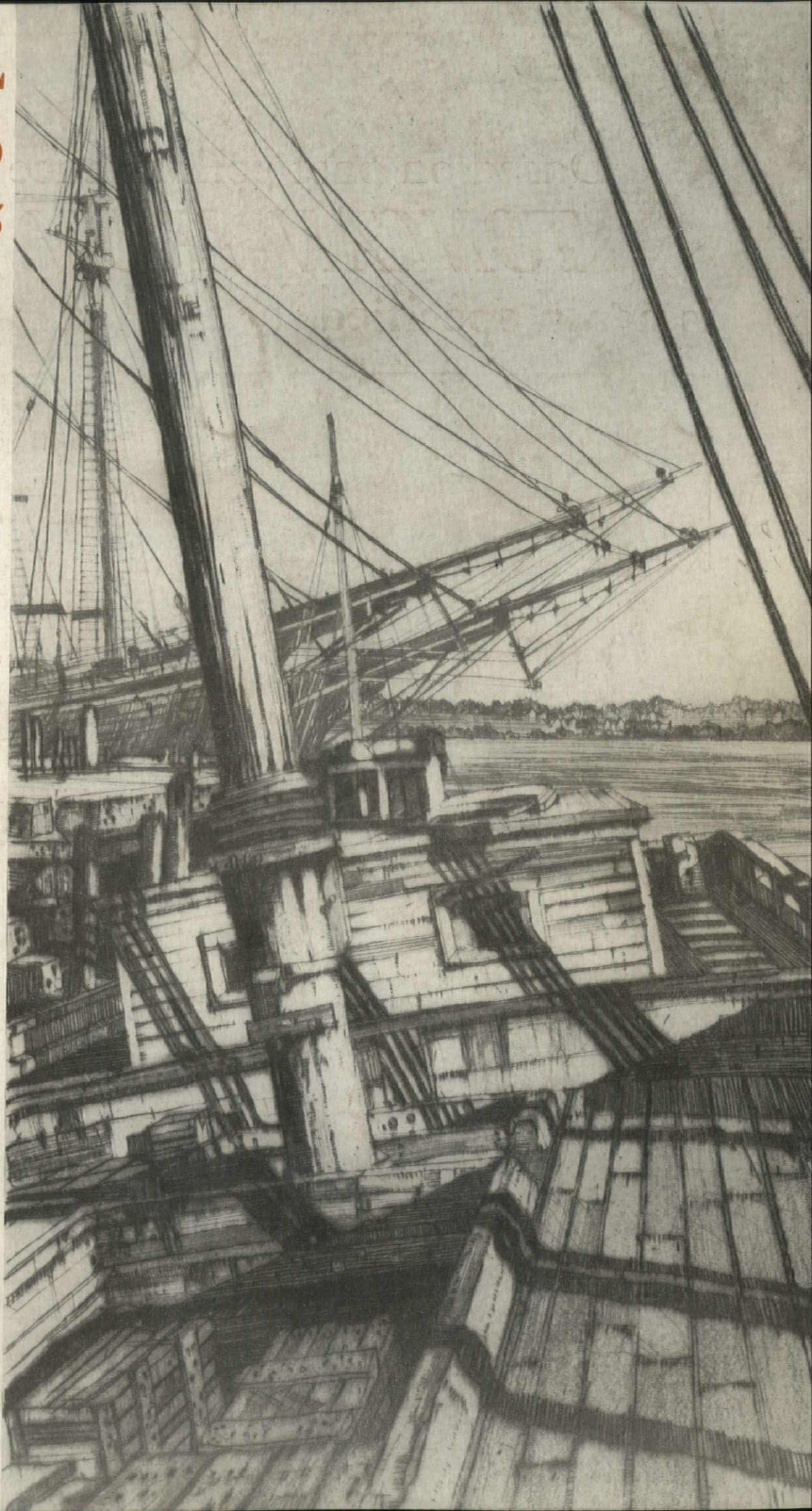
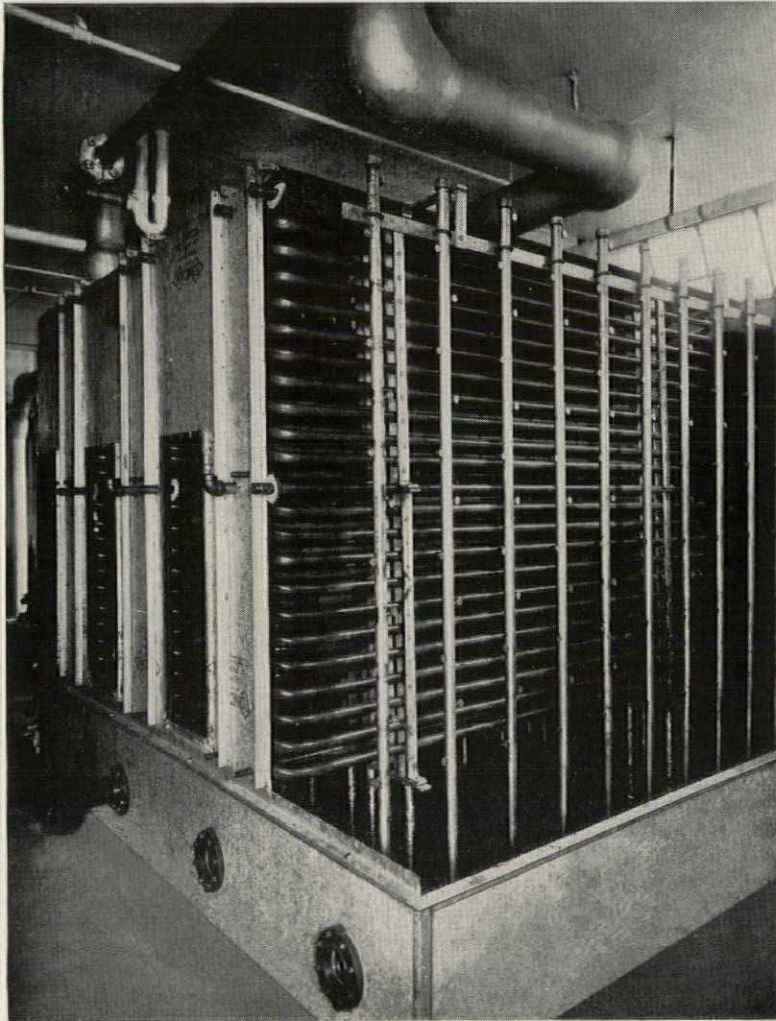


PENCIL
POINTS
October 1935



Costs a Copy

Based on past performance
TONCAN IRON
is again specified for Air Washer



Republic Steel

C O R P O R A T I O N

GENERAL OFFICES · · · YOUNGSTOWN, OHIO



Five years ago, a large drug manufacturer installed an ammonia evaporator in an air washer. The material selected for both pipe and sheets was Toncan Iron. Recently, a similar installation was needed in the same plant. The performance of Toncan Iron during the last five years caused it to be specified for the new unit.

Service conditions such as are encountered in an installation of this sort are severe—air and moisture combine forces to tear down the ferrous structure. But Toncan Iron is not an ordinary metal. Refined open hearth iron, copper and molybdenum are here combined to form an alloy that possesses the highest rust-resistance of any ferrous metal in its price class. It often takes years for users to find out how superior Toncan Iron really is—how much more economical it is in service.

You'll find the story of Toncan Iron in "The Path to Permanence," if you're interested in sheets, and in "Pipe for Permanence," if pipe troubles worry you. Either, or both books sent on request.

REG. U. S. PAT. OFF.
TONCAN
COPPER
MO-LYB-DEN-UM
IRON

PENCIL POINTS

A Journal for the Drafting Room

OCTOBER, 1935



VOLUME XVI, NUMBER 10

RUSSELL F. WHITEHEAD, *Editor*

KENNETH REID, *Managing Editor*

Something for Everyone in the Architectural Profession

Cover Design, "The Derelicts—Rockland, Maine," by Samuel Chamberlain

READERS' COMMENT
for future reference

ARTICLES

SHOP DESIGN	"Modernizing Main Street"	501-519
OBITUARY	"A Conscientious Artist" Francis P. Sullivan	520
DRAFTING TECHNIQUE	A. L. Guptill's Corner Arthur L. Guptill	537

THE MONOGRAPH SERIES

DESIGN SOURCES	Volume XXI, Number 5	
	Some Old Houses of Warren, Rhode Island J. Fenimore Russell	539
	Research and Measured Drawings by Frank Chouteau Brown	

PLATES

SMALL HOUSE DESIGN	G.E. COMPETITION DESIGN Royal Barry Wills	523
	THREE SMALL HOUSES Walker & Gillette	524-526

COMPARATIVE DETAILS—Group 24

CONSTRUCTION AND DESIGN	Modern Lighting The work of William Lescaze, Dwight James Baum, Walter Kantack, Ralph T. Walker, Donald Deskey, Irving L. Scott, Walter Dorwin Teague, Eugene Schoen & Sons, and Voorhees, Gmelin & Walker	527
-------------------------	--	-----

DATA SHEETS—Prepared by Don Graf

OFFICE DATA	Standard Telephone Booths Nos. 5 and 6	534
	Chimney Construction (2)	534
	Check-List of Electric Equipment	535
	Safe Loads on White Fir and Eastern Hemlock Joists	535

PERSONAL AND NEWS

HERE, THERE, THIS, AND THAT	
Letters from Readers, News from the Field, etc.	13

Published Monthly by REINHOLD PUBLISHING CORPORATION, Stamford, Conn., U.S.A.

RALPH REINHOLD, *President and Treasurer*

H. BURTON LOWE, *Vice President and Secretary*

PHILIP H. HUBBARD, *Vice President*

FRANCIS M. TURNER, *Vice President*

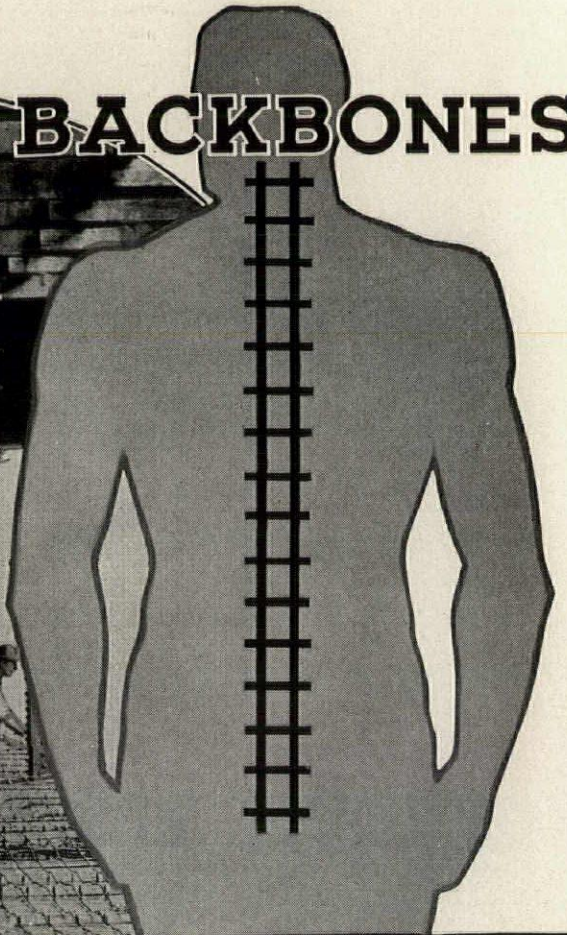
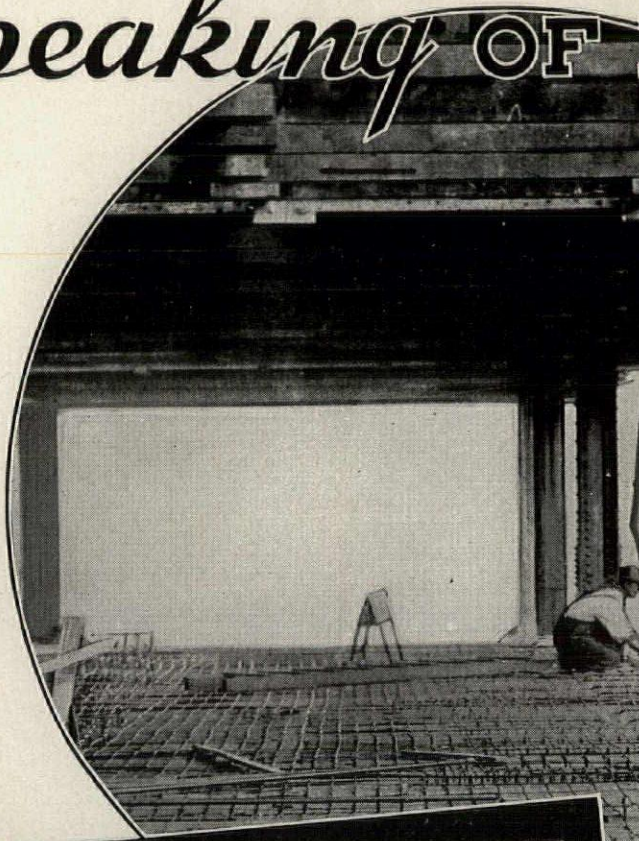
Executive and Editorial Offices: 330 West 42nd Street, New York

35 cents a copy. Yearly subscription \$3.00, two years subscription \$5.00, payable in advance, to the U. S. A., U. S. Possessions, Cuba and Mexico. Foreign subscribers add \$1.00 a year for postage; Canadian, 50 cents a year additional. Remittances by International or American Express Money Order or by Draft on a bank in the U. S. should be payable in United States funds. Subscribers are requested to state profession or occupation. Changes of address must reach us

before the 20th of the month to assure delivery of forthcoming issue. Be sure to give both your old and new addresses. *To Contributors:* Articles, drawings, photographs, etc., sent with a view to publication will be carefully considered, but the Publisher will not be responsible for loss or damage. Copyright, 1935, by Reinhold Publishing Corporation. Trade Mark Registered. All rights reserved. Pencil Points is being indexed regularly in The Art Index.

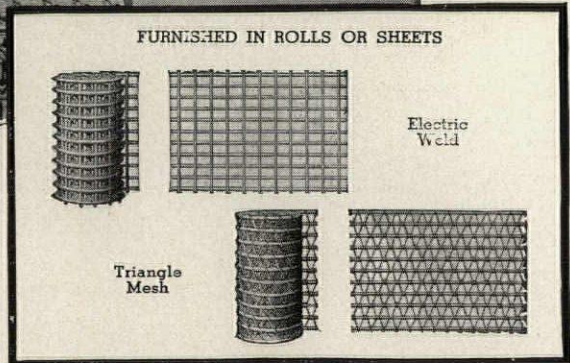
THE MAGAZINE OF ARCHITECTURE AND DRAFTSMANSHIP

Speaking OF BACKBONES



This WIRE FABRIC IS THE Backbone of FLOOR SLAB CONSTRUCTION

WHATEVER the method employed in constructing a concrete floor, there is one reinforcing material that meets all requirements. It is American Steel & Wire Company Wire Fabric. This giant backbone of permanence reinforces the slab in every direction, and that means a long life floor. The closely spaced wire members bind the slab



together thereby safeguarding every penny invested in construction costs. Equally important, this "backbone" is easily and quickly placed—lays flat—is convenient to handle. The time and labor saving, alone, is a big item. On your next job, be sure to command all of these advantages. By specifying American Steel & Wire Company Wire Fabric, you make certain of the reinforcing result—and you also get perfect service and cooperation.

AMERICAN STEEL & WIRE COMPANY

WIRE FABRIC

THE STEEL BACKBONE OF CONCRETE

AMERICAN STEEL & WIRE COMPANY

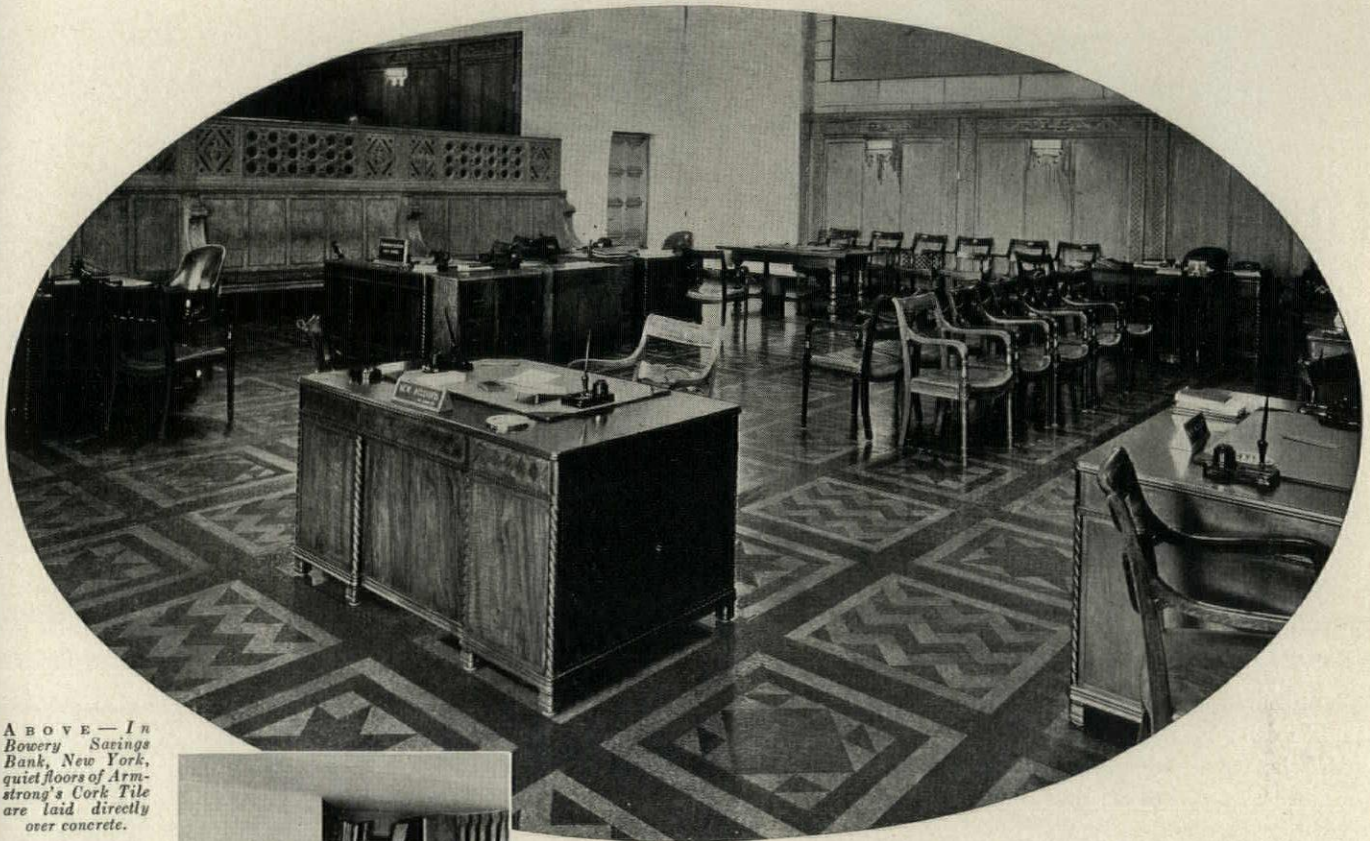
208 S. LA SALLE STREET, CHICAGO . . . EMPIRE STATE BUILDING, NEW YORK

Pacific Coast Distributors: Columbia Steel Company, Russ Building, San Francisco *Offices in All Principal Cities* *Export Distributors: United States Steel Products Company, New York*

United States Steel  *Corporation Subsidiary*

CORK

.... combines **BEAUTY** and **SILENCE** in floors

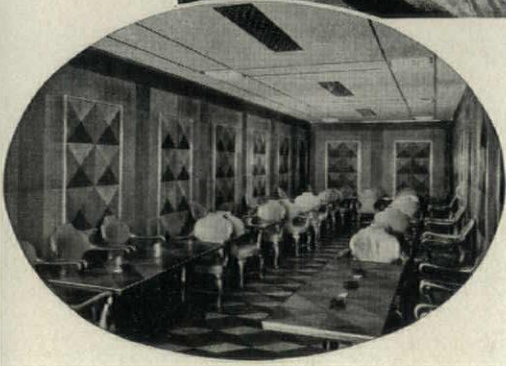


ABOVE—In Bowery Savings Bank, New York, quiet floors of Armstrong's Cork Tile are laid directly over concrete.



RIGHT—This cork floor in the model library of Barker Bros., Los Angeles, shows the possibilities of Armstrong's Cork Tile in homes.

BELOW—In Pittsburgh's smart Duquesne Club bar, the floors, walls, and ceilings are Armstrong's Cork Tile.



WHERE silence is golden . . . in hospitals, libraries, banks, and private homes . . . you can insure quiet with floors of sound-absorbing cork tile. Armstrong's Cork Tile is made of pure resilient cork containing millions of dead-air cells to hush footsteps and muffle reverberation. Yet for all its resilience, Armstrong's Cork Tile is exceptionally durable. Right now, it is demonstrating its wear-resistance in hundreds of busy public buildings. Simple washing and waxing keep

it clean and beautiful for years. Finally, Armstrong's Cork Tile lends itself to all manner of delightful designs. Its three rich, warm tones of "cork brown" offer you a wide range of decorative possibilities. See Sweet's, Section 15, Catalog 35, pages 15 and 21—and write now for samples and a file-sized copy of "Armstrong's Cork Tile Floors." Armstrong Cork Products Company, Building Materials Division, 1206 State Street, Lancaster, Penna.



Armstrong's
CORK TILE FLOORS

+ Found!

The EXTRA SPACE Everyone's Been Looking For

It was right there all the time—just below the sink and lavatory. Crane Co. discovered it by putting a cabinet around it. And that is how the Crane SUNNYSIDE Sink and TUCAWAY Lavatory came into being.

In new buildings these cabinet units reduce or eliminate the necessity for special closets. In old buildings they provide storage space where none existed before. They even eliminate the necessity for towel bars on the walls, or add to already existing capacity.

There's plenty of space for towels, soaps, cleaning powders and the overflow from the medicine cabinet. Towel bars may be had in two styles—heavy cast brass brackets and square chromium plated bars, or steel brackets and round brass rods, chromium plated or painted white. Heavy-gauge steel walls, bottom and shelf. Baked enamel finish. Perforated openings for ventilation in back. Steel sub-base with recessed toe space. Chromium plated hardware.

In apartments, stores, offices, homes—these cabinet lavatories equipped with regular Crane CORWITH bowl and fixtures, will immediately appeal to tenants and owners because of their great utility, their fine appearance. On display in all Crane showrooms.



+ Crane CORWITH-TUCAWAY Lavatory



+ Crane SUNNYSIDE Cabinet Sink

CRANE PLUMBING AND HEATING MATERIALS

CRANE CO., GENERAL OFFICES: 836 S. MICHIGAN AVE., CHICAGO, ILLINOIS • NEW YORK: 23 W. 44TH ST.
Branches and Sales Offices in One Hundred and Sixty Cities

CHAPMAN
SCHOOLS

Another Beautiful CONCRETE SCHOOL

... in the material that
allows complete design
freedom—with economy

*Cast stone and cast stone veneer were used in building
the new and rehabilitating the old parts of Chapman
School, Apalachicola, Florida*



WHY has concrete climbed through the depression until it is a foremost combined architectural and structural material? The answers:

- (1) Concrete is consistently low in first cost—durable and low in maintenance under the widest range of climatic and service conditions.
- (2) Concrete lends freedom in design. Recent architectural concrete structures of note run the gamut of building functions, architectural types and surface textures.

Many of these buildings are monolithic. Others use cast stone either as trim or for the complete exterior. Cast stone is available in a wide range of colors and textures. Close color *control* assures uniformity, and proper contrast or harmony with other materials used in conjunction. Detail is reduced in cost.

Have you the Cast Stone Service Bulletins? These practical data sheets cover copings, store front remodeling, color, specification data, and examples of design application. Sent free on request.

Watch
ARCHITECTURAL
CONCRETE
MONOLITHIC CONCRETE
TERRAZZO
CAST STONE

PASTE COUPON
ON POSTAL
OR WRITE
TODAY →

PORTLAND CEMENT ASSOCIATION
ROOM 2910 • 33 WEST GRAND AVENUE • CHICAGO, ILLINOIS

Please send Cast Stone Service Bulletins

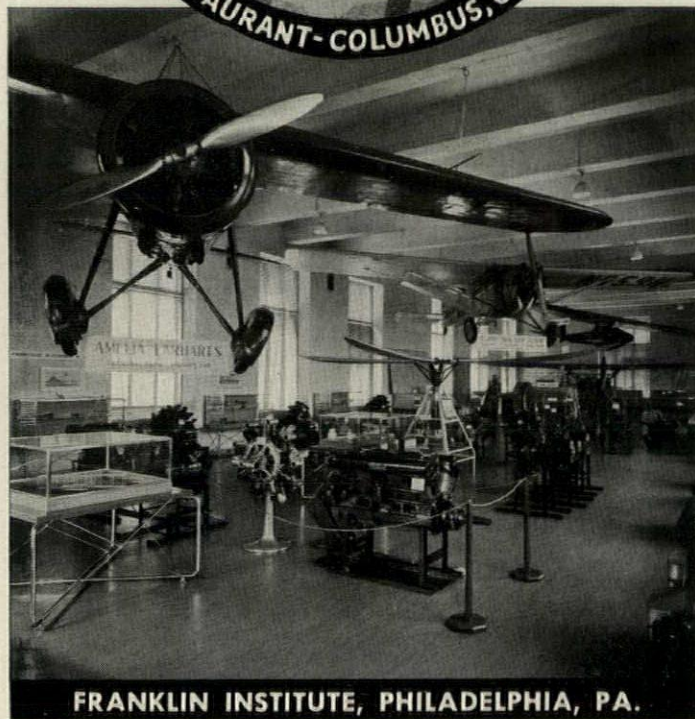
Name _____
Position or Firm _____
Address _____
City _____ State _____

SLOANE-BLABON

LINOLEUM



RESTAURANT - COLUMBUS, OHIO



FRANKLIN INSTITUTE, PHILADELPHIA, PA.

Six new pastel shades—Azure Blue, Flame Orange, Sunshine Yellow, Ocean Green, Burgundy Red and Clear White have just been added to our line of Plain Linoleums. These stunning colors make possible unusually distinctive color combinations. Let us send you samples. W. & J. Sloane Selling Agents, Inc., 577 Fifth Avenue, New York.

Life

**IS LIKE THAT AT
HOTEL CLEVELAND**



EVERYONE remembers you . . . gives you that pleasant little glow of realizing we're glad to have you here, and want you to be comfortable.

Beds are deep and very soft, rooms are bright and pleasantly furnished.

The food at Hotel Cleveland is famous. Rare delicacies that remind you of France, or simple dishes prepared in the home-like way you enjoy them.

In addition to being Cleveland's most modern and comfortable hotel, this is also the most centrally located in the city. Hotel Cleveland is only one step, via covered passage, from your train, and two steps from anywhere you'll want to go in the city.



Rooms from \$2.50 for one, \$4 for two.

**HOTEL
CLEVELAND**
Cleveland

IMPERIAL MOTORS are widely used

for pumps, fans, air conditioning,

elevators and other services

in all kinds of buildings . . .

Ratings from 1/2 to 300 h. p. in all types.

WRITE
FOR NEW
BULLETIN

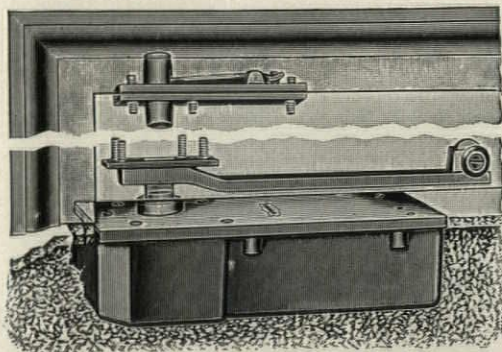
QUALITY · SERVICE · RIGHT PRICES
COURTEOUS TREATMENT

Imperial

Motors and Generators

THE IMPERIAL ELECTRIC CO. 58 Ira Ave. AKRON, O.

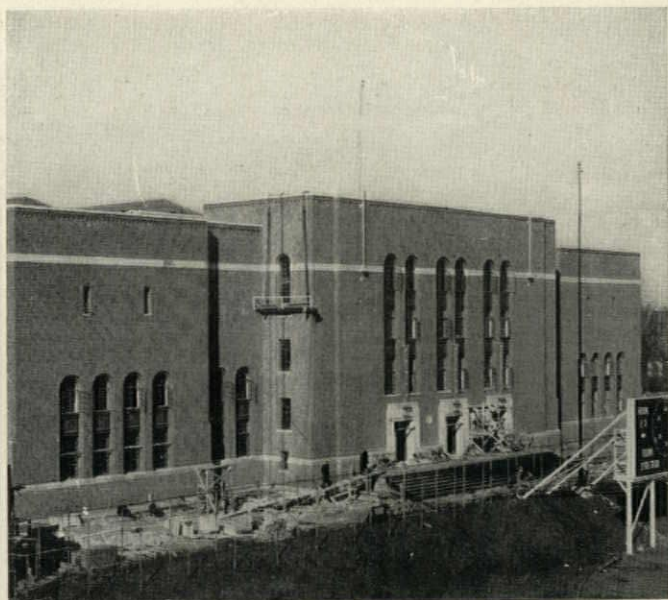
Bommer Checking Floor Hinge



Suitable for all sizes
and kinds of doors,
metal or wood

Write for illustrated catalogue

Bommer Spring Hinge Co.
Brooklyn, N. Y.



C. H. Johnston, Archt. Paul Steenberg Const. Co., Genl. Contrs., St. Paul
Hauenstein & Burmeister, Calking Contractors, St. Paul

This New University of Minnesota Building Sealed Weather-tight with



The new Indoor Sports Building of the University of Minnesota is a recent addition to the long list of Pecora-protected structures throughout the country.

It is gratifying to know that so many architects today will not permit calking to be omitted from specifications, nor will they permit the substitution of materials that cannot possibly approach the quality standards of Pecora.

For old structures as well as new, and a prime essential in air conditioned buildings, no material is so dependable, so permanent, so sponsored by years of satisfactory performance, as Pecora—for it will not dry out, crack or chip when properly applied.

For further details see Sweet's Catalog or write direct to us



This New Type, High-Pressure Cartridge Calking Gun (patent applied for) is a great Time and Material Saver. Pecora Calking Compound is packed in Non-Refillable cartridges of approximately One Quart capacity.

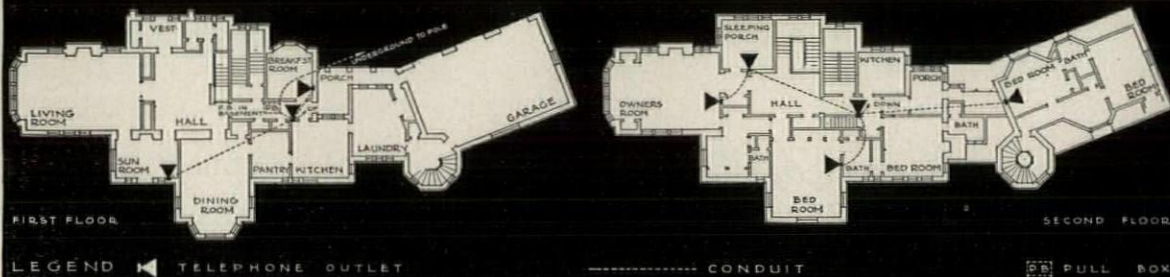
Pecora Paint Company Inc.

Sedgley Ave. & Venango St.
PHILADELPHIA
Est. 1862 by Smith Bowen

Also Makers of
**SASH PUTTIES
MORTAR STAINS**

SUCTION MASTIC
for Structural Glass

Built-in conduit and eight outlets provide for telephone convenience in the residence of Mrs. C. M. Kitselman, 2400 West Jackson Street, Muncie, Indiana. Fredrick Wallick, Architect, Indianapolis, Indiana.



TELEPHONE FACILITIES COST LEAST, GIVE MOST when they begin on your drawing board

THE most efficient, economical telephone arrangements for modern residences are born on the drawing table and grow up with the blue-prints. On paper, conduit can be easily run in walls and floors to prevent exposed wiring and protect against certain service interruptions. On paper, outlets can be located at strategic points upstairs and down to make possible a full, flexible telephone convenience.

Pre-planned telephone facilities add little to construction costs. But your client can have as few or as many telephones as he wants, when and where he wants them. He can move them as needs change with the years.

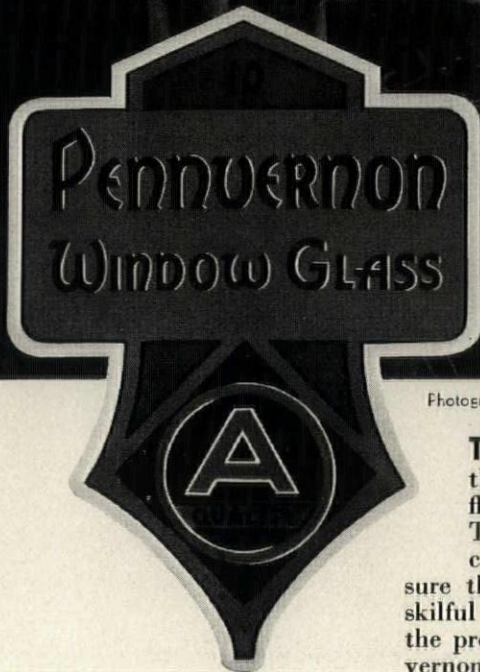
He and all his household will save steps, stairs and minutes . . . have more privacy for personal conversations . . . and be grateful to you for the lasting livability you've provided.

Incidentally, your local telephone company keeps trained telephone engineers always ready to work with you . . . on remodeling jobs or new construction . . . whether you're locating a second-floor outlet in a small house or planning an elaborate intercommunication system for a large estate. There is no charge, of course. Just call the Business Office and ask for "Architects' and Builders' Service."



For further information on Bell System telephone services and equipment, see Sweet's Catalogue

Specify "PENNVERNON"...not just "window glass"



Photograph by Johnston & Johnston

THICKNESS? ... PERFECT! Out of the drawing machine on the cut-off floor rise sheets of Pennvernon. Then this Pennvernon Craftsman calibrates them carefully to make sure they are of proper thickness. His skilful measurement is characteristic of the precautions taken throughout Pennvernon's making to insure high quality.

Our new booklet, called "The Making of a Leader", describes in dramatic pictures the manufacture of Pennvernon Window Glass. To get your free copy of this interesting book, sign and mail this coupon to

PITTSBURGH

PLATE GLASS COMPANY
2149 Grant Building, Pittsburgh, Pa.

Name _____

Address _____

City _____ State _____



Architecture is no longer content to tread only the paths of historical precedent. It is insistent upon new solutions of old problems.

Among producers of building materials the temptation has been severe in recent years to suspend research activities, in order to escape the heavy expense they entail.

In spite of economic pressure this organization has not permitted a moment's cessation of its aggressive, many-sided research program.

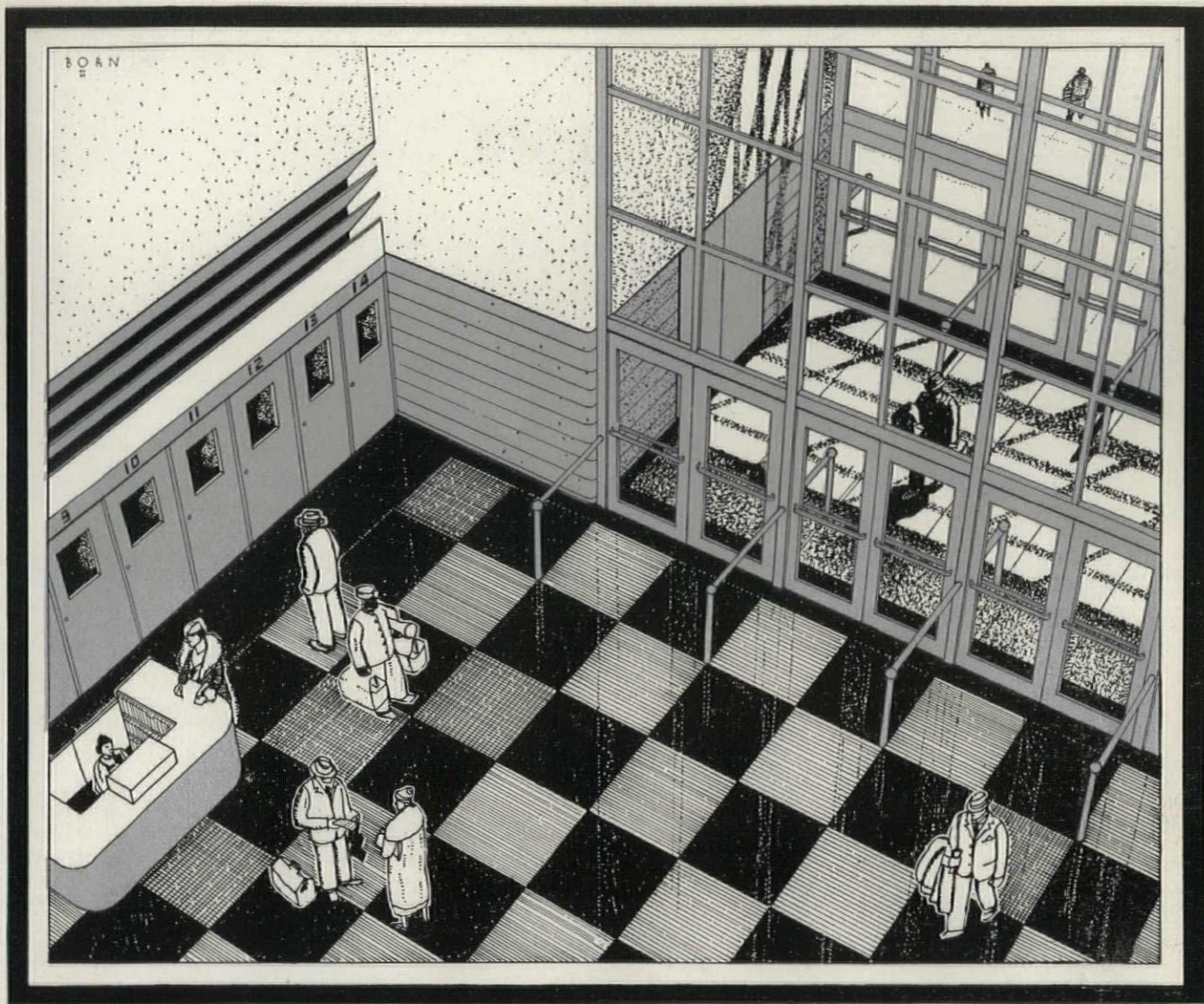
One reason for this policy is our desire to be ready to contribute to these new developments in architectural practice.

THE YOUNGSTOWN SHEET AND TUBE COMPANY

Manufacturers of Carbon and Alloy Steels

General Offices

YOUNGSTOWN, OHIO



T H E D O O R . . .

Focal point of design . . . typifying the very spirit of the building ★ Aluminum lends itself perfectly to the execution of architectural details and confers that supreme benefit: light weight ★ A lavish variety of finishes, all luxurious and lasting, is at the command of the designer ★ Manner of construction is dictated only by preference, for versatile alloys in every needed form are available to fabricators ★ Aluminum Company of America, 1898 Gulf Building, Pittsburgh, Pa.

ALCOA  ALUMINUM



Fine terrazzo floor, photographed in full natural color in St. Francis De Sales Church, Paducah, Kentucky. Made with Atlas White portland cement. Keno Rosa Company, terrazzo contractor. Thomas J. Norton, architect. Both of Louisville. Actual-size, true-color terrazzo samples below illustrate many color and pigment combinations similar to those used in this floor.



Botticino marble with white portland cement



Yellow Verona marble with white portland cement and yellow pigment



Verdolite marble with white portland cement and green pigment



Red Verona marble with white portland cement and red pigment

WHEN you design a floor in which symbolic pattern and figure may be important, in which color must be used to accentuate or harmonize certain elements in the design, and in which border and field must be sharply defined yet component units, then you are probably designing a floor of fine terrazzo. In fine terrazzo (made with white portland cement) you select, from the wide color range in marble and pigment, precisely those colors which will blend or contrast to best fit your motif. You design exactly to your needs, in intricate figure or simple pattern. And your finished floor is the colorful, durable replica of your ideas. See Sweet's for details and approved specifications, or write Universal Atlas Cement Co. (United States Steel Corporation Subsidiary), 208 South La Salle Street, Chicago.

229

ATLAS WHITE PORTLAND CEMENT
plain and waterproofed
 UNIVERSAL PORTLAND CEMENT ATLAS PORTLAND CEMENT

HERE, THERE, THIS & THAT

Wills' Impersonator Caught in Florida

The impostor who has for the past several months been victimizing architects and other citizens of New England and neighboring states by posing as Royal Barry Wills of Boston and in this guise borrowing money or cashing worthless checks was finally caught and arrested in Jacksonville, Florida. Not only did the man, whose real name turned out to be Daniel Webster Kingsbury, perpetrate his swindle on many practitioners, but he even persuaded Mrs. Marjorie Lundin, a nurse residing in Brooklyn, to marry him under the name of Wills, later deserting her and taking with him \$200 of her savings and some diamond heirlooms. Needless to say, the real Royal Barry Wills, who is one of the country's best known residence architects, is much relieved that the matter is now settled. Since August 1, when the swindle started, the real Wills has been receiving indignant letters from fellow architects, dunning him for repayment of loans they had made in his name to Kingsbury or asking him to make good for the rubber checks they had cashed for the pretender on the strength of his possession of the bronze medal awarded to Wills in 1934 by Better Homes in America. The medal disappeared from Wills' office about August 1, and all the trouble followed soon thereafter.

N.Y.U. Opens Community Planning Center

Unique models of regional plans and housing projects are featured in an exhibit of community planning which opened on September 26 in the Bryant Park center of New York University, 1071 Sixth Avenue.

The exhibit, which will be open to the public from 10:00 A. M. to 8:00 P. M. until October 23, was arranged by Dr. Carol Aronovici for his course in community planning in the School of Architecture and Allied Arts.

The material in the exhibit includes maps, charts, models, drawings and photographs and illustrates various phases of planning, from the rehabilitation of blighted areas to plans of extensive regions.

Among the items in the exhibit which have not been publicly shown before are studies of New York property valuation, models of population concentration prepared by the New York Housing Authority and models of several housing projects in the vicinity of New York City.

The New York Regional Planning Association, the Housing Authority, The Mayor's Committee on Planning, the Housing Committee of the Welfare Council and several communities co-operated in organizing the exhibit.

Ralph T. Walker to Address Federation of A. E. C. & T.

The Architects' Section of the Federation of Architects, Engineers, Chemists, and Technicians has arranged with Ralph T. Walker of Voorhees, Gmelin, and Walker to address them at their October meeting which will be held at the New York Chapter Federation Headquarters, 119 East 18th St., on Wednesday, October 9, at 8:00 P. M. Mr. Walker will discuss the Junior A.I.A.

Architectural League Show Changes Dates

In connection with the Fiftieth Annual Exhibition of the Architectural League of New York, to be held at the Grand Central Palace the following dates have been changed since the issuance of the original circular of information:

Last Day for Advance Submission of Photographs—Monday, December 16, at 115 East 40th Street.

Last Day for Return of Entry Slips—Wednesday, January 8, at 115 East 40th Street.

Only Day for the Reception of Exhibits—Monday, February 3, at Grand Central Palace.

Press View—Sunday, February 9, at 2:00 P. M.

Preview by Invitation—Sunday, February 9, from 3:00 to 6:00 P. M.

Award of Medals—Sunday, February 9, at 4:00 P. M.

Public Exhibition—Monday, February 10, through Wednesday, February 19.

Exhibits Discharged—Thursday, February 21, 9:00 A. M. to 5:00 P. M.

Registration Examination Preparation Courses at N.Y.U.

New York University School of Architecture announces a group of courses to be given this fall reviewing the fields of architectural design, construction, and practice. They have been planned to meet the requirements of the various state licensing boards in architecture, and include a review of questions similar to those given during past examinations. For those who have had experience in the various phases of architectural practice they offer a review and preparation in any particular specialty in which they may be deficient. The courses will be given by men who are specialists in their various fields, practising members of the architectural and engineering professions. For further information write to E. Raymond Bossange, Dean, School of Architecture and Allied Arts, New York University, 1071 Sixth Avenue, New York.

A Letter from Greville Rickard

"Last night I read the last of Mr. Magonigle's articles in the September number of PENCIL POINTS, followed by the note of his death, of which I had heard a week or so before. Although filled with extreme regret that we were no longer to be favored with these criticisms, the most entertaining, stimulating, and valuable thing in architectural journalism that has appeared in the press in many a year, I was very much impressed by

something else, and that was the completeness with which Mr. Magonigle had wound up a phase of this work that has engaged his attention for so many months. Perhaps he had planned a great deal more to say, but it seemed to me that all that he has been saying during these many months, he has so completely summarized in this last article, and with such excellent illustrations, that there really wasn't any more to say. If the life of a distinguished soul had to come to an end, what more gratifying termination to a long career of valuable activity than this! May his appeal to the sanity of us all not have been in vain!"

Mr. Allen W. Jackson Replies to Robert Sargent Cook

"In your September issue Mr. Robert Sargent Cook finds fault with my article 'Art via Geometry,' published in your July number.

"The point of my article was, briefly, that in the present state of our knowledge we are not yet warranted in announcing to the world the terms of the secret treaty between art and mathematics that our logical friends are sure exists. Art, the wilful jade, may, to be sure, have secrets and hidden traffic with the enemy that will some day be laid bare. Then will the amateur come into his own, for armed only with a slide rule and the precious formula, he will inevitably produce good work—nay, perfect work, for figures cannot lie.

"Well, maybe so. Sometime. But not now, for in spite of the interesting labors of the Hambidge-Bragdon school of design they have not yet picked the lock nor found the 'open sesame.' It will be a grand day for mediocrity when they do, but until that happy time I still think that Mr. Cook will get better results by the old pragmatic methods, of trial and error, of sweat and labor. For, following a rule or group of rules hazily understood and only almost right, will give indifferent results—unless perhaps they are touched up, as I remember at school in arithmetic when we got the wrong answer we used to juggle things about judiciously until it looked all right. How maddening mathematics are!"

Evening Courses in Architecture at New York City College

The School of Technology, City College of New York announces for the fall term of 1935 a series of evening courses in Architecture and Building Construction. Subjects to be covered include: Materials of Construction, Plan Reading and Estimating, Elementary Structural Design, Advanced Structural Design, Reinforced Concrete Design, Advanced Estimating and Specifications, Elementary Architectural Drafting, Applied Building Construction and Design, Use of Surveying Instruments, Plumbing Equipment, Heating and Ventilation, Building Construction and Superintendence, Elements of Architecture, and Structural Steel Drafting and Detailing. Full information concerning these courses may be obtained from Professor F. O. X. McLoughlin, C.C.N.Y., Convent Avenue and 140th Street, New York.

Directory of Architects for Educational Buildings

"The American School and University," a yearbook for school and college executives, is revising its Directory of Architects for Educational Buildings to be included in its 1936 volume. Any interested architect can secure an information card to fill out for inclusion in the Directory by writing to the Yearbook at 470 Fourth Avenue, New York. No charge is made for a listing and no professional cards or other paid advertisements of architects are published in the Yearbook.

Princeton Prizes in Architecture for the Year 1935-1936

The Princeton Prizes in Architecture for the year 1935-36 were awarded to Messrs. John B. Applegate of Philadelphia, Pa., and Henry A. Jandl of Spokane, Washington, as a result of a ten-day competition in architectural design held from May 20th to June 1st, 1935. The winners will receive \$500 each to enable them to spend the next academic year in advanced study in the Princeton School of Architecture. They are entitled to residence at the Graduate College, and are exempt from tuition fees.

From over sixty applicants, twenty-five were selected on their records for admission to the competition. Of this number twenty-four submitted drawings.

The jury met on Thursday, June 13th, and consisted of Messrs. William Pope Barney of Philadelphia, Frederick G. Frost and Stephen F. Voorhees of New York City, representing the profession, and Professors Jean Labatut and Sherley W. Morgan of the Staff of the School.

The work submitted by the majority of the applicants showed variety of partis and an intelligent understanding of the program and its terrain. The requirements of the program and the given site did not call either for monumental composition or monumental architecture, but for a well worked out simple diagram of an essentially domestic group of buildings. Some of the unsuccessful applicants erred in presenting elaborately poched plans with fancy mosaic which were certainly uncalled for.

After careful deliberation the jury decided to award the prizes to Messrs. Applegate and Jandl. "Honorable Mentions" were awarded to Messrs. Octavio L. Colavecchio of Providence, Clarence E. Donath of Buffalo, New York, and Anthony A. Grasso of Brooklyn, New York.

Mr. Jandl presented one of the simplest conceptions of the problem. His studio group conformed to the topography of the site, and is suitably oriented for artists as well as for scholars. His service elements are well related to the studios. The proper scale of his parti and its good character were especially commended by the jury.

Mr. Applegate's design concentrating the studios on the southerly slope was well received by the jury for its informality, simplicity and its domestic character. His studio building is of excellent character and shows mature skill in arrangement and feeling for materials.

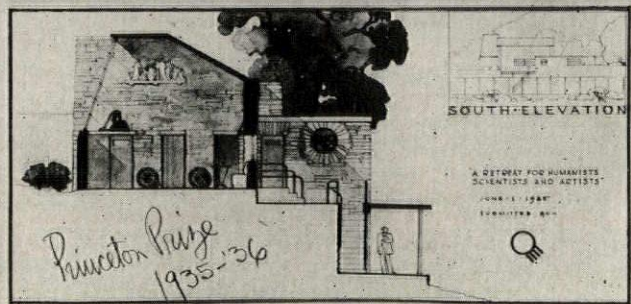
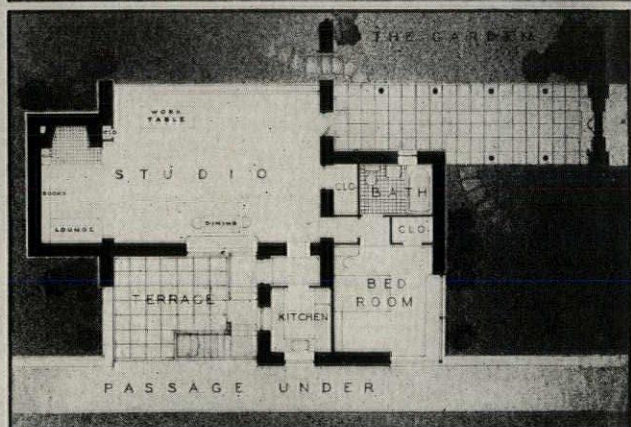
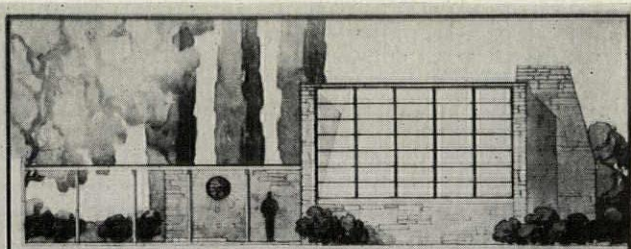
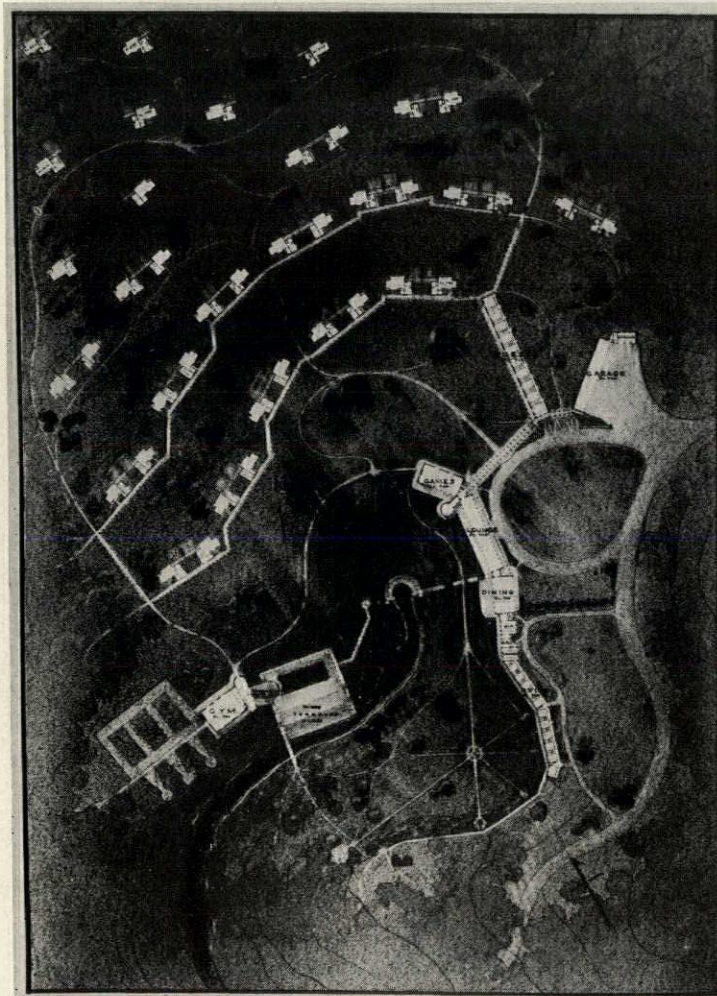
The problem, briefly, was as follows:
"A RETREAT FOR HUMANISTS, SCIENTISTS, AND ARTISTS"

"An important Foundation proposes to help humanists, scientists, and artists who are handicapped in their work by the anxieties, irritations and obligations of everyday life, by establishing a convenient place in which they may work and rest. With this aid they will be able to extricate themselves from such oppressive practical problems as hamper their creative activity.

"The accompanying topographical map shows the site chosen by the Foundation. It is in a large natural park far from any urban center, but easily accessible. Entrance will be controlled by a gate lodge in order to ensure privacy and to make the Retreat inaccessible to solicitors and tourists.

REQUIRED ELEMENTS

"A. STUDIOS. On a suitable part of the site approximately 40 studios will be erected. Some of these will be isolated to offer greater seclusion, and others will be connected by a covered passage. Each studio building
(Continued on page 16)



Princeton Prize Design, 1935, by John B. Applegate of Philadelphia

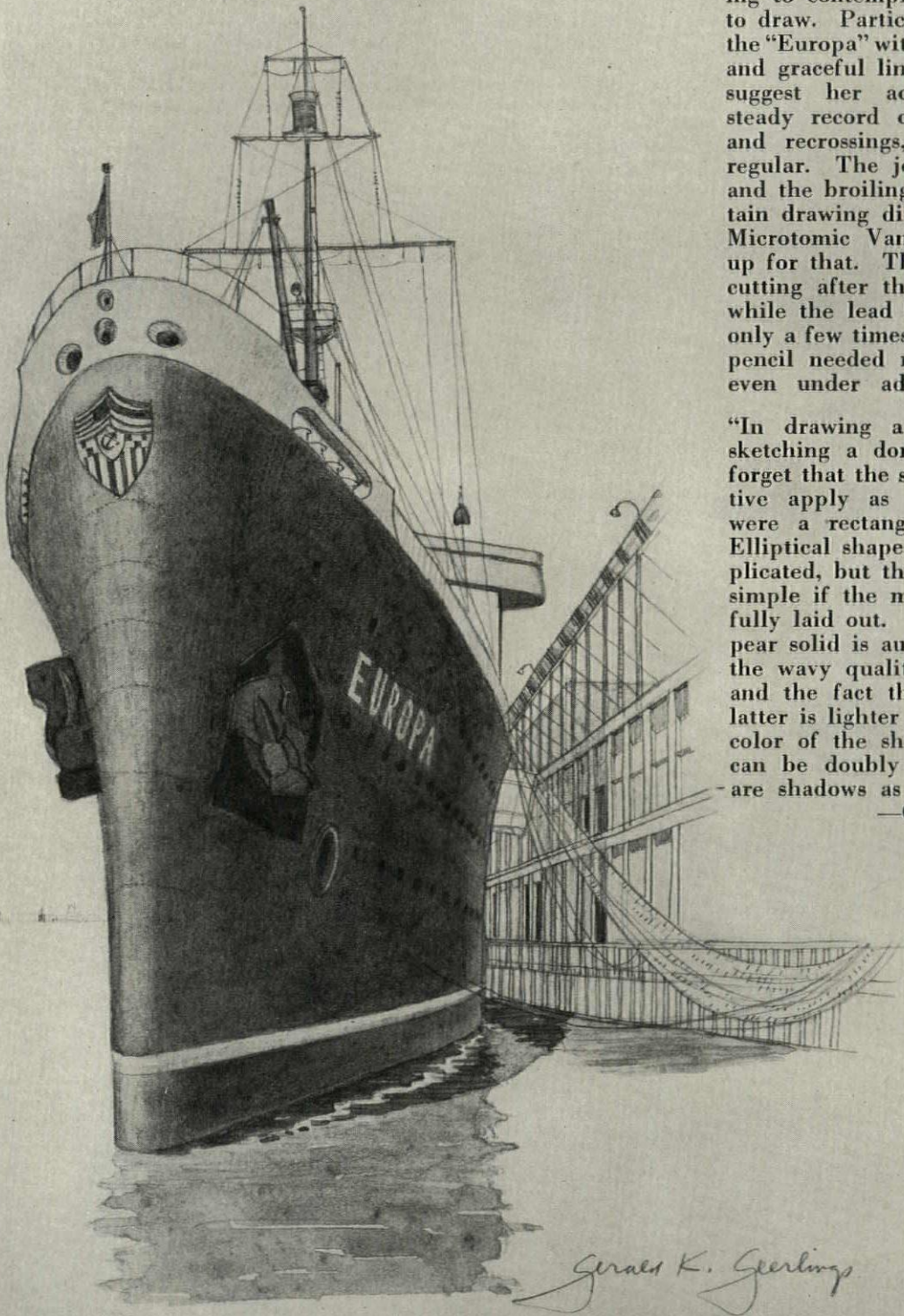
A Retreat for Humanists, Scientists, and Artists

PROW AND PROWESS

"The prow of any ship is as fascinating to contemplate as it is exacting to draw. Particularly is this true of the "Europa" with her unusual curves and graceful lines. Inevitably these suggest her accomplishments, her steady record of Atlantic crossings and recrossings, swift, precise and regular. The jostling longshoremen and the broiling sun caused me certain drawing difficulties, but the 2B Microtomic Van Dyke Pencil made up for that. The wood required no cutting after the initial sharpening, while the lead had to be repointed only a few times. Like the ship, the pencil needed no special treatment even under adverse circumstances.

"In drawing a ship's bow, as in sketching a dome, one is prone to forget that the same laws of perspective apply as though the subject were a rectangular office building. Elliptical shapes are seemingly complicated, but they become relatively simple if the main curves are carefully laid out. Making the hull appear solid is automatically aided by the wavy quality of the reflections, and the fact that the color of the latter is lighter in value than is the color of the ship itself. The water can be doubly fascinating if there are shadows as well as reflections."

—GERALD K. GEERLINGS



FREE SAMPLES of any two degrees of the Microtomic Van Dyke Pencil are yours for the asking. Write to the Eberhard Faber Pencil Co., 37 Greenpoint Avenue, Brooklyn, N. Y. These are made by the New Eberhard Faber Chemical Process, in 18 consistently accurate degrees—78 softest to 9H hardest.

MICROTOMIC VAN DYKE
EBERHARD FABER



PRACTICAL HINT—
When sketching a circular or elliptical object it often helps to draw the complete circumference—then erase the unwanted portion. When referring to photographs of curved objects don't allow yourself to be misled by the distortions which usually occur in the corners.

(Continued from page 14)

will include one large workroom, a small bedroom with bath, closets for tools and clothes, and a pantry where tea or occasional meals may be prepared. Some of the studios may have small private gardens similar to those connected with Carthusian Monastery Cells. Approximately one-third of the number of studios must have north exposure.

"B. COMMUNITY QUARTERS.

A large Dining Room with its necessary services.
A Lounge.
A Game Room.
A small Gymnasium and Swimming Pool, three Tennis Courts, and several putting greens must be provided. Service quarters with 20 rooms and their dependencies.
Garage for at least 20 cars. A Guest House accommodating 10 visitors, such as Private Secretaries, Consultants and Collaborators.
Particular care must be exercised in the arrangement of Kitchen services properly related to the various elements."

Changes at U. of Michigan

The College of Architecture of the University of Michigan announces a number of changes in its curricula.

While retaining for a short time longer the four-year program, partly as a base for the five-year plan announced in 1933, the latter has been developed with a view to meeting the needs of the student as an individual rather than having identical requirements for all. To this end there are offered five options or groups of courses to be added to the four-year basic program, or combined with it over a period of five years. These options are in general education, architecture, business administration, historical and decorative art and in city planning and housing. They will be offered in collaboration with the other divisions of the University.

For the degree of Bachelor of Design there are also options, in interior decoration and other related fields, with a four-year program in drawing, painting, and design.

The new illustrated Announcement of the College of Architecture showing the above will be sent on request.

John Simon Guggenheim Memorial Fellowships

Application for the John Simon Guggenheim Memorial Fellowships for 1936-37 must be made in writing on or before November 1, 1935, by the candidates themselves, in the form prescribed, addressed to Henry Allen Moe, Secretary,

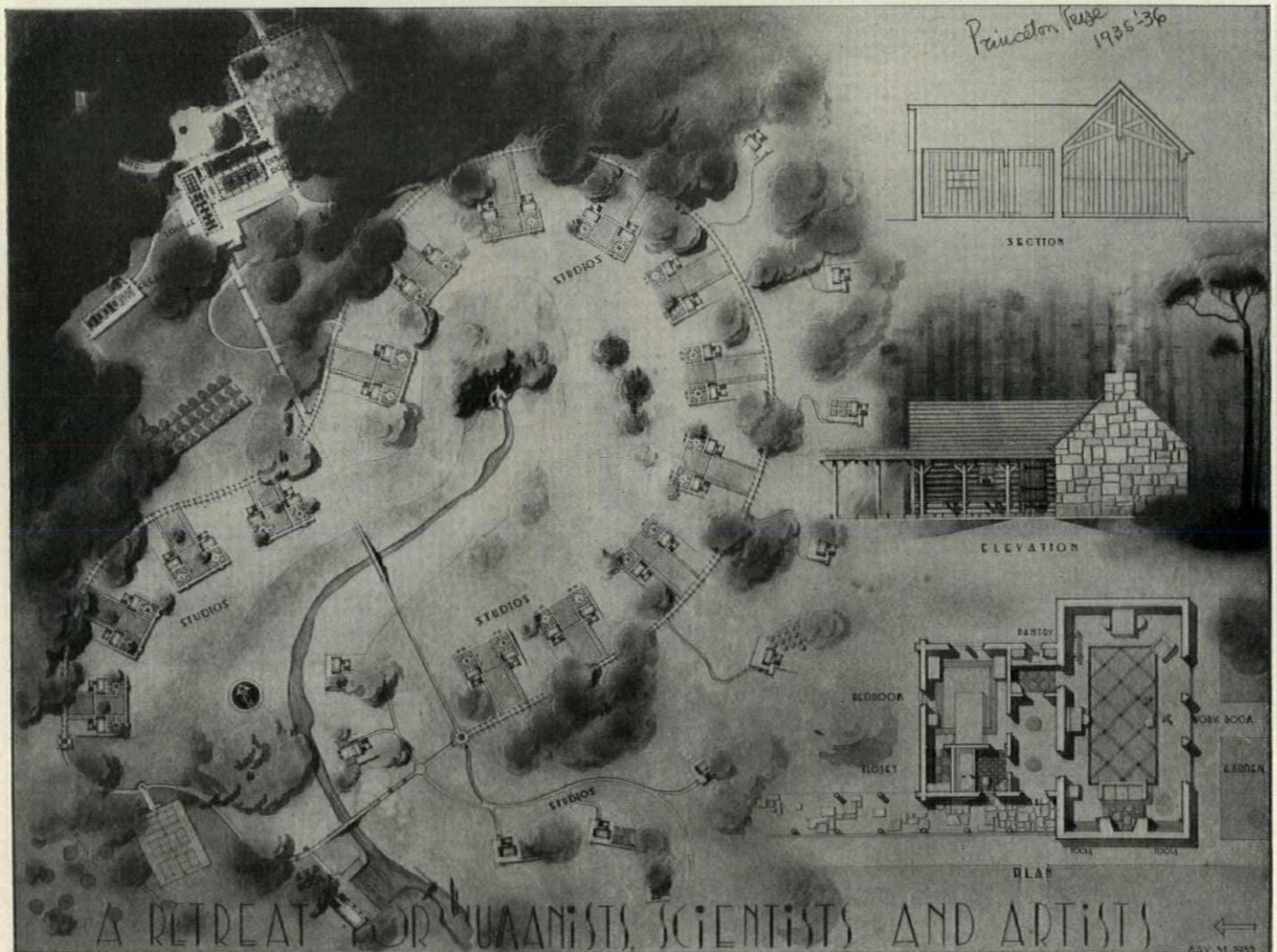
John Simon Guggenheim Memorial Foundation, 551 Fifth Avenue, New York. Final selection of the Fellows will be made in March, 1936. Application forms will be mailed by the Secretary upon request.

The Fellowships are intended for men and women of high intellectual and personal qualifications who have already demonstrated unusual capacity for productive scholarship or unusual creative ability in the fine arts. They are open to men and women, married or unmarried, and normally between the ages of twenty-five and forty years, though occasional exceptions are made for scholars over forty. The stipend will normally not exceed \$2000 for twelve months.

New Housing Display to Boost Building

A new Housing Display Conference has been formed under the sponsorship of the U. S. Treasury Department to stimulate new building and Russell G. Creviston of the Crane Company, Chicago, has been made its President. The Conference will, it is reported, stage a country-wide series of exhibits to demonstrate moderate cost housing, materials, and modern appliances. Its optimistic hope is that 750,000 housing units will be built during the next year.

(Continued on page 32, Ad Section)

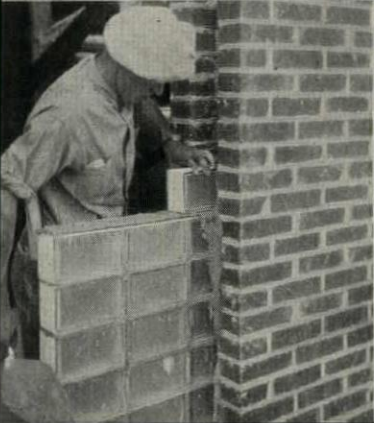


Princeton Prize Design, 1935, by Henry A. Jandl of Spokane, Washington

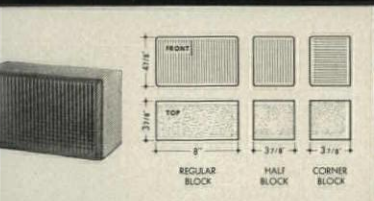
A Retreat for Humanists, Scientists, and Artists

INSULUX

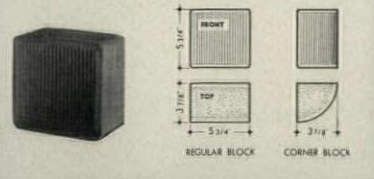
the GLASS MASONRY



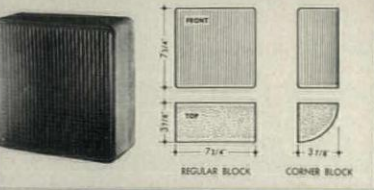
Glass blocks are light in weight and are a size that is convenient for the mason to handle. They lay up quickly in the same manner as other masonry units.



This block bonds with 2 courses of ordinary brickwork. Square corner blocks and half blocks used to start panels of Running Bond, are standard.



This block is particularly suited to Checkered Bond. Rounded corner blocks are standard in this series.



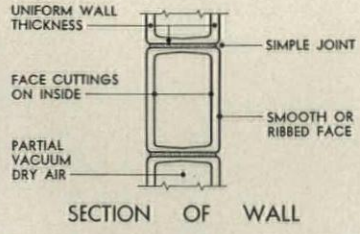
The larger size square block results in a wall of larger scale. Rounded corner blocks are standard in this series.

- ADMITS DIFFUSED LIGHT
- RETARDS HEAT FLOW

The new Owens-Illinois Insulux Glass Blocks are hollow, partially evacuated, translucent units of water-clear glass, and are laid up by masons using standard mortar joints. They are ideally suited for functional uses as light transmitting walls of high thermal resistance and at the same time offer extremely interesting decorative possibilities. Insulux Glass Blocks possess advantages and properties unique in the field of building materials, and exclusive manufacturing methods make them lower in cost than other glass masonry construction.

The variety of designs impressed on the faces of Insulux Glass Blocks produces a wide range of light transmitting values and diffusing properties resulting in an absence of glare. They have high compressive, lateral and bond strength. Scientific tests, conducted by Purdue University, have proven that the impervious character of the material itself and solid mortar joints makes infiltration losses negligible, that their heat conductivity is low, and that they reduce the effect of solar radiation.

Insulux Glass Blocks are obtainable at present in three standard sizes, each available in a broad variety of prismatic face patterns. Dimensions of these standard sizes and additional data are given on this page. For a complete brochure giving all of the necessary technical data on Insulux Glass Blocks, together with architectural details showing a wide range of construction application, write on your business letterhead to . . .



● The Owens-Illinois Glass Company has given the building industry the Dustop Glass Wool Air Filter and Glass Insulating Wool. These products, as well as Insulux Glass Blocks, were introduced only after exhaustive research and comprehensive studies of the problems involved.

OWENS-ILLINOIS GLASS COMPANY MUNCIE • INDIANA

INSULATION *must* STAY on the JOB



BE SURE

You Specify the Kind that Will

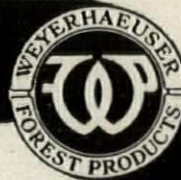
ONCE applied, insulation is usually hidden away from sight. Will it stay on the job—year after year? Will it retain its original form unaltered? Will it continue to give the protection expected of it? These are important questions that must be answered, if the owner is to get full value.

BALSAM-WOOL Blanket Insulation retains its high efficiency *permanently*. It does not settle, because it is firmly fastened in place. It will not change its form. Because it is flexible, it tucks into every little space, leaving no crack or crevice for heat or cold to get through. With BALSAM-WOOL, you can maintain continuity of effective insulation, because BALSAM-WOOL covers all of the area to be insulated with the same thickness of insulation.

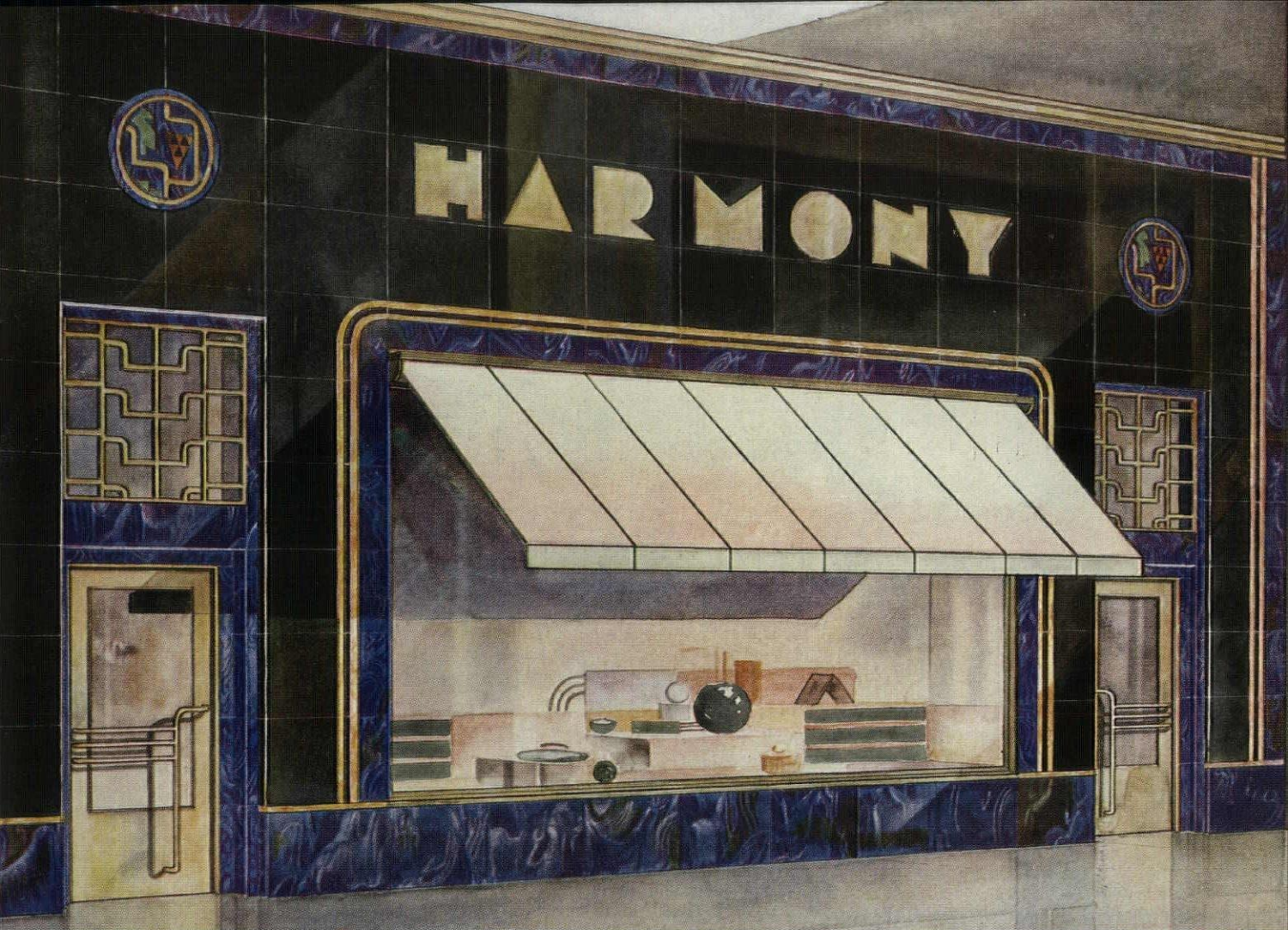
BALSAM-WOOL is waterproof, windproof, fire-resisting and verminproof. Three thicknesses— $\frac{1}{2}$ -inch, 1-inch and Wall-Thick enable you to choose the *right* thickness for every requirement. Let us tell you more about BALSAM-WOOL. Complete information is yours for the asking.

BALSAM-WOOL

WOOD CONVERSION COMPANY
ST. PAUL • MINNESOTA



Made by the Makers of
nu-WOOD



Beautiful and Modernize for Permanence with **VITROLITE**

Beauty, today and always—modern, permanent, colorful—that's what Vitrolite offers for new or remodeled structures.

Beautiful colors—ten rich, solid hues, some agate shades, an endless variety of patterns—flint-like surface, and color effects—give unlimited opportunity for development of color schemes.

The flint-like surface of Vitrolite is impervious to water, acids, oil or dirt. It will not discolor or stain. It will not scratch, or grow dull with age. It is bright, cheerful, clean, and sanitary.

A damp cloth is the only facial treatment Vitrolite ever requires.

Vitrolite pays its own way by immediately increasing property value, by increasing ready salability or rentability of property, by attracting and increasing flow of traffic in retail establishments, by its no-upkeep cost, and by its ease and economy of installation. (Applied directly over present walls, without fuss, muss, or cost of tearing out plaster.)

Your Vitrolite Distributor has a special display easel on which he will gladly set up actual arrangements in Vitrolite to illustrate designs and color possibilities.

Send the coupon for this Vitrolite literature NOW



The *Colorful* Structural Glass



A LIBBEY • OWENS • FORD PRODUCT

Tear out and mail

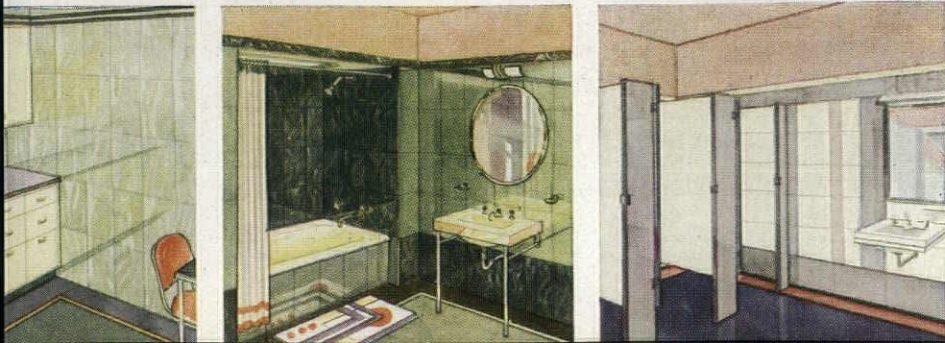
Vitrolite Division, Libbey-Owens-Ford Glass Co. (J 10)
 208 W. Washington St., Chicago
 Please send New Vitrolite Color Chart of 16 colors—10 solid hues, 6 agate shades, and various surface effects—together with

- Vitrolite Construction Details (Interior)
- Vitrolite Store Fronts (Colored Views)
- Vitrolite Store Fronts and Building Exteriors (Construction Details)
- Vitrolite Bathrooms and Kitchens

Name

Address

City State



ANNOUNCEMENT

of winners "MODERNIZE MAIN STREET"

Competition



● On August 26, there met at Lake Champlain a Jury of Award composed of the following seven men representative of leading contemporary thought in architecture, design and merchandising: Professor Melvin Thomas Copeland, Harvard University; J. Andre Fouilhoux, New York City; Albert Kahn, Detroit; William Lescaze, New York City; John W. Root, Chicago; F. R. Walker, Cleveland and Kenneth C. Welch, Grand Rapids, Michigan.

After a two day session in which were considered hundreds of designs submitted by the more than 3,000 entrants in the Competition, the following awards were made:

FIRST PRIZES

- To M. Righton Swicegood, New York City, \$1,000 for the best design for modernizing a drug store.
- To Suren Pilafian and Maurice Lubin, New York City, \$1,000 for the best design for modernizing an apparel shop.
- To G. Foster Harrell, Junior, New York City, \$1,000 for the best design for modernizing a food store.
- To Alfred Clauss, Knoxville, Tennessee, \$1,000 for the best design for modernizing an automotive sales and service station.

SECOND AND THIRD PRIZES

- To G. Foster Harrell, Junior, New York City, \$750 and to Nicholas B. Vassilieve, New York City, \$500, for the second and third best designs, respectively, for modernizing a drug store.
- To Lester Cohn, Chicago, \$750, and to Raoul L. Dubrul and Harry J. Trivisonne, New York City, \$500, for the same awards for modernizing an apparel shop.
- To A. Waldorf and S. T. Katz, Brooklyn, \$750, and to J. R. Sproule, Seattle, Washington, \$500, for the same awards for modernizing a food store.
- To Suren Pilafian and Maurice Lubin, New York City, \$750, and to Isadore Shank, St. Louis, Missouri, \$500, for the same awards for modernizing an automotive sales and service station.

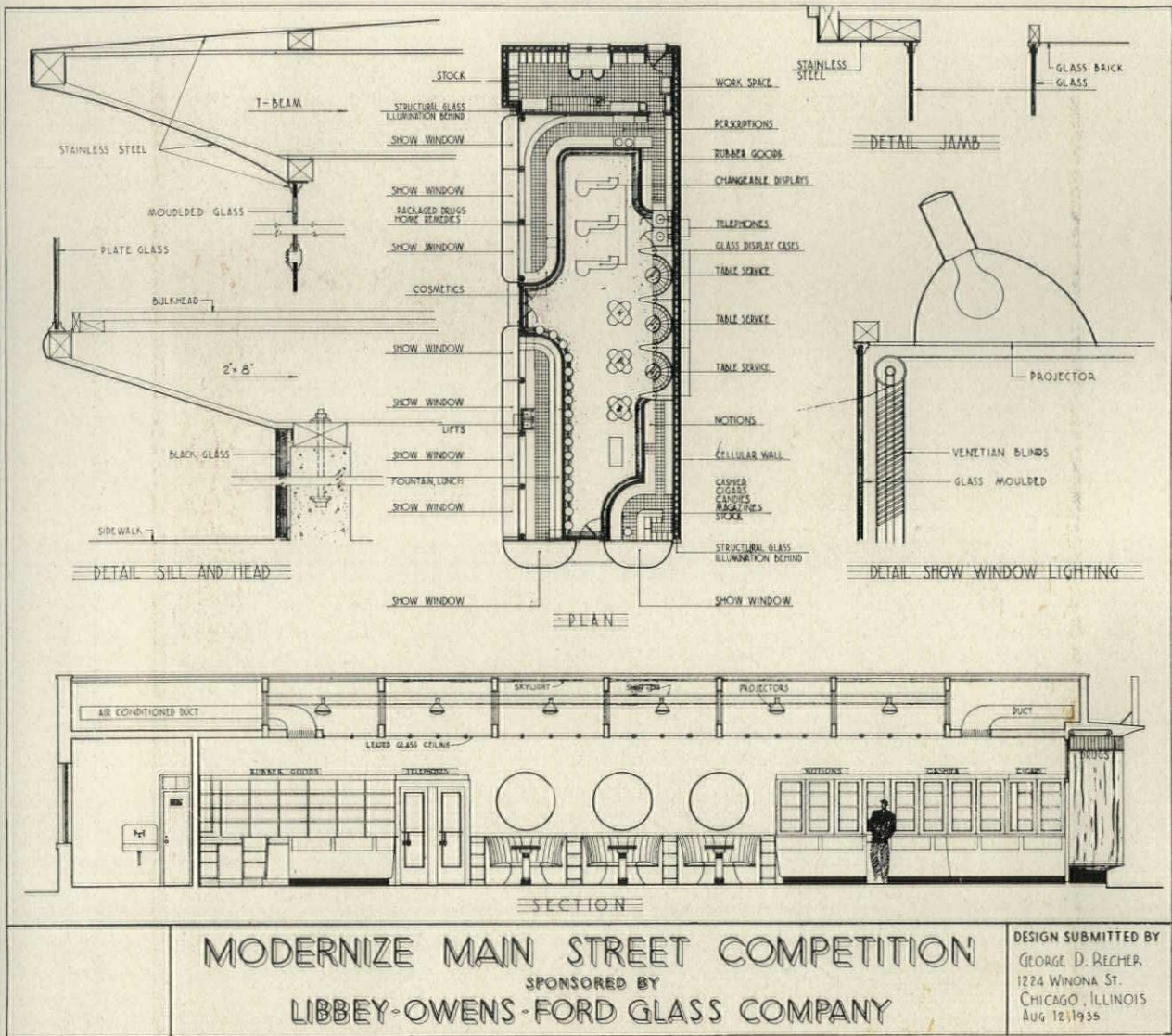
HONORABLE MENTIONS

each award including a cash prize of \$50

- For Drug Store designs: Harry Lon Ross, Philadelphia, Pennsylvania; Michael Auer, New York City; Isadore Shank, St. Louis, Missouri; Morrison Broun, New York City; Montgomery Ferar, Detroit, Michigan; Melvin L. Wolfson, Oak Park, Illinois; Verner Walter Johnson, New York City and Phil Birnbaum, Far Rockaway, New York; Robert F. McClelland and Victor N. Jones, Seattle, Washington; William Tuntke, Hollywood, California.
- For Apparel Shop designs: J. R. Sproule, Seattle, Washington; Irwin A. Sugarman, Chicago, Illinois; Anthony S. Ciresi, Cleveland, Ohio; Herbert L. Rodde, Chicago, Illinois; Lewis Eugene Wilson, Edwin Ellison Merrill and Robert Evans Alexander, Los Angeles, California; Joseph M. Hirshman, New York City; Orlo Heller, New York City; John Hironimus, New York City; Max Feldman, Ralph E. Lef and Harry Gottesman, New York City; J. Gordon Carr, Brooklyn, New York; George E. Recher, Chicago, Illinois; Donald M. Douglass, Georgetown, Connecticut.
- For Food Store designs: Sigismund J. Von Rosen, New York City; Nowland Van Powell, St. Louis, Missouri; Maurice Lubin and Suren Pilafian, New York City; Royal Barry Wills and Hugh A. Stubbins, Boston, Massachusetts; Charles DuBose, New York City; Maitland C. Harper, Woodside, Long Island, New York; J. Gordon Carr, Brooklyn, New York; H. K. Brig, Chicago, Illinois; Edward Hedberg, Homewood, Illinois; Carl Maas, New York City; Theo. B. Voyvodick and Jos. J. Pankuch, New York City.
- For Automotive Sales and Service designs: Thomas D. Taro, East Orange, New Jersey; G. McLaughlin, S. C. Reese and L. Berg, Knoxville, Tennessee; Henry T. Aspinwall and Paul F. Simpson, Great Neck, Long Island, New York; Charles DuBose, New York City; J. R. Sproule, Seattle, Washington; A. Albert Cooling, Los Angeles, California; Horace Hartman and George Wright, Detroit, Michigan; Victor Spector, Chicago, Illinois.

The uniformly high quality of the designs submitted was most gratifying to the sponsors, to the jury, and to the Architectural Record, which conducted the competition with Kenneth K. Stowell, A.I.A., as professional advisor. The widespread interest shown was considered particularly significant, for it presages new and profitable architectural activity in the several representative fields covered by the competition's program. We extend our sincere congratulations to the winners and our equally sincere appreciation of the effort expended by all competitors. The winning designs are reproduced in the October Architectural Record and will be released for general publication shortly thereafter. Checks have been mailed to all winners.

LIBBEY · OWENS · FORD GLASS COMPANY, TOLEDO, OHIO



THE DRUG STORE—PROBLEM "A." Design submitted by George D. Recher, Chicago, Illinois

OUTLINE SPECIFICATIONS

EXTERIOR FEATURES

Show Windows— $\frac{1}{4}$ " Polished Plate Glass
 Front Frame—Stainless Steel
 Bulkhead Facing—Black Glass
 Wall Facing—Structural Glass
 Trim or Ornament—Stainless Steel
 Sign Lettering and Illumination—Metal and Neon Tube

SALES INTERIORS

Walls—Plaster
 Ceiling—Glass
 Flooring—Linoleum
 Trim—Not specified
 Lighting Fixtures—Not specified
 Heating, Ventilating, or Air Conditioning—General Electric

DRUGS

LUNCHEONETTE CIGARS

DR. BARRY

PRESCRIPTIONS KODAKS

DR. WEST'S
TOOTH BRUSH

THE DRUG STORE—PROBLEM "A." Design submitted by George D. Recher, Chicago, Illinois, in the "Modernize Main Street" Competition sponsored by Libbey-Owens-Ford Glass Company

"MODERNIZING MAIN STREET"

Selected Designs from the Record's Competition

SPONSORED BY LIBBEY • OWENS • FORD GLASS COMPANY

THE Drug Store, The Apparel Shop, The Food Store, and The Automotive Sales-and-Service Station were chosen as the subjects of the "Modernize Main Street" Competition recently sponsored by Libbey-Owens-Ford Glass Company and conducted by *The Architectural Record*. The Program was written by Kenneth K. Stowell, who served as Professional Adviser. The Jury of Award, Melvin T. Copeland, Professor of Marketing, Harvard University, Cambridge, Mass., J. Andre Fouilhoux, A.I.A., of Hood and Fouilhoux, Architects, New York, N. Y., Albert Kahn, F.A.I.A., Architect, Detroit, Michigan, William Lescaze, A.I.A., Architect, New York, N. Y., John W. Root, A.I.A., of Holabird and Root, Architects, Chicago, Ill., F. R. Walker, A.I.A., of Walker and Weeks, Architects, Cleveland, Ohio, Kenneth C. Welch, A.I.A., Expert in Store Planning and Equipment, Grand Rapids, Michigan, met at Bluff Point on the shores of Lake Champlain on August 26, 1935.

The "Main Street" in every city, town, village, or community usually has at least the four stores and these were made the subject of this competition. The competitor was free to choose any one of the four problems presented and could submit as many designs as he wished as solutions of any or all problems. Any architect, engineer, draftsman, or designer in continental United States was eligible to compete.

The general requirements of the Program stated that complete freedom was to be given in regard to style, design, and the materials and methods of construction. It was assumed that the stores are to serve an average American community, rather than the luxury class. Photographs of the present store front or site were given for each type of store but they were shown merely to present uniform conditions for the competitors, as the problems were hypothetical only and were not intended to obtain designs for modernizing a particular existing store.

It was stated that modern merchandising methods demanded a store that attracts the public, displays goods to the best advantage, and provides space, convenience, and light so that purchasing is a pleasure. The store front with the plate glass show windows establishes the character of the store in the eyes of the passer-by. It must serve to make the passer buy, inviting him or her to stop and shop.

The interior, according to the stated requirements, must fulfill the promise of the front, serving as a background, and placing the merchandise

in the foreground of the customer's consciousness. It must be convenient in arrangement for expeditious service, comfortable, easily controlled, adequate in all its appointments, and consistent with the quality of the merchandise.

Space, equipment, and facilities must be provided for all merchandising activities normally engaged in by the stores, such as receiving, marking, storing, preserving or protecting, displaying, selling, measuring, wrapping, delivering, accounting and recording. Locker, dressing, and toilet facilities for employees must be provided, but may be in the basement if a stair is included.

The competitor could choose any appropriate names for the stores to use on signs or shop fronts, but no sign could extend more than 18" beyond the building line. No show window could extend beyond the lot lines. Skylights were permitted in any part of the roof.

PROBLEM "A"—*The Drug Store*. The building is on a level corner lot 25 x 75 feet, the short side on the north side of Main Street; the long side faces west on the side street. The east party wall extends 6" into store lot. The present clear height, floor to ceiling, 12'-0". The modernized corner drug store is to provide for the selling of many types of small merchandise as well as medicine and prescriptions.

The following "departments" must be provided for: soda fountain and lunch counter, cigars, candy, toilet articles and cosmetics, proprietary medicines and home remedies, sick-room supplies and rubber goods, packaged drugs, and prescriptions.

The kitchen for lunch counter may be in the basement if proper stairs, conveyors or dumb-waiters and flues are shown on the plan.

PROBLEM "B"—*The Apparel Shop*. The building covers a level inside lot, 25 x 75 feet, on the north side of Main Street. There is a service alley at the rear. The clear width between party walls is 24 feet. Party walls are 12 inches thick. The present clear height, floor to ceiling, is 12 feet. The modernized shop is to be devoted to the merchandising of women's wear, suits, dresses, hats, ensembles, gowns, lingerie and underthings, corsets, hose, and accessories. Customers' dressing rooms will be necessary. The sale of shoes is not contemplated.

PROBLEM "C"—*The Food Store*. The building covers a level inside lot, 25 x 75 feet, on the north side of Main Street. There is a service alley at the rear. The clear width between party walls is 24

feet. The present clear height, floor to ceiling, is 12 feet. This store is to provide for the merchandising of groceries, packaged and canned foods, fresh fruits and vegetables, meats, fish, and frozen foods.

PROBLEM "D"—*The Automotive Sales-and-Service Station*. The level lot is on the northeast corner of intersection of Main Street and a through traffic artery. The rectangular lot measures 100 feet on Main Street, 75 feet on the intersecting street. The wide Main Street runs east and west. Both streets are two-way traffic. From building line (lot line) to curbs of street is 12 feet. The plan shall provide a showroom for two low-priced passenger automobiles; space for display and sale of tires, parts and accessories; cash and record space; "rest-room" toilets; one-car washing space; two greasing pits, hoists or lifts; work bench and tool racks for minor repairs, with enclosure for repairing one car at a time; gasoline pumps and oil dispensers shall be located within the building lines (no pumps or other structure are permitted at the curb of street). It is assumed that the present structure may be moved, enlarged, altered, or torn down so that the most efficient design for the lot can be realized. The gas station is to be modernized by an automobile dealer as a "feeder" for his main showroom as well as to produce a profit through the sale of gasoline, oil, tires, accessories and parts.

Fifty-two prizes were awarded in this competi-

tion—a first, second, and third prize for each Problem and forty Honorable Mentions. These prize-winning designs have been published in the October, 1935, issue of *The Architectural Record*. To avoid the republication of these principal premiated drawings, the editors of PENCIL POINTS have selected, from the large number of submitted designs, four of each subject to provide our readers with material that otherwise might remain unpublished. This helpful service in no way implies a difference of opinion of the judgment of the Jury of Award.

As it was required that the Elevation of the store front and show windows shall show the true colors, in flat washes or tempera, or to show colors and materials by the use of flat colored papers, cellophane, metallized papers and the like, PENCIL POINTS has faithfully reproduced three of the subjects in full color. Orthochromatic negatives were made of the other drawings so that the black and white halftone plates would convey the proper impression of the renderings.

Modernization of Main Street is one of the objectives of the FHA program. Congress has enacted the amendment to the Act which permits maximum modernization loan insurance of \$50,000 on commercial properties. This class of commissions would seem to justify the architectural profession in employing every effort to stimulate the interest of property owners in making their holdings revenue producing.

PRIZES AND MENTIONS

PROBLEM "A"—THE DRUG STORE

FIRST PRIZE: M. Righton Swicegood, *New York*
 SECOND PRIZE: G. Foster Harrall, Jr., *New York*
 THIRD PRIZE: Nicholas B. Vassiliev, *New York*
 MENTIONS: M. Broun, *New York*; Michael Auer, *New York*; Isadore Shank, *St. Louis*; Montgomery Ferar, *Detroit*; Verner Johnson and Phil Birnbaum, *Far Rockaway, N. Y.*; William Tuntke, *Hollywood*; R. F. McClelland and Victor N. Jones, *Seattle*; Harry Lon Ross, *Philadelphia*; Melvin L. Wolfson, *Oak Park, Ill.*

PROBLEM "C"—THE FOOD STORE

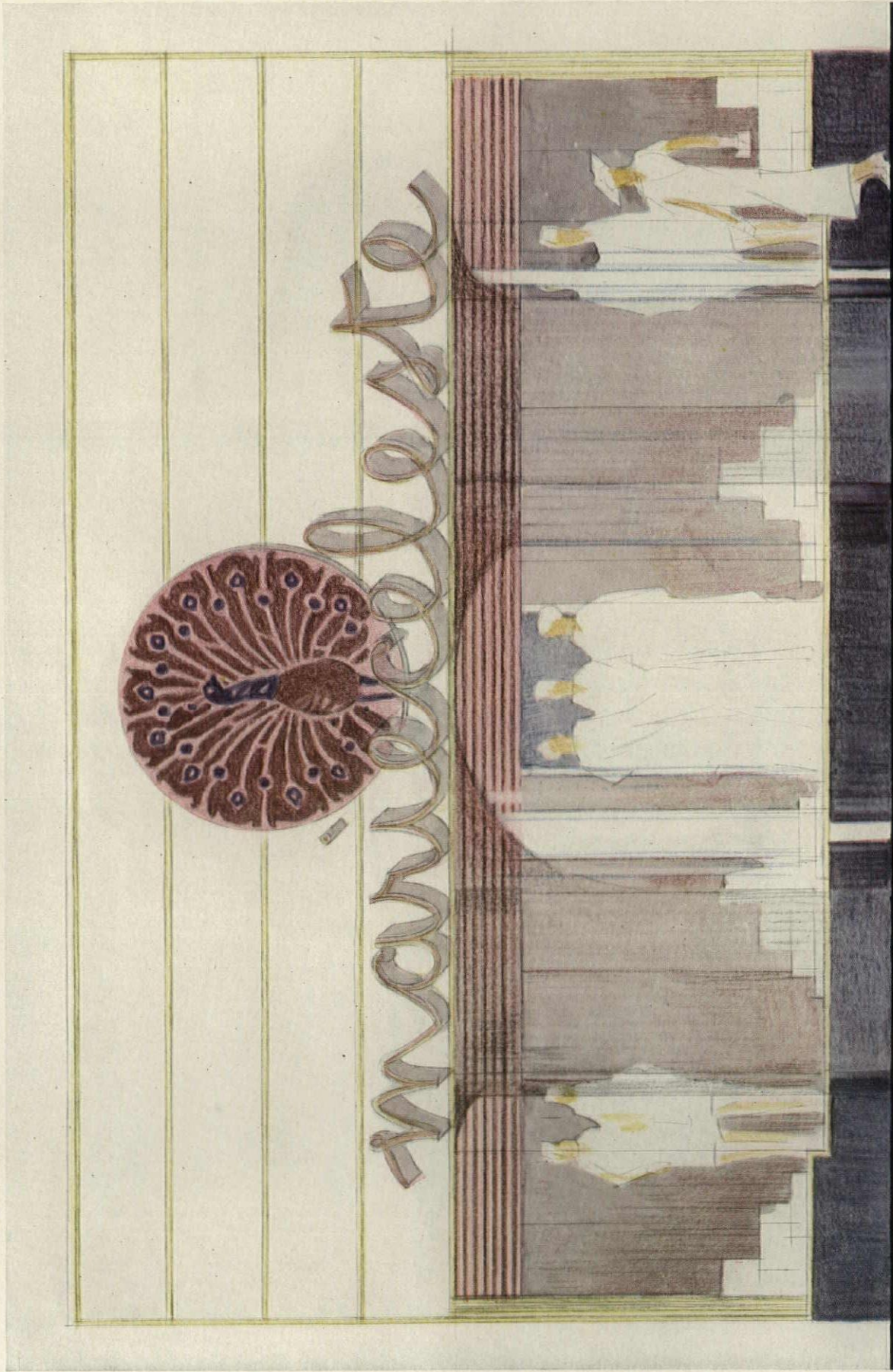
FIRST PRIZE: G. Foster Harrall, Jr., *New York*
 SECOND PRIZE: Adrian Waldorf and S. L. Katz, *Brooklyn*
 THIRD PRIZE: J. R. Sproule, *Seattle*
 MENTIONS: Maurice Lubin and Suren Pilafian, *New York*; Theo. B. Voyvodick and J. J. Pankuch, *New York*; Charles Du Bose, *New York*; S. J. V. Von Rosen, *New York*; R. B. Wills and H. A. Stubbins, Jr., *Boston*; H. K. Bieg, *Chicago*; J. Gordon Carr, *Brooklyn*; Carl Maas, *New York*; Nowland Van Powell, *St. Louis*; E. Hedberg, *Homewood, Ill.*; Maitland C. Harper, *Woodside, N. Y.*

PROBLEM "B"—THE APPAREL SHOP

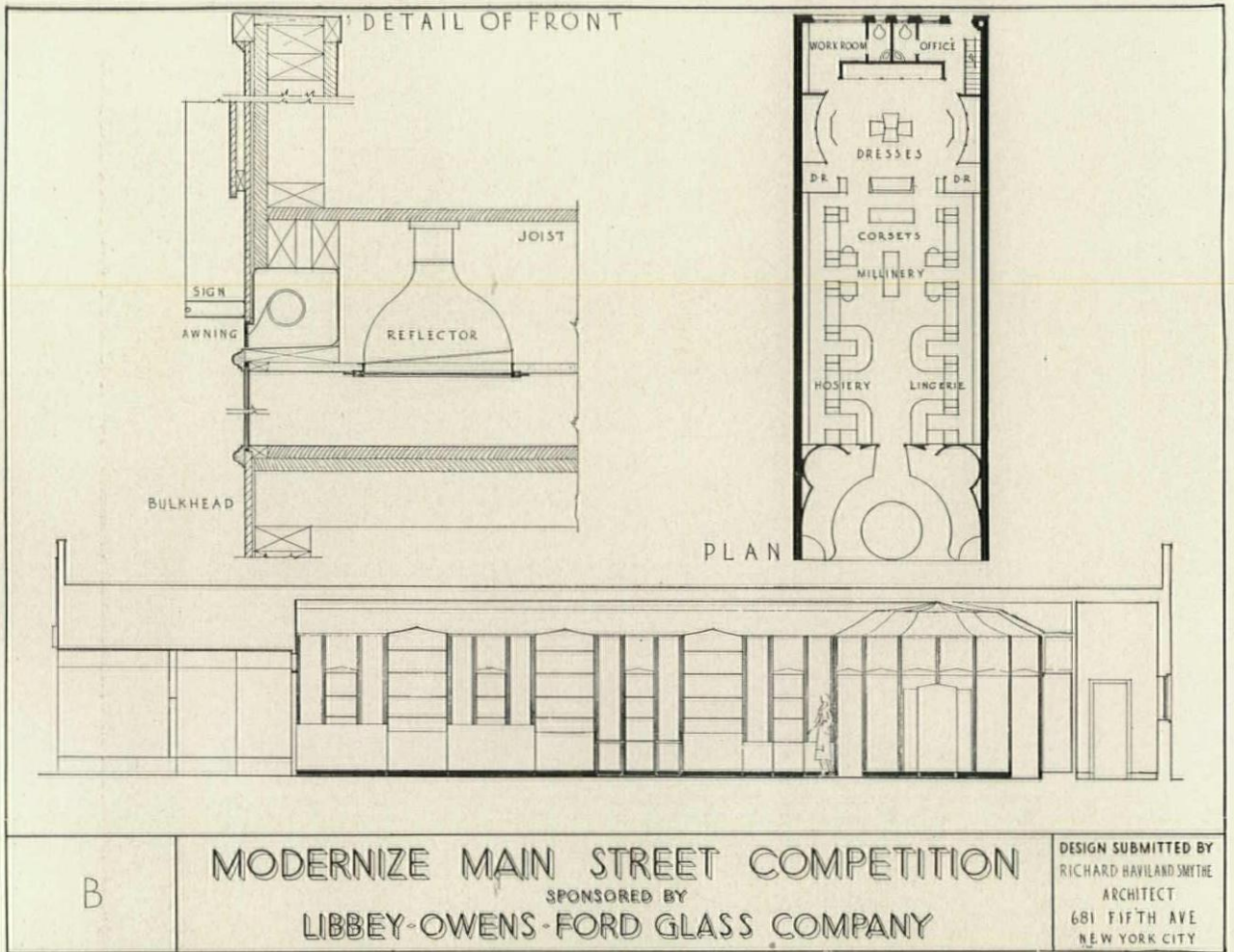
FIRST PRIZE: Suren Pilafian and M. Lubin, *New York*
 SECOND PRIZE: Lester Cohn, *Chicago*
 THIRD PRIZE: R. L. DuBrul and H. J. Trivisonno, *New York*
 MENTIONS: Max Feldman, R. E. Leff, and Harry Gottesman, *New York*; George D. Recher, *Chicago*; Irwin A. Sugarman, *Chicago*; John Hironimus, *New York*; J. Gordon Carr, *Brooklyn*; Joseph M. Hirschman, *New York*; Herbert L. Rodde, *Chicago*; L. E. Wilson, E. E. Merrill, and R. E. Alexander, *Los Angeles*; Anthony S. Ciresi, *Cleveland*; Orlo Heller, *New York*; J. R. Sproule, *Seattle*; Donald M. Douglass, *Georgetown, Conn.*

PROBLEM "D"—THE AUTOMOTIVE SALES-AND-SERVICE STATION

FIRST PRIZE: Alfred Clauss, *Knoxville, Tenn.*
 SECOND PRIZE: Suren Pilafian and M. Lubin, *New York*
 THIRD PRIZE: Isadore Shank, *St. Louis*
 MENTIONS: J. R. Sproule, *Seattle*; Charles Du Bose, *New York*; Victor Spector, *Chicago*; Thomas Taro, *East Orange, N. J.*; A. A. Cooling, *Los Angeles*; H. Hartman and George Wright, *Detroit*; H. T. Aspinwall and Paul F. Simpson, *Great Neck, N. Y.*; G. McLaughlin, S. C. Reese, and L. Berz, *Knoxville, Tenn.*



THE APPAREL SHOP—PROBLEM "B." Design submitted by Richard Haviland Smythe, New York, N. Y., in the "Modernize Main Street" Competition sponsored by Libbey-Owens-Ford Glass Company



THE APPAREL SHOP—PROBLEM "B." *Design submitted by Richard Haviland Smythe, New York*

OUTLINE SPECIFICATIONS

EXTERIOR FEATURES

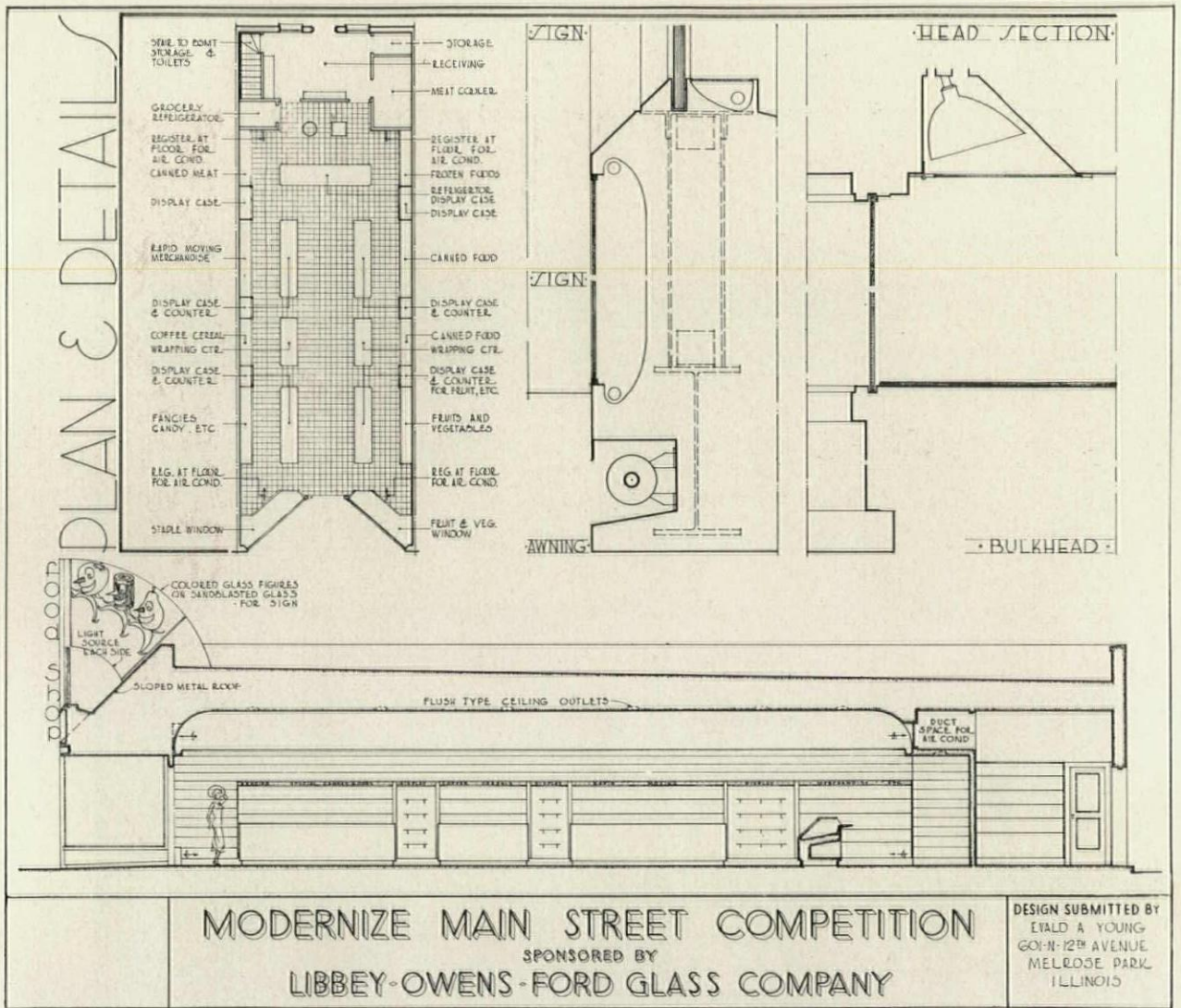
Show Windows—Polished Plate Glass
Front Frame—Lacquered Brass
Bulkhead Facing—Sheet Bakelite
Wall Facing—Hard finished Stucco or Terrazzo
Trim or Ornament—Lacquered Brass—Sheet Bakelite
Sign Lettering and Illumination—Neon Tubes in Lacquered Brass Trough

SALES INTERIORS

Walls—Plaster
Ceiling—Plaster
Flooring—Carpet over Wood
Trim—Whitewood, painted
Lighting Fixtures—Semi-indirect—bowl type
Type of Heating, Ventilating, or Air Conditioning Systems—Gas-duct System



THE FOOD SHOP—PROBLEM "C." Design submitted by Ewald A. Young, Melrose Park, Illinois, in the "Modernize Main Street" Competition sponsored by Libbey-Owens-Ford Glass Company



THE FOOD SHOP—PROBLEM "C." Design submitted by Evald A. Young, Melrose Park, Illinois

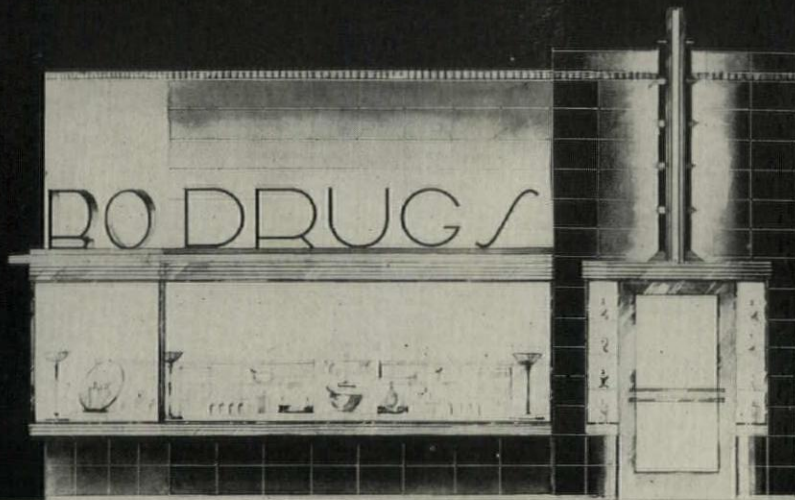
OUTLINE SPECIFICATIONS

EXTERIOR FEATURES

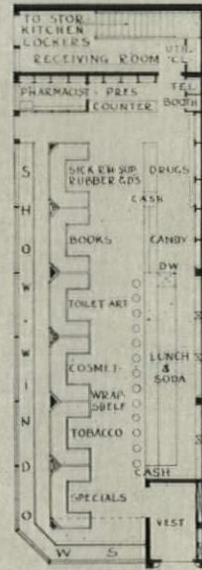
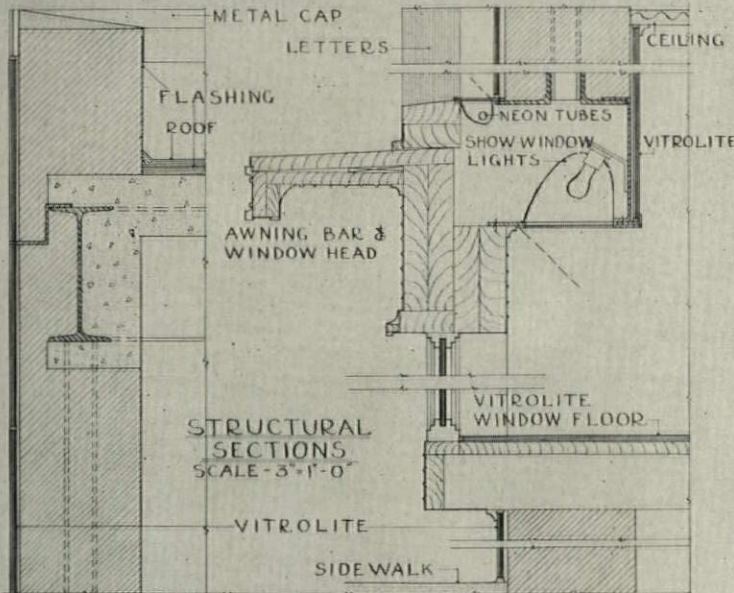
Show Windows— $\frac{1}{4}$ " Polished Plate Glass, L.O.F.
Front Frame—Stainless Steel
Bulkhead Facing—Vitrolite
Wall Facing—Vitrolite Piers
Trim or Ornament—Metal
Sign—Neon for vertical—Black Glass on Opal Glass

SALES INTERIORS

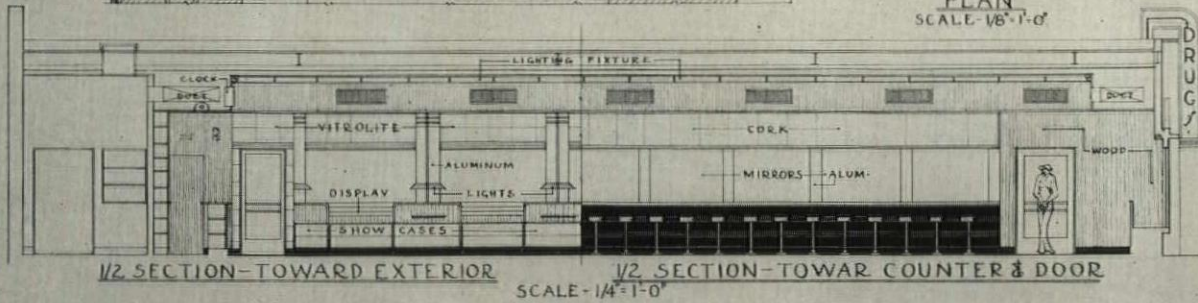
Walls—Plaster painted shades of green
Ceiling—Acoustical Plaster, cream
Flooring—Asphalt Tile—black and red pattern
Trim—Wood
Lighting Fixtures—Indirect and direct flush ceiling type
Heating, Ventilating, or Air Conditioning—"Clarage"



ELEVATION
SCALE - 1/2" = 1'-0"



PLAN
SCALE - 1/8" = 1'-0"



1/2 SECTION-TOWARD EXTERIOR

1/2 SECTION-TOWARD COUNTER & DOOR
SCALE - 1/4" = 1'-0"

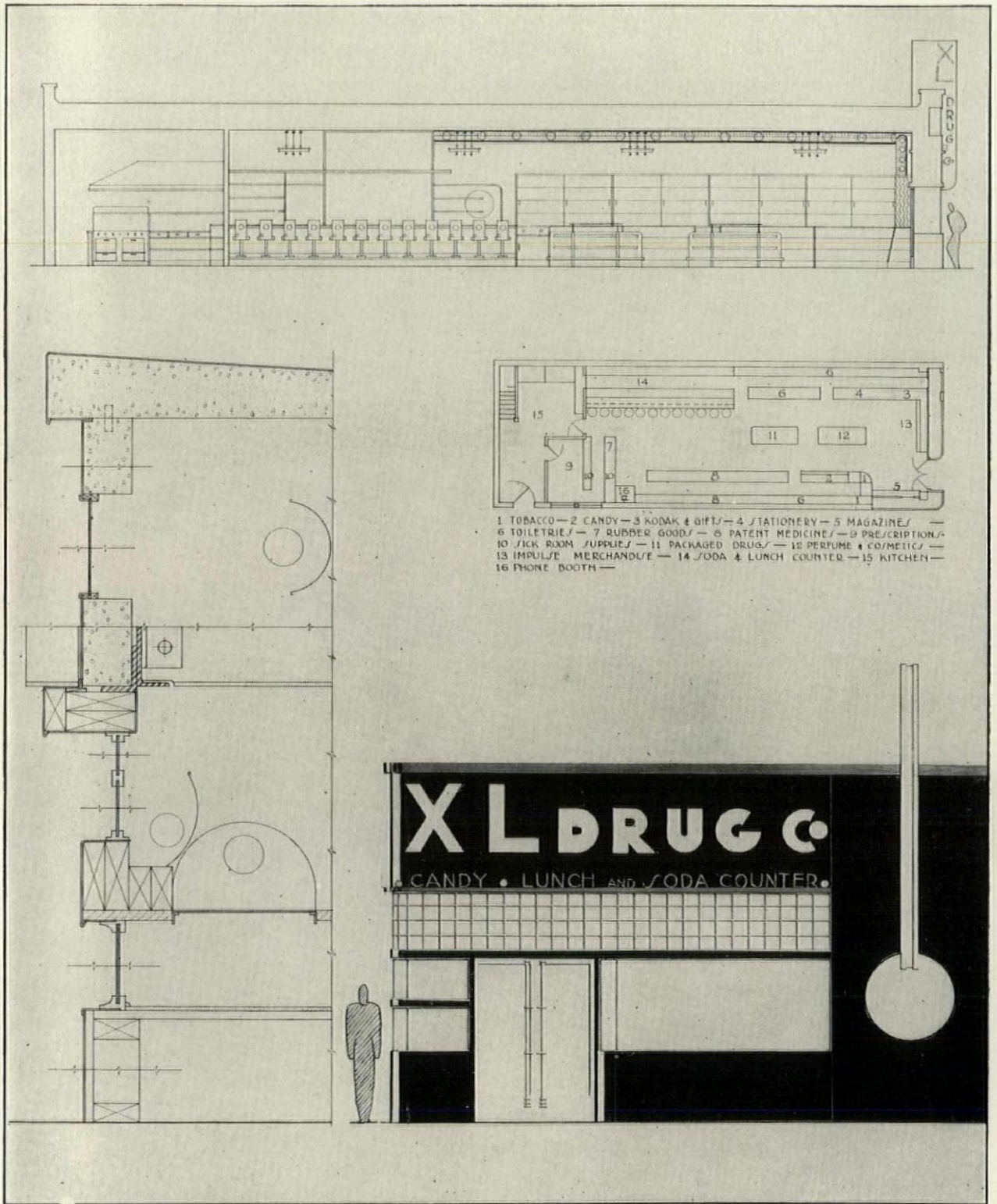
THE DRUG STORE — PROBLEM "A." Design submitted by Carl Schlacter and Elmer S. Tuthill, East Orange, N. J. "Modernize Main Street" Competition sponsored by Libbey-Owens-Ford Glass Company

EXTERIOR FEATURES

Show Windows—Polished Plate Glass
 Front Frame—Brushed Aluminum
 Bulkhead Facing—Black Vitrolite
 Wall Facing—Grey and Black Vitrolite
 Trim or Ornament—Brushed Aluminum
 Sign Lettering and Illumination—Black Enamel—Neon Tube

SALES INTERIORS

Walls—Oriental Wood Veneer and Grey Vitrolite
 Ceiling—Plaster, Canvas Covered, Painted White
 Flooring—Black and Grey Terrazzo—Aluminum Parting Strips
 Trim—Brushed and Polished Aluminum
 Lighting Fixtures—Brushed Aluminum and Opal Glass
 Mirrors—3/16" Libbey-Owens-Ford "A" Quality



- 1 TOBACCO—2 CANDY—3 KODAK & GIFT—4 STATIONERY—5 MAGAZINE—
 6 TOILETRY—7 RUBBER GOODS—8 PATENT MEDICINE—9 PRESCRIPTION—
 10 TICK ROOM SUPPLIES—11 PACKAGED DRUGS—12 PERFUME & COSMETIC—
 13 IMPULSE MERCHANDISE—14 SODA & LUNCH COUNTER—15 KITCHEN—
 16 PHONE BOOTH—

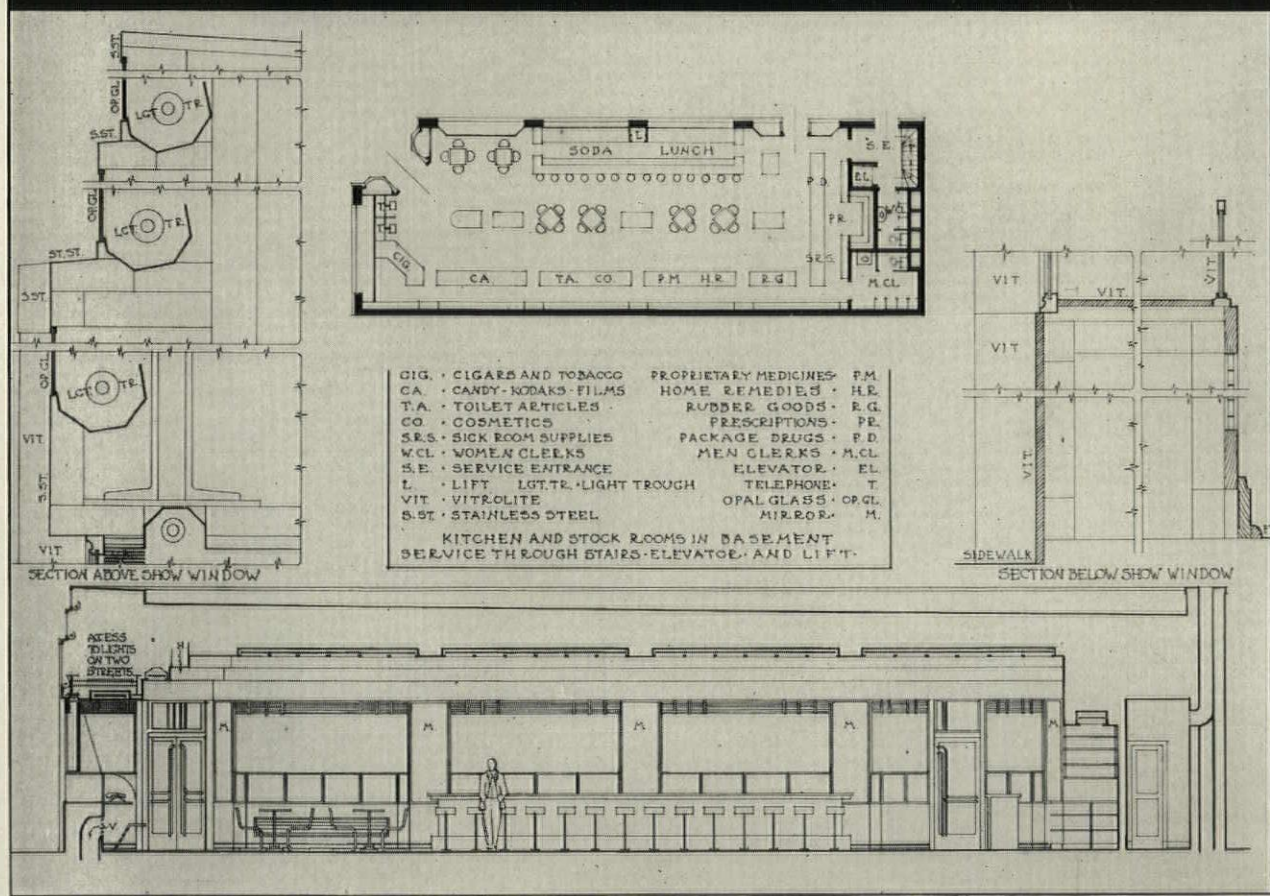
THE DRUG STORE—PROBLEM “A.” Design submitted by Emil Monier, Los Angeles, California, in the “Modernize Main Street” Competition sponsored by Libbey-Owens-Ford Glass Company

EXTERIOR FEATURES

- Show Windows—Polished Plate Glass
- Front Frame—Stainless Steel
- Bulkhead Facing—Stainless Steel
- Wall Facing—Stainless Steel
- Trim or Ornament—Enameled Sheet Metal
- Sign Lettering and Illumination—Opal Glass—Neon

SALES INTERIORS

- Walls—Plaster
- Ceiling—Plaster
- Flooring—Rubber Tile
- Trim—Wood
- Lighting Fixtures—Chromium plated
- Heating, Ventilating, or Air Conditioning—Not specified



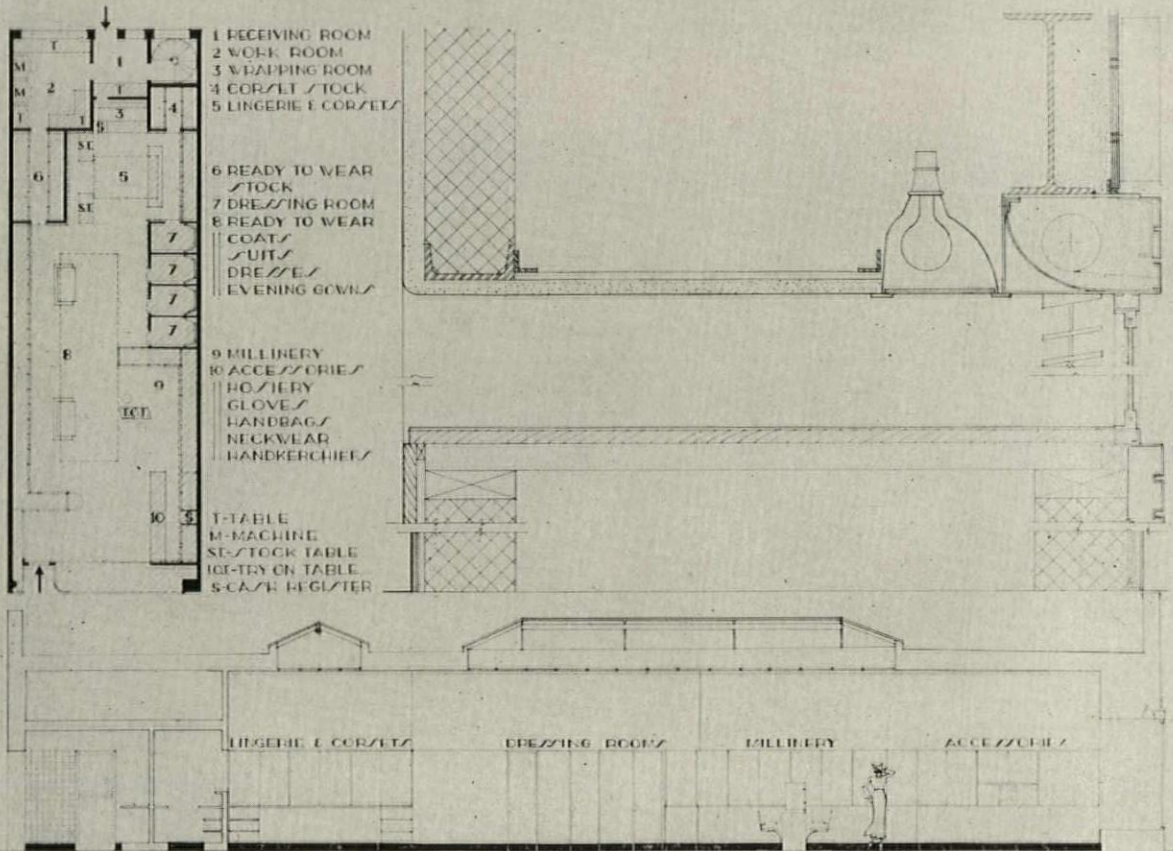
THE DRUG STORE—PROBLEM "A." Design submitted by Harry Leslie Walker and Robert L. Gwinn, New York, N. Y., in "Modernize Main Street" Competition sponsored by Libbey-Owens-Ford Glass Co.

EXTERIOR FEATURES

- Show Windows—L.O.F. Polished Plate Glass
- Front Frame—Honed finish Stainless Steel
- Bulkhead Facing—Black Vitrolite, 7/16" thick
- Wall Facing—Dark Emerald Green Vitrolite
- Trim or Ornament—Opal Glass above show windows
- Sign Lettering—Raised Letters, honed finish Stainless Steel

SALES INTERIORS

- Walls—Plaster with shelving and mirrors
- Ceiling—Plaster with Light Troughs
- Flooring—Ceramic Tile, black and white
- Trim—Painted Wood
- Lighting Fixtures—Mirror Reflecting with Opal Glass Fronts
- Heating, Ventilating, etc.—Oil Burner Air Conditioning



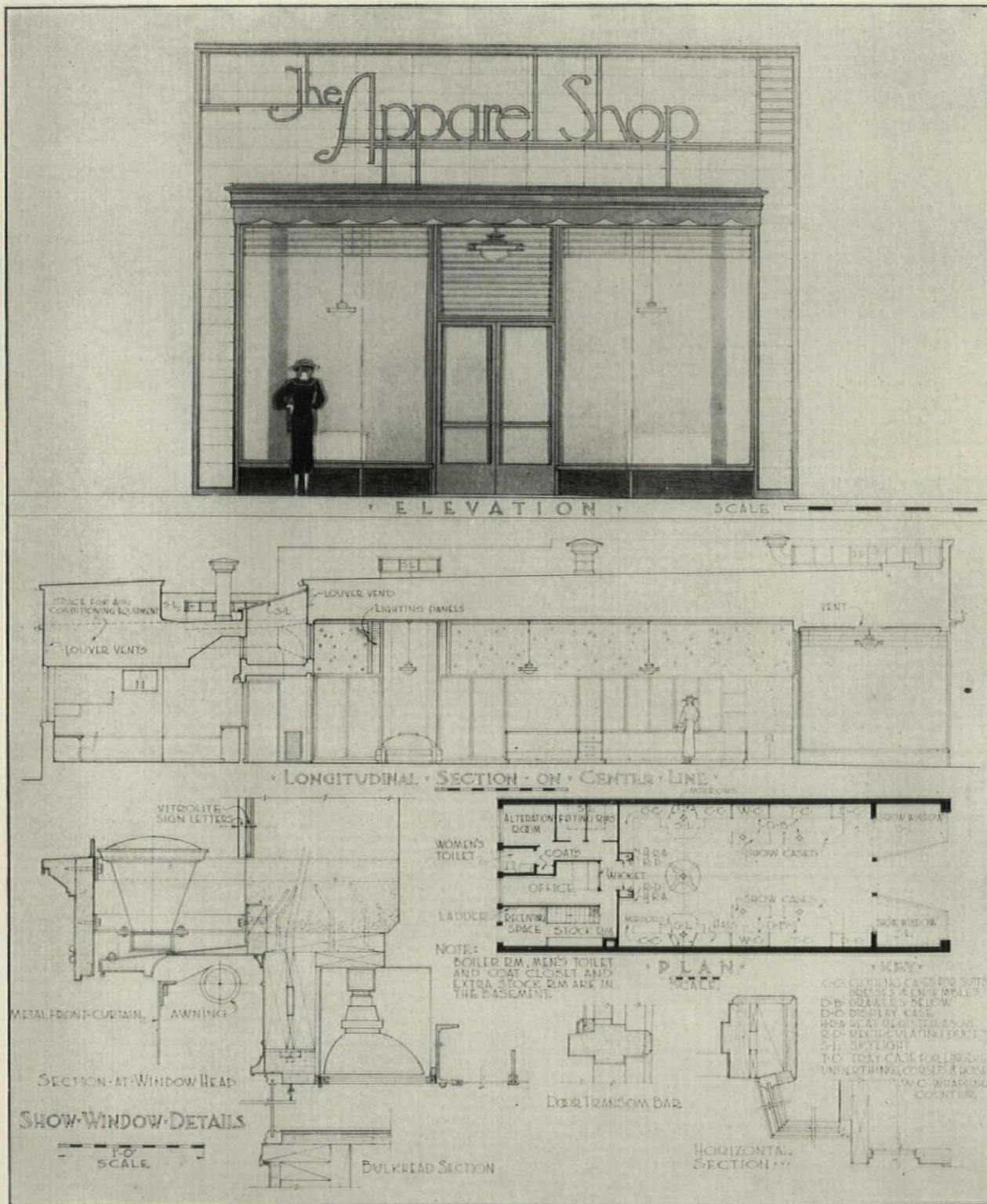
THE APPAREL SHOP—PROBLEM "B." Design submitted by Anthon F. Darrin and Charles W. Beeston, New York. "Modernize Main Street" Competition sponsored by Libbey-Owens-Ford Glass Co.

EXTERIOR FEATURES

Show Windows— $\frac{1}{4}$ " glazing quality Polished Plate Glass
 Front Frame—Extruded Bronze, satin finish
 Bulkhead Facing—Blue Vitrolite on bronze angles
 Wall Facing—Blue Vitrolite on bronze angles
 Trim or Ornament—Bronze
 Sign Lettering—Bronze

SALES INTERIORS

Walls—Plaster, painted
 Ceiling—Plaster, painted
 Flooring—Carpet
 Trim—Bronze, satin finish
 Lighting Fixtures—Metal Reflectors
 Heating, etc.—Single Unit Automatic Air Conditioning



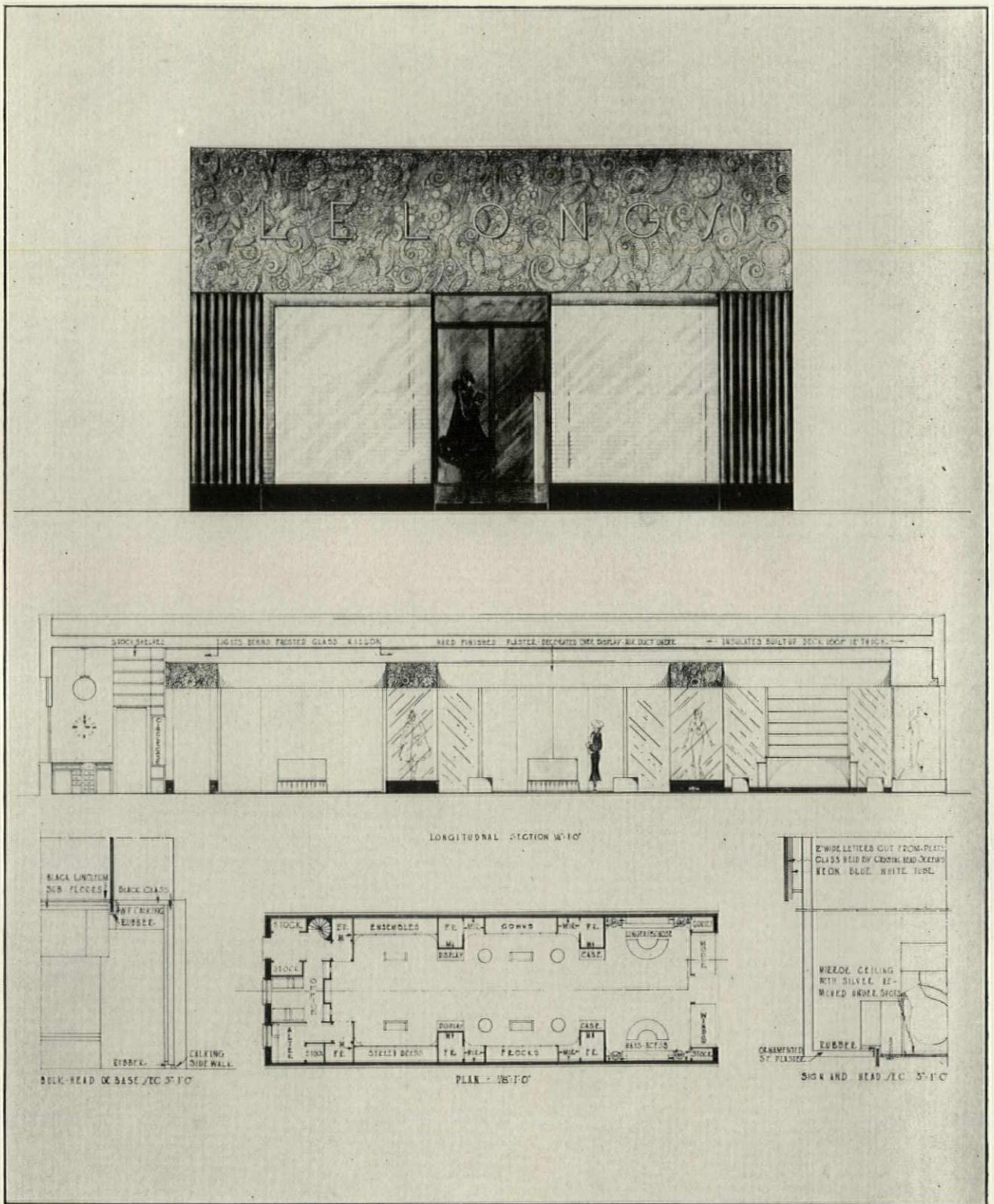
THE APPAREL SHOP—PROBLEM "B." Design submitted by Orrin F. Stone, Pasadena, California, in the "Modernize Main Street" Competition sponsored by Libbey-Owens-Ford Glass Company

EXTERIOR FEATURES

Show Windows—L.O.F. 1/4" polished Plate Glass
 Front Frame—Aluminum
 Bulkhead Facing—18-gauge Sheet Iron, enameled
 Wall Facing—5/16" Ivory Vitrolite, blue joints
 Trim or Ornament—Sheet Iron, enameled
 Sign—Enameled Iron, illuminated from below

SALES INTERIORS

Walls—Plaster, blue with silver stars
 Ceiling—Plaster, ivory
 Flooring—Oregon Pine covered with gray carpet
 Trim—Maple, natural finish
 Lighting Fixtures—Glass and Aluminum
 Heating, etc.—Complete Air Conditioning Equipment



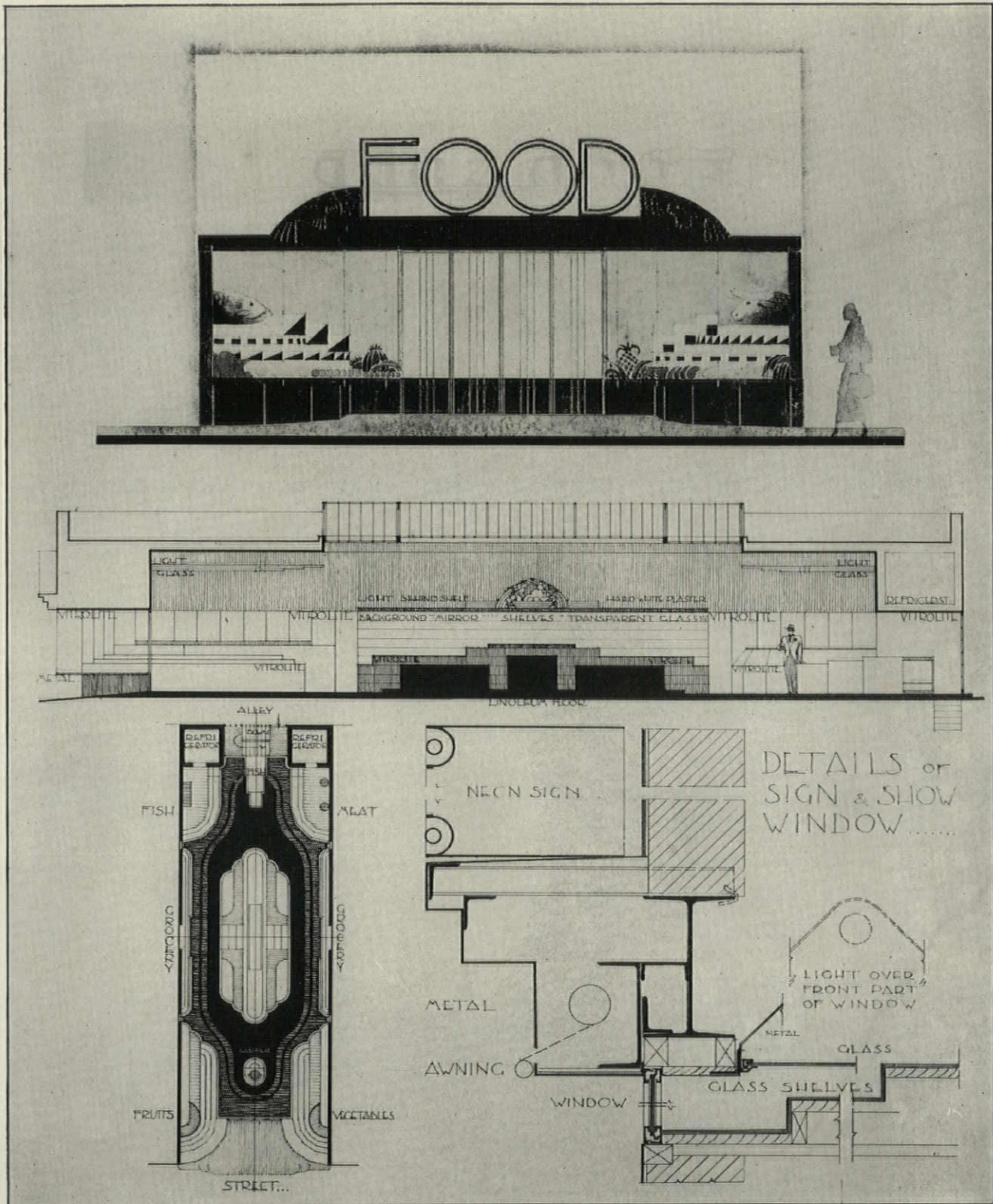
THE APPAREL SHOP—PROBLEM "B." Design submitted by Delmar Arliss Warren, Macon, Georgia, in the "Modernize Main Street" Competition sponsored by Libbey-Owens-Ford Glass Company

EXTERIOR FEATURES

- Show Windows—L.O.F. Plate Glass
- Front Frame—Monel for door—glass meets glass
- Bulkhead Facing—Black Glass
- Wall Facing—Dark bottle green Capless Fluted Glass
- Trim or Ornament—Same
- Sign Lettering and Illumination—2" wide Libbey-Owens-Ford Plate Glass—blue white "Neon"

SALES INTERIORS

- Walls—Plaster, panelwood, plate glass mirror
- Ceiling—Plaster—dead white
- Flooring—Chenille Carpet—deep mulberry
- Trim—Black Glass Base
- Lighting Fixtures—Ribbon of Glass
- Heating and Ventilating, or Air Conditioning Systems—G.E. Oil Burner and Air Conditioner



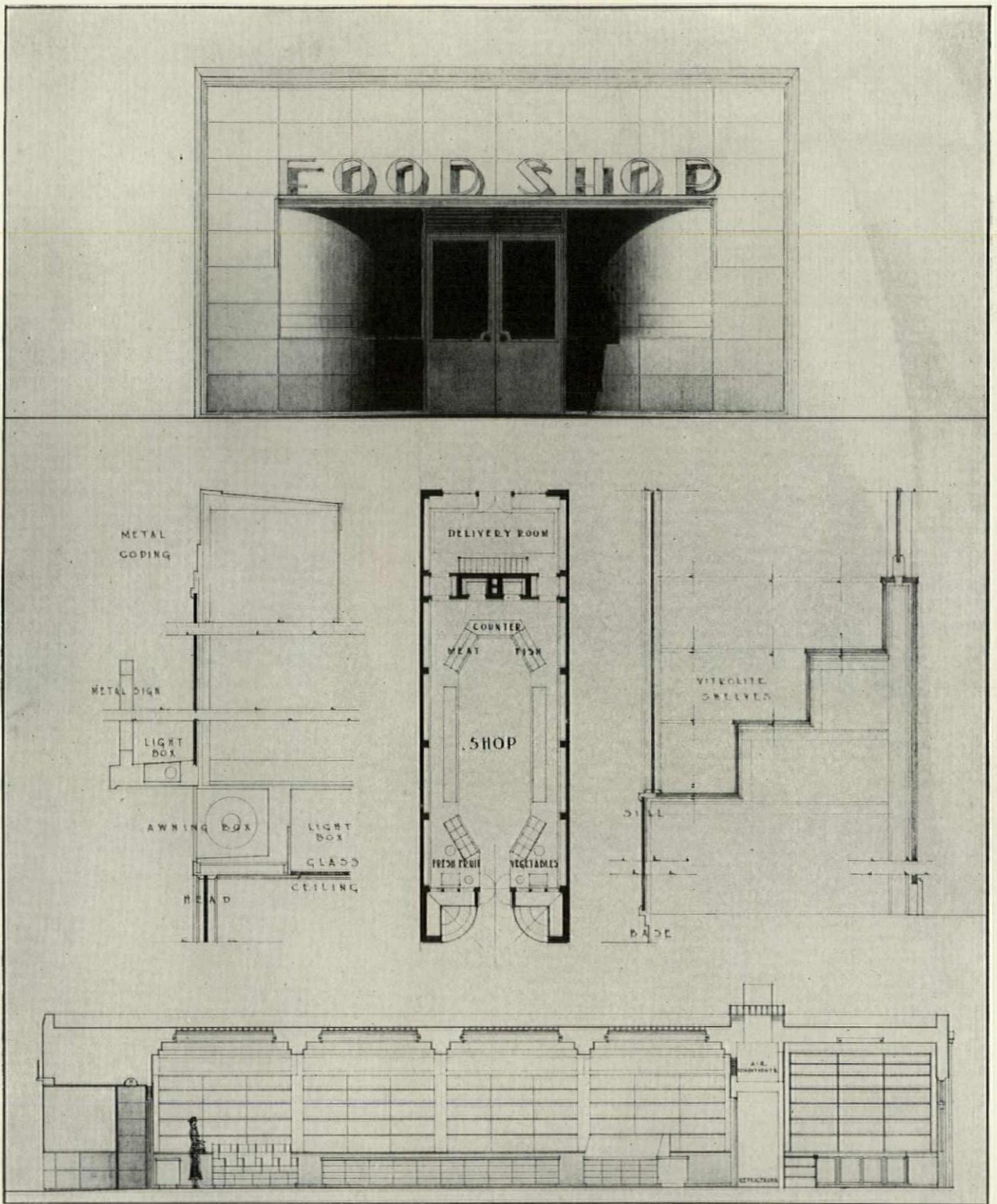
THE FOOD STORE—PROBLEM "C." Design submitted by Nicholas B. Vassiliev, New York, N. Y., in the "Modernize Main Street" Competition sponsored by Libbey-Owens-Ford Glass Company

EXTERIOR FEATURES

Show Windows—L.O.F. 1/4" Plate Glass
 Front Frame—4" T.C. Wall, Wood Joists
 Bulkhead Facing—Deplated Aluminum Alloy
 Wall Facing—Deplated Aluminum Alloy
 Trim or Ornament—Deplated Aluminum Alloy
 Sign Lettering and Illumination—Aluminum with Red "Neon"

SALES INTERIORS

Walls—Vitrolite and White Plaster above
 Ceiling—Plaster—enamel painted
 Flooring—Jaspe Battleship Linoleum—red
 Trim—Aluminum
 Lighting Fixtures—Indirect and semi-indirect ceiling troughs
 Heating and Ventilating, or Air Conditioning Systems—Vaporaire with Cooling Unit



THE FOOD STORE—PROBLEM "C." Design submitted by Theodore Fletcher, Marblehead, Massachusetts, in the "Modernize Main Street" Competition sponsored by Libbey-Owens-Ford Glass Company

EXTERIOR FEATURES

Show Windows— $\frac{1}{4}$ " Clear Plate Glass
 Front Frame—Metal
 Bulkhead Facing—Vitrolite $\frac{7}{16}$ " curved
 Wall Facing—Vitrolite $\frac{7}{16}$ "—green
 Trim or Ornament—Metal
 Sign Lettering and Illumination—Metal lighted by Trough

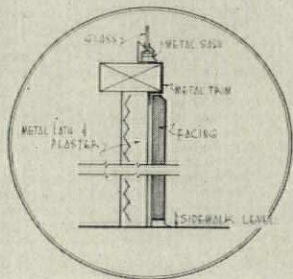
SALES INTERIORS

Walls—Vitrolite
 Ceiling—Vitrolite
 Flooring—Linoleum
 Trim—Metal
 Lighting Fixtures—Not specified
 Heating and Ventilating, etc.—G.E. Conditioned Air



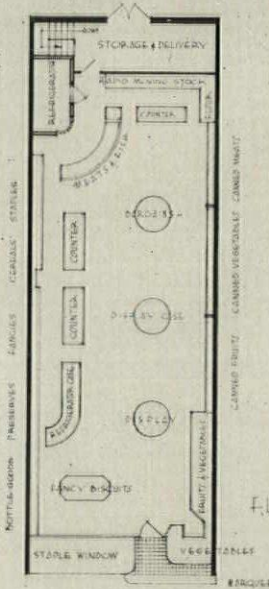
MAIN STREET ELEVATION

SCALE 2"=10'

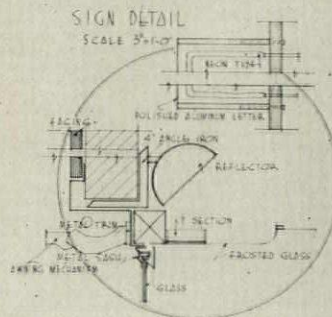


BULKHEAD DETAIL
SCALE 3"=10'

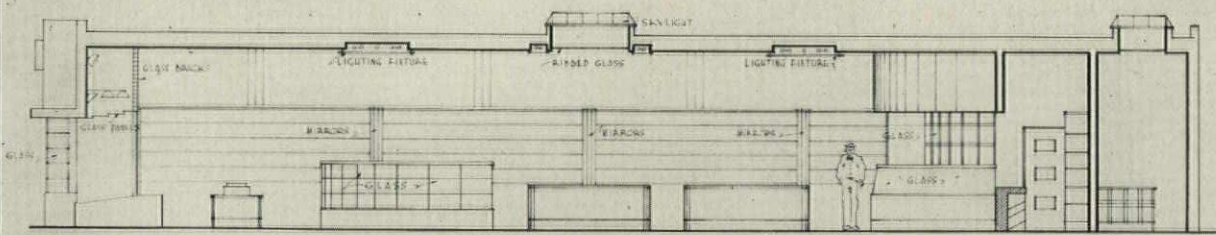
PROBLEM 'C'
THE FOOD STORE



FLOOR PLAN
SCALE 3/8"=10'



WINDOW HEAD & SHOW WINDOW CEILING
SCALE 3"=10'



LONGITUDINAL SECTION

SCALE 1/2"=10'

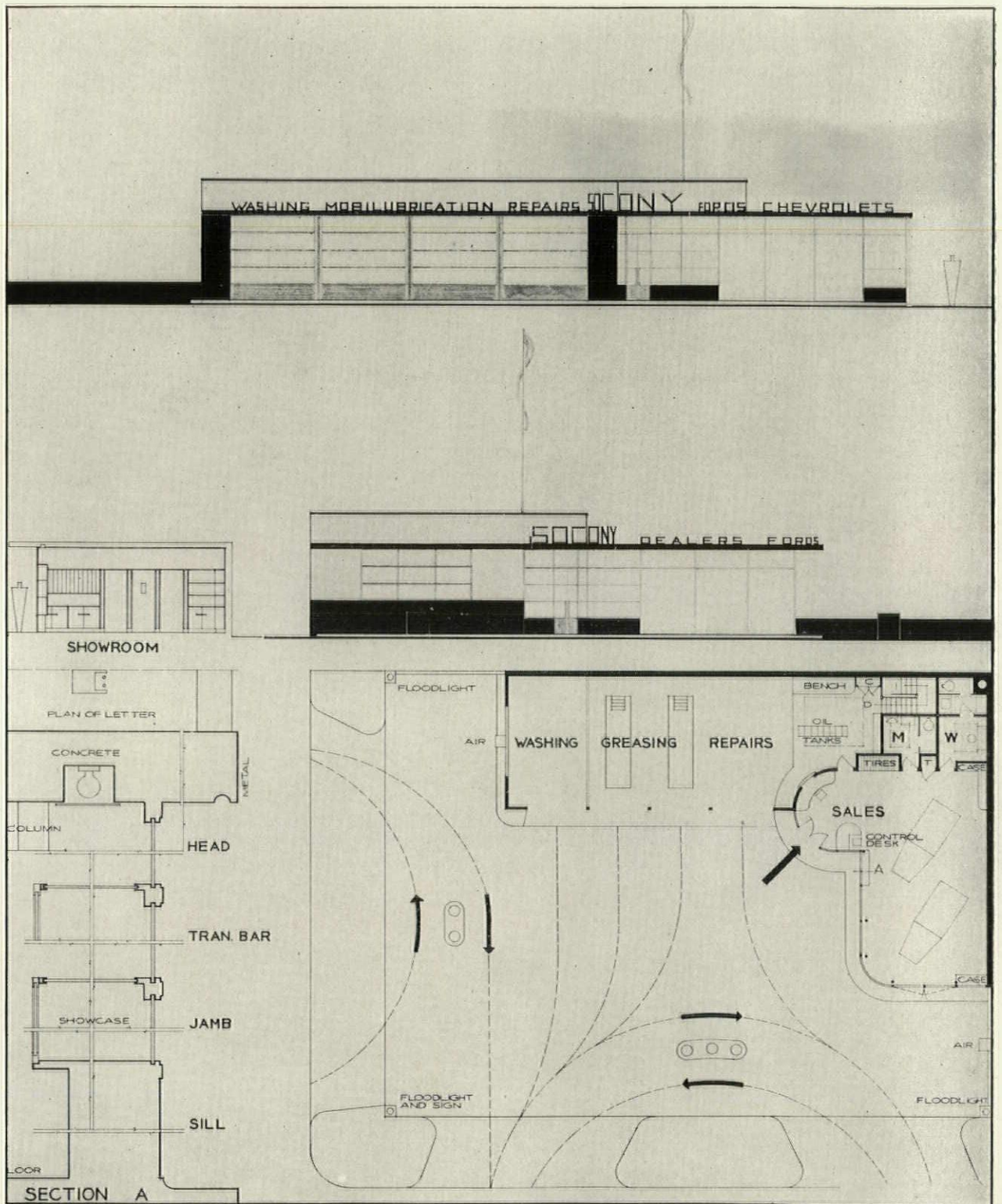
THE FOOD STORE—PROBLEM "C." Design submitted by Garrett V. S. Ryerson, Jr., Hunt, New York, in the "Modernize Main Street" Competition sponsored by Libbey-Owens-Ford Glass Company

EXTERIOR FEATURES

- Show Windows—1/4" L.O.F. Polished Plate Glass
- Front Frame—Kawneer Stainless Steel
- Bulkhead Facing—Vitrolite (Black) 3/4"
- Wall Facing—Same
- Trim or Ornament—Stainless Steel-Electro-Met
- Sign Lettering and Illumination—Polished Aluminum Letters—Tube Lighting

SALES INTERIORS

- Walls—Marsh Tile
- Ceiling—Plaster, smooth finish
- Flooring—Sloan-Blabon Linoleum
- Trim—Stainless Steel
- Lighting Fixtures—Trough covered with Frosted Glass
- Heating and Ventilating, or Air Conditioning Systems—Carrier



AUTOMOTIVE SALES-AND-SERVICE STATION—PROBLEM “D.” Design submitted by John Hironimus, New York. “Modernize Main Street” Competition sponsored by Libbey-Owens-Ford Co.

EXTERIOR FEATURES

Show Windows— $\frac{1}{4}$ " Plate Glass
 Front Frame—Aluminite
 Bulkhead Facing—Porcelain Enameled Metal
 Wall Facing—Porcelain Enameled Metal
 Trim—As shown
 Sign Lettering—Metal

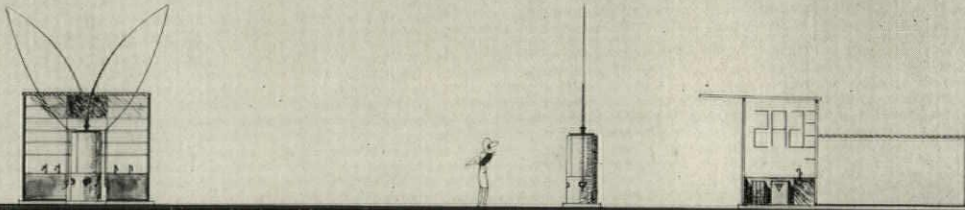
SALES INTERIORS

Walls—Flexboard
 Ceiling—Copper Leaf
 Flooring—Linoleum
 Trim—Wood
 Lighting Fixtures—Semi-indirect
 Heating, Ventilating, or Air Conditioning—Unit Heaters

GLASS STEEL CONCRETE

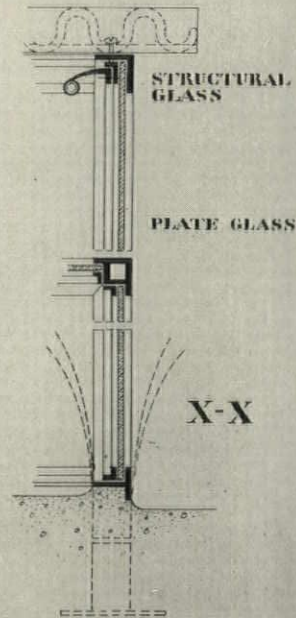
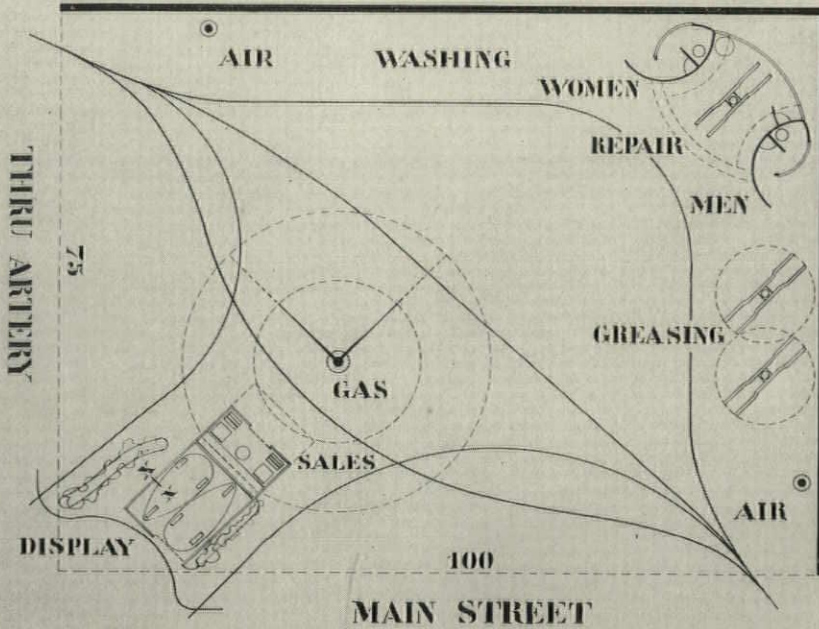


MAIN STREET
ARTERY SIMILAR



REAR

SECTION



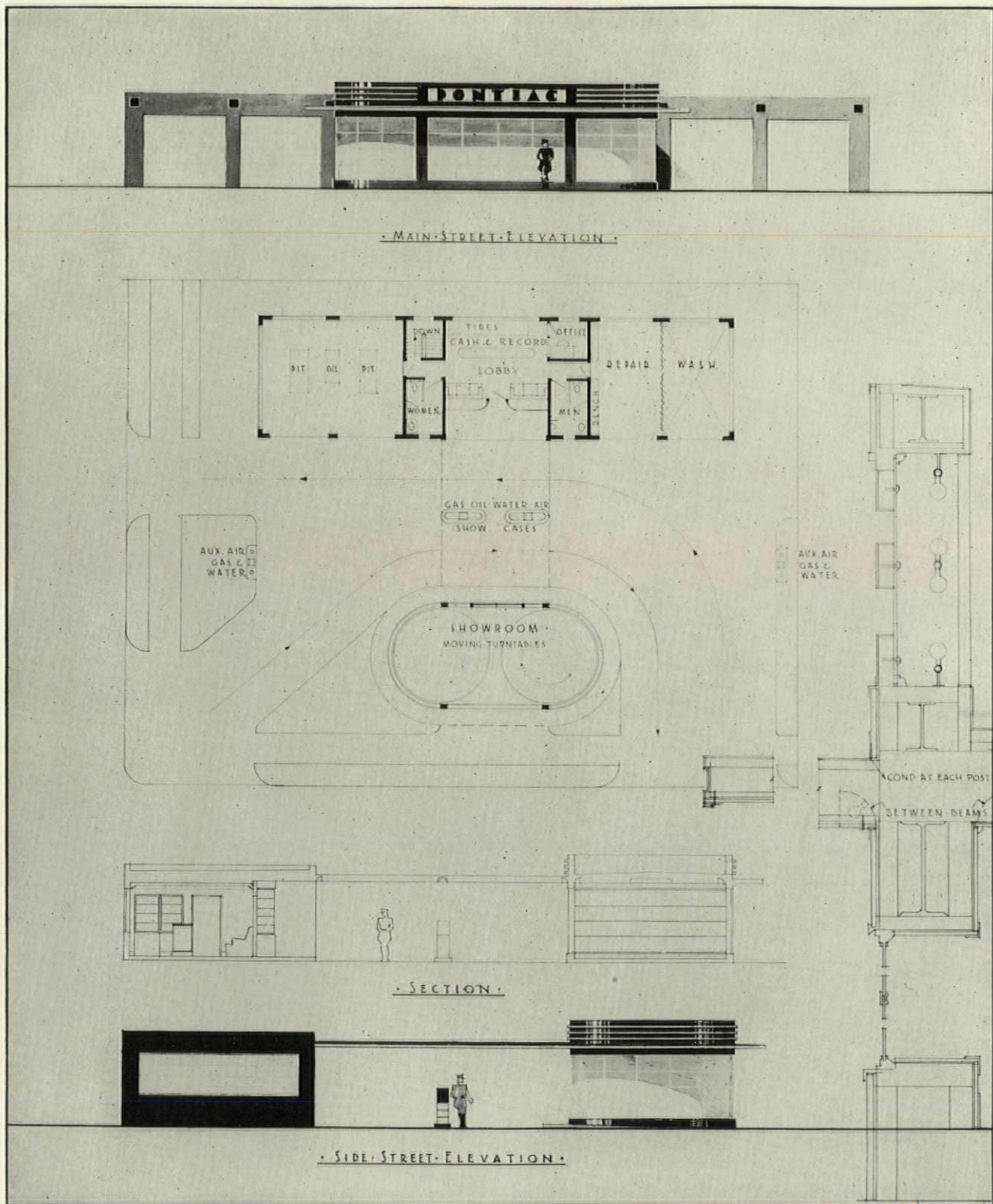
AUTOMOTIVE SALES-AND-SERVICE STATION—PROBLEM "D." Design submitted by Arne A. Kartwold, Berkeley, California, in Competition sponsored by Libbey-Owens-Ford Glass Company

EXTERIOR FEATURES

- Show Windows—Plate or Safety Glass, $\frac{3}{8}$ "
- Front Frame—Aluminum or Steel (rustproof)
- Bulkhead Facing—See detail
- Wall Facing—Not specified
- Trim—Metal, if any
- Sign Lettering and Illumination—Red Neon Tube

SALES INTERIORS

- Walls—Plate or Safety Glass
- Ceiling—As A-6 and G-3
- Flooring—Dark Green Cement
- Trim—Metal, if any
- Lighting Fixtures—Tube
- Heating, Ventilating, etc.—Small moveable electric units



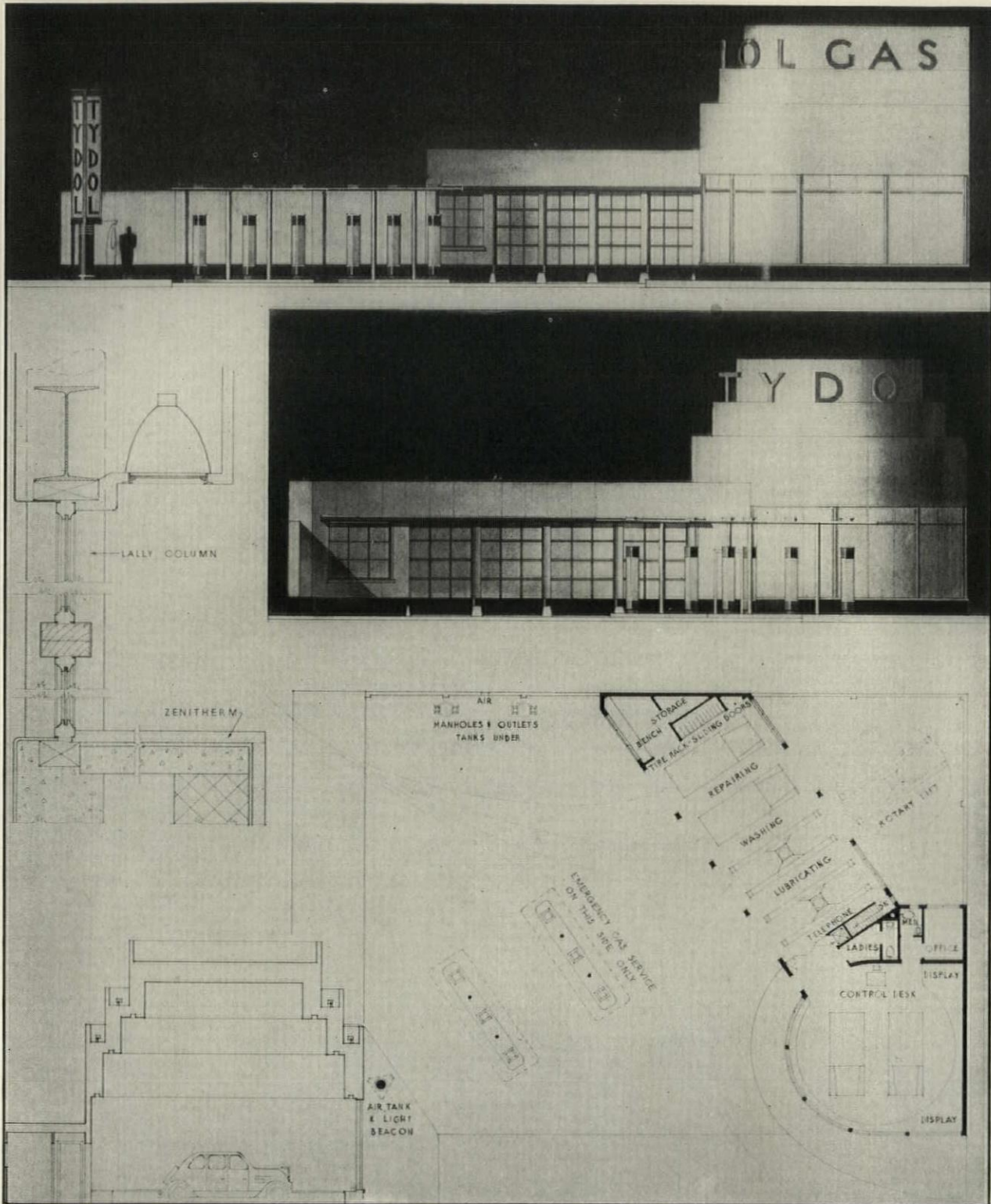
AUTOMOTIVE SALES-AND-SERVICE STATION—PROBLEM “D.” Design submitted by Owen W. Smith and Thomas Hennessy, Boston, in Competition sponsored by Libbey-Owens-Ford Glass Company

EXTERIOR FEATURES

- Show Windows—Plate Glass
- Front Frame—Concrete on steel frame faced with Vitrolite
- Bulkhead Facing—Vitrolite and Stainless Steel
- Wall Facing—Vitrolite
- Trim—Stainless Steel
- Sign—Metal letters backed by frosted glass, lights behind

SALES INTERIORS

- Walls—Light Tan Vitrolite
- Ceiling—White Plaster
- Flooring—Red and black squares of Armstrong’s Linotile
- Trim—Monel Metal
- Lighting Fixtures—Lights behind frosted glass in troughs
- Type of Heating and Air Conditioning—Universal



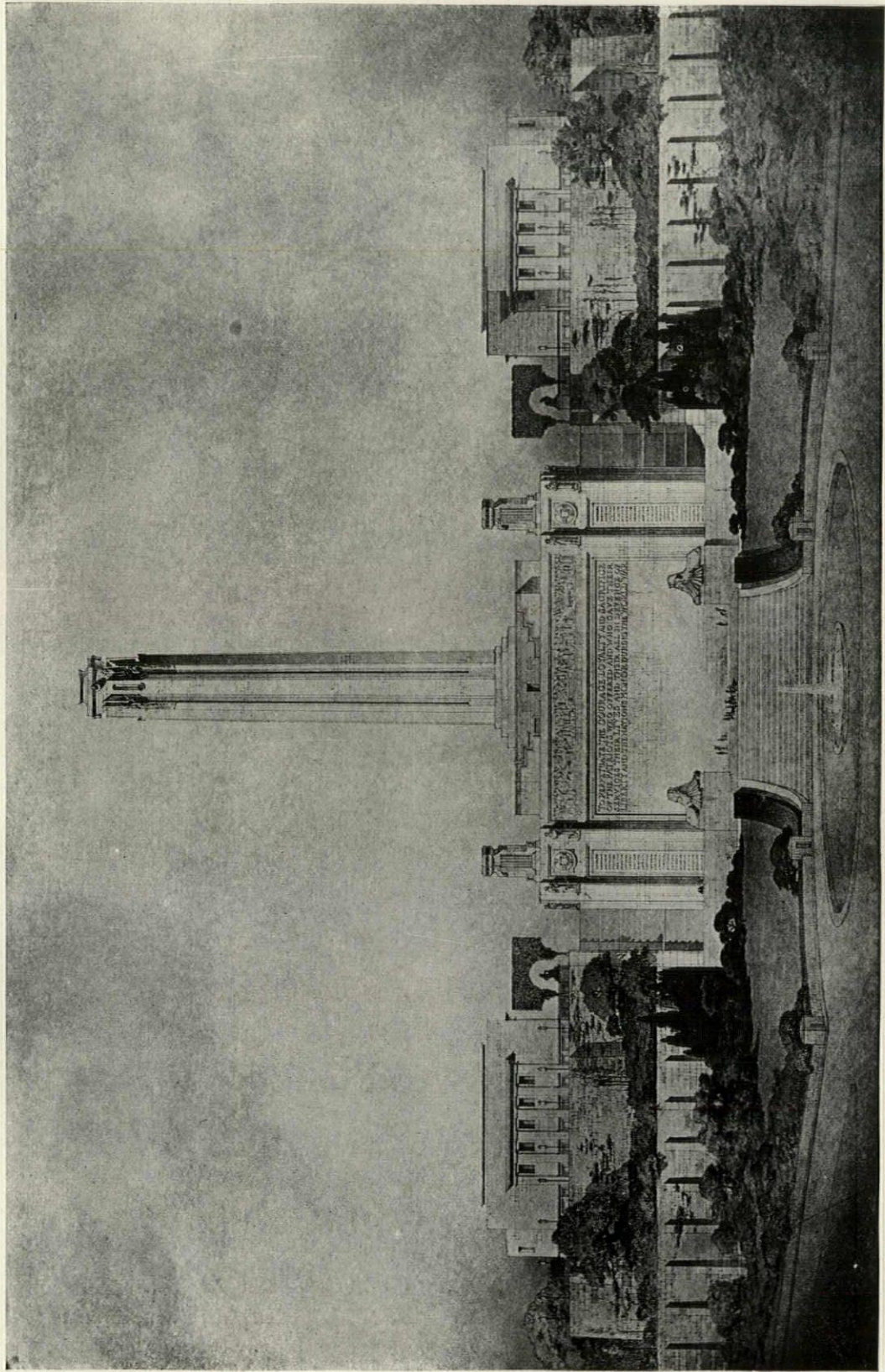
AUTOMOTIVE SALES-AND-SERVICE STATION—PROBLEM “D.” Design submitted by Ely Jacques Kahn, New York, N. Y., in the Competition sponsored by Libbey-Owens-Ford Glass Company

EXTERIOR FEATURES

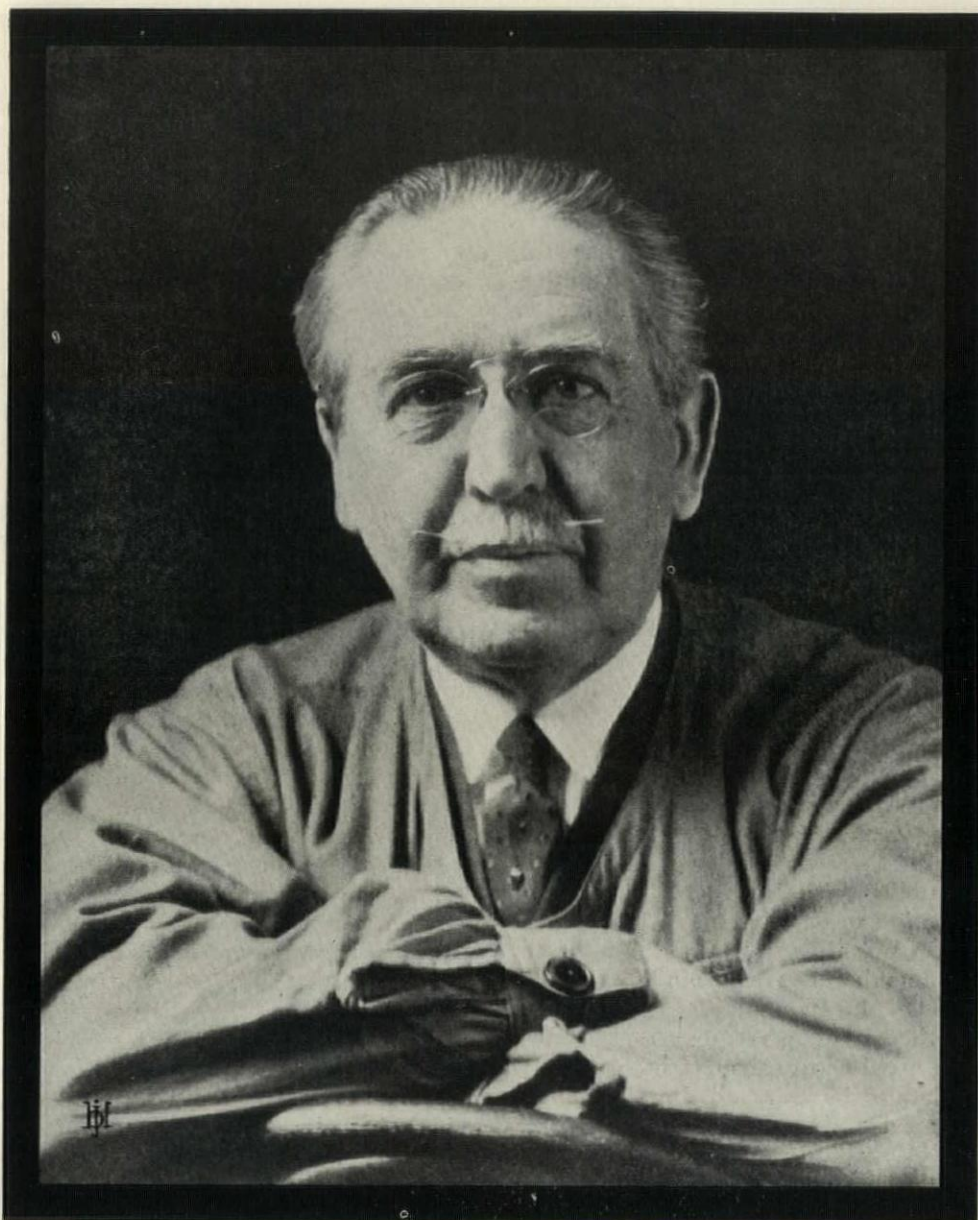
Show Windows— $\frac{1}{4}$ " Clear Plate Glass
 Front Frame—Lally Columns—Chromium Plated Metal
 Bulkhead Facing—Porcelain Enameled Steel
 Wall Facing—Porcelain Enameled Steel on Metal Furring
 Sign Lettering and Illumination—Free standing letters—
 letters show up dark against floodlighted background

SALES INTERIORS

Walls—Plaster
 Ceiling—Plaster
 Flooring—Terrazzo
 Trim—Metal
 Lighting Fixtures—Reflectors
 Heating and Air Conditioning—Not specified



Elevation of H. Van Buren Magonigle's Winning Design in the Kansas City Liberty Memorial Competition



H. Van Buren Magonigle, F.A.I.A.

1867—1935

“A CONSCIENTIOUS ARTIST”

IT has been customary of late years, in accordance with the theory that all history is a series of impersonal movements, governed by economic forces themselves impersonal, to speak of architecture as the expression of the civilization of the period that brings it forth, as if the forms which it assumes were the result of natural causes too potent to be resisted.

Once or twice in a lifetime we have it brought home to us that this is a fallacy; that, in architec-

ture at least, it is by a man and not by mankind as an unthinking mass that great ideals are brought into being, great projects conceived and fostered and great ends attained.

The men who have the force and the will to make themselves felt in this manner are not numerous, nor do they always receive fitting recognition from their contemporaries.

It is the more important, therefore, that when we do encounter among our associates one whose

character and abilities have given him the power to influence his time and who has directed that influence to noble ends, we should be ready to acclaim his achievements, and if these have been of an exceptional order, to speak of them in superlatives without fear of seeming extravagant in our eulogy.

On August twenty-ninth, Nineteen Hundred and Thirty-five, there died at Vergennes, Vermont, Harold Van Buren Magonigle, Doctor of Architecture and Fellow of the American Institute of Architects.

This was a man of brilliant and varied talents, an artist with an enduring record of accomplishment, and a teacher and leader to whom a large following looked for guidance and inspiration.

He was notable both in his own right as the designer of numerous and important buildings and because of the spirit which he awakened in others for the betterment of art.

In his own work he aimed at a high ideal and he fulfilled his aim. During a period of more than thirty years he produced an endless succession of vital, original, scholarly, and beautiful buildings, each of them in the truest and most complete sense his own creative work.

A draftsman of the greatest sensitiveness and facility, he was accustomed to develop with his own hand the brilliant presentations which caught the eye as much by the effectiveness of their rendition as by the quality of their design.

At the Convention of the American Institute of Architects held in Washington in 1924, in a debate which is still remembered as the model of a discussion by artists of the fundamentals of their art, he stated his theory of what our architecture should be: "An architecture firmly rooted in tradition, appropriate to its uses and therefore of infinite variety, free from freakishness as it is free from pedantry."

In the work that he produced he fulfilled this creed to the letter. It was the result of a searching analysis of the practical requirements of the problems set for him, of a singularly simple and direct emotional reaction to their æsthetic possibilities, and an unerring appreciation of the effect in execution of the means employed, so that in all of it there appears a personal and distinctive unity of style.

What is most marked in it is its robust and masculine character.

During a time when the fashion of the moment

set the designers at work to outdo the delicacies of Adam and Nash, he preserved in all his architecture a consistent vigor of scale that was the outward expression of his conviction that to build beautifully one must build enduringly and well.

His design is classical in its background and origin, imbued with a scholarship as broad as it is unobtrusive, but he had no interest in or desire to achieve a lifeless archæological correctness. Indeed it would seem that in his impatient determination to avoid pettiness at any cost he was willing to renounce with it some of the refinement and restraint that characterizes the best of the classical tradition.

In his later buildings he had already carried far a process of self-discipline that was progressively leading him to a greater and greater care to eliminate all that was not essential and to lay ever-increasing emphasis on the great general proportions and masses of his compositions.

He had an almost exaggerated dislike of having others borrow from him and was even reluctant to have the designs of his buildings reproduced in drawings or photographs to be used, as he phrased it, "as copybooks in drafting rooms."

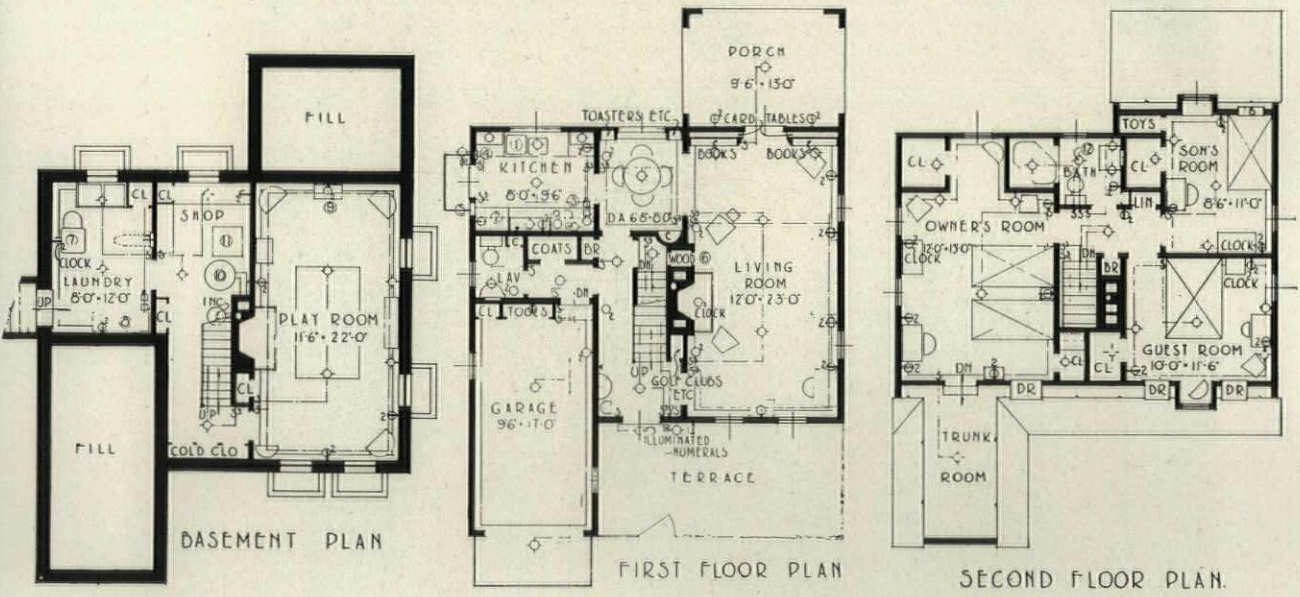
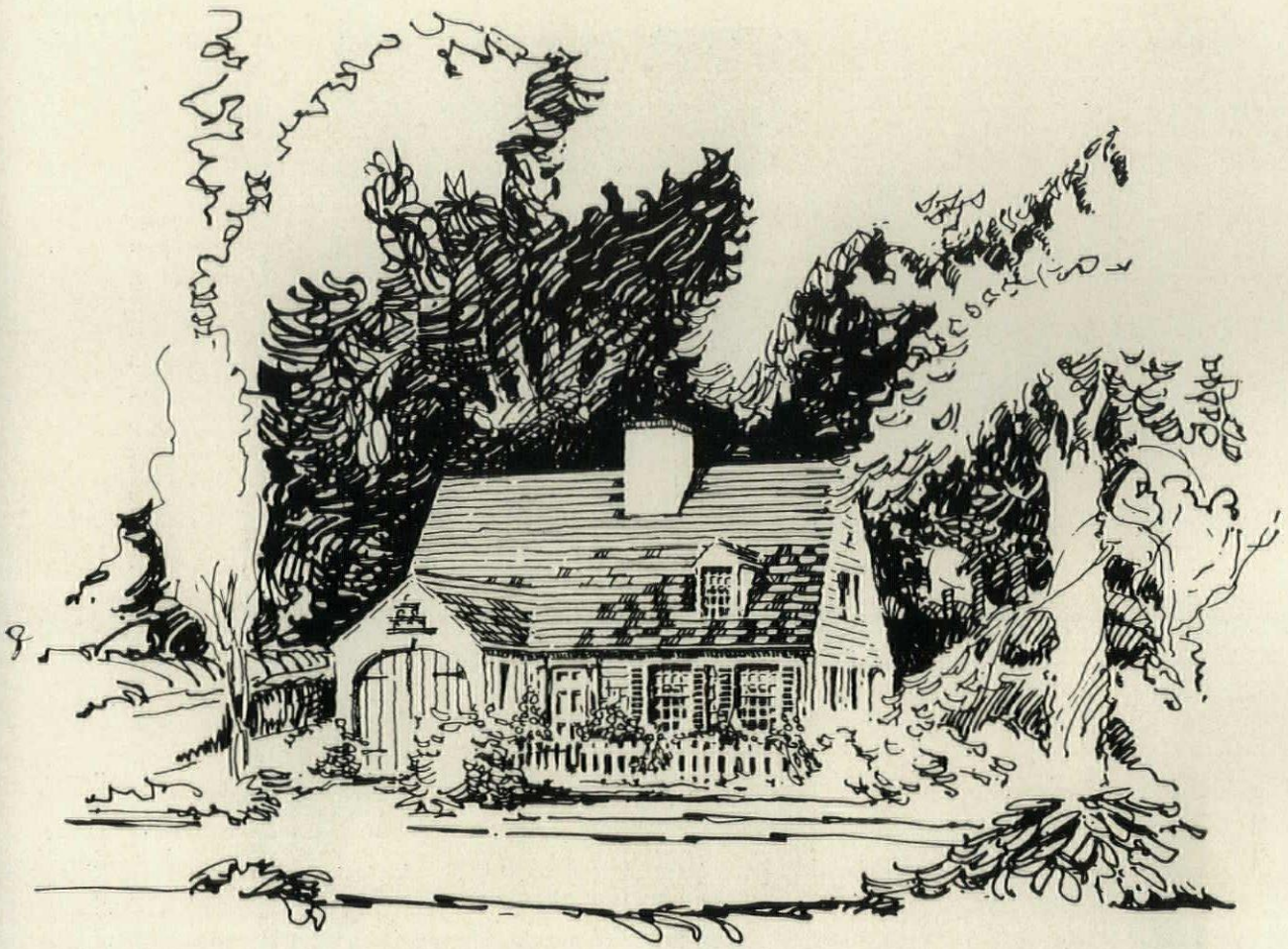
This has always made it difficult to appraise his work as a whole, for the buildings which he planned were widely scattered geographically and few can have seen them all.

One of the most familiar and most admired of them, one which he himself might perhaps have chosen as representing his abilities at their height, is the Liberty Memorial at Kansas City, Missouri, still incomplete because it lacks one of its most important elements as he conceived it, the splendid sculptural frieze designed for it by his wife, in a spirit of such perfect harmony with the monument as to seem to have been created with it in a single impulse.

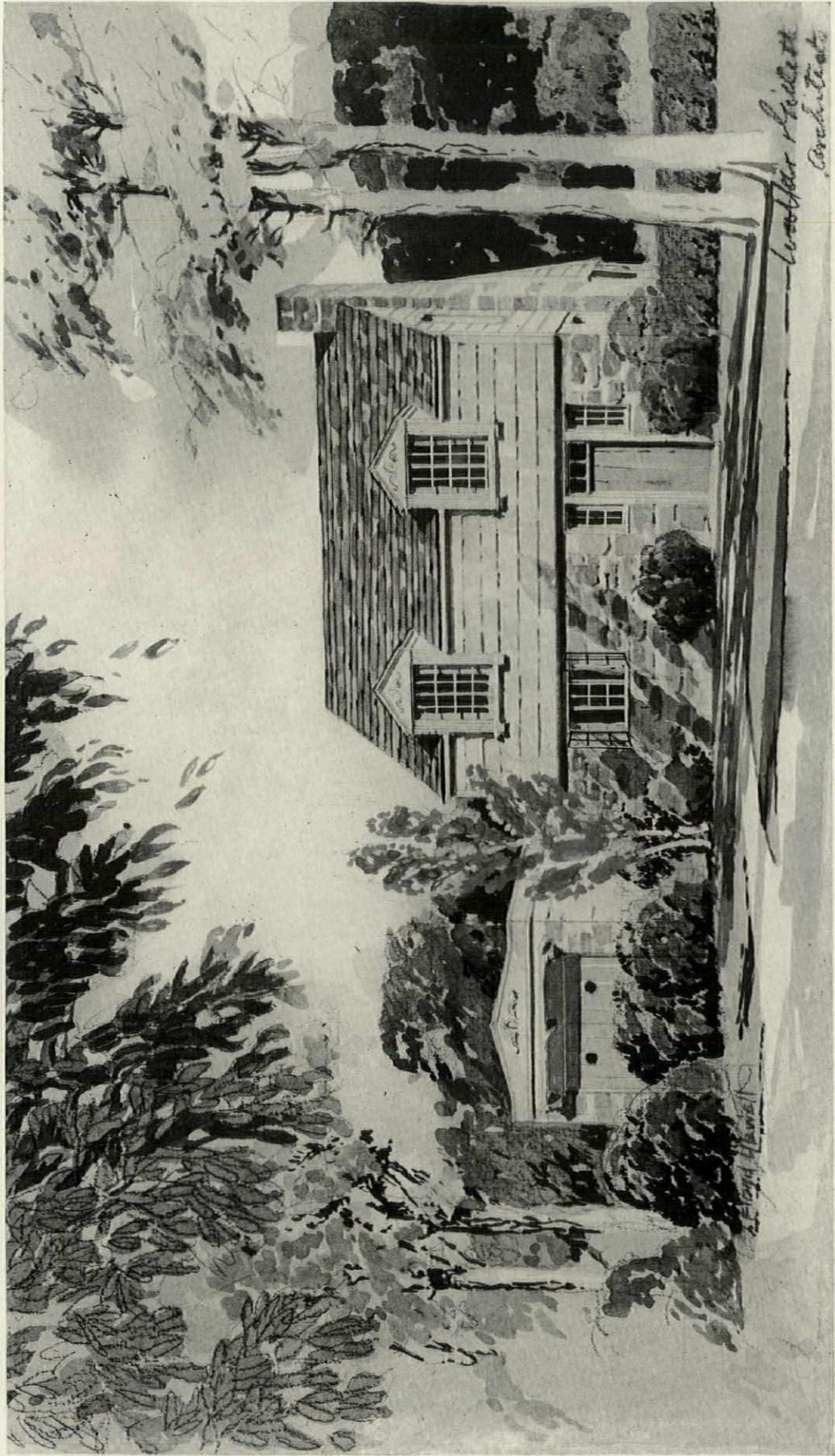
He founded no school of imitators nor did he desire to found one. The form of leadership which he wished to exercise was to awaken in men's minds the desire to create and originate themselves; to feel and express rather than to see and copy.

It was his great service to his contemporaries that he persisted in keeping before them by word and by example the truth that architecture is an art and that "in the arts is most of the beauty of the world and of life in the world; subtract them and the world is like a waterless desert."

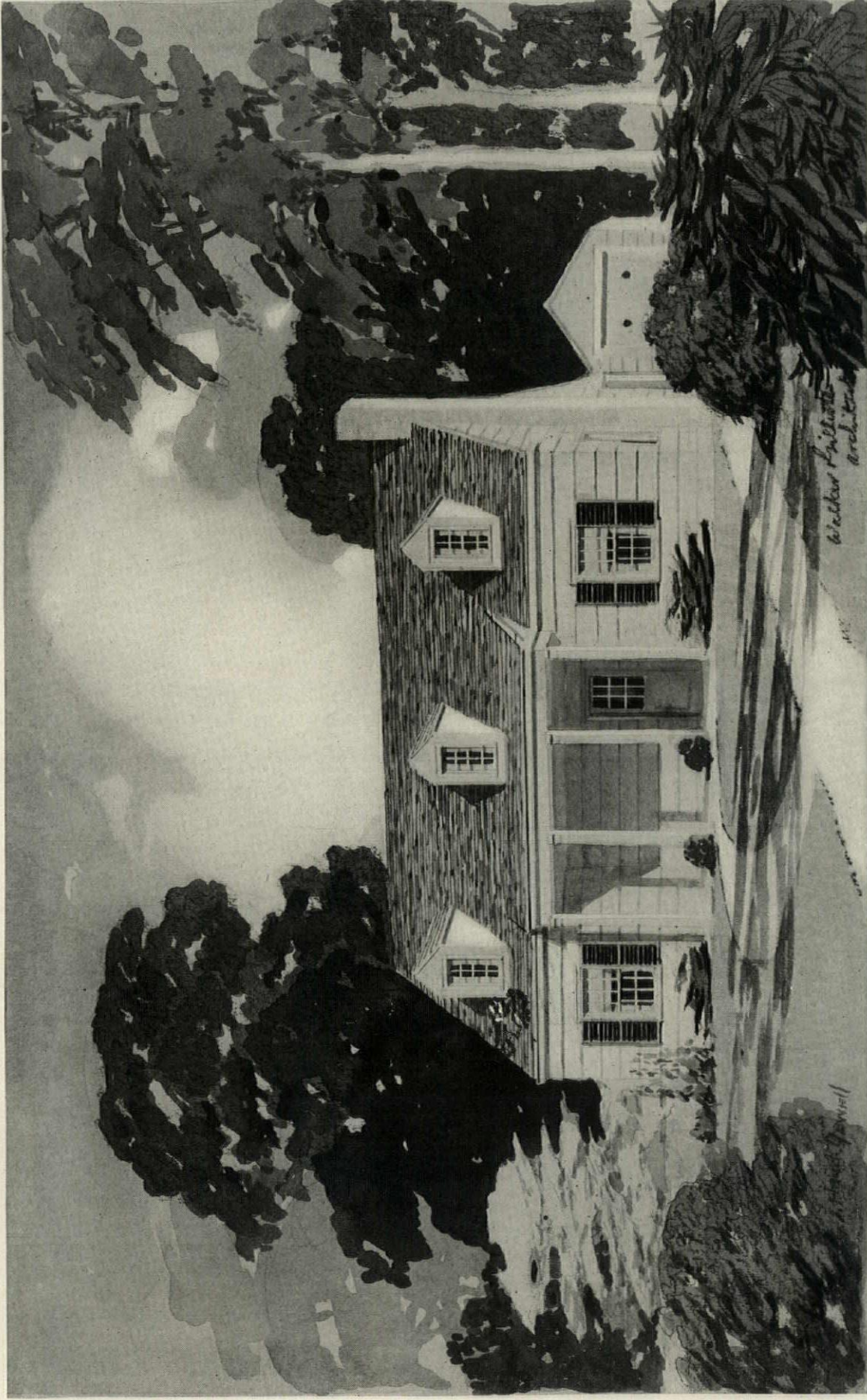
FRANCIS P. SULLIVAN



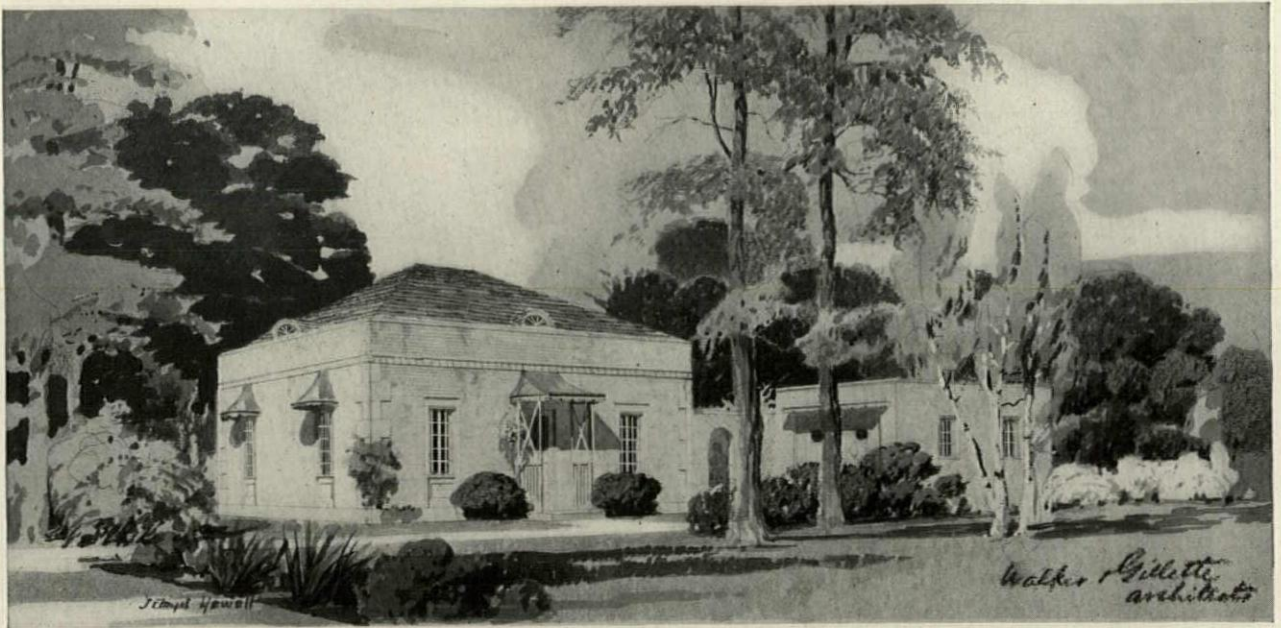
Small House Design submitted by Royal Barry Wills in the General Electric Company's "Home Electric" Competition. Although this design won neither prize nor mention in the competition it was selected by the company for inclusion in its portfolio of New American Houses made available to prospective home builders under the G.E. Home Building Program. We are informed that it turns out to be the people's favorite if not the jury's and that more have arranged to build it than any of the winners



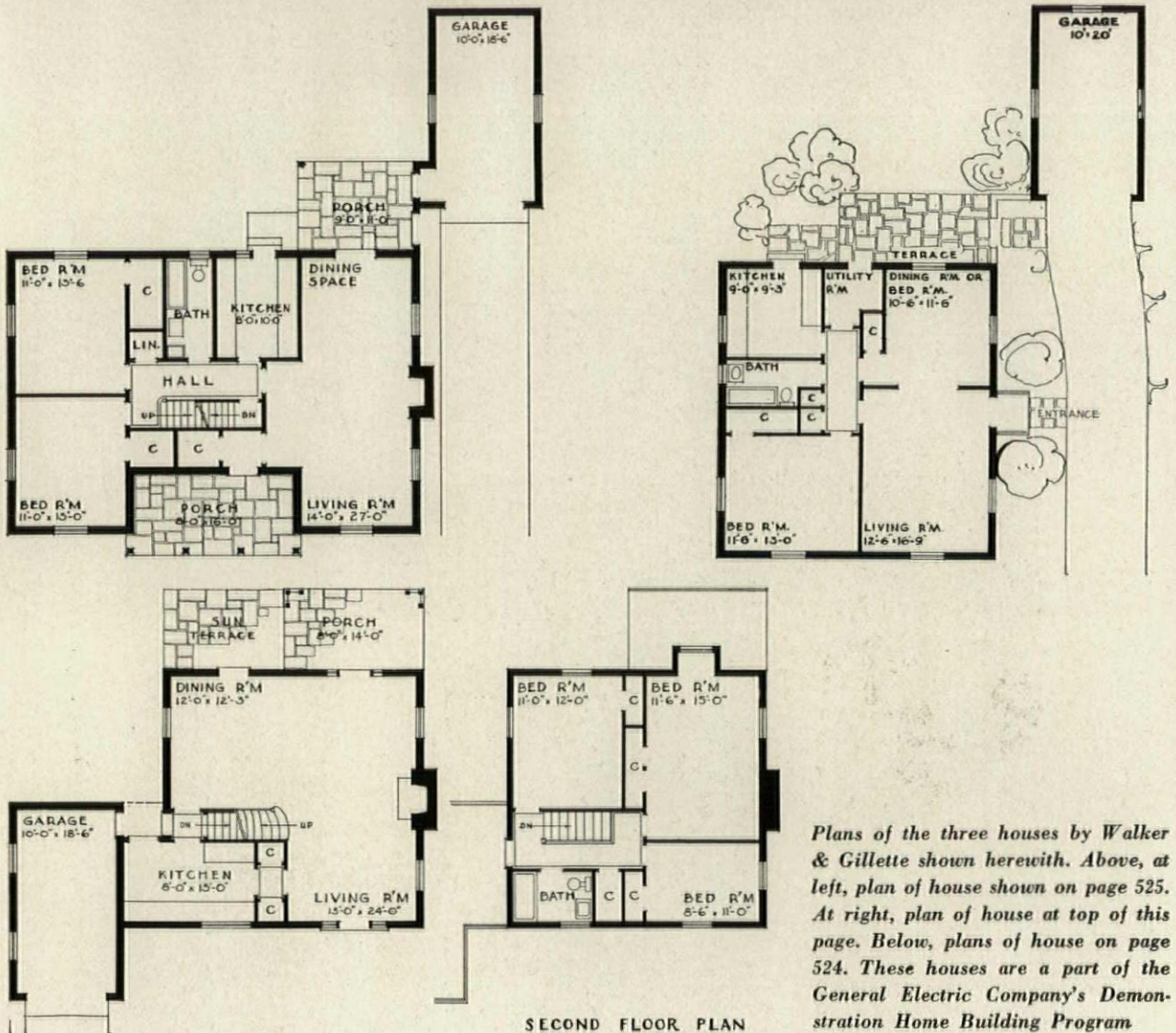
Rendering by J. Floyd Hewell of a House by Walker & Gillette, Architects. Designed as a part of the General Electric Company's "New American" Home Building Program



Rendering by J. Floyd Yewell of a House by Walker & Gillette, Architects. Designed as a part of the General Electric Company's "New American" Home Building Program



Rendering by J. Floyd Yewell of a House by Walker & Gillette, Architects



Plans of the three houses by Walker & Gillette shown herewith. Above, at left, plan of house shown on page 525. At right, plan of house at top of this page. Below, plans of house on page 524. These houses are a part of the General Electric Company's Demonstration Home Building Program.

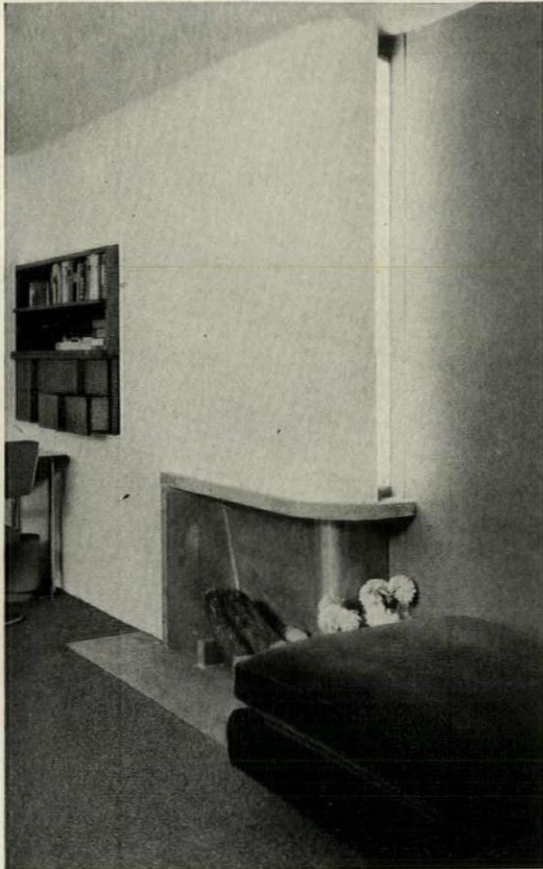
THE PENCIL POINTS SERIES OF COMPARATIVE DETAILS

Group 24—Modern Lighting

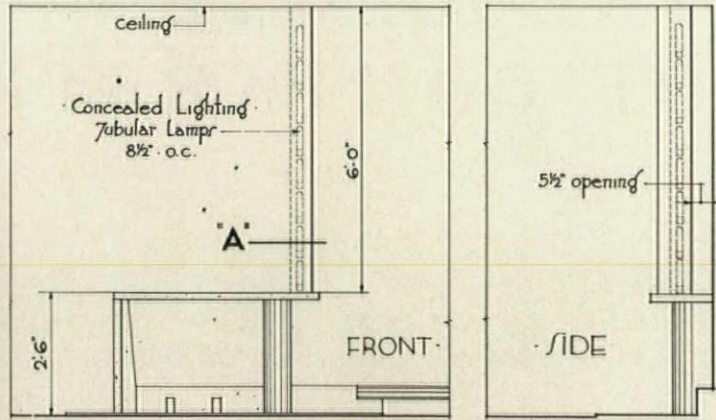
Presented by means of photographs and drawings from data supplied by *Dwight James Baum, Donald Deskey, Walter Kantack, William Lescaze, Eugene Schoen & Sons, Irving L. Scott, Walter Dorwin Teague, Voorhees, Gmelin & Walker, Ralph T. Walker, Architects and Designers, and Beaux Arts Lighting Company, Cassidy Company, Curtis Lighting, Inc., A. Ward Hendrickson & Company, Kliegl Brothers, Lightolier Company, Craftsmen.*
Drawings by Alfred J. Bagley

Previously published details in this series covered the following subjects:

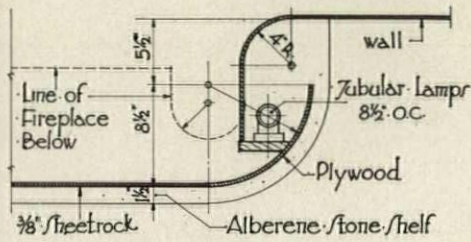
<i>Dormers</i>	<i>October, 1932</i>	<i>Exterior Steps</i>	<i>November, 1933</i>
<i>Fences and Gates</i>	<i>November, 1932</i>	<i>Cupolas</i>	<i>Jan. and Feb., 1934</i>
<i>Radiator Enclosures</i>	<i>December, 1932</i>	<i>Bay Windows</i>	<i>March, 1934</i>
<i>Second Story Overhangs</i>	<i>January, 1933</i>	<i>Closets</i>	<i>April, 1934</i>
<i>Fireplaces</i>	<i>February, 1933</i>	<i>Balconies</i>	<i>May, 1934</i>
<i>Door Hoods</i>	<i>March, 1933</i>	<i>Bookshelving</i>	<i>June, 1934</i>
<i>Chimneys</i>	<i>April, 1933</i>	<i>Exterior Doors, English</i>	<i>Aug. and Sept., 1934</i>
<i>Interior Woodwork</i>	<i>May, 1933</i>	<i>Corner Cupboards</i>	<i>Oct. and Nov., 1934</i>
<i>Residence Bars</i>	<i>June, 1933</i>	<i>Oriel Windows</i>	<i>Dec., 1934, and Jan., 1935</i>
<i>Stone Textures</i>	<i>July, 1933</i>	<i>Garden Pools</i>	<i>April and May, 1935</i>
<i>Eaves and Gutters</i>	<i>September, 1933</i>	<i>Motor Entrances</i>	<i>June, 1935</i>



Metropolitan · Museum



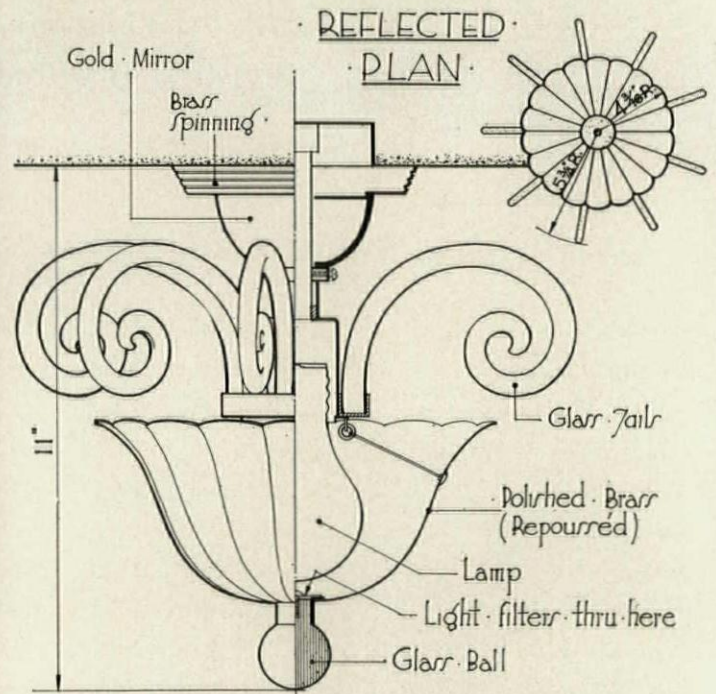
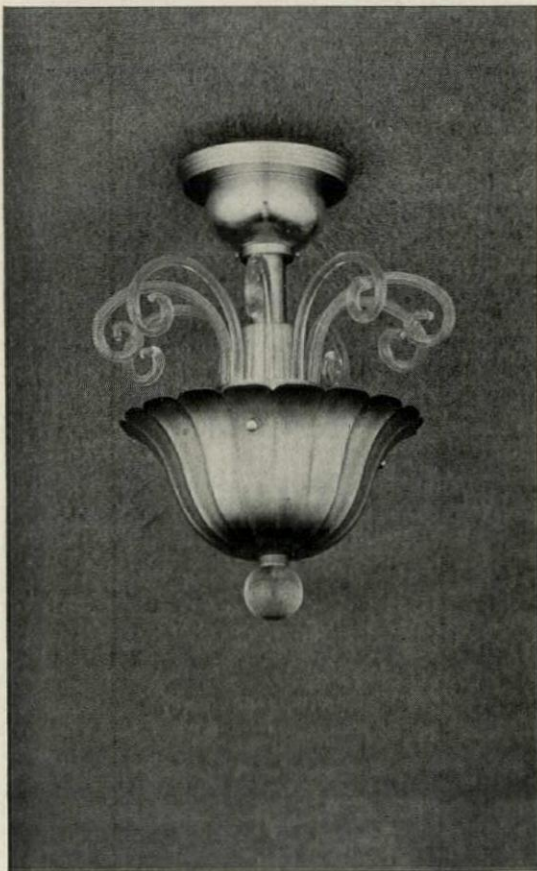
ELEVATION · of · FIREPLACE · & · LIGHT · COVE · OVER ·
SCALE 1/4" = 1'-0"



DETAIL OF
COVE AT
"A"

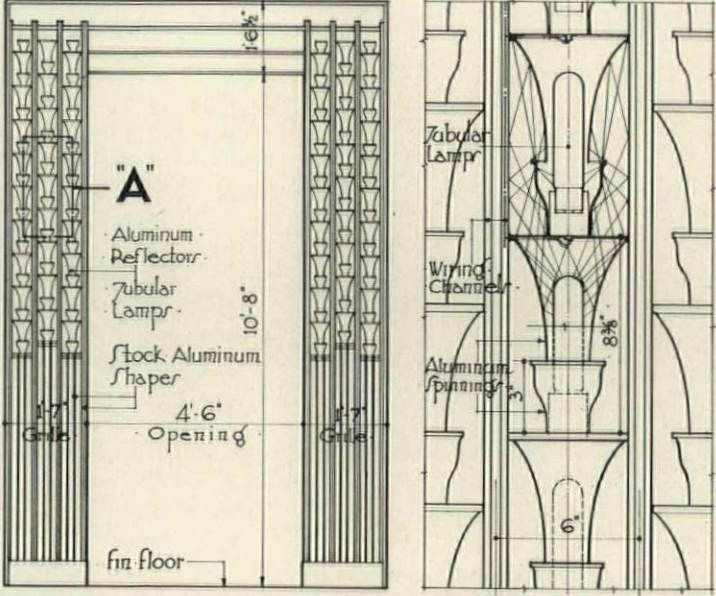
SCALE 3/4" = 1'-0"

· AMERICAN · INDUSTRIAL · ART · EXHIBIT · METROPOLITAN · MUSEUM ·
WILLIAM · LESCAZE · · · ARCHITECT ·

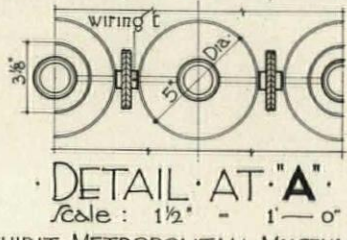


ELEVATION SECTION
· DETAIL · OF · CEILING · FIXTURE ·
Scale · 3" = 1'-0"

DWIGHT · JAMES · BAUM : ARCHITECT ·
CASSIDY · CO · INC. · · · CRAFTSMAN ·

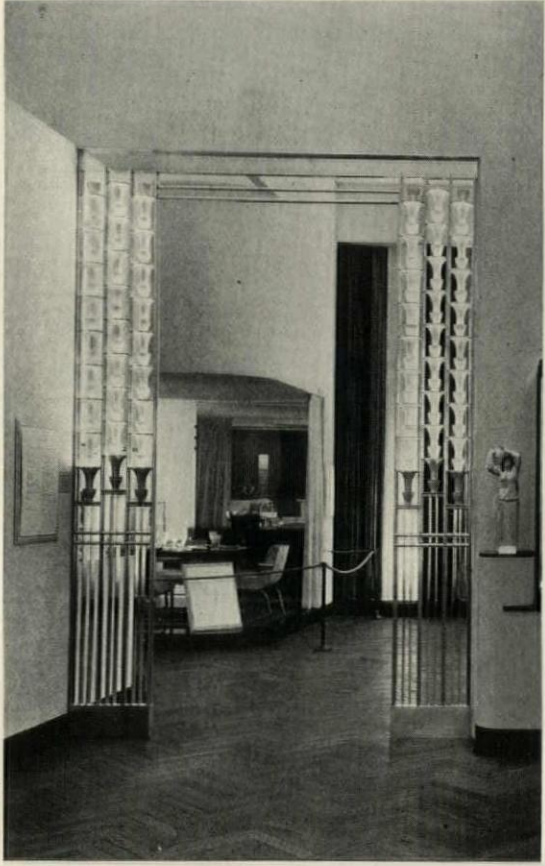


ELEVATION
SCALE: 1/4" = 1'-0"
DETAIL OF
ILLUMINATED
GRILLE

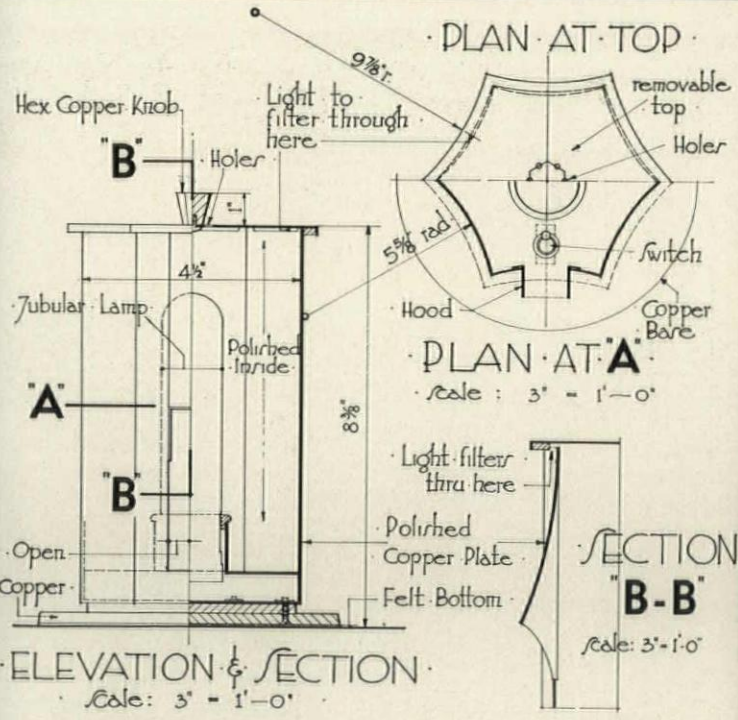


DETAIL AT "A"
SCALE: 1/2" = 1'-0"

AMERICAN INDUSTRIAL ART EXHIBIT · METROPOLITAN MUSEUM ·
WALTER KANTACK · DESIGNER & CRAFTSMAN



Metropolitan · Museum



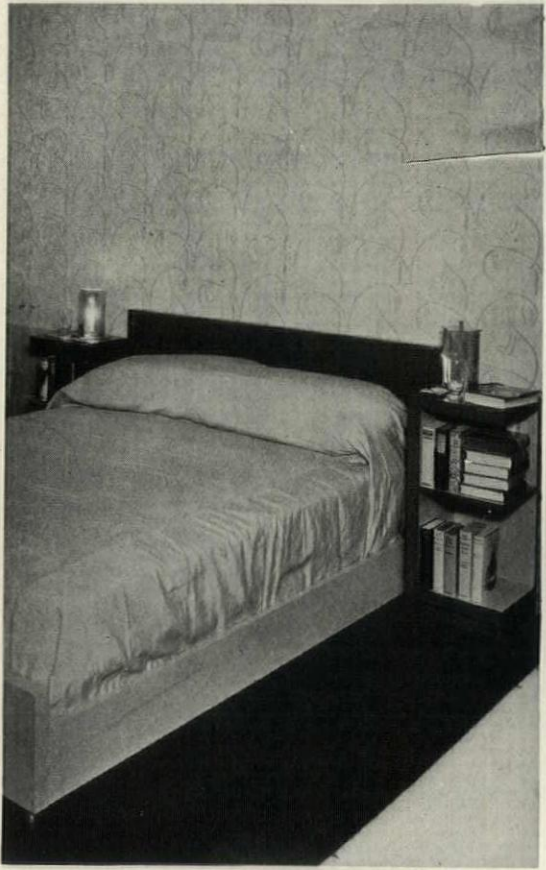
ELEVATION & SECTION
SCALE: 3" = 1'-0"

PLAN AT TOP
SCALE: 3" = 1'-0"

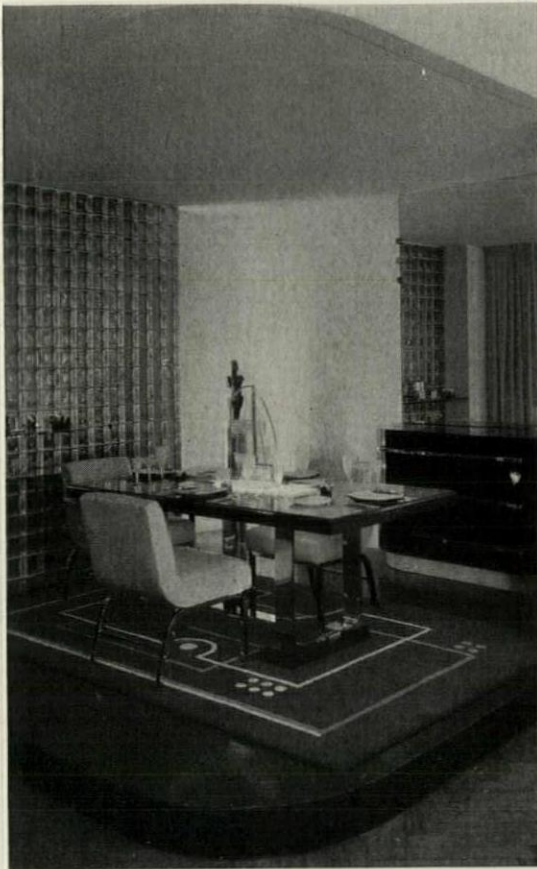
SECTION "B-B"
SCALE: 3" = 1'-0"

DETAIL OF TABLE LANTERN

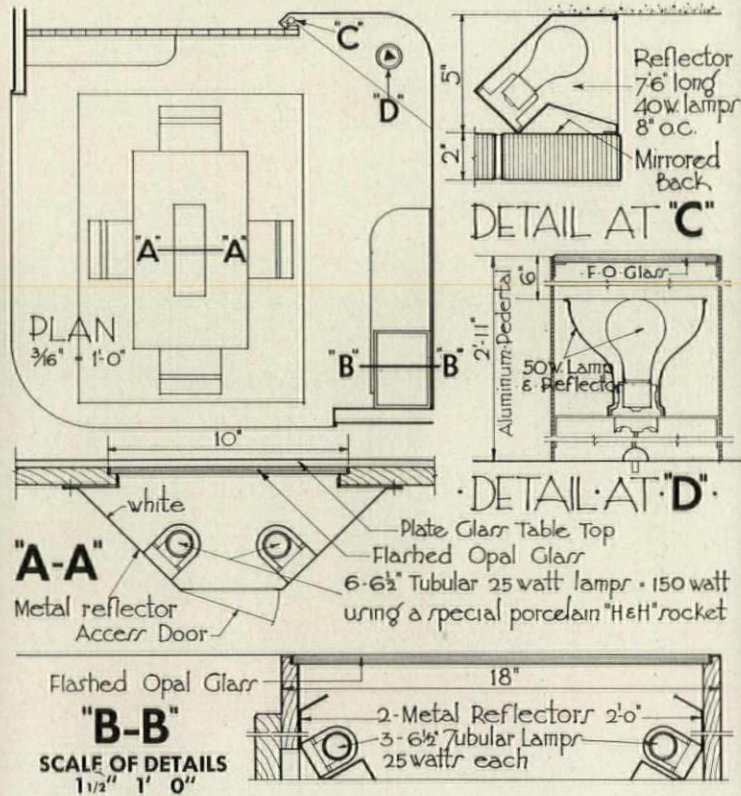
AMERICAN INDUSTRIAL ART EXHIBIT · METROPOLITAN MUSEUM ·
RALPH T. WALKER · ARCHITECT ·
CASDY CO. INC · CRAFTSMAN



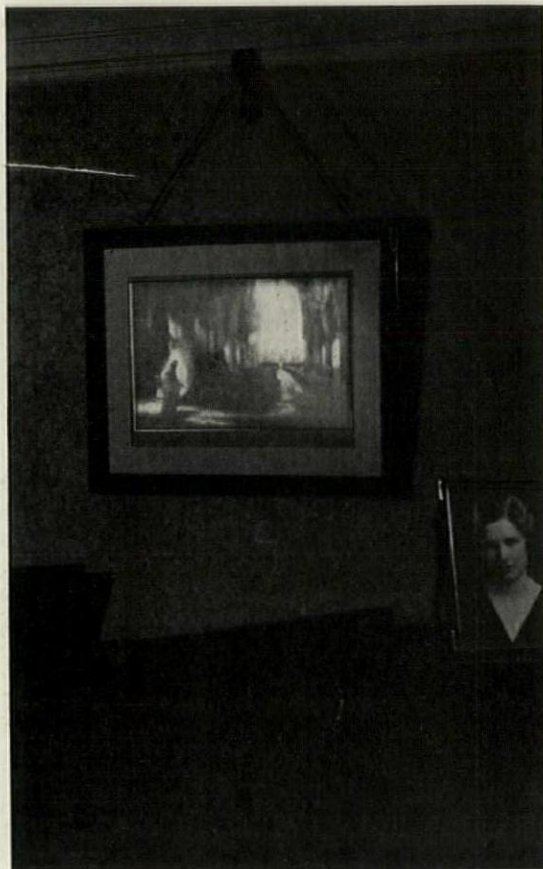
Metropolitan · Museum



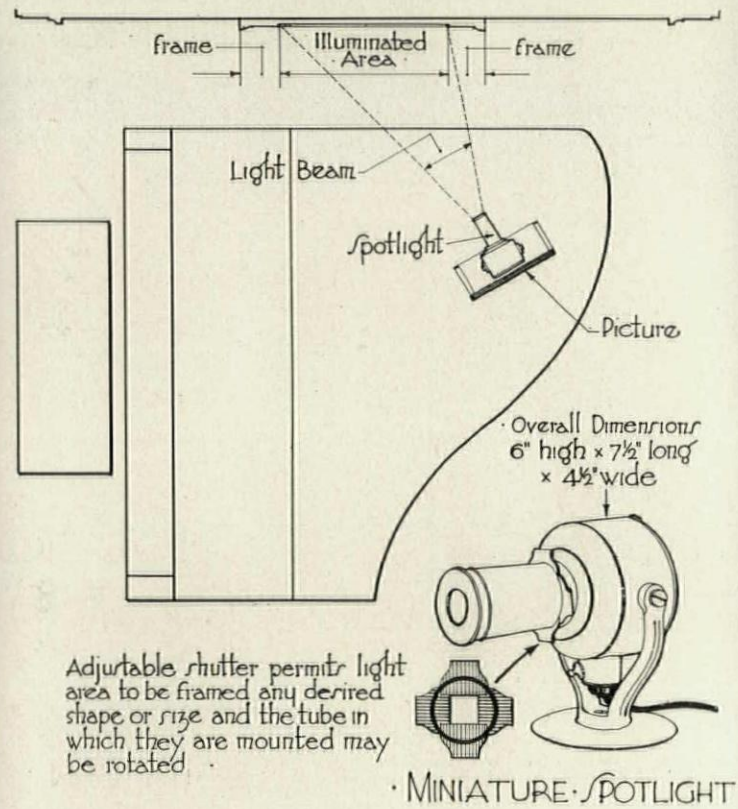
Metropolitan Museum of Art



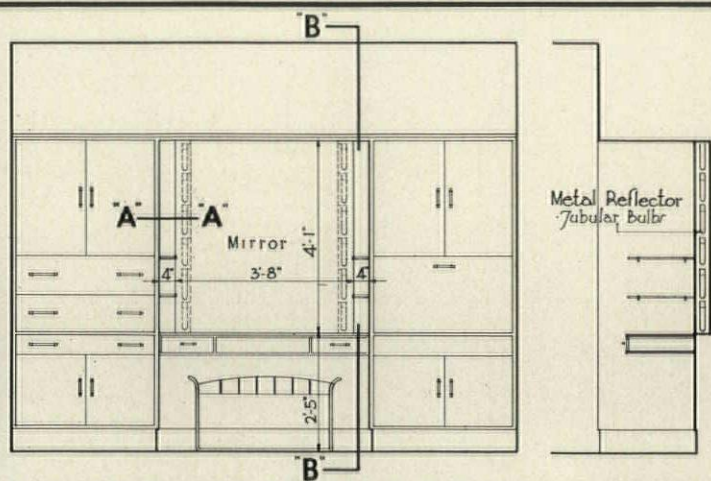
AMERICAN INDUSTRIAL ART EXHIBIT · METROPOLITAN MUSEUM
DONALD DESKEY · DESIGNER ·
BEAUX ART LIGHTING CO · CRAFTSMAN



Richard · C · Engelken

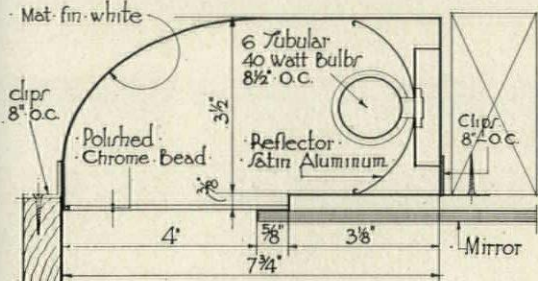


· PICTURE · LIGHTING · IN · A · RESIDENCE ·
· DESIGNED & MANUFACTURED BY · KLI EGL · BROS ·



ELEVATION OF DRESSING ROOM
SCALE 1/4" = 1'-0"

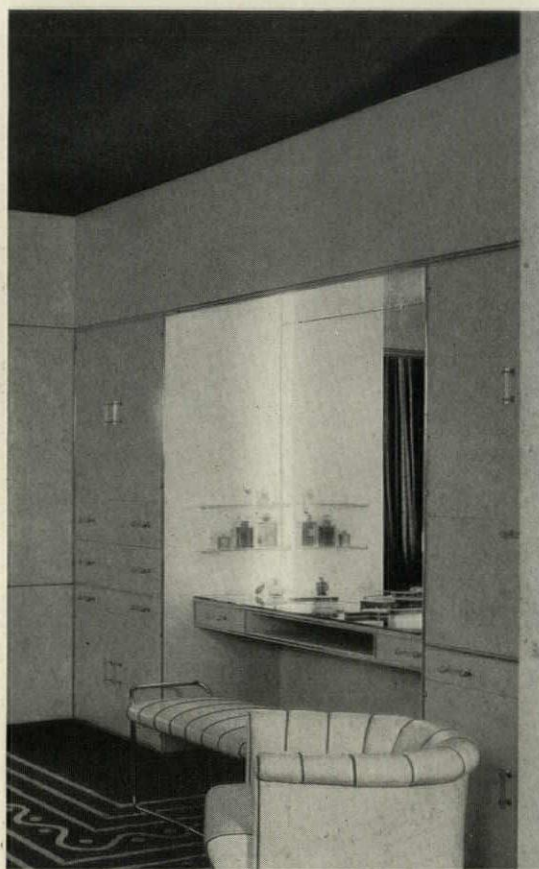
SECTION "B-B"



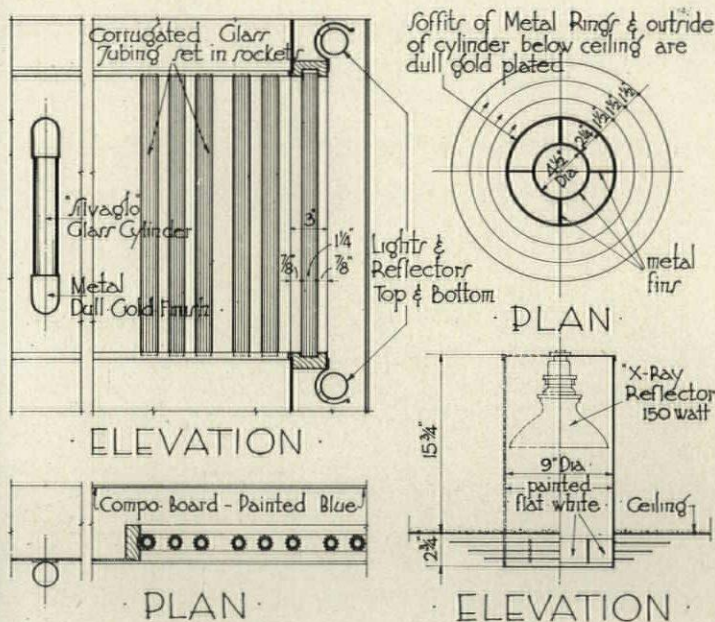
DETAIL AT "A-A"

SCALE 3" = 1'-0"

AMERICAN INDUSTRIAL ART EXHIBIT - METROPOLITAN MUSEUM
IRVING · L · SCOTT · ARCHITECT
A · WARD · HENDRICKSON & CO. - CRAFTSMAN



Metropolitan Museum



DETAIL of WALL LIGHTING · SCALE: 3/4" = 1'-0"

DETAIL of CEILING FIXTURE · SCALE: 3/4" = 1'-0"

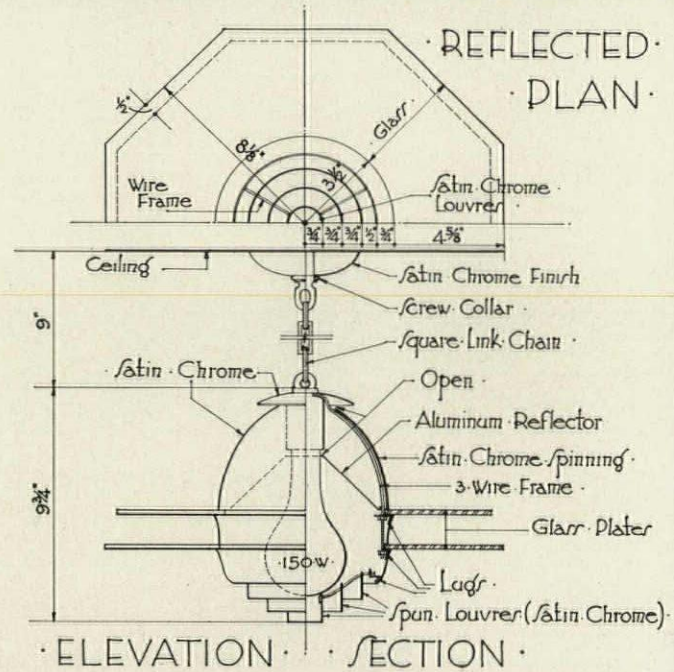
AMERICAN INDUSTRIAL ART EXHIBIT · METROPOLITAN MUSEUM ·
WALTER · DORWIN · TEAGUE · ARCHITECT ·
CURTIS LIGHTING, Inc. - CRAFTSMAN



Wyatt · Davis

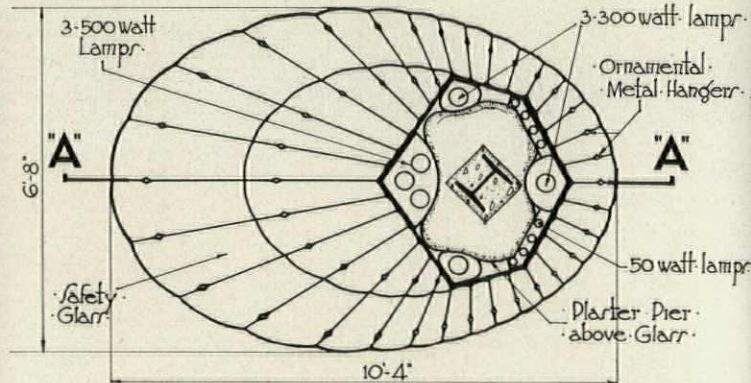
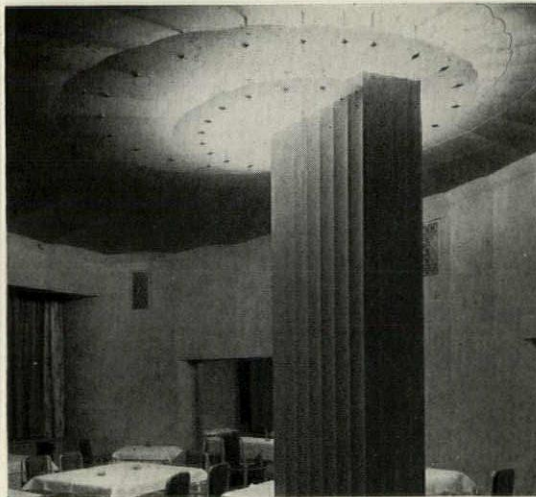


Metropolitan · Museum ·

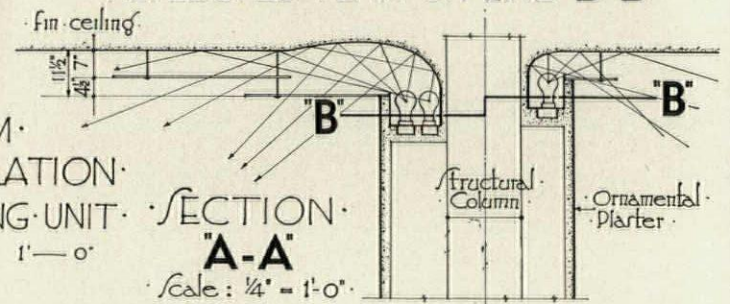


· ELEVATION · · SECTION ·
· DETAIL · OF · CEILING · FIXTURE ·
· Scale: 1/2" = 1'-0" ·

· AMERICAN · INDUSTRIAL · ART · EXHIBIT · METROPOLITAN · MUSEUM ·
· EUGENE · SCHOEN · & · SONS · ARCHITECT ·
· LIGHTOLIER · CO · CRAFTSMAN ·

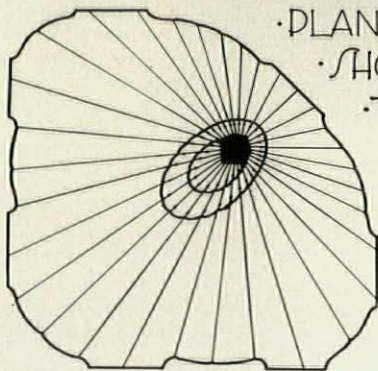


· REFLECTED · PLAN · ON · LINE · "B-B" ·



· DETAIL · OF · LIGHTING · UNIT ·

· VOORHEES · GMELIN · & · WALKER · ARCHITECTS ·
· KANTACK · INC · CRAFTSMAN ·



· PLAN · OF · ROOM ·
· SHOWING · RELATION ·
· TO · LIGHTING · UNIT · · SECTION ·
· Scale: 1/16" = 1'-0" ·
· "A-A" ·
· Scale: 1/4" = 1'-0" ·

PENCIL POINTS DATA SHEETS

Prepared by **DON GRAF, B.S., M.Arch.**

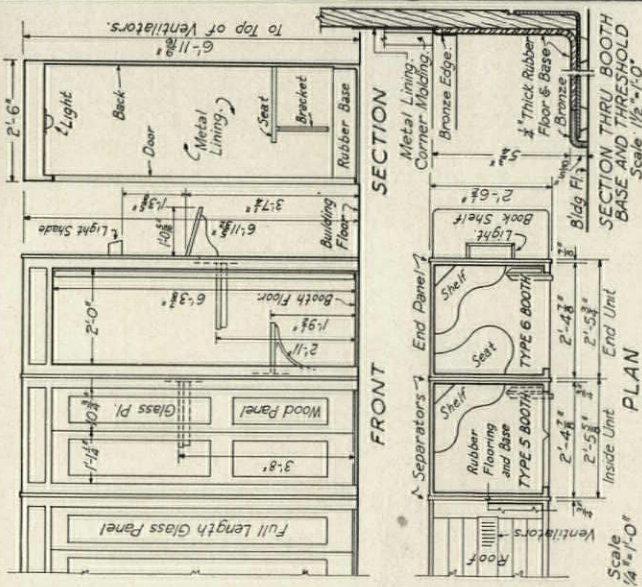
PENCIL POINTS DATA SHEETS
**STANDARD TELEPHONE
 BOOTHS NOS. 5 AND 6**

Prepared by Don Graf, B.S., M.Arch.

Sheet No.

E3g

Oct., 1935



**SPACE
 REQUIRED
 FOR GROUPS
 OF BOOTHS**

No. of Units	Overall Widths*
1	2'-6 3/8"
2	5'-0 1/2"
3	7'-5 3/8"
4	9'-11 1/2"
5	13'-5 3/8"
6	14'-10 3/8"
7	17'-4 3/8"
8	19'-10"
9	22'-3 3/8"
10	24'-9 1/2"
11	27'-2 3/8"
12	29'-8 3/8"

*Overall widths include two end panels and one less separator than number of units.

Booths 5 and 6 are similar, the only difference being in the height of shelf and that booth 6 is furnished with a seat. Both types may be had with either full-length glass panel or combination wood and glass panels. The book shelf and light fixture above are not a part of the booth unit and if they are to be located at end panel as shown, sufficient space must be provided for reader.

These booths are furnished and installed by the telephonic companies and remain their property unless they are to be "built-in." In that case they must be bought by the owner. The electric light in each booth uses house current and is controlled by a door switch.

A.T.&T. companies supply these booths in oak, mahogany and walnut woods with natural finishes and also mahogany and walnut to match special finishes.

**FACTS AT YOUR
 FINGERTIPS**

In each issue of Pencil Points, four *Data Sheets* appear. Research that would take many hours in the office is made for you and presented in telegraphic form. Readers are urged to write Don Graf with suggestions or criticisms that will make this feature of greatest value to you. Excellent subjects for *Data Sheets* have been suggested by many of our readers. Sit down and send in your ideas.

Interest in the *Data Sheets* has been so great that it has been necessary to reprint the sheets appearing in Pencil Points. Seven sets of 24 *Data Sheets*, each representing those which have been published during a six months' period, are available at 75c a set. They are printed on heavy bond paper and are punched, ready for your notebook. If several sets are desired, reduced prices will be quoted on request.

Basic information on several manufactured materials and equipment has been issued in *Data Sheet* form. Large numbers of readers have indicated their approval of this plan. Every effort has been made to make these free manufacturer's sets as valuable as possible to the architectural man. Requests addressed to the individual manufacturers listed below will bring you "Data-sized" information on their products.

- Burnham Boiler Corporation
 Irvington, N. Y.
- Seth Thomas Clock Company
 Thomaston, Conn.
- Buffalo Forge Company
 Buffalo, N. Y.
- Jones & Laughlin Steel Corp.
 Pittsburgh, Pa.
- Iron Fireman Mfg. Co.
 Cleveland, Ohio

PENCIL POINTS DATA SHEETS

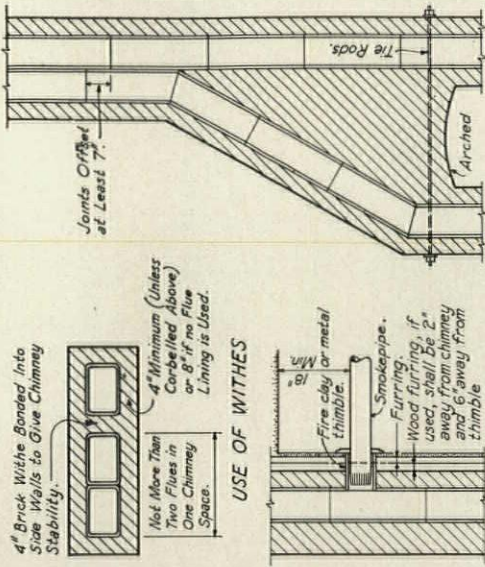
**CHIMNEY
 CONSTRUCTION (2)**

Prepared by Don Graf, B.S., M.Arch.

Sheet No.

E2e

Oct., 1935



**BOILER OR STOVE
 CONNECTION TO FLUE**

**ARCHED CHIMNEY
 WITH FLUE OFFSET**

*Not more than two lined flues shall be permitted in the same flue space, and the joints of any such adjoining flue linings shall be staggered at least seven inches.

*Flue spaces shall be separated by smoke-tight withes of masonry, not less than 3 3/4" thick, bonded into chimney walls.

*Flues used for heating furnace, boilers or for fireplaces shall be separated from other flues by means of withes.

*There shall be but one connection to a flue irrespective of whether the flue be used for coal, coke, wood or oil.

*Smokepipes shall enter chimney through a fire clay or metal thimble or flue ring of masonry. The top of smokepipe intakes shall not be less than 18 inches below sheet metal ceilings, wood lath and plaster, or exposed wood joists. Neither the intake pipe nor the thimble shall project into the flue. No woodwork shall be placed within 6 inches of the thimble.

*It is important that flues be constructed as nearly vertical as possible since each offset retards draft and offers a lodging place for the accumulation of soot. When the direction of the flue must change, it should preferably not depart more than 30° from the vertical but in no case more than 45°.

Chimneys that have openings within their width or depth shall have tie rods located over the opening to relieve thrust.

*Text from "A Standard Ordinance for Chimney Construction," as recommended by the National Board of Fire Underwriters.

PENCIL POINTS DATA SHEETS
**CHECK-LIST OF
ELECTRIC EQUIPMENT**

Sheet No.
E3h
Oct., 1935

Prepared by Don Graf, B.S., M.Arch.

FRONT HALL

Doorbell Chimes	600
Lighted House Number	20
Ceiling Fixture	600
Bracket Fixtures	400
Table Lamps	300
Vacuum Cleaner	600
Telephone	600

KITCHEN—Continued

Single Disc Hotplate	600
Double Disc Hotplate	1000
Waffle Iron	600
Tea Kettle	400
Chafing Dish	600
Electric Mixer	125
Popcorn Popper	600
Electric Flat Iron	600
Egg Cooker	600
Telephone	600

DATA SHEET NO. E3g.
In planning, where telephone booths form part of the equipment, this Data Sheet will be useful. Booths No. 5 and 6 are the most used types and represent the standard which is familiar to everyone.

LIVING ROOM OR LIBRARY

Ceiling Fixture	600
Bracket Fixtures	600
Floor Lamps	600
Table Lamps	600
Electric Fan	50
Vacuum Cleaner	300-375
Unit Air Conditioner	100
Radio	2
Electric Clock	250
Sun Lamp	50
Telephone	600
Maid Signal	2

BASEMENT

Ceiling Fixture	600
Oil Burner	900
Washing Machine	600-1000
Electric Flat Iron	600-1000
Flat Plate Iron	1320
Drier	600
Ventilating Fan	50
Electric Clock	2

DATA SHEET NO. E2e.
This is the second sheet giving in brief form the essentials of good chimney construction. The chimney of the fireplace and heater is one of the dangerous spots in a building so that no chances should be taken with poor construction.

DINING ROOM

Ceiling Fixture	600
Bracket Fixtures	600
Vacuum Cleaner	300
Electric Fan	50
Radiant Heater	1000
Waffle Iron	600
Toaster	600
Percolator	400
Egg Cooker	600
Chafing Dish	600
Electric Clock	2
Telephone	600

BEDROOM

Ceiling Fixture	600
Bracket Fixtures	600
Floor Lamps	600
Table Lamps	600
Electric Alarm Clock	300
Vacuum Cleaner	600
Radiant Heater	600
Sun Lamp	500
Infra Red Lamp	500
Electric Fan	50
Medicine Vaporizer	65
Heating Pad	100
Radio	100
Exercise	250
Hair Drier	1000-1320
Telephone	600
Fan Heater	1000-1320

DATA SHEET NO. E3h.
Many readers have requested a check list of electrical outlets for residences. The same outlets will in many cases serve a number of the devices given in the list, in which case the largest load to be expected should be the one used in the electrical design.

KITCHEN

Ceiling Fixture	600
Bracket Fixtures	600
Kitchen Desk Lamp	12500
Electric Range	1000-12500
Refrigerator	90-180
Dish Washer	200
Electric Clock	2
Ventilating Fan	50
Orange Juice Extractor	50
Toaster	600
Percolator	400
Grill	250

BATHROOM

Ceiling Fixture	600
Bracket Fixtures	600
Razor Blade Sharpener	50
Immerision Water Heater	600
Radiant Heater	25
Hair Carrier	250
Hair Drier	250

DATA SHEET NO. B2i.
Eastern Hemlock has as many aliases as a public enemy. It is sold in various parts of the country as West Virginia Hemlock, Hemlock, Wisconsin White Hemlock, Pennsylvania White Hemlock, Huron Pine, Pennsylvania White Hemlock, White Fir is also known as Balsam Fir although reference to Data Sheet No. B2a will show that it has quite different stresses than the wood properly so named.

Note—This check-list may be used to insure completeness of plans, as a questionnaire for the owner to determine the electric conveniences desired, and as a guide in determining the capacities of circuit. The figures given are for the wattage of the equipment and are subject to some variation but will represent a usual average.

PENCIL POINTS DATA SHEETS
**SAFE LOADS ON WHITE FIR
& EASTERN HEMLOCK JOISTS**

Sheet No.
B2i
Oct., 1935

Prepared by Don Graf, B.S., M.Arch.

Span in feet	2 x 16"				2 x 14"			
	Actual 1 1/2" x 15 1/2"	14	16	18	Actual 1 3/8" x 13 1/2"	14	16	18
8	225	194	170	151	136	168	147	132
9	201	172	150	134	120	148	127	114
10	179	154	135	120	108	125	117	104
11	163	140	123	109	98	114	106	95
12	149	128	112	100	89	101	97	87
13	137	117	103	92	83	93	89	80
14	127	108	95	85	76	86	82	74
15	118	101	87	79	71	78	76	68
16	111	94	82	73	66	71	69	61
18	97	83	73	65	58	61	62	50
20	88	74	66	59	53	53	53	41
22	77	66	58	51	46	46	46	37
24	53	45	40	37	32	32	32	27
26	40	34	30	26	24	24	24	20

Span in feet	2 x 12"				2 x 10"			
	Actual 1 1/2" x 11 1/2"	14	16	18	Actual 1 1/2" x 9 1/2"	14	16	18
7	192	164	144	137	116	160	136	119
8	168	143	126	111	101	140	119	104
9	149	127	111	99	90	123	106	93
10	143	113	100	88	80	111	94	83
11	121	105	91	80	73	101	86	75
12	111	94	83	73	67	93	78	69
13	102	87	76	68	61	81	69	61
14	94	80	70	64	57	74	64	54
16	77	65	58	50	46	42	35	31
18	52	44	39	34	31	28	24	21
20	37	31	27	24	21	20	20	20

Span in feet	2 x 8"				2 x 6"			
	Actual 1 1/2" x 7 1/2"	14	16	18	Actual 1 1/2" x 5 1/2"	14	16	18
6	146	125	109	98	88	110	94	82
7	125	107	93	84	75	94	80	70
8	109	93	81	73	65	73	65	50
9	97	83	72	64	58	61	45	39
10	86	73	64	57	52	36	32	25
12	51	43	37	34	30	20	20	22
14	31	26	22	21	20	20	20	22

Safe loads given are net safe loads per square foot, weight of joists themselves has been deducted from the total safe loads to obtain the values given. Stresses used are those recommended by the National Lumber Manufacturers Association for No. 1 *Dimes*, which is the grade ordinarily used for joists and rafters. Loads above the solid lines are determined by shear = 56, loads between solid and dotted lines determined by extreme fibre stress = 880. Loads below dotted lines determined by modulus of elasticity = 1,100,000, and will produce deflections less than 1/800 of the span.

A. L. Guptill's Corner

A LITTLE DEPARTMENT OF ARCHITECTURAL ESTHETICS, WITH EMPHASIS ON SKETCHING AND RENDERING



A MILLION BOTTLES OF INK AND ANOTHER MILLION PENS

I suppose a million bottles of ink, more or less, and a million pens and pen holders have been put to work on the grand and glorious Guptill's Corner Competition No. 2. And I bet that some swell drawings are being turned out. If you haven't done yours there's still time, and whether or not you win a prize you are almost certain to profit from your attempt, especially when you bring it into comparison with the winning drawings when later published. See the September issue for particulars. And remember that last time the prizes went to everyday fellows like yourself, rather than to professionals. And were scattered all over the country. You can be sure of a capable, conscientious jury.

Well sir, it's the 13th day of September (Friday the 13th), and to my surprise and contrary to my previous intentions I am still "rusticating" in Maine. Tonight I'm sitting before an open fire at "Westways," the Guptill ancestral domain on the Flaggy Meadow Road in the peaceful old town of Gorham. There's a dandy moon out but the air's a bit chilly,



COLD NIGHTS AND HOT DOGS

and I'm glad to toast the tired dogs before a good log fire. Particularly as this may be one of the last chances I shall ever have of doing this thing at this place, for we've put the old boyhood home—continuously occupied by my family for well over fifty years—onto the market. We'll hate to see it go but there are sixteen nice big rooms more than this family needs at the present time, and they are not where we can use 'em.

Life is a funny thing. I spent all my boyhood planning and scheming so I could get away from this very spot to go to the big city to seek fame and fortune, and now I only wish I had fortune enough to get back to this quiet and beautiful haven to stay!

Speaking of old times, whom should I run into this noon while lunching in the "sky" room of the Congress Square Hotel

in Portland (from which dining room, incidentally, there is a peach of a land and water view) but my good friend Josiah T. Tubby, Jr., A.I.A. Hadn't seen him for years. Used to work under him in his New York office when he was just back from his Paris studies, and he generously filled me full of top-notch architectural dope for which I have always been deeply grateful. And he first introduced me to some drafting instruments and devices which have proven so indispensable that I don't think he will mind if I share a few of them with such of you as have not made their acquaintance.



FROM ZERO YOU WORK BOTH WAYS

First, there's the "Tubby Scale" for which he was responsible. Excepting for the system of graduation this is like the regular, flat, architects' scale. The ones I have are eighteen inches long. From zero in the center they read towards both ends, a thing of great convenience when on symmetrical projects or wherever there are center lines. It makes your work (or play, for you play a scale—don't throw that, please!) easier and more accurate.

Again, friend Tubby pointed out the virtues of the sets of triangles which are available for laying out roof and stair pitches, etc., and of the sets of ellipses which have so many uses, and which I could now scarcely do without when full-sizing Gothic mouldings, etc. He showed me how to fit a compass so as to rule two parallel pencil or pen lines at once. Since then I almost never lay out a plan without setting a pair of points so as to draw the whole thickness of a wall or partition with one pre-measured stroke. And for guide lines for lettering, as well as for shingle courses in elevation, etc., the same tool is perfect. He taught me a good method of constructing perspective when the vanishing points fall off the board. And I believe he told me first of proportional dividers, and how easy it is to throw a thing into another scale by their use. If some of these matters interest you but are not clear, let me know and I'll describe them more at length.

This month I present No. 2 in the new series of projects which I started in August. The sketches at the top of the

plate are offered to emphasize a point already made—that we can frequently simplify shadows in interior sketching or rendering to great advantage. The sketch at the bottom shows a general method of rendering which is natural and easy. This particular example is based on a photo, as I have little reference material with me. Applied to straight rendering, the procedure would be as follows. First, lay out your subject instrumentally in pencil. Next, reline every pencil line in black or suitably colored ink, using a fine pen and working freehand but with considerable accuracy. Now erase the pencil construction. Sponge or brush over the whole with clear water. When dry, render. The present example combined brushed-on black ink (as on the floor) with quite evenly laid tints of color. An attempt was made to complete each area with a minimum number of washes. The grain of the furniture was managed by means of the "split-hair" brush. It is not necessary to use naturalistic values for this interior work. Often values are highly conventionalized, pure white and solid black being combined with poster-like grays or tints.



TALKED OVER THE COLOR BOOK

Ken Reid, Managing Editor of *PENCIL POINTS*, came dashing down here to the Pine Tree State not long ago to see me about the "Color in Sketching and Rendering" book and we talked it over from cover to cover, and settled on the final make-up. So it's mainly up to Mister Printer and Mister Binder now. Boy! What a relief it will be to see that off the press! Practically three solid years' work have gone into it, half of it trimming and paring so as to give you the most book for the least money.



PLEASE HELP THE NEEDY, SIR!

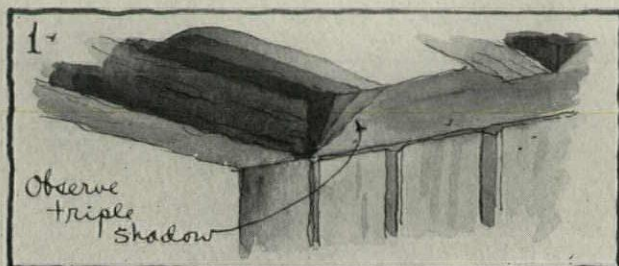
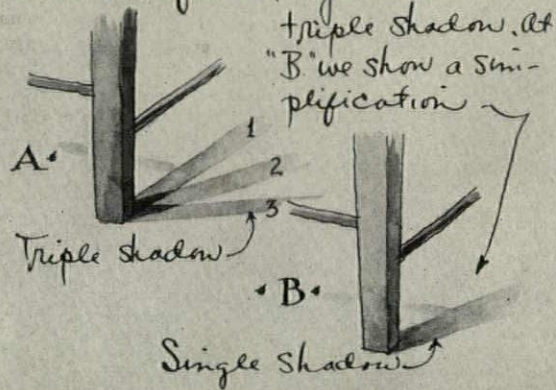
With architecture as it is, or isn't, I shall doubtless get under way at once with another book. What shall it be? I need your help. I have a number of titles in mind but would like to have you pick this one. Where is there a void in architectural or art literature which should be filled? I am earnestly anxious to write about those matters of the greatest interest, and the only way I can find what interests you is by asking you. So I'm asking now, and will deeply appreciate your suggestions. Address me at *PENCIL POINTS*: I'll be there before this is turned into print. Do you want 'em fat or thin, short or tall? Give us the dope.

RENDERING INTERIORS AND FURNITURE

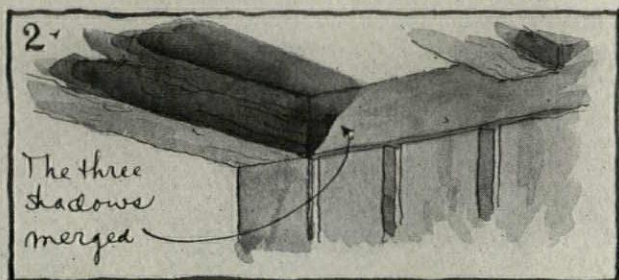
SHEET 2 • A FEW POINTERS FOR INTERIOR RENDERERS

Shadows in interiors are all too often complex, as here → due to light from several sources. It is usually best to simplify them.

Below is an instance where a chair leg, coming in contact with the floor, again casts a triple shadow. At



This beam showed three distinct shadows on wall and ceiling.



Most such details are better if simplified



SOMETIMES EXTREME LIBERTIES ARE TAKEN WITH THE VALUES



La Sainte Chapelle
 A Glory of Gothic Architecture
 Drawn with Eldorado
 The Master Drawing Pencil

Ernest Watson

ELDORADO'S 17 exact degrees of quality leads inspire the best work of architect or draftsman—6B, 5B, 4B, 3B, 2B, B HB, F, H, 2H, 3H, 4H, 5H, 6H, 7H, 8H, 9H. Pencil Sales Dept. 167-J, JOSEPH DIXON CRUCIBLE COMPANY, Jersey City, N. J.

S E R V I C E D E P A R T M E N T S

THE MART. In this department we will print, free of charge, notices from readers (dealers excepted) having for sale or desiring to purchase books, drawing instruments, and other property pertaining directly to the profession or business in which most of us are engaged. Such notices will be inserted in one issue only, but there is no limit to the number of different notices pertaining to different things which any subscriber may insert.

PERSONAL NOTICES. Announcements concerning the opening of new offices for the practice of architecture, changes in architectural firms, changes of address and items of personal interest will be printed free of charge.

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. Address all communications to 330 West 42nd Street, New York, N. Y.

THE MART

Charles A. Rais, 144 Westford Circle, Springfield, Mass., has for sale copies of **PENCIL POINTS** from 1920 to date, in good condition. Will sell complete or from 1920 to 1930, only. Make offer.

Arthur O. Dun, 222 West Rayen Avenue, Youngstown, Ohio, has the following books for sale: *Boston Architectural Club Year Book*, 1924; *Concours d'Architecture*, 1909-10, Vignola; *English Domestic Architecture*, Field & Bunney; *Tudor Period*, Garner & Stratton; *Study of Architectural Design*, Harbeson; *Houses and Gardens of Lytens*; *Shades and Shadows*, McGoodwin; *Gothic Architecture*, Pugin; *Works of John Russell Pope*; *Building Details*, Snyder; *Golf and Country Clubs*, Wendehack; *White Pine Series*, Vols. 7, 8, 9, and 10; *Specifications*, York & Sawyer.

Herman F. Ullmer, 1428 East St. Vincent Street, Philadelphia, Pa., would like to obtain the following back issues of **PENCIL POINTS**, in good condition: years 1925 and 1926, complete; January, February, April, and June, 1927; January, February, August, and November, 1928; January, 1929; July, 1930.

W. Wyatt Hibbs, 276 Bellefield Avenue, Pittsburgh, Pa., would like to obtain the following *White Pine Series*: Vol. 2, Nos. 1, 3, and 4; Vol. 3, No. 4; Vol. 18, Nos. 5 and 6; Vol. 19, No. 2.

PERSONALS

O. A. SKINNER. Mr. T. P. Phelps, 431 South Dearborn Street, Chicago, Ill., would like to get in touch with Mr. Skinner who was formerly of Chicago.

J. EDWARD AGENBROAD, *Architect*, has opened an office for the general practice of architecture at Oakwood at Far Hills, Dayton, Ohio.

LESLIE I. NICHOLS, *Architect*, and G. WILLARD SOMERS, have moved their offices from 529 Guinda Street to 532 Emerson Street, Palo Alto, Calif.

GEORGE J. DAVIDSON, *Architect*, has moved from Kansas City, Mo., to 324 North Washington Street, Nevada, Mo.

LEON JULIUS, *Architect*, has opened an office for the general practice of architecture in the Otis Building, 112 South 16th Street, Philadelphia, Pa.

ENGINEERING DEPARTMENT of Phillips County, Phillipsburg, Kansas, have added a WPA architectural department. W. F. Castella is County Engineer; F. H. WILKINSON, *Architect*; and K. H. Hinchliff, *Assistant Architect*.

J. JOSHUA FISH, *Architect*, has opened an office for the practice of architecture at 10 South 18th Street, Philadelphia, Pa.

A. FRASER ROSE and WILLIAM ALLAN ROSE, *Architectural Engineers*, formerly of Miami Beach, Florida, have opened a structural engineering office on the top floor of the Wills Building, 286 Fifth Avenue, New York, N. Y.

EDWARD A. NITSCHKE and WILFRED W. BEACH, *Architects*, have closed their offices at 28 East Huron Street, Chicago, Ill. Mr. Nitschke is at present continuing his practice at 2843 North Kilbourne Street, and Mr. Beach is temporarily at 3707 West Cambridge, Seattle, Washington, free lancing as a specification writer.

HERTZKA & KNOWLES, *Architects*, have moved to 369 Pine Street, San Francisco, Calif.

JOSEPH L. STEELE, *Architect*, has opened an office for the practice of architecture at 23 North Third Street, Harrisburg, Pa.

MANUFACTURERS' DATA WANTED

GEORGE J. DAVIDSON, *Architect*, 324 North Washington Street, Nevada, Mo. (for A.I.A. file).

J. JOSHUA FISH, *Architect*, 10 South 18th Street, Philadelphia, Pa.

CHARLES F. EGAN, *Architect*, Room 46, Burdett Building, Troy, N. Y. (data on junior high school buildings).

LEON JULIUS, *Architect*, Otis Building, 112 South 16th Street., Philadelphia, Pa.

WILLIAM G. PERRY, *Architect*, 1867 Shaw Avenue, Pittsburgh, Pa.

STAAB & RICHARDSON, *Architects*, 600 Bloomfield Avenue, Bloomfield, N. J.

JAMES H. COURTNEY, *Engineer*, U. S. Engineer Office, Tucumcari, N. M. (data needed for use in designing a complete town to be built by the Federal Government at Conchas Dam Site for an estimated population of 5,000, including electric plant and system, gas, water, sewerage, telephone systems, apartments, hotels, churches, etc., prices to accompany data).

MILTON N. KRAUS, *Engineer*, 35½ West 183rd Street, New York (data on heating, ventilating and air conditioning apparatus for factories and office buildings).

ENGINEERING DEPARTMENT, County of Phillips, Phillipsburg, Kansas.

ABRAHAM WARONOFF, *Draftsman*, 119 Kennedy Street, N. W., Washington, D. C. (also samples of various wood finishes).

RICHARD SALO, *Draftsman*, 142 S. E. 30th Avenue, Portland, Oregon.

O. C. HEYER, *Draftsman*, 2454A West Concordia Avenue, Milwaukee, Wis.

J. I. KETTLER, *Draftsman*, 2121 North Newhall Street, Milwaukee, Wis.

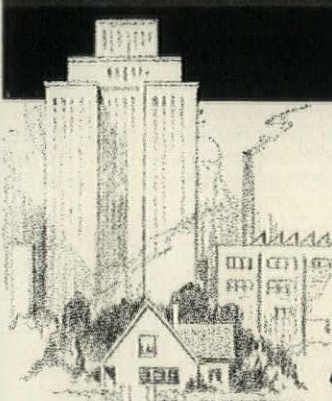
CARL E. RIEMENSCHNEIDER, *Draftsman*, 1827 East Park Place, Milwaukee, Wis.

LOUIS JORDAN, JR., *Student*, P. O. Box 408, Omar, W. Va. (data on small house, store and shop construction).

ALBERT C. LATTES, *Student*, Via Monte Santo 6, Rome, Italy (data on residential construction, decoration, furnishing, small commercial buildings, concrete constructions, etc.).



Greater Dollar Value



**National
Scale Free Pipe**

When you specify or buy pipe for plumbing or heating, make sure that the cost estimates give consideration to time and labor saved by using the right pipe. The pipe to choose is one that will handle easily, thread smoothly, and give long, satisfactory service to the owner. This last factor is especially important. Architects and plumbing and heating contractors build reputations for themselves by specifying durable, trouble-free pipe. It is because NATIONAL Scale Free Pipe resists corrosion and therefore lasts longer that it is preferred for America's outstanding structures, both by those who specify and those who use pipe. Having clean, smooth surfaces, free from

scale, NATIONAL Pipe reduces corrosion, particularly pitting, to a minimum. The NATIONAL Scale Free Process (applied to butt-weld pipe, sizes $\frac{1}{2}$ to 3-inch), and Spellerizing—two definite, specific mill operations, developed by this Company—give to the pipe a homogeneous structure, and surfaces free from scale, inside and outside. These advantages, together with the ease and economy of installation for which NATIONAL Pipe is noted, make it a greater dollar value for plumbing and heating lines. Specify this better, cleaner pipe and learn about it for yourself. Descriptive literature will be sent on request, to those interested.

CHROMATE TREATMENT—All National Galvanized Pipe is given a special chromate treatment to resist discoloration and the formation of white rust. This patented process preserves that smooth, glistening surface or metallic lustre which is characteristic of good galvanizing.

NATIONAL TUBE COMPANY — Pittsburgh, Pa.

Pacific Coast Distributors—COLUMBIA STEEL COMPANY, San Francisco, Calif.

Export Distributors—UNITED STATES STEEL PRODUCTS CO., New York, N. Y.

United States Steel  *Corporation Subsidiary*

PUBLICATIONS ON MATERIALS AND EQUIPMENT

*of Interest to Architects, Draftsmen
and Specification Writers*

Publications mentioned here will be sent free unless otherwise noted, upon request, to readers of PENCIL POINTS by the firm issuing them. When writing for these items please mention PENCIL POINTS.

TAKAPART PRECAST FIREPROOF WALL.—A.I.A. File No. 10-a-3. New publication covering a type of fireproof wall that eliminates all wet trades, can be painted immediately, shows no joints or cracks, provides runways for wiring, lends itself to puttyless glazing, has almost complete salvage value and is insulated against sound transmission. Specifications. 8½ x 11. Takapart Products Co., 114 East 32nd Street, New York, N. Y.

HOLOPHANE INBUILT LIGHTING.—Useful new reference guide for architects, designers and lighting engineers, showing the flexibility in Holophane Inbuilt lighting and its adaptability to specific needs, on any scale, for both concealed and exposed lighting. Special supplement contains complete engineering and estimating data on the subject. 28 pp. 8¼ x 10¾. Holophane Co., Inc., 342 Madison Avenue, New York.

BUILDING FOR THE FUTURE WITH INSULITE.—New reference manual dealing with the general subject of insulation and its uses. Beginning with a simple definition of thermal insulation as applied to buildings, the book treats on the various uses of insulation for decoration, sound control and resistance to the passage of heat. Useful collection of material for anyone planning the use of insulation whether for homes, new or modernized farm buildings, or industrial installations. 24 pp. 8½ x 11. The Insulite Co., Builders Exchange Bldg., Minneapolis, Minn. *Published by the same firm, "Insulite Tile and Plank." Folder describing Insulite tile and plank, and illustrating the versatility of those products.*

THE LURIE STEEL HOUSE.—Fully illustrated book announcing and describing the Lurie Steel House, a newly-developed type of low-cost permanent construction, utilizing a new combination of steel, concrete and metal lath and affording architects and builders unlimited scope in design inasmuch as it is not prefabricated. Plans, construction details, recommended minimum standard specifications. 16 pp. 8½ x 11. Metal Lath Manufacturers Assn., 208 South LaSalle Street, Chicago, Ill.

DIRECTIONS FOR STRETCHING DRAWING PAPERS.—Folder with useful information for architects and draftsmen concerning the stretching of hand-made drawing papers on a board or frame. 4 pp. H. Reeve Angel & Co., Inc., 7 Spruce Street, New York.

BURT MONOVENT CONTINUOUS RIDGE VENTILATOR.—A.I.A. File No. 12-k. Folder announcing the introduction of the new Monovent continuous ridge ventilator, presents the construction details and advantages and gives a brief outline of its application to both industries and homes. 4 pp. 8½ x 11. The Burt Mfg. Co., Akron, Ohio.

KIESLING DUMBWAITERS, ELEVATORS AND DOORS.—A.I.A. File No. 33. Brochure illustrating and describing a new line of electric dumbwaiters and elevators, in conjunction with a line of hand power dumbwaiter and elevator equipment. Specifications. 16 pp. 8½ x 11. John W. Kiesling & Son, Inc., 1793 Atlantic Avenue, Brooklyn, N. Y.

STREAMLITE FLAT WALL PAINT.—Series of descriptive folders covering a new flat wall paint which dries in thirty minutes and can be applied over wet or dry plaster or brick surfaces. A. C. Horn Co., Long Island City, N. Y.

JOHNS-MANVILLE INDUSTRIAL PRODUCTS.—Comprehensive catalog, just issued, covering the full line of J-M industrial products, including insulating materials, roofings and transite in its various forms, floorings, etc. Profusely illustrated with photographs, drawings, tables and charts. 48 pp. 8½ x 11. Johns-Manville, 22 East 40th Street, New York, N. Y.

DURE-WOOD.—Folder announcing and describing a new waterproof resin-bonded plywood for interiors, ceilings, subfloors, exteriors, walls, roof panels, etc. Physical properties are discussed in detail. 4 pp. 8½ x 11. General Plastics, Inc., North Tonawanda, N. Y.

ILG UNIT HEATERS.—A.I.A. File No. 30-d-11. Valuable reference manual for architects and heating engineers dealing with the subject of Ilg unit heaters. Descriptive and engineering data, capacity tables, diagrams, dimensions and weights, typical installations, etc. Indexed. 48 pp. 8½ x 11. Ilg Electric Ventilating Co., 2850 N. Crawford Avenue, Chicago, Ill.

CONCRETE REINFORCING BAR STANDARDS.—New bar card covering areas and weights for the eleven standard sizes of concrete reinforcing bars. 8½ x 11. Concrete Reinforcing Steel Institute, 201 North Wells Street, Chicago, Ill.

NEW MEDUSA-LITE FLAT WALL FINISH.—Folder discussing the advantages of a new quick-drying paint for use on walls, ceilings, or other interior surfaces whether they be of concrete, brick, tile, stone, plaster, insulating board, canvas, wood, metal or wall board. 4 pp. 8½ x 11. Medusa Products Co., 1000 Midland Bldg., Cleveland, Ohio.

CONCRETING IN COLD WEATHER.—Concrete information Sheet ST-21 explains how concrete work can be done in winter to be assured of satisfactory results. Methods of performing various operations are illustrated and detailed specifications are given. Portland Cement Association, 33 West Grand Avenue, Chicago, Ill.

TRANE ORIFICE SYSTEM.—New catalog with descriptive data and installation details covering a low-cost steam vapor system for residences in which Trane convection heaters and humidifiers are used. 8 pp. 8½ x 11. The Trane Co., LaCrosse, Wis.

Published by the same firm, "Trane Floor Line Spread Unit Heaters." New reference manual giving complete descriptive and engineering data covering a line of floor recirculating unit heaters and suspended units. Specifications, capacity tables, piping connections, etc. 24 pp. 8½ x 11.

CORRECT LIGHTING FOR AMERICAN HOMES.—New brochure illustrating and describing in detail a line of lighting fixtures especially applicable to the General Electric "New American Homes." Included is a chart listing the fixtures described for each particular house. 16 pp. 8½ x 10. Lightolier Co., 11 E. 36th St., New York, N. Y.

GENERAL ELECTRIC TIME SWITCHES.—Bulletin GEA-1427 D covers types T-17 and T-27 of a line of general-purpose automatic time switches suitable for store and show window lighting; signs; all-night lighting in apartment houses; floodlighting; domestic water heaters and furnaces, etc. Dimension and connection diagrams. 8 pp. 8½ x 11. General Electric Co., Schenectady, N. Y.

FOR THE HOUSE OF TODAY.—Attractive brochure covering a complete line of plumbing and heating equipment, including bathroom and kitchen fixtures and fittings, coal, oil and gas-fired heating boilers, radiators, water systems, water heaters and water softeners. 24 pp. 8½ x 11. Crane Co., 836 So. Michigan Avenue, Chicago, Ill.

Published by the same firm, "Crane Modernizing Suggestions." New publication presenting numerous suggestions for modernizing the home with special reference to bathroom, kitchen and heating equipment. 16 pp. 8½ x 11.

PIVOTED AND PROJECTED WINDOWS BY MESKER.—Catalog WP presents useful information for the architect and draftsman on the subject of Mesker pivoted and projected windows. Construction features, specifications, standard and special sizes, installation details. 16 pp. 8½ x 11. Mesker Bros. Iron Co., St. Louis, Mo.

Published by the same firm, "Mesker Wrought Iron Sash." Bulletin explaining briefly the production and advantages of genuine wrought iron for Mesker sash. 4 pp. 8½ x 11.

STANDARD OF COMPARISON

When draftsmen, engineers or architects compare tracing papers or vellums, they invariably say, "It's something like Dietzgen's *Nelson*" or "... like Dietzgen's *Edvell*" or "... similar to Dietzgen's *Eton*". Leadership so widely recognized must be noted in reality. Just the fact that others are compared to Dietzgen *must* indicate the chance you take when you accept other than the genuine. If you have not already done so, send for the Dietzgen Sample Books of Tracing Papers and Vellums. Note the unparalleled wide array of surfaces, weights and characteristics Dietzgen offers. Try them ... for "tooth" ... for erasing ... for transparency ... for anything you wish. One of them will come nearer *your* idea of perfection than anything you have ever used. Then you, too, will see why Dietzgen is the standard of comparison.

EUGENE DIETZGEN CO.

Chicago · New York · New Orleans · Pittsburgh
San Francisco · Milwaukee · Los Angeles
Philadelphia · Washington



DIETZGEN

World Famous Quality DRAFTING NECESSITIES

Dietzgen's Winston, Nelson, Lupton, Briston, Ralton, Clinton, Pompton, Edco Bond, Clayton, Milton, Dependon, Bolton, Crafton, Anston, Filton and Kelton Tracing Papers as well as Dietzgen's Edvell, Excello, Eton and Sterling Vellums may be had in rolls, tubes, or in cut sheets ... the latter either plain or printed.





Every Successful Craftsman knows this Secret

It takes a younger Craftsman years to learn what every successful Architect and Engineer knows. Success depends upon discovering this secret.

Here is the secret: The great bulk of humanity is not visual-minded. People can not visualize easily. They understand only what their eyes see. In most cases your client lacks the gift of imagination.

Why Masters use "Castell"

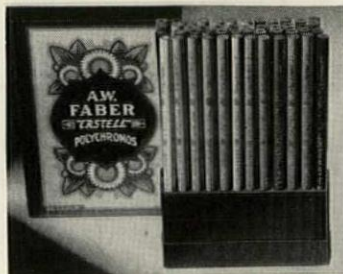
The Craftsman who submits the most elaborate rendering is the man who wins. It is not enough that you have the idea in your *mind*—you must translate it graphically on paper for your client to see.

That is why so many Masters use the famous A. W. Faber "Castell" Drawing Pencil. It brings out all your skill. It gives full expression to your genius. It improves every sketch, drawing, rendering or elevation. Smooth, free from grit and hard spots, it does not crumble or snap off easily under pressure. The 18 degrees of hardness give you every gradation of tone you desire.

Of course it costs a little more, but the marked superiority of "Castell" can not be measured in pennies. Do as the Masters do—use the perfect tool for your craft—"Castell" Drawing Pencils.

Castell "Polychromos" Colored Pencils

Are you using this marvelous technique in your work? With Polychromos pencils you achieve the nearest approach to actual oil color painting. Yet the process is as simple as drawing with colored pencils. Available in handy boxes of 6, 12, 18, 24, 36, 48, 60 and 64 pencils. Send for instruction sheet and color chart.



Castell

DRAWING PENCILS

Made in Bavaria in 18 Degrees A. W. Faber, Newark, N. J.

FREE EMPLOYMENT SERVICE *for Readers* of *Pencil Points*

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

POSITION WANTED: Senior chief draftsman. Architecture, Columbia. Engineering, Carnegie Tech. Married. 15 years' experience as chief draftsman, designing engineer, superintendent. Banks, office buildings, residences, topography, landscape. References. \$200 monthly. Location immaterial. Boyce H., Box 3, Hillsboro, West Virginia.

POSITION WANTED: Young man, 25, designer, draftsman. Recent graduate of architectural design course desires position in architect's office. Ambitious, eager to learn and advance. Will accept position in any city in the United States. Salary easily arranged. Chris F. Kimball, 8 Madison Street, Port Washington, N. Y.

POSITION WANTED: Young man, graduate in architectural engineering from Penn State College, desires position with structural engineer or architect. Advanced course in architectural drafting by correspondence from Chicago Technical College. Four years' working experience as carpenter on residence work. Roland Mowry, 32 South Mercer Street Ext., Greenville, Pa.

POSITION WANTED: Permanent or temporary. Architectural draftsman. Rapid, dependable, over 15 years' experience including residential, commercial, schools, ecclesiastical, State work, store fronts and fixtures, modernization. Expert on design and detail. Handle work from sketches to completion, including specifications and supervision. Now located in Chicago. American. Married. Have car. Highest references. Box No. 1000.

POSITION WANTED: Architectural designer. Extensive and diversified architectural experience with prominent architects. Eastern background, executive capacity, presentation and construction. No preference as to location. Salary easily arranged. Box 1001.

POSITION WANTED: Experienced architect, good designer, wishes association with established architect. Willing to invest in the business. Fifteen years' experience with all types of buildings. Box No. 1002.

POSITION WANTED: Junior draftsman, architectural student, High School graduate, age 19. Two years' experience architectural drafting. Box No. 1003.

POSITION WANTED: High School graduate desires position as junior draftsman in architect's office. Box No. 1004.

POSITION WANTED: Young man, 21, graduate of High School and Mechanics Institute. Capable renderer of small houses in various mediums, especially pen and ink. Own perspectives. L. R., 2111 Quentin Road, Brooklyn.

POSITION WANTED: Secretary, six years' experience, desires position with architect where interior decorating background is required. Has completed course at reputable decorating school. References. Box No. 1005.

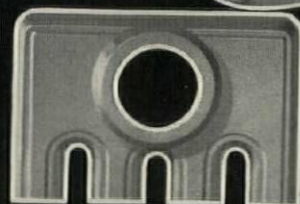
WANTED: Young draftsman, some experience preparing shop drawings and full-sized details for cast or natural stone. Good opportunity for right man to take charge of estimating, drafting and sales. State age, experience and salary first letter. Box No. 1006.

POSITION WANTED: Experienced young architect capable of doing all kinds of office work. Seven years' experience on building construction. Knowledge of model building and cabinet making. Desires position with architectural or manufacturing concern anywhere. Salary secondary. Box No. 1007.

POSITION WANTED: Draftsman-designer, architectural training. Ten years' office experience seeks position with architect or builder. Box No. 1008.

POSITION WANTED: Architectural graduate wishes to train as sales representative with concern selling to architects and builders. Box No. 1010.

**This Slenderized
Radiator made of
cast iron is
only one
finger
wide**



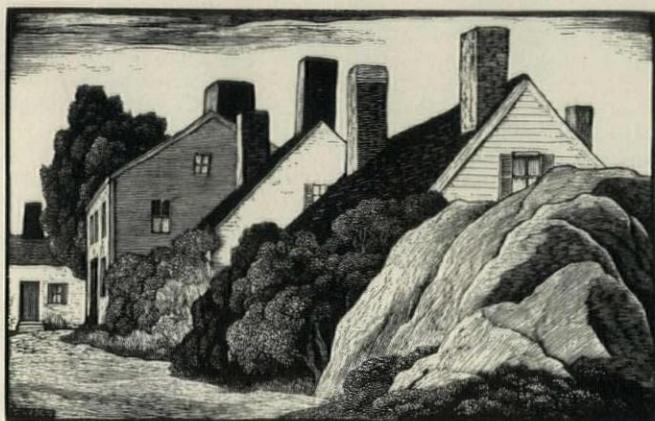
ONLY a finger wide, and still it delivers just as much heat as the stick-out-in-the-room ones. Takes up 40% less space than the old cast iron. The 3-tube is 3¼" wide; 4-tube 4-7/16"; 5-tube 5-11/16". Furthermore they cost no more than the others. You can recess them between the studding under a window and they will not extend into the room. In design they are clean cut, entirely free from any ornaments, save only a chaste beading. Castings are exceptionally smooth. Glad to send you a cut-off portion same as shown above, so you can see for yourself. Per lineal foot of length Burnham 5-tube 26" radiators have 19.2 feet of surface. The regular tube-type radiator 26", 5-tube is rated 16.8 square feet. Other Burnham sizes rate in proportion. Made in all stock sizes. Ratings, measurements and full facts ready for you. Described and illustrated in our "Home Heating Help Book" which we will be glad to send you and your clients.

DON GRAF DATA SHEETS
3 on Radiators 3 on Boilers
1 on Valves 1 on Taco Tanks
SENT FREE

Burnham Boiler Corporation
IRVINGTON, NEW YORK

Representatives in All Principal Cities of the United States and Canada

New, Authentic
REPRODUCTIONS OF
Old New England Colors



Wood engraving of old New England houses by Thomas W. Nason.
Loaned by Goodspeed's Book Shop, Boston.

NOW for the first time, architects designing Colonial Houses can match the original colors used on famous early houses of New England. These colors have been authentically reproduced in a special new series of Cabot's Collopakes. They are based on painstaking historical research, plus careful reproduction in our laboratories. Among the shades available are Wayside Inn *Pink*, Old Lyme *Yellow*, Salem *Gray*, Haddam Barn *Red*, Harwichport *Blue* for blinds. For color samples, sign and mail coupon below.

**Cabot's
Collopakes**

FOR EVERY PAINT USE

Samuel Cabot
Inc.
Manufacturing Chemists

SAMUEL CABOT, INC.
141 Milk Street
Boston, Massachusetts

Gentlemen: Please send me color samples of your new, authentic reproductions of Old New England Colors.

Name

Address PP-10-35

HERE, THERE, THIS & THAT

(Continued from page 16)

Charles S. Peabody

1880—1935

Charles S. Peabody of Ludlow and Peabody, Architects, died of a heart attack at Lake George, New York, on September 10. Mr. Peabody, with his partner, William Orr Ludlow, made their architectural firm known throughout the United States by designing many important skyscrapers, churches, hospitals, residences, college buildings, and other edifices.

Among the best-known New York buildings for which they drew the plans were the twenty-eight-story Johns-Manville Building, at Fortieth Street and Madison Avenue; the forty-eight-story Chase Tower, formerly Ten East Fortieth Street; the Railroad Building and Loan Building, Forty-third Street and Lexington Avenue; The New York Times Annex, 229 West Forty-third Street, and the Combustion Engineering Building, on Broad Street.

The partners also designed Dr. John Haynes Holmes's Community Church at Thirty-fourth Street and Park Avenue, torn down in 1931 to make way for an apartment building; the Wadsworth Avenue Baptist Church, 210 Wadsworth Avenue, and a Negro, a Bohemian and two Italian churches in uptown New York for the Presbyterian Board of Missions.

The First Presbyterian Church and parish house at Watertown, N. Y., and the First Baptist Church at Westfield, N. J., likewise were designed by their firm, along with about twenty-five other churches in various parts of the country. The most prominent hospitals designed by Mr. Peabody's firm were the Carson S. Peck Memorial Hospital, the Cumberland Hospital, and the St. Giles Orthopedic Hospital, all in Brooklyn.

Mr. Peabody and his partner also drew the plans for a score or more of college buildings. They included a large group for the Peabody Teachers College at Nashville, Tenn.; the Stevens Institute of Technology Gymnasium and for the University of Georgia in Athens, Ga., Alumni Hall, the Carnegie Library, the Educational Building and one dormitory.

Others were a group for Skidmore College, Saratoga, N. Y.; the Memorial Chapel and a dormitory group for the Women's College of New Jersey, at New Brunswick; and the Ogden Memorial Auditorium and several dormitories at Hampton Institute, Hampton, Va. In addition, they drew plans for the remodeling of the Castle and Library at Stevens Tech and a complete layout for developing the grounds there.

The Hotel Champlain at Bluff Point, N. Y., the Fort William Henry Hotel and the Lake George Railroad Station at Lake George, N. Y., and the Central Trolley Station at Saratoga, N. Y., were designed for the Delaware & Hudson Railroad by Ludlow & Peabody.

The work of the firm will be carried on by the surviving member, William Orr Ludlow.

EXHIBITION OF PENCIL POINTS COMPETITION DRAWINGS

Architectural Clubs and Societies and other organizations that are interested in holding exhibitions of small house designs are invited to apply for inclusion on the schedule now being made up for the traveling show of about seventy-five drawings, including prize winners and mentions, submitted in the PENCIL POINTS 1935 Architectural Competition, sponsored by the Iron Fireman Manufacturing Company.

Morgan Pupils Win Prizes

An unofficial, but unquestionably truthful, report has reached this office to the effect that something like eight of the winners in the recent "Modernize Main Street" Competition, held by the *Architectural Record* and sponsored by the Libbey-Owens-Ford Glass Company, were pupils or former pupils of Lloyd Morgan, most of whom received their training under him at New York University. This little group won an aggregate of over \$3000 out of the total of \$11000 offered in the four divisions of the competition. One of these men, Suren Pilafian, who placed third in this year's Le Brun Competition, accounted, with his partner, Maurice Lubin, for a First Prize, a Second Prize, and a Mention, totaling \$1540. Other Morgan men who placed in the money were Adrian Waldorf, S. L. Katz, and R. L. Du Brul.

Committee of Administration at Columbia School of Architecture

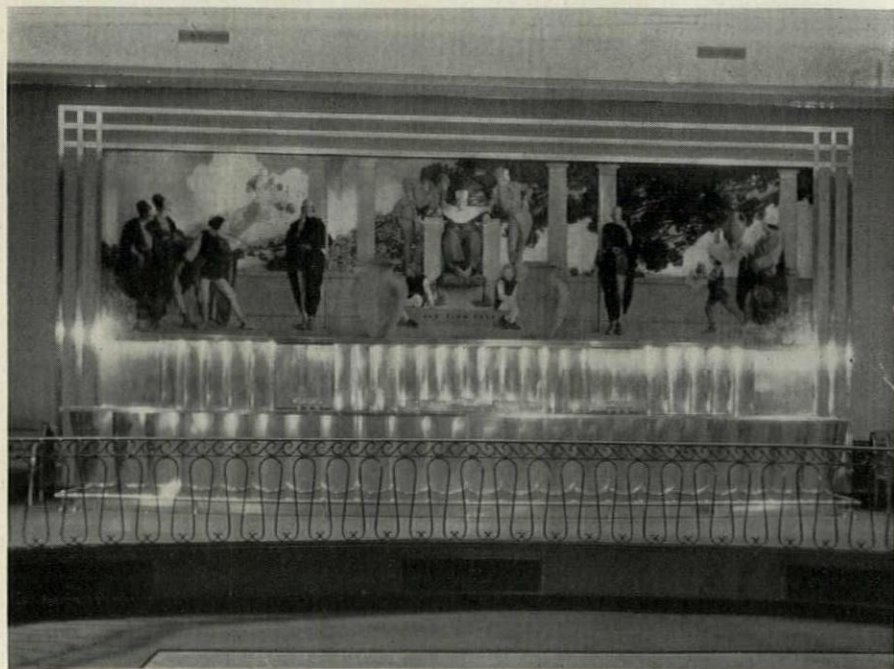
A Committee of Administration has been appointed by the Columbia University Trustees to direct the work of the School of Architecture. Prof. Leopold Arnaud is chairman. The other members are Prof. Cecil C. Briggs and Jan Ruhtenberg, associate in architecture. The Com-

mittee will function until a successor to Dean Joseph Hudnut, who resigned to head the Faculty of Architecture at Harvard, is selected.

Developing the new educational policy which went into effect last year, steps have been taken to widen the opportunity for architectural training, emphasizing creative design and sound science, according to Prof. Arnaud, who declared that "architecture is at the beginning of a period which promises to be the most brilliant in generations."

The reorganized teaching plan, which in design embraces a three-year program of personal tutoring of each student by a master, eliminates group competitions and utilizes the problem method employed at the Ecole des Beaux Arts in Paris, has been extended to include provision for instruction in city planning, and in the use of new materials through which, it is said, science is transforming American architecture.

Architectural students, Prof. Arnaud explained, will be trained to meet the problems which are arising from the transition from depression to recovery in the building industry. He foresees an era of activity in construction and design which will open a limitless field for the younger members of the architectural profession.



Copyright "House of Art"

Maxfield Parrish's mural "Old King Cole," now installed above the bar in the King Cole Room at the St. Regis Hotel, New York. The painting is owned by Vincent Astor. It was in the Knickerbocker Hotel until 1918, the Racquet and Tennis Club until 1930. It has been retouched by the artist for its new home in the room by Mrs. Tiffany

WITH
BRIGSTEEL
Beautyware

ARCHITECTS CAN DESIGN LUXURY TYPE BATHROOMS
FOR MODEST HOMES

This revolutionary new type plumbing ware offers five major advantages that cannot be duplicated in any other fixtures on the market. They are (1) An unlimited range of colors that can be combined on the same fixture; (2) An acid-resisting high lustre, vitreous porcelain finish at no extra cost; (3) A two-thirds reduction in weight plus strength that is substantially greater; (4) Ultra modern designs with finer lines and more pleasing contours, made possible by the greater adaptability of formed metal; and (5) Basic materials thoroughly proved by more than 20 years successful use in quality ranges,

refrigerators and other household appliances, yet entirely new to the plumbing industry.

Brigsteel Beautyware gives you an opportunity you have never had before to create truly striking effects in the bathrooms, kitchens and basements you design. Its low price permits you to specify it for even the most modest residence or building.

The history, reputation and general resources of the Briggs Manufacturing Company are your guarantee of the finest materials and workmanship.



PLUMBING WARE DIVISION, BRIGGS MANUFACTURING COMPANY, DETROIT



Distributed exclusively through
Plumbing Wholesalers and Licensed
Master Plumbers.

But The Front appeals to the Eye . . .
 it's the FLOOR that brings in the money!



ONLY too frequently, a building's "front" is emphasized at the expense of its utility . . . in striving for impressiveness of appearance, utility factors, of equal importance to the building's success, are sometimes slighted. Among these important utility factors, the building's floors play a leading role. They alone produce the building's revenue. They determine the extent and convenience of the electrical facilities offered to tenants; And they largely determine the length of the building's profitable life. Therefore, floors obviously deserve the most careful consideration from architect, builder, and building owner. And such serious consideration inevitably leads to the newest and most modern method of floor construction . . . The Robertson Steel Floor System.

Electrically, the Robertson Floor is so completely flexible that it can meet all electrical requirements that the present or

the future may demand of it. More than that, this flexibility is such that it is readily available for use without the trouble and expense usually involved in utilizing the partial flexibility of other types of floor construction. Yet this perfect electrical provision is obtained at a cost that is little, if any, higher than that of the ordinary bare floor alone. Expensive underfloor ducts are eliminated and thereby big cost savings result.

The Robertson Steel Floor System, developed after years of study at famous Mellon Institute of Industrial Research, is in reality, a super-strong steel floor which contains, in itself, a complete system of protected wire raceways. These raceways permit of such complete electrification of the floor that electrical outlets can be placed every six inches over the floor area if desired, without the costly tearing up of floor surface which the installation of outlets in ordinary underfloor duct systems entails.

The Robertson Floor is stronger, lighter, more compact. It increases fire safety . . . lowers accident hazards. And it speeds up large building erection by 20% to 30%! Every architect, contractor and engineer will find our brochure "New Life for Buildings" and our special technical bulletin on the Robertson Steel Floor System extremely instructive and valuable. Send for your free copies. H. H. Robertson Co., Pittsburgh, Pa.

ROBERTSON STEEL FLOOR SYSTEM

Architectural Guild of America

The plight of architectural men engaged on WPA work has caused a great deal of activity to center upon the problems of wages and working conditions during the past two months. Confusion of officials during the transition of authority for relief work and the broadness of the Federal Relief Laws themselves made a planned offensive against wage cuts very difficult. The relief wage for men doing architectural work was, in New York, from twenty-seven to fifty dollars per week, and lower in other states. Wages on work which, though architectural, was not drafting was about fifteen per cent lower. When the Federal Government took control, all of these schedules did not hold and it is the purpose of the Guild to assure all men performing architectural services the full amounts allowed in federal regulations.

When the WPA took over relief work, no attention was paid to prevailing rates, and the standards of the union trades worker were placed in serious jeopardy. The American Federation of Labor, instead of using its power for all the WPA employees, called a strike of building trade workers and issued the amazing statement that it would not cooperate with any professional groups or unaffiliated organizations. This extraordinary position of so-called labor leaders alienated many of the workers and was one of the causes of the strike failure. Despite this lack of cooperation, however, the Guild believes that the wage standard of the union mechanic is of vital importance to us as a yardstick to measure our own standards. For this reason and in sympathy with the long and difficult struggle of the unions to reach a decent standard, we have offered our cooperation to the responsible organizations on WPA work. The necessity for a change of attitude by Federation officials toward professional and non-manual employee organizations was demonstrated by the WPA situation. Leaders of American labor must recognize the importance of these groups who will eventually take the leadership in labor affairs.

In the New York City Park Department, the largest WPA architectural project, a stoppage of work was called when pay of draftsmen was cut by the Federal Government. A committee, headed by George Holland, Vice-President of the Chapter, saw the Administrator and obtained a number of concessions, including an increase over the government wage rates. Other adjustments which Guild committees have secured by direct appeal to the administrator have been re-rating of architectural draftsmen, the opportunity to take a leave of absence to accept private work, assurance of workmen's compensation, and adequate sick leave.

A serious situation, which may have far-reaching effect upon architectural men, is an attempt which is being made to use WPA draftsmen in private offices

on PWA work. The New York City Housing Authority is endeavoring to place men getting a government subsistence wage in the offices of private architects who have commissions for housing developments which will be financed entirely by the United States Government through the Housing Division of the PWA. This is a variation of the architects' proposals in the ill-fated "Recommendations for Construction Under the Work Relief Act," by the Construction League of the United States. The architects are to get a full commission and the Housing Authority will be the nominal head of the project. Architects have been approved by the PWA and the Housing Authority for two housing developments and by the Authority alone for two others. The Housing Authority attempted to transfer men to the offices of private architects by means of the initiation of a vague Housing Study Project. There was nothing in the application for the project which would indicate that working drawings for a PWA project were to be prepared! The scheme was that men on relief were to turn out working drawings for a wage of \$21 or \$27 per week—paid by the government. Incidentally it is of interest to know that in answer to protest by the Guild against some of these architects using young college graduates on preliminary work at a small salary or for no salary, this same Housing Authority wrote as follows: "The Authority will use its good offices to support and reinforce any conditions governing the employment of professional men as in its opinion tend to maintain a high standard of employment." This was written at the precise time that the scheme to furnish free drafting was completed.

Negotiations with both the architects involved and the Housing Authority have brought from these parties several

unacceptable proposals and unless an agreement is reached the Guild will take legal steps to stop the project as illegal.

In this controversy the Housing Division of the PWA has attempted to remain aloof. Mr. A. R. Clas, Director of Housing, claims that the PWA has no regulation governing the compensation and that they have no jurisdiction over the men whom the architects employ. Here we have a situation where public funds are paid to architects and the government says that the architect is the sole judge of how they shall be used. If they can get free labor it appears that this government official is not concerned. Although the government pays a regular fee to the architect and does not bargain on the "law of supply and demand basis," it feels that the architect should be free to take advantage of employment conditions in our profession and work the draftsmen's status as low as possible.

This is without exception the most important question to draftsmen at the present time. A most active national campaign must be immediately instituted to obtain protection for draftsmen in all government contracts. We ask that each association and draftsman write to the PWA Administrator and to their representatives requesting that a clause be inserted in all government contracts with architects guaranteeing draftsmen minimum wage scales from \$65 to \$35 per week as recommended by the Guild. These have been published in detail in our monthly letters in previous issues.

We also ask your cooperation in sending to the Guild any factual information bearing on the above matters or bringing to our attention other matters which adversely affect the economic standards of the architectural employees.

JOHN F. ST. GEORGE

Architectural Guild of America
101 Park Avenue, New York, N. Y.



Pencil sketch by Paul Studer, Architect and Author of "In the Shadow of Gold"

ANOTHER *Koh-i-noor* PRODUCT

DESCRIBED BY A. L. GUPTILL

L. & C. HARDTMUTH 192-№2
CZECHO-SLOVAKIA

ARTIFICIAL CHARCOAL No. 192

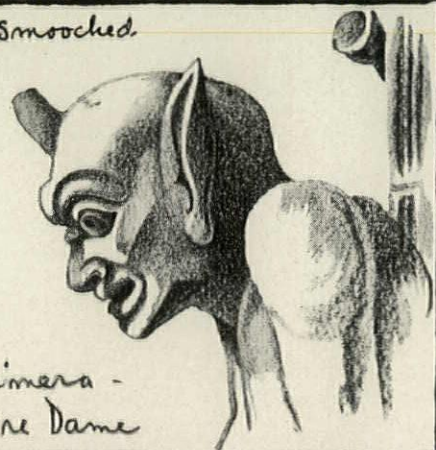
HERE is a truly remarkable material, eliminating the disadvantages of natural charcoal, while retaining its advantages. It's gritless. Sensitive. Gives a black of unusual richness and depth. Erases well. Made in five degrees, 1, 2, 3, 4, 5. 5¢ each, 50¢ a dozen.



CONVENIENT AND CLEANLY IS HOLDER No. 1112 • PRICE 15¢

A SIMPLE APPLICATION

Not Smooched.



Chimera -
Notre Dame

Artificial Charcoal also comes in lead form, No. 2625, for our Universal Holder No. 48. It's 5¢.

KOH-I-NOOR PENCIL CO., INC.

• 373 FOURTH AVE. • NEW YORK • N. Y. •

"Your Great-grandfather Used Carew Quality Papers in the Days of the Quill!"

Would You Like To Try || SOME OF THE FINEST ARTIST BOARD || AND DRAWING PAPER THAT CAN BE MADE?



Stamped on every sheet

This Seal
Is Your
GUARANTEE
of
QUALITY
and
UNIFORMITY

Made by the CAREW MANUFACTURING COMPANY, South Hadley Falls, Mass., "Since 1848 Makers of the Finest Rag Papers in the Land". The uniformity of surface . . . sizing with animal hide glue —not starch . . . freedom from blemishes . . . and toughness of these fine papers make them impregnable against scrubbing and rubbing.

CAREW 1848 ARTIST BOARD

- Unfinished edges on four sides
- High and Vellum Finishes
- Single to 5-Ply Pasted

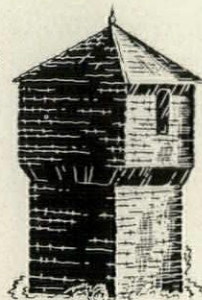
YOU CAN RELY ON CAREW QUALITY

Send in your request for samples to
SOLE DISTRIBUTORS

RICH ART PAPER COMPANY
FINE ARTISTS' PAPERS
INCORPORATED

33 WEST 21st STREET, NEW YORK, N. Y.

FORT DUQUESNE
Built 1754



Portals of HOSPITALITY

Pittsburgh has played an important part in the settlement and growth of these United States. Here was the far frontier of the original thirteen colonies. Today this great hotel, symbol of modern hospitality, towers high above tiny Fort Duquesne, which for one hundred and eighty years has stood "at the forks of the Ohio," the last portal of hospitality for those headed downstream to "Ole Kaintuck." Experienced travelers recognize this fine hotel as the best address and the largest hotel in Pennsylvania. Four restaurants, the famous Urban Roof Garden and the air-cooled Continental Bar.

Rates from \$3.50 Single, \$5.00 Double



**HOTEL
WILLIAM PENN
PITTSBURGH**

The Lurie Steel House

"The One Hundred Year House"

The newest development in building fireproof in the cost range of ordinary wood construction, yet with the durability of a skyscraper.

Not prefabricated. Affords architects and builders unlimited scope in design.

Built on the job with usual building mechanics, utilizing a new combination of steel, concrete and metal lath.

Double Wall Construction: fire, hurricane, earthquake and depreciation proof.

Fully illustrated book with plans and construction details sent free on request.

ADDRESS

**Metal Lath
Manufacturers Association**

208 South LaSalle Street
Chicago, Illinois



USE MARS LUMOGRAPH

*.. and stop tracing
your profits away*



Save time, save money with MARS LUMOGRAPH... the pencil that gives reproduction copy as good as any ink tracing.

Only MARS LUMOGRAPH has the "opaqueness" which makes this possible.

Results are amazing. Reproductions are perfect, clear, sharp. MARS LUMOGRAPH does not smudge, erases easily. Comes in 11 degrees of hardness. On sale at your favorite supply shop, in handy metal boxes of one dozen each.

J. S. Staedtler, Inc.
53-55 WORTH ST., NEW YORK, N. Y.

TRADE  MARK

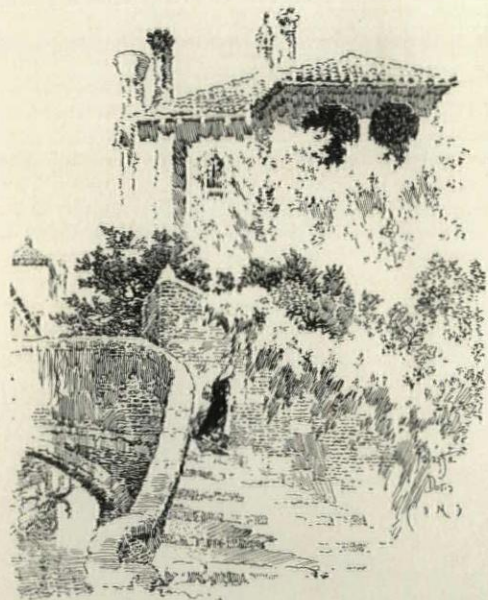
Micrographic tests to show the greater opaqueness of the Lumograph pencil as compared with that of other fine quality drawing pencils. It is this opaqueness, closely approaching that of India Ink, which permits perfect reproductions direct from pencil tracings.

WHATMAN Genuine Hand-Made Drawing Papers stand changes and erasures so well that their use is an economy as well as a delight.

*A sample is free to Architects,
Artists and Engineers*

H. REEVE ANGEL & CO., INC.
7-11 Spruce Street New York, N. Y.

J WHATMAN
Genuine Hand-Made
DRAWING PAPERS



GILLOTT PEN POINTERS

A collection of drawings, by Gordon Grant, Arthur Ferrier and other Masters, illustrates the wide variety of strokes possible with Gillott Pens.

The above drawing, by Charles D. Maginnis of Brookline, Mass., with Gillott Pens 303 and 404, is one of the many interesting illustrations shown.

For sale by leading artists' supply houses—or send us 35 cents. Also set of six Gillott superfine drawing pens for 25 cents.

ALFRED FIELD & CO., INC.
93 Chambers Street New York, N. Y.

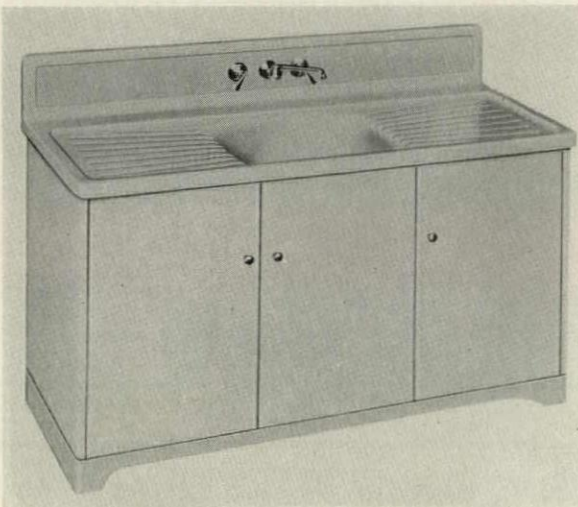
NEW PRODUCTS

Changes in Personnel, etc.

BRIGGS PLUMBING WARE DIVISION ANNOUNCES NEW FIXTURES

A new kitchen cabinet sink, a sink and tray combination for kitchens and a new wall-hung lavatory have been introduced by the Plumbing Ware Division of the Briggs Manufacturing Co., Detroit, Mich.

The kitchen cabinet sink is available in white or solid colors and harmonious color combinations. The sink is 25" by 60", includes convenient accessories and is enameled with acid resisting porcelain. Two or three hole faucet fixtures may be used on this model, either on the back apron or individual fixtures on the ledge.



Width of the sink has been standardized to meet requirements in case a 24" work table is constructed at either end of the sink. Drain boards are recessed. Ledge across the back of the sink is 3" wide to provide sufficient dry space for cleaning powders and other articles.

The cabinet is finished with high baked enamel. The base of the cabinet sets back 4" to provide toe room. The compartment under the drain board contains partitioned metal cutlery drawers. The cabinet also contains a wooden cutting board. Ventilation of the cabinet is obtained through holes in the bottom panel.

The sink and tray combination for kitchens is especially adaptable for apartment house and other new housing projects.



The combination is available in double tray or double sink ensemble, or with right or left sink and laundry tray. The combination is 36" high, 50" long and 25" wide. A rubber covered, recessed drain board in various colors is available.

The fixture is supplied either with or without back, making the installation suitable for tiling in. The sink portion is provided with a flat, 3" ledge on the back to provide dry space for articles.

The combination is available with cabinet or legs and wall bracket. Holes are provided for standard swing type faucet.

The new wall-hung lavatory is 20" by 24" and is made of drawn metal. It is available in a diversity of colors of acid-resisting porcelain.



The lavatory is supported by streamlined or wing designed wall brackets and takes standard fixtures, either group or individual. An unusual feature is an easily removable overflow pipe for cleaning. The lavatory has a wide ledge all around and a bead to prevent water from dripping over the edge. A bracket adjustment permits installing it flush against the wall or 2" away.

VAN DYKE BLUE PRINT PENCILS

Of interest to architects and draftsmen is a new line of pencils that is especially adaptable for use in working on blue prints. They are furnished in four colors—white, blue, red and yellow.

Among the outstanding features of this new line are thin strong leads that take fine points in a pencil sharpener; leads that hold fine points for thin lines, fine lettering and figures; an intense white; brilliant and distinct red and yellow; an opaque blue that gives heavy coverage for deleting or correcting white lines; non-smearing, non-smudging marks; strong black lines from the white and yellow pencils in photoprints.

V. GILMORE IDEN ELECTED SECRETARY OF AMERICAN INSTITUTE OF STEEL CONSTRUCTION

The board of directors of the American Institute of Steel Construction has elected V. Gilmore Iden to the office of secretary. Mr. Iden has been serving the Institute for the past year in the capacity of acting secretary.

Mr. Iden joined the staff of the American Institute of Steel Construction in 1927 to become its director of public relations. Prior to that time he had been engaged in newspaper work in Washington and New York.

The board has also voted to create a new office to be designated executive vice president, and has elected Robert T. Brooks of New York to fill it. This action will be confirmed at the Thirteenth Annual Convention of the Institute to be held at White Sulphur Springs, W. Va., October 16, 17, and 18, next.

Mr. Brooks has been identified with the structural steel industry in New York for the past thirty years. For a number of years he was vice president of John J. Radley & Co., Inc. In 1914 he joined the firm of George A. Just & Co. as vice president, and in 1919 became its president. He has been treasurer of the American Institute of Steel Construction for the past four years.

ALLEGHENY METAL ARCHITECTURAL TUBING

The Allegheny Steel Co., Brackenridge, Pa., has recently announced a new stainless steel tube, known as Allegheny Metal Architectural Tubing. This new product is thin wall stainless tubing without or with carbon steel inserts which are fabricated into the tube when applications demand additional strength and rigidity. It has variety of applications, such as hand rails, foot rails, metal furniture, etc.

The company is now prepared to make the following round O.D. sizes: $\frac{5}{8}$ in., $\frac{3}{4}$ in., $\frac{7}{8}$ in., 1 in., $1\frac{1}{4}$ in., $1\frac{1}{2}$ in., 1.9 in. Certain sizes of square and rectangular shapes will also be produced.

NEW WATERPROOF RESIN-BONDED PLYWOOD

A new structural building material in the form of large, lightweight, waterproof resin-bonded plywood sheets, known as Dure-Wood, is announced by the General Plastics, Inc., North Tonawanda, N. Y.

Dure-Wood, it is claimed, cannot de-laminate or separate, even when boiled in water or baked in an oven, due to the use of Dure-phenolin resin adhesive, which is insoluble, waterproof, weatherproof, verminproof and heatproof.

This new material is made with hard or soft-wood veneers: fir, birch, poplar, maple, oak, walnut or foreign woods. Any thickness or strength can be obtained, depending on the number of plies. Grain of each ply is at right angles to the next, adding great strength.

Surface veneers of maintenance-free materials such as roofing felt and slate are inexpensively and permanently attached at the factory for roof and sidewall use. For interiors, veneers of fine woods, fabrics, metal, etc., primers or finished paint films are applied.

Dure-Wood is obtainable with metal foil insulation permanently veneered to one side. Cane or fibre-board insulation board can also be affixed permanently to Dure-Wood, eliminating the need for extra operations of blanket or bat insulation.

Dure-Wood can be used for sheathing, interior walls, sub-floors, ceilings, doors, partitions, cellar or attic finishing, cupboards, closets, coal bins, etc. In public buildings, with fabric or fine wood face veneers, Dure-Wood can be used as a decorating material with advantages of easy-large-unit installation, extreme durability, good sound absorption, warmth of texture, richness and high salvage value. Resurfacing old walls, ceilings and partitions in bars, stores, restaurants, etc., as well as knock-down office partitions, are other applications where the cleanliness, lightweight, low-cost and easy handling of Dure-Wood is said to be particularly valuable.

NEW FIRM BUYS ASSETS OF D. A. EBINGER MFG. CO.

A newly-formed organization, incorporated under the name of the Ebco Manufacturing Co., has purchased all assets of the D. A. Ebinger Sanitary Manufacturing Co., 401 West Town Street, Columbus, Ohio.

The entire personnel will be retained, and for the present all plumbing equipment previously made by the company will be continued, including a kitchen sink, a circular wash sink for industrial or other group washrooms, and metal toilet partitions and shower enclosures, and self-contained electric water coolers and bubbler drinking fountains.

A. R. Benua, the president and general manager of the Ebco Manufacturing Co., has engaged in metal manufacturing during his entire career. E. E. Fox, who served as general manager of the old company, will be production manager. Lee C. Love is sales manager.

PLASTIKON RUBBER PUTTY

A new type of rubber putty, which is said to be highly resistant to moisture, corrosive chemicals and fumes, and especially adaptable for properly sealing windows against air leakage in air conditioned buildings, is being offered by the B. F. Goodrich Co., Akron, Ohio.

The putty, known as Plastikon, is similar in appearance and consistency to ordinary painters' putty and may be applied with a knife in the same manner. It adheres equally well to steel or wood surfaces and, because it contains little oil, requires no mixing.

VALVE COMPANIES EXCHANGE PATENT RIGHTS

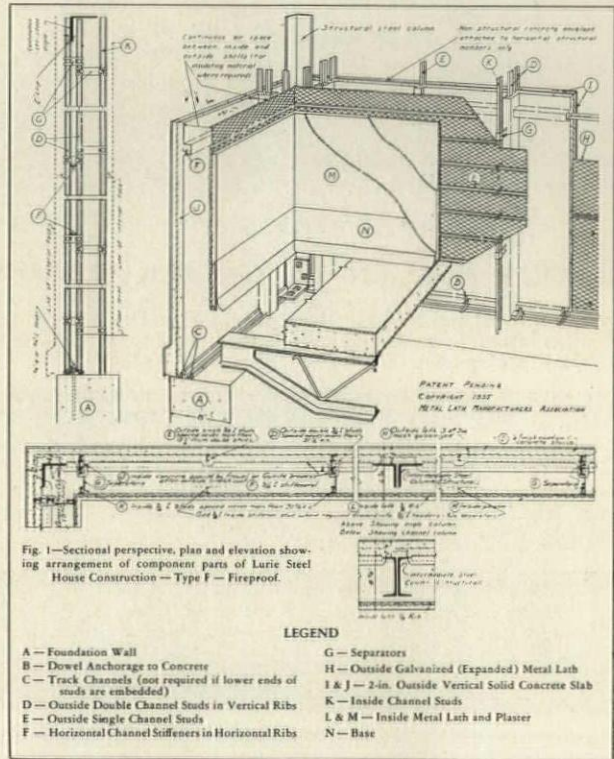
Announcement is made by the W. A. Russell Co., manufacturers of Warco air valves, that it has granted an exclusive license to the Hoffman Specialty Co. for all rights on adjustable port venting valves as covered by W. A. Russell Company's patent No. 1,761,685.

Under a cross-licensing agreement, the Hoffman Specialty Co. has in turn given an exclusive license to the W. A. Russell Co. for manufacturing rights under certain of the Hoffman patents.

THE LURIE STEEL HOUSE

Announcement is made by the Metal Lath Manufacturers Association of the development by E. M. Lurie, chief engineer of the Association, of the Lurie Steel House, a new type of permanent, fireproof construction utilizing a new combination of steel, concrete and metal lath and in the cost range of ordinary wood construction.

The Lurie Steel House is not prefabricated thereby affording architects and builders unlimited scope in design. It is built on the job with the usual building mechanics. The



materials used are commonly stocked by building supply dealers throughout the country, thus facilitating purchaser and expediting construction. The Lurie House is said to be particularly adapted to the specific needs of home and apartment occupancies such as heating, air conditioning, plumbing and electrical installations.

A fully illustrated book with construction and erection details and data will be sent free upon application to the Metal Lath Manufacturers Association, 208 South La Salle Street, Chicago, Ill.

The Jamison Cold Storage Door Company, Hagerstown, Md., has just announced the appointment of Harry H. Frank, of Pittsburgh, Pa., as district representative of the Jamison Company in that territory. Mr. Frank maintains headquarters at 207 Fulton Building, Pittsburgh. Jamison, Stevenson, and Victor cold storage doors and allied equipment, all three the products of the Jamison Company, will be represented by Mr. Frank.

At a special stockholders' meeting of Inland Steel Company on Sept. 20th, the plan of reorganization to effectuate the union of the business of Inland Steel Company with that of Joseph T. Ryerson & Son, Inc., was approved.

The charter was amended by increasing the authorized no par value shares from 1,200,000 to 1,600,000, of which 240,000 shares were authorized to be issued for the acquisition of all of the assets, business and good will of the Ryerson Company.

Edward L. Ryerson, Jr., Joseph T. Ryerson and Everett D. Graff were added to the board of directors of Inland Steel Company. J. H. Morris was also elected a director.

R. A. B. Williams, formerly with the John Van Range Company, has been appointed manager of the hotel equipment division of the Crucible Steel Company of America, to succeed Alfred H. Birnbaum, deceased.

MAKE
**Striking
 Renderings**
 WITH
*David Cox
 Drawing*

FAMOUS ENGLISH WATER COLOR PAPER

Famous throughout Europe, these David Cox Papers are creating a sensation in this country for their beauty of color tones and quality of paper.

Distinctive as your water color renderings are, now, they will be strikingly beautiful on David Cox Drawing Paper.

To fully appreciate this paper, you must see it. There's a sample book of this outstanding paper ready to mail to you . . . just as soon as you ask for it. It contains ten samples in five colors, two weights, and five finishes. Write for it today. Now, while it is still fresh in your mind.

B. K. ELLIOTT CO.

ARCHITECTS AND ARTISTS SUPPLIES

126 SIXTH STREET
 PITTSBURGH, PENNA.

733 PROSPECT AVE
 CLEVELAND, OHIO

ARCHITECTURAL ENGINEERING

A practical course (Home Study) by mail only

Prepares Architects and Draftsmen
 for structural portion of

STATE BOARD EXAMINATIONS

For many this is the most difficult section of the examinations. Qualifies for designing structures in wood, concrete or steel. Successfully conducted for past three years. Our complete Structural Engineering course well known for twenty-three years.

Literature without obligation—write TODAY.

WILSON ENGINEERING CORPORATION

College House Offices Harvard Square
 Cambridge, Massachusetts, U. S. A.

ANSWERS TO QUESTIONS ON PAGE 42

- Both of these bonds consist of alternate courses of headers and stretchers; in English Bond, the vertical joints of the stretcher courses fall over each other, in English Cross Bond they do not. See Data Sheet No. A1a.
- Limestone has considerable strength in itself. Lintel 2' high by 8" thick will support 9600 lbs. safely on a 6' span. See Data Sheet No. A2a.
- The classification of stonework depends upon the dressing of the horizontal beds. If the stone permits laying with uniformly thick horizontal joints of 1/2" or less, it is called ashlar. See Data Sheet No. A2b.
- This depends not only upon the thickness of the glass, but upon the quality to be used. In 3/8" thick glazing quality, sheets as large as 72" x 200" are available. See Data Sheet No. A4a.
- 3/8". See Data Sheet No. A5a.
- The National Oak Flooring Manufacturers Association give 3/8" as the thickness. See Data Sheet No. F1b.
- This is the botanical name for Alaska Cedar, sometimes called Alaska Yellow Cedar. See Data Sheet No. A5c.
- Maximum moment always occurs where the shear is zero. See Data Sheet No. B1g.
- 2" is the usual thickness. A 1" bed can be used in old construction for a very limited area. See Data Sheet No. F1f.
- 1" of leader would be sufficient. See Data Sheet No. F2a.
- 6" rise in 12" run is minimum. See Data Sheet F2d.
- This is a right-hand reverse bevel door. See Data Sheet No. F4a.

**I N D E X T O
 A D V E R T I S E R S**

Advertising Offices: 330 West 42nd Street, New York, N. Y. Philip H. Hubbard, Vice-President and Advertising Manager.
 District Offices: 433 Bulkley Building, Cleveland, R. M. Creaghead; 706 Straus Building, Chicago, G. A. Ahrens; 703 Market Street, San Francisco.

Aluminum Company of America	11
American Sheet & Tin Plate Company	3rd Cover
American Steel & Wire Company	2
American Telephone & Telegraph Company	8
Angel, H. Reeve, & Company, Inc.	37
Armstrong Cork Products Company, Floor Division	3
Bommer Spring Hinge Company	7
Briggs Manufacturing Company	33
Burnham Boiler Corporation	31
Cabot, Samuel, Inc.	31
Carew Manufacturing Company	36
Crane Company	4
Dietzgen, Eugene, Company	29
Dixon, Joseph, Crucible Company	25
Eberhard Faber Pencil Company	15
Elliott, B K., Company	40
Faber, A. W., Inc.	30
Field, Alfred, & Company, Inc.	37
General Electric Company	Back Cover
Hotel Cleveland	6
Hotel William Penn	36
Imperial Electric Company	7
Koh-I-Noor Pencil Company	36
Libbey-Owens-Ford Glass Company	20
Metal Lath Manufacturers Association	37
National Tube Company	27
Owens-Illinois Glass Company	17
Pecora Paint Company	7
Pittsburgh Plate Glass Company	9
Portland Cement Association	5
Republic Steel Corporation	2nd Cover
Robertson, H. H., Company	34
Sloane, W. & J., Selling Agents, Inc.	6
Staedtler, J. S., Inc.	37
Trane Company, The	41
Universal Atlas Cement Company	10
U. S. Steel Corporation Subsidiaries	2, 3, 10, 27
Vitrolite Division, Libbey-Owens-Ford Glass Company	19
Wilson Engineering Corporation	40
Wood Conversion Company	18
Youngstown Sheet & Tube Company	10

COMPLETE

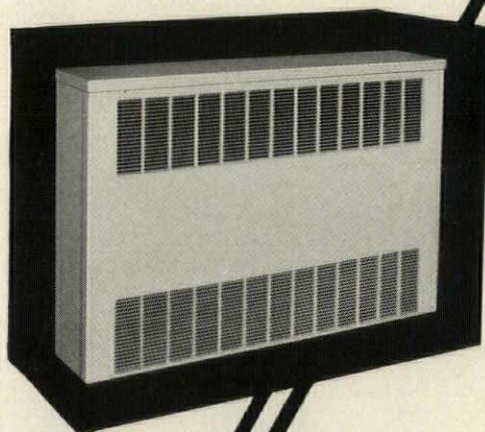
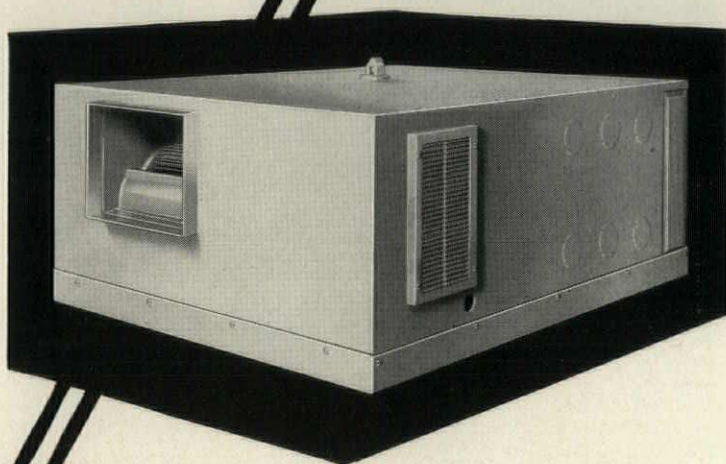
TRANE

HEATING AND AIR-CONDITIONING

for the home

**At Practically the Same Cost
as a Good Heating System**

NOW you can specify residential air conditioning with the knowledge that it costs but little if any more than just a good heating system. And your client gets the benefit of a complete winter conditioning system that filters, humidifies and circulates the air; yet has sufficient capacity to amply cool one or two rooms during the summer. Think of it! These air conditioning features that everyone wants in his home or building now available for every residence where you ordinarily install a steam or hot water system.



The Air-conditioner is ordinarily used to humidify the entire home during the winter and to heat one or two rooms. The balance of your rooms will be correctly heated with equipment that cuts fuel costs and gives maximum comfort, if you specify TRANE Convection Heaters in one of the various types available to fit with your architectural requirements. Complete detail data will be supplied to you if it is not already in your files.

And if you specify TRANE Vapor Heat as the basic system for supplying the heating medium to the air conditioner and the Convection Heaters you will be doubly sure of client satisfaction. Here is a TRANE product that has been giving excellent satisfaction for more than a score of years in every type of building from bungalows to skyscrapers and still retains its popularity when owners want efficient economical heat.

**TRANE
VAPOR
HEAT**



Send for this free booklet that explains in complete detail the various TRANE Systems and Combinations of Units for heating and air-conditioning residences and small buildings. You will be surprised at the economies that can be secured and how inexpensively you can give your clients air-conditioned buildings.

**The TRANE Company, Dept. 3b
La Crosse, Wisconsin**

Mail Us Full Details on TRANE

..... Air-conditioner Convection Heaters
..... Vapor Unit Heaters

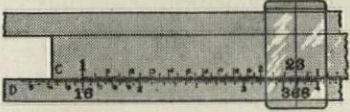
Firm Name

City State

WHO

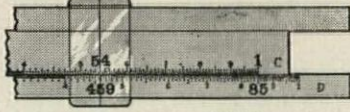
THE OLD OFFICE GAME OF KNOWS ?

PENCIL POINTS DATA SHEETS
MULTIPLICATION AND DIVISION
 Prepared by Don Graf, B.S., M.Arch. Sheet No. C3a



$1600 \times 23 = 368$

MULTIPLICATION
 In this problem the slide projects to the right, and the position of the decimal point in the result is found by taking one less than the sum of the whole digits in the two factors. Thus 1600 has 4 whole digits, 23 has 2 whole digits, so $(4+2)-1=5$, and there are 5 whole digits in the result.
 If one or both of the factors are large, it will be found that the slide will have to project to the left as in the example below.



$\frac{368}{23} = 16$

DIVISION
 Division is exactly the opposite of multiplication. The position of the decimal point in the result, when the slide projects to the right, is found by subtracting the number of whole digits in the divisor from the number of whole digits in the dividend and then adding one. Thus 368 has 3 whole digits, 23 has 2 whole digits, so $(3-2)+1=1$

$850 \times .054 = 45.9$

MULTIPLICATION
 When the slide projects to the left as in this example, the decimal point is found by adding the whole digits in both factors. Thus 850 has 3 whole digits, .054 has -1 whole digit, so the result will have $3+(-1)=2$ whole digits.

$\frac{45900}{3.4} = 8500$

DIVISION
 When the slide projects to the left in division, the number of whole digits in the result will be found to equal the number of whole digits in the dividend less the number of whole digits in the divisor. Thus 45900 has 5 whole digits, 3.4 has 1 whole digit, so the result will have $5-1=4$ whole digits.

NOTE

321.9876 has 3 whole digits	.3219 has 0 whole digits
32.1987 has 2 whole digits	.0321 has -1 whole digit
3.2198 has 1 whole digit	.0032 has -2 whole digits

TRY THESE ON YOUR LIBRARY

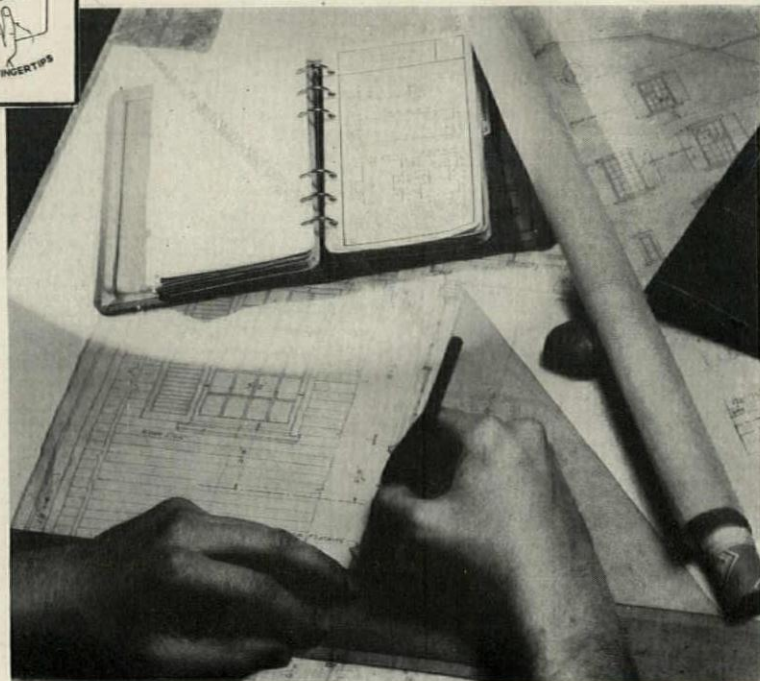
1. How do English and English Cross Bonds differ?
2. Is limestone safe to be used as a lintel?
3. What is the difference between ashlar and rubble?
4. What is the largest size of polished plate glass available?
5. How thick is a 1" piece of dressed softwood lumber?
6. How thick is 13/16" oak flooring?
7. What is *Chamaecyparis nootkatensis*?
8. Where does the maximum moment occur in a beam?
9. How thick should a concrete setting bed be for tile floors?
10. What cross section of roof leader would be required for 1000 sq. ft. of roof in Utah?
11. What is the minimum roof pitch for wood shingles?
12. If a door swings toward you and is hinged on the right, what is the "hand"?

See Answers on Page 40



It is fun to play "Ask Me Another" for amusement and recreation. It is not such good sport when you are trying to get out a set of drawings. Try the list of questions above. See how many you are sure of. Figure out how long it would take you to find the answers to the ones you do not know, by searching through the office literature.

The *Data Sheets* answer thousands of questions which constantly come up in the preparation of drawings and specifications. They are presented in convenient form for instant fingertip reference. They do not waste your time. Every fact is presented in telegraphic form. Over 7,000 architectural men are on record as being *Data Sheet* users.





AMERICAN Products are well made and up to highest quality standards — the kind that pleases architect, builder, sheet metal worker and property owner. Demand these sheets for all forms of sheet metal work, heating, ventilating and air-conditioning systems. Supplied in Black and Galvanized

Sheets, Special Sheets, Tin and Terne Plates for all purposes. KEYSTONE Copper Steel offers maximum rust-resistance—and USS STAINLESS Steel Sheets and Light Plates are specially suited to construction fields. AMERICAN products are sold by leading metal merchants. Write for our latest literature.

AMERICAN SHEET AND TIN PLATE COMPANY, Pittsburgh, Pa.

Steel Sheets are also manufactured in the South by Tennessee Coal, Iron & Railroad Co., Birmingham, Ala.



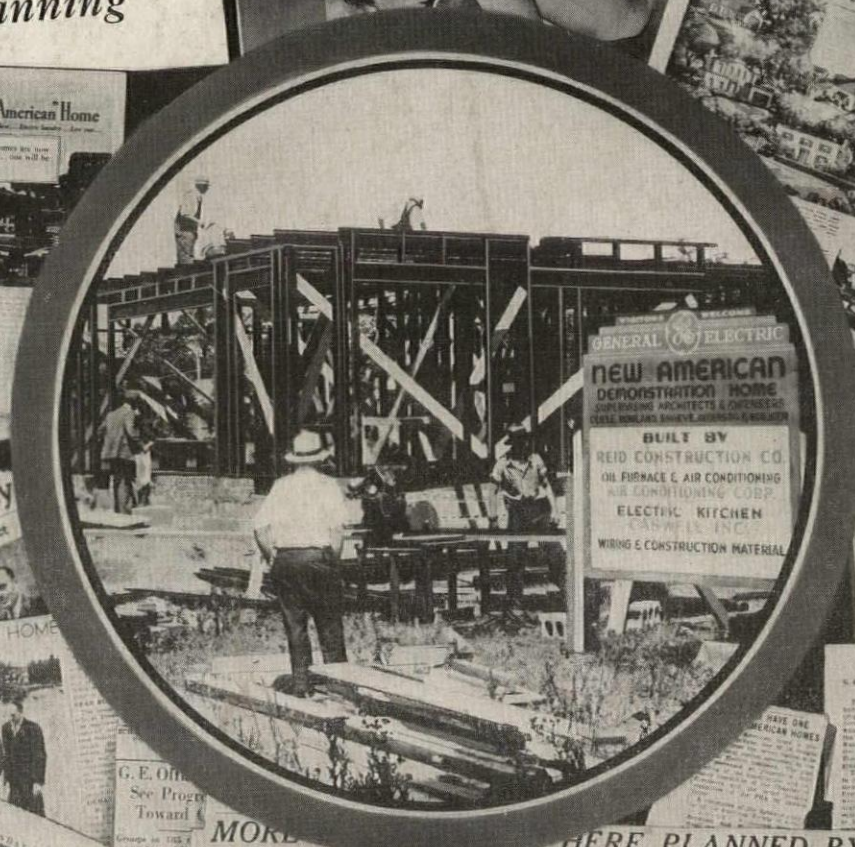
Sheets and Tin Plates produced on the Pacific Coast by the Columbia Steel Company, San Francisco, Calif.

Sales Offices in principal cities. Export Distributors for above Companies — UNITED STATES STEEL PRODUCTS COMPANY, Hudson Terminal Building, 30 Church Street, New York, N. Y.

United States Steel  *Corporation Subsidiaries*

What the "New American" Home means to the Architectural Profession

It gives new and greater emphasis to the importance of the architect in house planning



SEVERAL hundred G-E "New American" Demonstration Homes are now open for exhibition all over the country. These homes, built and financed by a local builder and supervised by a local architect, are an outgrowth of the G-E nation-wide architectural competition last spring. They represent one of the greatest organized boosts that building has had since the war.

But the really vital thing about these homes from an architect's standpoint is the way they emphasize the importance of the architect in planning a house.

They start people thinking about such things as the relation of one room to another; saving steps; proper placing of windows to give more wall area and better light; doing away with unnecessary hallways that waste space; the need for

outdoor living in good weather; making the garage part of the house; putting in lighting that is scientific rather than haphazard; dual use of space, such as combination living and dining room; providing a place for everything, including Junior's rubbers and bicycle.

They emphasize, too, that the really modern and economical servants are the electric ones that are planned for when the house is planned. For instance, a complete electric kitchen and laundry; air conditioning; automatic heat; electric clocks and radios in several rooms; a modern wiring system; modern lighting that is part of the room structure.

Watch for news of General Electric's 1936 plan for promoting the "New American" Home idea. It is even more far-reaching than the 1935 plan.

GENERAL  ELECTRIC