THE ARCHITECTURAL FORUM

AUGUST 1926
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Perfect operation and control are guaranteed when Ideal Elevator Door Hardware is installed. For while hangers, closers, checking devices and safety interlocks are distinctly separate mechanisms, they all synchronize perfectly when installed together. Complete Unit Control under a single responsibility is assured. Door weight is evenly distributed; doors glide on steel ball bearings along heavy, dirt-proof track, smoothly and noiselessly. Speed and quiet are important Ideal features. Either mechanical or electric inter-locks can, like all other Ideal elevator door hardware, be added without changing present controller mechanism. If, in addition to speed and freedom from trouble, you want real elevator door safety, write us for complete information. Our engineers are at your service.

Largest and most complete line of door hardware made
True Economy in Home Building

In the first group of a series of model homes now being constructed throughout the country by the Home Owners' Service Institute, Natco Hollow Building Tile is being used for the walls of many of the homes. These homes, ideal in design, construction and equipment, will have Natco walls because Natco Hollow Building Tile best meets the need of the Institute for an economical wall material which will give permanent satisfaction.

Walls of Natco Tile are Dry

The double shell construction eliminates through mortar joints. This, combined with the still air spaces in the tile walls, between the inner and outer shells, prevents heat, cold and moisture from penetrating. Stucco and plaster applied to firesafe Natco walls will not crack, scale, craze or come off. The large units, being light and easily handled, save in time, labor and mortar.

NATIONAL FIRE PROOFING COMPANY
General Offices: 609 Fulton Building, Pittsburgh, Pa.

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National Fire Proofing Company of Canada, Ltd.
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Everyone allied with the building industry should make it a point to secure a copy of the new Natco Tex-Tile book. It tells an authoritative story of true economy in home building. Write for it today.
The Tower Building, Cleveland Union Terminals Company, Cleveland, Ohio
Engineer, Mr. H. D. Jouett; Architects, Graham, Anderson, Probst & White of Chicago
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SOLID STEEL

DOUBLE-HUNG WINDOWS

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STEELHART Expanded Metal Stucco Mesh provides a rigid, continuous strengthening steel framework or "skeleton" for either hand applied or "gunited" stucco, checking cracking tendencies and giving permanence to the work.

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Interior marble, whether for ashlar work, floors or the complete interior of an especially large project is not only inexpensive in comparison to its great beauty but its maintenance cost, where our own Appalachian Tennessee Marble is used, is nil.

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Our Service Department, composed of experienced interior marble engineers, will gladly advise with you on any project you think might well include interior marble; or will promptly furnish you with exact cost estimates on any project, specifying interior marble, in which you are interested.

APPALACHIAN MARBLE COMPANY
Knoxville, Tennessee
Inseparably Bonded for Strength and Beauty

Much will be required of the doors in the new Administration Building of the Southwestern Bell Telephone Company, St. Louis, both from a standpoint of appearance and durability. Compound Doors were the choice of the architects, Mauran, Russell and Crowell, and I. R. Timlin, Associate Architect for the Bell Telephone Company.

Write for sample of Compound construction, and data on cost and design.

THE COMPOUND & PYRONO DOOR COMPANY
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MADE BY AMERICA'S OLDEST VENEERED DOOR SPECIALISTS
The setback is an architectural asset because it breaks up the monotony of huge wall areas. The heavy horizontal lines which the setback involves, create shadows which emphasize the value of brick textures and bring out, in a wall built of "SUMMER GREYS", the brick's vitality, individuality and architectural character.

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Dry Press and Wirecut in all shades and textures

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Worthy to rank with "Bradford Reds"

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Plants at Bradford, Lewis Run, Summerville, Pa.
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Flat stones are one thing. Olde Stonesfield Flagging is quite another. Let's not confuse the two.

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America Needs More Garages in Her Cities

This very important opportunity for the creation of architectural commissions should engage the attention of architects in every city of over 25,000 population. In the recent past over 100 modern, multi-floor buildings have been erected. That they are exceptionally profitable is a matter of record. To aid you in formulating ideas on this subject we urge you to read "Planning Garages for Profitable Operation." It will be sent, gratis, on request. Ask for the latest "F" edition.

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CONSULTANTS ON PROMOTION AND GARAGE OPERATION
The Barry Apartments are a striking example of the use of delicate tints in beautiful brickwork. The Face Brick is in light buff. Its color and texture is emphasized by the terra cotta trim. You will find many splendid examples of the modern use of Face Brick in "Architectural Detail in Brickwork," a portfolio of many halftone plates, showing various treatments of the brick wall surface, ready for filing. It will be sent postpaid to any architect making request on his office stationery.

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who in 1892 founded the Heggie Organization and
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THROUGHOUT a third of a century, the organization headed by
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A boiler built to Heggie standards in every detail, so as to be “The
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Zouri's many distinguishing features, planned to hold plate glass gently and firmly against shocks and wind pressure, prevents breakage and the start of ugly cracks. Interruptions of display are thus avoided, a fact that more than pays the architect, contractor and retailer for Zouri's choice.

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Announcement of
An Architectural Competition

Photographs and Plans of Common Brick Houses

This competition has been simplified to an unusual degree. It is open to any architect, architectural firm or designer. It requires no sketch plans. It calls only for photographs and plans of houses or bungalows already constructed—or completed before the contest closes November 16, 1926.

Thus the contest requires very little time on the part of the architect, yet substantial rewards are offered. The jury will consist of three architects of national reputation in residential design.

The purpose of this competition is to bring together a collection of the best among the many houses being built with Common Brick exteriors. Whenever these photographs are published, the name and location of the architect will be given.

Full details of this competition may be secured by writing the COMMON BRICK HOUSE COMPETITION, care of The Architectural Forum, 385 Madison Avenue, New York.

Award List

First Prize . . . $1,000
Second Prize . . . 500
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Fourth Prize . . . 100
10 Honorable Mentions at $50 each

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Check above, and send for any or all of these books.
A close-up of one of the fine Embossed Inlaid floor designs in Armstrong's Linoleum—Pattern No. 6005 (Patented). Note the hit-and-miss arrangement of the colors, the irregular dropping into the pattern of varicolored figured blocks, the raised effect of the tiles.

Embossed Tile Inlaid Linoleum—Different from Any Floor You Know

Here is Linoleum that has not only color, pattern, luster—but more. It has actual texture—a rich embossed effect of old hand-set ceramics. Each unit in the design is actually raised above the surface. It is an entirely new Armstrong achievement in linoleum manufacture.

The colors include soft, pastel shadings of heather browns, dusk blue-greens, tapestry tans, and rugged brick reds. The designs are not repeated regularly, but are varied in a pleasing handcraft manner. Heraldic and figured emblems inserted here and there complete the Old-World effects in this modern floor material.

Here is a real achievement in floor beauty that merits your consideration when you plan your next home or business project. Our Bureau of Interior Decoration will gladly send you, by return mail, generous-size quality samples and colorplates of these new Embossed Tile Inlaid Linoleum designs, as well as other linoleum floor suggestions for interiors you may be planning.

Armstrong Cork Company, Linoleum Division, Lancaster, Pennsylvania
No material is more adaptable nor expressive of subtle texture and mellow colorings than Face Brick.

The Esperson Building is faced with Acme Perla Weatherproof Brick—selected by architect and owner for color, texture, durability, simplicity and strength.

We are manufacturers of the products we sell and make “a brick for every type—a color for every color scheme.”
yes, insulation now pays for itself!

The cost of insulating material and the cost of putting it up need no longer be "extra expense," even though the added comfort and security are worth it.

Our new product is all wood, not a substitute. A new process now produces perfected manufactured lumber for structural insulation.

It goes up with greater rapidity and efficiency than old-fashioned sheathing—insulates and deadens sound at the same time. And there is no waste. It is a perfect plaster base, eliminating lath—or interior finish ready to receive decoration, no plaster required.


What's Its Name?

What is the name of this new product? Its name is destined to be one of the most important in the building field. The men behind it (*) will announce the name in an early issue of this publication.

STRUCTURAL INSULATION

USED FOR SHEATHING, the new all-wood product adds to the strength and permanence of any structure. It insulates and deadens at the same time, and to an unexcelled degree. This we are prepared to prove by test and example.

WE GUARANTEE IT for superior insulating qualities. We would like to send you a sample.

SEND FOR DETAILS concerning this all-wood manufactured lumber—its discovery, its manufacture, its many profitable uses, the men behind it. We will send you complete information, including sample, if you will send us your name and address.

MASON FIBRE COMPANY
Dept. 608   111 W. Washington St.
CHICAGO, ILL.
60 apartments
get perfect electric refrigeration
from three Coldak machines in the basement

The building shown above is the Lexington and Concord Apartments, in Somerville, Mass. It was designed by Arthur H. Bowditch, the well-known Boston architect.

This building contains sixty apartments. These apartments all get perfect refrigeration from only three Coldak machines, installed as a unit in the basement.

No other system is like it. Coldak was developed especially for apartment houses. It is a system that supplies refrigeration to as many as 25 apartments from one machine—just as one heater supplies many radiators. And the Coldak System can be expanded indefinitely—two machines for 50 apartments, three machines for 75 apartments, etc.

The advantages of the Coldak System are apparent when compared with other refrigerating systems.

No similar system can supply more than six apartments from one machine located in the basement.

Brine circulating systems are vastly more expensive. The cost of installing the Coldak System is only a fraction of the usual cost of a brine installation. The life of Coldak is infinitely longer, because the refrigerant used will not eat away the pipes.

Individual installations in each apartment cannot be compared with Coldak. They make it necessary to install all the machinery in the kitchen. With Coldak all the machinery is installed in the basement, out of the way. No machinery in the living quarters. No noise or service calls to annoy the tenants. They get perfect refrigeration as conveniently as they get light, water and heat.

If the smaller Coldak, however, were installed individually in each apartment, they would still have the advantage of quiet. And the older a Coldak grows, the quieter it becomes.

The operating cost of the Coldak System is much less than that of individual installations. Coldak's cost is more than offset by the increased rental value of the apartments.

Few parts—low service cost

The simplicity of the Coldak machine has reduced the service cost to less than half that of other machines. Coldak has no belts, pulleys, pistons, crankshafts, reduction gears or reciprocating valves. A simple, two-stage helical gear compressor, directly driven by the motor at motor speed, does the job.

Coldak costs less to install

With Coldak, the refrigeration takes place only inside the ice boxes. The pipes are small and require no insulation. That makes installing easier. The initial cost is lower. The current consumed is less. And once Coldak is installed, it requires little attention other than an...
occasional oiling of the motor. The oil in the compressor requires changing only about once every two years.

Coldak is the one ideal system of electric refrigeration for apartment houses. It is the last word in making the new apartment house completely modern—and an easy means of bringing old apartment houses up to date.

**Coldak for private homes—and commercial uses**

The Coldak Household System offers advantages that are equally outstanding. The first Coldaks installed over six years ago are still giving satisfactory service. There is a Coldak model for every size home.

For stores dealing in perishable goods, the Coldak Commercial System offers revolutionary economies and conveniences. The one system makes possible different degrees of temperature in different compartments.

**Coldak managed by**

**J. G. White Management Corporation**

The Coldak Corporation secured the services of the J. G. White Management Corporation after the Coldak System had demonstrated its superiority over other types of electric refrigeration.

The services of the Coldak engineers are available to any architect. Suggestions will gladly be given about installing the Coldak System in any building, proposed or already completed.

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**Note these Specifications**

These specifications apply to the Coldak Electric Refrigerating System for apartment houses:

- **Capacity per Compressor**—At 12° F. boiling temperature of the refrigerant, and with the cooling water at 70° F., the refrigerating effect is equivalent to the melting of 1100 pounds of ice per day.

- **Refrigeration**—Direct expansion. Float valve controlled chilling units, connected in multiple. Unoccupied apartments may be cut off.

- **Compressor**—Two-stage helical gear—straight line.

- **Motor**—2 H.P., 1200 R.P.M.

- **Control**—Automatic back-pressure control.

- **Refrigerant**—No unpleasant odor, harmless and non-corrosive.

- **Distribution**—Refrigerant distributed through ⅛-inch liquid food lines and 1-inch gas return lines. No insulated pipe lines.

- **Safety Devices**—Automatic safety valve, out-door purge, automatic overload cutout switch, high-pressure stop switch, water failure stop switch, shut-off valves on all main lines and to each apartment.

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**You should have this Coldak booklet**

A Coldak booklet, containing more detail information about the Coldak System for apartment houses, will be sent to you if you desire a copy. Just fill out the coupon or attach it to your letterhead.
The Function of the Sign was Recognized Even in the Early Ages of Architecture

In the early ages buildings, arches and market places were deemed incomplete without the actual incorporation of ideographic or lettered legends to render their purpose more definite.

Because of commercial activity the sign today is a recognized essential of modern architecture. Designers realize the importance of including in their original plans definite provision for the public message, written in clean-cut letters of translucent white by day and glowing beauty by night.

In the moulded glass letter and variety of background the Flexlume Electric Day-and-Night Sign has a sufficient degree of flexibility to render it easily adaptable to the architect's pencil—to be made an attractive component of the building's exterior.

"Signs and Inscriptions in Architecture" is a 40-page authoritative book that gives suggestions for correct architectural lettering of signs and inscriptions on modern buildings. If you have not received a copy, have your secretary write us today.

Communicate with our Department of Design for intelligent cooperation whenever you have a sign problem to solve.

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A complete set of Data Sheets, Full Specifications, and the most comprehensive and detailed catalog comprise this new set.

They have been arranged by CASTLE engineers for your especial help in all hospital sterilizer installations. They answer the hundred and one questions on piping and space requirements that heretofore have been everywhere except in your own office.

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**T-M-B Flooring**
A permanent quiet flooring with a durable, rubber-like texture. It is applied over cement or wood, forming a seamless sanitary surface easy to clean. It gives distinctive beauty at a cost often less than for other floorings. Made in red, brown, green and black. Used in all kinds of buildings.

**T-M-B Acid Resisting Flooring**
A special compound of T-M-B flooring where protection is desired from acids, alkalies and water. In laboratories of schools, colleges and industrial plants T-M-B Acid Resisting Flooring has proved its ability to give long service under severely adverse conditions.

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**Dance Floor**
Applied over any cement or wood surface, resulting in a smooth floor easily waxed to the desired slipperiness. Available in several colors. Unaffected by rain, snow, heat or cold. Used as outdoor dance floor in many leading amusement parks throughout the country.

**Outdoor Floor**
Composed of imperishable minerals that successfully defy frost, heat, rain and snow. Ideal for roof gardens, porches, roofs used for recreation, etc.

**Moulstone**
A permanent fireproof floor for stores, lobbies, reception rooms, toilets and offices. An ideal flooring for making new floors over old ones. In variety of colors, permitting border, panel and inlay design. Can be scored to resemble tile. Applied over cement, wood subfloors or old wood floors.

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A resilient tile floor of unusually durable texture. Green, red, brown and green tiles afford almost any combination desired.
Announcing a new model apartment size electric refrigerator. Revolutionary in design in service and cost.

FIVE MINUTE SERVICE
Should attention be required the Copeland service man or the janitor merely lifts the unit out and substitutes a loaned unit in almost the same length of time that it takes to fill the average refrigerator with ice.

STORAGE DRAWER
The large vegetable or storage drawer is a convenient accessory. When in position, under the refrigerator, the food compartment is raised twelve inches.

MORE ROOM for DISHES
On the left, the wide, unobstructed Copeland shelf, holding six dishes. On the right, two narrow shelves of an ordinary refrigerator which, because of the partition, hold only four dishes.

MORE ICE CUBES
More ice — 108 cubes can be frozen at one time. The double depth drawer is also used for delicious frozen desserts, salads and bouillon.

COPELAND ELECTRIC REFRIGERATION
The radically different design of the new model Copeland Electric Refrigerator, with both machine and cooling compartment forming a single removable unit at the top of the box, makes possible better refrigeration, greatly increased food space, a larger number of ice cubes, simple installation and “five-minute” service.

Measuring only 26¼ inches in width, 21 inches in depth and 62½ inches in height, the new model Copeland requires very little floor space. Yet the commodious, unpartitioned food chamber with wide, unobstructed shelves affords ample storage space for the average-size family.

Built of the finest sheet steel, insulated with solid corkboard and finished in white Pyroxylin, it maintains throughout, the same high standard of quality that characterizes thousands of other Copeland models giving satisfactory service in American homes today.

The retail price of the new model Copeland is lower than that of any other complete electric refrigerator. We shall be pleased to quote quantity prices and to furnish detailed specifications.

COPELAND PRODUCTS, INC...630 LYCASTE STREET • DETROIT • MICHIGAN
For The Laboratory

In specifying Alberene Stone for the table tops, shelving, sinks, drain boards, fume hoods, etc., the designers of the Baker Chemistry Laboratory of Cornell University (pictured to the right) chose the one pre-eminent material for laboratory use—the material used, because of its unique qualities, in 90% of the laboratories built in the past 20 years. As a matter of fact, there is no substitute for Alberene Stone as a laboratory material, whether on grounds of durability, workability or economy.

Write for the Catalog, describing the advantages of Alberene Stone for laboratory use and also for stair treads, sanitary work and electrical uses.

Alberene Stone Company
153 West 23rd Street, New York

The Alberene Stone Laboratory Equipment here pictured in the Baker Chemistry Laboratory is in keeping with the high architectural and technical standards maintained throughout.

Alberene
Quarried for over 40 Years
The Indestructible Material for Laboratory Use
Standard also for toilet, urinal and shower partitions, stair treads, electrical construction.

Otis
For nearly three quarters of a century
The World's Word for Elevator Safety

Otis Elevator Company
Offices in all principal cities of the world

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Hydrex Double-Layer Roofing Felt
Provides insulation and waterproofness. Consists of two sheets of coated felt and between the two felt sheets a layer of Asphaltic Compound to make the nail holes tight—especially in the valleys. Used on the highest class structures. Samples and data on request.

Hydrex Asphalt Products Corporation
Waterproof Cloth,Canvas, Bitumen, Insulating and Building Papers, Roofing, Sound-Deadening Felt, Paints, Asphalts, Etc.
120 Liberty Street, New York
The use of Brixment has grown to such proportions that we have had to build another large-capacity mill to supply the increasing demand. This new mill, located at Brixment, N. Y. (formerly Akron Falls), now puts Brixment within easy reach of every city in the east. Architects in charge of operations there who know, by experience, the architectural, structural and economic advantages of Brixment will appreciate the importance of this announcement. To those who are not yet acquainted with Brixment we shall be glad to send a copy of our architect's handbook (8½ x 11 inches with filing tab) containing specifications, data and tests and telling how Brixment insures masonry of unusual strength, permanence, beauty and economy.

Advantages of Brixment

Brixment is a mason's cement of a uniform strength equal to that of the brick it binds. Spreads fast, smooth and buttery and insures better, more accurate joints in less time and at less cost. Repels moisture. Does not fade mortar colors. No lime. No slaking. Can be used as soon as mixed. Its approval by prominent and exacting architects is evidence that Brixment is filling the need of an improved, economical mortar material. LOUISVILLE CEMENT CO., Incorporated, General Offices, Louisville, Ky.

Some Brixment Buildings

Biltmore Hotel, Miami, Schultze & Weaver, Architects; Thompson-Starrett Co., General Contractors.

Cement Manufacturers for Nearly a Century

Brixment for Perfect Mortar
Test Your Brickwork Color Schemes!

You first imagine the effect brick of a certain color and texture will produce when laid with mortar. The Clinton Mortar Color Experimenter will permit you to test this color scheme by laying up a panel in a few seconds. The color of the mortar joints may be easily changed to permit the study of other effects.

Leading architects all over America are using this ingenious device. Scores of them have written commending its utility.

We will gladly ship a Mortar Color Experimenter to any architect free upon request. Write for it today.

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40 Clinton Road
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built and equipped with—

Blue Star Installation Domestic Gas Appliances
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Anacoma Brass Pipe and Bronze Screen Wire
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Every Architect should have this manual on file:

It contains 48 pages of perspectives and floor plans of these model homes and other helpful advice to home builders on how to make the home a model in every way. It is free on request to every registered Architect. Simply fill in the coupon below.

HOME OWNERS' SERVICE INSTITUTE, Inc.
441 Lexington Ave., New York City
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Please send me, without cost or obligation—


Name

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A nation-wide movement for better homes

In the July issue we illustrated the first of the model homes being built with the co-operation of these leading building and equipment manufacturers under our supervision. Additional homes are shown above; each has been designed by a registered Architect.

A total of thirty-six of these model homes will be demonstrated to the public in approximately twenty-eight cities this year, thus educating the home-seeker toward better architectural planning and better building as well as fostering an appreciation of the permanent investment value of good equipment.

Under the supervision of

HOME OWNERS' SERVICE INSTITUTE - INC.
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For institutional buildings whose funds do not admit costly architectural treatment, Terra Cotta will provide handsome enrichment at a moderate expense.

The Terra Cotta entrance and surmounting bay windows of the building shown above illustrate the possibility of effectively dignifying institutional buildings in this way.

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NATIONAL TERRA COTTA SOCIETY
19 West 44th Street

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What a difference three locks make!
First, there is a right-twist lock in every other bar.
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Third, there is the 1600-ton hydraulic pressure-lock, which is affected by pressing the cross bars into the two twist-locks.
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"CEMENTILE" comes in three types: Red Interlocking for pitched roofs; Flat and Channel for flat or pitched roofs where it is desired to waterproof with a composition covering. "CEMENTILE" is laid directly on the roof purlins.

CEMENTILE On Your Building Takes Roofing Off Your Mind

YOU can forget about your roof after Cementile is laid on the purlins. An assuring situation, especially when your building houses valuable equipment or machinery, which demands Absolute Protection.

The Power House pictured above—Georgia Railway and Power Co., Tugalo, Georgia—containing important electrical equipment, the value of which runs into seven figures—is roofed with Interlocking Red Cementile. Because of previous satisfactory roof service over a period of 12 years on their Tallulah Falls Power House, this company again chose a Cementile roof, fire-proof, weather-proof, free from maintenance, permanent; the most economical roof from any point of view.

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American Cement Tile Manufacturing Co.
801 Oliver Building, Pittsburgh, Pa.

PLANTS:
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A lighting story with too much point

SAVE in rare instances, this light distribution curve tells a story painful to the eyes—a story of concentrated glare from a wrongly selected lighting unit. And industry, aroused to the economic danger in poorly selected fixtures, is demanding authoritative information on lighting.

The architect is particularly well situated to give this information—and the Graybar Electric Lighting Manual to give it to him. For here is shown, in concise form, complete installation data for every type of business, industrial and home lighting. Fixtures for proper light distribution are shown—and the Graybar distributing house nearby has those fixtures in stock.

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Successor to Western Electric Supply Dept.
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Federal Roofs
link light weight
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When you roof with Federal Cement Tile, you effect substantial savings on the steel super-structure or frame. That is due to Federal Tile's light weight.

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FEDERAL CEMENT TILE ROOFS
“For Every Type of Permanent Building”
Floors that play an important part in securing decorative unity

Where wide doorways permit an unobstructed vista from room to room, the floor area may be made the connecting decorative link.

In the interior above, a **Belflor Inset Tile** pattern with grey field and tiles of mottled green and black provides the unifying note. A border of solid black gives the finishing touch and serves to frame the three rooms in one delightfully harmonious picture.

Not only does this floor "tie together" entrance hall, living room and dining room but it is a decorative asset in each room. Nairn **Gold Seal Inlaids** form a handsome background for furnishings in any type of interior. And in the wide variety of patterns there are many appropriate designs for the modest home as well as for the mansion. **Gold Seal Inlaids** have practical advantages that recommend them to architects and home-owners. They can be installed over old as well as over new floors at a moderate cost. They never need expensive refinishing and they can be kept immaculate with minimum care. Their steadfast durability is assured by the Gold Seal guarantee and the name Nairn, which is synonymous with quality.

(See next page)
THE *Belflor Inset Tiles* patterns of Nairn *Gold Seal Inlaids* provide resources for giving character and distinction to almost any interior. Home-owners quickly see the artistic possibilities and practical qualities of these permanent floors.

The widespread use of *Belflor Inset Tiles* in living rooms, halls, dining rooms and sun parlors is silent, but convincing testimony that the manifold advantages of inlaid linoleum are no longer confined to the service rooms of the house.

Period furniture which is so much the vogue today lives most amicably in a room with a *Belflor Inset Tile* floor. Colonial and modern furniture, too, fit in with the colorful designs. The decorative value of *Belflor Inset Tile Pattern No. 2152/3* (shown above) is illustrated on the reverse of this page.

In durability, finish and flexibility, *Belflor Inset Tiles* set a high standard. Every tile is cut and set with mathematical precision, which insures that lengths can be laid side by side with certainty of a perfect match. Two sizes of tiles are available—4 1/4 inches and 6 inches square. Thus the proportions of the pattern in the floor can harmonize with those of the room.

We will be glad to send you "life size" reproductions of any *Gold Seal Inlaid* pattern as well as samples of the actual goods.

*Nairn Gold Seal Inlaids*

Philadelphia New York Boston Chicago Kansas City
Atlanta Minneapolis Cleveland Dallas Pittsburgh
San Francisco New Orleans

(See preceding page)
THERE is a flexibility of design possible with enameled brick that has been little studied. This plate shows how three of our stock shapes, combined with ornamental terra-cotta have produced a commercial building, ornate, economical, sanitary and of high advertising value. Succeeding plates will point out the wide ornamental possibilities of enameled brick. For stock shapes see Sweet’s.

AMERICAN ENAMELED BRICK & TILE CO.
52 Vanderbilt Avenue
New York City

ENAMELED-BRICK PLATE N° 2
GASOLINE STATION—QUEENS BOULEVARD
FRANK J. SCHEDICK, ARCHITECT
V. HAGopian, Delineator

Copies of these plates in folio will be mailed upon request.
Concrete Building Units Establish New Masonry Standards

Once the masonry home was considered beyond the means of the average purse. That is no longer true.

Concrete building units have introduced new economies in masonry construction. Everywhere today you see homes being built with concrete tile or concrete block. These express fully the inbuilt value always recognized as characteristic of masonry.

Concrete building units assure you a home of enduring strength, firesafeness and economy.

With portland cement stucco exterior finish in any one of a wide variety of colors and textures, the beauty of any admired type of architecture is easily secured.

Ask for your free copy of "A Book of Beautiful Homes"

PORTLAND CEMENT ASSOCIATION

A National Organization to Improve and Extend the Uses of Concrete

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Richmond, Va.
Salt Lake City
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Vancouver, B. C.
Washington, D. C.
Bringing Rust into the House

This illustration is used in one of a series of advertisements appearing in magazines of national circulation to impress upon home builders the waste entailed through the use of corrodible metal where Copper, Brass and Bronze serve more economically.

The reader is reminded that if iron and steel are used, rust is, in effect, being brought into his new house; but that if pure Copper, Brass, and Bronze are used, the house will be rust-proof inside and out, and periodic painting, repairs, and replacements will be entirely unnecessary.

A collateral purpose of this advertising is to help bring into the small house field the appreciation of sound, permanent building materials which the architectural profession has established so generally for more pretentious buildings.

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GENERAL OFFICES: WATERBURY, CONNECTICUT
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Canadian Mill: ANACONDA AMERICAN BRASS LIMITED, New Toronto, Ontario

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For the Old Remodeling Job

Caen Stone Cement is a Life Saver

When an old client wants you to revive one of his old "vintage of '98 office buildings" so that he may realize some income on the property instead of holding it at a loss, do not despair.

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We are the sole Importers of French Caen Stone Cement

PALMER LIME & CEMENT COMPANY
103 Park Avenue
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A Statement

The block floor in Carnegie Institute Gymnasium is not Bloxonend. This statement seems necessary because of erroneous statements coming from the Institute.

Bloxonend is not loose blocks but is a perfectly matched wood flooring strip, composite in its structure—the upper surface with the ends of the fibers meeting the wear.

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- G. Howard Chamberlin, Yonkers, N. Y.
- J. B. DeRiemer, Grand Forks, N. D.
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- Howell & Thomas, Cleveland, Ohio
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- A. L. Harris, Washington, D. C.
- Wm. B. Imler, St. Louis, Mo.
- Kidd & Kidd, Buffalo, N. Y.
- Lafrance, Buckler & Frushagen, Baltimore, Md.
- H. M. Macklin, Winston Salem, N. C.
- W. H. Nicklas, Cleveland, Ohio
- Nicklas & Roterick, Cleveland, Ohio
- H. G. Perring (Eng.), Baltimore, Md.
- Edward W. Palmer, Baltimore, Md.
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These 8 ft. sections make a tight, smooth floor—no loose blocks.

Architectural Specification gladly furnished on request

CARTER BLOXONEND FLOORING COMPANY
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BLOXONEND
Lays Smooth FLOORING Stays Smooth

August, 1926 THE ARCHITECTURAL FORUM 41
A Plea for the Decorator

Painted and tinted walls are now enjoying a wave of popularity. The decorator is adding a touch of charm and elegance to all types of buildings in every section of the country.

And he is having his troubles. Many a wonderful vision of artistic beauty, and many a scheme of delightful color blending have been utterly ruined by chemical reaction from the plastic materials used in the walls.

There's a lot of satisfaction in knowing that decorative results will be exactly as planned and specified. Our brands of Finishing Hydrated Lime insure this satisfaction.

There is a building supply dealer in your vicinity who handles one of our brands of pure, snow-white, Finishing Hydrated Lime.

THE WOODVILLE LIME PRODUCTS COMPANY
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The American Privilege

As a nation, the United States is always an interesting and perplexing study to the visitor from other shores. Our residence architecture, for example.

We build our homes to accord with our personal tastes. There is no slavish adherence to a single, monotonous, national pattern. Our cosmopolitan origin accords us the privilege—which we freely take—of adapting the best types of all countries.

This American tendency toward individuality of home design is increasing; and, as a result, new architectural importance is being attached to the interior effects that can be obtained by the judicious utilization of plastering.

It is interesting, in this connection, to note that the makers of Beaver American Plasters, conscious that good plastering must start at the very source, go to great lengths to produce plaster of real dependability. The reason, no doubt, why the definite specification of particular Beaver American Plasters by the architect is a growing tendency.

THE BEAVER PRODUCTS CO., Inc., Buffalo, N. Y. Dept. 2508
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This is an age of fine plastering, with a wealth of textures and color treatments far beyond the dreams of a few years ago. But it is not the quality of the plaster, but what’s behind it, that determines lasting satisfaction with walls and ceilings.

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Behind Par-Lock is a national organization of expert, responsible applying firms. Par-Lock is a service, not a mere material. For lasting satisfaction on high quality interiors, rely on the Par-Lock Applier and rely on Par-Lock.

Any Par-Lock Applier will gladly furnish data on Par-Lock and consult as to the character and cost of application required in a given case. See an applier or write to The Vortex Manufacturing Co.

1984 West 77th Street
Cleveland
"You're Doing a Great Work"

To date, approximately one thousand architects have been interviewed by members of the National Council for Better Plastering in an effort to obtain the suggestions of the profession toward the betterment of the campaign. In each case, the ideals of Better Plastering have been fully explained.

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As in past years, the Better Plastering campaign is a direct effort to raise the standards of plastering to a higher level through the use of improved materials and workmanship.

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THE NATIONAL COUNCIL FOR BETTER PLASTERING
1305 Madison Square Bldg., Chicago, Ill.

BETTER PLASTERING ON METAL LATH
Bakelite Switch Plates in new Palmer House

In keeping with the handsome decorations and furnishings of the new Palmer House, Chicago, Ill., are the Bakelite molded flush plates used for all wall switches.

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Makers of IDEAL BOILERS and AMERICAN RADIATORS and other products for heating, ventilating and refrigeration
When you are working on a reinforced concrete job, get in touch with Kalman. Kalman engineers will be glad to help you. Just write.

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It is highly important that the top bars be set carefully in the reinforced concrete slab. If they are just an inch or so out of the way, the slab is weakened. The Kalman High Chair will help you here. It opens exactly to specified height. After each chair is placed according to specifications—an easy job—the reinforcing bars are laid across them. Then, everything is ready for the concrete. The top bars are located at the exact distance from the forms that specifications say they should be. The contractor has not been penalized in the least. For the Kalman High Chair actually speeds up steel setting. The cost of Kalman High Chairs is infinitesimal compared to the cost of the building—and they can play a most important part in the ultimate strength of the concrete. Of course, you are interested in better concrete construction. You will want to remember the Kalman High Chair on the next reinforced concrete job you design. Why not send for a folder on it for your files?

KALMAN STEEL

KALMAN STEEL COMPANY, 1462 Wrigley Bldg., Chicago

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An architect builds his own house
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When R. A. Perkins, an architect of prominence in Sioux Falls, South Dakota, built his own house he planned on oil heat. How well he chose his oil burner is indicated by the remarks of his wife.

“Our house is new, with painted walls in delicate shades of cream and gray. Yet this spring, these same walls were fresh and clean!

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For full information, advise with the oilomatician in your community. Write for our latest book, “OIL HEATING—and what it means to the architect.”

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Please send us a copy of “Oil Heating” and the name of the oilomatician in our community.

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at U.S. Naval Training Station, Great Lakes, Ill.

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U.S. Navy

This bridge is surface finished by Standard CON-TEX—the most economical and reliable means of giving texture, color, and character to concrete.

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Every engineer, architect, builder, superintendent and foreman should have a copy of "Surfacing Concrete with CON-TEX."

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From the single home to the towering hotel, apartment or hospital structure GF Steel Joists are economical, practical and dependable. Steel Joist construction proceeds very rapidly, needing very little field labor. Several floors can be constructed at once and the finished floor construction is a strictly modern, rigid and firesafe one, dependable for all types of light occupancy buildings. GF Steel Joists will solve your problem of firesafe design in such structures. Full details will be gladly sent on request. Return the coupon.

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IN ALL probability New York has the strictest fire laws in the country—particularly as applied to schools, theatres and similar buildings. Sargent fire exit bolts have always met every specification of the city’s fire underwriters. Now they incorporate a new and exclusive safety feature—the Sargent roll-back latch, on which an application for patent has been filed. This insures operation of the doors under the most trying circumstances. The pressure of a child against the cross-bar will open it. The weight of a crowd against the door cannot jam the mechanism, as is possible with the sliding type of latch bolt. Details and specifications on request.

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Mckinney clears up the three difficulties which have attended the use of forged iron hardware in the past: application, finish and delivery.

As you know, McKinney makes the famous McKinney Butt-Hinges. Sixty years' experience with architects' and builders' problems in fitting hardware was brought into play when McKinney Forged Iron was developed.

The completed pieces, while being of authentic design based on the finest traditions of the work of metal craftsmen of past centuries, are primarily gauged to fit modern building requirements.

An entrance handle set in the justly famed Heart design (illustrated here) has a rosette accurately made for use with modern locks.

Hinge straps, both straight and offset, are reversible. There is not a handed item in the line.

For use with shutter straps, there are butt-hinges specially designed to clear the reveal of any type of construction.

Directly from a McKinney catalog you may write complete specifications for a residence, as easily as you now specify on standard lines. And you may include all hardware, from entrance door to kitchen cabinet complete.

McKinney made no effort to supersede and "improve" the designs of the old master artisans. The designs are authentic: Tulip, Heart, Curley Lock and Etruscan being available, the Etruscan being illustrative of the finest work of the Southern European countries of several centuries ago.

All pieces are made in three finishes: Dead Black Iron, Relieved Iron and Rusty Iron. They are immediately available through your local builders' hardware merchant, so there need be no waiting on the job. The fact that every piece is especially protected to resist rust and given a final finish that will withstand wear and exposure assures lasting satisfaction to your clients.

The coupon is for your convenience in obtaining the special catalog for your files.

McKinney Mfg. Co.
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Good Buildings Deserve Good Hardware

To the outsider looking in Good Hardware—Corbin—says "Keep Out."

Sturdy Sash Fasteners of solid brass or bronze that will not give an inch. Cylinder Locks that admit no one save their owners. Staunch Bolts to bar intruders. Strong Night Latches to guard the unprotected door.

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P. & F. CORBIN SINCE 1869
New Britain, Connecticut
The American Hardware Corporation, Successor
New York, Chicago, Philadelphia
In Railroading, from the heaviest crane to the most delicate relay, Ball Bearings are essential.

In fifty years, ball bearings have become an essential in almost every type of machine. In railroading, modern safety signal methods would not be possible without this efficient method of overcoming friction.

The constant grind of unlubricated wear calls for Ball Bearing Butts

For doors that bear the brunt of heavy traffic, we recommend ball bearing butts. Unlubricated friction of metal on metal, which occurs in most hinges, results in quick wear.

Over a period of years the expense of repairs and replacements of ordinary hinges which you save will more than pay for the additional cost of ball bearing butts. The ball bearing feature is an investment—not an expense. The Stanley Works pioneered in the making of high grade butts.

Stanley standards of design and quality are well known to the architectural profession. Stanley Ball Bearing Butts are made of cold rolled bronze and steel. They have non-detachable (non-losable) washers, and are perfected in every feature.

You will find that Stanley Ball Bearing Butts render maximum efficiency for life. Look for the Stanley trade-mark on every butt.

The Architect’s Manual of Stanley Hardware contains information which will aid you in selecting and specifying the correct hardware. We will gladly send you a copy. A description of the Stanley line of butts and hinges can be found in Sweet’s Catalogue, pages 1556 to 1568.
Solid for a Lifetime—Movable Overnight

Office requirements, like the style of your collar or the mood of your stenographer, have a habit of changing overnight. An ideal division of space today may be an impractical layout tomorrow.

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CIRCLE A PARTITIONS
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ANY a student of architecture, dazzled by the rich and severe beauty of Greek and Roman forms, absorbed in the mystery of the Gothic age, or carried away by the brilliance of the Renaissance or the types which have sprung from it, fails to give more than casual interest to what to other students is more interesting than any,—the Romanesque, as it was developed in western Europe during what may be roughly described as the two centuries from 800 to 1000 A.D.

The world during the ninth century and the tenth was obsessed with the belief that the year 1000 would see the end of all things as foretold by the Apocalypse. When the mystical year had passed and the world still pursued her wonted way, there came a powerful renewal of interest in things earthly, art and architecture being by no means overlooked. There had been another reason for this renewed interest. The reign of Charlemagne, giving promise as it did of a Europe once more united and powerful, had renewed faith in Rome as the predestined center of the world and had tended to again spread over Europe the belief that from Rome should emanate the animating force necessary for invigorating and once more renewing the earth.

The type of architecture which arose during this era and which is called "Romanesque" forms the subject matter of the volume under review. Among the characteristics of the style a few may be briefly mentioned: (1) wide use of the round or semi-circular arch; (2) walls of brick or of stone given a more or less smooth surface, or else built of alternating courses of brick and stone; (3) use, particularly at doors, of columns freestanding or engaged, clustered shafts or half-rounded piers from which round arches were made to spring; (4) placing of small arched windows in groups of two, three or more resting upon slender colonnettes, the entire group often set within a larger blind arch; (5) much use of corbels, corbel tables, or pilaster strips upon which (particularly upon outer walls) members forming blind arches were placed; (6) use of the rose window, a detail which during the Gothic era was to receive treatment incomparably magnificent; (7) a wide use of ornament derived from Byzantine sources, particularly in the form of carving on capitals, vousoirs and spandrels. Many parts of Europe felt the stirrings of this re-vitalizing influence upon architecture, and particularly of an incomparable beauty was and still is the Romanesque of Italy which is discussed here.

In this volume there is given a presentation of what yet remain of the Romanesque structures built in Italy, a country which made wide use of Romanesque forms long after the rest of Europe had been committed to the use of Gothic. The time when they were built antedated the era of building great city palaces and country houses, and building was largely or rather chiefly in the form of churches, the plan of which was ordinarily that of the primitive basilica (often with an atrium), a semi-circular apse forming the east end of the nave and often of each of the aisles. Circular churches were not unknown, and extensive use was made of the campanile, sometimes joined to the church and sometimes standing alone. Added to the richly decorative use of Romanesque forms for the buildings themselves a use supremely rich was made in fashioning details of interior furnishings, parapets to screen choirs or chapels; ambos or pulpits; fonts and episcopal thrones; paschal candelabra; altars and their baldacchinos and other accessories.

A work of this scope is necessarily largely of illustrations. This volume, apart from some 27 pages of excellent text, is entirely of half-tone illustrations selected with a view to widening the practical application of the Romanesque style. The mere selection of subjects for illustration from the vast number available proves the author possessed of taste of a high order. The volume constitutes a valuable addition to the data regarding an architectural type of importance to the modern world.

HOUSE & GARDEN’S Second Book of Interiors

EVERY little while a new volume is added to the House & Garden series, which deals with houses, their exteriors and interiors, and their gardens. In this, the latest and by far the most helpful and stimulating of these volumes, there has been collected the very best of the invariably excellent matter which has appeared in House & Garden during the past year or two. It is a volume valuable alike to the architect, the interior decorator and the home owner, as well as to the large number of people casually interested in interior decoration.

SEVEN hundred illustrations deal with every department of the house,—entrance porches, vestibules and halls; reception and living rooms; libraries, dining rooms and kitchens; stairways; bedrooms and bathrooms; verandas and terraces, all these illustrations presenting the most perfectly planned and beautifully arranged examples, the greater part of which are of distinctly moderate cost. Other departments deal with color schemes of which a great many are suggested; with accessories, such as bookcases and built-in bookshelves; lamps and lamp shades; mirrors and other details of furnishing; and one section is given up to illustrations and text which make entirely plain the types of furniture of the different historic periods.

It would be impossible to over-emphasize the value of this work to anyone interested in its subject.

223 pages. 9½ x 12½ inches. Price $5.

ROGERS & MANSON COMPANY
383 MADISON AVENUE, NEW YORK
son says: "It is unfortunate that L'Enfant was so impatient and domineering. He had trouble from the start, because he began to act upon no authority but his own, and actually demolished the house of a respected resident of Duddington, both against the owner's wishes and without authority from the commissioners under whom, by law, he was serving. His best friend, President Washington, was compelled to tell him in exact terms that he had disobeyed the law and would have to take the consequences. He told him that he must work with the commissioners. Even to this advice of a friend and the chief personage of the country, L'Enfant was deaf, and continued his work defiantly. Washington recognized his worth to the country, but he wrote to the commissioners after the Duddington incident: "You are as sensible as I am of his value to us. But this has its limits; and there is a point beyond which he might be over-valued." Finally the President was forced by his continued defiant and unlawful acts to dismiss the French engineer. The latter continued to live in this country, but withdrew himself and nursed his grievance. Throughout he had acted as a spoiled child, and would brook no interference. The book is full of such intimate and elucidating sidelights. There are also valuable comment.


Of books about the Palace of Versailles there may well be no end, perhaps because the kingly dwelling begun by Louis XIII and brought to completion by the Grand Monarque may be justly regarded as France in epitome during the seventeenth and eighteenth centuries, and the life of Versailles as the quintessence of French life and history during this period. The whole architectural, artistic and social life of France found its focus, indeed, at Versailles from the time that Louis XIV started on his magnificent building career until the dark days of the French Revolution ended an era of dazzling splendor altogether unparalleled.

At all events, however one may regard Versailles historically and socially, it cannot be denied that the fabric alone is an inexhaustible storehouse of interest. The authoress of this book of 235 pages, embellished with numerous half-tone illustrations, has performed an invaluable service in giving a most carefully detailed and admirably arranged history of the building, noting all the successive changes that have taken place. Not only has she done this in the most lucid and logical manner imaginable, but she has also contrived to remove the subject from the realm of dry-as-dust data and statistics and infuse into it an enormous amount of human, personal and historic interest, so that the different chapters are not merely records of materials and dimensions, which one reads and straightway forgets, for the facts are so interwoven with personal incidents and anecdotes that they fix themselves quite indelibly in the memory. The Palace of Versailles is peculiarly the outward manifestation of Louis-le-Grand's personality, the abiding memorial of his hopes and aspirations, his triumphs and failures. Since this is so, no one can hope thoroughly to understand the building without knowing something of the man who called it into being and who imposed his personality and ideals upon the architects and other artists who worked for him, not merely in a perfunctory.
professional manner but with genuine enthusiasm, and aided him to amply realize his architectural ambitions. In view of this unique condition, the authoress has included a singularly able, fair and sympathetic analysis of Louis' personality and character. In part she says of him: "Louis XIV had two sides, the man and the king—and the king came first. As such he saw himself a divinely appointed intermediary between God and people. . . . As such he was invariably benevolent, measured, great; with an enormous patriotism and sensitiveness for France so that every Frenchman felt the honor of the country to be safe in his hands. He gave a prestige to monarchy unknown before. Never, through all the intoxication of youth and adulation and passion, did Louis XIV forget what was due to the dignity of the crown. Hence the decorum, even in his faults—though he never loved a woman as much as he loved France.

"He could be hard and incredibly selfish in private life, and considered himself placed above the morals of ordinary persons; but then all his subjects shared that view. It was he himself who set the limit to his will—a limit that touched every point of life—his duty as a king. He had an enormous sense of duty. He worked hard for France. Never for any hunting did he miss a council meeting, or neglect a state appointment, or say foolish, indiscreet things or betray a state secret. He was not handsome as a boy, and he was early pitted with small-pox; still, his profile was one to delight sculptors, and Lebrun turns it to decorative use on his ceiling. In fact he grew 'decorative' in a massive way—what we call grand siècle. . . . He could look like a country farmer or like a Roman emperor. Perhaps because of his neglected, lonely childhood he seldom smiled, but when he did, the smile was winning, and his courtesy toward women was invariably; he raised his hat even to a housemaid."

It is refreshing to have an estimate of Louis XIV that is neither a fulsome panegyric nor an unlimited denunciation, an estimate that portrays him as he really was, a very human mixture of good and ill. But it is not Louis alone whose personality is inseparably associated with the halls and salons of Versailles. The writer has agreeably traced the many other personal associations with the various parts of the Palace so that we may see Madame de Maintenon, the young Duchesse de Bourgouyne, the sharp-tongued Marlame, Louis' sister-in-law, or the queenly Marie Antoinette, each in her accustomed environment. All of this combined architectural, historical and personal subject matter is so pleasantly blended that the book cannot fail to be both useful for reference and exceedingly readable, however one may intend to use it.

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**The Practical Book of Tapestry**

By George Leland Hunter

The intimate connection between tapestry and architecture as well as the frequent use of architectural motifs in tapestry design gives to tapestry and its history an interest to architects which is strong. Primarily associated with the Gothic age, which saw what were perhaps the most brilliant of its triumphs, tapestry has been identified with the development of all of western Europe and with the different periods—the Renaissance, early and late; the Baroque age; the era of the different Louis; and in later days with the various places where looms have been set up and where present-day workers are engaged in creating by use of old-time methods those marvelous weaves which add to any surroundings where they are placed a richness of decoration which confers dignity and splendor to the place where they are used. No study is more absorbing than that of tapestry. It must be owned that Louis XIV had little sense of humor. . . . Though as a young man he was clumsy, he so schooled his body for the sake of France that majesty and gracefulness seemed natural to him. . . . He kept his body agile into middle age by constant exercise. He had the large Bourbon nose; contemporaries agree he was not handsome as a boy, and he was early pitted with small-pox; still, his profile was one to delight sculptors, and Lebrun turns it to decorative use on his ceiling. In fact he grew 'decorative' in a massive way—what we call grand siècle. . . . He could look like a country farmer or like a Roman emperor. Perhaps because of his neglected, lonely childhood he seldom smiled, but when he did, the smile was winning, and his courtesy toward women was invariably; he raised his hat even to a housemaid."

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Above—Benton Hotel, Corvallis, Oregon. Hougholding & Dagan, Architects; L. N. Travers, General Contractor. 261 Crescent Tint Window Shades mounted on Columbia Rollers do 24-hour duty every day in this modern hotel.

Left—Bedell Building, Portland, Oregon. George Schonewald, Architect; Hanson-Hammond Co., General Contractors. 510 Columbia Damasko Window Shades on Columbia Rollers are used throughout this splendid structure.

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# Architectural Forum

## Volume XLV

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PARKER MORSE HOOPER, A. I. A., Editor

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THE EDITOR'S FORUM

METROPOLITAN LIFE'S HOMES

The lesson to be derived from this experiment seems obvious. It is doubtful if 8 per cent net on cost could be realized, without tax exemption, at a rental of $9 per room per month; but there is no doubt that an additional rent of $1.50 per month per room would abundantly provide for full taxes. If, therefore, limited dividend corporations, other life insurance companies and employers of labor desiring to produce apartment homes at the lowest rent possible, with a sure net return of say 8 per cent, would use the same methods the Metropolitan has in this operation, there seems to be no doubt that a maximum rental of $10 to $11 per room per month will produce 8 per cent net and pay full taxes, but only if the homes are built on low-priced land, easily and cheaply prepared for building, and with public utilities already provided and fully paid for.

A CORRECTION

The June Forum presented illustrations of the chapels at West Point and at the University of the South, Sewanee, Tennessee. These chapels were, through an oversight, credited to Cram & Ferguson instead of to Cram, Goodhue & Ferguson.

GOVERNMENT BUILDING PLANS

The demise of C. W. Rapp, senior member of the firm of C. W. and George L. Rapp on June 28 after a brief illness, came as a shock to a wide circle of friends. Born in Carbondale, Ill., he built up a large architectural practice in Chicago, where among the many important buildings attributed to him are the Uptown, Chicago, Tivoli and Riviera Theaters and the Masonic Temple building, in which is incorporated the Oriental Theater, recently opened, and the new Detroit Theater, in Detroit. Mr. Rapp was in fact, regarded as an authority on theaters, particularly motion picture theaters, and to his foresight and energetic leadership is due a great part of the credit for the improvement which has been made in the designing and planning of these buildings.

Nor was Mr. Rapp's work wholly connected with theater buildings. The new Paramount Building, now under construction in Times Square, New York; the National Press Building, under construction in Washington; the new Detroit Hotel, and the Metropolitan Office Building in Detroit, and various other large and important building projects in St. Louis, Cleveland, Buffalo, Kansas City and Milwaukee were of Mr. Rapp's design. Under Mr. Rapp's guidance his firm attained a position among those of the first rank in Chicago and the middle west.

A DISPATCH widely published in the New York press during June gives some account of the plans the government contemplates taking to stabilize the building industry during the next few years. The government building program contemplated in the authorization of congress of expenditures aggregating $165,000,000 over the next six years will be manipulated by Secretary of the Treasury Mellon to offset any general financial depression or threat of unemployment. Government operations will be expanded in lean years, and held down in full years of private construction. The building industry is regarded as the keystone in the industrial arch because it has so many related and dependent lines, including the lumber, cement, stone, gravel, iron and steel, plumbing supply, roofing material, and other industries. It is almost always the first industry to reflect spreading unemployment.

Building operations were practically stopped during the war. Private building was quickly resumed, and has been going on with a rush since 1921. The government is just about to resume. It is considered in some economic quarters that building has reached its peak and that a sudden downward plunge would inevitably bring unemployment.
Here are the twelve important operations in the erection of Telesco Partition. Because it is screwed together and not nailed, it can be taken down as easily as it is erected and moved to any desired location. The extension top takes care of different height ceilings. Write for details.

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FROM A PENCIL SKETCH BY SAMUEL CHAMBERLAIN

The Architectural Forum
HOSE who await the appearance of an architectural style which shall inform contemporary London buildings seem to be waiting in vain. Recently two very large and important structures have been finished by architects of fame, yet it would be difficult to find in them any common quality. Adelaide House and Britannic House, the one by Sir John Burnet and partners, the other by Sir Edwin Lutyens, strike so forcible a contrast that one is led to assume that there exists no common outlook. It must be admitted that the programs for the two buildings are not identical. Britannic House is the headquarters of a single vast and mighty industrial corporation, and thus it contains within its walls a single hierarchy. Adelaide House, on the other hand, is simply a block of separate business offices, so that when once the spacious entrance hall is passed, there lies ahead but a combed hive of offices. This difference is quite clearly expressed in the elevations of the buildings, for, in the one, the windows are graded according to the importance of the rooms which they light (this importance depending upon the position in the hierarchy of its occupant), while the exterior of Adelaide House presents a diapered pattern of windows varying but little in sizes, and not at all in importance. But this difference of programs is insufficient to account for the immense difference in treatment, and one can imagine the historian of the future being sorely perplexed in his attempt to disentangle the architecture of today with all its variations.

In architecture, as in literature and the arts generally, the critical faculty is likely to wilt before a famous name, and Britannic House has received an ovation such as would scarcely have been accorded had it been the work of a younger and less well known man,—for the simple reason that it does not merit it. Britannic House is clever,—brillianly clever. It disarms criticism by reason of its cleverness, and is comparable to the flowery peroration of a gifted politician, skilled in dialectic and rhetoric, and it beats down critical opposition. It is rich and fascinating. It is like a conjuror whose incessant talk absorbs the attention until the climax of the trick is reached. The means are overlooked; it is the end alone that matters. Unfortunately in architecture, especially in the architecture of a huge city, it is not only the end that matters. A picture may have no duty due to its position, no consideration due to its neighbors; a building has both, and unrestrained individualism on the part of a building in a busy thoroughfare is as out of place as on the part of a person in a crowded railway carriage. Certain conventions must be observed, for upon them depends the smoothness of communal life. But individualistic behavior in the railway carriage may not always take the form of blatant aggression and rudeness; it may take the form of good natured loquacity, or tiresome friendliness displaying itself in a lack of reticence and forbearance. The great new shops of London offend in the former manner; Britannic House, perhaps, in the latter. It
ADELAIDE HOUSE, LONDON
SIR JOHN BURNET AND PARTNERS, ARCHITECTS
is tiresome and fidgety, but it is certainly friendly and good natured, so that it is difficult to be angry with it; as well be angry with a too-confidential neighbor.

There is nothing cheap about Britannic House. The rich industrial corporation was surely not particular as to spending a few thousands more or less. The setting back of the upper stories, a device which achieves a kind of dramatic effect, is surely an expensive luxury,—and then the carving! Delicate and beautiful, executed by Mr. Broadbent and his assistants, it adorns keystones and capitals, and it is particularly prolific above the sixth story windows. Its presence, one presumes, is a continual secret joy and inspiration to the board of directors, who may indeed deem themselves true art patrons, who have set carving before dividends, for without field glasses it is impossible to observe the detail of the carving from the ground, even now when it is newly finished, and in a year or two it will be completely obscured beneath a rich coating of London’s soot deposit. Yes, Britannic House ignores realities, at least so it impresses the spectator, although all criticism of it is subject to reservation, seeing that but half the building is as yet completed.

Within there is much to admire. The planning is simple and yet subtle, with its gently curved hall following the line of Finsbury Circus, and its changes of axes due to the irregularity of the site. Within, too, there are ample signs of the exercise of Sir
Edwin's fertile imagination. The ground floor hall and corridors are paved with squares of cast iron and white marble. The ceilings are varnished, so that the floor patternings may be reflected therein,—a delightful reversal of the usual procedure, in which the floor is the reflecting surface. Then the staircases are planned from floor to floor on opposite sides of the main corridors. The ascent is thus delightfully broken, and the disheartening sense of stepping into an endless well is avoided. The rubber treads, silent and dark, contrast richly with the white marble of wall and shining ceiling. Each floor is paved in rubber of a distinctive color, surely a pleasant, practical treatment. The equipment of the vast building is throughout in accordance with the very latest practice which science and invention have been able to provide; all service mains, pipes, ducts, and so on are discreetly hidden, while yet remaining immediately accessible. Britannic House shows indeed the meticulous coordination necessary among all the trades and crafts engaged upon a vast modern building enterprise to obtain a finished result.

If Britannic House is personal, Adelaide House is impersonal. That is not to say that anyone seeing it would not at once attribute it to Sir John Burnet, but the approach to the problem is impersonal. Here are certain definite requirements; here is a great city; this is the twentieth century; these are the materials at my disposal;—and
LOBBY, ADELAIDE HOUSE

PLAN, GROUND FLOOR, ADELAIDE HOUSE
Adelaide House is the logical result. If there is romance about the building, and some may certainly find it, it is the romance that certain painters and etchers find in the pulsating activity of iron works, in the starkness of a great ship in its dock, in the disorder of a pit head, but it is not the romance evoked by suggestions of the past. If there is beauty,—and that there almost surely is,—it is the beauty that is found in the motor car, in a piece of smoothly running machinery, in a race horse,—wherever, indeed, there is a balanced synthesis of form, purpose and material. And moreover, there is grandeur, there is simplicity. If you fail to like it, if its crudeness offends you, then you are out of touch with the century in which you live. "Love me, love my dog" is an adage which might here be recast: "Love my age, love Adelaide House." But it is expressive of the best of the age, for there is nothing vulgar about Adelaide House, and vulgarity is a besetting sin of the age. Adelaide House has its counterpart in other art forms, in music, in painting, and in sculpture, and wherever they are met they are somewhat startling and are likely to frighten the timid and to distress others, but to the robust they are invigorating. It is as yet impossible to prophesy how the future of architecture will develop, but there is a future along the lines of Adelaide House; there is no future along the lines of Britannic House, which must ever remain an entirely personal utterance.

Despite the novelty of Adelaide House, it harmonizes with its neighbors, and this is because the parts are small and are kept in scale with the human form. It impresses without overawing, and seen from London Bridge it has a truly majestic dignity which will be enhanced when the crowning upper story takes its place above the cornice. The building is steel-framed; the lower story is faced with granite and stone. Perhaps after all it is incorrect to say that these two new buildings have no common quality, for they at least have this:—they are both alive. Neither of them is a pastiche; in neither is there any sign of that febrile searching in books and portfolios for motifs which unfortunately distinguishes so much contemporary architecture just now, and this is because both buildings are the work of men who are fertile with ideas. If we feel that one will have a greater influence than the other, it is but the expression of a personal opinion which time will either confirm or contradict. Both Britannic House and Adelaide House are English architectural achievements.
"What an image of peace and rest
Is this little church among the graves!
The wounded spirit, the heart oppressed,
Here may find the repose it craves."

WHERE is "this little church" which Long­fellow so beautifully describes? For the benefit of those who are not students of the immortal poet, the answer is,—in England. But this is not surprising, for even the English admit that all Christendom is envious of the beauty and antiquity of their parish churches, an admission not in the least exaggerated in spite of the ravages of time and civil war, religious differences, and unsympathetic remodeling. Among the justly envious the United States deserves a front rank position, which in less critical moments is attributed to the adolescent stage of our national growth. Although we are undoubtedly far ahead of these early church builders in general taste and refinement, as measured by the scope of arts and sciences, we are their inferiors in "the application of architecture to its highest pur­pose;" in church architecture we have much to learn.

Of all the various Protestant denominations in this country, the Episcopal Church has the greatest heri­tage from England, and it is accordingly logical for this body to turn there for architectural inspiration and example. Winsted is an old New England town, and at first thought it might seem appropriate to follow there the best church precedent we have,—that of our colonist forefathers. Their places of worship were, from necessity and choice, boldly different from those of their English ancestors, and admirably adapted to new and varied conditions. But the fierce flames of bigotry, which changed even the architec­ture during that period, no longer bum to effect such contrasts in modern church design here in America.

Furthermore, Winsted nestles among rugged foot­hills, far wilder and more primitive than their serene and majestic neighbors, the Berk­shires, an environment which suggests the use of stone. A so-called Colo­nial church would surely be too sophisticated for this town, famous for extremes of nature, with its six­legged cows and its mushrooms as large as cabbages, if one can be­lieve the newspapers. Along with the other freaks of nature which give Winsted her place in the sun is the local field stone, used primarily for pasture fences, and undoubtedly the least desirable of all building stones. It is a large, rounded, black cobble, with little variation in tone or texture, and as hard as flint. Use of this black sheep among build­ing materials was carefully avoided in the original specifications for the new church, colorful and strat­fied granite having been chosen instead. Church building funds, however, have their limits, and in this case the limit was reached before the more ex­pensive material could be included. White marble and red sandstone were available in this vicinity, but both of these were obviously unsuitable for an informal building of the type proposed. A blank stone wall had literally been reached and, as the least of these evils, field stone was finally used. The flintlike character of this cobbie stone recalls to memory the numerous parish churches in the southern counties of England, some even within sight of the portals of Canterbury, built of small, black flints, which have successfully defied time and weather. The contemplation of these charming English churches encour­aged the use of the local field stone, and the design of the building was largely governed by a desire to be in sympathy with use of this unusual material.

Instead of using merely one style or type of ecle­sial architecture, several related styles were adapted with results suggesting the English parish churches which recall the various periods of history during which they were built. Departure from use of one style or period throughout a church is not favored by architectural purists, but in this cosmo­politan era such liberties are sometimes justified if unity is the result. From the simple Norman tower to the more elaborate Late Gothic chancel the pro­gression in architectural style was intended to be gradual and appropriate to the function of each part of the plan of the church.

Possession of a corner plot determined the gen­eral shape and distribu­tion of the elements of the plan, but the tradi­tional method of orienta­tion for an English church, with the chancel at the east end, was dis­regarded. The modifica­tion of ancient and estab­lished laws, changes in the form of service, and expansion of functions to meet modern de­mands, while—often the cause of much dissension
ST. JAMES' CHURCH, WINSTED, CONN.
COFFIN & COFFIN, ARCHITECTS
PLOT AND FLOOR PLAN, ST. JAMES' CHURCH, WINSTED, CONN.
NAVE AND CHOIR, ST. JAMES' CHURCH, WINSTED, CONN.
COFFIN & COFFIN, ARCHITECTS
and debate among theologians, at least prevent too accurate reproduction of the old buildings and stimulate originality in design. A column or pier which is gratefully welcomed by drowsy and apathetic parishioners is too often the cause of much annoyance and dissatisfaction to their more attentive brethren. These obstructions may be avoided by using a long, narrow nave or one short and wide, but the former plan is usually impractical for good acoustics, and the latter a handicap to both beautiful and economical design. To overcome these objections in the new St. James' Church, and at the same time to create a resemblance to the column and arch construction customary in the English type, the narrow side aisles were arranged without seats, and for circulation only.

The costly clerestory, however, was omitted for the sake of economy and as an aid in eliminating damp walls, but of course at the sacrifice of that atmosphere which contributes so much to the charm of old structures. The heavy columns with their slightly pointed arches springing from them are similar to those used in the transitional period between the Late Norman and Early Gothic, and were not used merely for effect but serve a definite structural purpose. They shorten the span of the oak roof trusses, and take the concentrated load, while the exterior walls receive their thrust and perform the same work as the picturesque flying buttresses.

By employing this simple form of construction to meet practical requirements, a resemblance to the interiors of the old churches was maintained though not duplicated. Omission of the clerestory suggests a dark nave, but here the windows on the narrow side aisles give ample light without destroying that mystery in the depth of shade and shadow so needed.

The parishioners interested themselves in the construction and furnishing of this church in somewhat the same spirit of sacrifice which accompanied the furnishings of the old structures. The altar, the colored faience tiles in the chancel floor, the organ, the stained glass windows, and innumerable other fittings were generously contributed by them. Generosity seems customary in Winsted church circles, however, for a story is current there to the effect that one of their clergymen was presented with a new pair of trousers by the ladies of the Home and Foreign Missionary Society. In his address of thanks he undoubtedly alluded to Psalm 139:2: "Thou knowest my downsitting and mine uprising: Thou understandest my thought afar off."
A

N office building and studio, located at the northwest corner of East Jefferson and Joseph Campau Avenues, is the new home of George Harrison Phelps, Inc. The new structure is most unusual in character and an innovation for Detroit. New York and Chicago have private office buildings of a similar nature, which have been designed for the use of individuals whose professional needs require considerable space for their staffs of assistants. Heretofore in Detroit such needs have been met by remodeling large residences in districts where business expansion has altered the neighborhoods, or by using ordinary office spaces in new or old buildings,—spaces sometimes adequate, but often not.

In planning the new building for George Harrison Phelps, Inc., it was desired to develop a structure suitable in every respect for the needs of a highly departmentalized advertising organization of 106 people, and, in addition, to produce a building distinctive, interesting and beautiful,—a structure that would compel attention, cause admiration, and serve in a dignified way as the home of the organization. That was the problem presented to the architects, Smith, Hinchman & Grylls. The usual solution would have been a three-story, box-like structure, punched full of holes for the various windows, topped with or without the usual cornice, etc., and the result would have been the ordinary building which may be seen on any business street in any city.

With an owner desirous of avoiding building such a structure, and more than willing to assist in developing the architects' suggestions, the result shown in the accompanying illustrations was attained. The building is set back from the Jefferson Avenue street line about 30 feet, on a brick-walled terrace. This allows space for planting, and removes the offices...
from the noises of Jefferson Avenue. Rising behind
the trees is a facade of brick and stone, not a flat,
box-like face, but a facade irregular in outline, that
expresses the plan within. The architectural char­
acter of the design is a modified form of that brick
architecture found in northern Italy, dating from the
time of the middle ages and the early Renaissance.
A well marked door and terrace of stone indicate the
public entrance. To the left is a semi-circular bay,
where the stair tower shows itself. To the right, ex­
tending up through the second and third stories, is a
double-arched opening with a column of marble
forming a balcony and great window for Mr. Phelps'
studio. These three features on the exterior are set
off by the smaller office windows, which have been
grouped to avoid the monotony of regular spacing.

On the Joseph Campau Avenue side various smaller
architectural features of interest are apparent.

The walls are of brick varied in color, soft in
texture, and laid in pairs to produce the effect of a
long Roman brick, with mortar joints 1 inch thick.
The stone trim is likewise varied in color and tex­
ture to harmonize. The roof is of tile, in shingle
form, hand-made, with a variety of color and ex­
posures. The windows are fitted with metal case­
ments with leaded glass. The general structural
work is fireproof, with reinforced concrete frame
and floors. Mechanical equipment and facilities are
of the best and include oil-burning steam heating
plant and a well arranged private telephone system.

On entering the building through the vestibule, one
steps into a public reception room, finished with
travertine floors, antique plaster walls, and a beamed
ceiling treated with polychrome stencils. This room
provides for an information, telephone and telegraph
desk in an alcove and a waiting space for visitors.
It gives access to the business offices on the first floor
and to a fine stairway leading to the studio and sec­
ond-story offices. This stair hall is similar to the
reception room in materials used, except for the ceil­
ing, which is of coffered wood panels with applied
color. At the head of the stairway is a library and
office for Mr. Phelps' secretary, as an anteroom to
the studio, the room which by nature of its use,
location and size gives to the exterior a dominating
feature. It is two stories high, having a barrel-
vaulted ceiling, with penetrations along the sides,
and decorated in full color. The walls, almost un­
broken by windows, because of the great window
looking out over the balcony, offer excellent spaces
for the fine old furniture and wall fabrics belonging
to Mr. Phelps. At the end opposite the great win­
dow there is an old Italian stone fireplace, its design
in keeping with the style and scale of the room.

In addition to the special rooms just described, the
first and second stories contain a dozen or more
private offices for the various executives, with a
mailing room and barber shop on the first floor and
library and conference room with a kitchenette on
the second floor. The third floor provides for the
bookkeeping and clerical forces, vaults, the auditor,
the dictaphone, and statistical departments. The base­
ment has, besides the usual heating plant and store­
rooms, a five-room apartment for the caretaker; and,
most unusual, a regulation-sized squash court with
dressing, locker, shower and rubbing rooms. In
connection with these athletic facilities there is an
open-air volley ball court at the rear of the building.
PLANS, GEORGE HARRISON PHELPS, INC., BUILDING, DETROIT

SMITH, HINCHMAN & GRYLLS, ARCHITECTS
GEORGE HARRISON PHELPS, INC., BUILDING, DETROIT
SMITH, HINCHMAN & GRYLLS, ARCHITECTS
DETAILS OF BALCONY

SMITH, HINGMAN & GRYLLS
ARCHITECTS & ENGINEERS
DETROIT, MICHIGAN

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The Architectural Forum Details
THE ENTRANCE
GEORGE HARRISON PHELPS, INC., BUILDING, DETROIT
SMITH, HINCHMAN & GRYLLS, ARCHITECTS
TWO VIEWS OF MR. PHELPS' STUDIO
GEORGE HARRISON PHELPS, INC., BUILDING, DETROIT
SMITH, HINCHMAN & GRYLLS, ARCHITECTS
RECEPTION ROOM, LOOKING TOWARD STAIRWAY

CONFERENCE ROOM
INTERIORS, GEORGE HARRISON PHELPS, INC., BUILDING, DETROIT
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THE KING HOOPER SHOP, CHESTNUT STREET, BOSTON
DANA SOMES, ARCHITECT
DETAIL OF FRONT ALTERATIONS FOR I SACK ESQ
CHESTNUT STREET, BOSTON
DANA SOMES ARCHITECT BOSTON MASS

The Architectural Forum Details
PLAN, KING HOOVER SHOP, BOSTON
DANA SOMES, ARCHITECT
INTERIORS, KING HOOPER SHOP, BOSTON
DANA SOMES, ARCHITECT
The Historic Cathedral and Library, Vincennes, Ind.

By THOMAS E. O'DONNELL
Assistant Professor of Architecture, University of Illinois

TWO of the most interesting historic buildings of the middle west are to be found in the once noted but now almost forgotten Indian-French town of Vincennes. The old St. Francis Xavier's Cathedral, now a parish church, and the Cathedral Library which adjoins it, are silent reminders of a period in American history when this community played an important part in the affairs of the old Northwest—an early outpost of civilization.

Long before our forefathers reached the shores of this continent, the Wabash River was well known to the Indians, and the spot where now is located the city of Vincennes, was one of their favorite haunts. The land, which was covered with light brushwood, could be easily cleared, and the rich, sandy soil was tilled with little labor; consequently, it was the natural location for an Indian village. This Indian settlement became known to the white man through the French explorers and missionaries. Of all the early explorers to visit the American continent, none were more daring or zealous than the French. Zeal for establishing missionary posts and for converting the Indians caused them to penetrate the wilds of this section of the country. A "Missionary of the Cross" always accompanied the French soldiers and explorers, wherever they went to establish trading posts and settlements. The French made their first permanent settlement in Quebec in 1608. From here they worked westward and southward. They made a settlement at Detroit in 1670, at Kaskaskia in 1673, and it is almost certain that the black-robed Jesuits visited the Indian village on the site of the present city of Vincennes before 1700. Old records collected from Kaskaskia and other early French mission centers give evidence that the town now called Vincennes and the French Catholic church there were in existence in 1708, and probably earlier.

Whatever the exact date of settlement, Vincennes is a very old city, and although now of comparatively little importance, she has had a distinguished past and her place in American history is firmly fixed. She was destined to become the most important and permanent of all the French missionary posts in the Mississippi Valley. The place is of more than general historic interest to us because here, at different times, the flags of three nations have been unfurled, those of France and England, and since 1779 that of the United States. Long before Chicago was even a village Vincennes was considered a city. The comparative importance of the two places in the early days is brought out by an old document, quoted by an early writer, in which it is said that the village of Chicago petitioned the city of Vincennes for the purpose of opening a road connecting the two centers.

Vincennes also bears the distinction of being the first cathedral city in the state of Indiana and one of, if not the first, in the whole Northwest Territory. It is because of this fact that we have coming down to us today the two unusual and important examples of early American architecture. The first St. Francis Xavier's Church, which is said to have been founded about 1702, was of the stockade type with a thatched roof. The altar and other details of furniture were crude affairs, made on the spot with primitive tools and the aid of Indian converts. In 1785 Father Gibault built a new log church, 42 by 90 feet, which was used until about 1830. The present church edifice, which stands very near the site of the earlier churches, was projected by Father Champomier in 1825, and the cornerstone laid on March 30, 1826. By great sacrifice and labor the work of construction was continued by the local adherents of the church from 1825 until 1834, when, upon the arrival of Bishop Brute, it was destined to become a cathedral, seat of episcopal rule for a vast region.

It is not known who designed the structure, but it is most likely that Father Champomier, who was in charge of the original project, was responsible for the design of the earlier portion, while Bishop de la Hailandiere was in part responsible for the later additions, although a master builder was no doubt in charge of the actual construction. The Vincennes Cathedral is similar in many respects to the cathedral at Bardstown, Ky., which was built ten years earlier, and for that reason some of the church officials are of the opinion that one designer may have been responsible for both buildings. There is preserved in the Cathedral Library an original drawing showing the design of the structure as it was originally planned. The name of the designer does not appear on the drawing. By comparing this original drawing of the structure and the building as actually completed, it is seen that the design was carried out in most respects, except for the arrangement of entrances at the front. The original drawing shows that the main or front facade was to have had three large windows, similar to those on each side of the church, and that it was originally intended to have two side entrances, one on each side near the front.

A measured plan of the Cathedral, as it stands today, is included here. Although small and simple enough in its parts, it displays nevertheless, characteristics which clearly mark it as a building of distinction, especially when we consider its early period and the pioneer conditions of the country at the time it was built. It consists of a nave and two aisles, the nave being divided by rows of columns from the aisles. These columns, eight in number, are 2 feet in diameter and 28 feet high, and are of a simple Doric-like type, without entasis. They are constructed in a manner quite in keeping with their period, being made of solid tree trunks, especially se-
THE OLD CATHEDRAL, VINCENNES, IND.

SERVED AS THE CATHEDRAL OF A VAST REGION FROM 1834 TO 1895; NOW USED AS A PARISH CHURCH
lected for the purpose, which after being shaped as desired were lathed and then plastered. On the walls are pilasters of like proportions and construction. The columns carry wooden arches, spanning from column to column and from columns to wall pilasters. The ceilings of the side aisles, between the wooden transverse arches, are flat, while that over the nave and apse is in the form of a wooden vault, which is flattened at the top. The construction of these ceilings and vaults is quite singular in that they are at once insulated and semi-fireproofed by means of a layer of clay mixed with straw, of several inches in thickness, placed over their entire area.

The sanctuary, which is of generous proportions, is raised five steps above the level of the nave. It contains the high altar and two side altars. From the side aisles, stairways lead down to the chapel and crypt below the sanctuary. Back of the sanctuary are the sacristies. The organ loft, which is over the main entrances, is shown by dotted line on the accompanying floor plan. It has been enlarged at some later period, a fact that is evident from the change in design of the railing, and an organ has also been installed in the loft. Perhaps the most distinctive feature of the old cathedral church consists of the crypt and chapel below the sanctuary. This is an unusual feature in American church architecture, especially in the smaller churches of early times, and can be traced, in this instance to French influence.

Architecturally, the exterior of the old Cathedral is very plain and simple. The front facade, however, is quite effective with its three arched doorways, above each being a niche filled with a statue. In the niche over the central doorway stands a statue of St. Francis Xavier, to whom the Cathedral was dedicated. The statue in the niche over the doorway to the left of the center is of St. Joan of Arc, and in that to the right is a statue of St. Patrick. Crowning the whole facade there is a plain pediment with an effective cornice, and rising above this is the clock tower and belfry terminating in a slender spire, the total height being about 140 feet. This was the
last main exterior feature added to the Cathedral and was built between 1840 and 1847 under the direction of Bishop de la Hailandiere. Structurally, this tower is of considerable interest. It is carried upon heavy masonry walls, square in plan, which are 2 feet in thickness and carried up to the attic of the structure. Within the four angles of this tower are set up heavy vertical wooden timbers which are, by means of splicing, made continuous through the entire height of the tower. These are made more firm and rigid by being framed, in stages, with heavy horizontal timbers and crossed bracing on all four sides. All of the tower and spire which appears above the roof is of wooden construction. The tower contains a clock, installed soon after its erection, which is said to be of French make, and which is still in use. This tower also contains the first bell brought to Vincennes and used in the former church edifice. The bell was cast in France, shipped to New Orleans, and from there brought on a flatboat up the Mississippi, the Ohio and the Wabash to Vincennes.

The side walls of the church were originally very plain, being relieved only by five simple window openings on each side. The Gothic-like buttresses which are now in place down each side were added in 1908 to stiffen the old brick walls which were spreading outward, due to settlement or other structural difficulty. The glass in the windows was originally of a frosted variety, of small diamond-shaped panes set in lead, and at the center of each was the figure of either a cross or a star. The entire window area was divided into two vertical panels by means of a central wood mullion, and the top of each panel was formed by a large circular area of colored glass. The extent and arrangement of the apse and sacristies, built about 1841 by Bishop de la Hailandiere at the rear of the earlier structure, give accent to this important part of the old Cathedral. The interior is quite in harmony with the exterior. Simple in construction and arrangement, it depends for interest entirely upon the richness of the altars, furnishings and wall paintings mellowed with age, all of which, when seen in a subdued light, impart to the interior something of the glory of the smaller Old World cathedrals. The whole structure, in spite of its naive simplicity and almost archaic quality, has a certain dignity and charm about it that are in keeping with its one-time considerable importance in America.

The most important adjunct of the cathedral was the Cathedral Library, which was established at an early date, probably soon after 1834, when Bishop Brute took charge. Many of the best books belonged to him, and it is to this bishop and his successors that we are indebted for the collecting and preserving of the old records, documents and books. This library served the bishops in a practical way in the training of young men for the priesthood. The library building, which stands close to the cathedral church, was built in 1840. It is a simple brick structure, rectangular in plan, 40 by 20 feet, and harmonizes well with the larger structure, although it shows classical tendencies in its pilastered treatment. It exhibits a refinement and restraint that are pleasing and express admirably the purpose of the building. The entrance doorway is not on the street facade but on the opposite side, access being possible only from the private grounds at the rear. Although now preserved as a historical monument, this library was for many years in regular use by young men who were studying for the priesthood under the bishop.

These two buildings, together with the treasures which they house, constitute a most valuable heritage.
New Apartments from Old Houses

By ROGER WEARNE RAMSEY AND HAROLD DONALDSON EBERLEIN

The title, "New Apartments from Old Houses," may, perhaps, convey a certain glamorous suggestion of "new lamps for old" and all the Eastern magic familiar to us from the pages of the "Arabian Nights." The magic of converting old houses of unalluring character into agreeable apartments, however, though quite as successful in achieving its ultimate results, is not of the instantaneous sort wrought through the instrumentality of talismans and obedient genii but is clearly traceable, at every step of its progress, to the combined common sense and creative imagination of everyday mortals prompted by the necessity of meeting a definite social and economic present-day condition.

The project of alteration has two distinct aspects. The one is purely architectural, while the other is economic and civilly reconstructive. The former calls into play the faculties of invention and insight into the latent opportunities offered by certain types of dwellings that have outlasted the functions for which they were originally destined, due to a variety of causes; the latter has to do with the problem of reclaiming decayed neighborhoods and other "waste areas" in our large cities, a matter that is yearly becoming more and more important. The two aspects are closely linked in some ways, but not so inseparably that we cannot consider them apart, and for our present purpose it is desirable to discuss them independently, however much both may tend to a common end, regarding first the architectural question, and afterwards taking into account its bearing with reference to "waste areas," found in every city.

The two instances here presented where apartments have been created by remodeling dwelling houses are both in New York, one at 420 East 50th Street, the other at 180 East 75th Street. In each case the waste space contained in the original buildings was utilized so that a vastly greater amount of service was derived from exactly the same area. The general characteristics of the kind of plan followed in the average city house of from 40 to 60 years ago are sufficiently familiar, so that there is no need for comment on that score. Inspection of the accompanying plans will show to what an extent interior arrangements have been created by remodeling the old basement without using the main staircase. Apartment 3 has one floor, and is reached by the main staircase, so that there is no occasion for any independent stair provision. The common heating arrangements, with coal storage and the maids' bath, are in the sub-basement.

At 180 East 75th Street the exterior changes were far more extensive. The high steps leading from the sidewalk to the main floor disappeared, as in the former instance, and the basement door at the street level became the chief entrance. But in addition to this, the whole facade of the building was changed by removing superfluous projections once considered ornamental, laying a stucco jacket over the dingy brown stone, and manipulating the factors of illusion so that the front assumed a totally different expression, although no drastic structural alterations were involved in the process of transforming the building.

The only outside alteration affecting the interior arrangement was the removal of the high flight of steps from the sidewalk to the front door on the main floor. The old basement entrance, at the street level, then became the front door, while the former vestibule and front hallway made room for the owner's bath and a large storage closet. In the course of remodeling the old front basement was made the dining room of Apartment 1, enough space being reserved for the entrance hall and the first run of the main staircase. The old basement kitchen, at the rear, was at the level of the back yard, and was the logical place for the owner's living room on account of its size, pleasant southern exposure, abundant light and proximity to what has now been turned into an agreeable garden from an erstwhile desolate tract of sheer ugliness. In the readjustment the sub-basement beneath has become the kitchen, and is abundantly lighted from a wide grated areaway outside the living room windows and garden door. A private staircase, ascending from the corner of the living room, connects the ground floor and main floor in Apartment 1, while another private staircase connects the two floors of Apartment 2, so that there is complete internal communication in these two apartments without using the main staircase. Apartment 3 has only one floor, and is reached by the main staircase, so that there is no occasion for any independent stair provision. The common heating arrangements, with coal storage and the maids' bath, are in the sub-basement, the only actual basement, with the kitchen of Apartment 1. Thus the planning of utilities.
came the ground floor and was so divided that it contains in front a bedroom, a bath, and the private entrance and staircase of the first apartment, the living room of which is immediately above the bedroom and occupies most of the space devoted to the drawing room in the original plan. The private vestibule of the second apartment opens from the common entrance hall on the ground floor and gives access to a large living room with full length windows overlooking the garden, which from its previous dreary estate has been converted into a place that is really sightly and agreeable, as a garden should be, and as even a city garden can be. Directly above the living room are the bedroom and bath of the second apartment. The ground floor and first floor are thus occupied by two very agreeable small "duplex" apartments. The upper floors are somewhat differently arranged, but each duplex apartment has its own private stairway as well as access to the main or general staircase and its hall on each floor.

It now remains to view the economic aspect of the situation. To begin with, anyone at all familiar with conditions in our large cities cannot fail to be aware of the existence of many districts that may be called "waste areas," "decayed neighborhoods," "inactive sections," or whatever other name can be devised that seems more accurately to define their status. Such localities perhaps once enjoyed high

![After Remodeling](image1)

House at 180 East 75th Street, New York
Remodeled by Harry M. Clawson, Architect
popularity as desirable places of residence, but subsequently lost their prestige. Sometimes the change can be traced directly to certain altered economic conditions. There may have been a gradual invasion of small shops, or else the relentless advance of great mercantile and manufacturing interests may have crowded in too closely, disquieted the residents and sent them trooping elsewhere, leaving “backwaters” untouched by the current of commercial onrush and yet bereft of their former tenants and sources of upkeep. Again, the change can sometimes be accounted for only by the caprices of fashion, a fickle but potent agency, to whose charge can be laid many a freak of development in large American cities.

At all events, we know only too well the rows of city dwellings whose original occupants, those for whom they were built, have long since forsaken them for other quarters more fashionable or more to their taste. These dwellings have apparently seen their best days; dilapidation and dinginess have set their impress upon their fronts, and within they have become tenements for families or individuals of a type not contemplated when they were erected, and for whose accommodation they are not in any wise fitted. It may be they have fallen into the rank of cheap, shabby boarding houses; have become, perhaps, the quarters of nondescript organizations, charitable or otherwise; or here and there they have yielded a basement or part of a ground floor to petty tradesmen with ephemeral businesses. In any case, the fact remains that these properties are not really profitable possessions from the owners’ point of view. Although they may have an appreciable value, that value

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\text{Garden Facade; House at 180 East 75th Street, New York}
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\text{The Main Entrance}
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\text{A Dining Room}
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is not as substantial as it should be, and not as substantial as it would be, could they and the neighborhoods of which they are the individual units be classed in a more desirable category. Neither are they as good an asset as they might be to the municipality, for their assessed values do not keep pace with the assessed values of properties in a more attractive environment. Furthermore, their value is likely to grow relatively less all the time, unless the process of decay be arrested and some active agency of redemption be brought to bear. They are waste and unprofitable, so far as the compact and complex economic organization of the community is concerned, and will remain so, or become worse, until rehabilitation takes place and lifts them out of the mire. In every large city such localities exist.

Now and again the objection is seriously made, by folk with a laissez faire, fatalistic turn of mind, that a wrong is done the present denizens of decaying neighborhoods by dispossessing them of the quarters they are rapidly turning into slums and by reclaiming the places for decent habitation in accord with the changed social and economic conditions of the present time. If such folly requires an answer, it may be pointed out that it is always praiseworthy and of the very essence of progress to make any existing material conditions better than one finds them,—to make two blades of grass grow, so to speak, where only one grew before. No one, surely, will argue that such examples of neighborhood rehabilitation as “Sutton Place” or “Turtle Bay” are to be regretted. It needs no vivid imagination to picture what Sutton Place and Turtle Bay would be by the present time if the decay that had already set in had not been arrested and a course of thorough regeneration inaugurated; nor does it require profound financial acumen to estimate what property there would have been worth now either to the owners or as a source of tax revenue to the city. Yet, if the fatalistic fallacy had prevailed, Sutton Place and Turtle Bay would have been allowed to go steadily down hill. It is no kindness to relinquish a neighborhood to tenants who are causing it to deteriorate. It is simply a stupid blunder. Tenants who are misfits and really not comfortable in their quarters, which are not fitted to their mode of life, are infinitely better off elsewhere, even though they may have no “model slums” to repair to. Perhaps some day we may arrive at the achievement of truly model slums. At any rate, it is doing them a genuine service to prevent them from creating new and larger slums.

There is an unfortunate tendency inherent in most
Plans, Remodeled Residence at 420 East 50th Street, New York
Franklin L. Kline, Architect
towns and cities built by people of Anglo-Saxon blood, a tendency to sprawl and straggle, leaving behind the outlying districts areas imperfectly developed that soon begin to decay. This tendency is traceable to certain traits of Anglo-Saxon character. The remedy is to be found in a subsequent process of consolidation. The problem of systematic consolidation of urban “waste areas” is one that nearly every city, sooner or later, is obliged to face. In New York the problem happens to be particularly acute, owing to the dense population of the city and the physical constriction of its limits. As one method of coping with this problem, the remodeling of old houses into new apartments has evidenced success.
THE BUILDING SITUATION
A MONTHLY REVIEW OF COSTS AND CONDITIONS

THE month of June, showing well maintained building activity, closes a six months' period which again establishes a high record for any similar period of building industry in the United States. According to figures of the F. W. Dodge Corporation and other authorities, it is evident that the round figure total of new building for the first six months of 1926 is approximately three and a half billion dollars, being about 15 per cent greater than for the first six months of 1925. The month of June records for the country new building construction amounting to approximately the sum of $948,000,000.

While there has been considerable talk of the slowing up of building activity, it is quite evident that there is no very definite slowing up in evidence. On the other hand, it is obvious that the present pace cannot be maintained indefinitely, because there must be a limit to the capacity of building labor in this country, and as costs are increasing again because of this situation, it is probable that many wise prospective investors will defer their projects. It will be a good thing for the industry if this occurs, and a more general distribution of building activity over the next few months will aid materially in relieving a strained situation, both as to labor and the production and distribution of materials. Architects are advised that it probably will be wise to defer projects for two or three months, unless the local labor and material situation is elastic enough to allow for favorable bidding on the part of the contractors.

The contemplated construction during the first six months of 1926 is the highest on record in any year, and for the month of June totaled approximately $807,000,000, which is 16 per cent above even the vast amount represented in the month of June, 1925.

The attitude of investors in mortgage bonds, the proceeds of which are used to finance new buildings, continues on a sound basis of interest, and with other funds used for mortgage purposes, it is evident that the financing progress continues on as strong a basis as ever. The mortgage companies are constantly ready to handle new projects and are not curtailing funds, although the economic viewpoint is being more carefully studied than ever, and financing is not available for over-built districts or for projects not effectively designed and well planned.

ANNUAL CHANGES
MONTHLY CHANGES 1925

These various important factors of change in the building situation are recorded in the chart given here: (1) Building Costs. This includes the cost of labor and materials; the index point is a composite of all available reports in basic materials and labor costs under national averages. (2) Commodity Index. Index figure determined by the United States Department of Labor. (3) Money Value of Contemplated Construction. Value of building for which plans have been filed based on reports of the United States Chamber of Commerce, F. W. Dodge Corp., and Engineering News-Record. (4) Money Value of New Construction. Total valuation of all contracts actually let. The dollar scale is at the left of the chart in millions. (5) Square Foot Area of New Construction. The measured volume of new buildings. The square foot measure is at the right of the chart. The variation of distances between the value and volume lines represents a square foot cost which is determined, first by the trend of building costs, and second, by the quality of construction.
The Designing of Open Timber Roofs

By E. T. P. Walker

As we look over the achievements of church architecture in recent years it seems that of all its various departments the study of open timber roofs, as revealed to us in the beautiful examples of mediaeval architecture, has received the scantiest attention. Many of our churches of the twentieth century are excellent in general design, in mass and in detail; many have beautiful proportions of nave and choir, exquisitely designed sanctuaries and entrance portals, but how very few have beautiful, honestly constructed roofs! It may be that most of the other parts of a church present inviting possibilities to the artist and craftsman, whereas the problem of spanning a roof has been very largely left to the solution of the engineer.

From a purely architectural point of view it is poor practice in a building of any character to construct a thing in steel or concrete and then attempt to deceive the beholder by covering it with a wood casing. This method of designing may deceive, but it does not convince. On close study such woodwork is found to lack all of the qualities which contribute so much real, innate charm and beauty to the old woodland of English and continental churches—the variety of chamfers, the life-giving qualities of the surfaces of plain faces and mouldings, the checks and sincerity of the graining, and the depth of the material. Another point that may be touched upon in this connection is the appropriateness of design for the problem at hand. When steel is used the properties of the steel alone are considered, and often the wood forms, if really solid, would fail utterly to do the work which they pretend to do. And we find in such work many examples where, if wood alone had been used, the design of the framing would have been entirely different. It is safe to conclude that had such been the case the problem would have been studied with due regard to the properties of the materials, and the results would have been immeasurably finer and more architectural.

The need of a close study of early roofs is very manifest when we realize how excellent these models are and how fully they answer our own requirements in matters of construction. It is not for us to slavishly imitate, but it is for us to study the examples still left to us with an idea of mastering the principles of their inherent qualities of law and order, whether they have to do with exterior embellishment or inner construction. The sacred edifice is and should be the assembling place for the best in all the various arts. As we study the mediaeval churches we find that no art has made more notable achievements than that of building the roof; there is no portion of a building, ecclesiastical or secular, requiring more skill in its construction and more thought in the designing of its ornament.

Mankind was in an early stage of barbarism when the necessity of having some place of shelter was first experienced. The origin of covered habitations is lost in the twilight of history. The earliest forms of shelter must have been rude indeed. When the hollows of trees and the recesses of caverns failed him, it is probable that the savage devised nothing better than he could construct from the boughs of trees covered with skins, or moss and twigs, or mud and clay. These earliest forms were steps in historical development and are exceedingly interesting in that, crude as they were, they furnished ideas which led to later results of great architectural importance.

The simplest and earliest type of roof was that formed by two rafters pitching against each other. It soon became apparent, however, that this type of construction was defective because the rafters had a tendency to spread and thrust outward the walls on which they rested. This led to the use of the tie-beam, which has been used in all periods and which is still the best of all constructions when the roof is hidden from view. It may be observed that the tie-beam roof was never entirely discarded by mediaeval builders. The trussed-rafter or single-framed roof, the roof framed with hammer-beams and braces, and the roof constructed with collars and braces all followed in the later development. But we find constantly recurring in the Norman, Early English Decorated and Perpendicular periods the use of the simple tie-beam form. In its earliest examples the tie-beam was sometimes used independently of the other roof members, being laid across the walls and anchored to the wall plates. Examples of this may be seen in the Church of St. Mary the Virgin, Wiggenhall, Norfolk, and in the south chapel of Bredon Church, Worcestershire. Later examples show various expedients arrived at by the builder to make this simple form an ornamental feature in the design. At Southfleet Church, in Kent, the tie-beams are beautifully moulded; in the chancel of Northfleet Church the tie-beams are left in their natural hand-hewn surfaces, while the roof above is beautified with trussed rafters, panels and moulded ribs with bosses. Such a form possesses great possibilities.

The design of the tie-beam roof was changed in succeeding periods so as to harmonize with the rest of the architecture. In roofs of low pitch the beam frequently carried the weight of the whole roof, as in the case of that of the large south aisle of St. Martin's Church, in Leicester. A similar roof is that of the south chapel at St. Nicholas' Church at Kidlington, Oxfordshire. Here there is a massive beam well moulded on the soffit and connected with the wall pieces by moulded curved braces; the purlins rest directly on the beam, and the ridge is also supported on it by a strut or king-post and strengthened.
A Beautiful Though Comparatively Simple Open Timber Roof

by short curved braces. The church at Higham Ferrars, Northamptonshire, is of the Decorated period. The tie-beam is cambered and with the short curved braces forms an arch. The cornice and rafters are simply but effectively moulded. In roofs of higher pitch the arch shape is retained in connection with the tie-beam. In the nave of Morton Church, Lincolnshire, the beam and the arch are equally emphasized, and on this account the result is lacking in beauty and order. In many tie-beam roofs the arch form was entirely omitted, as in Swardestone Church, in Norfolk. The design includes a boldly cambered beam supporting a small king post with cap and base and curved braces springing to the principals and ridge. This is an interesting example of use of a simple form, one well adapted to the problem.

The roofs over North Walsham Church in Norfolk are beautiful examples of the tie-beam construction without any surface ornament. The beauty of this work is the result of a very scientific and correct use of timbers. It shows ingenious framing, but nothing of a superficial character. The ties of the aisle roofs pass through the walls and form corbels for the wall braces which, in turn, support the tie-beams over the nave. The Chapel of St. Anne at Arlington Heights, Mass., and the chapel at Greenlawn Cemetery, Nahant, Mass., both designed by Cram & Ferguson, are good examples of modern work done in the true spirit of Gothic architecture.

As we trace the development of the roof framing through the ages we find that the roof with diagonal ties follows closely upon the tie-beam form of construction. It was more widely used and was sometimes substituted for earlier forms when discovery had been made of its superiority of construction and of the additional height and opening of the roof space which it made possible. In roofs of wide spans each pair of rafters had a collar which was stiffened by braces. Sometimes the braces occur above the collar, and at other times they are tenoned into the rafters and soffit of the collar. The nave roof of Ely Cathedral furnishes a good example of this method. Here we find each pair of rafters trussed so that from below it is a richly wooded roof suggesting in its long parallel curves the form of an arched ceiling. The church at Peterborough, N. H., by Cram & Ferguson, pre-
sents a noteworthy example of this type of construction in modern work. In this instance the constructive forms have been carried out just as in work of this kind in the middle ages; the timbers are solid throughout, mortised, tenoned and halved together and held securely by oak pins.

In roofs of this character the rafters usually extended over the outside edges of the walls to form the roof cornices on the exteriors of the buildings. Because the walls were thick and finished horizontally at the lines of the plates, great openings were left on the interiors between the tops of the walls and the underneath sides of the rafters. The builders introduced a strut on a line with the inside wall to give additional support to the rafters and to more firmly secure the entire roofing system to the wall. The addition of these vertical struts above the wall gave additional value both constructively and artistically to the roof in its completeness. An additional horizontal timber resting directly on the wall and connecting the vertical strut with the rafter completed the triangle and gave to the roof on each side a firm trussed base and obviated any danger of the truss spreading at the walls. Some students regard this simple form as

very important in the history of events, as it undoubtedly supplied the idea for the development of the hammer-beam truss, which followed later.

In many of the old trussed rafter roofs boarding was applied underneath the rafters, braces and collars, and formed coved or polygonal ceilings divided into panels with engaged moldings and further enriched with carved bosses at the intersections. In some of the work the tie-beam was retained, as in the chancel of Sandridge Church near St. Albans, Herts. But in work of the Early English and Decorated periods, we find the tie-beam omitted and use of trussed rafters characteristic. The spaces between the rafters varied from 12 to 20 inches.

Some authorities have regarded the hammer-beam truss as a tie-beam truss after cutting away the central portion of the tie-beam. There is a similarity, at first thought, though it cannot but be regarded as erroneous to make this comparison, for the constructive principles of the two trusses entirely disprove such a theory. It is more logical in terms of construction, to regard the hammer-beam as a development of the trussed rafter base which has just

Nave of Chapel at Nahant, Mass.
Cram & Ferguson, Architects

Choir; St. Anne’s Chapel, Arlington Heights, Mass.
Cram & Ferguson, Architects
been described. We have no examples of the hammer-beam truss making use also of the tie-beam. The earliest example we know is the magnificent truss in the roof of Westminster Hall, completed in 1399. This differs from all earlier roofs in the use of large main arches of timber springing from the bottom of the wall pieces and uniting at the soffit of the collar-beams. The hammer-beams and struts run through this arch, and their braces complete the form of a trefoil arch. This particular example is so perfect that it is hardly possible that it was the beginner of the style. The various examples which must have intervened between the times of building the earliest trussed-rafter examples and this superb truss, the culmination of the type, have been lost to us. Use of the hammer-beam trusses did not begin until late in the fourteenth and were not generally used until later in the fifteenth century. In the early examples the curved braces were usually of the same thickness as the main rafters of the truss; in the later examples they were usually 3 or 4 inches thick, and occasionally thicker.

Having once discarded the tie-beam, the English church builders, moved with the startling beauty of the latest form, carried to a perfection that has never since been attained the wooden roof in its most excellent forms. In this phase of architectural beauty England is unrivaled. Whereas the continent has examples in all the other departments of ecclesiastical architecture that far surpass the English work of the same nature, there is no work having examples of open timber ceilings that can equal those of almost any county in England. The very best example in our work of today, a roof which can stand comparison with the best of English examples, is that in the dining hall of the Graduate College at Princeton University, designed by Cram & Ferguson.

Open timber roofing is particularly useful in these days of high building costs, in that it adds architectural richness and dignity to a building for vastly less than would necessarily be paid for vaulting of any kind. Especially when color is used upon roof of open timber, there is secured an appearance of splendor satisfying out of all proportion to its cost.
HOUSE OF MRS. A. C. BALDWIN, BEDFORD HILLS, N. Y.

BUTLER & CORSE, ARCHITECTS
PLANS, HOUSE OF MRS. A. C. BALDWIN, BEDFORD HILLS, N. Y.
BUTLER & CORSE, ARCHITECTS
THE ENTRANCE
HOUSE OF MRS. A. C. BALDWIN, BEDFORD HILLS, N. Y.
BUTLER & CORSE, ARCHITECTS
TERRACE AND GARDEN FACADE

HOUSE OF MRS. A. C. BALDWIN, BEDFORD HILLS, N. Y.

BUTLER & CORSE, ARCHITECTS
END ELEVATION FROM ORCHARD
HOUSE OF MRS. A. C. BALDWIN, BEDFORD HILLS, N. Y.
BUTLER & CORSE, ARCHITECTS
THE DINING ROOM

FIREPLACE END OF DINING ROOM

HOUSE OF MRS. A. C. BALDWIN, BEDFORD HILLS, N. Y.

BUTLER & CORSE, ARCHITECTS
ONE END OF THE LIVING ROOM

HOUSE OF MRS. A. C. BALDWIN, BEDFORD HILLS, N. Y.

BUTLER & CORSE, ARCHITECTS
THE END ELEVATION

DETAIL, ENTRANCE FACADE

HOUSE OF MRS. A. C. BALDWIN, BEDFORD HILLS, N. Y.

BUTLER & CORSE, ARCHITECTS
I have lived in the peninsula of Florida for several years, and for the past decade have been a frequent winter visitor. I have often wished to express an opinion of the error of Florida's ways in architecture, hoping that some good may thereby be done. I suppose naturally there is another side to the question, but personally I consider the houses, and particularly the small, so-called Spanish and Italian buildings, nothing more than aberrations. These bad houses springing up everywhere are a sure indication that the American public and carpenter-builders are fumbling with a foreign element. These same people, given a small Colonial house to build in Florida, would exhibit an intelligent understanding, as is seen elsewhere throughout America. Theoretically, there are stronger reasons why the Latin masquerades should cease. Today Florida is the melting pot of the union, the cosmopolitan state. Should not a cosmopolitan public exhibit a strong nationalism? Should not the house itself be in its national style of architecture? Yet here, staid Florida citizens of the type immortalized by Sinclair Lewis,—realtors, rotarians and chamber of commerce members,—see fit to house themselves in baby pink, Alice blue and sea green houses, which they fondly believe to be of either Spanish or Moorish architecture. Curiously enough, these Babbitts consider their environment appropriate; but to me it is as incongruous as to see them dressed in the habiliments of a sheik or of Don Juan, having no relation to present conditions.

America has, everyone now knows, a fine architectural traditions, that of the colonial period and of the early republic. It is the architecture which we are further developing today. It is our national style. One may easily go a step further, since the Colonial style was brought over from the mother country, and say that the English-speaking races have a national architecture, differing in expression in various localities, but similar. Granted, then, that we have our national style, can it be adapted to the climatic conditions of the semi-tropics? The houses of eighteenth century Charleston, with verandas and balconies for each floor, are most fittingly suited for Florida's climate. The planters' homes of the early republic throughout the "cotton belt" are admirably planned for the tropical summers throughout Georgia and Alabama. These houses have balconies and verandas between or completely encircling the buildings. These well shaded second-floor balconies would furnish cool retreats for a Florida summer. In these houses the rooms are very high-studded, which, together with shaded facades, ensures cool interiors. With these two types Florida need have no other source to draw from. The public and builder should have a natural understanding of such architecture, and could produce from this precedent creditable architecture for the critic to praise as fulfilling all the requirements.

However, Florida has other sources to draw upon, that if not American, are closely related. The lovely architecture of Bermuda; of Nassau; of Trinidad; of Barbados and of Jamaica:—all sister colonies of America in the eighteenth century. Nassau and Bermuda are swept by the same Gulf Stream that

Thousands of examples like this Florida house illustrate the unfortunate results of adopting an architecture unsuited to the temperament of the people
makes Florida famous, and all have the same climatic conditions. One often hears: "Why not Spanish architecture in Florida? The Spaniard first settled this section." So he did, and so also did he settle Bermuda, Trinidad, Nassau and Jamaica. Then the Englishman came and pushed him into the sea. But did the Englishman carry on the Spanish tradition? He did not. The English and Latin races have very different ideas. The English race craves fresh air; the Latin studiously avoids it. In a sleeper upon a Latin railroad, have you ever tried to open a window with a Latin in the upper berth? If you never have, I would advise suicide as a more pleasant experience. Just so in their homes: the Spaniard builds a house with splendid wall surfaces,—walls of extreme thickness, and with small windows,—windows that are barred with shutters through the heat of the day, so that the cool, damp air is confined indoors. The Englishman, in the tropics, builds homes fronted with or surrounded by two-story balconies, often latticed to effectively exclude the burning sun, but open to readily allow every breeze to circulate throughout the house. Similarly the American craves fresh air, which is another strong argument for the elimination of Spanish architecture in Florida. Every architect designing a house in Florida remembers the client exclaiming: "I want a Spanish house, but I want
lots of large windows and sleeping porches.” Can you imagine a Spaniard using a sleeping porch? He would consider even the thought barbarous. And how can a house be Spanish in character with many and large windows? It simply can’t be so designed.

All this being true, what was the motive behind this Latin movement? About ten years ago an architect from New York was called upon to do a palatial home in Miami. Here was his opportunity for a bully good time,—and he had it; but he did not for a moment consider the havoc it would play within the next decade. Then about nine years ago, another architect migrated to Palm Beach, and built a beautiful club house. In Palm Beach the winter visitors had this artistic edifice to compare with the staid old wooden facades of the “Breakers” and “Poincianna” hotels, and a few shingled “bungalows.” At this time it began to be the vogue for wealthy visitors to build winter homes. They, without exception, wanted houses in the Spanish style, like this artistic club. For this wealthy class it had good points;—people who had city and country homes in the north designed in the Georgian style, but who, for their two months in Florida wanted to live in something different. One enjoys the Everglades Club costume ball for the night, but one does not want it for 365 nights in the year. Neither do I believe that this wealthy, educated class would want
to live in their Spanish stage settings 365 days in the year. However, the vogue spread like wildfire, and since it began, every house, irrespective of cost, has been built in this Latin style, so that the pathetic part of it is that the good, wholesome working man does have to live in these abortions 365 days in the year, whether he wishes to or not.

Latin architecture is far easier for the average architect to design than Colonial or Georgian architecture. Basically it is a picturesque style. In the north, if we have an English house to design, it is clearly defined that it shall be either Tudor, Renaissance or Georgian; or if Georgian, late seventeenth century, early eighteenth century, middle eighteenth century, late eighteenth century, or early nineteenth century. If in Florida a Spanish building is to be designed, it is "Spanish" and that is all. Anything from thirteenth century to early nineteenth century is included, and not infrequently in the same house. There seems to be no idea that a building's design should be confined to a period of time. This, I should say, is the paramount objection to the better Florida houses. A natural outcome of this flirting with early Renaissance forms has been the coarsening of houses with bastard ornament in lieu of the well thought out details and composition needed.

I have said that the Spanish is a simple style to design in. Of course I mean as applied to
eighteenth century types, for I believe this is the point where we should take up all tradition. Gothic and Renaissance are, from merely economic reasons if for no other, out of the question. First to be considered is of course the plan. The Spanish house, where its size permits, includes a patio, or room without a roof. This patio is the brilliant contribution of the Latin. The patio, being an outdoor room, should have the dimensions of a room. The mistake in the Florida house is that the patio is so large that it is a court rather than an outdoor room. It should approach a square in plan, 25 by 25 being quite sufficient, or 30 by 30 in the largest houses. It should be paved and have potted plants, and not be a garden, as it is in the prevalent Florida interpretation. It may be quite small and still be in excellent taste. Around the patio should be overhanging balconies, loggias and cloisters, for the exterior of the Spanish house is always bare and devoid of such intimacies. The small rectangular house does not allow space to include the patio. A poor substitute, which is often attempted, is completing the enclosure by means of two walls affixed to the small ell-shaped house. The Latin patio is an inside, open-air room. It is surrounded on four sides by the building. This American version of two sides building and two sides wall is a make-shift, and not really in character with its prototype.
After the plan is determined, simple, well proportioned roof masses are to be considered. If the house is large enough, a few picturesque breaks should occur, for the Spaniard knew how to take full advantage of picturesque roof lines. The texture of Spanish tile roofing is so lovely that with a well composed roof the problem is about solved. To complete the design, compose in a direct manner the windows and entrance doorways, relieved, if necessary, by balconies or grilles, and the problem is finished. Cornices are unnecessary, and should not appear in the modest dwelling. Enframed and ornamental doorways are also unnecessary in small houses. If a client's money must be squandered, do it by adapting the lovely iron grilles and balconies of the Spaniard. Another outstanding decorative feature of the Spanish dwelling is the hanging wood balcony with its tiled roof, which usually extends from 3 to 4 feet from the facade on a level with the second floor, the floor beams cantilevered through to carry it. These beams are not of the usual 2 by 12 inches but range from 6 by 8 to 6 by 10 inches, and are often shaped and carved, but in a simple manner. They terminate carrying a turned railing between chambered uprights, spaced 7 to 8 feet apart, which, in turn, support corbels, upon which rests the roofing.

Too much cannot be said of the charm and interest of the patio. The exterior of the Latin building is cold and forbidding, but a glimpse through the half-open doors, through the house into the patio, usually shows a lovely garden room of flowers, glazed tiling and fountains. The sense of absolute privacy out of doors, under the tropical blue sky is perhaps its most charming feature. The transformation from bare, austere masonry exteriors to the intimate details of inviting loggias and balconies comes as an unfailing delight. The desire is universal to have just such a patio, and in the climate of Florida it is justifiable. If Colonial or British West Indian architecture is to supplant the Latin, then we must introduce the patio into it, which is easy to accomplish and entirely appropriate and consistent, and therefore wholly desirable.

Photo. F. E. Geidel
Small Houses in "Major Alley," Palm Beach. Illustrating Use of "British West Indian" Architecture
Howard Major, Architect
HE much-discussed question as to the appropriateness of the use of Spanish and Italian architectural styles for houses located in the New England and middle states will not be taken up in considering this group of small houses which follow in design what is often termed today "Mediterranean" architecture. There are rugged picturesqueness and consistency in scale which commend the design of this house in New Rochelle to favorable attention. Heavy red tile roof, rough-finished stucco, crude wood window shutters and heavily framed overhanging balcony give this house a character strongly suggesting the farmhouses of northern Italy. Another pleasing variation from the usual small house is in the irregularity of the plan. This to a certain extent is suggested in the elevations. In the semi-circular bay or half tower on the first floor is located an entrance vestibule leading into a center stair hall. A living room and sun porch occupy the low one-story wing at the right of the front door. A dining room and kitchen, together with a breakfast porch, pantry, maid's room and bath occupy the
space on the first floor at the left of the entrance. Stairs to the cellar lead down under the main stairway. A small lavatory is located at the back of this stair hall, adjacent to a rear entry, the door of which opens onto a graveled forecourt. The illustrations included here are all of the front of the house, and so do not show the rear entrance. On the second floor are four bedrooms, a boudoir and two baths, all of which come in the main part of the house, over the front hall, dining room, pantry and kitchen.

The treatments of the windows in the living room and sun porch are not particularly Italian or Spanish, but they indicate a concession to the demand of most clients today that there shall be as much light and air as possible in a country house. The extension of the main walls of the house beyond both the sun porch and the corners of the main part of the building may add an unusual touch to the design, but hardly serves any logical or consistent purpose, with the exception of the buttress-like projection on the upper corner of the second story, which gives space for a closet to the bedroom located at this corner. The use of these buttresses prevents the unbroken continuation of the wide overhanging eaves, which treatment adds much picturesque charm to many houses built in the Mediterranean style.
IT is interesting to note the many different materials used for the exterior walls of houses designed in the Spanish and Italian styles. Except for the desire to obtain an interesting texture for the wall surfaces of buildings in these types there can hardly be said to be any precedent for the use of “skintled” brick for the walls of Italian houses. However, the result obtained is sufficiently effective to justify the use of this most modern and latest type of brickwork. In the case of this house near Chicago the general proportions, outline and design indicate sufficiently the style from which it is derived. Whether this house would seem more truly Italian had rough-textured stucco been used for the exterior walls is open to question. The front elevation shows a carefully studied and attractive arrangement of small windows and glassed-in second-story loggia. Undoubtedly in summer, when the glass sashes are removed from this loggia, the effect of the design is still more Italian. The location of this long loggia in relation to the entrance door and the sturdy end chimney is excellent; also the sparing use of windows, as well as their small sizes, deserves commendation and consideration. It is possible that the effect of the long, low living room window, which projects slightly from the building and has

![Diagram of the house](image-url)
FORUM SPECIFICATION AND DATA SHEET—129
Residence of Arthur Jones, Esq., Glencoe, Ill.; James Roy Allen, Architect

OUTLINE SPECIFICATIONS

EXTERIOR MATERIALS:
Common brick, laid up rough ("skintled").

ROOF:
Tile.

WINDOWS:
Wood, casement.

FLOORS:
Tile in hall; wood in living room.

HEATING:
Vapor.

PLUMBING:
Enamed fixtures.

ELECTRICAL EQUIPMENT:
Lighting.

INTERIOR MILL WORK:
Walnut in living room. Painted birch elsewhere.

INTERIOR DECORATIVE TREATMENT:
Painted plaster.

APPROXIMATE CUBIC FOOTAGE OF BUILDING:
41,000.

COST PER CUBIC FOOT:
50 cents.

YEAR OF COMPLETION:
1924.

interesting leaded glass carried out in the Italian manner, would have been somewhat more in keeping with this style had the wide opening been divided by stone colonnettes or by brick mullions. The arched-top casement door at the end of this living room, with its wood muntins which seem rather more Colonial than Italian in character, is effectively placed as the only opening at the end of this one-story living room wing. The design has considerable charm.

In plan the house is as interesting as it is in elevation. The entrance door leads into a small hall with circular stairway, beyond which is a well proportioned square dining room. In the main part of the first floor are located the pantry, kitchen, maid's room and bath and a one-car garage which opens into the court at the rear of the house. This garage is conveniently reached through a rear entrance hall, so that in winter it is unnecessary for the owner to go outside of the building. The second floor plan shows three good sized bedrooms and two baths. The closets indicated with these bedrooms are all unusually spacious. The sleeping porch or covered loggia is well located, opening off the second floor hallway, thus making it accessible without the necessity of passing through any of the bedrooms. One bedroom possesses an attractive bay window. Unfortunately, there is no illustration showing the exterior elevation of this window, which is at the rear of the house. It seems probable that this rear elevation, with the garage doors and this overhanging bay window, must be almost as interesting architecturally as the front elevation shown here.
HOUSE OF FRANK HARTLEY ANDERSON, BIRMINGHAM, ALA.
FRANK HARTLEY ANDERSON, ARCHITECT

Plans, House of Frank Hartley Anderson
**FORUM SPECIFICATION AND DATA SHEET—130**


**OUTLINE SPECIFICATIONS**

**GENERAL CONSTRUCTION:**
- Reinforced concrete and hollow tile.

**EXTERIOR MATERIALS:**
- Stucco; stone pilasters.

**ROOF:**
- Concrete tile.

**WINDOWS:**
- Casements throughout; cypress, leaded.

**FLOORS:**
- Reinforced concrete; cork tile on second floor; composition on first floor.

**HEATING:**
- Vacuum steam; fuel oil burner. Automatic gas heater for water.

**PLUMBING:**
- Enameled iron except toilet, porcelain.

**ELECTRICAL EQUIPMENT:**
- Lighting and electric range, dishwasher, refrigerator, mixer, etc.

**INTERIOR MILL WORK:**
- Doors are fir; brick mouldings around doors and windows.

**INTERIOR WALL FINISH:**
- Plaster, sand-floated and painted.

**INTERIOR DECORATIVE TREATMENT:**
- Rough oak beams and ceiling in three rooms, stained silver gray.

**APPROXIMATE CUBIC FOOTAGE OF BUILDING:**
- 30,000.

**COST PER CUBIC FOOT:**
- 51 cents.

**DATE OF COMPLETION:**
- February 6, 1924.

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**NOW** a man by the books he reads and the friends he keeps" is no more true than "know an architect by the house he designs for himself." In Birmingham, Frank Hartley Anderson has recently completed his own house, which although small is of unusual interest and distinction. He has taken an irregular shaped, hillside lot and built a house to fit the unusual and difficult topography. From the lower street, on which the house really faces, it rises in two simple masses, one lower than the other, to a crowning cornice and overhanging roof of Spanish tile. It is the simplicity of these two adjoining rectangular buildings, with their rough-textured stucco and few but well placed and fanciful window and door openings, which wins this house one's commendation. The elevation of the lower part of the front facade terminates with an interesting roof garden above the second story, an attractive treatment possible only in a mild climate seldom visited by snow or extreme cold. The design of this main elevation might have been slightly improved had it been possible to place the arched doorway of the garage the same distance from the corner near which it is located as is the main entrance door from the opposite corner of the building. The narrow lancet windows, of which five are grouped at the right of the entrance door, and one in the wall of the second story, give a distinctly mediaeval touch to the design. It is feared that the small number and sizes of the window openings would hardly suit the type of client usually encountered by the architect of today. The general public has not as yet been educated up to an appreciation of the beauty of the plain wall surfaces of "Mediterranean" buildings. With such an interesting and unusual exterior, it is not surprising to find the plan of the interior equally out of the ordinary. The first or ground floor of the building contains a good sized office, which connects by a fireproof door with the garage at one side, and through an open archway with a boiler room at the rear. Off of this office a wood stairway leads up to the second or main floor into a large living room on the south side of the building. Off this room opens a corner porch and a dining alcove connecting with a small kitchen. At the back of the living room, directly above the office and garage, is a well proportioned bedroom with bathroom and closets connecting. The third floor of the main part of the house is devoted entirely to a studio of large dimensions, which opens by casement doors onto the roof garden. Practical and convenient as the plan of this house may be for a married architect or artist without children, some rearrangement would be required to adapt the plan for the use of a family with children. But the evidence of individuality and personal taste shown both in the interior as well as the exterior design justifies its unusual plan.
AGAIN we have a house designed by architects, two, father and son, and for their own occupancy. It is always interesting to note what sort of a house an architect builds for himself, as the ideas and preferences of clients greatly influence and handicap an architect in designing their houses. When building for himself, he has an opportunity of trying architectural effects and experiments in colors, plan and design, which he is seldom able to attempt in the house of a client. This Italian house at Santa Monica has real distinction and dignity, and it is only regretted that lack of space prevents the publication of more illustrations of this excellent example of domestic architecture. The tall triple arches of the entrance loggia pleasantly dominate the front elevation, and adequately light the large center sun parlor. In general the design of the house suggests those of many of the smaller Tuscan villas, with their dominating central buildings and projecting wings.

The center stair hall, extending through the

Plans, House of John P. Parkinson, Esq.
FORUM SPECIFICATION AND DATA SHEET—131
House of John P. Parkinson, Architect, Santa Monica, Calif.

OUTLINE SPECIFICATIONS

GENERAL CONSTRUCTION:
Reinforced concrete foundation, hollow tile bearing walls, wooden floor and roof construction.

EXTERIOR MATERIALS:
Stucco.

ROOF:
Clay tile.

HEATING:
Gas hot air furnace and fireplace.

PLUMBING:
Standard bathrooms; water softening system; circulating hot water system.

ELECTRICAL EQUIPMENT:
Lighting and stove, water heater, washing machine, auxiliary electric pumps for domestic water system.

INTERIOR MILL WORK:
Oak and redwood for stained surfaces. Douglas fir and pine for those painted.

INTERIOR WALL FINISH:
Stained redwood and paint on smooth plaster.

DECORATIVE TREATMENT:
Subdued in color.

APPROXIMATE CUBIC FOOTAGE OF BUILDING:
75,000.

The entrance to the house, is entered through the main door located at the right of the high vaulted loggia. On the right of this stair hall is a living room, 30 by 19 feet, with a large fireplace in the long wall. On the opposite side of the main hall three steps lead down into a sun parlor, which occupies the center of the main part of the house. Beyond this room a doorway connects with the eastern wing, which is a complete house in itself, containing on the first floor, a living room, dining room, kitchen and laundry. Above these rooms are four bedrooms and a large bathroom. Over the main part of the house and the western wing are three large bedrooms and one bath. From the illustration of the rear elevation of the house some idea may be obtained of the beauty of its high location. The Pacific Ocean lies a half mile distant to the southwest, while on the other side, beyond a canyon, or ravine as it would be called in the east, are the Santa Monica Mountains, which stretch for 50 miles along the coast to the northwest.
It is always refreshing to find a new interpretation of the "Mediterranean" style, so-called, exemplified in this small one-story house in Alabama. The low and simple effect of the front elevation would suggest somewhat the architecture of the Near East, on account of the flat roof and exterior stairway leading to it, were it not for the double-hung windows and casement doors used in the living and dining rooms. The low, tile roofed entrance vestibule makes a pleasant break in the length of the facade, as does also the double-arched window of the covered porch at the left of the vestibule, as illustrated.

The plan indicates that the house is, perhaps, larger than would be imagined from the front eleva-

**FORUM SPECIFICATION AND DATA SHEET—132**

House of Stanley McArthur, Esq., Birmingham, Ala.

### OUTLINE SPECIFICATIONS

#### GENERAL CONSTRUCTION:
Concrete foundation and footings. Concrete and hollow tile walls. Wood floors.

#### EXTERIOR MATERIALS:
Stucco.

#### ROOF:
Built-up roofing and roofing tile.

#### WINDOWS:
White pine, double-hung and casements.

#### PLUMBING:
Enamed fixtures.

#### ELECTRICAL EQUIPMENT:
Flexible conduit wiring for lighting.

#### INTERIOR MILLWORK:
Yellow pine.

#### INTERIOR WALL FINISH:
Sand-finished and sponge-finished plaster.

#### INTERIOR DECORATIVE TREATMENT:
Painted walls. Beamed ceiling in living room.

#### APPROXIMATE CUBIC FOOTAGE:
27,248.

#### COST PER CUBIC FOOT:
35 cents.

#### DATE OF COMPLETION:
September, 1925.

The Dining Room

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tion. Three bedrooms and a bathroom are grouped at the side and rear of the living room, accessible to it but sufficiently isolated to secure adequate privacy. The kitchen is small and opens directly into the dining room, a convenient location for a young housekeeper, so many of whom prefer to do their own work rather than struggle with the servant problem. The bedrooms are so located that each has spacious windows on two sides, a very desirable arrangement for a one-story house with a flat roof. If sufficient air space is left between the flat roof and the ceilings of the rooms below, there should be no difficulty in keeping cool in summer. The view of the dining room, shown here, indicates that no attempt at creating Spanish or Italian atmosphere in the furnishing and decorating of this house has been made. All of the furniture as shown appears to be excellent reproductions in mahogany of the late Colonial type, which attractively furnishes any small modern dining room, though in this case it gives no suggestion of the architectural style from which the design of the exterior of the house has been derived.
HERE is a house decidedly homelike and attractive in design, which suggests in general outline and proportions the small villas around Florence. The entrance door in its architectural detail also suggests Italian precedent, but the spacious, double-hung windows, each with its 24 small panes and wood muntins, could have been derived from no architectural type but the Colonial. However, the effect of this combination of Italy and New England is decidedly homelike and pleasing. The location of the rain water leaders as well as of the single iron-grilled window on the front elevation indicates the care and thought which went into the study of this problem and which achieved such satisfactory results. This house is a noteworthy proof of the now generally admitted fact that absolute adherence to any one architectural style is not necessary in order to secure a thoroughly architectural and pleasing design. As the house stands on sloping ground, it was possible to drop the level of the service wing considerably below that of the main structure. This difference in height is further emphasized by the high tiled roof of the main house and the low, flat-roofed service wing. Under this wing, on a level considerably below that of the entrance court, is located a large garage, well concealed, as is the servants' yard also, by a high stucco-covered wall.

The front door opens into an attractive oblong...
**FORUM SPECIFICATION AND DATA SHEET—133**

House of M. D. Arnold, Knoxville, Tenn.: Barber & McMurray, Architects

<table>
<thead>
<tr>
<th>OUTLINE SPECIFICATIONS</th>
<th>ELECTRICAL EQUIPMENT:</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>GENERAL CONSTRUCTION:</strong></td>
<td><strong>Lighting:</strong></td>
</tr>
<tr>
<td>Hollow tile walls; wood floors.</td>
<td></td>
</tr>
<tr>
<td><strong>EXTERIOR MATERIALS:</strong></td>
<td><strong>INTERIOR MILL WORK:</strong></td>
</tr>
<tr>
<td>Stucco walls; tile roof.</td>
<td>Birch, oak and pine.</td>
</tr>
<tr>
<td><strong>ROOF:</strong></td>
<td><strong>INTERIOR WALL FINISH:</strong></td>
</tr>
<tr>
<td>Tile.</td>
<td>Sand-finished plaster.</td>
</tr>
<tr>
<td><strong>WINDOWS:</strong></td>
<td><strong>DECORATIVE TREATMENT:</strong></td>
</tr>
<tr>
<td>Double-hung, cypress.</td>
<td>Paint.</td>
</tr>
<tr>
<td><strong>FLOORS:</strong></td>
<td><strong>APPROXIMATE CUBIC FOOTAGE OF BUILDING:</strong></td>
</tr>
<tr>
<td>Oak and 8 x 8 tiles.</td>
<td>90,000.</td>
</tr>
<tr>
<td><strong>HEATING:</strong></td>
<td><strong>COST PER CUBIC FOOT:</strong></td>
</tr>
<tr>
<td>Vapor.</td>
<td>45 cents.</td>
</tr>
<tr>
<td><strong>PLUMBING:</strong></td>
<td><strong>DATE OF COMPLETION:</strong></td>
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</tbody>
</table>

hall, out of which a vaulted loggia is reached through three arched openings. Thus, when one enters the main hall from the forecourt, a delightful vista is obtained of this typical Italian loggia with its terraced garden beyond. The living room, of excellent proportions, opens off of this loggia on the right, while on the left is the dining room with connecting pantry. The maids’ rooms and bath, as well as the kitchen and service porch, located in the second floor of the service wing, are only one step below the main floor level. For a country house of moderate size this plan is recommended for careful study and emulation. The second floor is equally well arranged, with four large master bedrooms and four baths and a sewing room, all directly accessible from the main hall. Particular attention is called to the excellent location and plan at the end of the main hall. The enclosed stairway treatment is distinctly Italian.

The Hallway

The Garden Front
AGAIN we have to consider an architect's house designed by himself. This house is rather more pretentious in size, detail and interior finish than some already considered in this group of houses, all of which suggest at least some influence of Italian or Spanish architecture. There is, however, a pleasing straightforwardness and simplicity in the design of this comfortable, homelike looking house, which decidedly expresses a spirit of culture and refinement. An entrance loggia containing five arches
OUTLINE SPECIFICATIONS

GENERAL CONSTRUCTION:
Brick walls; fireproof first floor and wood floor joists above first floor.

EXTERIOR MATERIALS:
Stucco on brick, with limestone trimmings.

FLOORS:
Oak and teak parquet in first floor rooms; brown tile in halls, and pine in bedrooms.

PLUMBING:
Enamed fixtures.

ELECTRICAL EQUIPMENT:
Wired in conduit.

INTERIOR MILL WORK:
Mahogany in dining room; gum in balance of first floor and second floor halls. White woodwork; mahogany doors in bedrooms.

INTERIOR WALL FINISH:
Paneling and plaster.

DECORATIVE TREATMENT:
Marble stair with iron handrail.

APPROXIMATE CUBIC FOOTAGE:
157,000.

COST PER CUBIC FOOT:
34 cents.

YEAR OF COMPLETION:
1914.

opens into the long vaulted corridor which connects the library at one end of the house with the dining room at the other. These spacious and well proportioned rooms are equal in size. Back of the dining room an unusually large pantry leads to the kitchen and service department at the rear. Joining the kitchen wing is a garage for three cars. Back of the library is a small study, an illustration of which is included in this presentation. The decorated beam ceiling, the rough plastered walls and the quaint corner fireplace with its quarter-conical hood are Italian features worthy of note. At the side of the library a large, brick-paved, covered porch adds comfort and convenience. To the plan of the second floor of his house, Mr. Baskervill also devoted much care and study. Bathrooms separate the bedrooms, and are arranged with doorways in such a manner that access to them may be had throughout the entire group of five bedrooms without the necessity of entering the open stair hall or north and south passageways. A more logical, convenient or pleasing bedroom floor plan can hardly be imagined. It is most truly an architect's plan, showing as it does unusual economy of space and remarkable balance in design.
ONE of the houses recently completed at Hollywood, near Birmingham, Ala., from the designs of George P. Turner, architect, is this two-story, stucco-covered house which shows much originality in its design. It might be preferred that the two groups of double windows had been of equal size and, together with the single window under the gable of the roof, treated with metal casements and old glass suggesting Italian precedent, but it must be confessed that the design and location of the house are sufficiently out of the ordinary to warrant its consideration as an interesting example of small house architecture. The setting of the house against a background of pines is most effective and in itself justifies the unusual facade and wall treatment of the front elevation. These walls seem to end rather abruptly, and it is to be hoped that when this house is purchased and occupied they may be carried back into the forest. As is so often the case with houses built on speculation, there were not sufficient funds...
**FORUM SPECIFICATION AND DATA SHEET—135**

**House of Key Foster, Esq., Birmingham, Ala.**

### OUTLINE SPECIFICATIONS

**GENERAL TYPE OF CONSTRUCTION:**
Concrete foundation and footings. Concrete and hollow tile walls. Wood floors.

**EXTERIOR MATERIALS:**
Stucco.

**ROOF:**
Built-up roofing and roofing tile.

**WINDOWS:**
Pine, 12-light, double-hung and casements.

**PLUMBING:**
Enamelled fixtures.

**ELECTRICAL EQUIPMENT:**
Flexible conduit wiring.

**INTERIOR MILLWORK:**
Yellow pine.

**INTERIOR WALL FINISH:**
Sand-finished and sponge-finished plaster.

**INTERIOR DECORATIVE TREATMENT:**
Painted walls.

**APPROXIMATE CUBIC FOOTAGE:**
39,055.

**COST PER CUBIC FOOT:**
38 cents.

**DATE OF COMPLETION:**
October, 1925.

Available to carry out logically and consistently many of the architectural and decorative details which make or mar a design. Small details are important.

As the illustration of the exterior of this house indicates, the plan is irregular and amusing. The windows shown on the front elevation open into the kitchen and upon the dining room porch. The surprising lack of kitchen closets and any pantry indicated on the accompanying sketch plan has undoubtedly been rectified by the prospective owner. This omission may not be a mistake, since no two housekeepers have the same ideas about the locations of kitchen pantries, closets, sinks and dressers.

The dining room in this house probably has a charming outlook into the pine grove at the side and rear, this being true also of the living room and living porch, both of which are located at the back of the house. The high wall at the right of the entrance door encloses a square, formal garden. The location of the entrance drive and garage so necessary to a suburban house is not shown, but, undoubtedly, would be considered by an architect who could devise so clever a plan as this. The plan of the second floor shows four well arranged bedrooms and one bath. The latter opens not only off the hall but also off the principal and largest of the four bedrooms.
The Dining Room at Compiegne

By C. HAMILTON PRESTON

Of all the rooms in the Louis XVI wing at Compiegne, the dining room is by far the most notable. Opening directly into the suite occupied by Marie Antoinette herself, it far excels in dignity and majesty any of the rooms of the royal suite. One doesn't have to look far for the reason for this. In the first place, the proportions of the room are majestic. It is approximately 45 feet long by 33 feet wide and 19 feet, 8 inches high, proportions which make it adequate for those state functions for which it was designed. Then, too, whereas the other rooms are in some instances ornate and burdened with detail as well as with stuffs and furniture, the dining room is extremely simple and direct in treatment, in fact almost severe, and yet the effect is satisfying to an unusual degree.

The walls are kept decidedly plain, only a faint gray marbleizing being apparent; panels are held in abeyance except for the grisailles over the doors, the huge grisaille over the mantel, and the small panels in the wainscot below the pilasters. The pilasters are very vigorous, and the caps unusually beautiful in detail. The spacing of the pilasters on either side of the mantel is unequal, but one scarcely notices it; this was made necessary by the position of the chimneypiece. The corners, cut off at an angle of 45 degrees at the far end of the room, add to the attractiveness of the plan. All the architraves are large in scale, and the mantel itself as well; but so large is the room, and the various members are so well proportioned that there is no perceptible heaviness of scale. The cornice, simple yet bold and vigorous and beautifully disposed as regards detail, is dignified and well designed and adapted to the splendid order of pilasters. The entire room is richly simple, reticent, and full of character.

The marked simplicity of the room, its great size and noble treatment all combine to make it one of the most commanding and impressive to be found. As an inspiration for rooms of a like character today it cannot be surpassed. It is an excellent example of what can be done in the case of a large room by exercising restraint in the matter of ornamentation and detail. This is always desirable in a dining room.
ELEVATION "A~A"
DINING ROOM
COMPIEGNE

Scale 1/4 Inch = One Foot
DETAIL "D"

DETAIL "C"

DETAIL "B"” DEVELOPED

DETAIL "A"

DETAILS “A, B, C, D” ARE AT ONE HALF FULL SIZE.

"B"

SEC 5

SEC 12

SEC 2

SEC 10

SEC 9

SEC 11

SEC 8

SEC 7

SEC 6

SEC 1

ONE QUARTER FULL SIZE

"D"

"C"

LINE OF WALL

SEC 13

SEC 14

LINE OF \_\_WALL

SEC 13A

FLOOR LINE

½ FULL SIZE DETAILS

DINING ROOM

COMPIEGNE

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All its old-fashioned charm has been preserved, not only in the pattern but also in the colorings in which it may be had—dull green or blue or buff or mauve or salmon.

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THE ARCHITECTURAL FORUM

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Brasco "Series 500" All Copper Construction.

Brasco COPPER STORE FRONTS
A CENTURY ago Keats poured forth his adoration of Hellenic art in the “Ode to a Grecian Urn.” To him, the utmost realization of beauty was to be found in the simplicity and grace of this vessel.

As truly Grecian in line and form as the ruins of the Parthenon is the exquisitely proportioned piece shown above. Artists and craftsmen of the Luminaire Studios have been accurate in catching the mood of ancient Greece in the designing and executing of this luminaire.

CURTIS LIGHTING, Inc.
CHICAGO
A New Triumph in Illumination

Controls and Directs Light

Wonderful new features are embodied in this new, totally enclosed illuminator—a new triumph in modern interior illumination.

The reflector is adjustable up or down, controlling the direction of light vertically and horizontally. Portion of the scientifically designed globe extends above reflector, providing shadowless ceiling illumination.

Note the beauty of this new unit. Beauty and efficiency combined!

GuthLite gives a glareless flood of softly diffused white light. Maximum illumination on the working plane. More light where most needed! Extremely wide light distribution. Low brightness at the source.

Canopy, hanger and ornamental metal band are finished in Antique Bronze. Reflector is White Porcelain Enamel with Ivory band. Made in plain and ornamental types. Packed in individual cartons. Complete. Ready to install.

Write for GuthLite Folder

It illustrates the various types of GuthLite, is regulation size, and bears A. I. A. file number.

Prices and Sizes:

<table>
<thead>
<tr>
<th>Watts</th>
<th>Dia.</th>
<th>Glass</th>
<th>Size</th>
<th>No.</th>
<th>Price</th>
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<tbody>
<tr>
<td>75 to 150</td>
<td>Med. 12 1/2&quot;</td>
<td>Plain Ref. Glass</td>
<td>8 1/2&quot; x 11&quot;</td>
<td>B2820</td>
<td>$ 5.90</td>
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<tr>
<td>200</td>
<td>Med. 17&quot;</td>
<td>Plain Ref. Glass</td>
<td>11 3/4&quot; x 5&quot;</td>
<td>B2821</td>
<td>8.35</td>
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<tr>
<td>300 to 500</td>
<td>Mog. 21&quot;</td>
<td>Orn. Band Glass</td>
<td>14 3/8&quot; x 6&quot;</td>
<td>B2822</td>
<td>11.65</td>
</tr>
</tbody>
</table>

Contact Edwin F. Guth Company

Lighting Equipment
St. Louis, U.S.A.
OF THE new hotels that are constantly opening their doors to the traveling public, it is noticeable that the ones enjoying the greatest patronage are those that are equipped to provide every service which might add, if only in small measure, to the comfort of their guests.

Just such a hostelry is the Washington Duke Hotel, Durham, N. C., one of the finest in the South. For its lighting equipment, MONAX GLOBES were selected as one of those important items of comfort that directly or indirectly attract a preferred trade.

MONAX GLOBES, "The Shadow Chasers," were chosen because by actual test they provide a softer and more perfectly diffused illumination than almost any other lighting glassware, spraying light uniformly in all directions, yet absorbing scarcely any of it. The architects who specify MONAX know just what results these globes will give: cheerful dining rooms, absence of shadow in lobby and corridor, and plenty of restful, glareless light in the guest rooms.

Whether your lighting problem is that of a hotel or some other project, our Illuminating Engineering Department will gladly help you in its solution. This co-operation is always yours for the asking and entails no obligation whatsoever. Macbeth-Evans Glass Company (Eastern Division), Department J, Charleroi, Pennsylvania.
Nearly 70 years' research and study furnishing special lighting equipment for many of the important hospitals throughout the country has left us with a wealth of information on this important subject.

One of our engineers would be glad to confer with you on any problem you may have, pointing out the advantages of the various methods we have devised to overcome the problems of hospital illumination.

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Salt Lake City, Utah

Canada
Associated with The Robert Mitchell Co., Ltd.
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England
35-35 Drury Lane, Kingsway, W. C. 2, London
Results of this Great Contribution to the Lighting Industry

When the Type "C" lamp came on the market in 1916 trouble began for manufacturers of silvered glass reflectors, owing to the greater heat of this new lamp. Manufacturers and engineers sought means of overcoming this trouble, whereby the silvered reflecting surface could be made permanently efficient.

The problem was solved by the Pittsburgh Reflector Company ten years ago—and thus far we have succeeded in keeping the method secret.

It is not sufficient that a reflector installation be effective when first installed. Initial efficiency is important, of course, but it is far more important that this initial efficiency be maintained throughout a reasonable period of time.

Any reflector which turns dark soon becomes worthless. Not only does such a reflector fail to serve the purpose for which it was bought, but it becomes a source of waste instead of profit.

Darkening of the reflecting surface of a reflector can easily lessen the output of light 10 per cent, 20 per cent, even one-third or one-half.

A depreciation of 10 per cent causes a waste of $1.00 per year per 100 watt lamp; $1.80 per year per 150 watt lamp; $2.40 per year per 200 watt lamp.

A depreciation of 25 per cent means a waste of current amounting to $2.00 per year per hundred watt lamp; $4.50 per 150 watt lamp; or $6.00 per year per 200 watt lamp.

The waste of current may easily exceed the initial cost of the installation, within two or three years.

This refers only to the wasted current—money paid out for which nothing whatever is received in return.

But more important in window lighting is the fact that any deterioration lessens the attention value, decreases the number of people who view the display, and cuts down sales and profits.

In case of co-ve-lighting, it is particularly important that the reflectors stay bright, because the ceiling and walls which constitute a second reflecting surface deteriorate as they become dirty. Ceiling and walls can be cleaned or painted; but deterioration of the reflecting surface of a reflector calls for new installations.

It is of great importance, therefore, not only that reflectors maintain their initial efficiency, but also that the initial efficiency be as high as possible.

The Pittsburgh secret method of protecting the silvered reflecting surface resulted ten years ago in the production of a reflector with the highest possible efficiency and having a permanent reflecting surface.
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ARCHITECTURALLY and commercially, the governing motif in a great store is—Display.

Especially in the staging of fine furniture, the element of effective display must needs dominate the interior detail.

In control of the lighting, H&H Push Switches carry out the designers' aims and sustain the quality of the setting.

It's "OLD RELIABLE" No. 2081 in the specifications.

The Hart & Hegeman Mfg. Co., Hartford, Conn.
Makers of Electric Switches since 1890
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to the Skyline of Sol-Lux

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Westinghouse Electric & Manufacturing Co.
Merchandising Department    South Bend, Indiana
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The plan as evolved and carried to success in Troy, N. Y. is applicable to any city that is large enough to have a motor parking problem.

To architects and those representative citizens of any community who are earnestly endeavoring to solve their curb parking problems we'll be glad to submit the plan. There's no obligation, of course.

An attractive brochure, THE HITCHING POST PROBLEM IS HERE AGAIN, explains the program more in detail.

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HARRISBURG PENNSYLVANIA
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DIXON
CARNATION ERASER

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Sample Offer—To give you the opportunity to see how the Dixon Carnation Eraser knuckles down and cleans-up, we will send you one free upon receipt of your name and address.

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OTTO R. EGERS here presents his conception of the Memorial Stadium of the future—a vast amphitheatre in everlasting concrete. "While we are more or less familiar with the various great modern stadiums that have been built, few people not in the building profession realize that without the use of concrete no permanent structure of this kind would be possible."
THE growing demand for concrete construction will find Lehigh shaping its policy with eyes to future needs, just as today it is meeting all requirements with twenty mills from coast to coast.

Any architect or engineer can secure the series "The Architect's Vision of the Future," of which the above is one. Address Lehigh Portland Cement Company, Box 3-H, Allentown, Pa., or Chicago, Ill.
John Davey was born in England, June 6, 1846, at a time when there were no public schools. This hardship and humble genius was twenty-one before he knew his A B C's. So he started in as a full grown young man to learn to read by the slow and painful process of self-education. He began with a little copy of the New Testament and a small dictionary, picking out one word at a time. Later he acquired a grammar so that he might put the words together properly, meanwhile studying horticulture and landscape gardening during a full apprenticeship at Torquay, England.

Then he heard the call of America, this great land of freedom and opportunity; and, like millions of other sturdy sons of Europe, he came here to work out his destiny. He pursued his education still further, working by day and studying by night, until he acquired an education that would do credit to the majority of college graduates.

Perhaps one of the most striking things about him was the fact that he became one of the finest Americans. He learned every word of our Constitution. He learned every word of every verse of America and the Star Spangled Banner; and, until old age laid its heavy hand upon him, he could sing those songs with a zeal that was good to see.

He became a full citizen at the first opportunity under our law, and to him it was a sacred day when he raised his right hand and forswore allegiance to the British crown and swore allegiance to the Constitution and the flag of America. And always, during his fifty years of life in his adopted country whenever he passed by Old Glory, he would tip his hat in veneration.

John Davey saw with eyes of understanding the appalling neglect and butchery of America's trees, and beset out to find a way—a systematic, scientific way—to save them, little dreaming that a great business would be developed on the science that his love and genius created. And thus came into being the wonderful profession of Tree Surgery.

His first book, The Tree Doctor, was published in 1901, and then began the gradual development of The Davey Tree Expert Company, incorporated in 1909, doing a business of nearly $2,000,000 in 1925, and now having in the field nearly 700 master Tree Surgeons, all carefully selected, thoroughly trained, properly disciplined, and regularly supervised, and giving superior service to the tree owners of America. For twenty years the business of this institution has been managed by his son, Martin L. Davey, whose highest aim has been to perpetuate the ideals and philosophy of his pioneer father.

John Davey, though not now living, still lives in the spirit and purpose of the magnificent service that he rendered his adopted country—he taught the American people to think in terms of the living tree. Greater even than his creation of the invaluable science of Tree Surgery is his contribution as the apostle of the tree as a living thing.
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"U.S." TILE FLOORING
Maple for the floors
in the famous Straus Building
in Chicago

The Straus Building, Chicago, is one of the "sights" of that city—regarded as one of the finest office buildings in the world. Its owners placed behind their architects every resource. They were building for permanence in service and appearance.

The Straus Building is floored with Maple. The far-sighted projectors of the structure say: "It was decided to use wood because of its greater resiliency and warmth . . . obtaining a surface more comfortable and pleasant under foot."

Today, after thousands of people have trudged through the building, these floors are as inviting as the day they were laid.

Ten years from now visit the Straus Building, and see the fine, smooth, polished condition of the floors! It will be interesting in 1936 for an expert to figure the saving accomplished by using beautiful, tight-grained, tough-fibred Maple.

Your architect will tell you how, when and where to use Maple flooring. Ask your lumber dealer for quotations. Send for any or all of the free booklets listed.

 Guarantied Floorings.
The letters MFMA on here to manufacturing and Maple, Beech or Birch grading rules which eco-flooring signify that the nomically conserve every flooring is standardized and guaranteed by the woods. This trade-mark is Maple Flooring Manufacturing Association, whose it on the flooring you use.

Maple Flooring Manufacturers Association
1057 Stock Exchange Building, Chicago

Floor with Maple
Beech or Birch
The Store Where People Like to Buy

Not the least important detail in making a store attractive to buyers is a floor that is comfortable to walk on, pleasing to look at — such a floor as Linotile. Its resilience and noiselessness under foot and its fresh, clean colors and attractive designs create an impression of quality and refinement — an invitation to "come in again."

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Linotile is practical for the store floor because it can be laid over any smooth, dry base and readily adapted in design to areas of any shape or size. It is easily cleaned and, regardless of wear, remains as smooth and bright as the day it was laid.

Linotile is an economical store floor because its first cost is reasonable and its upkeep very low. It needs no refinishing, no varnishing. It does not buckle or crack, and is remarkably durable, showing little trace of wear even at doorways and counters.

Linotile is a cork composition made in tile form. It is resilient, nonabsorbent and nonslippery. It is furnished in 12 colors and in squares, oblongs and strips of many sizes.

Linotile and its uses for stores is fully described in the 36 page book, "Linotile Floors for Public and Semi-Public Buildings." Copy and sample sent on request.

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Division of Armstrong Cork Company
132 Twenty-Fourth Street
PITTSBURGH, PA.
The ramps in this garage—one of Boston’s newest and finest—have been made both slip-proof and durable by using Alundum Aggregates in the cement. And the slip-proof feature is not affected by water and oil. The aggregates have also been used in the treads of the main stairway.

Alundum Aggregates are a semi-vitreous product made by bonding hard, tough Alundum abrasive with clay. Their slightly porous structure causes them to bond perfectly with cement, becoming an integral and permanent part of the floor. The result is a walking and trucking surface that combines exceptional resistance to wear with slip-proof effectiveness.

Alundum Cement Floor [C. F.] Aggregates are marketed in two sizes—the coarse (0.295”–0.100”) for the finish course or topping and the fine (0.100”–0.0322”) for surface treatment only.

Alundum Aggregates for terrazzo floors are marketed in four sizes and five colors.


New York Chicago Detroit Philadelphia Pittsburgh Hamilton, Ont.

Norton Floors

Alundum Tiles, Treads and Aggregates
How a Canadian Guide's story sold a roof—

"... nine hours we prayed there," concluded Ed, the guide. "1600 people—every soul in Iroquois Falls. "... near half a day that forest fire roared outside like big rapids. Nothing left next day but black ashes ... nothing but the power house* where we crowded. That was 10 years ago—July 29th, 1916."

Ten days later the two fishermen left Ed and the woods—headed for the States. Two hours wait for a train in Iroquois Falls—plenty of time to look over the power house of Ed's story.

They found a steel and concrete structure covered with a Barrett Specification Roof—found that this roof 10 years after its ordeal by fire was still in perfect condition, had never cost one cent for repairs or maintenance.

"Which," said one of the fishermen, dryly, as they walked toward the station, "pretty much settles the kind of roof we'll have on our new plant."

An exceptional test, yes! But not exceptional that the Barrett Specification Roof stood up under it. The fire-safe qualities of these roofs are acknowledged. As the building world knows they take the base rate of fire insurance. But this is not the quality that makes them stand out.

For service records on file testify that many Barrett Roofs of this type, built 35, 40 and more years ago, are still absolutely weather-tight—and not a cent spent on them for maintenance.

Barrett Specification Roofs are guaranteed by a Surety Bond against repair or maintenance expense for a full 20 years.

You're interested? Then dictate a brief memo to The Barrett Company, 40 Rector Street, New York City. We'll give you the full story—promptly.

Of course, you might, for sound reasons, want a built-up roof constructed according to your own specification. Even so, don't neglect this fact: the experience of leading architects and builders over a period of more than 60 years has shown that it pays to construct a built-up roof of pitch and felt—both labeled Barrett.

*The facts back of this story: In the summer of 1916 a forest fire swept 650 square miles of Ontario forests. At Iroquois Falls the population took refuge in the plant of the Abitibi Pulp & Paper Co.—reinforced concrete structure with a Barrett Specification Roof. Raging fire surrounded this building for 9 hours—the air full of falling embers driven by a sixty mile wind. Building and roof were unharmed. The roof today is in perfect condition.

Barrett

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Realizing this fact, we developed some years ago, after long study and experiment, a system of flashings that is positively dependable. Time and the experience of leading architects in all sections of the country have proved that Barrett Flashing Block and Barrett Flashing Form, in combination with Barrett Flashings, overcome all the difficulties of flashing construction.

This Flashing System provides these all-important things:

1. A durable, watertight connection between the roof and the parapet wall;
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3. Ease of installation;
4. A moderate cost with entire freedom from upkeep expense.

Barrett Flashings, installed in Barrett Flashing Block and Barrett Flashing Form, are guaranteed for ten years when used with Barrett Specification Bonded Roofs. (While not guaranteed when used with other roofings, these flashings are adapted to every type of bituminous flat roof work.)

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Rust-Resisting Copper Steel Sheets
AND ROOFING TIN PLATES

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Apollo-Keystone Galvanized Sheets give increased service and added permanence to your building construction. These are unquestionably the highest quality sheets produced for galvanized sheet metal work.

KEYSTONE COPPER STEEL Roofing Tin Plates make clean, safe, attractive and satisfactory roofs. Supplied in gauges up to 60 pounds coating — specially adapted to residences and public buildings. Metal roofs may be painted to harmonize with the color scheme of the building — an important feature which is often overlooked. Keystone quality products are sold by leading metal merchants, and are used by first-class roofers and sheet metal workers. Write for interesting booklets.

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than a standard No.1 slate shingle

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We shall be glad to send you samples of Preston Roofing and an architect's file card. Write to Dept. D 20.

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Firesafe Building Products

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ECONOMY that must be paid for through sacrifice of architectural beauty and permanence is not the sort of economy you would dare to endorse. The price of some so-called economy is often beyond payment.

But when you can recommend to your clients an economy which greatly enhances the beauty, permanence, firesafeness and sanitary conditions of any type of building, you render a real service by doing so.

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TENANT-SATISFACTION often depends upon the equipment furnished in apartment kitchens. That is why the keen-sighted business men, responsible for the success of the finest apartment-building projects, are specifying Gas Ranges with Lorain Oven Heat Regulators.

These men realize that millions of women see the advertisements of the Lorain in their favorite magazines every month. They know that women recognize the Red Wheel as a mark of superior quality and service—a guarantee of easier, better cooking and smooth-running kitchen affairs.

The Lorain Oven Heat Regulator measures the oven heat. After the Red Wheel is set, the Regulator automatically maintains the desired temperature for any length of time. Foods cooked by measured temperatures need no watching. The Lorain Self-regulating Oven saves time for maids and home managers, and assures uniformly perfect results with all oven cooking.

Lorain is the original oven heat regulator, used in more than 1800 schools and colleges to teach domestic science. It is the only oven regulator with a long-compounding lever. It reacts quickly to the slightest change of oven temperature, thus insuring even oven heat control without excessive fluctuation.

To women who know the little Red Wheel, there is no "just-as-good" Gas Range. When they come to inspect suites in new apartment buildings, they look for the Lorain Red Wheel, found only on the following six famous makes of Gas Ranges: Clark Jewel, Dangler, Direct Action, New Process, Quick Meal, Reliable.

Gas Ranges with Lorain Self-regulating Ovens are made in sizes, styles and finishes suitable for use in homes, schools, hospitals, church and lodge kitchens—in fact, any building where cooking is to be done. For additional information, see 20th edition, Sweet's Catalog, Pages 2769-2778 or send for our Handbook on Gas Ranges for Architects and Builders.

AMERICAN STOVE COMPANY
Largest Makers of Gas Ranges in the World
444 Chouteau Avenue  St. Louis, Mo.

LORAIN OVEN HEAT REGULATOR

Unless the Regulator has a RED WHEEL it is NOT a LORAIN
Greater-than-pantry convenience
... with no waste of space!

Eliminating every need for a pantry, providing all the working and storage space a woman needs, compact, convenient, beautiful—right in step with modern building trends—Kitchen Maid Units represent an important advance in kitchen equipment.

These units include everything from kitchen cabinet and linen cupboards to Pulmanook and refrigerator, from dish and broom closets to folding ironing boards and kitchen gas range. Each unit is complete in itself; it can be used alone or in combination with other units.

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Mail the coupon for full information, including dimensional drawings and prices.

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The Ventadoor
Ventilating Panel for Doors
DEADENS SOUND AND EXCLUDES UNWANTED LIGHT

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VENTILATION WITHOUT DRAFT

AUSTRAL WINDOW CO.
101 PARK AVE., NEW YORK CITY
A New-Style Kitchen as Arranged by Mann & MacNeille—Architects

A NEW NOTE IN KITCHEN STYLE SINGS OUT

No longer the humdrum monotone of glaring white. No longer the discordant screech of angular shapes. A new note; a new rhythm; a new symmetry of line sings forth. Vanished, has the sprawling, clumsy, old-fashioned range. Its corners, its angles, its box-like oven—Gone! Instead, now, the new Smoothtop Gas Range. Smooth, flat top. Straight, console lines. Built-in oven. Smoothtop fits in with other kitchen units. Carries our room lines. And, Smoothtop requires far less floor space—yet provides far greater cooking surface. Its oven cuts off no light—for it has been lowered to convenient, table-drawer level. The result? Better planning. Better lighting. Simplicity of line. Harmony. Rhythm... Yes, a distinctly new style in kitchens has been born—inspired by the new Smoothtop Gas Range. Would you know more of this new style? Study it? Send for the book couponed below. It shows six new-style kitchens as planned by six prominent architects.

If you are not served with City gas, write us for information about portable gas service maintained by a nationally-known producer of compressed gases. It is adapted especially for use with Vulcan Smoothtop. Standard Gas Equipment Corp., 18 E. 41st St., New York City.

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It revolutionizes cookery, too—this new Smoothtop Gas Range. Stews, soups, pot roasts are done by a new, savory simmering. Vegetables are finished with the new speed cooking; it retains all their precious mineral salts and vitamins. Entire meals kept hot till time to serve. All this with far less watching, less fussing, less cleaning.

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This Smoothtop cookery has really been created by the Super-Vulcan Burner. Note the aeration plate over the gas port-holes. This creates the hottest, steadiest gas flame known. Yet, no more gas is consumed.

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75% of all cooking is done top-stove. But Smoothtop's equipment is complete, even to the little control which gives oven heat regulation.

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A cook-book with a new viewpoint. Solves meal planning and work planning. Shows how to do more cooking with less trouble, how to use "left-overs" and still have more delicious meals.Edited by Sarah Field Splint. 25c in stamps.

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STANDARD GAS EQUIPMENT CORPORATION—VULCAN DIVISION

This advertisement appears in full color in the July 1926 issue of House & Garden and August House Beautiful
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The All Metal System: And Designed, Manufactured, Installed Solely And Entirely By Johnson Engineers And Mechanics Assuring Thoroughly Correct, Reliable Results Permanently.

Johnson Dual or Two Temperature Thermostat: one temperature for occupied rooms, another temperature for unoccupied rooms day or night. Write for details of this Johnson advantage.
One of those little things that make the living room in Mr. Child's home beautiful in detail as well as in general design and proportions is the character of the moldings in the casement sash. If the photograph were larger you could see that each thin division bar between the panes of glass is delicately molded. The drawing above is a cross-section of a muntin, or division bar, and shows the exact shape of this molding. All Curtis Woodwork shows care in such matters.

Curtis Casement sash, in the living room of the home of Mr. Edward T. Child, in Larchmont, N.Y.; Aymar Embury II, architect; The New Rochelle Coal and Lumber Company, New Rochelle, N.Y., dealers.

So much beauty is due to woodwork alone! That is why some architects are able to build a wealth of beauty for very little money, into the homes of their clients

ASK the average woman what she considers essential to beauty in a room and the chances are she will mention rugs, furniture, curtains and antiques long before she includes doors, windows, trim and other woodwork or architectural details. It is only when the architect points out that it is the architectural background of a house which makes it beautiful regardless of movable furnishings, that the average client begins to appreciate the service the architect renders for his fee. What house designed by an Aymar Embury II or any other good architect is not capable of standing by itself, empty, if need be, and proclaiming its own intrinsic beauty? Such a house is homelike with even the most modest furnishings. It was because the manufacturers of Curtis Woodwork realized the importance of woodwork to both the architecture and furnishings of a house, that they went to the architectural profession for help in detailing Curtis designs. The result is woodwork that architects of highest standing are glad to use in their residential work. An example is shown above, with a detail of the sash muntin. This attention to design is seen in all Curtis Woodwork—doors, windows, trim, exterior moldings, stair parts, cabinetwork. And Curtis designs are offered in such variety that no matter in what architectural styles you are working, you can use Curtis standardized woodwork to both your own and your clients' advantage.

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The Curtis Companies Service Bureau 459 Curtis Bldg., Clinton, Iowa
Curtis & Yale Co., Waukesha, Wisconsin; Curtis Sash & Door Co., Sioux City, Iowa; Curtis Detroit Co., Detroit, Michigan; Curtis Bros. & Co., Clinton, Iowa; Curtis Door & Sash Co., Chicago, Illinois; Curtis, Towle & Paine Co., Lincoln, Nebraska; Curtis, Towle & Paine Co., Topeka, Kansas; Curtis-Yale-Holland Co., Minneapolis, Minnesota; Curtis Companies Inc., Clinton, La.; Eastern Sales Office: 25 W. 44th St., New York City; Curtis Companies Incorporated, Clinton, Iowa
meets the utmost demands of architect and client for interior woodwork of enduring elegance and stability. Its nearly mar-proof hardness assures that happy fact. In beauty, birch interior trim, doors and paneling compare favorably with the most costly imported cabinet-woods.

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For further data, see Sweet’s Catalog; also write for "Beautiful Birch" brochure with valuable table of Physical Properties of all American Hardwoods.

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On the other hand, fast growing Oak causes the wide annular growth rings (C), which, in turn, produce the coarse grain (D). Figure 2 shows flooring made from rapid growing Oak, lacking the dignity and elegance characteristic of Ritter Appalachian Highland Oak Flooring.

In the Standard Rules for Grading Oak Flooring, no consideration is given to grain and texture; therefore, to be certain of getting the most beautiful Oak floors obtainable, many architects specify "Ritter Appalachian Highland Oak Flooring." For ready identification every piece is branded on the back, “W. M. Ritter Lbr. Co.”

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Need

Economy of space is demanded in all types of modern constructed homes, apartments, hotels and other buildings. Full advantage must be taken of all the conveniences to insure easy and efficient operation, especially during the present day servant problem.

The Paine Hanging Closet solves the problem of sufficient closet and storage room and utilizes space not ordinarily used.

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The Paine Hanging Closet is an all-purpose cabinet and can be used to equal advantage in the Kitchen, Bathroom, Bedroom or Den. This cabinet will lessen steps and assist in the ease and efficiency of operation of the household to an extent comparable to the vacuum cleaner and the other modern conveniences.

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This cabinet is made in one size: Width inside 19", height 68", depth 16 1/2". The back is a three-ply panel. It is attached with a hanging molding that is nailed to cabinet and screwed to wall. For 2-4 doors and narrower, molding is applied only to the top and bottom of closet.

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It is made of Basswood, one of the lightest woods of the commercial woods, and so accounted of its light weight can be hung or attached where desired. Basswood has a fine, light grain and soft texture, takes paint and enamel perfectly and accepts and retains a smooth finish.

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The sale or rental value of a building is now very largely determined by the up-to-dateness not only of its design and arrangement but by the extent, location and type of the conveniences. A moderate investment in new and unusual features will bring returns many fold over their cost.

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The blue-print shows a typical Higgin window installation in the Parkstone. Note the Higgin Spring Bronze Insert Strip (patented) which really keeps the weather out by forming an impenetrable metal-to-metal contact.

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The one outstanding feature that distinguishes the Higgin All Metal Weatherstrip is the self holding Spring Bronze Insert Strip dovetailed into the window sash. It is flexible and springlike, and therefore fits over the strip in the window frame like a glove. It keeps air currents from seeping through and makes protection from drafts a reality.

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A practical, good-looking, easy-moving window for office buildings, hotels and apartments. Weather-tightness is assured by the carefully designed construction of galvanized steel plate. Low cost is due to quantity production.

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Acme Brick Company, Ft. Worth, Texas.

Series No. 1

Architectural designs rendered in Acme Brick. Booklet 11 x 8½ in. Illustrated. A series of 48 photogravures showing architectural design rendered in Acme brick. Illustrations show the various types of buildings erected in the Southwest in recent years. Sent free to architects applying on their office stationery.

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

Architectural Details in Brickwork. Series One, Two and Three. Each series consists of an indexed folder case to fit standard vertical letter file, containing between 30 and 40 half-tones in brown ink on fine quality paper. These collections are indexed according to all designs. Sent free to architects who apply on their office stationery; to others, 50 cents for each series. See 8½ x 11 in.

English Precedent for Modern Brickwork. A book of plates and measured drawings of Tudor and Gothic brickwork with a few recent variations of modern architects in the spirit of the old work. Price 12.00. 100 pp., Illustrated. 8½ x 11 in.

Brickwork in Italy, 296 pages size 7½ x 10¼ in., an attractive and useful volume on the history and use of brick in Italy from ancient to modern times, profusely illustrated with 60 line drawings, 360 half-tones, and 30 colored plates with a map of Italy. Sent to architects in the United States which secure bond issues purchased by S. W. Strauss & Co.

BUILDING FINANCE

S. W. Strauss Co., & Co., 655 Fifth Ave., New York, N. Y.

The Strauss Plan of finance is an attractively prepared booklet of 26 pages, 8½ x 11 in. in size, which summarizes the plan under which the Strauss Co. finances modern offices, apartment house, residential hotel and other types of construction. It is entirely free of cost, and contains general and specific information, with illustrations, regarding a valuable form of conduit for other publications intended for architects designing this class of buildings.

Massillon Metal Lath. Pamphlet. 8½ x 11 in. Illustrated.

Contains illustrations and specification for the use of various weights and kinds of metal lath for fireproofing beams and steel joists.


Standard Fire Proofing Bulletin 175. 8½ x 11 in. 32 pp. Illustrated.

A treatise on fireproof floor construction.

Northwestern Expanded Metal Co., 1234 Old Colony Building, Chicago, III.

Northwestern Expanded Metal Products. Booklet. 8½ x 10¼ in. 26 pp. Fully illustrated. Describes different products of this company, such as Kno-Jo insulating metal lath, 20th Century Corrugated Plaster-Sava and Longspan lath channels, etc.

DAMPPROOFING

Philip Carey Co., Lockland, Cincinnati, Ohio.

Architect's Specifications for Carey Built-Up Roofing. Booklet. 3 x 10½ in. 34 pp. Illustrated. Complete data to aid in specifying the different types of built-up roofing to suit the kind of roof construction. Contains general information, with illustrations, regarding a valuable form of conduit for other publications intended for architects designing this class of buildings.

Carey Built-Up Roofing for Modern School Buildings. Booklet. 3 x 10½ in. 32 pp. Illustrated. Complete data to aid in specifying the different types of built-up roofing to suit the kind of roof construction. Contains general information, with illustrations, regarding a valuable form of conduit for other publications intended for architects designing this class of buildings.

A. C. Horn Company, Long Island City, N. Y.

Waterproofing, 8½ x 10½ in. Folder. Contains giving data on excellent waterproofing and dampproofing materials.


Specification Sheet, 8½ x 11 in. Descriptions and specifications of compounds for dampproofing interior and exterior surfaces.

Toch Brothers, 310 East 42nd Street, New York City.

Specifications for Dampproofing, Waterproofing, Enameled and Technical Paint. Complete and authoritative directions for use of an important line of materials.

DOORS AND TRIM, METAL

The American Brass Company, Waterbury, Conn.

Illustrated pamphlet describing use and adaptability of Extruded Architectural Bronze Shapes for metal window frames, doors, grilles, counter tops, metal doors and door trim, etc.

Art Metal Construction Co., Jamestown, N. Y.

Hollow Metal Doors and Trim. Portfolio containing several brochures and a catalog of 159 pages and plates 8½ x 11¾ in.


Pyrono Handbooks for Architects and Contractors. 8½ x 11 in. 16 pp. Contains full information regarding Pyrono Fireproof Veneered Doors and Trim, with complete details and specifications.

Pyrono details in short form for tracing.


Fire Doors and Hardware. Booklet. 8½ x 11 in. 64 pp. Illustrated. Describes entire line of time-saving fire doors, complete with automatic closers, track hangers and all the latest equipment—all approved and labeled by Underwriters Laboratories.

CEMENT

Carrney Company, The, Markato, Milan.


Louisville Cement Co., 313 Guthrie St., Louisville, Ky.


CONCRETE COLORINGS

A. C. Horn Company, Long Island City, N. Y.

Ceramic Catalog. Booklet. 8½ x 11 in. 26 pp. A magnificent brochure, illustrated, describing a valuable line of specialties for use with concrete floors—colorings, hardeners, waterproofing, etc.

CONDUIT


Orangeburg Fiber Conduit. Booklet. 8½ x 11 in. 8 pp. Details regarding a valuable form of conduits.


Bulletin of all National Metal Molding Products. In correspondence folder. 9½ x 12¾ in.

Sherdale Circular. 3 x 8 in. Illustrated.

Flaxsteel Circular. 3 x 8 in. Illustrated.

CONSTRUCTION, FIREPROOF

Massillon Steel Joist Co., Canton, Ohio.

Massillon Bar Joists. Pamphlet. 8½ x 11 in. Illustrated.

Contains general information, with illustrations, regarding obtaining Permanent Fireproof Floor and Roof Construction by using Massillon Steel Joists. Gives complete general information, with illustrations, regarding other publications intended for architects designing this class of buildings.

Massillon Steel Lath. Pamphlet. 8½ x 11 in. Illustrated.

Contains cut, illustrations and recommendation for the use of various weights and kinds of metal lath for fireproofing beams and steel joists.


A treatise on fireproof floor construction.

Northwestern Expanded Metal Co., 1234 Old Colony Building, Chicago, Ill.

Northwestern Expanded Metal Products. Booklet. 8½ x 10¼ in. 26 pp. Fully illustrated. Describes different products of this company, such as Kno-Jo insulating metal lath, 20th Century Corrugated Plaster-Sava and Longspan lath channels, etc.
SELECTED LIST OF MANUFACTURERS' PUBLICATIONS

DUMBWAITERS
Sedwick Machine Works, 351 West 15th St., New York.
Catax and Service Sheets. Standard specifications, plans and prices for various types, etc. 6 pp. 84 x 114 in. 60 pp. Illustrated.

ELECTRICAL EQUIPMENT
Frank Adams Co., 2428 South Broadway, St. Louis, Mo.
Catalog No. 43-1925. Panelboards—Steel Cabinets. 74 x 105 in. 64 pp. Illustrated and describes steel cabinets, and the fittings which go with them.

Frieze Co., 773-781 Pearl St., 24th St. and 18th Ave, New York City.
Catalog 453. 85 x 11 in. 46 pp. Photographs and scaled cross-sections of the screen and partition reflectors, double and single desk reflectors and Polizolite Signs.

The Line of Least Resistance. Catalog R. 1014 x 31/2 x 6 in. 4 pp. Illustrated. Shows complete line of H & H Tumbler Switches.

Architects' Handbooks for Electrical Wiring Devices. Catalog 8. 6 x 9 in. 10 pp. Illustrated. Contains data for contractors on wiring.

Signal Switches for Hospital Procedures. 8 x 5 in. 16 pp. Illustrated. Contains complete data covering Nurse's Call, Doctor's Call, and "Out" Fire Alarm, Watchman's Clock for Calling Fire, etc.

Installing and Maintaining Western Electric Inter-Phones. Incomplete descriptive pamphlets on hand power freight elevators, sidewalks elevators, automobile elevators, etc.

Kohler Co., Kohler, Wis.
Principle and Proof of Door. 48 pp. Illustrated. Describes a standard method of automatic electric power and light plant for isolated homes, for emergency auxiliary or permanent lighting in any location.

Pick & Company, Albert, 208 West Randolph St., Chicago, 111.

Removing Adhesive Annoyances. Complete and authoritative directions for linoleum and cork carpet in the Armstrong line.

Simplex Wire & Cable Co., 501 Delaware St., St. Louis, Mo.
Simplex Catalog and Reference Book, 65 x 94 in. 92 pp. Contains in addition to information, indexes the General Fireproofing Company, Youngstown, Ohio.

Western Union Co., 198 Broadway, New York, N. Y.
Western Electric Inter-Phones for Apartment Houses. Booklet 85 x 84 in. 16 pp. Describes a standard equipment of efficient and inexpensive electric phone systems.

ELEVATORS
Ots Elevator Company, 200 Eleventh Ave, New York, N. Y.
Ots Push Button Controlled Elevator. Descriptive leaflet. 8 1/2 x 11 in. Illustrated. Full details of machines, motors and controllers for these types.

Otis Gear and Geared Transmission Elevators of All Types. Descriptive leaflet. 8 1/2 x 11 in. Illustrated. Full details of machines, motors and controllers for these types.

Escalators. Booklet. 85 x 11 in. 22 pp. Illustrated. Describes the essential parts of various escalators, theaters and industrial buildings. Also includes elevators and dock elevators.

Elevators. Booklet. 11 x 15 in. 34 pp. Illustrated. Describes complete line of "Ideal" elevator door hardware and checking devices.

Sedwick Machine Works, 151 West 15th St., New York, N. Y.
Catalog and descriptive pamphlet. 65 x 94 in. 70 pp. Illustrated. Descriptive pamphlet on hand power freight elevators, sidewalk elevators, automatic elevators, etc.

ENAMELING
Tennis Club, 331 East 43rd Street, New York City.
Specifications for Dampproofing, Waterproofing, Enameling and Technical Painting. Complete and authoritative directions for use of an important line of materials.

FLOOR DOORS—See Doors, Windows and Trim, Metal
FIREPROOFING—See also Construction, Fireproofing

FLOORING
Armstrong Cork & Insulation Co., 24th St., Pittsburgh, Pa.
Linoleum Floors for Public and Semi-Public Buildings. 75 x 105 in. 36 pp.


Armstrong Cork Co. (Linoleum Division), Lancaster, Pa.


Holtz-Cobet Electric Company, Armory Street, Boston, Mass.
Handy Quality Sample Folder of Linoleums. Gives actual samples of linoleum. Contains complete data for the ready reference of architects, engineers and contractors.

Blabon's Linoleum. Booklet illustrated in color; 128 pp.; 8 1/2 x 11 in. Contains patterns and specifications for installing linoleum and Cork Carpet. Gives high quality samples, 8 1/2 x 6 in. of various types of linoleum and cork.

A series of booklets, with full color inserts showing standard colors and designs. Each booklet details and describes standard applications and material as follows:

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

Treadlite Tile. Shows a variety of colors and patterns of this adaptable cork composition flooring.

Natural Cork carpet in the Armstrong line. Description and color plates of this super-quiet, resilient floor.

Practical corking specifications for installing Battlement cork, cork composition tile and cork tile.

Carpet and Loosened Flooring Co., Robert F. Perry Bldg., Kansas City, Mo.
Bloomed Flooring. Illustrated. Describes uses and adaptability of Bloomed Flooring to concrete, wood or steel construction, and advantages over loose wood blocks.

File Folder, 94 x 8 1/2 in. 854 in. For use in connection with A. L. A. system of filing. Contains complete collection of Bloomed Flooring in condensed, loose-leaf form for specification writer and drafting room. Literature embodied in folder includes standard Specification Sheet covering the use of Bloomed in general, industrial, service and Sanitary Specification Sheet No. 1, which gives detailed description and an approved method for installing Bloomed in gymnasiums, armories, drill rooms and similar locations where maximum resilience is required.

Duraflax Company, Inc., 11 Pleasant Street, Baltimore, Md.
Why They Used It in One of Boston's Finest Buildings. Typical of Character of One of the 15 Original States. Illustrated 4-page brochures, 94 x 854 in., giving data on "Duraflex" floors. Describes use of floor covering material.

Permanent, Easy Tread Flooring. Folder. 4 pp. 8 1/2 x 11 in. on floor covering material.


Mueller Co., Franklyn R., Washington, III.

Piling Folder. 85 x 114 in. 27 pp. Illustrated with drawings.


Ritter Lumber Co., W. M., Columbus, Ohio.
Ritter Oak Flooring, brochure 5 x 7 in. 31 pp. Illustrated. Excellent data on floors of different kinds of natural woods.

Ritter Oak Flooring, brochure 5 x 7 in. 31 pp. Illustrated. Excellent data on floors of different kinds of natural woods.

Beauty Begins in the Forest. Descriptive Specifications for dampproofing, waterproofing, enameling and technical painting. Complete and authoritative directions for use of an important line of materials.

August, 1926

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Architects are securing quiet, plus beauty, at moderate cost, with this unique acoustical material

EXCESSIVE noise is being recognized more than ever today as both a menace to health and a cause of needless industrial waste.

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Acousti-Celotex is a highly efficient sound-absorber made in tile form from cane fibre. It has a pleasing soft texture surface, light tan in color and can be decorated in full color effects without materially reducing its unusual sound-absorbing qualities. No membrane or other covering is required.

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This material has been widely specified by leading architects in all sections of the country.

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American Radiator Company, The, 40 West 40th St., N. Y. C.
Ideal Type "A" Hot Machine. Catalog 749 x 1054 x 16 pp. Illustrated. Describes high efficiency heating appliance for residences and commercial buildings.


Ideal Smokeless Boilers. Catalog 749 x 1054 x 16 pp. Illustrated in 4 colors. Data on a boiler shown from the outside, including material of construction.

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James B. Chew & Sons, 53 East Madison St., Chicago, Ill.
Standard Equipment on all these Boilers

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Burnham  Floral City  Novelty  Ontario
Coil  Freed  Keystone  Oil City

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Ames  Congress  Imperial  L-O
Birchfield  Fitzgibbons-  International  Landsdale
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HEATING EQUIPMENT—Continued

Utica Heater Company, Utica, N. Y.

Imperial Round and Square Boilers and Supplies. Catalog. 30 pp. Illustrated. Gives complete specifications and details of construction involving its use.

INSULATION


Corkboard Insulation. Brochure. 6 x 9 in. Illustrated. Fully discusses properties of corkboard and its uses in insulation of cold storage rooms, refrigerators, restaurants, apartment houses.

The Insulation of Roofs with Armstrong's Corkboard. Booklet, 7 x 10 in. 32 pp. Discusses methods of insulating roofs with Armstrong's corkboard. Illustrations of various types of installations.

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


INSULATION—Continued


Johns-Manville Service to Industry. Bound Volume. 200 pp. 8 x 11 in. Deals with Asbestos Roofs, Heat and Electrical Insulation of Buildings, Application of Insulation, etc. Includes many illustrations.

A Representation Installation of the Johns-Manville System of Insulation. Booklet. 8 x 11 in. Illustrated.


Carey Asbestos and Magnesia Products. Catalog. 6 x 9 in. 72 pp. Illustrated.


The Hidden Comfort of Cosy Homes. Booklet. 8 x 11 in. Illustrated. Describes properties of mineral wool as insulation for heat, cold, moisture, specification and section drawings for use as a fireproofing. Rules for estimate and cost.

KITCHEN EQUIPMENT

Standard Gas Equipment Corporation, 18-20 East 41st Street, New York, N. Y.

VULCAN Gas Ranges and Appliances. Catalog. 5 x 8 in. 30 metal is used, reasons for its adoption, with sources of such metal.

The Uses of Monel Metal. Booklet. 5 x 8 in. 45 pp. Illustrated. Gives complete information on the VULCAN SMOKELESS TOP Compact Cabinet Gas Ranges for kitchens in the home.

VULCAN Gas Equipment for Hotels, Restaurants, etc. Booklet. 5 x 8 in. 45 pp. Illustrated. Equipment for hotels, restaurants and other establishments, with information of value to architects in planning kitchens.

The International Nickel Company, 27 Wall St., New York, N. Y.

Retailers, Restaurants and Cafeteria Applications of Monel Metal. Booklet. 9 x 6 in. 16 pp. Illustrated. Gives complete information on the use of Monel Metal in hotels, restaurants, etc., with sources of such metal.

Herrick Manufacturing Company, 141 Lincoln St., Kewanee, Wis.

Kewanee Book of Laboratory Furniture. Catalog. 7 x 10 in. 48 pp. Illustrated. Science and Vocational Laboratory Furniture for schools, colleges, technical institutes, hospitals, etc., including floor plans, illustrations of buildings and equipped laboratories, instructions for planning laboratory equipment.

LANTERNS


Duriron Acid, Alkali and Rust-proof Drain Pipe and Fittings. Illustrated. 8 x 11 in. 20 pp. Full details regarding a valuable form of pipe for interior and exterior use, designed from old models and meeting the requirements of modern lighting.

LATH, METAL AND REINFORCING

The General Fireproofing Company, Youngstown, Ohio


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Making the Roof Heat-Proof

It is a very simple matter to make a roof practically impervious to heat. And very desirable, too, for such a roof keeps a building cooler in summer, and in winter makes it easier to heat with less fuel.

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In hundreds of buildings of all kinds—commercial, industrial, public, office, residential—the benefits of Armstrong’s Corkboard insulated roofs are being demonstrated so effectively that their owners would never again even consider a building with an uninsulated roof. The increased comfort and economy resulting from insulation with Armstrong’s Corkboard constitute an investment return which neither owner nor architect can afford to ignore.

Full information and detailed specifications are contained in the 36-page book, “The Insulation of Roofs with Armstrong’s Corkboard.” Copy and sample will be sent on request.

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Armstrong’s Corkboard Insulation
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SELECTED LIST OF MANUFACTURERS’ PUBLICATIONS Continued from page 146

LATH, METAL AND REINFORCING—Continued

Massillon Steel Joint Co., Canton, Ohio.
Massillon Metal Lath. Pamphlet. 8½ x 11 in., 8 pp., illustrated.
Describes and illustrates the different products of this company, including lath, spit, and 3%-in. Rib Lath,—complete line of 16-gauge channels, box channels, pencil channels, base and corner beads, tie wire and similar products.

Milwaukee Corrugating Co., Milwaukee, Wis.
The Milcor Manual. Booklet. 8½ x 11 in. 54 pp., illustrated.
Covers Millcor methods and materials, metal lath, corner beads, and similar products.

Northwestern Expanded Metal Co., 1234 Old Colony Building, Chicago, Ill.
Northwestern Expanded Metal Products. Booklet. 8½ x 10½ in., 16 pp., illustrated, and describes different products of this company, such as Kno-burn metal lath, 20th Century Corrugated. Plastic and Longgonage latch channels, etc.

Wickwire Spencer Steel Co., Inc., 41 East 42nd St., New York.
Wickwire Spencer Steel Catalog. 11 x 17 in. 56 pp. A valuable booklet on metal lathing and the proper method of using it.

LAUNDRY CHUTES

The Plaудer Company, 217 Cutler Building, Rochester, N. Y.
Plaудer Metal-Lined Steel Laundry Chutes. Booklet. 8½ x 7¾ in. 16 pp., illustrated. A beautifully printed brochure describing in detail with architects’ specifications THE PLAУDER GLASS LINED STEEL LAUNDRY CHUTES. Contains views of installations and list of representative examples.

LIGHTING EQUIPMENT

Curtis Lighting. Inc., 1119 West Jackson Boulevard, Chicago, Ill.
Curtis Lighting Specifications.—A. I. A. File 31 F. Looseleaf.
This is a valuable addition to the A. I. A. files, containing useful information on lighting these important areas.

Curtis Lighting, Inc., 1119 West Jackson Boulevard, Chicago, Ill.
Forge Craft (Catalog No. 16). Booklet. 16 pp., illustrated. This booklet briefly describes the Forge Craft line of products, including lighting fixtures for interior illumination of stores.

Curtis Lighting, Inc., 1119 West Jackson Boulevard, Chicago, Ill.
Georgian Mantels. New Booklet. 24 pp., illustrated. This booklet contains illustrations of Georgian mantels and information on their use in buildings of the so-called “bungalow” type.

Curtis Lighting, Inc., 1119 West Jackson Boulevard, Chicago, Ill.
Why Georgia Marble is Better. Booklet. 8½ x 11¼ in. 12 pp., illustrated. The purposes of this booklet are to inform architects and builders of the advantages of using Georgia Marble in their projects.

MILL WORK—Continued

American Sheet & Tin Plate Co., Frick Building, Pittsburgh, Pa.

The International Nickel Company, 6 Wall St., New York, N. Y.
The Choice of a Metal. Booklet. 8¼ x 3½ in. 166 pp., illustrated. Discusses the different properties of metals and illustrates the choice between them for specific uses.

Curtis Companies Service Bureau, Clinton, Iowa.

Curtis Companies Service Bureau, Clinton, Iowa.
Circle A Partitions Sectional and Movable. Brochure. 9½ x 11 in. 20 pp., illustrated. Describes and illustrates the use of Circle A Partitions, along with Erection Instructions for the architect.

Curtis Companies Service Bureau, Clinton, Iowa.
Preservative Coating. Booklet. 6½ x 9 in. 15 pp., illustrated. Presents in a concise manner the properties and uses of the Curtis Companies’ various paint preparations.

Curtis Companies Service Bureau, Clinton, Iowa.
Protective Paints for Metal Surfaces. Bulletin No. 1. 8½ x 11½ in. 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.

Roderick Company, Cleveland, Ohio.
Roperol Paint Systems. Bulletin No. 2. 8½ x 11½ in. 12 pp., illustrated. A comprehensive treatise with complete specifications for the use of Roperol paints, including descriptions of the materials and instructions for their use.

Roperol Company, Cleveland, Ohio.

Curtis Companies Service Bureau, Clinton, Iowa.
Painting Concrete and Stucco Surfaces. Bulletin No. 1. 8½ x 11 in. 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.

MILL WORK—Continued

Roddas Lumber & Yeezer Company, Marshfield, Wis.
Roddas Doorman. Booklet. 10¼ x 7¾ in. 4 pp., illustrated. Describes and illustrates the use of Roddas Doors for residences, clubs, hotels, etc.

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

The Pergola Catalog. 7½ x 10 in. 44 pp., illustrated. Contains illustrations of pergola lattices, garden furniture in wood and cement, garden accessories, etc.

MORTAR COLORS

Clinton Metalite Paint Co., Clinton, N. Y.
Clinton Mortar Colors. Folder. 8½ x 11 in. 4 pp., illustrated in color, gives full information concerning Clinton Mortar Colors with specific instructions for using them.

Color Card. 9½ x 6¼ in. Illustrates in color the ten shades in which Clinton Mortar Colors are manufactured. Also something new in Stucco. Folder. 3½ x 6½ in. An interesting folder on the use of coloring matter for stucco-molded walls.

PAINTS, STAINS, VARNISHES AND WOOD FINISHES

Cabinet, Inc., Summer, Bowery, Mass.
Cabinet’s Creosote Stains. Booklet. 4 x 8½ in. 16 pp., illustrated.

The Glidden Company, Cleveland, Ohio.
More Daylight. 8 x 10¼ in. 20 pp. Portraying by illustrations and text the need and methods of using Glidden’s daylight paints.


Martin Varnish Co., 2003 Quincy St., Chicago, Ill.

Martin Varnish Products.
Your Floors. Booklet. 7½ x 5½ in. 20 pp., illustrated. Explains how to finish all kinds of floors and woodwork with Martin’s Pure Varnishes.

A. C. Horn Company, Long Island City, N. Y.

Praet & Lambertt, Inc., Buffalo, N. Y.

The Ripol Company, Cleveland, Ohio.
Ripolin Finishes. Book. 8 x 10¼ in. 12 pp., illustrated. Complete specifications and general instructions for the use of Ripolin paints, including directions for finishing wood, metal, plaster, and other surfaces.

Why Ripolin Has an International Reputation. 8 x 10¼ in. 24 pp. Designed for the architect’s files to illustrate the many varied uses of Ripolin Enamel Paint in all parts of the world. Profusely illustrated.

Roderick Co., The (formerly the Standard Paint Co.), 95 Madison Avenue, New York, N. Y.
Preservative Coating. Booklet. 6½ x 9 in. 15 pp., illustrated. Presents in a concise manner the properties and uses of the Roderick Company’s various paint preparations.

Shawin-Williams Company, 601 Canal Rd., Cleveland, Ohio.
Painting Concrete and Stucco Surfaces. Bulletin No. 1. 8½ x 11 in. 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 11½ in. 12 pp., illustrated. Thorough, detailed 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. 8½ x 11¼ in. 20 pp., illustrated. An illustrated reference book on Flat Wall Finish, including texture effects, which are taken into consideration in determining the country’s most suitable finishes for all surfaces. Every architect should have one on file.

Protective Paints for Metal Surfaces. Bulletin No. 4. 8½ x 11½ in. 12 pp., illustrated. A highly technical subject treated in a simple, understandable manner.

Somersun Sons, Inc., 116th Avenue, New York, N. Y.
Paint Specifications. Booklet. 8½ x 10¼ in. 4 pp., illustrated.

PANELING—See Millwork

PARTITIONS

Circle A Products Corporations, New Castle, Ind.
Clow Quality Can Be Measured
By The Absence Of High Upkeep And Replacement Costs.

Here plumbing is subjected to the hard usage that it receives in public schools, its quality is measured in terms of upkeep and replacement costs.

One of the outstanding reasons for Clow’s increasing pre-eminence in the field of school plumbing is the minimizing, and often total absence, of these costs.

Every piece of Clow equipment is put through a complete “set-up” test before shipment. The assembled equipment is set up just as it will be when installed, and tested for fit, operation, and quality.

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Clow
PREFERRED FOR EXACTING PLUMBING SINCE 1878
SELECTED LIST OF MANUFACTURERS' PUBLICATIONS (Continued from page 148)

PLUMBING EQUIPMENT—Continued

Maddock's Sons Company, Thomas, Trenton, N. J.
Catalog K. 10 x 14 in. 242 pp. Illustrated. Complete data on vitreous china plumbing fixtures with brief history of sanitary pottery.

Mueller Co., Decatur, Ill.
Catalog G, 8 x 11 in., 306 pages. Profusely illustrated. Contains full data on plumbing, water and gas brass goods, including valves, faucets, traps, regulators, built-in bath equipment, and automatic systems of water and gas control. Complete details are presented with a number of data sheets showing rough-in measurements for built-in bath equipment.

Speakman Company, Wilmington, Del.
Speakman Showers and Fixtures, Catalog, 4 5/8 x 7 3/4 in., 252 pp. Illustrated. Catalog of Modern Showers and Brass Plumbing Fixtures, with drawings showing layouts, measurements, etc. Toned Up in Ten Minutes Booklet, 7 1/8 x 10 1/4 in. 32 pp. Illustrated. Modern Showers and Washings for Industrial Plants, showing the sanitary method of washing in running water.

PUMPS

Chicago Pump Company, 2300 Wolfram Street, Chicago, Ill.
The Correct Pump to Use. Portfolio containing handy data. Individual bulletins, 8 1/2 x 11 in., on bioge, sewage, condensation, circulating, house, boiler feed, and slud pumps.

Kawane Private Utilities Co., 442 Franklin St., Kewanee, Ill.
Bulletin E, 8 1/2 x 11 in. 32 pp. Illustrated. The Hockenbury System Incorporated, Harrisburg, Pa., for years specializing in the financing of modern community hotels, which have financed a hundred and thirty-five city parking garages, and describes the Hlmy 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.


The Trans Co., LaCrosse, Wis.

The Hekkenbury System Incorporated, Harrisburg, Pa., for years specializing in the financing of modern community hotels, which have financed a hundred and thirty-five city parking garages, and describes the Hlmy 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.

REINFORCED CONCRETE—See also Construction, Concrete

The General Fireproofing Company, Youngstown, Ohio
Self-Sterilizing Handbook. 8 1/2 x 11 in., 36 pp. Illustrated. Methods and specifications on reinforced concrete floors, roofs and decks, with a combined form and reinforced material.

Shearing Stresses in Reinforced Concrete Beams. Booklet. 8 1/2 in. 12 pp.

North Western Expanded Metal Company, Chicago, Ill.

ROOFS (INSULATED)

Helerb, Inc., 2735 Prospect Ave., Cleveland, Ohio
Helerb Insulated Roofs. Booklet, 7 1/2 x 11 in. Gives complete data regarding a valuable line of insulated roofing materials.

ROOFING

Better Buildings. Catalog, 8 1/2 x 11 in. 32 pp. Describes Corrugated and Formed Steel Roofing and Siding Products, black, painted and galvanized, with directions for application of various patterns of Steel Roofing in various types of construction.

Copper—Its Effect Upon Steel for Roofing Tin. Catalog. 8 1/2 x 11 in. 16 pp. Illustrated. Describes the merits of high-grade roofing tin plates and the advantages of the copper-coated steel alloy. The Testimony of a Decade. Booklet, 8 1/2 x 11 in. 16 pp., with Graphic Chart and illustrations showing losses to various Iron and Steel Sheets for roofing, from atmosphere corrosion.

Specifications, Gencon Standard Trinidad Lake Asphalt Built-up Roofing. Booklet, 8 x 10 1/2 in. Gives specifications for use of several valuable roofing and waterproofing materials.

Philip Carey Co., Lockland, Cincinnati, Ohio
Architects Specifications for Carey Built-up Roofing. Booklet. 8 x 10 1/2 in. 24 pp. Illustrated. Complete data to aid in specifying the different types of built-up roofing to suit the kind of roof construction to be covered.

Carry Built-up Roofing for Modern School Buildings. Booklet, 8 x 10 1/2 in. 32 pp. Illustrated. A study of school buildings of a number of different kinds and the roofing materials adapted
When Carney appears in the specifications, there is one thing certain—you can cast aside all misgivings and mental anxieties as to the outcome of the mortar.

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Specifications: 1 part Carney to 4 parts sand.
SELECTED LIST OF MANUFACTURERS’ PUBLICATIONS—Continued from page 150

ROOFING—Continued

Copper & Brass, Inc., Bridgeport, Conn. Brochure. 8 1/2 in. 8 pp. Illustrated.

Federal Cement Tile Co., 603 E. 42nd St., Chicago, Ill. Catalog. 10 x 13 in. 32 pp. Illustrated. Describes the product and its uses. Contains charts showing the different woods and woods.

Johns-Manville Company, Madison Avenue & 418th Street, New York, N. Y. Memorandum. 8 1/2 x 11 in. 4 pp. Illustrated. Gives valuable technical sheet metal data.


Ruberoid Co., The (formerly the Standard Paint Co.), 95 S. Madison Street, Milwaukee, Wis. Catalog. 6 x 9 in. 16 pp. Illustrated. Gives valuable data on the use of tile in roof construction.

Athey Company, 601 S. West 65th St., Chicago, III. Catalog. 8 1/2 x 11 in. 8 pp. Illustrated. Describes the product and its uses.


Johns-Manville Asbestos Shingles. Booklet. 8 1/4 x 11 in. 24 pp. Illustrated. The booklet is profusely illustrated, showing some very artistic blends of asbestos shingles with various types of architecture. Contains many valuable suggestions for the use of these shingles.


Ruberoid Strip Shingle. Booklet. 3 1/2 x 6 1/4 in. 16 pp. Illustrated. Gives valuable data on the use of tile in roof construction.

Milwaukee Corrugating Co., Milwaukee, Wis. Catalog. 8 1/2 x 11 in. 8 pp. Illustrated. Describes the product and its uses.


Fyrbrool Roof Construction. Booklet. 8 1/2 x 11 in. 8 pp. Illustrated. Gives valuable data on the use of tile in roof construction.

A Collection of Successful Designs. Catalog. 9 1/4 x 6 1/4 in. 64 pp. Illustrated. Describes the product and its uses.

Laid-In Roof. Booklet. 8 1/2 x 11 in. 16 pp. Illustrated. Describes the product and its uses.

Ruberoid Shingle Strip. Booklet. 3 1/2 x 6 1/4 in. 16 pp. Illustrated. Gives valuable data on the use of tile in roof construction.

SASH CASH
Smith & Egge Mfg. Co., The, Bridgeport, Conn. Catalog. 8 1/2 x 11 in. 8 pp. Illustrated. Describes the product and its uses.

SASH CORD

SCREENS
Athey Company, 601 West 65th St., Chicago, Ill. The Athey Perennial Window Shade. An accordion pleated window shade, made from translucent Herringbone cloth. The shade is made from the bottom and lowers from the top. It eliminates sun shine, affords ventilation, can be dry-cleaned and will wear indefinitely.


SEWAGE DISPOSAL
Kewanee Utilities, 424 Franklin St., Kewanee, Ill. Specifications Sheets. 7 1/4 x 10 1/4 in. 40 pp. Illustrated. Describes the product and its uses.

SHELVING-STEEL
David Lounsbury’s Sons Company, Philadelphia, Pa. Catalog D. Illustrated brochure. 40 pp. 8 1/4 x 11 in. Deals with steel cabinets, shelves, racks, doors, partitions, etc.

STAINLESS STEEL

STEEL JOISTS—Continued

STONE, BUILDING
Indiana Limestone Quarriers’ Association, Box 306, Bedford, Ind. Volume 1, Series B. Indiana Limestone work. 8 1/2 x 11 in. 36 pp. Contains specifications and supplementary data relating to the best methods of specifying and using this stone for all building purposes.

Volume 5. Series B. Indiana Limestone Library. Portfolio. 128 x 8 1/4 in. Illustrated. Describes and illustrates the use of stone for small houses with floor plans of each.

STORE FRONTS
Brasco Manufacturing Co., 3025-35 South Wabash Avenue, Chicago, Ill. Portfolio. 8 1/2 x 11 in. 22 pp. Illustrated. Selected examples of Brasco Copper Store Fronts suitable for different businesses and varying conditions of locations.

Catalog 28. 8 1/2 x 11 in. 30 pp. Illustrated. Describes the product and its uses.


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International Store Front Construction. Catalog. 8 1/2 x 10 in. 70 pp. Illustrated. Describes the product and its uses.

TECHNICAL PAINTING
Toch Brothers, 150 East 42nd Street, New York City. Specifications for Damproofing, Waterproothing, Examining and Technical Painting. Complete and authoritative directions for use of an important line of materials.

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. 8 1/2 x 11 in. Furnishing and Setting of Terra Cotta, consisting of complete detail specifications, Glossary of Terms Relating to Terra Cotta and Short Form Specification for incorporating in Architects’ Specifications.


Present Day Schools. 8 1/2 x 11 in. 32 pp. Illustrated. Examples of school architecture with article upon school building construction by James O. Betelle, A. I. A. A.

Better Banks. 8 1/2 x 11 in. 32 pp. Illustrated. Describes the product and its uses.

THERMOSTATS—See Heating Equipment
TILE, HOLLOW

Natco on the Farm. 8 1/2 x 11 in. 32 pp. Illustrated. A treatise on the subject of hollow tile construction.

Natco Homes and Garages. Booklet. 7 1/2 x 10 in. 32 pp. Illustrated. Describes the product and its uses.

VACUUM CLEANING APPARATUS
The Spencer Turbine Company, Hartford, Conn. Better Banks. 8 1/2 x 11 in. 32 pp. Illustrated. Complete information about product, showing prominent buildings equipped with this system.

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Upon the architect even more depends than beauty, comfort and structural greatness in buildings. Through his foresight and ideals of perfection—through his optimism—finally, through his insistence upon the creation of new and finer methods—come the vital improvements that build up greater human health and happiness.

It was by such ideals that the Univent system of ventilation was inspired. Ventilation that combines sound engineering principles with those of modern hygiene. Ventilation that is as nearly perfect as human skill can make it.

The Univent draws fresh air from outdoors, cleans it, warms it, and distributes it gently yet evenly throughout the room—without draft. If you are interested in the planning of schools, hotels, office and similar buildings, write for the book, "Univent Ventilation," architect's edition.

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MODERN DECORATIVE ART HAS IN VITROLITE A PERFECT MATERIAL FOR ITS EXPRESSION AS WILL BECOME EVIDENT UPON VISITING THE BEAUTIFUL SHOW ROOMS IN NEW YORK AND CHICAGO.
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YOU select fixtures of the very best quality when you plan your clients' bathrooms. Yet, in a short time, when the brass begins to show through, they lose their beauty and look old.

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When you know the water in a pool is pure and refreshing—free from harmful bacteria and free from biting chemicals—there's a beckoning appeal that says, "Come on, dive in." And if you heed that appeal, you'll come up with a pleasant and refreshed feeling.

That is the kind of water you'll have in the pools you design if the recirculating systems are equipped with R-U-V Sterilizers. Every drop of water that goes through them is perfectly sterilized. Quartz mercury vapor lamps produce powerful ultra violet rays which penetrate each drop of water and instantly kill every disease-producing germ. But these rays cannot in any way affect the taste, composition or feel of the water.

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Competitions in Design

1—Competition for street traffic signal tower and traffic signal standard designs, and street lighting standard designs, including street name signs.

2—Competition for filling station designs.

for

BISCAYNE BOULEVARD
Miami, Florida

Conducted by BISCAYNE BOULEVARD ASSOCIATION
BENNETT, PARSONS and FROST, Professional Advisers

These competitions are approved by the American Institute of Architects.

Note: The electrical and mechanical equipment of the above structures is not a part of these competitions.

COMPETITIONS CLOSE 6 P.M. OCTOBER 1, 1926

These competitions are open to all who desire to offer designs of merit for the above named structures. The purpose of these competitions is, [1] to obtain designs for traffic signal towers and standards and street lighting standards to be erected on Biscayne Boulevard, Miami, Florida. [2] to develop ideas for more pleasing filling station designs and [3] to stimulate general interest in the designing of better structures pertaining to public street improvement.

Biscayne Boulevard is a 100 foot street which extends from the center of Miami northward to Northeast 55th Street [three and one-half miles]. It runs along Biscayne Bay for one mile, and about one block from the Bay for the rest of its course through a high class residential section of Miami. The south end [formerly Bay Shore Drive] is an old street recently widened and improved. The north two and one-half miles is a new street opened by curving through fourteen improved city blocks, widening a narrow street [formerly Northeast Third Avenue] through nineteen improved blocks, and extending the street thus created through the recently divided estate of Charles Deering, into Bay Shore, a suburb of fine homes. Biscayne Boulevard here becomes the Federal Highway, which combined with the Dixie Highway, extends 360 miles to Jacksonville, Florida, and beyond to the Northern States.

Buildings are now being demolished along the new portion of Biscayne Boulevard and this section will be opened about December 1, 1926. Already dwellings are giving way to buildings for showrooms, theatres, offices, restaurants and first class shops.

Being a main artery of through traffic, a system of traffic signals will be required, lighting will be made a feature, and the demand for filling stations along the northern section of the Boulevard must be taken into consideration.

The Biscayne Boulevard Association is anxious that such structures shall be well designed so as to add to the beauty of the Boulevard. The Association, representing more than 80 per cent of the property, is desirous to control in a measure the architecture and the uses of the street. With the cooperation of the City of Miami and the City Planning Board, Royal Palms will be planted the entire length of Biscayne Boulevard.

Any competitor may submit designs for one or both competitions. The awards will be made separately.

The Biscayne Boulevard Association agrees to award to the winners within 5 days after the judgment of the jury, $4,650.00 in prizes as itemized below.

<table>
<thead>
<tr>
<th>Competition No. 1</th>
<th>LIST OF PRIZES</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st. Prize</td>
<td>$1,000.00</td>
</tr>
<tr>
<td>2nd. &quot;</td>
<td>600.00</td>
</tr>
<tr>
<td>3rd. &quot;</td>
<td>400.00</td>
</tr>
<tr>
<td>4th. &quot;</td>
<td>200.00</td>
</tr>
<tr>
<td>6 Mentions, each.</td>
<td>75.00</td>
</tr>
</tbody>
</table>

Program of the Competitions may be obtained by addressing Harry T. Frost, in care of:
—Biscayne Boulevard Association, Columbus Hotel, Biscayne Boulevard, Miami, Florida.
or—American Architect, 239 West 39th Street, New York.
or—Bennett, Parsons and Frost, 80 East Jackson Boulevard, Chicago.
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Flower Hospital
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St. Vincent's Hospital
Los Angeles —1 chute

Northwestern Hospital
Minneapolis —2 chutes

The drawing at the right is taken from our booklet giving complete details. Referring to diagram:

1. 1½" pipe bushing for connection to water service pipe. This is for flushing the chute and keeping it sanitary.

2. 3" coupling for ventilator pipe.

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4. Special "Pfaudlerite" Gasket for each joint.

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Including

Acoustics of Auditoriums and Soundproofing of Rooms

By

F. R. WATSON
Professor of Experimental Physics, University of Illinois

This book covers the entire subject of Acoustics of Buildings. It describes briefly the action of sound in buildings, and, in accordance with the present knowledge of the subject, gives detailed illustrations for guidance in the acoustic design of new buildings and in the correction of acoustic defects. In this volume, mathematical formulae and theory have been minimized, but the results of experimental tests are set forth in considerable detail. Formulae which are needed for calculating acoustic effects are illustrated by numerical examples and curves. The publication of this book was made necessary because of the repeated requests made by architects and builders for help in the correction of acoustic difficulties found in many buildings. Information is also needed about the construction necessary to avoid these defects in new buildings. As the scientific publications on the subject deal with special topics in more or less general terms, an extensive study is required before practical applications can be made with any degree of confidence. The existing knowledge of the acoustics of buildings is incomplete in many respects, with the result that a number of misleading ideas have grown up to explain the phenomena. The book is divided into two main divisions, "Acoustics of Auditoriums" and "Soundproofing of Rooms."

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"Better Plastering" on 20,000 Sq. Yds. of Ceco 3.4 lb. "Quality" metal lath hold plaster tightly and permanently to the ceilings of this new office building. This style of Ceco Lath is a flat, diamond meshed expanded metal lath.

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This building is up-to-date in every respect. Only the most improved equipment is installed for providing light, heat and power.

For removing the condensate and air from the exhaust steam heating system, Jennings Pumps were a logical choice. For in the many years they have been in use, Jennings Pumps have proved again and again that they can always be depended on for efficient trouble-free performance—the kind of performance that is indispensable in getting the best results in cooperation with other high grade equipment in the plant.

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IN Designing Young Centrifugal Vacuum and Boiler Feed Pumps to maintain a standard discharge pressure of 20 pounds at the pump, we have made it possible to return water to the boiler at all times. Pumps with but half of this discharge capacity may fail to return water to the boiler when the boiler pressure reaches 8 or 9 pounds. Boiler pressures under the A. S. M. E. Code may reach fifteen pounds, the maximum permitted under the code, showing the necessity for a pump with a standard pressure of at least 20 pounds at the pump.

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Sherarduct is known and used in practically every civilized country in the world. Defying climatic conditions, the Ace of Conduits guards the wiring systems of important buildings in Tokio, Shanghai, or Caracas, just as effectively as it does in New York City. The heavy coating of zinc, alloyed under intense heat, actually becomes a part of the steel pipe, protecting both inside and outside surfaces against rust, corrosion and the destructive effect of acids. A coating of enamel adds further protection.

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Molding Company
1101 Fulton Building PITTSBURGH - PA.
HOTEL
PERE MARQUETTE
Under construction at Peoria, Ill.

Owners
The Pere Marquette Hotel Building Corp.

Associate Architects
Horace Trumbauer
Hewitt & Emerson

Plumbing Contractor, Thomas J. Cody
General Contractors, V. Jobst & Sons

Being equipped throughout with the

Watrous
Flush Valve and Duojet Closet
Non-Clogging—Water Saving

THE design of the Watrous Duojet Closet prevents clogging and overflowing by eliminating the narrow passage needed by many types of closet to maintain syphonic action. It is also very economical with water.

The Watrous Flush Valve delivers the exact quantity of water required for a thorough flush by the type of bowl with which it is used. Therefore, when used in combination with the water-saving Duojet Closet, it assures a substantial saving of water at every flush—an important annual economy.

PLUMBING DIVISION

THE IMPERIAL BRASS MFG. CO.
1238 West Harrison Street
Chicago

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We have the largest Library of Laboratory Plans in the world—records of a generation of Laboratory construction.

Whatever the building—whether a School, Hospital or Industrial Plant—Kewaunee's "Library" will prove helpful.

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LABORATORY FURNITURE EXPERTS
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Section of Outside Wall of House, Showing Wool Between Studding

Mineral Wool for Building

Mineral Wool has superseded all other materials used for similar building purposes because it does "a great work at little expense." A house lined with Mineral Wool has an indestructible, fire-proof and vermin-proof guard; it protects the entire household. In the winter it keeps the cold air out, facilitating proper heating and economy in fuel. In the summer it keeps the heat out.

This material, being of fibrous, inelastic composition, acts as a deadener and muffles all sound. It is considered the best insulator material on the market, making it a perfect refrigerating machine.

Mineral Wool makes life-long friends of all its users. If you are skeptical as to its power, let us demonstrate. We can prove all claims. Write us today.

U. S. MINERAL WOOL CO.
280 Madison Avenue, New York
The three buildings that comprise the Belmont County Infirmary.

Htg. Contractor: Jas. R. Fitton, Bellaire, Ohio.

This advertisement is No. 5 of the Trane Undivided Responsibility Series.

Trane Undivided Responsibility Heating in 50-year-old Belmont County, Ohio, Infirmary

This installation has the equivalent of 15,000 sq. ft. of radiation, taken care of by three cast iron boilers having a total of 27,000 sq. ft. The piping is arranged so that by opening or closing a few valves the system can be operated as a vacuum system using the Trane Return Line Duplex pumps, or it can be operated as a vapor system using Trane Direct Return Traps. The pumps have a rated capacity of 12,000 sq. ft. each. 175 Trane Bellows Traps, and 155 Trane Valves are used. The three buildings in this group are connected with the boilerhouse by tunnels, the farthest radiator being 500 ft. by pipe line from the boilers.

Mr. Fitton, the contractor, received the following letter from the commissioners of Belmont Co.:

"We desire to advise you that the Trane System installed in the Belmont County Home is certainly 100% perfect and is doing everything that you and the Heating Engineer claimed for it. We have no hesitation in recommending either the system or you as the heating contractor who installed it to anyone who are interested in getting the best."

Mr. Fitton also received a letter from Supt. Moon of the Infirmary, telling of the satisfactory, economical, and efficient service by the system, and closing by saying "I can recommend this system as the best for we have three warm buildings and no worry."

This freedom from worry is one of the nicest things about Trane Undivided Responsibility Heating. Let us tell you more.
EXCELSO COSTS LITTLE TO OPERATE

NEARLY 150,000 Excelso Indirect Heaters supply hot water in homes, office buildings, apartments, hotels and buildings of all types and sizes.

Easily connected to heating plant and when once installed gives lasting satisfaction.

Write for installation literature

Excelso Specialty Works, Inc.
69 Clyde Ave., Buffalo, N.Y.
District Representatives:
210 E. 45th Street, New York, N.Y.
32 Olive R., Boston, Mass.

Nationally Distributed by Leading Wholesalers and Boiler and Radiator Manufacturers.

EXCELSO WATER HEATERS

Combining all the properties necessary and desirable for acid drain pipe, Duriron alone may be specified with the assurance that it will last as long as the structure, wholly eliminating repairs and replacements under any conditions.

The paid-up insurance that Duriron drain pipe provides caused its specification from the laboratories of Denver’s East High School, and over a thousand others during the past five years. It is guaranteed, and doesn’t need the guarantee.

Duriron is produced only by

The DURIRON COMPANY
DAYTON·OHIO
Our Guarantee

The Trenton Potteries Company makes but one grade of ware—the best that we can produce—and sells it at reasonable prices. We sell no seconds or culls.

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

The Te-pe-co Trade Mark is found on all goods manufactured by this company and is your guarantee that you have received what you paid for.
There’s No End To the Economy of

Evernu
Everlasting Hard Rubber Seats

Evernu Hard Rubber Seats are everlasting. The repairs and replacements you don’t have will represent a considerable saving. Year after year that saving will accumulate. It will go on accumulating long after the initial cost has been returned. It will go on, in fact, until the building has seen its day and is razed. Even then the seats could probably be used in another building. And this will surprise you: superior as they are, Evernu Seats cost no more than other seats.

Condensed specifications will be found in Sweet’s. Complete specifications are given in the new Evernu Catalog, which should be in your file.

THE NEVER SPLIT SEAT COMPANY
Dept. 128, Evansville, Indiana, U.S.A.
Founded 1905

The Largest Manufacturers of Toilet Seats in the World

Representatives in the U. S.

L. W. Jarrett, 68 East 42d St., New York City, N. Y.
W. T. Mayfield, American Trust Bldg., Birmingham, Ala.
F. F. Bulkeley, 775 Hampshire Road, Cleveland, Ohio
Ralph Hoch, 587 Russell Ave., St. Louis, Mo.
F. C. Nonpert, 809 Central Bldg., Seattle, Wash.

Evernu is the perfect seat. The interior wall of special hard rubber of great strength and the outside surface of mild-color hard rubber are vulcanized under hydraulic pressure into one lasting piece.

No finish to wear off. No joints to open up. The hollow center provides lightness with strength. The hinge is as durable as the seat.
VITAL SPOTS
—indeed that’s what they are!

The story of Mueller Faucets and plumbing brass fittings for the Vital Spots of plumbing goes into the homes of 3,800,000 families every two weeks. Full-page color advertisements in The Saturday Evening Post and Liberty Magazine feature Mueller brass goods and emphasize their relation to more satisfactory plumbing systems. Watch for these advertisements. They are making it easier for you to specify better plumbing.

Indeed, that’s what they are! Faucets are the Vital Spots of the plumbing. Every day they are subject to constant use and wear. If they give good service, they can add immensely to comfort, convenience and sanitation. But if they don’t . . . What a source of annoyance and expense sputtering, leaking, ill-behaved faucets become to the owner!

People today recognize faucets as Vital Spots that deserve careful consideration at the time of installation. More and more, people who like to live in a modern way are acquainting themselves with the refinements in appearance and betterments in operation that distinguish better faucets. They are learning that the best is none too good at the Vital Spots of plumbing—and that to have Mueller Faucets is to have the assurance that faucet troubles are settled once and for all.

MUELLER CO. (Established 1857) Factories: Decatur, Illinois; Port Huron, Michigan

MUeller faucets without a fault
Delmonico and Jenkins

Time has closed the doors of Delmonico's. The celebrated old restaurant exists only in the pleasant memories of hundreds of New Yorkers.

Today on the familiar site at 5th Ave. and 44th St., a 33 story modern office building is being erected in accordance with the high standards naturally to be expected of a building called by the name of Delmonico.

Jenkins Valves are part of the owners' promise that "superior service will be maintained with the latest mechanical equipment." Valves marked with the Jenkins "Diamond" will serve the Delmonico Building throughout the plumbing service, and in heating and fire protection as well.

Make sure the Jenkins "Diamond" is mentioned in your specifications. It pays to take every precaution against substitution.

Genuine Jenkins Valves are furnished for practically every valve requirement—in standard, medium and extra heavy patterns.

JENKINS BROS.
86 White Street, New York, N. Y.
524 Atlantic Avenue, Boston, Mass.
133 No. Seventh Street, Philadelphia, Pa.
646 Washington Boulevard, Chicago, Ill.

JENKINS BROS., LIMITED
Montreal, Canada

FACTORIES:
Bridgeport, Conn. Elizabeth, N. J. Montreal, Canada

SINCE 1864
JENKINS BROS.
80 White Street New York, N. Y.
524 Atlantic Avenue Boston, Mass.
646 Washington Boulevard Chicago, Ill.

JENKINS BROS., LIMITED
Montreal, Canada

FACTORIES:
Bridgeport, Conn. Elizabeth, N. J. Montreal, Canada

Always marked with the "Diamond"

Jenkins Valves
SINCE 1864
Chicago’s first permanent settler had his house here as carefully studied and con­

considered as exterior beauty.

It is especially gratifying to Crane that not only were its plumbing fixtures, valves, and fittings, se­

lected for one of these buildings, but that all four of them were so equipped. Thus do these mag­

nificent temples of commerce add their endorse­

ment to the impressive roll of Crane installations.

Perhaps your own next construction would worthilv

augment the list. Specify Crane plumbing and heat­

ing materials for initial appearance, minimum up­

keep, long-lasting dependability, and final economy.

CRANE

Address all inquiries to Crane Co., Chicago

GENERAL OFFICES: CRANE BUILDING, 836 S. MICHIGAN AVENUE, CHICAGO

Branch and Sales Offices in One Hundred and Fifty-five Cities

National Exhibit Rooms: Chicago, New York, Atlantic City, San Francisco and Montreal

Works: Chicago, Bridgeport, Birmingham, Chattanooga, Trenton, Montreal and St. Johns, Que.

CRANE EXPORT CORPORATION: NEW YORK, SAN FRANCISCO, MEXICO CITY, HAVANA

CRANE LIMITED: CRANE BUILDING, 186 BEAVER HALL SQUARE, MONTREAL

CRANE-BENNETT, LTD., LONDON

CRANE: PARIS, BRUSSELS
SHOWERS
Especially Designed for Golf and Country Club Installations

There are several types of SPEAKMAN Showers which can be used for this purpose. The Brinton Lake Club near West Chester, Pa., uses the regular SPEAKMAN H-895 Mixometer Shower with Anyforce Head—placing both temperature and force of the shower under instant control. Both angle and overhead showers are part of this installation which is shown on the left.

However, the Golf and Country Club Shower which is growing in popularity very fast, is shown at the right. The illustration was made from a photograph taken in the Manufacturers' Country Club near Philadelphia. They have several of these showers in this club. The valves are ¾ inch and the head twelve inches across and contains 666 holes.

We'll be glad to give you the complete specifications of the showers and stalls; also if you wish we'll send you our shower and fixture catalog made up for your files, A.I.A. Classification 29H3.

SPEAKMAN COMPANY
Wilmington — Delaware
The Maddbury Lavatory — a type for each particular bathroom

THE Maddock "Madbury" Lavatory of Durock is the last word in beauty, convenience, cleanliness and durability.

The larger illustration shows the pedestal style; the smaller, the leg style. Both are identical in every detail except the method of support.

Because the leg style costs less to manufacture, it may be furnished at a somewhat lower price than the pedestal style; also it may be supplied, if desired, in a smaller size.

Both styles are made of all white Durock, including trimmings. Durock will not chip, crack, craze nor discolor.

The "Madbury" is the only lavatory made with a self-cleansing overflow, insuring complete sanitation. Hot and cold water, mixed to any desired temperature, is directed to the center of bowl in a single stream. There is a large square bowl with anti-splash rim.

Durock lavatories remain new indefinitely. They can always be kept spotlessly clean by merely wiping with a damp cloth.

Write us for as many copies as you can use of our booklet, "Maddock Bathrooms". They will help you "sell" clients on quality fixtures, and make them more appreciative of such fixtures when recommended. There will be no charge for the booklets.

THOMAS MADDOCK'S SONS COMPANY
Oldest Sanitary Potters in America
Trenton, N. J.

MADDOCK
Durock Bathroom Equipment

DUROCK
the perfect material for bathroom equipment
is stain proof

IODINE is often dropped on the lavatory basin. It will leave an indelible stain on ordinary coated ware but can be readily wiped off of a Durock lavatory.

Durock cannot be stained.
A fixture you will eventually specify

The China Outlet Cover gives an entire white appearance on inside of urinal.

A Solid Vitreous China Urinal Stall
Guaranteed not to Craze

While vitreous china has long been regarded as the ideal material for sanitary plumbing fixtures, its use in the construction of urinal stalls is of comparatively recent date. In fact, until made by Douglas, the production in vitreous china of so large a fixture as a urinal stall was thought to be practically impossible.

Douglas Urinal Stalls are the ONLY FULL-SIZED SOLID VITREOUS CHINA URINAL STALLS made—the result of intensive study and experimenting. They are of the same high quality materials and workmanship that have distinguished all Douglas products.

The superiority of vitreous china over other materials being well known, the advantages of Douglas Urinals will be apparent to everyone specifying and installing sanitary plumbing fixtures. However, when writing the specifications for your next job where urinals are included, bear in mind that Douglas Vitreous China Urinal Stalls will not crack, craze, or discolor—that they are absolutely impervious—that they are easy to clean and keep clean—assuring the utmost in service and satisfaction.

THE JOHN DOUGLAS COMPANY
Makers of High-Grade Plumbing Fixtures
CINCINNATI, OHIO
Trane Heat Cabinets

Trane Heat Cabinets take the place of radiators. They were invented by Reuben N. Trane and developed and perfected in the Trane Engineering Laboratories to meet the demand for an improved method of distributing heat.

The Heat Cabinet is a new application of convection heating. In effect, the heat is bottled up in the Cabinet and is released only in sufficient quantities to care for the demand. The Cabinet gives heat instantly when desired, or by merely adjusting a damper it can be turned off so that no heat units escape to the room.

As shown by the illustration above, a Heat Cabinet looks somewhat like a radiator enclosure. The principle of operation and the features of the Heat Cabinet, however, are vastly different than those of enclosed radiators.

All heating systems that use Heat Cabinets are known as Cabinet Heating Systems. Cabinet Heating can be used in connection with regular steam, vapor, vacuum, or hot water heating equipment. No special design is necessary. No special heating system is necessary. The Cabinets are easily installed on any job where radiators could be used, or where radiators are used at present.

Their many good points are discussed at length in the pages of the Trane Heat Cabinet Catalog—their pleasing appearance, their light weight, their moderate cost, and above all, the perfect heat control that is made possible by the Heat Cabinet principle.

If you haven’t received your copy of this catalog, write for it.
FEDERAL CEMENT TILE CO., Chicago. “The Roof for Permanence.” A booklet on an important subject.

Interest of architects in roofing materials is never ending, particularly in those materials which by reason of their nature last forever. This booklet is issued to inform architects and builders regarding Federal Cement Tile, a material which while possessing maximum strength is of minimum weight, and since it cannot wear out or (except by use of extraordinary force) be broken, it will endure without repairs. Such a roof requires no painting or patching, and never rusts; heat or cold cannot break down its endurance, and even fire, the greatest of all destroyers, cannot damage it. Federal Glass Tile can be used when it is necessary that portions of a roof provide top-lighting.


Certain architects who do much country house work have succeeded in capturing something of the skill which made notable the work of architects and builders a century or more ago. This applies not only in the matter of design but also in the use of materials, which, of course, has its effect upon the design. Architects and builders well know the value of the slates supplied by the John D. Emack Co. Slatess can be cut, shaped, split or trimmed in quite variety of ways, and this folder describes and illustrates what is known as “Thatchplate,” obviously slate which when used for roofing gives the appearance and much of the texture of a thatched roof, –or as the folder puts it, “a roof thatched with slate instead of with straw.” Slatess of this particular variety come in various colors,—greens, grays, browns, purples, buffs and blacks, all highly valuable colors.

EDWIN F. GUTH CO., St. Louis. “Guth Lighting Equipment.” A brochure on lighting and on fixtures for lighting.

Lighting the interiors and even the exteriors of buildings properly necessitates the use of fixtures of many kinds,—fixtures suspended from ceilings, fastened to walls, or else the type called “portable,” intended to be placed wherever it may be convenient to have them. In this brochure the Edwin F. Guth Company illustrates a vast number of the fittings which it carries in stock or makes to special order,—fixtures for banks, public buildings, clubs, churches, hospitals, residences and apartment buildings, stores, commercial and industrial plants, these fixtures made of metals of many sorts given to different kinds. One valuable part of this brochure is given up to describing the type of illumination known as “Concealite,” widely used for show windows, shop windows, show cases, the chandeliers of churches or the prosceniums of theaters, and of interest is the page giving in percentages efficiency of different lighting units.

ELEVATOR SUPPLIES COMPANY, INC., Hoboken. “Elevator Door Closer and Positive Electric Interlock.”

Improvement in elevator equipment has kept pace with the development of the elevator. Perhaps it would be more accurate to say that development of the elevator has been made possible only by the ingenuity and resource which makers of their equipment have brought to their work. Prominent among manufacturers of such equipment has long been the Elevator Supplies Co., Inc., and in this brochure there are given for architects and builders details of the Elevator Door Closer and Positive Electric Interlock. The Elevator Door Closer and Positive Electric Interlock give the maximum of safety to elevators in modern buildings. The Positive Electric Interlock absolutely cuts off the power when the doors are open, and therefore makes it impossible for the operator to start the car while passengers are entering or leaving the elevator. With the Elevator Door Closer and Positive Electric Interlock it is impossible for a waiting passenger to open the door from the outside, even with the car on a level with the floor. The operator's efficiency is then increased, for though the possibility of accident is practically removed from his mind.


Those in charge of the building of the Cathedral of St. John the Divine are allowing to be put into it only the best of materials, their idea being to leave to the world an example of what is the best building practice today. It is the ambition of the builders to have archaeologists 2000 years hence as greatly impressed by the remains of this great structure as students of today are by the imposing monuments of ancient Rome. It is to be noted that particular attention is being given to piping. This brochure dwells upon the well known merits of brass piping, proof, of course, against rust, which colors or stains water and porcelain fittings, and destroys the pipes themselves.


The widespread use of stucco, which plays so conspicuous a part in modern building, is after all merely a revival of the use of a material centuries old. Wide use of stucco by the ancients was made possible by its naturally weatherproof, of course, against rust, and its being applied as much as because it possessed certain qualities which rendered it particularly valuable. Chief among these qualities is its affording insulation which in hot climates prevents the penetration of heat to the interior of a house, just as (in cold climates) it protects or conserves what heat the interior enjoys and prevents its loss. This brochure dwells upon the use of stucco in the ancient world and some account of its recent use. It illustrates numerous structures old and new in various parts of the world for building which stucco has been used and describes some of the textured surfaces developed.


These two folders or brochures contain data regarding a device which is founded upon an entirely new application of the principle of distributing heat. The “Heat Cabinet,” as its name implies, is a cabinet which contains or surrounds a heating element and which is constructed in such a way that it gives out heat by convection rather than by radiation. Expressed in different words, the amount of heat given off by the heating element depends almost wholly upon the amount of air passing through it; the giving of heat is entirely dependent upon the circulation of air around the cabinet. The Trane Heat Cabinet is such a basic invention that its features apply to all the accepted forms of direct radiator heating, such as hot water, steam, vapor, or vacuum. Air passes through the cabinet at a rate of 100 to 150 feet a minute, causing fast circulation. In ten minutes a room is heated to a comfortable temperature.


There are of course countless places where it is convenient to use doors which roll up out of the way instead of opening in regular door fashion. But it is by no means necessary that such doors be invariably of metal, and there are many places where rolling doors of wood are as useful as doors of metal, and sometimes use of wood is in fact preferable. For over 50 years Wilson Doors have been meeting the definite industrial need so satisfactorily and efficiently that they are now in successful use in many industrial plants throughout the world. Wilson Rolling Wood Doors are especially adaptable to garages, engine houses, chemical and refrigerating plants, and to any other vacuum, or oxidizing fumes are present. They are specially constructed to attain the greatest ease in operation and a maximum long life unaffected by corrosion, buckling, warping, swelling, or shrinking. As the opened doors are closed overhead, they allow full use of valuable floor space, and that Wilson Rolling Wood Doors are remarkably durable is shown by actual records of installations made many years ago that are still giving daily satisfactory service.
TWELEVE hundred and fifty rooms will be added to the great Manger chain of hotels in New York City with the completion this fall of the Hotel Manger.

The bathtubs in this fine hotel will be of Kohler make, in the well-known "Viceroy" built-in pattern. The installation will number 456 tubs, the remaining bathrooms being equipped with showers only. In addition there will be 1050 other Kohler fixtures.

The exceptional quality of Kohler Plumbing Fixtures, their beauty of design, their uniform whiteness of enamel (always signed with the name "Kohler"), and the fact that they cost no more than any other acceptable ware—these considerations give ample warrant for writing "Kohler" into any specification.

KOHLER CO., Founded 1873, KOHLER, WIS.
Shipping Point, Sheboygan, Wis. • Branches in Principal Cities

KOHLER OF KOHLER
Plumbing Fixtures
Reviews and Announcements


Careful study given to greenhouses by architects and builders of such structures has resulted in something which closely approaches perfection in their development—and not only are they being used for the growing of plants, fruits, vegetables, etc., the purposes for which they are generally erected, but often for sheltering the bathing or swimming pools and squash courts being built on so many country estates. This very interesting brochure gives data on every possible detail of greenhouse construction: Buildings; Sites and Orientation; Sizes of Compartments; Types of Construction; Roofs; Gutters; Glass; Heating; Service Buildings; etc. Views are given of many greenhouses which have been erected by these well known builders, several in country estates. This very interesting brochure gives data with the claims of Architecture. It proves (first) that signs properly managed need not in the least injure the architectural character and dignity of a structure. That this objection and giving the comparative costs of different

GRAYBAR ELECTRIC COMPANY, New York. "Graybar Housekeeping Appliances." A brochure on utilities. That the application of electricity seems to have been made to household utilities of every kind in which movement is involved is suggested by this booklet which illustrates, lists and describes the housekeeping devices supplied by the Graybar Electric Company, which was recently formed to take over the supply department of the Western Electric Co. Clothes washers, wringers, vacuum cleaners with their various attachments, ironers, ranges for cooking, heaters, cooling fans and sewing machines are some of the appliances with which the brochure deals. The booklet not only lists and illustrates these utilities, but gives the specifications which architects and builders might reasonably require to provide for their proper use. The wide use which is being made of these and other similar devices is due, of course, very largely to the ingenuity which their makers have shown in adapting to so many practical purposes that most useful of forces,—electricity.

THE FLEXLUME CORPORATION, Buffalo. "Signs and Inscriptions in Architecture." A work on their proper use. Architects find only too often that carefully designed exteriors and well considered interiors are disfigured and sometimes badly marred by use of the signs which present-day business methods find so necessary. Frequently these signs, bad enough in themselves, are made worse by use upon them of lettering which bears no relation whatever to the architectural character of a structure. That this need not be so is abundantly proved by this extremely useful and well produced brochure issued by a concern which shows considerable skill in reconciling the demands of Business with the claims of Architecture. It proves (first) that signs properly managed need not in the least injure the appearance of a building without or within, and (second) that there are types or styles of lettering in such close agreement with the different styles that their use emphasizes the architectural character and dignity of a structure. Greek, Roman, Romanesque, Gothic, Byzantine, Renaissance and Georgian types are considered, and lettering well adapted to each is shown. The brochure offers to those desiring them the services of the Flexlume Designing Department, equipped as it is with all possible facilities.

George Winkler announces the opening of new offices in the Moorhouse Building, Tampa, Fla.

Everett H. Merrill, formerly of 3981 West Sixth Street, Los Angeles, has opened new offices at 475 Santa Monica Boulevard.

B. Fraser, care of the Shanghai Land Investment Co., Ltd., 28 Jinkee Road, Shanghai, would be glad to receive catalogs from firms interested in sending building materials or specialties to his part of the world.

Elieh Saarinen and Henry Scripps Booth have established themselves in the Cranbrook Architectural Offices, Lone Pine Road, Bloomfield Hills, Birmingham, P. 0., Mich. They would be glad to receive catalogs and other publications from manufacturers.

Teachers Wanted. For the school year beginning September 8, 1926, the School of Applied Arts of the University of Cincinnati is desirous of filling these new positions: One Assistant Professor, History of Architecture; (Major work in Medieval and Modern Architecture.) One Assistant Professor, Interior Decoration. Three Assistant Professors, Principles of Design (Composition). One Assistant Professor, Landscape Architecture.

Address applications or inquiries to the Director, School of Applied Arts, University of Cincinnati.

AMERICAN WALNUT MANUFACTURERS’ ASSOCIATION, Chicago. "Walnut for Interior Woodwork and Paneling." A work on the many advantages of using walnut. The possibilities of using walnut for interior trim are so many and so great that one wonders why it is not more frequently employed for work of the better class. The reason generally given would be, of course, that its cost prevents its more frequent use, and one of the most interesting details of this brochure is in its precisely answering this objection and giving the comparative costs of different woods. The cost of the interior trim of a typical room, for example, a room with baseboard and shoe moulding and low paneling, mantel, and the usual doors and trim about doors and windows, as illustrated on pages 7 and 8 of the booklet would be: American Walnut $390; Mexican or African Mahogany $380; Philippine Mahogany $308; Quarter Sawed White or Red Oak $365; Plain Sawed White or Red Oak $355; English Oak $425; Birch $355; Quarter Sawn Red Gum $342; Plain Gum, etc., $300. From these figures it will be seen that the cost of walnut is really less than that of several woods likely to be used, and but a trifle more than that of birch or gum, woods frequently made use of. The booklet gives considerable useful information on the subject of use of walnut for floors of residences, a subject which is always important.
The exterior walls of the newly completed Miner Physicians' Hospital in Plattsburg, New York, were treated with Hydrocide Colorless, the invisible waterproofing. In addition to keeping the interior of the building warm and dry, this material preserves the natural beauty of the brickwork. It prevents the walls from becoming discolored. It is absolutely invisible when applied.

Hydrocide Colorless penetrates the brick and forms a non-conductive, protective layer. Since it contains no paraffin, it will not run in hot weather. It can be applied as easily during the winter months as during the summer. It can be painted. It will never collect dust.

Hydrocide Colorless will give you warm, dry, beautiful buildings. Buildings of which you can be permanently proud. Write us for further information and a generous demonstration sample.

**Hydrocide Colorless**

**Waterproofing**

**Other Sonneborn Products**

**Lapidolith**—The original concrete floor hardener. A liquid chemical that changes the floor surface to a fine, dense, crystal-like structure of flint-like hardness. Hundreds of millions of feet of concrete floor have been Lapidolized in leading industrial plants of the country.

**Cemcoat**—A paint that stays white longer than any similar paint; can be washed again and again; sticks to brick or concrete as easily as to wood; and usually requires one less coat. Made for both interiors and exteriors, in white and colors and in gloss, eggshell, or flat-enamel finish.

**Lignophol**—A preservative dressing for wood floors that penetrates and restores the natural oils and gums of the wood. Lignophol prevents rotting, splintering and drying out; it is not sticky; it can easily be washed; and it does away with ordinary floor oils.

**Stormtight**—The famous semi-liquid compound for mending and preserving roofs. The thick, adhesive rubber-like material can be applied by anyone, over any kind of roof, and gives a tight new surface that lasts for years. Made in four colors. Mends a single leak or makes an entire roof water-tight.

Send for free samples of these products

L. Sonneborn Sons, Inc.
114 Fifth Avenue, New York City
Quality is Worth Its Price

The far-seeing, master minds that conceived this majestic structure know that Quality is Worth Its Price. To insure the utmost in heating comfort and satisfaction they took the precaution to specify an ILLINOIS Vacuum System. To every notable architect and engineer ILLINOIS HEATING SYSTEMS is a familiar name. They know of the overwhelming evidence of satisfactory installations—of faultless performance—of satisfied owners. ILLINOIS HEATING SYSTEMS are largely preferred by architects and consulting engineers—whose discerning judgment can be safely accepted as a criterion.

EVERY Architect Should Have Bulletin 21
MORE and more the profession is leaning toward clear floors in public and semi-public washrooms.

The Eljer fixtures shown furnish the means for accomplishing this desired result.

**TACOMA WALL CLOSET**
The Tacoma Jet Action Wall Closet (for flush valve only) operates with a small amount of water—giving an instantaneous and thorough flush. It has a large trapway, extra large water area, deep seal and extended sanitary flushing lip.

Can also be furnished with plain rim-back spud or vented to meet varying needs.

**ELJER HANGER**
Eliminates the need of a utility corridor and special fittings.

The bowl is bolted tightly to the hanger with a molded asbestos gasket between the outlet flange and bowl assuring a rigid support and permanently tight joint.

**CORRECTO URINAL**
The Correcto Wall Pattern Stall Urinal (for tank or flush valve) has integral side shields—making a complete unit, and obviating the need of marble partitions. It has a trap with cleanout which effects an additional saving in material and labor.

It is Eljer highest quality genuine vitreous china, guaranteed not to crack, craze or discolor.

ELJER COMPANY, FORD CITY, PA.

*Sales offices in principal cities of the country*
"It gives me More Time to Create!"

This Company's Catalogs in the Twentieth Edition of "Sweet's" not only provide reliable and accepted specifications for the uses of Medusa Products, but they greatly simplify the detail of specification writing. By shortening routine, they thus make available more hours for truly creative work.

This seems to us a peculiarly appropriate service for our Company to render: because Medusa White Portland Cement is recognized by Architects everywhere as the ideal element from which to create unique and lovely, but practical and efficient exteriors for homes and public buildings. And of course Medusa White Cement has many other notable uses, beside stucco.

Supplementing the information in "Sweet's"—pages 118-121; 341-349; 1716-1717—we issue interesting Booklets in Architectural sizes, which we shall be very pleased to send upon request.

Our Technical Department will also be pleased to contribute practical suggestions on special matters whenever its services may be desired.

THE SANDUSKY CEMENT COMPANY, The Engineers' Building, CLEVELAND, OHIO
Manufacturers of Medusa White Portland Cement (Plain and Waterproofed); Medusa Waterproofing (Powder or Paste); Medusa Gray Cement (Plain and Waterproofed); and Medusa Cement Paint.

MEDUSA
The Simplicity of Massillon Bar Joist Fireproof Floor Construction

No type of fireproof floor is so simply, easily and quickly erected as that built with Massillon Bar Joists. And no type of construction provides a better, more dependable fireproof floor for all kinds of buildings, from homes to skyscrapers.

The detail drawing above shows the simplicity of construction. The joists are quickly placed in position and covered with metal lath. A thin slab of concrete serves as a base for the finish floor. This may be wood, tile, terrazzo or cement.

Each Massillon Bar Joist is suitable for a variation in spans. 18 standard joists meet all spans from 4 feet to 30 feet 6 inches. All materials are available for immediate shipment from stock. Construction time is cut to the minimum.

The open web construction simplifies and reduces the cost of piping installations. The reduced weight of Massillon Bar Joist floor panels provides structural savings in all supporting members down to the footings. Write for literature and designing information.

THE MASSILLON STEEL JOIST COMPANY, Canton, Ohio

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Two Bars Top and Bottom

Solid Steel Welded Joints