TIME WILL NOT DIM THE GLORY OF THEIR DEEDS

1938
Here's how J & L PIPE will help to keep your piping jobs ahead of schedule

You can specify J & L Standard Pipe with full confidence that piping jobs will go ahead... with full speed.

J & L Pipe is easily and quickly installed. Its free cutting qualities speed up threading and cutting operations. Couplings are sound and accurate and mill threads are always true. J & L Standard Pipe is manufactured under the strict control of our metallurgists to meet your exacting requirements.

J & L Pipe is clean and smooth inside and out—and made to stand up under the most severe service conditions. You will find J&L Pipe not only gives guaranteed performance but its long life also makes it economical in the end.

Your J & L distributor already has in stock a complete line of J & L Standard Pipe, whether seamless, in black or galvanized finishes, as well as the accessories to make it complete. Specify J & L Pipe in your plans and you will be more than pleased with the finished piping job.
Floors, Roofs and Ramps are simplified by Wheeling Long Span System. This system saves time and material, allowing immediate use by tradesmen. Architects and contractors can use the system to simplify floor and roof problems, especially for spiral ramps, circular roofs, and similar applications. The pre-fabricated units are ready upon delivery and do not depend on the skill of individual workmen for assembly. Dimensions are predetermined at the factory. Each joist has a shelf 1½" wide for attachment of metal lath ceilings. Write for details.

Wheeling Long Span Steel Joists are 5", 6", and 8" deep and can span distances from girder to girder. They use Wheeling's COP-R-LOY, a rust-resistant copper alloy. The system is available in various cities across the U.S., including Wheeling, West Virginia.
Proper Relationship Between Design and Capacity is Essential

Only the New Herman Nelson Air Conditioner for Schools maintains a uniform relationship between design and capacity in air conditioning of classrooms.

Fan outlet area is an important factor in solving the problem of how to deliver a sufficient quantity of air quietly. Only Herman Nelson increases the fan outlet area in direct proportion to rated capacity. Thus, more quiet operation is obtained with each Air Conditioner, regardless of size.

A uniform relationship between capacity of any size unit and the area of its filter, heating element, damper openings and discharge grilles is also maintained by Herman Nelson. This same relationship applies between number of fans and rated capacity. Ideal air conditions in school classrooms are made possible only by maintenance of this proper relationship between design and capacity, together with Herman Nelson's Exclusive "Draw-Through" design.

For complete information write to

THE HERMAN NELSON CORPORATION
MOLINE, ILLINOIS
How to change an "Eyesore" into an Asset

See how easily this ancient apartment structure was transformed from an ugly liability into an attractive, rentable building!

Cornice and front porches were removed, a simple cornice designed, and the front of the building covered with stucco made with Atlas White portland cement.

You doubtless have similar opportunities for profitable remodeling work. When figuring on such jobs, these are good facts to remember:

1. White portland cement stucco gives a building a fresh exterior.
2. It is permanent because it is a thin sturdy wall of concrete with the weather resistance and fire resistance of concrete.
3. It can be applied in any texture and any color.
4. Its cost is moderate and gives service that endures in any climate.

Universal Atlas Cement Co. (United States Steel Corporation Subsidiary), 208 South La Salle Street, Chicago.
PC GLASS BLOCKS

make ANY building Better!

A strong statement. But a true one.

Even an abbreviated list of the qualities of PC Glass Blocks makes it obvious immediately why the home or the skyscraper, the factory or the store, the hospital or the theatre is a better-looking, more useful and more successful building when you design it to include PC Glass Block construction.

PC Glass Blocks transmit light generously, but preserve privacy by obscuring the view. They combine the light-transmitting qualities of glass with the insulating properties of masonry. They decrease noise, they add immeasurably to building appearance with their crystalline beauty. They are easy to clean, they lower maintenance costs, they are available in temperature, humidity and condensation control. They offer beauty, usefulness and permanence in a material that looks modern and is modern.

PC Glass Blocks bring a new versatility to design, open up fascinating new vistas in building construction. Find out about PC Glass Blocks.

IN THE FACTORY
PC Glass Blocks mean better lighting, better insulation. They reduce condensation, keep dirt infiltration through light areas. Lower maintenance. Improve humidity and temperature control.

IN THE HOME
PC Glass Blocks provide light, privacy, modern good looks, and a universality of appeal which makes them equally at home in houses of all architectural styles.

IN THE PUBLIC BUILDING
PC Glass Blocks reduce noise, aid appearance, cut heating costs, insure welcome privacy and heighten the working efficiency of building occupants.

IN THE RETAIL STORE
PC Glass Blocks add tremendous eye appeal, admit cheerful, flattering daylight by day, and provide interesting and attractive lighting effects by night.

Send the coupon below for complete information. And should you desire specific information concerning the application of glass blocks or structural glass to building construction, the Pittsburgh Corning Corporation, makers of PC Glass Blocks and Carrara Structural Glass, will gladly supply it upon request.

Distributed by
PITTSBURGH PLATE GLASS COMPANY
and by W. P. Fuller & Co. on the Pacific Coast

PITTSBURGH CORNING
Glass Blocks

Pittsburgh Corning Corporation
2100X Grant Bldg., Pittsburgh, Pa.
Please send me, without obligation, your new book of facts about PC Glass Blocks entitled "The Glass Age Arrives."

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Street ____________________________
City __________________ State ______

PENCIL POINTS
OCTOBER, 1938
Quality and sturdiness are built into windows by General Bronze Corporation—combining finer performance and appearance with a high degree of weathertightness. General Bronze fabricates both custom and stock-size windows—in aluminum or bronze—for the better residences, apartment and institutional buildings of every type.

Consult Sweet's or write us for a catalog.

GENERAL BRONZE CORPORATION
34-19 Tenth Street . . . LONG ISLAND CITY, N.Y.
YOUR LEAD WON'T BREAK
UNDER PRESSURE ON THE FLAT...

CRISP, clean, broad strokes like these make brilliant renderings, but they test the mettle of your drawing pencil. Made with the flat of the lead, under heavy pressure, such strokes call for a point with extra resistance to breakage. Just another reason why so many artists and architects are changing to Eagle TURQUOISE, the "Chemi-Sealed" pencil that stands up when you bear down. Its super bonded construction unites lead and wood so inseparably that you will rarely break a point. To make your own test of TURQUOISE stamina, write for any one of the 17 grades, naming your supplier and this publication. You'll be delighted, not only with the point strength, but with the precision grading, sealed-in smoothness and perfect blue printing quality of TURQUOISE drawing pencils.

EAGLE PENCIL COMPANY • 703 EAST 13TH STREET • NEW YORK CITY

Send for free sample
“Window Conditioning” is accomplished by installing storm windows or double-glazed sash, thus providing two panes of glass instead of one. Between the two pieces of glass, a wall of captive air is formed. This air space is one of the best forms of insulation. It makes possible more uniform temperatures throughout the home and freedom from drafty danger zones on the floor and near the windows—healthful humidity without foggy windows, soiled draperies and moisture on window sills. “Window Conditioning” brings a greater fuel savings per dollar invested than any other single type of insulation.

American Builder, June 1937 (Condensed; Of Heat-Loss Tests — Five Types of Construction)

<table>
<thead>
<tr>
<th></th>
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<tr>
<td>Total Heat Loss BTU's</td>
<td>159,175</td>
<td>159,974</td>
<td>157,741</td>
<td>118,773</td>
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<td>Per Cent Saving</td>
<td>11.1</td>
<td>13.1</td>
<td>21.0</td>
<td>35.4</td>
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<td>Sq. Ft. H. W. Radiation</td>
<td>1060</td>
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<td>837</td>
<td>791</td>
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<td>Oil Per Season, Oils</td>
<td>3980</td>
<td>3699</td>
<td>3163</td>
<td>2969</td>
<td>2739</td>
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<td>Cost of Oil Per Season</td>
<td>$ 256</td>
<td>$ 232</td>
<td>$ 184</td>
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<td>Savings in Fuel</td>
<td>$ 34</td>
<td>$ 40</td>
<td>$ 72</td>
<td>$ 40</td>
<td>$ 28</td>
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<td>Cost of Construction</td>
<td>$ 142</td>
<td>$ 139</td>
<td>$ 284</td>
<td>$ 106</td>
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<td>Interest and Depriva­</td>
<td></td>
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<td></td>
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<tr>
<td>tion on Investment</td>
<td></td>
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<tr>
<td>Net Saving</td>
<td>$154.06</td>
<td>$150.97</td>
<td>$125.13</td>
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<td>Per Cent Return on In</td>
<td>16.9</td>
<td>17.1</td>
<td>18.3</td>
<td>23.0</td>
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<tr>
<td>vestment, Net</td>
<td></td>
<td></td>
<td></td>
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<td>Years for Net Fuel Saving to Pay off Inves</td>
<td>5.9</td>
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<tr>
<td>Cost of Heating Plant</td>
<td>$1190</td>
<td>$1198</td>
<td>$1156</td>
<td>$1166</td>
<td>$1102</td>
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<tr>
<td>Reduction in Plant Cost</td>
<td>$ 192</td>
<td>$ 334</td>
<td>$ 404</td>
<td>$ 488</td>
<td></td>
</tr>
</tbody>
</table>

From studies made by Professor G. I. Larson on a typical suburban residence of 8 rooms in Madison, Wisconsin, figured on a winter heating season of 260 days. The fuel used was oil figured at 7.5e per gallon.

Note that the fuel savings effectuated by “Window Conditioning” in thin particular case are greater than any other form of insulation would.

In this case the savings in fuel make a simple return on the cost of the improvement.

Net savings, Figure per square foot as follows: Rate of 8c per square foot, one layer of 1/2-inch glass and 1-inch air space, or 2c per square foot, two layers of 1/2-inch glass and 1-inch air space.

Net return of 75% shown above “Window Conditioning” not only a sound, but a very attractive, investment.

“Window Conditioning” proved to be in improvement that paid for itself in less than two winters. It has continued to pay for many years to come.

STUDIES CONDUCTED BY PROFESSOR G. I. LARSON OF THE UNIVERSITY OF WISCONSIN PROVE CONCLUSIVELY THE VALUE OF “WINDOW CONDITIONING”

Architects can bring added comfort and economy to new homes, everywhere, by providing “Window Conditioning.” And the quality of the glass specified for these double windows becomes doubly important. For your clients will be looking through two panes instead of one. L-O-F Quality Glass is today, as it has been for many years, clearer, brighter and flatter than any Window Glass that the industry has ever offered.

Libbey-Owens-Ford Glass Company, Toledo, Ohio.
HERE'S ANOTHER REASON
FOR SPECIFYING ROOFING ASPHALT CONTAINING

THE VITAL ELEMENT
(TRINIDAD NATIVE LAKE ASPHALT)

In the roofing industry we have a testing device known as the Weather-Ometer. With it, we are able to produce accelerated weather conditions — *in our own laboratory*. Weeks can equal years of actual exposure likely to be encountered by the roofs you specify. Now let’s see how roofing asphalt containing *The Vital Element* stands up in the Weather-Ometer Test. Repeated cycles of three weather conditions constitute this test.

- **FIRST**, actinic or active rays of sunlight generated continuously by electric arcs inside the Weather-Ometer. Even under these destructive beams, roofing asphalts containing *The Vital Element* show a definite superiority over those made without it.

- **SECOND**, a drenching similar to a soaking, steady rainfall. Long after other asphalts have failed, those that contain *The Vital Element* still effectively shed water.

- **THIRD**, sub-zero temperatures. This completes a cycle of heat, rain and cold. Imagine a climate that offers such a supreme test for the roofs you specify.

And here’s how roofing asphalt containing *The Vital Element* looks when taken from the Weather-Ometer. Even after sufficient cycles to cause many other roofing asphalts to fail, its surface is scarcely blemished. And, above all, *it still sheds water!* Clear evidence of the balanced weather-resisting properties of roofing asphalts containing *The Vital Element*.

When you specify roofings, be sure you specify Barber Genasco — the only roofings that offer you the added protection of genuine Trinidad Native Lake Asphalt. And when you have questions involving roofings and other asphalt uses, Barber will be very glad to co-operate with you in finding a correct, authentic answer.

**BARBER ASPHALT CORPORATION**
NEW YORK, N. Y. • BARBER, N. J. • MADISON, ILL. • CHICAGO, ILL.

BARBER Genasco
PRODUCTS

Nationally advertised Barber Genasco Products, containing *The Vital Element*, include: BONDED AND OTHER TYPES OF BUILT-UP ROOFINGS, MASTIC FLOORINGS, SHINGLES. Other Barber Asphalt Products include: Waterproofing Asphalts and Fabrics, Resaturator, Resurfacer, Asphalt Protective Products (*Plastics and Liquids*), Spandrel Beam Waterproofing (*Spandrel Cloth and Cement*).
MUST AIR CONDITIONING COST A FORTUNE?

**Question:**

**Answer:**

**NOT IF YOU CONSULT THE "WORLD'S LARGEST INSTALLERS OF HOME HEATING AND AIR CONDITIONING SYSTEMS"**

- The thousands of home owners who installed the Holland Automatic Furnace Air Conditioner (for oil or gas) have had ample proof that home air conditioning need not cost a fortune. Every promise of efficiency and economy has been more than fulfilled in spite of Holland's surprisingly low first cost. In virtually every case, operating costs were substantially below the most optimistic estimate, yet perfect comfort was automatically maintained in every room throughout the winter. During the summer, too, these homes were made far more comfortable by circulating the air on hot days.

To architects, this signal success means that the range of homes in which it is feasible to specify automatic winter air conditioning now extends well into the lower price brackets.

If not already fully informed about this remarkable unit, you will surely want full details. Data sheets prepared especially for architects by the well-known Don Graf, BS., M. Arch., may be had by mailing the coupon at left.

**HOLLAND FURNACE COMPANY**

HOLLAND, MICHIGAN
EGGED AT 70° IN SPITE OF WIND, THAW OR ZERO WEATHER

Outdoor Bulb detects changes in temperature and sends signal to the Temperature Controller for a compensating amount of heat.

Temperature Controller... coordinator between Outdoor and Water Bulbs.

The Water Temperature Bulb, installed in the Supply Main, keeps the circulating water at the proper degree for any outdoor temperature.

Hoffman Hot Water Controlled Heat has startled the building world with its unrivaled control of room temperature

The operating principle of Hoffman Hot Water Controlled Heat can be explained in a few words... continuous, instead of intermittent circulation, with the temperature of the circulating water controlled simultaneously by the outdoor temperature and the heat emission of the radiators.

This dual control of the continuously circulating water balances the delivery of heat against the heat loss of the building—so exactly that room temperature is held at practically a constant level, no matter how suddenly or violently the weather may change.

Either old gravity systems or new installations can be equipped with this absolutely unique advance in heat control. For the first time, a positive protection against overheating or unpleasant fluctuations in temperature is offered the home owner. Scores of installations have demonstrated beyond question the accuracy and dependability of Hoffman Hot Water Controls.

Write for new bulletins giving complete information. Hoffman Specialty Co., Inc., Dept. PP-10, Waterbury, Conn.

HOFFMAN Hot Water CONTROLLED HEAT

By the makers of Hoffman Valves, Traps and Pumps, sold everywhere by leading Wholesalers of Heating and Plumbing Equipment.
Draftsmen Busy,
Even in Demand
Paradoxical as it may seem, the busier we get the less we know. But we do know that this busy-ness of ours does not, at this writing, bear the stigma of a spasmodic tenure of employment. It appears that sufficient funds are available for a healthy program of construction in Washington and the forty-eight states of our Union.

As this column predicted recently, there is a shortage of architectural men not only in the Government service but in private practice as well. Recently one of Washington's leading newspapers carried two advertisements (on the same day) requesting the services of architectural men and both were from out-of-town offices. Can it be that jobs are now going begging? Perhaps. But at what salaries? Or is this water too hot to step into? (Pardon the grammatical license.)

One of our Ex-Procurementers, Lusby Simpson, got tired (?) of mixing up standard details for Procurement; chasing plumbing, electric, heating and structural bugs into their holes all over the Queensbridge Housing Project in New York and hied himself off to South America. There to amuse himself with whatever comes under a soft pencil, water color brush or anything else that may be handy for the design of buildings in the Northern ranges of the Andes and in the interest of Herrera Carrizosa Hermanos, Arquitectos y Inginieros of Bogota. Good luck, Lus, and don't laugh at the wrong place.

Procurement's bowlers got off to an early start this season. With this twenty-team league now in action, the shooting is loud but as yet not so good. However, the old feud between George "Steve" Brodie and Ken "Smoky Mountain" Abernethy is again revived and in this attraction they don't pull their punches. But some of our promising newcomers may steal the show . . . we hope.

Increase in the architectural personnel in the Government service is the reason that the local chapter of the F.A.E.C.T. is making considerable progress both in its membership enrollment and its activities. Apparently their arguments are convincing because their efforts in matters pertaining to personnel are rewarded by at least a sympathetic ear on the part of the Government officials. Nor are they overlooking the wonderful opportunities for excellent and interesting programs dealing directly or indirectly with architectural subjects which Washington facilitates. At the first fall meeting of this year, H. H. Har-

(Continued on page 47)

Heffernan Appointed Georgia Tech Critic
The appointment of Paul M. Heffernan, Paris Prize winner in 1935, as Head Design Critic in the Department of Architecture, Georgia School of Technology, Atlanta, Georgia, for the coming year, is announced by Harold Bush-Brown, Head of the Department.

Heffernan is a graduate of the Iowa State College in Architectural Engineering and is holder of a degree of M. of Arch. from Harvard. While at Harvard, he won the Paris Prize, the Eugene Dodd medal in freehand drawing, and a Sheldon Travelling Fellowship for travel abroad. The latter he did not use after being awarded the Paris Prize. He is a member of Tau Sigma Delta, Tau Beta Pi, Phi Kappa Phi, and Sigma Upsilon.

This rendering by J. Floyd Yewell shows the Glass Center designed by Shreve, Lamb & Harmon, Architect, for the New York World's Fair, 1933, on which construction has been pushed since its clear glass "cornerstone" was laid, August 24, by the presidents of the concerns that will exhibit in it. The block, structural and plate glass building with its 108-foot blue glass tower, Displays will include a bot glass fuse and a glass thread machine. The exhibitors sponsoring the Center at Corning Glass Works, Owens-Illinois Glass Co., Pittsburgh Plate Glass Co.
GYPSTEEL PLANK safeguards a modern hospital and nurses' home

Valley View Hospital and Nurses' Home, Ada, Okla. James Gamble Rogers, Architect. Because of satisfactory experience at Ada, the architect is again using PLANK in similar buildings for the Utah Valley Hospital at Provo, Utah, now under construction.

Architect James Gamble Rogers selected GYPSTEEL PLANK® for the floors and roof-decks of the Valley View Hospital and Nurses' Home at Ada, Oklahoma, because it has the fire-safety, permanence and freedom from maintenance cost that is expected of masonry, yet can be erected in a fraction of the time and requires a minimum of supervision in installation. PLANK handles like lumber and can be laid with the same ease and speed — little experience is necessary on the part of labor to make completely successful applications. Other advantages are its light weight, strength and great adaptability to varying conditions, which permit a freedom in the design of supporting frames that leads to economy.

Many leading architects throughout the country have discovered these and other advantages of PLANK and are regular users, repeatedly specifying it not only for institutional buildings but for homes, office and industrial buildings. It will pay you to have the complete facts on hand about this versatile structural unit. They are contained in a special 28-page Bulletin, which also illustrates where and how PLANK has been used with unusual economy and client satisfaction. Write for your copy today.

*The term PLANK as applied to cementitious building products is a trademark of the American Cyanamid & Chemical Corporation.

GYPSTEEL PLANK is a complete structural unit shaped like lumber. Made of extra dense, nailable gypsum. All four sides are bound with galvanized steel tongues and grooves which lock to form a strong, continuous I-BEAM. Center is reinforced with steel wire mesh. Vermin-proof, termite-proof. Will not shrink or warp.
France Honors
U. S. Architects

The French Government has made 19 awards to American architects whose work was entered in a photographic exhibition of American architecture in the United States Pavilion at the Paris International Exposition of 1937. The awards, originally recommended by an international jury, were recently given final governmental approval, according to word received by Julian Clarence Levi, New York, chairman of the A.I.A. Committee on Foreign Relations, which organized the exhibition.

In industrial and commercial architecture, two grand prizes went to the New York architectural firms of Reinhard & Hofmeister, and Shreve, Lamb & Harmon. Reinhard & Hofmeister were honored for their participation in the design of Rockefeller Center, and Shreve, Lamb & Harmon for the design of the Empire State building.

Diplomas of honor in this field were won by Voorhees, Gmelin, & Walker of New York for the design of the Irving Trust building, New York, and to the Weyerhaeuser Timber Company for the Everett Pulp Mills, Everett, Wash.

Albert Kahn, Detroit, Mich., and Gordon B. Kaufmann, Los Angeles, each received a gold medal. Kahn exhibited photographs of the W. W. J. Radio Station, Detroit, the Upjohn office building, and several factories. Kaufmann is designer of the Times-Mirror building in Los Angeles.

Silver medals were awarded to Hohlscheid & Root, Chicago, who exhibited photographs of the North Dakota State Capitol at Bismarck, the A. C. Smith Building in Milwaukee, and the Racine County Court House, Racine, Wis.; Howe & Lescze, New York, for the Philadelphia Savings Fund building; and Foulhous, Howells, and Hood, New York, who exhibited photographs of the News Building and the Rockefeller apartments, New York City.

The awards in residential architecture and the exhibits entered were as follows:


Gold medal—Treasor and Fatio, New York, the J. Makoff residence in Palm Beach, Fla.

Silver medal—Harris Armstrong of Webster Groves, Mo., office of Dr. Leo Shanley; George Howe of New York, the Wasserman residence in Philadelphia.


A silver medal in sports buildings and housing development went to Karcher & Smith, Philadelphia, designer of the field house at Swarthmore College. Bronze medals in this category were given to Allen & Webster, Chicago, for the Beloit Stadium, Beloit, Wis.; Gordon B. Kaufmann, Los Angeles, for the grandstand and club house at Santa Anita Park, Arcadia, Calif.; and Kastner, Stonorov & Barney, for the Juniata Housing in Philadelphia.

The Grand Prix in Public Building Architecture was awarded to Paul Lester Wiener, who designed the United States Government Building at the exposition in collaboration with Charles Higgins and Julian Clarence Levi, all of New York.

Dukelski Critique
Talbot F. Hamlin has advised us an analysis of Alexis Dukelski's Fourth Prize Design in the Wheaton College Competition was not consciously omitted from our September issue, and will appear in November. He asks Dukelski's patience, meanwhile.
Here's a product—Perforated Rocklath*—with which you can translate your clients' ideas to walls and ceilings of wide beauty. And because it holds plaster easily, it makes and holds the dream of clients for years after the job is completed. First, a WELDED metal lath is placed on the surface of sheets of Gypsum Plaster; second, it takes a RIVETED grip, formed as plaster is forced through its regularly spaced perforations to form "mechanical bond." There's nothing in Perforated Rocklath to bleed through and stain the decorated surface. Cracks are minimized because plaster clings tightly to the metal lath; as plaster is forced through its regularly spaced perforations to form "mechanical bond." Perforated Rocklath is not high in cost; in fact, it sells for little, if any, more than the cheapest kind of old-fashioned plaster lath.

Here's a product—Perforated Rocklath*—with which you can translate your clients' ideas to walls and ceilings of wide beauty. And because it holds plaster easily, it makes and holds the dream of clients for years after the job is completed. First, a WELDED metal lath is placed on the surface of sheets of Gypsum Plaster; second, it takes a RIVETED grip, formed as plaster is forced through its regularly spaced perforations to form "mechanical bond." There's nothing in Perforated Rocklath to bleed through and stain the decorated surface. Cracks are minimized because plaster clings tightly to the metal lath; as plaster is forced through its regularly spaced perforations to form "mechanical bond." Perforated Rocklath is not high in cost; in fact, it sells for little, if any, more than the cheapest kind of old-fashioned plaster lath.

Now available to help you increase remodeling and repair sales

THE USG MONTHLY-PAYMENT PLAN

can be used to finance all types of remodeling—regardless of the USG materials used on an individual job. Write for complete details.

For more facts about Perforated Rocklath, send in the coupon below

United States Gypsum Company
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Chicago, Illinois

PLASTERS - ROCKLATH* - METAL LATH SHEETROCK* - FIBER WALLBOARD SHEATHING - INSULATING BOARD INSULATING WOOL - ACOUSTICAL MATERIALS - PAINT PRODUCTS - STEEL PRODUCTS - ROOFING PRODUCTS - LIME PRODUCTS

*Registered trade-marks

United States Gypsum Company
200 West Adams Street, Chicago, Illinois
Please send information on Perforated Rocklath.

Name:
Address:
City:

PF-18
Keach Ponders
Office Amenities

As notable a feature as may be isolated in this dull season is PWA's insistence on getting its jobs started quickly, even by letting separate foundation contracts. The disillusioned observer takes cognizance of coming elections and the propaganda value afforded by flashing all this made-employment on a grateful public, just before voting day. From my observation, Boston architects are by no means sure that the theory behind those three letters is a good one, but they are practical enough to get what they can out of their opportunities. After being knocked round at sufficient length a fellow loses his zest for a martyrdom to ideals which are only political, and have never been substantiated by direct revelation.

A knack for self-preservation, through control of useful institutions, is also exemplified by local building trades. For a decade, the older men among such as the bricklayers and stone masons are said to have closed their crafts to apprentices, excepting sons of members. Thus, in an era of little work, the ancients duck competition with the young and presumably vigorous, but what of the future? If ever again we get to booming, sud-

The small house sketched here by T. Johnson was designed by Milton L. Griggs, Architect, for construction at Charlottesville, Virginia, where families renting upstairs rooms to university students are said to favor an outside stair.

den-like, impatient clients may force us to eschew bricks and stones in favor of new materials.

Everybody will concede that apprenticeship is necessary where machines do not take full responsibility and reduce handwork to a mere rhythmic routine; but in a free-for-all like Architecture, with no centralized maintenance of standards, anyone may grow a goatee and proclaim himself.

(Continued on page 43)
600 Visitors A Week

...And One Thing They Always Notice
Is The Clean Hard Maple Floors!

*To be sure of Association guaranteed grading, specify and look for the MFMA trademark (indented and stamped). The following manufacturers are licensed to use it:

- Beck, August Co., Milwaukee, Wis.
- Bruce, E. L. Co., Memphis, Tenn.
- (Mill at Reed City, Mich.)
- Connor Lumber & Land Co., Laona, Wis.
- (Sales Office, Marshall, Wis.)
- Farrin Lumber Co., M. B., Cincinnati, O.
- Holt Hardwood Co., Oconto, Wis.
- Kerry & Hanson Flooring Co., Grayling, Mich.
- Kneeland-Bigelow Co., Bay City, Mich.
- North Branch Flooring Co., Chicago, Ill.
- Oval Wood Dish Corp., Tupper Lake, N. Y.
- Robbins Flooring Co., Rhinelander, Wis.
- Yawkey-Bissell Lumber Co., White Lake, Wis.

Mr. Davidson says:
"Hard Maple is by far the most economical floor to service and keep in good appearance. About 120 women visit our bakery every day and one thing they always notice is the hardwood floor. They know that hardwood floors in a home are the very best, and they realize the Hard Maple floor means we take pride in our bakery."

Bakery floors are bought for cleanliness and economy—not for advertising value. But when you pick Northern Hard Maple, you get both.

For Hard Maple's smooth surface holds no dust, offers natural sanitation. To visitors, its spic-and-span appearance plainly says, "This plant is clean!" Employees, too, appreciate Maple. Warm, dry, easy to work on, it reduces fatigue, increases efficiency.

And for economy, Hard Maple has no equal. Like bakeries, countless factories have proved its remarkable resistance to abrasion and indentation; it does not sliver, splinter, or develop ridges through the years. Hard Maple creates no dust, simplifies alterations, anchors machinery firmly—is simple and inexpensive to maintain—and, properly finished, is cleaned by brushing alone.

Before building or remodeling, investigate this most logical service flooring. And when you buy, be sure it's MFMA® Northern Hard Maple (the Association-guaranteed Maple)—available in strips or blocks.

Floor with MFMA Maple
(NORTHERN HARD)
How Old is Plywood?

In the interest of preserving a complete record of events which eventually will take their place in art and architectural histories, Dr. Nikolaus Pevsner recently contributed a provocative article to the English Architectural Review, in which he asked, "Who knows when laminated plywood was invented?" and "Where was it first used in cabinet work?"

Dr. Pevsner remarked that the earliest use of plywood in cabinet work that has come to his attention was the use of % inch veneers in 1898 by Karl Schmidt and J. V. Cassarz, near Dresden. Any information on this subject will be welcomed by PENCIL POINTS.

Unknown Winner

We are indebted to Carl F. Brauer, New York architect who was one of the winners in the recent Wheaton College Competition, for the following note on an inadvertent fiction: "In Professor Hamlin's article on Competitions in the September issue of PENCIL POINTS the names Brauer, Priestley and Rodgers seem to have acquired the form Brauer, Lindsay and Rogers. Could you please point out to our 'public' that the names under the reproduction were correct, those in the article itself, not?"

Attire of draftsmen in the office of August Geiger, Architect, on pretensions Lincoln Road, Miami Beach, displays an insistence on comfort compatible with the office appointments (note tilted spittoon) if not the address. Jim Church and Ed Sakrison, pictured by S. M. Whitney while working well below fever heat, want to know if draftsmen elsewhere can compete with their workroom mode

Los Angeles Letter

Among the "firsts" and "unusuals" that characterize Los Angeles and Southern California, to the East, mention should certainly be made of the consistency with which architectural prizes are carried off by the profession here. In most of the national competitions a Southern Californian is sure to emerge near the top, while in the residential field the programs have been particularly congenial to our talents. Things have actually come to such a pass that an architect to be anybody at all must have won an honor or two—or else his clients will be forced into bitter silence while Mrs. Fudger and Mrs. Chappellett talk about what their architects, Roland Coate and Roy Kelley, have done.

Of course, some of the distinctions bestowed upon the profession are of more note than others. At the September meeting of the Southern California Chapter of the A.I.A. Gordon Kaufmann was presented with his Certificate of Fellowship in The Institute. Myron Hunt, in making the presentation, stated that word had just been received that Mr. Kaufmann had been given both a Gold and a Bronze Medal in the Paris Exposition of 1937. Mr. Kaufmann acknowledged the help of (Continued on page 44)
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PAUL PHILIPPE CRET whose career as Architect and Educator has had a far-reaching influence on his times and won him the respect and admiration of architect and cultivated layman alike. His four partners, to whom he attributes much credit for such merit as is found in the firm's work, are shown below in characteristic conference in the office library. Reading from left to right they are Roy F. Larson, William J. H. Hough, William H. Livingston, and John F. Harbeson.
There is reason to believe that when the history of architecture in America is finally summed up the name of Paul Philippe Cret will be prominently included. For surely, among his generation, he is one of the acknowledged leaders. The evidence of his executed works leaves no question as to his exceptional skill as designer. The evidence of successes registered by scores of his former pupils now in practice points to his high ability as educator. The recognition he has received in the form of honors and awards bestowed by lay and professional bodies attests to the quality of his citizenship and service to his fellow man. No lily-gilding words of praise are necessary to prove to this audience that he is, to paraphrase a locution frequently heard in Boston, an architect of the first water and the deepest dye.

The equipment Cret brought to the United States from France and the Ecole in 1903 included a rather thorough acquaintance with the historic background of architecture and the design philosophy and technique then current. (This scholarship he has since persistently and steadily added to.) It included a clear, logical mind and the disposition to accept its conclusions. It included a passionate urge to seek and find and create order and beauty—an order and beauty determined by his particular brand of that complex known as taste. And in his case the taste, let us agree, was excellent.

Upon these foundations he has built, during a practice of thirty-odd years, tempering his initial eclecticism with more and more of personal creativeness as he matured, achieving progress by seeking "continual slight novelty" rather than revolutionary originality. True originality in art, he feels, is arrived at only by the mature artist and is much over-rated as an immediate goal for the young. "Hitch your wagon to the star of Beauty," he says in effect, "and whatever you may have of originality will not wither through contact with what others have done before you." His works prove his words.

Cret has two habits of working that mark him as different from most other practitioners. These peculiarities have been commented on elsewhere but it may be worthwhile to recall them now. The first is to visualize his buildings during design principally in terms of their sections. Many designers, in their mind's eye, see things in perspective as they work out the plans and elevations, but Cret sees straight through the walls. He once said "A good plan is one from which may rise good rooms in a good sequence; its test, therefore, lies in the sections resulting from its lines. The sections are the diagram of the whole composition, and ought to be its source."

The second noteworthy habit that prevails in Cret's office is that of studying detail completely with full size drawings rendered in charcoal. Many architects do this but few to the extent insisted upon by Cret. It is said that few F.S.D.'s have ever gone out of the establishment without his own hand having worked over them, refining profiles and modeling forms so that nothing is left to chance. The photographs that follow show the results of this consistent study.

In a world as generally troubled as ours, man prizes his moments of peace and tranquility. The architectural world, too, is troubled with doubts and fears, and the din of conflicting theories about design is often confusingly loud. In the midst of it all, it is refreshing and reassuring to come upon one man who maintains his serene conviction that the quest for beauty must not be abandoned in pursuit of fashion; who has faith that architecture performs functions beyond and above the material—functions which it is the architect's duty to recognize and take into account.

Such a man is Paul Cret, quietly going his own way, genuinely interested in what others are doing with their experiments in searching for new forms and ready to applaud when they push ahead the frontiers and extend the possibilities of architectural expression, yet for himself not sharing their restlessness. He still believes there is a deal of beauty to be discovered within the realms of symmetry.
The Rodin Museum, Philadelphia, Paul Cret and Jacques Greber, Associated Architects, 1928

Art School for the John Herron Art Institute, Indianapolis. Designed by Cret in 1928

The Barney Foundation Museum in Philadelphia, done in 1923

The Pan-American Union in Washington; done in association with Albert Kelsey in 1908

Courtyard of the famous Detroit Institute of Arts. Zanzinger, Borie, and Medary associated with Cret on this project in 1922
The Washington, D. C., Heating Plant Cret did in 1933 was greatly admired for its good proportions.

Cret contributed to the interest of the Century of Progress, 1933, by designing the Hall of Science.

Just completed at West Point are a new Academic Building, a new Barracks, and an extension to the Gymnasium, designed by Cret. Photo shows Gym end.
Cret was Consulting Architect for the University of Texas in connection with its plan for future development. The Library shown opposite is on the principal axis hereabove.
A view of the Union Building and an interior detail of the Hogg Auditorium, both at the University of Texas and both built in 1932. Cret was Consulting Architect on these buildings while Robert Leon White was the Architect of Record. The clients desired something with a Spanish flavor in all these Texas buildings but, though the Spanish influence is unquestionably there, it has been filtered through Cret's personal feeling for fitness and harmony.
The courtyard of the Architectural Building of the University of Texas has, since 1931, shed its quiet influence for good taste upon the students of the school. Cret had a definite hand in creating this influence for he acted as Consulting Architect, working with Architects Green, LaRoche, and Dahl. The building is of Texas stone—Cordova shell walls with Cordova trim.
Three others of the Texas University group built in 1931 are the Physics Building (top), and the Geology and Home Economics buildings (left and right below). Green, LaRoche, and Dahl were again the Architects with Mr. Cret as Consulting Architect. While the details are clearly based on Spanish precedent, the buildings are designed for contemporary use to house the activities of a modern university.
Cret has designed several federal court house buildings in recent years, including this one in Fort Worth, Texas, which dates from 1932. It is a combined Post Office and Court House. Wiley G. Clarkson was associated with Cret on this project of graceful and delicate dignity.
The Hartford County Building, the commission for which Cret won in association with Smith & Bassette in competition in 1926, adheres more closely to the classic than some of his later public buildings. Yet it has a freshness and personal quality that marks it as Cret’s own. Quite definitely it states a theme later elaborated upon in such compositions as the Folger Library, the Fort Worth Court House, or the Federal Reserve Board Building. Both the song and the variations are possessed of distinctive beauty.
Not so obviously Cret's, yet showing evidence of his logic and good taste, are the train interiors he has done in recent years. Here is the "Cocktail Tavern" of the Reading Crusader, placed in service last year. It is at once efficiently commodious and aesthetically satisfying.
A dining car for the Pennsylvania Railroad, done in 1938; an observation car for the Burlington “Denver Zephyr,” dated 1936; and a streamlined locomotive and train for the Reading Lines (1937)
The attractive Cocktail Lounge in the Santa Fe "Super-Chief" and a coach for the Burlington "Denver Zephyr" were added to Cret's list of accomplishments in 1936. The client for all trains shown here was the Edward G. Budd Manufacturing Company.
The Federal Reserve Board Building in Washington has won plenty of applause for designer Cret. Here are shown a view in the court, a detail of the Constitution Avenue façade, and one of the lamps at C St. entrance.
GARDEN DETAIL, FEDERAL RESERVE BOARD BUILDING, WASHINGTON, 1937

PAUL P. CRET
MASTER OF DESIGN
The Staff Dining Room in the Federal Reserve Board Building and a view of the stair well. Every detail of the building is beautifully studied.
No presentation of Cret's work would be completely representative if it left out the familiar but ever lovely Folger Shakespeare Library for which he was the Architect with Alexander Trowbridge acting as Consulting Architect. To the left is seen the Exhibition Hall and, below, the façade on Second Street.
The Capitol Street side of the Folger Library is no less exquisite in proportions and detail. Since it was built, in 1930, this building has grown in public esteem and is generally held to be one of the finest pieces of design in Washington. The Great Hall of the Library is shown at the right.
The Anchorage of the Delaware River Bridge (1921-26) at Philadelphia and a view of the Klingle Valley Bridge in Washington, built in 1931
The Henry Avenue Bridge in Philadelphia, gracefully spanning Wissahickon Creek, was built in 1930. Cret was the Architect and Modjeski, Masters, and Chase were the Engineers. The main arch ring is of warm gray Pennsylvania sandstone with a cool gray Chestnut Hill stone above up to the road level. The parapet is of Indiana limestone. The whole effect is harmonious.
Cret was Architect for the Tacony-Palmyra Bridge, Philadelphia (1929), and the Market St. Bridge, Harrisburg (1925)
One of Cret's most satisfying bridge designs was done to carry Washington's Calvert Street over Rock Creek Parkway. Modjeski, Masters, and Case were the Engineers in this instance—the date, 1933. The two bridges opposite were by Modjeski, Masters, & Chase.
In 1932, Cret did the Federal Reserve Bank in Philadelphia—a beautifully detailed job with just the right blending of quiet dignity and opulence to fit the institution. The finely sculptured panels by the sculptor, A. Bottiau, and the splendidly executed ornamental gate shown opposite are typical of the quality of craftsmanship found throughout all work from Cret’s office.
DETAIL OF BRONZE GATE, FEDERAL RESERVE BANK, PHILADELPHIA

PAUL P. CRET
MASTER OF DESIGN
Cret's residence work is not widely known though he has done a number of noteworthy houses. Among them is the Clarence H. Geist house at Villanova, Pa. (above) and houses for T. C. Slaefter at Haverford and Vance C. McCormick near Harrisburg (left and right below). An interesting departure from the conventional is a remodeled studio for the artist, Earl Horter, which was done in the contemporary modern manner.
MANTEL DETAIL IN EARL HORTER'S STUDIO, PHILADELPHIA

PAUL P. CRET
MASTER OF DESIGN
The Pennsylvania Battle Monument at Varennes, France, the United States Cemetery and Chapel at Watreghem, Belgium, and the American Memorial at Chateau Thierry are shown in order on this page, top to bottom.
The American Battle Monument at Bellicourt, the American War Memorial at Gibraltar, and the Peace Memorial recently completed at Gettysburg are all distinguished examples of Cret's sense of fitness and simple dignity. He has been Consulting Architect to the American Battle Monuments Commission since 1925. T. H. Atherton was associated with Mr. Cret on the Varennes Monument. Lee Lawrie was the Sculptor for the Gettysburg Memorial and A. Bottian for Chateau Thierry and Bellicourt.
The architect can contribute something to the appearance of such engineering structures as dams and Mr. Cret's touch is applied here with excellent effect as consultant for the United States Army Engineer Office at Pittsburgh. The Emsworth Dam for the Ohio River (above and at right), the Tygart River Reservoir Dam at Grafton, West Virginia, and the Montgomery Dam on the Ohio are examples of ameliorated functionalism.
Landscape design falls somewhere between architecture and sculpture. Relieved of most structural and use requirements in the architectural sense, it is less purely aesthetic than sculpture because of circulation requirements. In reality, it is outdoor sculpture, not to be looked at as an object, but designed to surround us in a pleasant sense of space relations. It differs from both architecture and sculpture in several important respects:

1. Materials, for the most part, are living and growing.

2. Horizontal dimension is usually much greater in relation to the vertical, a fact that increases the difficulty in getting a sense of volume and third dimension.

3. Scale, determined by the sky and surrounding country, is necessarily larger.

4. A sense of form is more difficult to achieve because of the looseness and instability

Aesthetic division of space imparts distinction to the garden plan, at left, by the author, who seeks to preserve in materials abstract relations such as those expressed in Picasso's "Figure," below, reproduced from "Cubism and Abstract Art" by courtesy of the Museum of Modern Art, New York City.
Recognizable continuity of the contemporary style, from pattern to architecture to landscape, is exemplified in two more illustrations from "Cubism and Abstract Art," reproduced through courtesy of the Museum of Modern Art. They are "Russian Dance" by Doesburg, top, and a house plan by Architect Miès van der Rohe of growing material used in garden design.

In building or sculpture, shape, height, and scale are determined once and for all by non-changing elements. The variables in landscape—sky, topography, and materials—make it a subtle art, and worthy of specialized study.

II

We are told that industrial design and "so-called" modern architecture came about through the discovery of new materials and methods of construction, but that landscape design cannot change because materials and methods have not changed. We have found our final resting place. Our grave is on axis in a Beaux Arts cemetery. A monument terminates the vista, and if you approach with reverence, you can see the tombstone authority has placed there: "A tree is a tree, and always will be a tree; therefore we can have no modern landscape design."

Painting has had no noticeable change in materials, yet how a Beaux Artist must scratch his head when he compares Picasso with Leonardo.

Sculpture seems to have undergone at least a minor revolution if you compare Brancusi and Cellini, although similar materials have been at the disposal of both.

Music achieves the most startling renovation of modern times, yet the same nine notes used by Bach are used by Stravinsky. Let us not consider what might have happened to

Arrangement without rigidity is characteristic of both the garden designed by Rose, photographed at left from the terrace of a model, and Gabo's "Construction Sphérique" reproduced from "Modern Plastic Art," by courtesy of Dr. H. Girsberger, Zürich
The rhythm of trees and free-standing piers recalls Stone Henge, reproduced above from "The Circle," by courtesy by Dr. Walter Gropius, and "Les Peupliers" from "On Drawing and Painting Trees" by Adrian Hill, by courtesy of the Pitman Publishing Corporation. Landscape design if it had been limited to nine elements as constant as a note in music.

Perhaps the dance is the best single example of change in expression without change in material. The Ballet Russe quite obviously differs from the Greek chorus or the toe dancing of the '90's, and the human body is the only important element ever used by dancers. That must be as steadfast as a tree.

III

These changes in approach—and we can trace them everywhere from industrial design to poetry—have evolved whether or not the development of materials or methods applied directly to them. They are not changes in degree; they are not the attempt of the new generation to be different. We are told that the principles of the Renaissance are the A, B, C of design, and that we must learn the alphabet before we may talk in good company. Another beautiful bromide—but, unfortunately, to learn the Renaissance alphabet in design has about the same value as to learn the Greek alphabet if we wish to speak English. No question but that it is a scholarly thing to do, and has an historical interest; but just as we cannot assume that a professor of Greek could write a better play than Noel Coward, we cannot assume that a foundation of classic design will better equip us to do modern.

Contemporary design represents a change in kind, a change in conception, the expression of a new mentality we have derived from the effects of the industrial and economic revolutions. These revolutions have the significance for our civilization that the discoveries of Galileo, Copernicus, and Magellan had for the Renaissance. They have put a transparent but impenetrable screen between us and the past, and we find ourselves in a new mental atmosphere. We can appreciate Gothic cathedrals and Renaissance palaces, but we can no longer produce them because we have been cut off from their source of inspiration. History has no value for us unless we learn this first. The only direct stimulus we can get from the past is an understanding of how the social and psychological influences led a particular...
Reflections in the pool, top, and perspectives from the summer house, at once a structure for vines and for shelter, were all carefully studied from every viewpoint civilization to arrive at its peculiar expressions. We should do the same for our own civilization and seek to express it.

IV

Style evolves naturally from the subjective influences of the social order in which we live; fashion is the superficial manipulation of any style to produce variations that have momentary appeal. To determine the essential elements of the contemporary style, we can do no better than turn to the abstractionists. They are the great experimenters in art as Einstein and Millikan are in science. Their work is invaluable. Dissociated from context, we can see the new mentality in the raw.

The constructivists probably have the most to offer landscape design because their work deals with space relations in volume. The sense of transparency, and of visibility broken by a succession of planes, as found in their constructions, if translated into terms of outdoor material, would be an approach sufficient in itself to free us from the limitation imposed by the axial system. If you wish to consider any line of sight an axis, then you have an infinite number of axes in a garden or anywhere else, and so it should be. By selecting one or two axes and developing a picture from a given station point, we are losing an infinity of opportunities. The axial approach merely harks back to the elegant façade and two-dimensional design of the sixteenth century. Such elegance fitted the society of Louis XIV, but has no relation to our own. We no longer design buildings like Mansard. Why should we design gardens or even world fairs like Le Nôtre? No one would think of furnishing a room on the principle of the axis. You do not expect to stand at one end and find an aesthetic composition at the other. You want a sense of proper division and interest from any point. So with gardens: it is fundamentally wrong to begin with axes or shapes in plan; ground forms evolve from a division of space.

V

The Beaux Arts system—and it seems incredible that practically every landscape school in the country is bound by it—has an amazing scorn for plants. They seem to be totally dissociated from design, and a knowledge of them a matter of indifference. Plants, rock, earth, and water are the major materials of landscape; to ignore any one of them limits the possibilities. Now they are stuck in a "design" at the last minute to provide enclosure or frame a "picture," but they are seldom used for their own sake. From Brancusi we can learn the importance of qualities inherent in a material; material gives the quality to a design. Warmth, charm, and intimacy come from materials. The popular belief that the contemporary style is necessarily cold and impersonal betrays an ignorance of the style and scant feeling for the use of materials. We can use anything from adobe brick to concrete and steel, and can therefore expect all the attributes of former styles in addition to the freedom that comes with self-expression.

Plants are to the landscape designer what words are to the conversationalist. Anyone can use words. Anyone can use plants; but the fastidious will make them sparkle with aptness. At Versailles, one finds hedges and trees clipped to fit the design. The whole scheme represents that point of view which we have discarded. It belongs to the period that crowded rooms into an H-shaped plan. The
contemporary landscape would require the honest use of materials and the expression of their inherent qualities.

VI

The romantic period attempted to correct the fallacy of imposed academic principles, but failed in the graphic arts because its roots were in literature and sentiment rather than form and arrangement. This single failure has been the constant war cry of the classicists against any departure from their conviction of the absolute. The informal movement, essentially destructive, offered no satisfactory alternative to the order it replaced. Informal came to mean "formless" and proved as incompatible with the evolutionary state of man as the "back to nature" philosophy of Rousseau.

Anything that has not the quality of form is amorphous and meaningless. When man arranges nature or nature arrives at an arrangement perceptible to man, the thing acquires form and meaning. The arrangement may be pleasing or ugly, it may be loose or stiff, it may be symmetrical or unsymmetrical, but if the arrangement is perceptible, it possesses the quality of form, and to that extent is "formal." Informality does not exist for us except as an effect coming from the looseness and freedom in the use of form; the "leave nature alone" attitude is complete childish romanticism, and, more important, an impossibility.

Conclusion

No absolute exists in design any more than it does in nature. It is human, perhaps, to cling to a life line, but we only do so when we are afraid. Landscape schools from New York to California cling to the Beaux Arts system, and fight because their existence is threatened. Words are of no use. Fear dissolves the intelligence and blocks the vision. These conventional instructors not only look where we look and do not see what we see, but they say what we say and do not mean what we mean.
Four themes have been effectively handled by Drix Duryea, Inc., in the large Photo Murals used in decoration of the four entrance foyers of The Chelsea Gardens Apartments in New York City, for which J. M. Felson was the architect. Old prints of the city and views of mountain peaks were photographed for these
The imaginative and prophetic drawings of Hugh Ferriss, whose studies for Cities of Tomorrow have advanced a Futuristic Style, were photographed for the walls of a third foyer in The Chelsea Gardens Apartments, while pictures of New York structures of Today adorn the fourth, not shown. Ceilings are 9 feet high.
AN AXIOM is said by the dictionary to be "A self-evident truth," "A proposition whose truth is so evident that no demonstration can make it plainer"; and in our callow youth we have all assented because of the plausibility of the examples put before us. Our geometry books—where axioms most abound—said, "A straight line is the shortest distance between two points," and, "The whole is greater than any of its parts," etc. These seemed reasonable to the dullest of us and we were encouraged to find that geometry (that big word) was not going to be so bad after all.

With arithmetic, the same. The most truculent radical in the class found nothing to object to in, "Two and two makes four." It was all much easier than we had expected.

Leaving the axioms of mathematics, we came to the humanities and their aphorisms. These, in turn, were undisturbing and we were willing again to concede them a certain plausibility. The Golden Rule probably had a case, and such a Sunday School maxim as, "Honesty is the best policy," was not without its secret supporters.

Perhaps these moral maxims did not have quite the same gilt-edged rating with us as the old one about the straight line and the two points. These had a flabby quality lacking the bite of, "The whole is greater than any of its parts," and it did not occur to us until much later that the reason was, they were treating of human affairs where logic was no longer admissible. We had left the logic of Euclid for the unpredictable reactions of life. At any rate, we found ourselves provided with a lot of ready-made slogans to guide our footsteps along the paths of science and morality. It was only later that we were surprised to find that both the scientists and humanists had a tendency to extend their authority into the arts.

One would suppose that the arts occupied a wide enough field and were of sufficient singularity to need a special body of laws of their own. But no! Enthusiasts in science and ethics and, for that matter, literature, have always been quite sure that their particular formulas will also fit and govern the arts nicely.

Now, without going into the troublesome question of "what is art," we may at least agree that the history of art is, in its essence, the history of man's culture, and that the artistic expression of any period has always been a very accurate mirror of the contemporary state of that civilization, if not indeed a prophetic finger pointing the direction in which it is moving. A people's past influences the artistic output of the present which in turn reflects the contemporary social forces. If the artistic output is feeble, groping, and without conviction, it is not less but more expressive of the time. But, just as it would be without significance for an artist to revert to a period not his own, so it would be fatuous for him to allow himself to be guided in his work by canons made for the guidance of science, ethics, or literature. It is this latter confusion that causes so much misunderstanding in the artistic world.

There are those who, forgetting that they are not in the pulpit, talk about truth and falsehood in discussing pure design, thus mixing art and morals. "Bad morals make bad art" was a simple equation put out by Ruskin—and thus they thrust upon art, an innocent bystander, the odiun theologicum.

We all know there is no use arguing about taste. Yet there are those of a critical turn who cannot forbear laying down rules regarding it. Moral judgments assume an aesthetic validity and the puritan critic does not hesitate to instruct the architect in his work and the artist at his easel. He informs the architect that in his work truth alone is admissable, that form follows function, that there shall be no sham, etc. He informs the painter as to his subject, how it should be treated, and finally pronounces it good or bad on a summing up of moral values. As for his architectural virtues, the whole history of architecture from the Egyptian temples to the New York Fair has thrived on sham and pretense and "form" has too often been quite willful about following "function."

Another artistic axiom supplied gratuit-
tously by these ethical critics is, "Architecture is good construction truthfully expressed." Now, no doubt good construction is the highest virtue to the specification writer and is certainly expected by the building committee, but unfortunately it is not always found as a part of good architecture. If it were engineering we were talking about, "good construction" would indeed be necessary: it would, in fact, almost constitute engineering—but not architecture.

Indeed, it is a question if the best Gothic architecture of the 13th century as exemplified in the great cathedrals can be called good construction. In spite of the extraordinary cleverness in pushing to its extreme limits the balancing of the dynamic forces of thrust and counter-thrust necessary to hold the stone vaulting in place, the results were certainly questionable as to their being good construction. A ceiling that requires such an elaborate tour de force as a series of exterior props—the flying buttresses—to keep it from collapsing would seem to be exceeding the proper limits of its material. One may be too clever. These builders were indeed fortunate—and it was only a happy chance—to have at their disposal all the arts and crafts in their fullest flower, ready to enrich and overlay their extraordinary skeleton. The happy result of their union was a glorious architecture.

The same question may be raised against the classic work, notably in the case of the Doric order with its great supporting columns far in excess of any structural demand. And we should not fail to note, in passing, the necessary aesthetic requirements of great architecture which may actually conflict with the exact needs of good construction. These may even call for bad construction in the sense that over-strength is as much an engineering fault as under-strength. So the fulfillment of proper engineering requirements for exact strength may give less bulk than required for aesthetic satisfaction. If economy of means is stretched here to please the eye, if form exaggerates function, it may be "poor construction" but no sin against architectonics. A support shall not only be strong enough for the work it is called upon to do, but it must look strong enough. That is why it is so unpleasant to see a granite building supported on a sheet of plate glass. A big mass calls for a big support. Perhaps the world will sometime become so used to steel construction that it will learn to evaluate the slender steel shaft in terms of the old stone pillar and the aesthetic sense will be completely satisfied. Today we have not come so far and the sin of fattening the steel column with lath and plaster should be forgiven if the beholder is otherwise troubled. As old Henry Wotton said, "delight" is one of the conditions of worthy architecture, perhaps the chief condition, and must be had, whatever the price. Our modern young architect, with his "machine for living" of glass and concrete, smiles with tolerance at this, as an old-fashioned notion perhaps; but is it not the real difference between architecture and engineering?

There is another bit of architectural guile, another bit of benevolent deception affecting good construction that might well trouble the moralists; namely, that of the refinements introduced into building by the Greeks and perhaps by the mediaeval men in an attempt to correct certain optical illusions to the end that the effect on the spectator should be nearer what the architect intended.

The Renaissance men tried for the same thing in their use of false perspective, as in St. Peter's colonnade and, in more naïve fashion, in their painted gardens and architecture on the walls of their courtyards.

All this deception, if we choose to call it that, may be bad morals but is unquestionably an expression of the highest function of art in that here things are made slightly wrong that they may appear more convincingly right. This transmutation is the chiefest function of all art. It is the plus quality that the artist brings to fact. It is a fine example of the end justifying the means—but not of the axiom about truth in building. Honesty is not the best policy.

The utilitarians have another slight variant on "good construction means good architecture," a bolder claim in which their interest in sound work and no nonsense makes the further assertion that good construction alone means, ipso facto, beauty in the result. Of course if we follow this idea far enough we reach the logical conclusion—and patent absurdity—that we must finally award the palm to such things as printing presses, locomotives, and warehouses—things in which use only is thought of. This would be to say that there is no such thing as beauty in building, only utility; no designers, only engineers; no charm, only honesty. Ornament, color, and handsome material would be unknown, for good construction alone would never use marble, carving, or ornament.

As for trying to attach odium to sham and pretense in architecture, it will hardly stick. They have been freely indulged in at all times and in all styles without shame because the people, who are the final judges in such mat-
ters, do not object to either. In the light of history we may even say they like it.

It takes various forms but they follow a common pattern. In Egypt, the builders of the best period made the granite cornices of their temples in imitation of the dilapidated mud walls of simple huts. These walls were made of vertical reeds plastered with Nile mud. With time, the mud fell away and the reeds fell over, making a sort of great cavetto moulding. It was this ruined mud wall that the stone masons choose to copy in granite for their great buildings! What a failure in adaptability! What a lack of originality! What a superb result!

We have the Greeks’ whole system of temple building imitating in stone all the several parts of the earlier wooden buildings, if not in marble then in stucco to imitate marble—a double sin. What a sham! What a paucity of ideas! What a triumph!

With the Romans, the same: the false use of structural members as applied decoration, the deceit in covering over their concrete with a veneer of marble. How vulgar! How shoddy! How splendid!

Again, in the Renaissance we have the great stone domes saved from collapsing, not by any such frank expedient as the Gothic men used, but by being bound by secret iron chains; and stone arches and vaults dependent on their iron tie rods to hold them in place.

The same everywhere. Witness St. Paul’s in London with its lying façades and a result that all the world admires.

And the higgledy-piggledy English country houses, the most hopeless list of architectural sins and the most charming houses in the world. Their wilful unpremeditated precursor of the struggle in our modern style for the casual and studied neglect of architectural tonics. But, unlike the modern work, it was never carefully capricious as in Germany, nor an intellectualizing of the picturesque as in the Baroque.

And to come nearer home in our search for transgressions against artistic integrity, what of the half-timber villas beloved of the bride and the speculative builder scattered over our suburbs? The artificial stone, the asbestos shingle, the make-believe brick, all combine to produce an imitation of rugged simplicity and picturesqueness.

None of these things troubles the public, in spite of the rules and regulations for good architecture worked out for them by the cognoscenti. And why should they, when the rules are unknown and the aberrations hidden. In any case they would not care a button about the whole matter. To the man in the street, ignorance is bliss and architecture is good if he likes it. Otherwise, otherwise.

Is it possible that the modern architect himself spends so much time mastering the rules and in being quite sure his work is correct that as a result it is nothing else? Does this account for the bitter jibe that there has been no good architecture since there have been architects?

Why should the modern men, for instance, be so slavish in their copying of the “Colonial” style? The builders were a lot of 18th century Yankee carpenters experimenting with Georgian work and whose chief virtue was that they were not at all interested in getting it “right.”

But enough of the moralists and their preaching. There are also the scientists eager to aid art with their mechanical formulas for producing correct proportions in design by the use of logarithms and slide rules; forgetting in their turn that there is no common ground here, and that art and science are opposite facets of the human mind to be forever kept apart. For if they are allowed to encroach on each other the result is sure to be epicine and futile. When art is subjected to science it is stiffened and blighted, and when science allows art to take a hand it becomes flaccid and inept. Art, science, and morality can never be at ease in each other’s company.

It is hard for the professors to remember that art is made for the people and not the people for art; that a picture is as good as it looks. “Looks” is all it was painted for and it has no more concern with right and wrong than a sunset. If the crowd insists, in spite of its instructions, in admiring the wrong picture, then it is the right picture. Pictures are not painted for the pedants but for the people who “know nothing about art but know what they like.” The greatest pictures are those admired by the most people.

Aside from technical studio tricks, no artist is worth anything who bothers about rules. The real artist knows nothing is right, nothing is wrong—that art is a sort of ectoplasm thrown off by certain men as naturally as they sweat and with as little relation to any intellectual process. An artist is a poor emotional creature who, with a pencil in his hand and visions swarming through his brain, puts down what pleases him, careless of those who find fault and would set him right. As Maugham has said, “Beauty is an ecstasy; it is as simple as hunger. There is nothing to be said about it. It is like the perfume of a rose: you can smell it and that is all: that is why the criticism of
art . . . is tiresome," and he continues, "No one has ever been able to explain why the Doric temple at Paestum is more beautiful than a glass of cold beer except by bringing in considerations that have nothing to do with beauty."

Why the learned in special fields of human thought should assume that their particular medicine is just as good for other troubles outside their purview is hard to understand. We had supposed it was only the quack who claimed his particular nostrum was "good for what's the matter with you!"

But the scientist cannot bear to have the artists so slip-shod and unenterprising as to go along without a good handy mechanical rule for transforming sterile desire into art in fact, a short cut, a rule of thumb. He cannot believe that it is like a plan for perpetual motion, lifting oneself by one's boot-straps, or any ignis fatuus that will lead to the promised land where one can get something for nothing. The old haphazard, lawless way of artistic production is a constant source of irritation to these men of figures. They are sure there is such a formula somewhere and that it is only a matter of discovering it. They have no patience or understanding of Sir Joshua Reynolds' remark that, "Art comes by a kind of felicity and not by rule."

As a result, they offer us a wealth of formulas so diverse that it is a question if they do not get in each other's way. Formulas as an aid to design of whirling squares, dynamic symmetry, the square root of figures that have none, the plane projection of fourth dimensional space, magic squares, the golden mean, the laws of crystals, phyllotaxis, Egyptian rope stretching, and other abracadabra.

We are told that the Parthenon plans and elevations are related to a square plus a root five triangle; and the demonstration really is astonishing. But when we apply the same formula to the next worthy building it doesn't fit. Perhaps, however, an analysis of this building shows that all the parts are related to each other and to the whole by a system of modules. It is impressive. But the third again proves intractable. And so, if each case is to be a special one, all these panaceas cannot be of much help to the befuddled student. It is too much like the bed of Procrustes. In all these mathematical rules for producing a beautiful façade, let us say, do its innumerable subdivisions, the character of its ornament, its fenestration count for nothing? Beauty can never be at the call of such a hash of algebra and geometry. Of course, one can see how attractive it is to the matter-of-fact mind that in order to recapture the dainty charm of Grandada one only needs to apply the square root of two, or that the brooding mysticism of Chartres is to be had by designing with modules, or that the wild splendor of St. Mark's is but an exercise in whirling squares. But they should remember that, "In everything beautiful there is something strange about the proportions." It is the gay flouting of logic, the happy recognition of the sharp value of the discord, the aid to harmony to be obtained by the accent of dissonance.

It would not seem unfair to ask the proponents of these various get-art-quick methods to turn from their analysis of existing buildings and give an a priori demonstration of what their formulas can accomplish in the way of synthesis. Unless the results are as prompt and splendid as claimed we should not feel justified in recommending their methods.

There is one more school of critics who wish to be heard. They may be called "The Hygienists," and their axiom is, "We cannot have too much sun." Not light, but sun. This is assumed to be a self-evident truth and where formerly, in house building, they were content with plate glass windows and a sleeping porch, they now demand whole walls of glass from floor to ceiling. Whether this makes living more uncomfortable in July or January is a question. In July one slowly fries in the glare and heat of such a conservatory and in January to sit down among the snow drifts is far from cozy. We have, besides, the difficulty of keeping warm both physically and psychologically. And in all seasons we must suffer from the nervous exhaustion of so much undiffused sunlight. One need only observe how people of very hot and very cold countries manage these things, to be skeptical of this new movement.

Now what is the explanation of all these mistaken criteria? Why has the great multitude of art critics of all persuasions, in all times and places, done such an unsatisfactory piece of work, so unrelated to the plain facts everywhere observed? Can the unreality of their findings be traced to that bit of homely wisdom that, "Those who can't do, teach"? Or is it, perhaps, that the men of letters on the lookout for a good subject on which to exercise their dialectic skill in verbal pattern making have been attracted to art and architecture as a gentlemanly field for the parading of literary conceits and preciosity? That they have thought more of exhibiting their own skill than of bringing aid to a brother artist? If so, this would explain how, in a sort of literary ecstasy, they often soar to such a
high aesthetic plane in expounding the inner motivation and esoteric meaning of the work of some artist that the poor man listening with astonishment is like to exclaim in bewilderment, "Alack, but this is none of I." Has the temptation to such poetic flight proved irresistible to such craftsmen with the pen as Ruskin, Faure, Reed, or any of those lesser men who have to fill a column periodically in our magazines?

Have the philosophers also found in art a perfect perennial subject on which to exercise their subtleties—a drop of quicksilver on which each happily accepts the challenge to put his finger?

We are more encouraged to believe in these explanations of the existence of so much inept artistic dogma when we note that none of these writers on art are themselves artists. Artists, it seems, have nothing to say about art. All the advice comes from the bystanders. Artists do not even make reply. It is as if they did not hear. Seemingly, they are not interested. Have they different ideas or have they no ideas, or are they inarticulate? Strange people who apparently do not know how they work or why they work and do not wish to be bothered by the chatter of the reformers but prefer to be let alone in a great silence to paint and draw.

We are sometimes tempted to say, when we regard the rather ridiculous art works of our no less intelligent fathers, that it is all merely a matter of fashion—but when we ponder the great works universally admired throughout the ages we quickly realize that it cannot be dismissed so lightly as being entirely a caprice. No, our quarrel is with our leadership.

Art is long and there are no short cuts. Life is short and artists cannot waste time talking or listening.

All that we have been saying is, of course, destructive criticism of criticism and we have to confess that we are not holding back any constructive secret ready to bring it forth like a rabbit from a hat at the proper moment. We are only seeking to clear the ground of old encumbrances so that some more clear-sighted school of observers may view artistic labors with more realism, if less eloquence.

The quiet beauty of a winter landscape has been captured by Miles Sater, Chicago designer and delineator, in this lithograph which he has titled "The Farm." It is slightly reduced here from the size of Sater's original study.
PENCIL POINTS DATA SHEETS

Prepared by DON GRAF, B.S., M.Arch.
FLOORS. The floors of all rooms in which food or drink is stored, prepared, or served, or in which utensils are washed, shall be of such construction as to be easily cleaned, shall be smooth, and shall be kept clean and in good repair. Kitchen floors shall be impervious to water.

Public-health reason. Properly constructed floors which are in good repair can be more easily kept clean than improperly constructed floors. Kitchen floors having an impervious surface can be cleaned more easily than floors constructed of wood or other pervious or easily disintegrated material, will not absorb organic matter, and are, therefore, more likely to be kept clean and free of odors. Clean floors are conducive to clean food-handling methods.

Satisfactory compliance. The following requirements are implied conditions of satisfactory compliance:

(1) The floors of all rooms in which food or drink is stored, prepared, or served are of such construction as to be easily cleaned, are smooth, and are in good repair. Floors may be of concrete, terrazzo, tile, etc., or wood covered with linoleum, or light wood floors.

(2) The floors of all rooms in which food is prepared or utensils are washed are constructed of concrete, tile or other impervious material, in good repair and provided with drains. However, where floors of such rooms are kept clean without flushing, a linoleum or similarly impervious surfacing in good repair shall be accepted in lieu thereof and the drain requirement shall be waived. If floor drains are used they shall be provided with proper traps so constructed as to minimize clogging.

WALLS AND CEILINGS. Walls and ceilings of all rooms in which food or drink is stored, prepared, or served shall be kept clean and in good repair; shall be finished in light color; shall have a smooth, washable surface up to the level reached by splash or spray.

Public-health reason. Painted or otherwise properly finished walls and ceilings are more easily kept clean and are therefore more likely to be kept clean. A light-colored paint or finish aids in the even distribution of light and the detection of unclean conditions. Clean walls and ceilings are conducive to clean food-handling operations.

LIGHTING. All rooms in which food or drink is stored or prepared or in which utensils are washed shall be well lighted.

Public-health reason. Ample light promotes cleanliness.

Satisfactory compliance. This item shall be deemed to have been satisfied if artificial light sources are provided equivalent to one 100-watt electric light bulb per 100 square feet of floor area, reasonably evenly distributed, and are in use except when equivalent natural light is present.

Perhaps plumbing fixtures are coming in for more than their share of carping criticism in this department. For this reason, we have hesitated to add further fuel to the flame. However, a letter from a PENCIL POINTS reader points out a "Disregard of the Obvious" that has long been under suspicion in the mind of your deponent as probably being a private peeve. Apparently we are not alone in our conviction that the public Gent's Room is not a place to compromise with extreme sanitary measures. The reader inquires:

"Have you ever noticed that most bar, restaurant, pool room, filling station, and office building urinals are equipped with flush valves set above the flowing bowl, requiring manual operation? As a result of the
current drive against social diseases, I, together with a million other clean-living Americans, am rapidly tiring of pushing and stabbing at knobs and buttons with my sleeves. Cannot these all be set in the floor?"

In the illustration is shown a type of urinal flush valve designed for foot operation. It is set in the wall; it is a sufficient distance from the floor so that it can be easily touched by the foot, but still allows an unobstructed floor surface to facilitate cleaning. There will always be some male schwein who will not be tempted by the convenience of such a valve to flush the urinal after use. Nevertheless, the percentage of those who operate the flushing mechanism is very much greater with the foot type of valve than with the manual type—improving the olfactory purity of the room to a marked extent, as well as eliminating the visual revulsion felt by men who are civilized enough to be fastidious.

In entering the toilet stall, the arrangement and fittings favor bashful privacy to a considerably greater extent than they do the occupant’s sanitary sensibilities. It is necessary to handle the door knob on the inside and the outside as well as the flush valve. Just why it should be necessary for a psychologically healthy male to lock himself in the toilet cubicle is a little difficult to understand. Why, too, seat-operated valves are not in common use is another open question.

While we are on the subject, we should very much like to sentence to eternal hell fire and damnation the inventor of the most fiendishly annoying contraption known to man — the paper-saving toilet roll holder which lets you remove not more than 0.000245 worth of the thirsty fiber tissue per attempt.

We propose as an ideal situation to be realized in some far distant city of the future, that toilet rooms be arranged so an individual can enter, use any or all of the sanitary conveniences provided, and leave without touching any object with his hands that any one else has previously touched. Merely our suggestion.
I have been trying to learn what American architecture is, to pick out—at least in one part of America, the New England coast—those controlling ideals or methods which, almost regardless of period, create the spirit of buildings we call American. In New Bedford, in Wood's Hole, on the islands of Martha's Vineyard and Nantucket, there is a wealth of beauty characteristic of its locality and of the people who produced it. There is work of the 18th century, the "Late Colonial," of the Post-Revolutionary Period, of the Classic Revival, of the Jigsaw Period, and of that epoch from about 1885 to 1905 when so many summer cottages, often with considerable loveliness, were built along these shores.

The character of all of these buildings is not a matter of period; the current styles wax and wane as the decades pass by, and touch the basic forms and the basic feeling but gently, like cloud shadows over the sea, which, despite their purple streaking, remains the sea still. Throughout these periods in which these buildings were especially numerous this is true, and whether the building is the simple cottage of 1770-1820 like the Sconset cottage shown herewith, whether a Late Colonial double house like the Nantucket houses, whether decked with the grandeur of the Greek Revival like the 1840 houses in Nantucket shown, or even whether the jigsaw of Oak Bluffs or the modern cottages of Wood's Hole, there is in all some quality of peculiar charm, of harmony with the location, which one can only call, perhaps, their essential American character. If one could analyze this and find the elements that go to make it up, it seems to me that a great step would be made in the correct appraisement of our contemporary work.

The first of these qualities, the most obvious reason for the delight one feels in walking through these coastal towns, is harmony—the controlled harmony between the big and the little buildings, between the simplest, most meager cottages and the largest and grandest of whalers' homes, between the houses and the churches and the public buildings. It is also a harmony between the buildings themselves.

The houses of Siasconset, Nantucket Island, Mass., built close to the street and to each other, harmonize in material and roof slope. These all have their walls, windows, chimneys, doors, and space where required—that is all...
and the land they are on—a generally gently rolling country with sandy bluffs and a few rocks by the all-encircling sea, a country grown with pitch pine and scrub oak, and varied with rolling moorland of russet grass, stone walls, and the rich greens of blueberry, bayberry, and sumac. It is a country with a strange and quiet magic, lush in its sea-blown vegetation, yet restrained and somehow, as it were, disciplined by the sweeping winter gales.

The harmony between the buildings is a harmony of roof slopes, of window sashes and rhythms, and of a certain reticence in detail—a reticence which was lost only in the jigsaw period, and then only to be replaced by an exuberant delight in craftsmanship. The silver gray of weathered shingles contrasts almost everywhere with the shining white paint of trim and sash. Where the buildings are of brick, the white of the woodwork carries through to make a pleasant transition; and, where stone is used, it is the rough gray granite of Massachusetts, as in the Langshaw house in New Bedford, or the New Bedford Customs House—a gray granite that is severe and yet has some of the quality of the shingles.

The feeling for proportion in these native works is extraordinarily sensitive. The rightness of placing of doors and windows runs through all of it, ties all of it together. Even the Menemsha fish houses carry the same interest of wall and roof relation, the same unconscious beauty of window size and window position. Even the jigsaw houses of Oak Bluffs maintain something of the same innate sensitiveness, which makes them somehow part of the total picture and prevents them from being the monstrosities that so many of the buildings of their time were.

The second quality which runs through all seems to be a feeling which the builders had for the materials they were using. Whether it is wood shingles or neat white trim, whether it is brick or granite, it all is used in a way that seems to have a perfection, in its expression of the material, which is a continual delight. Wood trims, particularly in the houses built around 1820 to 1840, are full of variety. Those who look for the sophisticated elegance of Beacon Hill may be disappointed, but instead there are all sorts of local decorations, such as pilasters made by applying half-round mouldings to a flat strip, and cornices that are simple, thin shelves with a delicate moulding below. Whatever the variety, and whether the style be the slimness of the late colonial or the dignity of the Greek Revival, this same unsophisticated naturalness of finish holds true and seems somehow to incarnate the very spirit of wood and to show the tools—the saws and planes and chisels—which gave it birth.

The brick is also characteristic, reticent in its texture, sure and strong in its color. A smooth, deep red brick is well-nigh universal, laid with tiny joints—not over a quarter of an inch—to make the smoothest wall which the mason could produce. This quiet, warm plane of wall, with the most reticent texturing of joints, gives at once an impression of permanence, of a certain gentlemanly solidity, which more varied walls must lack.
Granite, on the other hand, is usually but roughly axed to an approximate plane, save where architectural members demand more careful tooling, in which case the workmanship of these is as fine as could be desired. The Langshaw house and the New Bedford Customs House both show the subtle stony texture thereby achieved, and the interesting contrast of the smoothness of antae and the textured roughness of wall.

Yet in all of this subtle handling of material there is seldom any display. Almost never does the designer seek to express his material first and foremost; rather, the building is always paramount and the material used in the quietest, most fitting way to build the building, rather than the building used to display the material.

The third great quality is restraint, a restraint to be expected from the builders of Nantucket, New Bedford, and Martha's Vineyard. Like the sense of material, this restraint is never forced; there is never any sense of meagerness resulting from it. It has an elegance of its own, like the elegance of quiet good manners—never artificial, but a simple expression in architecture of the way these people lived and felt and thought. This restraint never becomes a pose. Ornament is used sparingly, but it is used. The impression seems to be that the builders of these houses, these churches and public buildings, were looking for the most elegant and the richest buildings which they could afford and which were at the same time harmonious with their tastes. Since their taste in elegance ran towards the restrained and the austere, is it strange that

Main Street grandeur of 1815 in Nantucket is exemplified by the wealthy whaler's house, lower right, notable for its generous dimensions and perfect restraint. The elegant refinement of the large houses of the early 19th century also is seen in the examples on Sixth Avenue, New Bedford, shown above and left.

their buildings have the same quality of gracious and controlled austerity?

The last quality which stands out is the frankly urban character of these towns and villages. There is no romantic nonsense here about country life; rather, the builders of Nantucket or Vineyard Haven, of New Bedford, of Marblehead and Portsmouth seem bent on creating the most closely knit, the most urban community which their resources would permit. Houses are close together and near the street; even when the houses and their grounds are large, only a narrow strip, usually banked with gay flowers, separates each mansion from its neighbor and leads back to the ample tree-shaded lawns behind. The smaller houses are built frankly together, sometimes as double houses, sometimes as rows, sometimes merely as individual houses built with eaves almost touching. All of them are close to the street, and this quiet alignment of house after house, down a sloping or curving street vista, adds not a little to the effect of these towns. The brick sidewalks, granite curbs, cobbled streets, and ranked lovely buildings, closely spaced, give Nantucket even today an expression of urban dignity and urban amenity not to be found in thousands of more recent towns of three or four times its size. The same feeling extends even to the smaller villages like 'Sconset, where the tiny houses shoulder one another closely along the
The dignity of the Greek Revival buildings of Nantucket is well represented by the homes on Main Street, left, both from the early Forties, while the Langshaw House at New Bedford, center, for which Russell Warren was the architect in 1837, is a monumental example in granite. The brick walks, stone curbs, and houses lined along Nantucket streets create an unforgettable effect. The Ionic Order was chosen to enrich the facade of the Library and Atheneum of the town, right, the structure following somewhat the lines of a church which had occupied the site.

narrow streets, or like Menemsha, where the fish houses group along the pier as closely as the swordfish boats which lie off them.

This quality, it seems to me, is more than a mere accident. Behind it is no land poverty, no sense of congestion forced by land speculation, but, instead, some kind of basic neighborliness, some kind of real love of and respect for one's fellowmen, which is at the very foundation of the American ideal of democracy. There was, of course, from whaling days on, wealth in all the towns, and predatory wealth too, as well; yet the impression which they make today is not one of unbridled competition, of the wealthy dominating and crushing the poor, of mansion and slum, but rather of a true community in which cooperation and mutual helpfulness are after all supreme.

Changing fashions of the 19th century swept over this country as they did everywhere; and, though the underlying qualities remained constant, each style brought its own special qualities—these New Englanders were obviously no reactionaries, but rather sought to be as modern as they could. The first period, the Colonial, in these parts, has the great basic virtue of simplicity. The same basic proportions are found here that are found elsewhere in Colonial America, but the spirit is perhaps somewhat more stark, the houses are smaller, the trim often merely a board around the openings, the gable moulds are universally flat, close to the wall, and give the houses a sense of tight neatness. The same quality held through the late Post-Revolutionary period, up almost to the time of the Classic Revival, although the growing wealth that came from the whales of the Pacific and the Atlantic brought larger windows, occasional dentil cornices, and a universal attempt to ornament simply the entrance door. Yet the strong, tight power of the earlier style remained, and there is little here of the Adam and Paine refinements which so frequently prettified the early houses of the Republic in the more populous and more central localities. The new elegance is one of ample scale rather than of rich and finicky details. The richest and most elegant of the houses of this type is that pictured on Sixth Avenue in New Bedford, with its ionic porch and its delicate cornice; but even that is exceptional—one is more likely to find such quiet fronts as those shown in Nantucket.

The Greek Revival brought, of course, new ideals and a new grandeur, which shows in all the buildings built between, say, 1825 and 1850; yet, even with the Corinthian and Ionic columns of the Revival, the basic quality of dignified restraint and grandeur, of quiet detail, held true. Even where the detail is as rich...
and as architectonic as in Russell Warren's Langshaw house in New Bedford, this richness seems subsidiary to the large and ample monumentality of the whole. The New Bedford Customs House, like almost all of Robert Mills's work, has of course severity as one of its most marked characteristics. Yet the Nantucket Atheneum maintains something of the same quality, and, especially in its great entrance doorway, has the same quiet and assured dignity to be found in the earlier work.

The period of the 1870's is one of the least understood of all the periods of American architecture. Martha's Vineyard offers an unusual opportunity for studying it, for around a famous camp meeting center there grew up, especially in the 'sixties and 'seventies, an extraordinary group of jigsaw dwellings. At first, tiny houses built in a circle around the tabernacle replaced the earlier tents; later, as wealthier people were attracted, the colony spread out, and now a charming waterside park is almost surrounded with more lavish examples of the same period.

Of course, taking it as a whole, this period is one of the least admirable in all the developments of American building. The terrific effects of over-rapid exploitation, of cutthroat competition, of economic "success" are obvious in the forced ostentation, the over-lavish and ill-considered detail which curses so much of this work; yet in Oak Bluffs, where there is so much of it to see, and where economic limitations sometimes prevented the utmost in display, the effect of the whole has a queer charm of its own. After seeing enough of it, one begins to pick out the better from the worse, one begins to examine it critically, one loses his sense of derision and comes eventually almost to like it.

The tabernacle itself is a remarkable piece of light and airy steel work, carrying roofs of wood. It is open at the side all around and stands in a generally circular lawn; around it are grouped tiny cottages close together. The little Gothic cottage shown is typical of a sort of tight and compressed character not unrelated to the earlier work of Nantucket or the fish houses of Menemsha.

In the larger houses, where evidently thousands were spent, the results are more questionable; yet even in these the basic propor-
In the jigsaw work of the Seventies, when woodworkers were most exuberant, there is much to examine. On the park at Oak Bluffs, Martha's Vineyard, a hardware magnate had the house shown at the top built in 1873—a fantasy of lattice and jigsaw, porches and gables. Below it are the "Gothic" cottages built around the Oak Bluffs Tabernacle, itself an airy structure of steel with wooden roofs. The summit of the woodworker's inventiveness was reached in the lower house, built on Shore Road, Oak Bluffs, about 1875, in the "Gothic" style.
with each other, with the old work, and with nature which is so apparent in the work before the Civil War. Again it is the color-chord of silver-gray shingles and simple white board trim. It is the flat gable moulds and the simple dormer windows. Window areas are large and the windows distributed where they are needed, yet usually with effective relationships—grouped, coupled, or single as the case may be. The gambrel roof is well-nigh universal, and its general convexity of outline goes well with the forms of the shore. These houses weather well and wear well; their wide, low rooms and spreading porches are welcoming and restful. In them there is seldom a trace of conscious stylism; they achieve their effect by directness, honest simplicity, and beauty of material and shape. They constitute a unique flowering of American architecture.

Yet summer building did not cease with the passing of that simplicity. The "Colonial" became popular and Colonialization swept in like a tide. It is strange how this modern pseudo-Colonial work stands out with all the arrogant newness and awkwardness of an ill-mannered child. It is all so pat, so too-too-Colonial—more Colonial than any building that the colonists ever built. It is all so white, so sharp, so lacking in any spirit of human reality. Stilted and mannered like a schoolboy's translation of a classic, it reveals only a wistful desire to be something other than it is. Beside it, even the jigsaw work of Oak Bluffs somehow seems real.

There are, of course, exceptions. There are many delightful additions and alterations of old houses in which the spirit of the old has somehow been preserved, and there are a few frank reproductions of the earlier types which, seen in general and as a part of the village picture, are not without effect. Yet, in almost every case, even there something seems lacking. It brings up the whole question of whether, even with the most reverent and understanding taste, a real reproduction is possible. Two temptations are ever-present—to change the original so as to make it more convenient, or, on the other hand, to display all you know about the style which you are attempting to reproduce; and to the sensitive eye it is usually an easy matter to pick out the real from the reproduction, and often one cannot help feeling in the reproductions qualities of strain or even of ostentation which are the direct opposite of the quiet simplicity of the earlier structures.

* * * *

If it is desirable that contemporary architecture here in America should be American,
and if it is true that many of our ideals of democracy, of culture, of cooperation are the same today as they were a hundred years ago, is it too much to hope that some of the qualities that make the charm and the beauty of those old seaport towns should somehow be incarnated in it? Perhaps our study of the qualities inherent in the architecture of this New England shore may be of assistance here. Harmony of general form with site and with the neighboring buildings—may not that be a valid ideal still? Surely the sensitiveness to shape and to proportion of window and wall, of wall and roof, is a quality not of styles but something much more fundamental; and, if our American architecture of these four periods has shown it as one of its basic merits, can we not expect the same sensitiveness, the same graciousness and subtlety, in the handling of proportions of our more varied forms?

The feeling for material so evident in this work is another quality to be sought and one that is particularly important today. To express a material by using it rightly, and yet never to make a display of technical ingenuity an end in itself—this would seem to be the way in which our forefathers produced the beauty they created. Today, the temptation so frequently is—like the temptation the jigsaw builders sometimes fell victim to—the temptation to take our gorgeous new materials and design these rather than design a building, to make our architecture a tour de force of strained expressiveness rather than a gracious use of the structural riches we possess. To express and not to display, to build a building and not a tour de force—this, it seems to me, is the aim of architecture.

And the last quality, the frankly urban character of these towns, with all it means in democracy and cooperation, is perhaps as important as any of the other, more tangible matters. This is a quality we have, it would seem, begun to learn; and, in suburban building, our growing use of row houses, our growing attempt to develop a tightly-knit community, there is promise of more than architectural beauty, there is promise indeed of a new civic consciousness, a new feeling of unity, a new democracy and cooperation. If only all our developers of suburbs could visit Nantucket and Greenbelt, and learn the same lesson from both the old and the new!
The Firm of
JACQUES KAHN
Architects

PLAN
Scale 1/4" = 1'-0"

ELEVATION
Scale 1/8" = 1'-0"

SECTION
Scale 1/4" = 1'-0"

Continous
brick pattern
1 1/2" x 7 3/8"

1' 6"

Fireplace
symmetrical
on center

Carved
wood panel

Travertine

Brass frame (beaded)

Brass screen

Flush hearth

October • 1938
Not infrequently, the architect is faced with a highly specialized problem such as an apiary for bee culture, data for which Eldorado Scoops is glad to present this month. For a person not familiar with the modern science of bee culture, a somewhat extensive research must be carried on before sufficient facts are accumulated with which to attack the problem of designing an apiary. The data here presented, therefore, are intended to give a fairly comprehensive picture of the fundamental requirements as to equipment, orientation, etc.

A complimentary 14½" x 10¾" blue print of these plans is offered by Dixon. Simply mail coupon below.

This drawing was made with Eldorado F pencil on tracing paper.

APIARY DATA

TWO FULL DEPTH HIVES ARE ADVOCATED FOR BEE FOOD PERYR./COLONY.

HIVES WITH NUMBER OF SECTIONS SHOWN SHOULD BE AMPLE FOR NORMAL YEARS OF HONEY FLOW.

HIVES PAINTED WHITE ARE COOLER.

IDEAL LOCATION FOR AN APIARY IS GROUND SLOPING TOWARD S. OR E.

HIGH GROUND IS PREFERABLE TO LOW IN ANY CASE.

IF ECONOMY OF SPACE IS NECESSARY, HIVES MAY BE GROUPED IN TWOS OR FOURS, 4'-O' APART, OR, IF PLACED SINGLY, 4'-O' EACH WAY. THESE DIMENSIONS ARE IDEAL, NOT ESSENTIAL.

F-ELDORADO SCOPS

Pencil Sales Dept. 167 J10
Joseph Dixon Crucible Co., Jersey City, N. J.
Gentlemen:
Please send me, without cost, a 14½" x 10¾" blue print of the Eldorado drawings on Apiary Data, for reference in my office.
Name
Address
SPECIAL NOTICE TO ARCHITECTS LOCATED OUTSIDE OF THE MART. In this department we will print, free of charge, Notices submitted for publication in these Service Departments. Announcements concerning the opening of architectural firms, changes of address and items of personal interest will be printed free of charge.

PERSONAL NOTICES. Announcements concerning the opening of new offices or the practice of architecture, changes in architectural firms, changes of address and items of personal interest may be inserted, but there is no limit to the number of different notices pertaining to different things which any subscriber may insert.

FREE EMPLOYMENT SERVICE. In this department we shall continue to print, free of charge, notices from architects or others requiring designers, draftsmen, specification writers, or superintendents, as well as from those seeking similar positions.

SPECIAL NOTICE TO ARCHITECTS LOCATED OUTSIDE OF THE UNITED STATES: Should you be interested in any building material or equipment manufactured in America, we will gladly procure and send, without charge, any information you may desire.

Notices submitted for publication in these Service Departments must reach us before the fifth of each month if they are to be inserted in the next issue. Advertisements all communications to THE MART.

We will pay 10c per copy, plus postage, for issues of the June, 1938, PENCIL POINTS. Must be in good condition.

FOR RENT: Space of 750 square feet on 2nd floor in Architects' Building at 144 East 30th Street, New York. May be subdivided for one, two or three offices for architects or designers. Apply to Frederick G. Frost, Architect, on premises.


Francis J. Rose, 710 N. Plankinton Avenue, Milwaukee, Wisc., has the following bound volumes for sale, in good condition: Architectural Review—1898, 1899, 1903, 1906, 1907, 1908, 1909, 1910, 1912, 1913, 1914, 1916, each in 1 volume, and 1917, 1918, 1919, 1920, 1921, in 2 volumes; American Architect—1 volume plates, September 1901 to January, 1902, 2 volumes 1907, 1 volume 1908, 2 volumes each 1909, 1910, 1911, 1 volume 1913, 2 volumes each 1914, 1915, 3 volumes 1916, 4 volumes each 1917 and 1918, 3 volumes 1919, 4 volumes 1920, 3 volumes 1921, 2 volumes each 1927, 1928, 1929; Architectural Review and American Architect combined—2 volumes each of 1922, 1923, 1924, and 3 volumes of 1926; Architectural Record—The volumes run from 1891 to 1929. The earlier years are in 1 volume, but from 1905 through 1928 they are in 2 volumes; Architecture—1 volume each 1901 through 1906, 1915, 1917 through 1929; Western Architect—1 volume each 1904, 1905, 1909, 1910, 1912 through 1929; Architectural Forum—1 volume each 1917, July through December, 1920, July through December, 1922, 1923, 1924, 1925, July through December, 1926, 2 volumes 1927, 3 volumes each 1928 and 1929, 1 volume January through April, 1930.

FREE EMPLOYMENT SERVICE


H. G. Waldron, State Highway Department, Valley City, N. D., has the following PENCIL POINTS for sale: 1927, 1928, complete, and January, February, and March, 1929. All are in new condition. Please make offer.

B. F. Murphy, 9126 120th Street, Richmond Hill, L. I., New York, has for sale all copies of PENCIL POINTS from June, 1920, through May, 1932, with the exception of February, 1921, October, and November, 1931, and October 1929. Will sell in part, but would prefer purchaser to take the lot. Please make offer.

H. E. Beisher, 1529 Maryland Avenue, Houston, Texas, has the following magazines for sale: American Architect, 1931, bound in blue cloth; PENCIL POINTS, 1932, 1933, 1936, bound in red cloth, and 1937 unbound. Bound volumes are in stiff backs, are in perfect condition, only advertising matter has been removed. Unbound copies are in perfect condition. For sale by volumes only.

Leon Keach, 105 Sumner Road, Brookline, Mass., would like to purchase a copy of the June, 1929, issue of PENCIL POINTS.
Foot-weary hospital staffs appreciate this
COMFORTABLE FLOORING

Armstrong-Stedman Rubber Tile Absorbs Shock . . . Reduces Noise

QUIET and comfort are built into these floors of Allegheny General Hospital, Pittsburgh. Resilient Armstrong-Stedman Reinforced Rubber Tile muffles noise and cushions foot shocks.
Reinforced with strong but invisible fibres that resist denting, this colorful rubber tile gives extra long wear. Scuffing feet and scraping furniture do not wear away its freshness and beauty.
Maintenance is no problem at all. Daily sweeping and occasional washing and waxing preserve the attractive gloss finish for years.

Armstrong-Stedman Reinforced Rubber Tile can be quickly and economically installed in new buildings or old. Fifty-six handsome colors are available.

Armstrong manufactures the only complete line of resilient floors—Rubber Tile, Cork Tile, Linotile (Oil-Bonded), Asphalt Tile, and Linoleum.

This quiet corridor in Allegheny General Hospital, Pittsburgh, is floored with Armstrong-Stedman Reinforced Rubber Tile. This flooring is also used in the library of the nurses' home, shown above.
There is no more satisfactory method of lighting than a good pull socket and BEAD CHAIN®. This is the heart of the fixture or lamp, and there is no life nor profit in a poor heart.

BEAD CHAIN® has the strength, finish and quality that every fixture needs. Specify it with good pull sockets, and use it, too, for better suspension and ornamentation.

THE BEAD CHAIN MANUFACTURING CO.
54 MT. GROVE ST., BRIDGEPORT, CONN.

America's Window Security
Rests in your hands—
Hundreds of architects specify Silentite because it's troubleproof.

Since 1932, the Curtis Silentite Double-Hung Window has been making window history. Today, it's America's fastest selling residential window!

Silentite has many features that explain its popularity—that explain why architects, contractors, dealers and owners choose Silentite first. And when you know the advantages that Silentite alone provides, you will join the rapidly increasing army of architects who guarantee permanent window satisfaction to their clients by specifying Silentite. Just consider these three outstanding features—

1. New principles of weather-stripping—metal-to-metal contacts allow for shrink and swell of sash, assure easy operation, year-round weather-tightness, as much as 25% fuel saving.

2. No weights, cords or pulleys to stick. Silentite operates on balanced springs which provide easy operation, freedom from repair bills, lasting satisfaction.

3. Factory-fit for precision and economy. Installation time and labor are reduced. Frame, sash, trim, storm sash and screen are all designed to make a complete unit, though all are priced separately.

These and many other outstanding features make Silentite a better window. And Silentite is made of wood because wood has a longer, better record of satisfactory window performance than any other material.

Get data on Silentite now—then you'll be equipped to specify window security on every job. This coupon will bring you complete window information.

Curtis Companies Service Bureau
Dept. PP-10, Clinton, Iowa

Please send me information on Silentite "Insulated" Window
☐ On the new Silentite Casements ☐ On other Curtis products

Name
Address
City State

Pencil Points
October, 1938
a WHITE that works with the architect...

On brick, stone, or wood, Cabot's DOUBLE-WHITE works with the architect, helping him get just the effect he wants. It gives him a whiter, truer white; and the extra whiteness lasts because this paint — unlike most others — is immune to discoloring reaction with atmospheric gases. Cabot's DOUBLE-WHITE is made by our patented Collopaking process in which the pigments are divided hundreds of times finer than by ordinary methods. The result is greater hiding power and longer life.

The White Book — FREE

Write today for your copy of The White Book, containing full information and showing pictures of many prize-winning houses finished with Cabot's DOUBLE-WHITE, Old Virginia White and Gloss Collopakes. Samuel Cabot, Inc., 1296 Oliver Building, Boston, Mass.

Cabot's DOUBLE-WHITE and Gloss Collopakes (colloidal paints)

PUBLICATIONS ON MATERIALS AND EQUIPMENT

(Continued from page 30, Advertising Section)

FITZGIBBONS DIRECT-FIRED AIR CONDITIONER.—A.I.A. File No. 30-c-1. Bulletin describing the features and advantages of a new direct-fired air conditioner for the small home, designed for oil, gas and stoker firing. 4 pp. 8 1/2 x 11. Fitzgibbons Boiler Co., Inc., 101 Park Ave., New York, N. Y.

MINWAX WEATHERCAP.—A.I.A. File No. 70. Folder containing specifications for sealing masonry joints with Weathercap, a newly patented Minwax product. 4 pp. 8 1/2 x 11. Minwax Co., Inc., 11 W. 42nd St., New York, N. Y.

AIR CONDITIONING FOR INDUSTRY.—Illustrated catalog showing the extent of Carrier equipment available to serve industry for air conditioning, refrigeration and space heating. The publication is indexed so that ready reference may be made for temperature and humidity control, refrigeration, heating of dehydation. Illustrations, diagrams, dimensions, applications, operation, installation and other data are included. 12 pp. 8 1/2 x 11. Carrier Corp., South Geddes St., Syracuse, N. Y.

ACME HEAVY DUTY FLOORSTEEL.—Catalog explaining how entire floor areas, aisles, runways and docks can be protected from ruts, holes and general wear by Acme Floorsteel. Installations in both existing and new buildings are described and illustrated. 12 pp. 8 1/2 x 11. Acme Steel Co., 2840 Archer Ave., Chicago, Ill.

REVERE COPPER WATER TUBE.—Booklet discussing the advantages and economies effected by the use of Revere copper water tube for hot water lines. 32 pp. 6 x 9. Revere Copper and Brass Incorporated, 230 Park Ave., New York, N. Y.


LUPTON STEEL CASEMENTS.—A.I.A. File No. 16-e-1. Useful reference manual covering a line of Master casements, office windows and projected windows, also residence casements, winter windows, basement windows, utility windows and casement doors. Included are specifications, sizes and designs, detail drawings. 44 pp. 8 1/2 x 11. Michael Flynn Mfg. Co., Allegheny Ave. at Tulip St., Philadelphia, Pa.

CHASE MIDAS COMMERCIAL PLASTIC BOWL LIGHTING FIXTURES.—Folder announcing and describing a new line of semi-indirect lighting fixtures with plastic bowls. 4 pp. 8 1/2 x 11. Chase Brass & Copper Co., Waterbury, Conn.

SUPERIOR COATED STEEL SHEETS.—Brochure illustrating a large number of diversified building and other products in which Superior coated sheets have been employed. 24 pp. 8 1/2 x 11. The Superior Sheet Steel Co., Canton, Ohio.

ELKAY STURDIBILT METAL PRODUCTS.—A.I.A. File No. 29-h-6. Catalog D presents complete descriptive and specification data covering a line of cabinet sinks, cabinet tops, sink bowls, kitchen, pantry and scullery sinks, also shower bath cabinets. Construction details, dimensions, etc. 48 pp. 8 1/2 x 11. Elkay Mfg. Co., 4704-14 Arthington St., Chicago, Ill.

(Continued on page 34, Advertising Section)
Bronze gives store windows warmth, dignity, added appeal

Bronze, since the earliest days of recorded history, has been the favorite metal for artistic expression—serving both esthetic and practical needs. Today, bronze is still preferred for architectural decoration—recognized not only for its beauty and remarkable durability, but as a symbol of integrity and stability which inspires confidence and respect.

A large proportion of the smartest, most successful stores in any established shopping center have storefronts of architectural bronze.

This popularity furnishes proof that architects find this ageless metal an ideal material for enduring and distinctive storefront design.

Anaconda Architectural Bronze is moderate in cost and economical to maintain. Even when neglected, bronze retains a distinctively rich appearance.

The American Brass Company is the principal supplier of architectural bronze, copper, and nickel silver in the form of extruded shapes, drawn shapes, sheets, rods, tubes, etc., for construction of all types of ornamental work. Our extensive catalog shows thousands of standard shapes which may be combined to execute the most original of designs. Their use eliminates die costs.

Anaconda Copper & Brass

The American Brass Company, General Offices: Waterbury, Connecticut

In Canada: Anaconda American Brass Ltd., New Toronto, Ont. - Subsidiary of Anaconda Copper Mining Company
TEGO-BONDED MEANS MORE THAN GOOD PLYWOOD

When plywood is bonded with Tego Resin Film, it is virtually a different material.

It is made by precise engineering methods, with synthetic resin.

It will withstand exposure anywhere—hot, cold, wet, or dry.

It offers important structural and decorative possibilities.

A list of sources of Tego-bonded plywood is available on request. See also Sweets 8-23 and Time-Saver Standard K 4.3.1.—The Resinous Products and Chemical Company, Inc., Philadelphia, Pa.
It has been a privilege to cooperate with

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in executing

The Federal Reserve Board Building
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TATE, GEORGIA
"If it Please THE COURT..."

May we respectfully submit the case of "Castell" Drawing Pencil in the Court of Public Opinion?

We maintain that "Castell" is the finest drawing pencil money can buy.

We maintain that "Castell" is milled by the exclusive microlette process... that it has a graphite particle purity between 99.5% and 99.8%.

We maintain the "Castell" lead is free of all impurities... grit and hard spots... that it does not scratch, flake, smudge or crumble. That its point resists unusually hard pressure without snapping off. That it is absolutely accurately graded in 18 uniform degrees, 7B to 9H.

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DRAWING PENCIL ★ 15¢
IN THE METAL BOX
The highest priced drawing pencil sold in America.

No Grit No Scratch No Smudge

A.W. FABER*Inc. NEWARK, N.J.

PUBLICATIONS ON MATERIALS AND EQUIPMENT
(Continued from page 34, Advertising Section)

COLUMBIA VENETIAN BLINDS AND WINDOW SHADES.—Catalog, covering a line of Venetian blinds and window shades, presents complete description and specification data, together with installation details. 14 pp. 8½ x 11. The Columbia Mills, Inc., 225 Fifth Avenue, New York, N. Y.

Published by the same firm, "Architectural Data Sheets," Architects' filing folder containing series of seven detail sheets covering Columbia residential Venetian blind installations for various types of windows, also set of installation photographs.

HOMES THAT SAY COME IN.—New brochure dealing with the subject of Bryant gas-fired heating equipment for moderate-priced homes. Illustrations show numerous exteriors and interiors of small homes.

16 pp. 8½ x 11. The Bryant Heater Co., 17825 St. Clair Ave., Cleveland, Ohio.

TRANE CONVECTORS FOR APARTMENT HOUSES AND HOUSING PROJECTS.—Bulletin S328 illustrating Trane convector installations in apartment buildings and low cost housing projects recently completed. 16 pp. 8½ x 11. The Trane Co., LaCrosse, Wis.

Published by the same firm, "Trane Extended Surface Coils." Bulletin S350 presents detailed description of a line of extended surface coils for heating, cooling, drying and air conditioning applications. 20 pp. 8½ x 11.

ASTRUP AWNING HARDWARE.—A.I.A. File No. 35-p-2. Looseleaf reference manual covering a line of awning hardware for modern store front construction. Construction details, installation instructions, specifications, color chart of awning fabrics, etc. 34 pp. 8½ x 11. The Astrup Co., 2937 W. 25th St., Cleveland, O.

SILENTAIRE.—Folder announcing and describing a new low-cost window unit which ventilates, circulates and filters the air and eliminates disturbing noises, for use in homes, office buildings, hotels, hospitals, clubs, apartments, etc. 6 pp. 8½ x 11. Berger Mfg. Div., Republic Steel Corp., Canton, O.

MANUFACTURERS' DATA WANTED

THEO. N. THOMPSON, Architect, 1322 East 21st Street, Oakland, California. (Data for complete A.I.A. file.)

R. D. WILSON, Consulting Engineer, Christie Clinic Building, Champaign, Ill. (Data for complete A.I.A. reference file.)

B. ROBERT SWARTBURG, Architect, 2 West 46th Street, New York, N. Y. (All samples and data for a new filing system.)

WM. H. CAMPBELL, Draftsman, 909 East Morton Street, Tacoma, Washington. (Data for complete A.I.A. file, residences, commercial and school buildings.)

ALFRED J. LUONI, Draftsman, 6 Cavfield Street, Dorchester, Mass. (Data for A.I.A. file on homes, residential work and small buildings.)

ALEX GORLEWSKY, Student, 18 Brokaw Avenue, Floral Park, New York. (Data to establish A.I.A. file.)
Your **Labor Costs** Have Been **REDUCED** At Our Factory

**AMERICAN** Steel & Wire Company Wire Fabric is a factory made product designed to give full strength as reinforcement for concrete floors, walls and roofs in building construction. And our Wire Fabric will do the job for you at a minimum cost.

This product is easy to handle and little or no skill is needed to put it in place. The use of Wire Fabric helps to speed up building operations and reduces labor costs. Once it is put in place it cannot become misplaced or shifted previous to concreting.

Our Wire Fabric is made in two forms: Triangle Mesh and Electric Welded square or rectangular mesh. Each is available in either sheets or rolls and we are able to make prompt deliveries.

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SAMSON SPOT SASH CORD
Made in only one quality—the best we can make after more than half a century's experience. No sash cord can be too good. One replacement job makes the cheapest cord cost more for a whole house than Spot Cord. It outwears any other material, and is noiseless. Substitution can be readily detected, because the Colored Spots (Reg. U.S. Pat. Off.) identify it. Write for samples and specification data.

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GUARDIAN of PROFITS
Refrigerator frosts in all special finishes, such as monel, chrome nickel steel, porcelain, etc.

Refrigeration plants noted for high efficiency prove every day that JAMISON-BUILT COLD STORAGE DOORS increase income by reducing outgo. Faster operation, tighter seal, modern improvements, and longer wear are the reasons ... For maximum profit, specify only JAMISON-BUILT DOORS. Free bulletin on request.

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Replies to box numbers should be addressed care of PENCIL POINTS, 330 West 42nd Street, New York.

POSITIONS OPEN
ARCHITECTURAL draftsman capable of making first class working drawings of "modern" public buildings. Need not be engineer or designer. Send sample print of working drawings. State experience and minimum salary. Architects, 413 Ardis Bldg., Shreveport, La.

ENGINEER, builder and architect. Must be first class and experienced. Must have sufficient interest in the business to invest some money in it. Specialists in prefabricated stone and metal homes. Box No. 1000.

A LUMBER concern located in northern Illinois wishes to engage the services of a man with the following qualifications, in their Small Home Building Department. Must be able to prepare from prospect's ideas a complete plan and specifications for a small home in the $4,000 class, same to comply with the F.H.A. standards of construction. Must be under 35 years of age, must present a neat appearance, and possess a pleasing selling personality, because this is primarily a sales job. Must have the desire and ability to work hard, because we would expect this to be a worthwhile proposition with plenty of opportunity for advancement. Knowledge or experience in F.H.A. financing and also details of procedure of retail lumber business is desirable but not essential. In replying please give complete information as to ability along these lines, with the understanding that all replies will be held in strict confidence. Box No. 1012.

ARCHITECTURAL draftsman quick in sketches, perspective and rendering wanted by Baltimore architects. State age, experience and salary. Box No. 1013.

POSITIONS WANTED
LANDSCAPE architect who has had experience with National Park Service, State Highway Dept. and City Park system. Have done design and field supervision in all places. Especially interested in city park work. Vernon Irish, 5312 Washington Blvd., Chicago, Ill.

DRAFTSMAN and tenderer, age 25, graduate of I.C.S. Inexperienced but eager to work. Paul Pavlik, 5688 Boulevard, North Bergen, N. J.

ARCHITECTURAL engineer, college graduate, 4 years varied experience in architectural field. Designed buildings for industrial, commercial and dwelling, designed and planned the entire building starting with field dimensions up to finished plans. Capable of designing structural steel, reinforced concrete and other trades. Also had supervising and estimating experience. Would like to become affiliated with firm in Central or South America. Box No. 1001.

REGISTERED architect—Connecticut—wants position with possibility of leading to partnership. B.F.A. degree. Wish to specialize in contacts and supervision. Box No. 1002.

ARCHITECT desires association with established architect. University graduate, good designer, 18 years practical experience. Willing to invest in business. Box No. 1014.

(Continued on page 42, Advertising Section)
Plant lovers everywhere will rejoice in this NEW BOOK on

Soilless Growth of Plants

By Carleton Ellis and Miller W. Swaney

Few technical developments of the past decade have aroused more general interest than this subject of "soilless growth," also referred to as tank farming, chemical gardening or the new coined word "hydroponics."

This book brings within the reach of everyone a complete picture of the principles, practices and equipment of soilless growth. To persons already engaged in growing plants, it will offer new avenues for plant work. For those not hitherto participating in raising flowers, vegetables and fruits, it will afford a splendid opportunity for developing a new and extremely fascinating hobby. Architects and laymen alike will find "Soilless Growth of Plants" packed with choice information which will make it a worthwhile investment either for pleasure or profit.

160 Pages; 60 Illustrations, 3 in color; $2.75

Reinhold Publishing Corp., Dept. W

ANEMOSTAT HIGH VELOCITY AIR DIFFUSER

1. The Anemostat will deal with any volume of air.
2. The Anemostat will deal with any air velocity.
3. The Anemostat can be made to give the velocity of emergence any desired value in any direction.
4. The Anemostat will draftlessly diffuse the air.
5. The Anemostat will constantly mix room air with conditioned air.
6. The Anemostat will equalize the temperature of the room air and conditioned air well above the breathing level.
7. The Anemostat's use will generally result in smaller plants, smaller ducts, lower operating cost.
8. The Anemostat, by keeping a large volume of air in constant, slow, dual motion
   a) prevents air pockets.
   b) dissipates the evaporation aura around the human body.
9. The Anemostat does not increase prevailing noise level at neck velocities below 1,600 fpm.
10. The Anemostat has no moving parts.
11. The Anemostat does not decrease the free area of the duct opening.
12. The Anemostat offers extremely low resistance.
13. The Anemostat may be combined with light fixtures or light effects.
14. The Anemostat is light in weight and easily supported by the duct.
15. The Anemostat is easily fastened to the duct.
16. The Anemostat is attractive in appearance.

Photographs of installations and technical data available on request

The Anemostat is protected by
11 United States patents and 9 United States patent applications.

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10 EAST 39th ST., NEW YORK

ANEMOSTAT
"No Air Conditioning System is better than its Air Distribution"
**FREE EMPLOYMENT SERVICE FOR READERS OF PENCIL POINTS**

(Continued from page 40, Advertising Section)

**DRAFTSMAN**, ambitious young man, 9 years drafting experience, four years residence, two years mill work, three years park work, maps, city basic squares and plating lots. Have knowledge of engineering drawing, building construction and plan reading. Will go anywhere in U. S. Box No. 1003.

**ARCHITECT** doing Catholic parochial building desires to make connection with guest designer who has thorough working knowledge of the Romanesque styles. Must be practical and capable of details. Need not leave present employment. State experience, with whom employed on such work and compensation expected. Box No. 1004.

**ARCHITECTURAL** designer — draftsman — excellent renderer, 3 1/2 years working drawing experience; working knowledge steel, concrete, illumination experience. New York Metropolitan district. Age 30, University architectural degree. Box No. 1005.

**ARCHITECTURAL** engineer — experience covers structural and mechanical layout of building, general duties in small architectural office, accoustical engineering, estimates and appraisals. University graduate with training in engineering and physics. 36 years of age. Will consider any position with possibilities for permanence and a future. Box No. 1006.

**JUNIOR** architectural draftsman, age 21, desires position with progressive firm. Vocational school graduate. Two years practical experience. Willing to learn and work hard. Good references. Box No. 1007.

**DRAFTSMAN**, 45, married, 25 years all-around experience in architects and engineers offices, sketches to completion, available anywhere. Box No. 1008.

**YOUNG** man, 5 years’ advertising experience associated with radio stations and advertising agencies. Anxious for any opportunity in selling or creative copy and layout. Box No. 1009.

**ARCHITECTURAL** draftsman, registered architect. Good on design and construction, over 15 years of practical experience. University graduate, trained at Columbia and Harvard. Box No. 1010.

**AVAILABLE** — some industrial designer or manufacturer needs a man who has (1) — 11 years experience on the design of lighting fixtures, reflectors, luminous elements and layouts based on esthetic and engineering principles (2) — 5 years study of interior decoration, freehand and instrumental perspective drawing, water color sketching and rendering of interiors and exteriors (3) — knowledge of exposition lighting (4) selling experience. If a person with these qualifications willing to start at a moderate salary would be valuable to your business please write to Box No. 1011.

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CAMBRIDGE, MASSACHUSETTS, U. S. A.
master of its esoterics. In particular I note the custom of occasional youngsters from the back-country, who spend a year or two at the B.A.C. and then rush home to whip out a shingle and call for manufacturers' samples and catalogues. Why isn't that reason for State Registration, or don't we like centralized control?

After prolonged meditation, I am prepared to state that the disciplinary attitude of architects and head draftsmen establishes an office's morale for better or for worse. Treated like kindergartners, the boys will naturally act the part, make the boss's name synonymous with being born out of wedlock and outsmart him at every opportunity. Not long ago a crew of hearties, on a night shift, were suspected of absenting themselves a little early. Said the architect, "I came in at nine-thirty, and the bulbs were cold." Next evening, to complete the picture, he telephoned and spoke to each of his stalwarts in turn, counseling them to fight fiercely. The entertainment of such suspicions is far more easily observed, by the suspected, than the practice of a purely artificial attitude of friendliness. A pat on the back and a cheerful greeting goes further in getting out work. You don't have to mean anything by it, but you can't just quit feeling bulbs and start patting with conviction.

A famous Boston architect, whose name comes somewhere between O and Q, recently sunk into an upholstered seat on the B & M, but decided to check personal equipment before relaxing. Back in the office his ticket lay mouldering in an envelope! So laxing. Back in the office his ticket check personal equipment before reseat on the B & M, but decided to

One of the unusual features of the new PEDAC headquarters in the International Building, Rockefeller Center, New York, will be a lobby constructed entirely of structural glass and mirrors, depicted here in a rendering by R. L. Stickney. Dramatizing new uses of glass in architecture, the walls will be of grey and Cadet blue structural glass with a ceiling of Gun-Metal mirror glass reflecting the color scheme. The information booth will be of the new "lonwex" glass. Other exhibits in the Permanent Exhibit of Decorative Arts and Crafts will show the increased adaptability and allure of other materials available for construction, according to Paul MacAlister, A.I.D., founder and director of PEDAC. The architects, Harrison & Fouilboux, also have included a small motion picture theatre, a two-story model house, three furnished apartments and an "X-ray house," in the exhibition space, to be utilized by some 200 concerns

PENCIL POINTS

October, 1938

Leon Reach.
Sculptured Murals for Time & Life Building

Rockefeller Center, Inc., has announced that Carl Milles, internationally famed Swedish sculptor, now at the Cranbrook Academy of Art, has been commissioned to do a sculptured mural for the Time & Life Building at Rockefeller Center. This will be Milles' first creation for any public building in New York.

The mural, which is to be carved in Polychromed wood, will occupy 15x20 feet in the lobby and will depict "Forest Life," in contrast to the urban character of the Center.

Interior Design

Students Compete

Announcement of a second competition in interior design, sponsored by James Blauvelt & Associates, New York, with Country Life magazine, for students enrolled in all schools and colleges offering regular courses in interior design, has been received. The problem is design of a dining room for a medium size country house.

A cash award will be offered for the winner of the competition, for which entries must be submitted before January 1, 1939.

(Please note: continues from page 18)

his excellent staff and spoke of his wife's loyalty during his enthusiasms and dejections, saying that instead of being the usual "severest critic," she thought everything he did "just lovely," Richard Neutra, who was present at the meeting, also has received a Bronze Medal from the Paris Exposition.

What to do with medals and certificates is something every architect has to work out for himself; but all of us are interested in what becomes of prize money. Alden Becker, who won a $1,000 award in the recent Gas Competition, still has the money and plans to study in Europe after graduation. It should be remarked that while Becker was only a sophomore in college last year, he had already spent two summers in the office of Webster and Wilson, whose modern work has such a fresh and vigorous quality. Dean Weatherhead of the College of Architecture at the University of Southern California started his students in the winning tradition by permitting the whole sophomore design class and some of the more advanced men to take the Gas Competition as a school problem; two national and several local prizes were thus won. Cameron and Topp, who also participated in the prizes, are at work on the astounding commission of preparing drawings for a Tudor gallery in the Shakespeare country, the client feeling that the local men are "deficient." Surely, all the English architects can't have gone modern?

Society also took note of the Gas Competition, for the society columns carried the following: "Emmons Brothers Capture Prizes. Fred Emmons, that handsome young architect, feels 'Pleasure that comes unlooked for is thrice welcome.' You see, Fred and his equally talented and attractive brother Donn, have just received news that they have captured prizes in national and local architectural competitions."

Paul Hunter.

Landscape Exchange Problems Announced

The Executive Committee of the Landscape Exchange Problems at the University of Illinois, Urbana, Ill., has announced the Problems for the Fifteenth Annual Season and cordially invites all schools teaching Landscape Architecture to participate, and receive statements of programs, reports of judgments, and exhibitions.
Mies van der Rohe Joins Armour Faculty

Ludwig Mies van der Rohe, noted as a founder of the new architecture, has joined the faculty of Armour Institute of Architecture, Chicago, as Professor of Architecture and Director of the School of Architecture. His appointment constitutes the realization of a plan, long under consideration by the Institute officials and a committee of prominent Chicago architects, and is in line with the current expansion program designed to make the architectural department of the Armour Institute one of the foremost in the United States.

The following committee of Chicago architects sponsored the appointment: John A. Holabird, of Holabird & Root, chairman; Alfred Shaw, of Shaw, Naess & Murphy; C. Herrick Hammond, State Architect of Illinois, a member of the firm of Burnham Brothers & Hammond; Alfred Alschuler, a trustee of the Institute and president of Alschuler, Inc.; and Jerrold Loeb, acting director of the Institute's school of architecture since 1936, and a member of the firm of Loeb & Schlossman.

Glass Competition

With the Second Annual Competition of the Pittsburgh Glass Institute in full swing, a reminder that entries will be received until November 1 has been sent out by competition officials.

"I've learned my lesson!"
says A. H. Dresser,
Maintenance Engineer

"No more high sill replacement cost for me! The windows in our new plant addition will be equipped with Genuine Wrought Iron Sills"

Specify Mesker steel sash with Genuine Wrought Iron Sills that last as long as the building and cost as little as 10c more per foot of sill member.

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for the illustrated booklet "Mesker Steel Sash With Genuine Wrought Iron Sills Reduce Window Maintenance Cost Over 90%". It tells why Mesker Steel Sash with GWI sills last as long as the building.

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Designs for mural paintings for the Great Halls of the United States Government Building at the New York World's Fair, 1939, are reproduced here from the studies which won the recent $10,000 National Mural Competition conducted by the Procurement Division of the Treasury Department. The paintings are to be 105 feet in height and 37 feet in width, on walls opposite the main entrances of the building. The design by George Harding, left, is for the Hall of Legislation, and the design by James Owen Mahoney, right, is for the Hall of the Judiciary. The $5,000 prizes received by the winners of the competition, which closed September 1, also will cover cost of supervision.
These pictures of the entrance to Paul Philippe Cret's famed Folger Shakespeare Library, Washington, D. C., at left, and the entrance to the newer $280,000 post office at Decatur, Illinois, right, were sent us by Torquato De Felice, Washington draftsman, as "one good reason why we are sometimes styled copyists." The Cret detail was published by the "American Architect," with scale drawings, in 1932, several years before the post office was built.

Information Service
Inauguration of an informational service to be known as the Pittsburgh Glass Data Service has been announced. It will attempt to keep the building profession constantly up-to-date on developments in the glass industry.

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By HARRY PARKER, Professor of Architectural Construction, University of Pennsylvania; Editor, Kidder’s "Handbook" (18th Edition)

Here at last is a book which presents the design of beams, columns, slabs, etc., so simply, so concisely, that you can readily follow the explanations without previous training in the subject. Now you can have at your fingertips the important terms and basic principles employed in the design of structural members in building construction, and a host of examples with their solutions, illustrating just the sort of problems that must be faced in practice. Timber construction, steel construction, reinforced concrete, and roof trusses all receive treatment. This book is a real time-saver.

Send for an "on approval" copy

214 Pages 96 Illustrations 5 by 7 1/4 Flexible binding, $2.75

JOHN WILEY & SONS, INC., 440 Fourth Ave., New York
They will not chip and of Mexico—beside the fact that his chief hobby is photography—he equipped himself with two of the finest precision cameras of his collection, and using both negative and color film he photographed the entire tour in hundreds of pictures, many taken from the plane which carried him to the West Coast.

Traveling by car from San Francisco down the Mission-Studded El Camino Real he recorded in color the picturesque beauty of Missions San Miguel and San Juan Capistrano. Hence skipping eastward across Arizona and New Mexico, with a stop at the famous Carlsbad Caverns, and on cross the plains and deserts of Texas he entered Old Mexico at Nuevo Laredo, penetrating nearly a thousand miles into that most interesting country. Mexico itself is a veritable paradise for camera fans. The archaeological and architectural attractions that abound there, coupled with the natural grandeur and Romanticism of our southwestern neighbor, make camera subjects interesting, exciting and educational.

The influence of Old Spain, intermingled with ancient Mayan and Aztec is rapidly losing face, because of the economic pressure of contemporary building requirements. However, in the little hilly town of Taxco, one hundred miles below Mexico, D. F., the city fathers established an ordinance prohibiting the construction of buildings "out-of-character" with the precedents already set by the old forms.

Washington effects the same thing without a law. Red.

Chapter to Entertain N. Y. State Architects

The New York Chapter of the American Institute of Architects announces that it will act as host, on Thursday evening, October 27-29, to a convention of New York State architects, sponsored by the New York Association of Architects. Their headquarters will be at the Hotel Pennsylvania.

The tentative program outlined includes an address on the interrelation of architectural organizations within the State, a visit to The Cloisters and Woodhaven, L. I. This award was presented to the youthful winners by Mrs. Franklin D. Roosevelt.

Five prizes, $1,000 each—M. Righton Swicegood, New York; Richard J. Neutra, Los Angeles; Williams Brothers, Detroit; John Hironimus, New York; John Donald Tuttle, New York.

Seventh prize, $250—Owen Lau Gowman, New York.

Three prizes, $100 each—H. Roy Kelly, Los Angeles; Amsden Leone, Detroit; Marc Peter, Jr., and Hugh Stubbins, Boston.

Nine honorable mentions and $10 each went to Stubbins and Peter; Robert S. Mayberry, Wichita, Kansas; John H. Van der Meulen and Ralph E. Rapson, Holland, Mich.; John Ekin Dinwiddie, San Francisco; Daniel Neilinguer and Lytle P. Lindberg, New York; Alain S. Robinson, Winnetka, Ill.; Robert Woods Kennedy, Boston; Royal Barry Wills, Boston, two mentions.

A. I. S. C. Convention Will Open October 11

The Sixteenth Annual Convention of the American Institute of Steel Construction will be held on October 11-14 at French Lick, Indiana.

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Ladies' Home Journal House Awards Listed

Awards in the Small House Design Competition, conducted this summer under supervision of John Cushman Fister and entered by architects in all parts of the country, have been announced as follows:

Grand prize, $1,100—Herbert Neumann, Jamaica, L. I. and Herbert Struppmann, Woodhaven, L. I. This award was presented to the youthful winners by Mrs. Franklin D. Roosevelt.

Five prizes, $1,000 each—M. Righton Swicegood, New York; Richard J. Neutra, Los Angeles; Williams Brothers, Detroit; John Hironimus, New York; John Donald Tuttle, New York.

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A. I. S. C. Convention Will Open October 11

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This NEW Yello-Jacket BURNHAM Stings The Fuel Bill

AN entirely new boiler both inside and out. The combustion chamber fire extends from bottom to top giving a direct fire-shine radiant heat all the way. Performs satisfactorily with practically any chimney, which in itself is a strong point. Its fuel consumption has proven to be surprisingly low.

Jacket is a light dandelion yellow; has a removable "front porch" like the jacket itself, completely enclosing burner when oil is used. Can be changed over at any time from oil to coal, or coal to oil. Has B litin Taco heaters for hot water supply.

Send for special printing about it.

See "Sweeth's for full line of Burnham heating equipments"

BURNHAM BOILER CORPORATION

Irvington, New York Zanesville, Ohio

PENCIL POINTS OCTOBER, 1938
NEW PRODUCTS
Changes in Personnel, etc.

MODERATOR MIXING VALVE
The Josam Mfg. Co., Empire Bldg., Cleveland, O., announces the introduction of a new moderator mixing valve which prevents accidental scalding in showers. It has an exclusive automatic type shuttle valve operation, so that if cold water fails, the pressure and flow of the hot water instantly shuts off the hot water before it reaches the shower head.

A single handle controls both hot and cold water, thereby preventing selection of wrong fixture handle. Turning the handle from "off" position delivers cold water first. Temperature is increased by further turning of the handle. Desired maximum temperature is controlled by a slight adjustment of the temperature regulator which regulates the amount of hot and cold water entering the mixing chamber when the control handle is in full turned position.

Hot water will not flow if there is no cold water pressure when valve is turned on. Hot water will shut off simultaneously if cold water pressure fails completely during operation of the valve.

Hydraulic action of shuttle valve automatically proportions flow of hot and cold water to compensate for sudden increase or decrease of hot or cold water pressures, thereby maintaining equalized temperatures.

NEW TREATMENT FOR COLORING AND DUSTPROOFING CONCRETE FLOORS
The Truscon Laboratories, Detroit, Mich., is offering in the Truscon Flor-Dye system, a new method for coloring, dustproofing and preserving concrete floors. Flor-Dye does not form a surface film, but penetrates, becoming an integral part of the cement surface. For this reason, it does not wear off easily, nor is it possible for the material to peel off, chip off, or crack. It must be used, however, over an unpainted surface. If the concrete is painted, such paint must first be completely removed.

Flor-Dye is oil-proof and generally stain-proof. It seals the pores, preventing the absorption of most staining materials such as oil, greases and the like. Also, Flor-Dye floors are easily cleaned and kept in first-class order. Flor-Dye is sun resisting, and with proper maintenance, it is said, will last for years. It is especially applicable to all forms of cement surfaces, as well as porous tile, where it is desired to color the surface, seal it, and make it non-dusting.

Among its wide range of uses are basements, garages, porch floors, sales rooms, auto service stations, stores, restaurants, power plants, convention halls, hotels and hospitals, offices, and especially food plants where the desire for clean, sanitary, decorative cement floors is paramount.

Modern in design, Silentaire is attractive in appearance, when installed does not interfere with Venetian blinds, curtains or drapes and can be easily removed when washing windows. Silentaire can be easily installed in any window. It is recommended for homes, offices, buildings, hotels, hospitals, clubs, apartments and many other classifications.

NEW LIGHTING UNIT FOR DRAFTING ROOMS
The accompanying triple-exposure photograph illustrates the extreme mobility of a recent lighting innovation for draftsmen’s tables, drawing boards, and other expansive working surfaces. The double swinging arm of this Greist White Knight can be extended twenty-four inches in any direction and the lamp held in the desired position with set screws at both turning points. The new Corrected Light unit was developed by the Greist Mfg. Co., New Haven, Conn.

Corrected Light, it is explained, is accomplished with an exclusive luminaire of Celestialite, a triple layer glass, under the metal shade. The three laminated glass layers—blue, opal and clear—whiten and diffuse the light, removing the distorting and harmful yellow rays, minimizing glare, and producing a light comparable to subdued daylight. Color contrasts are intensified under the white light increasing visual acuity by strengthening detail, the manufacturer reports.
The design of the lamp assures a wide distribution of light which, in this model, can be expanded further by the wide range of the swinging arm. Intensities with the recommended 100-watt bulb are said to conform to optical standards for close visual work. Genuine bronze or gunmetal plate with silver-plated trim are the choice of finishes.

NEW WARD LEONARD DIMMER
A new dimmer manufactured by the Ward Leonard Electric Co., Mount Vernon, N. Y., is a modern and improved device for controlling lamp brilliancy. It is known as an Autrastat dimmer and not only provides smooth flickerless dimming but also permits greater flexibility in loading and operates at high efficiency. The Autrastat dimmer has the characteristics of an auto-transformer with an infinite number of steps and its low losses result in a minimum amount of heat dissipation.

An Autrastat dimmer will control any load from a 10-watt lamp up to the maximum rating of the dimmer with equal facility and the same rate of change in intensity. At any dimmer position, the connected load may be increased or decreased without affecting the intensity.

Autrastat dimmers are available in two sizes; 1000 watts maximum capacity and 4000 watts maximum capacity and are for use on 110-120-volt, 50-60-cycle alternating current. They can be assembled in any of the forms of angle iron framework and provided with such control features as are available for Vitrohm resistance dimmers.

NEW TYPE OF GALVANIZED ROOFING
A new kind of galvanized roofing with a patented spring-pressure lap and other exclusive features has been announced by The American Rolling Mill Company, Middletown, O. It is known as Armco galvanized Seal-Krimp roofing, and is said to be storm-proof, weather-tight, and easily installed. It costs no more than ordinary metal roofing per square applied.

The new roofing is available in three grades of metal—copper-bearing steel, open-hearth steel and Armco ingot iron. The company's new galvanized Paintgrip finish is recommended for roofs to be painted immediately. Roofing accessories are available.

The new roofing is especially suitable for farm buildings, factory buildings and homes. It also finds ready use as siding for factories, garages, barns and other structures, filling stations and similar buildings.

When Armco Seal-Krimp is placed in position and nailed down, the sections are held firmly together with spring tension at three points. Drainage channels and siphon breakers are built-in features.

The pressure lap at the lower end of each sheet gives added protection, providing a pressure-sealed contact at the end laps and an effective water stop. The sections nest snugly together and cannot get out of alignment. Because of the spring pressure seam, Seal-Krimp must be laid one row or width at a time, starting at the eaves and working towards the ridge.

Roofing accessories available with Seal-Krimp include adjustable ridge roll, made in two pieces to fit any ordinary roof pitch without bending or malleting. It may be adjusted lengthwise to fit V's on either side of the ridge. Other accessories available are end wall flashing and gambrel joints.

NEW TOUCH CONTROL DRAFTER
What is described as one of the most important developments offered in drafting machines has just been announced by the Charles Bruning Co., 100 Reade St., New York—the new Bruning-Wallace Touch Control Drafter.

The new drafter is said to bring new speed, smoothness and accuracy to the drafting process. The new method of controlling the protractor head, known as touch control, assures utmost responsiveness of the machine to the draftsman's wish, and eliminates all fumbling or other waste motion in operating the machine.

The touch control button is located on the protractor head, where it is always conveniently under the draftsman's thumb. A touch on this control button releases the head, allowing it to rotate freely to the desired setting. Simply lifting the thumb locks the head positively at the desired automatic index stop. A slight turn of the control button allows free wheeling, enabling the head to rotate freely. With touch control, it is stated, the operator can concentrate on his work and is not required to pay undue attention to the operation of his machine. The thumb-latch has been eliminated.

The new Bruning-Wallace standard drafter is designed especially for the use of mechanical, architectural and structural draftsmen. The full circle protractor is graduated throughout in degrees, and numbered in each quadrant, from 0° to 90°. Automatic indexing stops are provided at 0°, 30°, 45°, 60°, and 90° in each of the four quadrants, corresponding to standard triangles. The double vernier reads to 5 minutes. The scale line-up adjustment permits the scales to be set accurately to correspond to lines previously drawn, instead of lining up the drawing to the scale.
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The Work of PAUL P. CRET

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HE Federal Reserve Board Building is but one of many
noteworthy structures designed by the distinguished Phila­
delphia Architect, Paul P. Cret, for which Pecora Calking
Compound was specified and used. While it has become general
practice to calk all window and exterior door frames, a further
development in calking provides for sealing all masonry joints
as well, to assure even greater weather-protection. Such work
should be performed by experienced calking contractors, with
suitable pressure equipment. Properly applied, Pecora Calking
Compound will not dry out, crack, or chip. It has demonstrated
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ALSO MORTAR STAINS • SASH PUTTIES • ROOF COATING • PECOMASTICS FOR STRUCTURAL GLASS INSTALLATION

50

OCTOBER, 1938
IN the RCA exhibition building — shaped like a radio tube — symbolical design is joined with utility of design in a remarkably effective union.

The broad "base" of the structure will house working models of various radio devices, while around the sides will be six television viewing rooms. In the "tube" section, visitors will see the latest radio apparatus actually being constructed. In the adjoining lagoon and park, sets for sending and receiving radiograms, and radiomarine devices will be featured.

AMERICAN PENCIL CO., Hoboken, N. J.

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