers, or both, located throughout a hotel, hospital, sanatorium, school, apartment house or even a private home. One receiver with amplifying equipment, distribution and outlet equipment constitutes one channel. One channel is required for the reception of one program. Provision is made for as many as four channels in order that the listener may choose any one of four programs. In planning centralized radio installations for new or old buildings, it is obvious that, for economic reasons, consideration should be given to the use of more channels than may be immediately contemplated, and wiring and outlet facilities provided accordingly. This means that without additions to the wiring system, additional channels may be installed in the central station at any future time." The booklet illustrates and describes the apparatus necessary for the proper receiving and distributing of radio service for different buildings.

Spotless Window Shades Bring Final Perfection to Your Buildings

YOU design a building. It stands as a monument to your skill . . . a reflection of your ideas of beauty and serviceability.

Yet—the equipment used in that building can do much either to detract from or to enhance its beauty.

Today—when recommending window shades—many architects specify Tontine. For these shades are washable—they keep their freshness season after season—

they give long wear—they bring a final touch of perfection to your building.

Tontine is a fine, even-textured shade fabric—designed to diffuse sunlight properly—to eliminate glare. Thoroughly washable—an occasional application with soap and water restores its original beauty—keeps it looking like new. Because it gives permanent beauty and outlasts ordinary window shade material Tontine lowers replacement costs—means real economy on the equipment budget.

Made by a special du Pont process—Tontine contains no "filler" . . . cannot crack or pin-



The Provident Mutual Life Insurance Co. building, 46th and Market Streets, Philadelphia, Pa. Architects, Cram & Ferguson, Boston. Completely equipped with Tontine Window Shades.

hole. It is impregnated with pyroxylin—the basic substance that makes the famous Duco so wonderfully durable. It will pay you to consider Tontine when specifying window shades for the buildings you design.

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Newburgh, N. Y.



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THE WASHABLE WINDOW SHADE

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Please send me samples and full information about Tontine, the washable window shade.

INDEX TO ADVERTISING ANNOUNCEMENTS

PART 1—ARCHITECTURAL DESIGN

Acme Brick Company	4 86 21	Eagle-Picher Lead Company, The Fischer & Jirough Co., The Frink Corporation, The	3 44 71	Mount & Robertson, Inc	65
American Brass Company American Walnut Manufacturers Asso-	21			Nashville Hdw. Flooring Co	73
ciation	47	General Electric Company Fourth Co	ver	National Lead Company	69
Architectural Decorating Company	44	Georgia Marble Company, The Guastavino Company, R	22 7	National Terra Cotta Society New York Galleries, Incorporated	49
Arkansas Oak Flooring Company	73 19	Guth Company, The Edwin F	78	New York Culteries, Liter persons	
Art Metal Construction Company, The	***			Orange Screen Company	90
Third C	over	Hamlin, Irving	24	Ornamental Plasterers	44
		Hanley Company	54	Dan & Common Too	78
Baguès, Inc	46	Hartmann Sanders Co	18	Pass & Seymour, Inc	81
Bakelite Corporation	88	Heinz Roofing T.le Co	6	Pratt & Lambert, Inc	67
Beardslee Chandelier Mfg. Co Best Bros. Keene's Cement Co	78 12	Higgins & Co., Chas, M	86 74		
Blank & Company, Fredric	52	Higgins & Co., Chas, M	93	Ramp Buildings Corporation	11 86
Bloomington Limestone Co	10			Reeves Co., Robert C	56
Bradley Lumber Company	31 73	Improved Office Partition Co38		Roddis Lumber and Veneer Company	58
Brasco Manufacturing Co	97	Indiana Limestone Company	5	Russell & Erwin Mfg. Co	25
Bruce Company, E. L	73	Jacobson & Company44, Jacobson Plastering Corporation, The	51	Sargent & Company	36
G G TI		Jacobson Plastering Corporation, The	51	Shanklin Manufacturing Co., Inc Sheldon Slate Co., F. C Second Co. Shevlin, Carpenter & Clarke Company	88
Carney Company, The	61 89	Kawneer Co., The	98	Sheldon Slate Co., F. C Second Co.	ver
Cellized Oak Flooring, Inc	73	Kensington Mfg. Company	41	Smyser-Royer Company	79
Circle A Products Corporation	26	King Construction Company	82 43	Smyser-Rover Company	29
Clinton Metallic Paint Co	54 33	Klein & Co., Inc., Henry	. 42		
Corbin, P. & F	23	Kosmos Portland Cement Company, In-		Tennessee Oak Flooring Co	73 52
Covert Company, The H. W	48	corporated	14	Tuttle & Bailey Mfg, Co	50
Crane Co	76 55	Libby-Owens Sheet Glass Co., The	83		~
Curus companies Service Bureau, xue.		Long-Bell Lumber Co., The	73	U. S. Gutta Percha Paint Co United States Rubber Company	63
Dahlstrom Metallic Door Co	91	Ludowici-Celadon Company	13 2	United States Rubber Company	31
Davey Tree Expert Co., Inc., The	20	Lupton's Sons Co., David	17	Voigt Company	44
Davis Extruded Sash Co	34	Lutton Company, Inc., Wm. H	82	W . D. W	
Decorators Supply Co., The	44 45	Machath Francisco Communication	77	Western Pine Manufacturers Association Wheeler Osgood Company, The84,	54
DeLong Furn.ture Co	44	Macbeth-Evans Glass Company Master Builders Company, The	77	"White" Door Bed Company, The	53
Detroit Steel Products Company	87	McKinney Manufacturing Co	24	Wickwire Spencer Steel Co	52
Driwood Corporation	8, 42 95	Missouri Portland Cement Co	16	7 . D W . L G	+ =
Du Tone de Iveniours & Co., Inc., E. 1	23	Modern Bronze Store Front Co	15	Zouri Drawn Metals Company	15
	0		900		
PAR	T 2—	ARCHITECTURAL ENGINEERING A	ND B	BUSINESS	
Aerofin Corporation	117	-ARCHITECTURAL ENGINEERING A General Refrigeration Company		Radio Corporation of America	106
Aerofin Corporation	117 178	General Refrigeration Company	189	Radio Corporation of America	198
Aerofin Corporation	117 178 209	General Refrigeration Company Hardinge Brothers, Inc.	189 213	Radio Corporation of America	198
Aerofin Corporation Alberene Stone Company American Blower Corp. American Shaeffer & Budenberg Corp. American Brass Company, The.	117 178 209 172 135	General Refrigeration Company	189 213 116 146	Radio Corporation of America. Rail Steel Bar Association. Raymond Concrete Pile Company Reading Iron Company Reading Jacks Co.	198 101 150 184
Aerofin Corporation Alberene Stone Company American Blower Corp. American Shaeffer & Budenberg Corp. American Brass Company, The. American Laundry Machinery Co., The	117 178 209 172 135 197	General Refrigeration Company Hardinge Brothers, Inc. Heggie-Simplex Boiler Company	189 213 116 146 191	Radio Corporation of America. Rail Steel Bar Association. Raymond Concrete Pile Company. Reading Iron Company Receivador Sales Co. Republic Iron & Steel Co.	198 101 150 184 149
Aerofin Corporation Alberene Stone Company American Blower Corp. American Brass Company, The. American Brass Company, The. American Laundry Machinery Co., The. American Radiator Company	117 178 209 172 135 197	General Refrigeration Company Hardinge Brothers, Inc. Heggie-Simplex Boiler Company	189 213 116 146	Radio Corporation of America. Rail Steel Bar Association. Raymond Concrete Pile Company Reading Iron Company Reading Jacks Co.	198 101 150 184 149
Aerofin Corporation Alberene Stone Company American Blower Corp. American Shaeffer & Budenberg Corp. American Brass Company, The. American Laundry Machinery Co., The. American Radiator Company. 107 American Rolling Mill Company, The. American Telephone & Telegraph Co	117 178 209 172 135 197 , 156 155 130	General Refrigeration Company Hardinge Brothers, Inc. Heggie-Simplex Boiler Company	189 213 116 146 191 129	Radio Corporation of America. Rail Steel Bar Association. Raymond Concrete Pile Company. Reading Iron Company Receivador Sales Co. Republic Iron & Steel Co. Richards, Wilcox Mfg. Co Second Co	198 101 150 184 149 ver 206
Aerofin Corporation Alberene Stone Company American Blower Corp. American Shaeffer & Budenberg Corp. American Brass Company, The. American Laundry Machinery Co., The American Radiator Company. 107 American Rolling Mill Company, The. American Telephone & Telegraph Co. A. P. W. Paper Company.	117 178 209 172 135 197 156 155 130 122	General Refrigeration Company	189 213 116 146 191 129 154 203	Radio Corporation of America. Rail Steel Bar Association. Raymond Concrete Pile Company. Reading Iron Company Receivador Sales Co. Republic Iron & Steel Co. Richards, Wilcox Mfg. Co. Second Co. Sarco Co., Inc. Sedgwick Machine Works.	198 101 150 184 149 ver 206 152
Aerofin Corporation Alberene Stone Company American Blower Corp. American Shaeffer & Budenberg Corp. American Brass Company, The. American Laundry Machinery Co., The. American Radiator Company. 107 American Rolling Mill Company, The. American Telephone & Telegraph Co	117 178 209 172 135 197 , 156 155 130	General Refrigeration Company Hardinge Brothers, Inc. Heggie-Simplex Boiler Company	189 213 116 146 191 129 154 203	Radio Corporation of America. Rail Steel Bar Association. Raymond Concrete Pile Company. Reading Iron Company Reactivador Sales Co. Republic Iron & Steel Co. Richards, Wilcox Mfg. Co. Second Co. Sarco Co., Inc. Sedgwick Machine Works. Servel Sales, Inc. Third Co.	198 101 150 184 149 ver 206 152 ver
Aerofin Corporation Alberene Stone Company American Blower Corp. American Shaeffer & Budenberg Corp. American Brass Company, The. American Laundry Machinery Co., The. American Radiator Company	117 178 209 172 135 197 1,156 155 130 122 163 171	General Refrigeration Company	189 213 116 146 191 129 154 203 187	Radio Corporation of America. Rail Steel Bar Association Raymond Concrete Pile Company. Reading Iron Company Reaceivador Sales Co. Republic Iron & Steel Co Richards, Wilcox Mfg. Co Second Co Sarco Co Inc Sedgwick Machine Works. Servel Sales, Inc	198 101 150 184 149 ver 206 152 ver 217
Aerofin Corporation Alberene Stone Company American Blower Corp. American Brass Company, The. American Brass Company, The. American Laundry Machinery Co., The. American Radiator Company	117 178 209 172 135 197 1,156 155 130 122 163 171	General Refrigeration Company	189 213 116 146 191 129 154 203 187	Radio Corporation of America. Rail Steel Bar Association. Raymond Concrete Pile Company. Reading Iron Company Receivador Sales Co. Republic Iron & Steel Co. Richards, Wilcox Mfg, Co. Second Co Sarco Co. Inc Sedgwick Machine Works Servel Sales, Inc. Third Co Sonneborn Sons, Inc., L Speakman Company Spencer Heater Company	198 101 150 1184 149 ver 206 152 ver 217 1212
Aerofin Corporation Alberene Stone Company American Blower Corp. American Shaeffer & Budenberg Corp. American Brass Company, The. American Laundry Machinery Co., The. American Radiator Company	117 178 209 172 135 197 155 130 122 163 171 172 183 196	General Refrigeration Company	189 213 116 146 191 129 154 203 187 175 201 207	Radio Corporation of America. Rail Steel Bar Association. Raymond Concrete Pile Company. Reading Iron Company Reading Iron Company Receivador Sales Co. Republic Iron & Steel Co. Richards, Wilcox Mfg. Co. Second Co Sarco Co., Inc. Sarco Co., Inc. Sedgwick Machine Works. Servel Sales, Inc. Sonneborn Sons, Inc., L. Speakman Company Spencer Heater Company Standard Conveyer Company Standard Conveyer Company	198 101 150 184 149 ver 206 152 ver 217 141 1212
Aerofin Corporation Alberene Stone Company American Blower Corp. American Shaeffer & Budenberg Corp. American Brass Company, The. American Radiator Company. American Radiator Company. 107 American Rolling Mill Company, The. American Rolling Mill Company, The. American Telephone & Telegraph Co. A. P. W. Paper Company Armstrong Cork and Insulation Company Automatic Electric, Inc. Baldor Electric Company Barrett Company, The Bates Expanded Steel Truss Co. Bethlehem Steel Company	117 178 209 172 135 197 , 156 155 130 122 163 171 172 183 196 193	General Refrigeration Company Hardinge Brothers, Inc. Heggie-Simplex Boiler Company	189 213 116 146 191 129 154 203 187	Radio Corporation of America. Rail Steel Bar Association. Raymond Concrete Pile Company. Reading Iron Company Receivador Sales Co. Republic Iron & Steel Co. Richards, Wilcox Mfg, Co. Second Co. Sarco Co. Inc Sedgwick Machine Works Servel Sales, Inc. Third Co. Sonneborn Sons, Inc., L Speakman Company Spencer Heater Company Standard Conveyer Company Staynew Filter Corporation Steel Frame House Company	198 101 150 184 149 ver 206 152 ver 217 141 212 129 1180
Aerofin Corporation Alberene Stone Company American Blower Corp. American Shaeffer & Budenberg Corp. American Brass Company, The. American Laundry Machinery Co., The American Radiator Company. 107 American Rolling Mill Company, The. American Telephone & Telegraph Co. A. P. W. Paper Company Armstrong Cork and Insulation Company Automatic Electric, Inc. Baldor Electric Company Barrett Company, The Bates Expanded Steel Truss Co. Bethlehem Steel Company Brunswick-Balke-Collender Co., The	117 178 209 172 135 197 156 155 130 122 163 171 172 183 199 193 167	General Refrigeration Company. Hardinge Brothers, Inc. Heggie-Simplex Boiler Company. 115, Hoffman Specialty Company, Inc. Home Incinerator Company Hubbell, Incorporated, Harvey Imperial Brass Mfg. Co., The Insulite Company, The International Nickel Company, The. 139, Jenkins Bros. Johns-Manville Corporation Johnson Co., S. T. Johnson Service Co. Kalman Steel Company	189 213 116 146 191 129 154 203 187 175 201 207 210 194	Radio Corporation of America. Rail Steel Bar Association Raymond Concrete Pile Company. Reading Iron Company Reading Iron & Steel Co Republic Iron & Steel Co Richards, Wilcox Mfg. Co Second Co. Sarco Co Inc. Sedgwick Machine Works. Servel Sales, Inc	198 101 150 184 149 206 152 207 141 121 219 180 1186
Aerofin Corporation Alberene Stone Company American Blower Corp. American Shaeffer & Budenberg Corp. American Brass Company, The. American Radiator Company. American Radiator Company. 107 American Rolling Mill Company, The. American Rolling Mill Company, The. American Telephone & Telegraph Co. A. P. W. Paper Company Armstrong Cork and Insulation Company Automatic Electric, Inc. Baldor Electric Company Barrett Company, The Bates Expanded Steel Truss Co. Bethlehem Steel Company	117 178 209 172 135 197 , 156 155 130 122 163 171 172 183 196 193	General Refrigeration Company Hardinge Brothers, Inc. Heggie-Simplex Boiler Company. 115, Hoffman Specialty Company, Inc. Home Incinerator Company Hubbell, Incorporated, Harvey Imperial Brass Mfg. Co., The Insulite Company, The International Nickel Company, The 139, Jenkins Bros. Johns-Manville Corporation Johnson Co., S. T. Johnson Service Co. Kalman Steel Company Kerner Incinerator Company	189 213 116 146 191 129 154 203 187 175 201 207 210 194 104	Radio Corporation of America. Rail Steel Bar Association Raymond Concrete Pile Company. Reading Iron Company Reading Iron & Steel Co Richards, Wilcox Mfg. Co Second Co. Sarco Co., Inc. Sedgwick Machine Works. Servel Sales, Inc	198 101 150 184 149 206 152 ver 217 141 212 199 180 1186 1121
Aerofin Corporation Alberene Stone Company American Blower Corp. American Shaeffer & Budenberg Corp. American Brass Company, The. American Laundry Machinery Co., The. American Radiator Company	117 178 209 172 135 197 156 155 130 122 163 171 172 183 196 193 167 186 148	General Refrigeration Company	189 213 116 146 191 129 154 203 187 175 201 207 210 194	Radio Corporation of America. Rail Steel Bar Association Raymond Concrete Pile Company. Reading Iron Company Reading Iron & Steel Co Republic Iron & Steel Co Richards, Wilcox Mfg. Co Second Co. Sarco Co Inc. Sedgwick Machine Works. Servel Sales, Inc	198 101 150 184 149 206 152 ver 217 141 212 199 180 1186 1121
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Aerofin Corporation Alberene Stone Company American Blower Corp. American Shaeffer & Budenberg Corp. American Brass Company, The. American Laundry Machinery Co., The. American Radiator Company	117 178 209 172 135 197 155 130 155 130 122 163 171 172 183 196 193 167 186 148 185 195 105	General Refrigeration Company Hardinge Brothers, Inc. Heggie-Simplex Boiler Company. 115, Hoffman Specialty Company, Inc. Home Incinerator Company Hubbell, Incorporated, Harvey Imperial Brass Mfg. Co., The Insulite Company, The International Nickel Company, The 139, Jenkins Bros, Johns-Manville Corporation Johnson Co., S. T. Johnson Service Co. Kalman Steel Company Kerner Incinerator Company Kewanee Bo.ler Corporation Kewanee Private Utilities Co. Kohler Co.	189 213 116 146 191 129 154 203 187 175 201 207 210 194 104 102 154 143	Radio Corporation of America. Rail Steel Bar Association. Raymond Concrete Pile Company. Reading Iron Company Reading Iron Company Receivador Sales Co. Republic Iron & Steel Co. Richards, Wilcox Mfg. Co. Second Co Sarco Co., Inc. Sedgwick Machine Works. Servel Sales, Inc. Third Co Sonneborn Sons, Inc., L. Speakman Company Spencer Heater Company Standard Conveyer Company Staynew Filter Corporation Steel Frame House Company Straus & Sons, Inc., Nathan Structural Clay Tile Association. 120, Structural Gypsum Corporation Structural Gopsum Corporation Structural Gopsum Corporation Structural Gopsum Corporation Structural Co, B. F.	198 101 150 184 1149 206 206 1152 117 117 117 117 117 117 117 117
Aerofin Corporation Alberene Stone Company American Blower Corp. American Shaeffer & Budenberg Corp. American Brass Company, The. American Radiator Company. American Radiator Company. American Radiator Company. American Rolling Mill Company. American Telephone & Telegraph Co. A. P. W. Paper Company Armstrong Cork and Insulation Company Automatic Electric, Inc. Baldor Electric Company Barrett Company, The Bates Expanded Steel Truss Co. Bethlehem Steel Company Brunswick-Balke-Collender Co., The. Buzzini, Inc., Walter J. Byers Company, A. M. Carey Company, The Philip. Carnegie Steel Company Carter Bloxonend Flooring Company Ceco Weatherstrip & Screen Co.	117 178 209 172 135 197 155 130 122 163 171 172 183 196 193 167 186 148	General Refrigeration Company Hardinge Brothers, Inc. Heggie-Simplex Boiler Company. 115, Hoffman Specialty Company, Inc. Home Incinerator Company Hubbell, Incorporated, Harvey Imperial Brass Mfg. Co., The Insulite Company, The International Nickel Company, The 139, Jenkins Bros. Johns-Manville Corporation Johnson Co., S. T. Johnson Service Co. Kalman Steel Company Kerner Incinerator Company Kewanee Bo.ler Corporation Kewanee Bo.ler Corporation Kewanee Private Utilities Co. Kohler Co.	189 213 116 146 191 129 154 203 187 175 201 207 210 194 104 102 154 143	Radio Corporation of America. Rail Steel Bar Association. Raymond Concrete Pile Company. Reading Iron Company Reading Iron Company Receivador Sales Co. Republic Iron & Steel Co. Richards, Wilcox Mfg. Co. Second Co Sarco Co. Inc. Sedgwick Machine Works. Servel Sales, Inc Third Co Sonneborn Sons, Inc., L. Speakman Company Spencer Heater Company Standard Conveyer Company Standard Conveyer Company Staynew Filter Corporation Steel Frame House Company Structural Clay Tile Association. 120, Structural Gypsum Corporation. Sturtevant Co, B. F. Toch Brothers Trane Co., The Trenton Potteries Companies, The.	1988 1011 150 184 1149 206 1152 217 141 121 121 121 121 174 117 142 113 117 114 117 117 114 117 117 117 117 117
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Aerofin Corporation Alberene Stone Company American Blower Corp. American Shaeffer & Budenberg Corp. American Brass Company, The. American Laundry Machinery Co., The. American Radiator Company	117 178 209 172 135 197 156 155 130 122 163 171 172 183 196 148 185 195 105 148 185 195 105 1180 144 151 1,192 198 206 154	General Refrigeration Company Hardinge Brothers, Inc. Heggie-Simplex Boiler Company. 115, Hoffman Specialty Company, Inc. Home Incinerator Company Hubbell, Incorporated, Harvey Imperial Brass Mfg. Co., The Insulite Company, The International Nickel Company, The. 139, Jenkins Bros. Johns-Manville Corporation Johnson Co., S. T. Johnson Service Co. Kalman Steel Company Kerner Incinerator Company Kerner Incinerator Company Kevanee Boler Corporation Kewanee Private Utilities Co. Kohler Co. Maddock's Sons Co., Thos. Fourth Co May Oil Burner Corporation McCray Refrigerator Sales Corporation McCray Refrigerator Sales Corporation McQuay Radiator Corporation Mid-West Air Filters, Incorporated Minwax Company, Inc. Moulding Floor Co., Thos. Mueller Co. Nash Engineering Co., The	189 213 116 146 191 129 154 203 187 175 207 210 194 104 102 105 115 115 129 115 115 115 115 115 115 115 11	Radio Corporation of America. Rail Steel Bar Association. Raymond Concrete Pile Company. Reading Iron Company Reading Iron Company Receivador Sales Co. Republic Iron & Steel Co. Richards, Wilcox Mfg. Co. Second Co Sarco Co., Inc. Sedgwick Machine Works. Servel Sales, Inc. Third Co Sonneborn Sons, Inc., L. Speakman Company Spencer Heater Company Standard Conveyer Company Standard Conveyer Company Staynew Filter Corporation Steel Frame House Company Structural Clay Tile Association. 120, Structural Gypsum Corporation. Structural Co., B. F. Toch Brothers Trane Co., The Trenton Potteries Company United Metal Products Co., The U. S. Mineral Wool Company Van Range Co., The John. 112, Vonnegut Hardware Co. Vortex Manufacturing Co., The	198 101 150 184 1149 206 152 179 1141 212 1179 1142 1179 1142 1179 1142 1179 1142 1179 1142 1179 1142 1142 1142 1143 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 114 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 114
Aerofin Corporation Alberene Stone Company American Blower Corp. American Shaeffer & Budenberg Corp. American Brass Company, The. American Laundry Machinery Co., The American Radiator Company. American Rolling Mill Company. The American Telephone & Telegraph Co. A. P. W. Paper Company Armstrong Cork and Insulation Company Automatic Electric, Inc. Baldor Electric Company Barrett Company, The Bates Expanded Steel Truss Co. Bethlehem Steel Company Brunswick-Balke-Collender Co., The Buzzini, Inc., Walter J. Byers Company, A. M. Carey Company, The Philip. Carnegie Steel Company Carter Bloxonend Flooring Company. Carter Bloxonend Flooring Company. Ceco Weatherstrip & Screen Co. Chromium Corporation of America. Clow & Sons, James B. Cohoes Rolling Mill Co. Concrete Engineering Co. Concrete Reinforcing Steel Institute. Concrete Steel Co. Consolidated Ashcroft Hancock Co. Inc. Cowing Pressure Relieving Joint Co. Cutler Mail Chute Co., The	117 178 209 172 135 197 1,156 1,155 130 122 163 171 183 196 193 167 186 148 185 195 105 180 140 141 151 192 192 193 194 115 195 195 195 195 195 195 195 195 195	General Refrigeration Company Hardinge Brothers, Inc. Heggie-Simplex Boiler Company. 115, Hoffman Specialty Company, Inc. Home Incinerator Company Hubbell, Incorporated, Harvey Imperial Brass Mfg. Co., The Insulite Company, The	189 213 116 146 191 129 154 203 187 175 201 207 2210 194 104 102 104 104 102 115 143 187 175 210 191 104 105 105 105 105 105 105 105 105	Radio Corporation of America. Rail Steel Bar Association. Raymond Concrete Pile Company. Reading Iron Company Reading Iron Company Receivador Sales Co. Republic Iron & Steel Co. Richards, Wilcox Mfg. Co. Second Co Sarco Co., Inc. Sedgwick Machine Works. Servel Sales, Inc. Third Co Sonneborn Sons, Inc., L. Speakman Company Spencer Heater Company Standard Conveyer Company Staynew Filter Corporation Steel Frame House Company Straus & Sons, Inc., Nathan Structural Clay Tile Association. 120, Structural Gypsum Corporation. Sturtevant Co., B. F. Toch Brothers Trane Co., The Trenton Potteries Companies, The. Troy Laundry Machinery Co., Inc. Truscon Steel Company United Metal Products Co., The U. S. Mineral Wool Company. Van Range Co., The John. 112, Vonnegut Hardware Co. Vortex Manufacturing Co., The	198 101 150 184 149 152 179 186 121 179 142 136 137 142 153 166 179 184 184 184 185 186 187 187 187 187 187 187 187 187
Aerofin Corporation Alberene Stone Company American Blower Corp. American Shaeffer & Budenberg Corp. American Brass Company, The. American Brass Company, The. American Radiator Company. American Radiator Company. American Rolling Mill Company. American Rolling Mill Company. American Telephone & Telegraph Co. A. P. W. Paper Company Armstrong Cork and Insulation Company Automatic Electric, Inc. Baldor Electric Company Barrett Company, The Bates Expanded Steel Truss Co. Bethlehem Steel Company Brunswick-Balke-Collender Co., The. Buzzini, Inc., Walter J. Byers Company, A. M. Carey Company, The Philip. Carnegie Steel Company. Carter Bloxonend Flooring Company. Carter Bloxonend Flooring Company. Carter Bloxonend Flooring Company. Coco Weatherstrip & Screen Co. Chromium Corporation of America. Clow & Sons, James B. Cohoes Rolling Mill Co. Concrete Engineering Co. Concrete Reinforcing Steel Institute Concrete Steel Co. Consolidated Ashcroft Hancock Co. Inc. Cutler Mail Chute Co., The. Douglas Co. The John	117 178 209 172 135 197 156 155 130 122 163 171 172 183 193 167 188 193 167 148 185 195 105 110 110 110 110 110 110 110 110 11	General Refrigeration Company Hardinge Brothers, Inc. Heggie-Simplex Boiler Company. 115, Hoffman Specialty Company, Inc. Home Incinerator Company Hubbell, Incorporated, Harvey Imperial Brass Mfg. Co., The Insulite Company, The International Nickel Company, The. 139, Jenkins Bros. Johns-Manville Corporation Johnson Co., S. T. Johnson Service Co. Kalman Steel Company Kerner Incinerator Company Kerner Incinerator Company Kewanee Bo.ler Corporation Kewanee Private Utilities Co. Kohler Co. Maddock's Sons Co., Thos. McCray Refrigerator Sales Corporation McCuay Radiator Corporation McCuay Radiator Corporation McCuay Refrigerator Sales Corporation McCuay Radiator Corporation Mid-West Air Filters, Incorporated Minwax Company, Inc. Moulding Floor Co., Thos. Mueller Co. Nash Engineering Co., The	189 213 116 146 191 129 154 203 187 175 207 210 194 104 102 105 115 115 129 115 115 115 115 115 115 115 11	Radio Corporation of America. Rail Steel Bar Association. Raymond Concrete Pile Company Reading Iron Company Reading Iron Company Receivador Sales Co. Republic Iron & Steel Co. Richards, Wilcox Mfg. Co. Second Co Sarco Co. Inc. Sedgwick Machine Works Servel Sales, Inc Third Co Sonneborn Sons, Inc., L. Speakman Company Spencer Heater Company Standard Conveyer Company Standard Conveyer Company Standard Conveyer Company Straus & Sons, Inc., Nathan Structural Clay Tile Association. 120, Structural Cypsum Corporation Sturtevant Co., B. F. Toch Brothers Trane Co., The Trenton Potteries Companies, The. Troy Laundry Machinery Co., Inc. Truscon Steel Company United Metal Products Co., The U. S. Mineral Wool Company. Van Range Co., The John 112, Vonnegut Hardware Co. Vortex Manufacturing Co., The Wasmuth-Endicott Company Weber Costello Co.	198 101 150 184 1149 206 152 179 1141 212 1179 1142 1179 1142 1179 1142 1179 1142 1179 1142 1179 1142 1142 1142 1143 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 114 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 1144 114
Aerofin Corporation Alberene Stone Company American Blower Corp. American Shaeffer & Budenberg Corp. American Brass Company, The. American Radiator Company. American Radiator Company. American Rolling Mill Company, The. American Rolling Mill Company, The. American Telephone & Telegraph Co. A. P. W. Paper Company Armstrong Cork and Insulation Company Armstrong Cork and Insulation Company Barrett Company, The Bates Expanded Steel Truss Co. Bethlehem Steel Company Brunswick-Balke-Collender Co., The Buzzini, Inc., Walter J. Byers Company, A. M. Carey Company, The Philip. Carnegie Steel Company. Carter Bloxonend Flooring Company. Carter Bloxonend Flooring Company. Ceco Weatherstrip & Screen Co. Chromium Corporation of America Clow & Sons, James B. Cohoes Rolling Mill Co. Concrete Engineering Co. Concrete Reinforcing Steel Institute Concrete Steel Co. Consolidated Ashcroft Hancock Co. Inc. Cowing Pressure Relieving Joint Co. Cutler Mail Chute Co., The Dixon Crucible Company, Joseph. Douglas Co., The John Dunham Co., C. A. 115 Duraftee Company, Inc., The.	117 178 209 172 135 197 1, 156 1, 155 130 122 163 171 172 183 196 193 167 186 195 195 195 195 190 140 141 151 1, 192 198 198 199 199 199 199 199 199 199 199	General Refrigeration Company Hardinge Brothers, Inc. Heggie-Simplex Boiler Company. 115, Hoffman Specialty Company, Inc. Home Incinerator Company Hubbell, Incorporated, Harvey Imperial Brass Mfg. Co., The Insulite Company, The International Nickel Company, The. 139, Jenkins Bros. Johns-Manville Corporation Johnson Co., S. T. Johnson Service Co. Kalman Steel Company Kerner Incinerator Company Kevanee Bo.ler Corporation Kewanee Bo.ler Corporation Kewanee Private Utilities Co. Kohler Co. Maddock's Sons Co., Thos. Fourth Co May Oil Burner Corporation McCaya Refrigerator Sales Corporation McQuay Radiator Corporation Mid-West Air Filters, Incorporated Minwax Company, Inc. Moulding Floor Co., Thos. Mueller Co. Nash Engineering Co., The. 108, National Electric Products Corporation. National Fireproofing Company National Tube Company	189 213 116 146 191 129 154 203 187 175 207 210 194 104 102 154 143 208 177 173 210 173 211 114 177 159 173 999 161	Radio Corporation of America. Rail Steel Bar Association. Raymond Concrete Pile Company. Reading Iron Company Reading Iron & Steel Co. Republic Iron & Steel Co. Richards, Wilcox Mfg. Co. Second Co Sarco Co. Inc. Sedgwick Machine Works. Servel Sales. Inc Third Co Sonneborn Sons, Inc., L. Speakman Company Spencer Heater Company Standard Conveyer Company Standard Conveyer Company Staynew Filter Corporation Steel Frame House Company Structural Clay Tile Association 120, Structural Gypsum Corporation. Structural Gypsum Corporation Sturtevant Co., B. F. Toch Brothers Trane Co., The Trenton Potteries Companies, The Troy Laundry Machinery Co., Inc. Truscon Steel Company United Metal Products Co., The U. S. Mineral Wool Company. Van Range Co. The John	198 101 150 1184 1184 1184 1184 1184 1190 1184 1174 1174 1174 1174 1174 1174 1174 1174 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 118
Aerofin Corporation Alberene Stone Company American Blower Corp. American Shaeffer & Budenberg Corp. American Brass Company, The. American Laundry Machinery Co., The American Radiator Company. American Rolling Mill Company. The American Telephone & Telegraph Co. A. P. W. Paper Company Armstrong Cork and Insulation Company Automatic Electric, Inc. Baldor Electric Company Barrett Company, The Bates Expanded Steel Truss Co. Bethlehem Steel Company Brunswick-Balke-Collender Co., The Buzzini, Inc., Walter J. Byers Company, A. M. Carey Company, The Philip. Carnegie Steel Company Carter Bloxonend Flooring Company. Carter Bloxonend Flooring Company. Ceco Weatherstrip & Screen Co. Chromium Corporation of America. Clow & Sons, James B. Cohoes Rolling Mill Co. Concrete Engineering Co. Concrete Reinforcing Steel Institute. Concrete Steel Co. Consolidated Ashcroft Hancock Co. Inc. Cowing Pressure Relieving Joint Co. Cutler Mail Chute Co., The	117 178 209 172 135 197 156 155 130 122 163 171 172 183 193 167 188 193 167 148 185 195 105 110 110 110 110 110 110 110 110 11	General Refrigeration Company Hardinge Brothers, Inc. Heggie-Simplex Boiler Company. 115, Hoffman Specialty Company, Inc. Home Incinerator Company Hubbell, Incorporated, Harvey Imperial Brass Mfg. Co., The Insulite Company, The International Nickel Company, The. 139, Jenkins Bros. Johns-Manville Corporation Johnson Co., S. T. Johnson Service Co. Kalman Steel Company Kerner Incinerator Company Kerner Incinerator Company Kewanee Boller Corporation Kewanee Private Utilities Co. Kohler Co. Maddock's Sons Co., Thos. Fourth Co. May Oil Burner Corporation McCray Refrigerator Sales Corporation McQuay Radiator Corporation Mid-West Air Filters, Incorporated. Minwax Company, Inc. Moulding Floor Co., Thos. Mueller Co. Nash Engineering Co., The	189 213 116 146 191 129 203 187 175 201 194 104 102 102 194 114 120 111 208 211 111 114 177 137 173 99 161 147 103	Radio Corporation of America. Rail Steel Bar Association. Raymond Concrete Pile Company. Reading Iron Company Reading Iron Company Reading Iron & Steel Co. Republic Iron & Steel Co. Richards, Wilcox Mfg. Co. Second Co Sarco Co., Inc. Sedgwick Machine Works. Servel Sales, Inc. Sedgwick Machine Structural Clay Tile Association. 120, Structural Clay Tile Association. 120, Structural Clay Tile Association. Structural Clay Tile Association. Structural Clay Tile Association. 120, Structural Clay Tile Association. 120, Structural Company Wether Co., The U. S. Mineral Wool Company. Van Range Co., The John. 112, Vonnegut Hardware Co. Vortex Manufacturing Co., The Wasmuth-Endicott Company Westinghouse Electric & Manufacturing Company Westinghouse Electric & Manufacturing	198 101 150 1184 1184 1184 1184 1184 1199 1184 1199 1184 1199 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 1184 118
Aerofin Corporation Alberene Stone Company American Blower Corp. American Shaeffer & Budenberg Corp. American Brass Company, The. American Radiator Company American Radiator Company American Rolling Mill Company, The American Cork and Insulation Company Armstrong Cork and Insulation Company Automatic Electric, Inc. Baldor Electric Company Barrett Company, The Bates Expanded Steel Truss Co. Bethlehem Steel Company Brunswick-Balke-Collender Co., The Buzzini, Inc., Walter J. Byers Company, A. M. Carey Company, The Philip. Carnegie Steel Company Carter Bloxonend Flooring Company. Carter Bloxonend Flooring Company. Ceco Weatherstrip & Screen Co. Chromium Corporation of America. Clow & Sons, James B. Cohoes Rolling Mill Co. Concrete Reinforcing Steel Institute. Concrete Steel Co. Consolidated Ashcroft Hancock Co. Inc. Cowing Pressure Relieving Joint Co. Cutler Mail Chute Co., The Dixon Crucible Company, Joseph Douglas Co., The John Dunham Co., C. A. Duraflex Company, Inc., The	117 178 209 172 135 197 1, 156 1, 155 130 122 163 171 172 183 196 193 167 186 195 195 195 195 190 140 141 151 1, 192 198 198 199 199 199 199 199 199 199 199	General Refrigeration Company Hardinge Brothers, Inc. Heggie-Simplex Boiler Company. 115, Hoffman Specialty Company, Inc. Home Incinerator Company Hubbell, Incorporated, Harvey Imperial Brass Mfg. Co., The Insulite Company, The International Nickel Company, The. 139, Jenkins Bros. Johns-Manville Corporation Johnson Co., S. T. Johnson Service Co. Kalman Steel Company Kerner Incinerator Company Kerner Incinerator Company Kewanee Boller Corporation Kewanee Private Utilities Co. Kohler Co. Maddock's Sons Co., Thos. Fourth Co. May Oil Burner Corporation McCray Refrigerator Sales Corporation McQuay Radiator Corporation Mid-West Air Filters, Incorporated. Minwax Company, Inc. Moulding Floor Co., Thos. Mueller Co. Nash Engineering Co., The	189 213 116 146 191 129 154 203 187 175 201 207 210 194 104 102 208 211 111 208 211 114 177 137 159 161 147	Radio Corporation of America. Rail Steel Bar Association. Raymond Concrete Pile Company Reading Iron Company Reading Iron Company Receivador Sales Co. Republic Iron & Steel Co. Richards, Wilcox Mfg. Co. Second Co Sarco Co. Inc. Sedgwick Machine Works Servel Sales, Inc Third Co Sonneborn Sons, Inc., L. Speakman Company Spencer Heater Company Standard Conveyer Company Standard Conveyer Company Standard Conveyer Company Stratus & Sons, Inc., Nathan Structural Clay Tile Association 120, Structural Cypsum Corporation Sturtevant Co. B. F. Toch Brothers Trane Co., The Trenton Potteries Companies, The. Troy Laundry Machinery Co., Inc. Truscon Steel Company United Metal Products Co., The U. S. Mineral Wool Company. Van Range Co. The John	198 101 101 1184 1184 1184 1184 1190 1190 1190 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 1191 119
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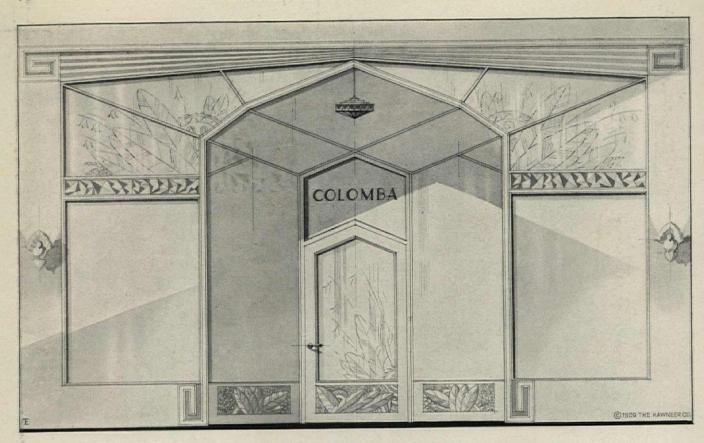
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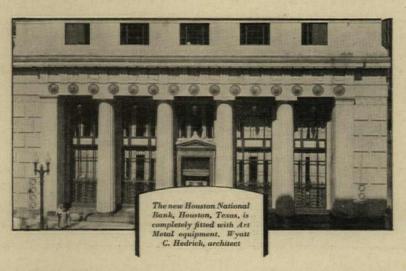
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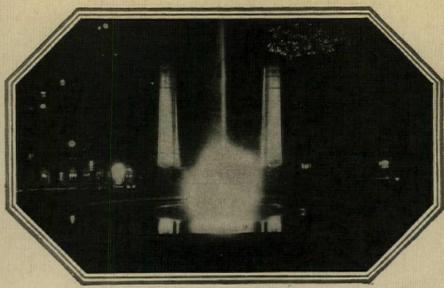


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LIGHT is part of the design

Many great buildings planned or erected in 1928 embody provision for floodlighting as part of the design.

For several years, this trend has been made increasingly practicable and desirable by the development of electric equipment which can be adapted to every structural and decorative requirement.

Owners of business structures have appreciated, more and more, the commercial as well as the artistic advantages of properly planned* floodlighting; while public officials are rapidly extending its use to government buildings and, in modified application, to electric fountains.

The General Electric Company has contributed the resources of its illuminating engineering laboratory and the long experience of its lighting specialists to the solution of the many problems involved and to constructive plans for the illumination of projected buildings as well as those already erected.

*Proper planning, while the building is being designed, materially reduces both the initial and subsequent operating cost of the floodlighting equipment essential for the desired effects. The service of our illuminating engineers is always available on request and places neither architect nor owner under any obligation.

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