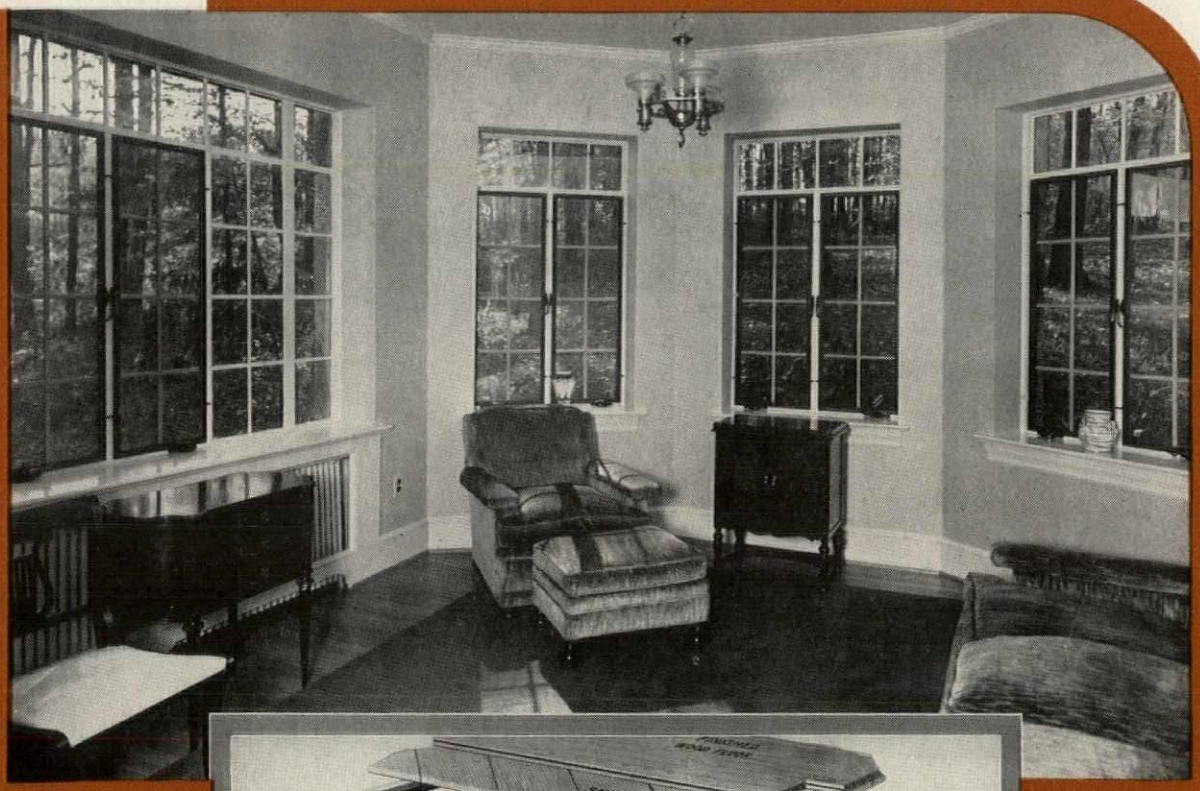
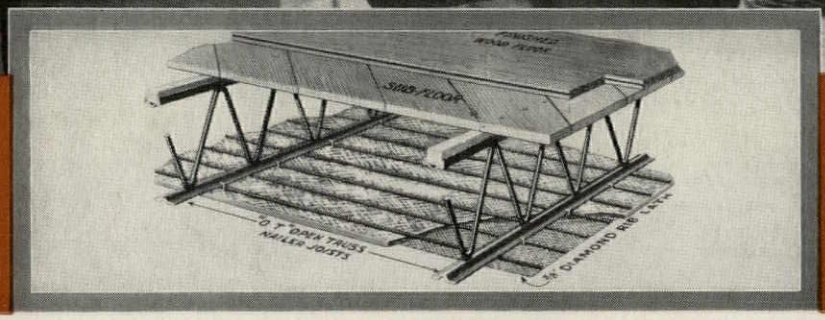
PENCIL POINTS

MARCH

1936

Under these Floors...





PROTECTION

WITH TRUSCON OPEN TRUSS NAILER JOISTS

"Not a squeak in a floor-load" is but one of the many advantages of Truscon Open Truss Nailer Joist construction. Combining exceptional strength and rigidity with fire-safety and freedom from damage by termites and other vermin, these accurately-made, shop-fabricated steel joists assure floors of longer life and greater value in any home, regardless of size.

Installation is simple and rapid. The sub-floor is nailed directly to the nailing-strip which is integral with the joist and made of specially-selected, cured and moisture-proofed lumber. Finish floor is then applied. For complete technical information, including loading tables, see Truscon's 80-page catalog in Sweet's Catalog File for Architects.

See Sweet's for
TRUSCON PRODUCTS
of all-steel
FOR THE HOME

Casement Windows
Screens
Casement Doors
Open Truss Joists
Metal Lath—All Types
Basement Windows
Utility Doors
Coal Chutes
Garage Doors
Lintels
Reinforcing Products
for Driveways
Numerous Other Products

TRUSCON STEEL COMPANY
YOUNGSTOWN, OHIO

Pencil Points, published monthly by Reinhold Publishing Corporation at 258 Atlantic St., Stamford, Conn. Publication office, Stamford, Conn. Editorial and Advertising Offices, 330 West 42nd Street, New York, N. Y. Yearly subscription $3.00, single copies 35 cents. Entered as second class matter, March 10, 1930, at the Post Office, Stamford, Conn., under the Act of March 3, 1879. Volume XVII, No. 3. Dated March, 1936

PENCIL POINTS

A Journal for the Drafting Room

MARCH, 1936 **VOLUME XVII, NUMBER 3**

RUSSELL F. WHITEHEAD, *Editor* KENNETH REID, *Managing Editor*

RALPH T. WALKER, *Editorial Adviser*

Cover Design "Cité de la Muette, Drancy" *by Samuel Chamberlain*

READERS' COMMENT
for future reference

ARTICLES

PLATES

COMPARATIVE DETAILS—Group 26

DATA SHEETS—*Prepared by Don Graf*

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.

Pencil Points is being indexed regularly in The Art Index.

THE MAGAZINE OF ARCHITECTURE AND DRAFTSMANSHIP

The Beauty of Your Design Endures in Floors of Fine TERRAZZO

Illustrating the adaptability of fine terrazzo to residential construction this library floor presents a permanently pleasing rug design in complete harmony with the room.

To BE worthy of a place in fine residences, a flooring material must permanently preserve the beauty of your design. For years after it is executed in the pattern and colors you conceive, it must present the same pleasing appearance that you planned in designing the floor. Only a durable floor material can show, year in and year out, the colorful artistry of the original design.

Floors of terrazzo are durable floors. Permanently satisfactory, they win the same praise through the years that was theirs at the time of installation.

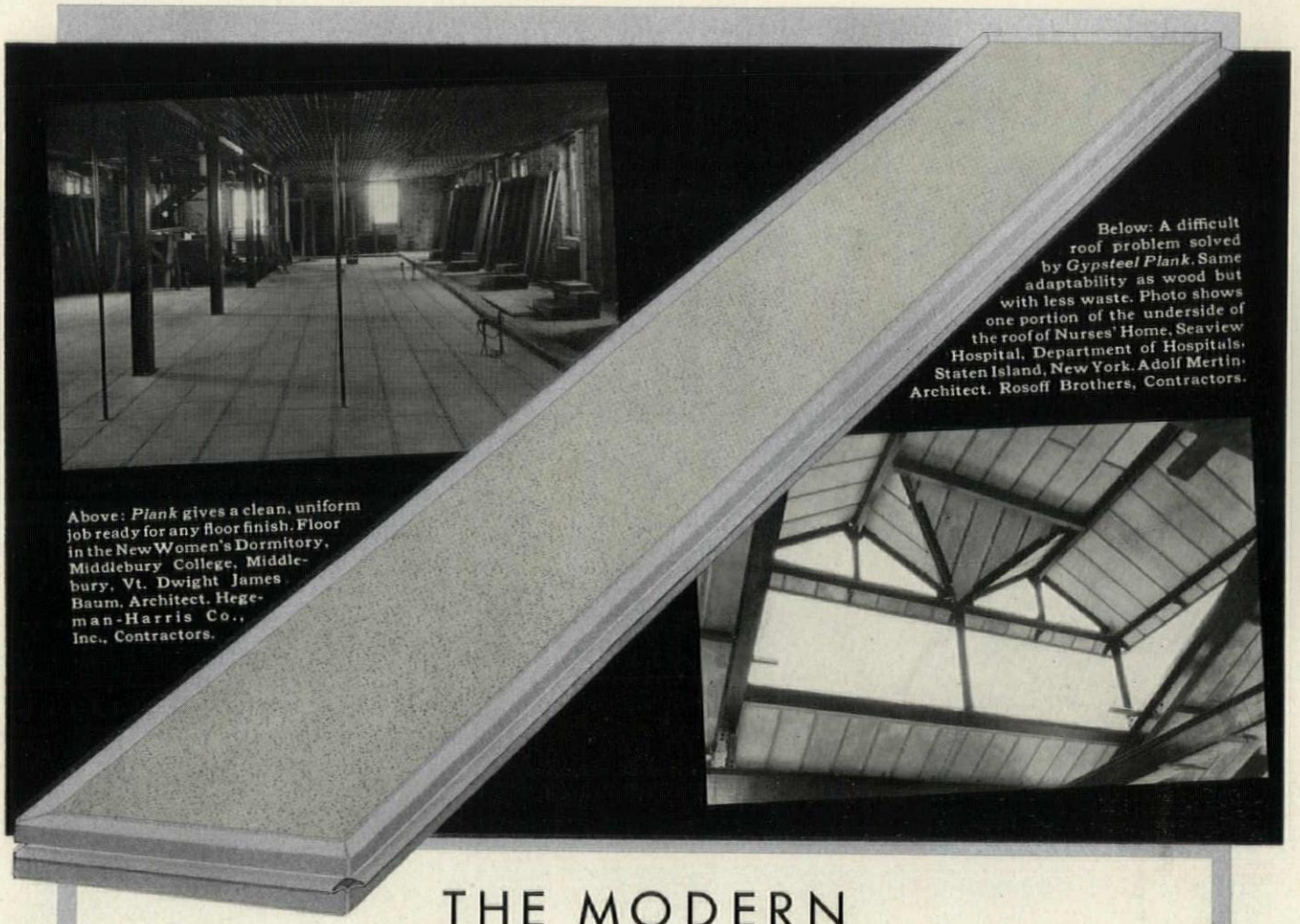
Adaptable to the pattern you conceive and the color scheme you desire, easily cleaned and maintained at a minimum, fine terrazzo floors have a definite place in the residential field. Detailed information and specifications will be furnished promptly at your request.

THE NATIONAL TERRAZZO AND MOSAIC ASSOCIATION

Secretary's Office: 524 Brook St., Louisville, Ky.

104

FUTURE ADVERTISEMENTS WILL PRESENT FURTHER ILLUSTRATIVE EXAMPLES OF TERRAZZO INSTALLATIONS



Above: *Plank* gives a clean, uniform job ready for any floor finish. Floor in the New Women's Dormitory, Middlebury College, Middlebury, Vt. Dwight James Baum, Architect. Hegeman-Harris Co., Inc., Contractors.

Below: A difficult roof problem solved by *Gypsteel Plank*. Same adaptability as wood but with less waste. Photo shows one portion of the underside of the roof of Nurses' Home, Seaview Hospital, Department of Hospitals, Staten Island, New York. Adolf Mertin, Architect. Rosoff Brothers, Contractors.

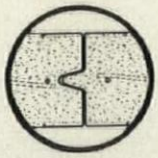
THE MODERN FIRE-SAFE STRUCTURAL UNIT

for floors and roof-decks

For many years architects have felt the need of a structural unit that would enable them to erect low-cost fire-safe floors and roof-decks with the ease and speed that marks the construction of wood floors and roof-decks.

*Gypsteel Plank** fills this need. It handles like wood—cut, sawed, nailed or bored—is fire-safe, durable, low in cost . . . made-to-order for fast construction . . . offers all the advantages of poured mixtures with none of their inconveniences in installation.

Gypsteel Plank is the *modern* structural unit for fire-safe floors and roof-decks. May we send you our illustrated Bulletin showing how and where you can use *Plank* to get a strong, uniform job at lower cost?



Steel-bound edges, tongued and grooved, mesh together to form 2" I-Beam

GYPSTEEL PLANK *is a complete structural unit shaped like lumber, light in weight, made of extra dense,* nailable *gypsum with a steel wire mesh reinforcement through the center. Sides and ends are bound with galvanized copper-bearing steel, tongued and grooved. Plank is vermin-proof, termite-proof, will not shrink or warp.*

** The term Plank as applied to cementitious building products is a registered trade-mark of The American Cyanamid & Chemical Corporation.*

GYPSTEEL PLANK

AMERICAN CYANAMID & CHEMICAL CORPORATION
Structural Gypsum Division
36 Rockefeller Plaza, New York, N. Y.

Gentlemen: Please send me, without obligation, your GYPSTEEL PLANK Bulletin.

Name..... Title.....
Firm.....
Address.....
City..... State.....

P.P. 3-36

Dennison's *chooses*

Sealex Linoleum *for its new 5th Ave. Shop*

Fifth Avenue sets the style for modern store interiors. So when Dennison Mfg. Co. opened its new retail outlet on that famous thoroughfare, Sealex Veltone Linoleum was the logical choice for a distinguished *modern* floor.

But Sealex was not selected on its smartness alone. Smart stores are busy stores—and a modern, resilient Sealex Floor is tough and long-wearing—withstands the heaviest foot traffic. Furthermore, it is easy to keep clean and inexpensive to maintain. It never needs refinishing!

Architects can develop any desired decorative scheme from the wide range of colors in Sealex Veltone. In addition, Sealex Linoleum comes in 18 plain colors, and a full line of Jaspés. These can be combined in designed-to-order effects at little extra cost.

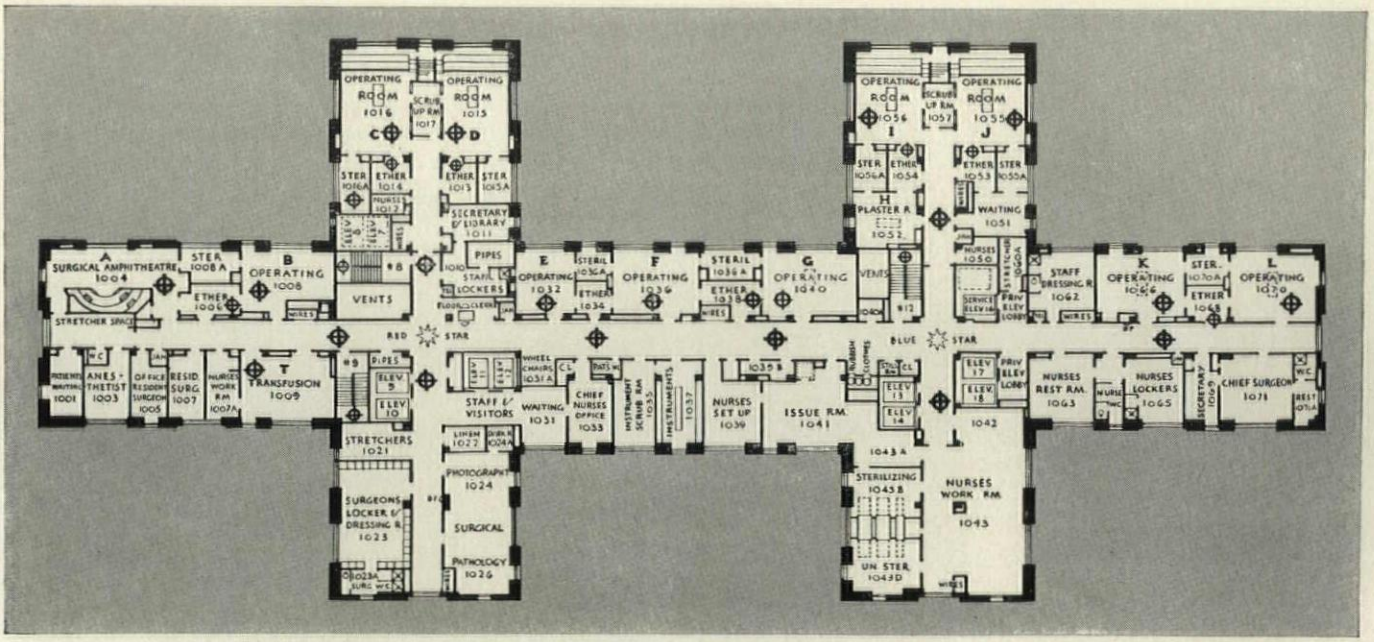
Sealex Linoleum will be installed exactly according to your specifications, by authorized contractors of Bonded Floors. These installations carry a guaranty bond covering the full value of materials and workmanship. Write for our complete catalogue, or for a free consultation on any specific floor-covering problem.

CONGOLEUM-NAIRN INC., KEARNY, NEW JERSEY

Richly veined Sealex Veltone Linoleum in Dennison's Fifth Avenue store provides a sweep of blended color from wall to wall, "styling up" the whole interior.

SEALEX *Linoleum Floors and Wall-Covering*

TRADEMARK REGISTERED



In a hospital, for instance, where would you specify emergency lighting protection?

Above is shown the floor-plan of a large modern hospital. Light-symbols indicate the operating rooms and other vitally important spots where there *dare* be no failure of the lights.

There is only one way to make this certain, in a hospital or in any other building. Interruptions in the normal electric current supply occur with sufficient frequency to make dependable emergency lighting protection imperative. The utility companies take every possible precaution to prevent interruptions in the service, but they cannot control the effects of street accidents, fires, storms, or blown fuses and short circuits within a building itself.

An Exide Emergency Lighting Battery System operates instantly and automatically upon any interruption in the normal electric current supply, providing abundant light for a single room or an entire building. There is an Exide System for as little as $150 that operates for less than one cent a day. Larger, 115-volt systems are proportionately economical.

No building can be considered modern if it is subject to the danger of sudden darkness. Why not get full information on Exide Emergency Lighting? Mail the coupon for complete details.

Exide Keepalite
EMERGENCY LIGHTING SYSTEMS
$150 AND UP

THE ELECTRIC STORAGE BATTERY CO.
Philadelphia
The World's Largest Manufacturers of Storage Batteries for Every Purpose
Exide Batteries of Canada, Limited, Toronto

Refer to Sweet's Catalogue, Section 27—Page 11, 1936 Edition

WHAT IS EXIDE EMERGENCY LIGHTING?

An Exide Keepalite Emergency Lighting Battery System automatically and instantly supplies abundant light, to a single room or an entire building, *in case the normal electric current supply fails.* It is fully automatic and absolutely dependable.

MAIL THIS COUPON

Send me, without obligation, the facts that an architect ought to have on emergency lighting protection.

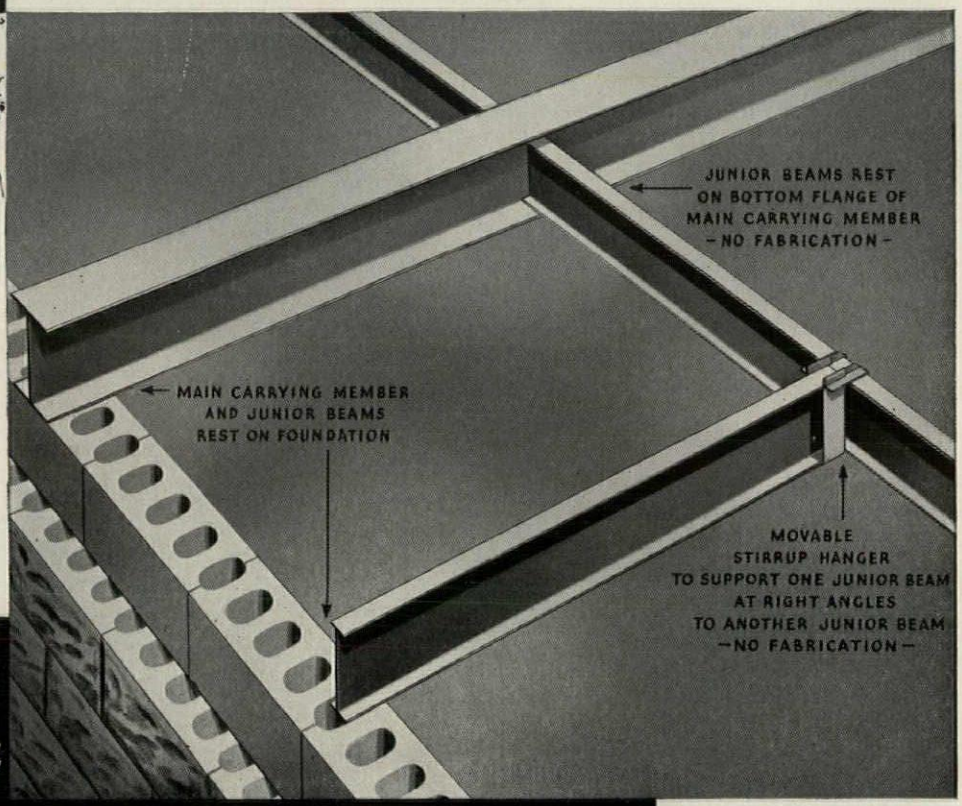
Name.....

Address.....

.....

J&L JUNIOR BEAM

STEEL FLOOR CONSTRUCTION FOR RESIDENCES



without TECHNICAL RESTRICTIONS

The J & L Steel and Concrete Floor System offers the advantages of steel construction in the first floor of any residence or other light occupancy building without imposing any restriction on either architect or builder. No specialized experience or special equipment is necessary. This system is also applicable to upper floors when solid masonry walls or steel framing are used.

There are many important advantages in this type of floor construction that have gained wide acceptance for it among architects and builders, and made it popular among owners. It is modern. It is completely and permanently termite-proof, shrink-proof, rigid and fire-resistant. It costs no more than other types of floor construction.

Its simplicity and ease of installation mean added structural values. The concrete slab engages the top flanges of the beams, anchors the floor rigidly to the foundation and provides a continuous firestop.

You will want to specify J & L Junior Beam Steel and Concrete Floors. They mean added values to your client and profits to you.

For further information on J & L Junior Beam Floors, send for descriptive bulletin.

For Complete Details on Junior Beam Floors for Residences and other Light Occupancy Buildings, See Sweet's Architectural Catalog (1936 Edition) Section 5, Catalog No. 6.

OTHER J & L CONSTRUCTION PRODUCTS

Steel Pipe . . . Bars for Concrete Reinforcement . . . Assembled Road Bar Mats . . . Standard Structural Shapes . . . Light Weight Channels . . . Tie Wire . . . Nails . . . Steel Piling . . . Fabricated Structural Work.

JONES & LAUGHLIN STEEL CORPORATION

AMERICAN IRON AND STEEL WORKS

JONES & LAUGHLIN BUILDING, PITTSBURGH, PENNSYLVANIA

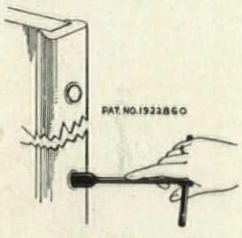
Sales Offices: Atlanta Boston Buffalo Chicago Cincinnati Cleveland Dallas Denver Detroit Erie Los Angeles Memphis Milwaukee Minneapolis New Orleans New York Philadelphia Pittsburgh St. Louis San Francisco

Warehouses: CHICAGO CINCINNATI DETROIT MEMPHIS NEW ORLEANS NEW YORK (Long Island City)* PITTSBURGH

* Operated by National Bridge Works Division of Jones & Laughlin Steel Service, Inc.

Canadian Representatives: JONES & LAUGHLIN STEEL PRODUCTS COMPANY, Pittsburgh, Pa., U. S. A., and Toronto, Ont., Canada

J&L STEEL



So Easy!

Von Duprin Compensating Astragal Devices completely solve the problem of warping . . . shrinking . . . swelling doors. In a few seconds, anyone who can use a wrench adjusts the gap between the astragals, and sticking, leaking doors are whipped.

STOP IT! PROVIDE SAFE EXIT WITH

Von Duprin

Self-Releasing Fire and Panic Exit Latches

It is such a simple matter to make the doors of schools completely safe against the major cause of death in school fires, the piling up of children at the exit doors.

Not only is it possible to do it but, waiving all the rights of school children to be safe, it is *economical* to do it. For Von Duprins are not only sure; they are so well built, their drop-forged parts are so strong, that they outlast the building with little or no maintenance cost during their entire life. . . . *Write us today for data sheets and complete information.*

Sweet's Index 18/42

VONNEGUT HARDWARE CO. INDIANAPOLIS, IND. • Von Duprin Latches are listed as standard by Underwriters Laboratories, Inc.

THE JONESES ARE *House Conscious* AGAIN...

And They Have Modern Ideas About HEATING

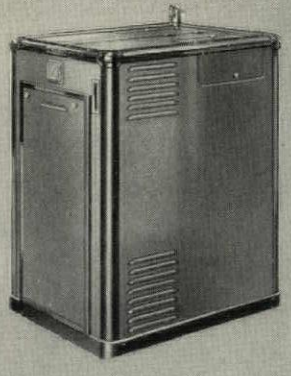
● The Joneses have learned a lot about heating they didn't know before. Now that they're "house conscious" again, ready to go ahead, they want 1936 heating standards.

Crane Heating Systems meet these demands. There are Crane boilers for every fuel, designed to burn it with utmost economy. Crane's four-score years in the heating business assured this result. Gas and oil-fired models, of course, are fully automatic. And the long firing period of Crane solid fuel boilers is extraordinary. Every type of heat is supplied—vacuum, vapor, hot water, steam.

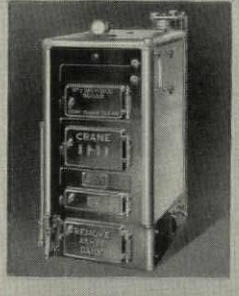
Crane Directed Radiation and Crane Scientific Humidification complete these perfected heating systems. For modernization or new construction in 1936, you are on solid ground, abreast of everything new in heating, if you specify Crane Systems, because you are giving homeowners what they want and what they ought to have.

The Crane Finance Plan is available for modernizing. No money down. Three years to pay. Government-approved rates.

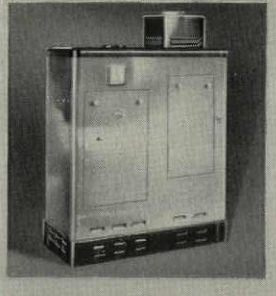
The Crane line of heating equipment includes round and square boilers for coal, coke, oil and gas firing, and for steam, vapor, vacuum and hot water heat. Also Directed Radiation, Concealed Radiation and Humidifying Radiators.



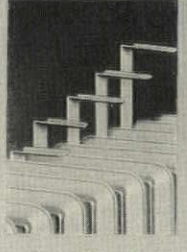
Crane D 1 Oil-Burning Boiler



Crane Coal-Fired Sectional Boiler



Basmor Gas-Fired Boiler



Crane Directed Radiation

Crane Humidifying Radiator

CRANE

CRANE CO., GENERAL OFFICES: 836 SO. MICHIGAN AVE., CHICAGO, ILL.
NEW YORK: 23 W. 44TH STREET
Branches and Sales Offices in One Hundred and Sixty Cities
VALVES, FITTINGS, FABRICATED PIPE, PUMPS, HEATING AND PLUMBING MATERIAL

There can be no stronger argument for ample fenestration—no stronger reason for stressing quality in glass—than the fact that the average person spends at least half a lifetime between four walls.

LIBBEY·OWENS·FORD

Quality Glass

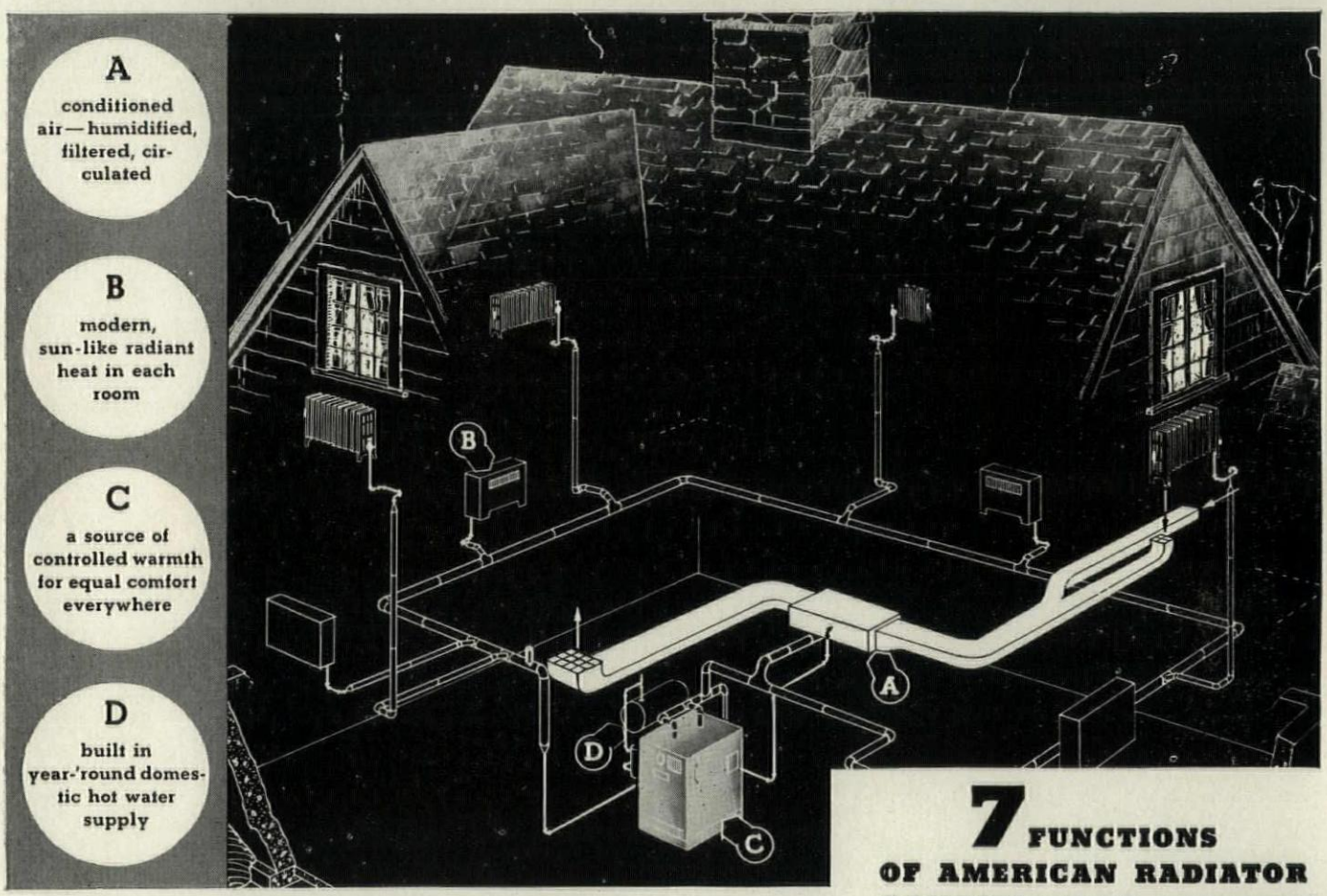
Libbey•Owens•Ford Glass Company, Toledo, Ohio manufactures and distributes a complete line of flat glass, including Flat Drawn Window Glass . . . Polished Plate Glass, both plain and colored . . . Heavy Sheet Glass . . . Greenhouse Glass . . . Safety Glass . . . Tuf-Flex tempered plate glass . . . Vitrolite opaque structural glass . . . Aklo heat absorbing glass . . . and the Figured and Wire Glass manufactured by the Blue Ridge Glass Corporation of Kingsport, Tennessee.

The World's Greatest Heating and Ventilating Organization Announces the

NEW

AMERICAN RADIATOR CONDITIONING SYSTEMS

for Every Home to be Built this Year



HERE is a typical American Radiator Conditioning System. It is simple to install. It requires a minimum of duct work. Heating and conditioning operate independently.

The Conditioning Unit suspended below the ceiling of the basement cleans, humidifies and circulates the air throughout the house. A radiator system—steam, hot water or vapor—provides heat. Here, too, there has been remarkable advance. New boilers, new radiators, new controls, new valves, new materials . . . produce a new kind of radiator heating.

This year *really* modern homes will include American Radiator Conditioning Systems. A national magazine, newspaper and radio promotion campaign will make people demand it in the new homes they build, or in the old homes they remodel this year.

Send for literature and specifications . . . as well as a merchandising and promotion plan . . . Write today.

7 FUNCTIONS OF AMERICAN RADIATOR CONDITIONING SYSTEMS*

1. **HUMIDIFICATION** . . . Restores proper moisture content to indoor atmosphere.
2. **AIR CIRCULATION** . . . Maintains stimulating and refreshing air motion.
3. **AIR CLEANING** . . . Filters dust, soot, pollen, etc., out of air in house.
4. **VENTILATION** . . . Brings in and distributes fresh outdoor air without drafts.
5. **RADIATOR HEATING** . . . An independent heat source in each room.
6. **CONTROLLED HEAT DISTRIBUTION** . . . Assures warmth in every part of the house, regardless of wind or weather.
7. **YEAR-'ROUND DOMESTIC HOT WATER**

* Mechanical summer cooling and dehumidification may be added if desired

AMERICAN RADIATOR COMPANY

40 West 40th Street, New York, N. Y.

Division of AMERICAN RADIATOR & STANDARD SANITARY CORPORATION

WHAT A DIFFERENCE A GOOD "Face-Lifting" MAKES!

Before modernizing. An old undesirable Sixth Avenue tenement.

After modernizing. Fine apartments and stores that rented rapidly. Architect for Studio Apartment Building, 1393 Sixth Avenue, New York City—William L. Rouse. General Contractor and agent, Klein & Jackson Construction Co., Inc. Plastering Contractor, Morell Plastering Co., Inc., all of New York City. Cream colored exterior stucco furnished by Artstone Rocor Corporation of Brooklyn.

● From an old Sixth Avenue tenement to fine, rentable, studio apartments and stores! That's what happened in this splendid modernization job.

The interior was completely modernized. The interesting facade was worked out in black glass, stainless steel, and Atlas White portland cement.

The beauty of *white* portland cement stucco is that you can get just the right color to fit the architectural design—from pure white, through pastel tints of cream, salmon, tan, pink—to rich warm yellows, browns, greens, and other shades.

Atlas White is economical to apply on new buildings as well as old. Permanent. Firesafe. Weather-proof. Requires little or no upkeep.

For the full story write Universal Atlas Cement Co. (United States Steel Corp. Subsidiary). 208 So. LaSalle Street, Chicago.

A FACTORY PREPARED STUCCO IS PREFERABLE

STUCCO *made with* ATLAS WHITE PORTLAND CEMENT

US STEEL

HERE, THERE, THIS & THAT

Our Competition

As we go to press, the closing date for the receipt of drawings in the 1936 PENCIL POINTS Architectural Competition, sponsored by the Portland Cement Association, draws nigh. Already a few of the early birds, of which there are always some, even among architectural men, have submitted their designs. The big volume, however, if our previous experience is to be trusted, will come in right at the last minute, true to the tradition of winding up such affairs in a big charrette. We are all prepared to receive and record the drawings, then to check them for conformity with the mandatory requirements of the program, and to escort them to Hot Springs, Virginia, for the Judgment. The members of the distinguished Jury have been getting rested up for the big job that lies ahead of them and are all ready to go to work on the day appointed. The Professional Advisers will, as usual, be on hand throughout to guard the interests of each and every competitor and to see that every design gets full consideration. The April issue will carry full news of the results. Good luck to all of you, and may the best men win!

Architectural League Show

The press view of the Fiftieth Annual Exhibition of the Architectural League of New York, with which was combined the show of the American Institute of Decorators, was held on Monday, February 17, the day before the public opening. We attended, and had a swell time lasting far into the night (not all our time was spent looking at the exhibits, we confess). We saw a lot of interesting things (many of which we had seen before) and met a lot of our friends in a mood of relaxation, so it was a pleasant occasion.

Of particular interest at this time was the group of drawings and studies for the Paris, 1937, Exposition, which we have reproduced in this issue on pages 123 to 127. They had never been publicly exhibited before, either in this country or in France, and so will undoubtedly receive much attention by the New York architects who are working on a little show of their own to be held in 1939.

Government Housing projects and other government buildings were, of course, plentiful. Private work was regrettably not as plentiful as in other years we can remember. The model for the Ford Motor Company's building at the California-Pacific Exposition in San Diego, designed by Walter Dorwin Teague, will probably receive much examination by architects and lay visitors because of its unusualness.

Other unusual items included photographs and models of the Rio de Janeiro Airport; exterior and bird's-eye views of the Miami Airport; the model of a Cosmosarium (a new type of Planetarium) which will be erected at the New York 1939 Fair; an exceptionally fine collection of etched and carved glass; and a group of lighting fixtures suitable for all types of interiors. The Decorators presented two rooms—one representing the typical "drawing room" of 1886 and the other the contemporary equivalent.

The show closes on Saturday, February 29. We hope you saw it.

Architectural Census

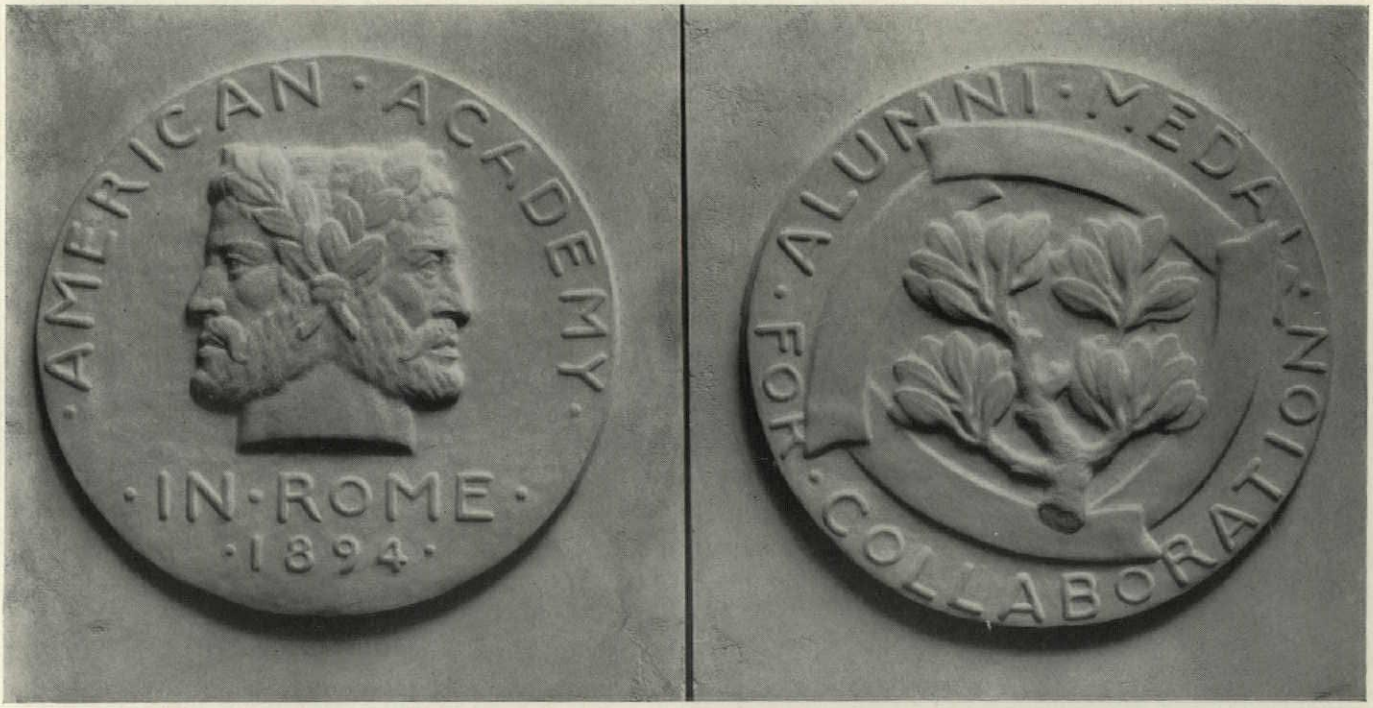
In January, PENCIL POINTS bemoaned the omission of architects from the Census of Construction now being taken by the Department of Commerce under the direction of Fred A. Gosnell, Chief Statistician. We have since been corrected by Mr. Gosnell, who assures us that the government is indeed interested in the profession and that it proposes to gather just as many statistics about architectural men as it can get its hands on. The information desired from all architects concerns receipts for services (if any) in 1935, paid employees and payrolls, operating expenses, the number of active practitioners and firm members, and other supplemental facts. Perhaps the results, when published, will give us all a clearer picture of the extent and importance of the profession. We could hope they will help us to peer into the future and discover what changes in distribution are going to take place, whether the trend will be for architects to leave the big cities and go to the smaller centers, how many men will go into other activities, how many men will be coming up from the schools.

A.I.S.C. Bridge Design Competition Jury

The Jury for the eighth student bridge design competition held by the American Institute of Steel Construction, announced in last month's issue, has been selected as follows:

Archibald Manning Brown, President of the Architectural League of New York; Henry H. Saylor, Editor of *Architecture;* Theodore E. Blake, Architect; Arthur G. Hayden, Designing Engineer of the Westchester County Park Commission, White Plains, N. Y.; and H. H. Allen, Vice-President of the J. E. Greiner Company, Consulting Engineers, of Baltimore.

The preliminary Judgment will be held April 15 and the finals will be judged on May 13, 1936.



Alumni Collaborative Medal of the American Academy in Rome. *Gaetano Cecere, Sculptor*

American Academy in Rome Collaborative Prizes

The Alumni Association of the American Academy in Rome has announced the winners of prizes and medals in the annual collaborative competition for students of architecture, landscape architecture, painting, and sculpture. The First prize of $300 was awarded to a team from The College of Architecture, Cornell University, of which the members were B. J. Rabe, architect; A. Briggs, painter; J. C. Lawrence, sculptor; and R. S. Kitchen, landscape architect. The Second prize of $150 was won by a University of Pennsylvania team in collaboration with the Pennsylvania Academy of Fine Arts—W. S. Allen, architect; Mary Louise Lawsen, painter; Katherine Blackman, sculptor; Katrina Haines, landscape architect. The Third prize of $75 went to a Yale University team, A. N. Daniel, architect; M. Lauretano, painter; G. Kratina, sculptor.

Medals were also awarded to teams from several schools, and criticisms of each design were recorded at the judgment to be sent to the competitors.

The problem was "A Community Recreation Center for a Town of about Twelve Thousand People." The program was issued on November 18th, 1935, and the competition closed on January 17th. Fifty teams participated, representing sixteen of the leading art schools of the country.

The jury of award was composed as follows: *Architects,* Edgar I. Williams and William Adams Delano; *Landscape Architect,* Michael Rapuano; *Painters,* Francis Scott Bradford and Barry Faulkner; *Sculptors,* Sidney B. Waugh and Joseph Kiselewski.

The prizes, which are known as the Venus Pencil Awards, are donated annually by the American Pencil Company.

Cash and Vacations Offered for Oils and Water Colors

The Old White Art Colony at White Sulphur Springs, West Virginia, announces a contest open to any professional or student of art or architecture in the United States or in Canada for the execution in Oil or Water Color of a striking picture of The Greenbrier Hotel and its surrounding estate. Prizes are offered as follows:

First Prize, $200 in cash and two weeks vacation at the Old White Art Colony in June or July;

Second Prize, $50 in cash and one week vacation as above;

Third Prize, $25 in cash and one week vacation as above.

Full particulars may be obtained from Contest Director R. B. Parker, The Greenbrier, White Sulphur Springs, W. Va.

We Bow in Apology

We are glad to call attention to an omission in credit to the authors of the general layout and detailed planning of the designs for the Texas Centennial Exposition presented in PENCIL POINTS for February, 1936. We are informed by the American Society of Landscape Architects that the general layout was the work of a joint Technical Committee made up of George L. Dahl, Architect, Messrs. Hare and Hare, Landscape Architects, and Messrs. Myers, Noyes, and Forest, Engineers. All matters affecting the general layout were therefore collaborative. The detailed planning of individual open areas was the peculiar responsibility of Messrs. Hare and Hare. We apologize for the omission which was due to incomplete information furnished us by the Exposition authorities.

Reader's Digest Contest Open to Architects

In an effort to unearth new writing talent and subject matter in the non-fiction field, the March issue of the Reader's Digest announces five prizes of $1000 each for unpublished, non-fiction articles by persons who never have contributed to national periodicals. In addition to these prizes, $500 will be paid for each manuscript judged acceptable for publication.

"There are people in all walks of life," according to the announcement, "who, thanks to unusual experience, observation or reflection, might well write magazine articles of lasting interest and significance, but for lack of encouragement have never done so. The architectural profession is cited by the Digest as being a particularly promising field for new writing talent.

"An illuminating experience, a special knowledge of some phase of American life, or an unusual opportunity to ob-

(Continued on page 18)

First Prize Poster Design by Eugene Zion of Brooklyn, New York, in competition sponsored by the Institute of Foreign Travel. He gets $500 and a free trip to Europe

"I suffered from Scratchitus for years–

How I got cured for 10c"

ELMER ZILCH*

tells all in a confession interview about troubles with gritty pencils.

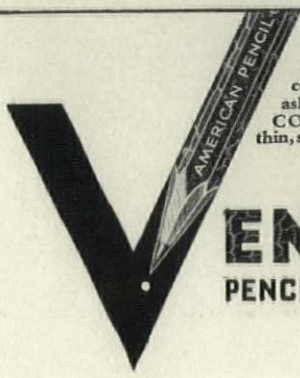
"IT used to come on every morning—that sudden feeling that no one could read my writing. When I got to the office, I'd have a shrinking sensation. I could hardly get through the day. Work was a bore.

"I was all right before I got to the office, but after a few minutes I became so annoyed with gritty pencils that I'd get jittery. I imagined that people pointed at me, muttering "Scratchitus". I developed an inferiority complex which handicapped me commercially and socially. I was desperate.

"Then, like a miracle, Venus Pencils made me a changed man. Now everybody can read my writing. In fact, writing with a Venus Pencil is my greatest thrill in life.

"Now when I leave the office! Ah, life just begins with me—I leave as fresh as a daisy. Everybody wonders what has come over me. And I tell them how Venus Pencils have changed my life."

** Not one cent was paid for this voluntary testimonial from Mr. Elmer Zilch, editor and bon vivant, member of many exclusive night clubs. Thanks Mr. Zilch—we hope you get as much of a kick out of this as we do.*



for the best in colored pencils ask for VENUS COLORING—thin, strong, smooth.

VENUS
PENCILS 10¢

• *This advertisement appears in Collier's and Time.*

In this advertisement to the general public, we stress the smoothness of Venus Pencils.

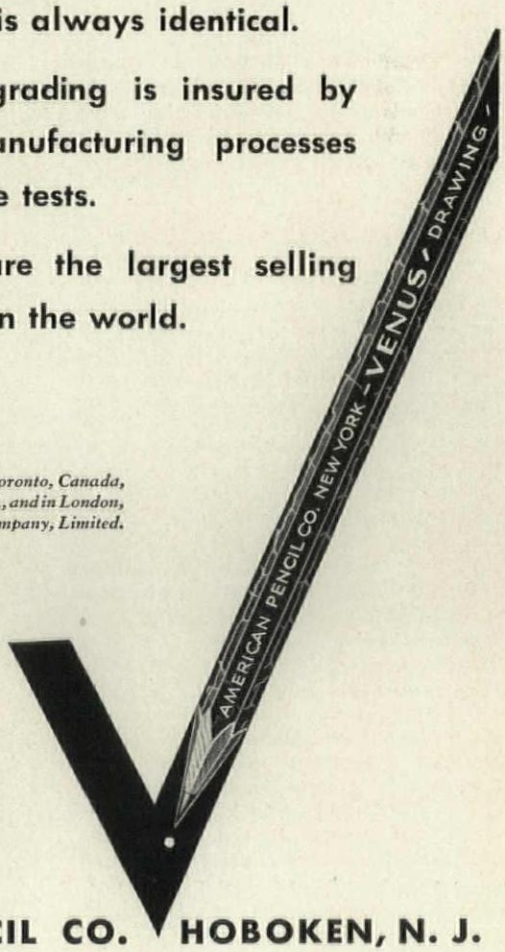
We realize, of course, that overshadowing it in importance to architects and engineers is another Venus superiority: uniform grading.

Particular men have come to place complete reliance in the precision of Venus grading. Every pencil in each of its 17 shades of black is always identical.

This precision grading is insured by costly extra manufacturing processes and by elaborate tests.

Venus Pencils are the largest selling Quality Pencils in the world.

Venus Pencils are also made in Toronto, Canada, by the Venus Pencil Company, Ltd., and in London, England, by the Venus Pencil Company, Limited.



AMERICAN PENCIL CO. HOBOKEN, N. J.

Two views in the new lobby of the Pittsburgh Plate Glass Company general offices in Pittsburgh, designed by Albert W. Varasse. Glass mural designed by Kindred McLeary

Design for Evenings

This is the season for planning
The homes that will never be built,
White houses on hills with gadgets and grills
And rumpus rooms silvered and gilt.

Heaven had never such mansions
As amateurs nightly design—
"Colonial" homes with turrets and domes
Suggesting the Nile and the Rhine.

Easy it looks to the tyro
Who knows about faucets and fans.
I've tried it and know. And next time I'll go
To men who know how to draw plans.

BRONK SEVILLE

M.I.T. Special Student Scholarship Competition

As in previous years, the Department of Architecture at M.I.T. offers two scholarships of $500 each for special students in the fourth or fifth year of the course. They will be awarded as the result of a competition open to American citizens of good character, between 21 and 28 years of age with at least three years of office experience. Apply to Dean William Emerson, 491 Boylston St., Boston, Mass.

(Continued on page 36)

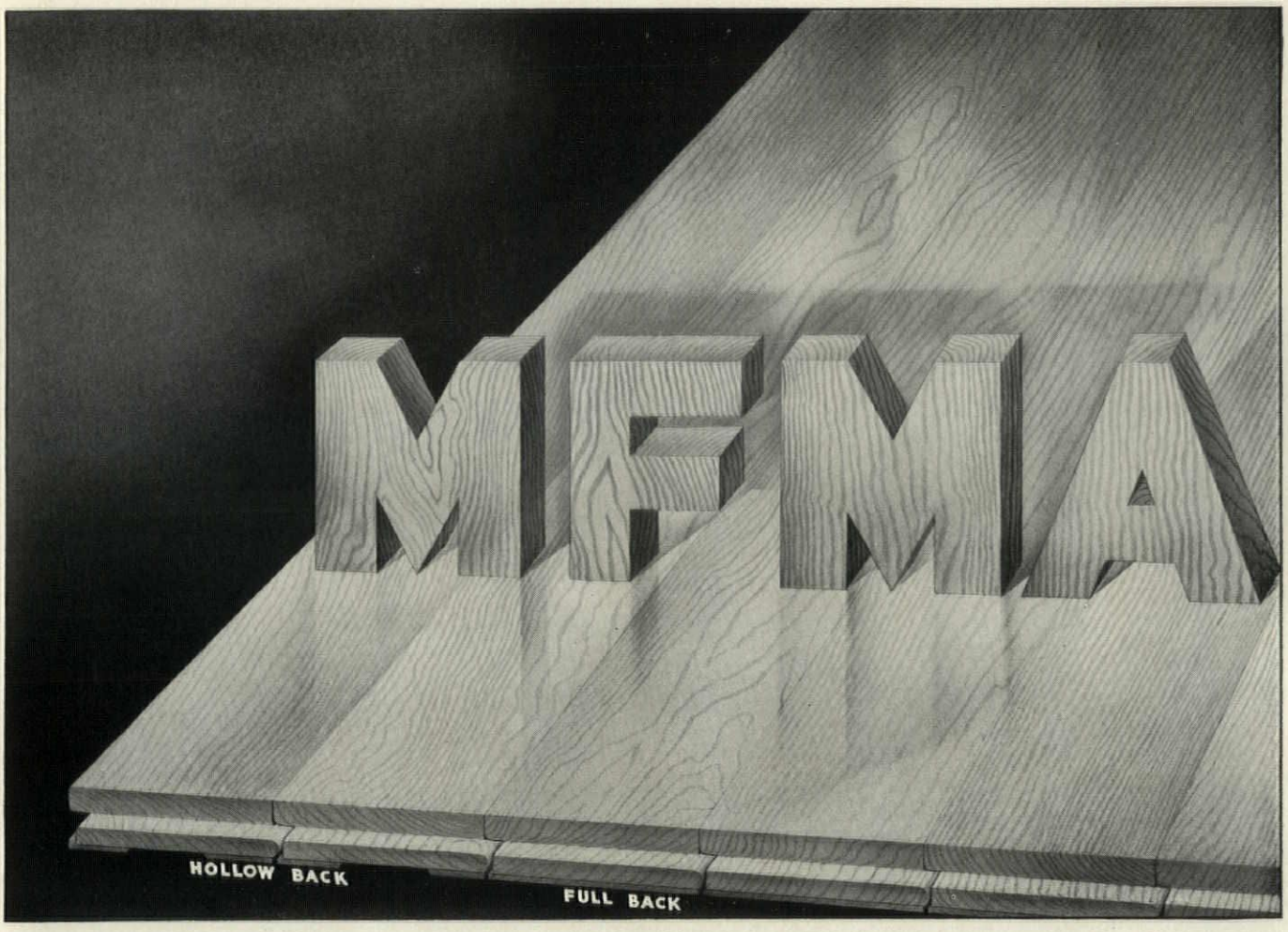
(Continued from page 16)

serve human nature may be had by individuals in any occupational field, ranging from architects, teachers, housewives or chemists, to reporters, nurses, clergymen, clerks or engineers." In order that such new and unexploited talent may be brought to light, the only persons not eligible for competition are those who have already contributed to a national magazine of the "general interest" class. Full details of the competition are given in the March issue of Reader's Digest, or will be mailed upon request by addressing the editors at Pleasantville, N. Y.

A Small Concrete House

On pages 157 to 162 of this issue will be found some of the working drawings for a small Firesafe house, designed by Weiss, Dreyfous & Seiferth of New Orleans to be erected in that city by a local contractor for the Lone Star Cement Corporation, which was the client. The purpose of the house is to show that an individually designed house can be built with fireproof materials throughout at a moderate price comparable to that of similar houses of brick veneer or frame and stucco. Heretofore, low cost homes of solid concrete had to be built in quantities and of identical design in order to keep the costs low. This Lone Star House is considered to have proved the point in that it has provided a completely equipped house, two stories high, with a plan 27′ x 30′, garage attached, designed to order by an architect, and built with the best solid concrete construction at a cost of $10,000.

Study of the drawings shown will reveal the type of architectural design and construction employed. The use of standard sizes of steel forms as indicated on pages 161 and 162 was an important factor in keeping costs down.



TO BE SURE TO GET WHAT YOU WANT

When You Specify Maple Flooring

THE tough fibre and tight grain of Northern Hard Maple provides exceptional service under many types of difficult conditions.

It will not sliver, splinter or develop ridges when subjected to hard usage. Its lasting smooth surface makes it easy to clean and maintain at low cost.

There is only one way, however, to be certain at all times of receiving these known qualities of MFMA standard Maple—and that is whenever you specify Maple Flooring, to specify trade-marked "MFMA" Maple.

Maple Flooring trade-marked MFMA is guaranteed to be all Hard Maple of the grade stamped thereon.

This mark also certifies standard quality and millwork, conforming in every respect to the high standards set by the Maple Flooring Manufacturers Association.

You invite substitution if you specify merely "Maple Flooring" when you want MFMA quality and MFMA supervision. You make sure of getting standard MFMA quality only when you specify trade-marked "MFMA" Maple —available in strips or blocks.

MAPLE FLOORING MANUFACTURERS ASSOCIATION

1785 McCormick Building, Chicago, Ill.

See our catalog data in Sweet's, Sec. 15/13. Let our service and research department assist you with your flooring problems. Write us.

Floor *with* Maple

The letters **MFMA** on Maple, Beech or Birch Flooring signify that the flooring is standardized and guaranteed by the Maple Flooring Manufacturers Association, whose members must attain and maintain the highest standards of manufacture and adhere to manufacturing and grading rules which economically conserve these remarkable woods. This trade-mark is for your protection. Look for it on the flooring you use. **MFMA**

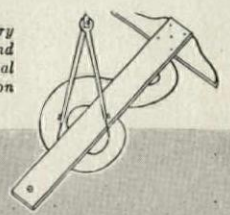
MFMA *Approved*

The FLOOR FOR RECREATION ROOMS

IT'S always fair weather for a recreation-room floor made of Armstrong's Linoleum. Spilled drinks wipe right up—with no telltale stains to embarrass the guilty guest. Built-in game-boards never wear off or lose their crisp, clear outlines. Amateur Bill Robinsons can tap to their heart's content—because the resilience of linoleum hushes noise that might disturb occupants in other parts of the house. Or, if plain, garden-variety dancing is in order, a quick coat of Linogloss Wax will transform Armstrong's Linoleum into the kind of dance floor that the very smartest dining-out places are using.

Point by point, you'll find that Armstrong's Linoleum meets the needs of genial hosts and hostesses. And even with intricate built-in game-boards, its cost won't loom too large in the home-building budget. See Sweet's, or write now for file-sized "Public Floors of Enduring Beauty," which shows what can be done with linoleum in custom-cut designs. Armstrong Cork Products Co., Floor Div., 1206 State St., Lancaster, Penna.

AMERICAN HOME'S *model game-room with floor of No. 48 Canary Yellow Armstrong's Linoleum. Game-boards are black, red, and white. Linostrip is No. 47 Eggplant. Armstrong's Architectural Service Bureau offers complete assistance in design or installation of resilient floors.*



Armstrong's LINOLEUM FLOORS

LET'S DO OUR WHITTLING AT OUR OWN FIRESIDES

We live in a wide land.

It takes a Walt Whitman or a Thomas Wolfe to catalogue its marvels, its beauties, its mountains, its streams.

Regardless of flying time, telephone time, radio time, there are always differences in cultural time in the several parts of the country, due to climate, due to manners, and due to many ways of doing the same thing.

And this, too, regardless of a fundamental similarity which we hope in time will be termed "the very breath of America made flesh and spirit."

I am strongly of the opinion that these differences should be further emphasized and made the basis of a larger local attainment.

Knowing as I do many parts of the eastern portion of this country, it is difficult to believe in an international art or architecture being effective here, or even a mere national manifestation. We are not that sophisticated.

Of course I have been told the machine age is different, VERY DIFFERENT, and that a thought born in Paris or Berlin or Los Angeles or Chicago must, because I know it shortly (the world being that small), affect all my actions, and vice versa.

But somehow I hesitate to believe it is necessary for William Wurster of California, for example, and myself to think alike, because we are both architects and because we both push buttons and so obtain light and heat. I do not happen to know Mr. Wurster, and while I am a reasonable soul, I know I do not altogether agree with him, and amusingly enough I question whether that bothers him any more than it does me. (I trust Mr. Wurster will not object to being used as an illustration for from the little I have seen of his work I would like to know him.)

I, as a New Yorker, am impressed by the size of that city and the great number of influences which are constantly in movement, as restless as the tides, new personalities, new ideas, all very much like the news in that they are seven-day wonders, and then for most of them the ash can. And while it all makes for a certain mental alertness which characterizes the "smart city feller," surely the resulting tempo, seemingly ever becoming more rapid, should not be the directing force in Charleston or in San Antonio or in Paducah, the home of the Cobbs.

When you get even as little removed from Forty-second Street and Fifth Avenue as the little valley in Westchester where I live, the crescendo of the city should have no meaning. But there, too, the beautiful hills and lovely valleys, the lakes, need a loving and tender hand lest they suddenly become as the Bronx.

So many, especially the younger men, think that the only places of opportunity are the big cities. This can well be questioned, for even in them the limitations are many and the competition keen, and what the country as a whole needs is a thoroughly competent architectural profession serving the small communities as well as the large.

Not only does the country at large need better practical design, but there is evidence everywhere of the need for beauty, for planned and coordinated beauty.

And that beauty, to my mind, can only be attained by an ardent belief in, and an understanding of, the community in which *you* live.

Recently there was a competition for a Court House in a southern city and all the local competitors invited "out of towners" to associate with them. The result certainly was another design, very good of its kind but having, in my opinion, very little of the flavor of the community in which it was to be built. It might have been built anywhere. I repeat it is the differences which make architecture and art interesting.

We (sh-shh! it's America speaking) need then to develop the local talents—the architect, the painter, and the sculptor—talents courageous enough to tackle their own problems within their own environment; problems small or large; to make their own mistakes; and further to create their own masterpieces, minor though they may be; and more, courageous enough to fight for the opportunity.

I firmly believe that the only way architecture can develop is through a local process, a process in which the whole community must share.

The machine, as a labor-saving device, has only a small part in making architecture.

It has been one of the false quantities of modern American life that so large an interest has been devoted to the gadget, for as the interest in the gadget increased the interest in beauty diminished. Life and its accessories are in need of a regeneration into beauty.

As this country left the eighteenth century and entered the nineteenth, it possessed a beautiful architecture, a civilization in which most things were harmonious, and it is interesting to remember that those years in which architecture and community were beautiful were longer than the years when ugliness became so common a sight to all.

It was almost as if, as the architect became a professional associated with the bigger communities and as the drafting room took the place of the workshop, the meaning of architecture became more and more confused, and the community as a whole made less use of the architect.

The architect cannot be successful when divorced from his community. He becomes merely imitative.

The architect should become so much a part of his community that no thought of its growth, its building, and even the beauty of its industrial products, would seem natural without his being in the picture definitely as an activating force.

RALPH WALKER

February 19, 1936

Main Entrance Detail of Fruit and Flower Mission, Portland, Ore.
Sutton & Whitney, Architects — Aandahl and Fritsch, Associated

Boychuk

FRED FRITSCH OF PORTLAND

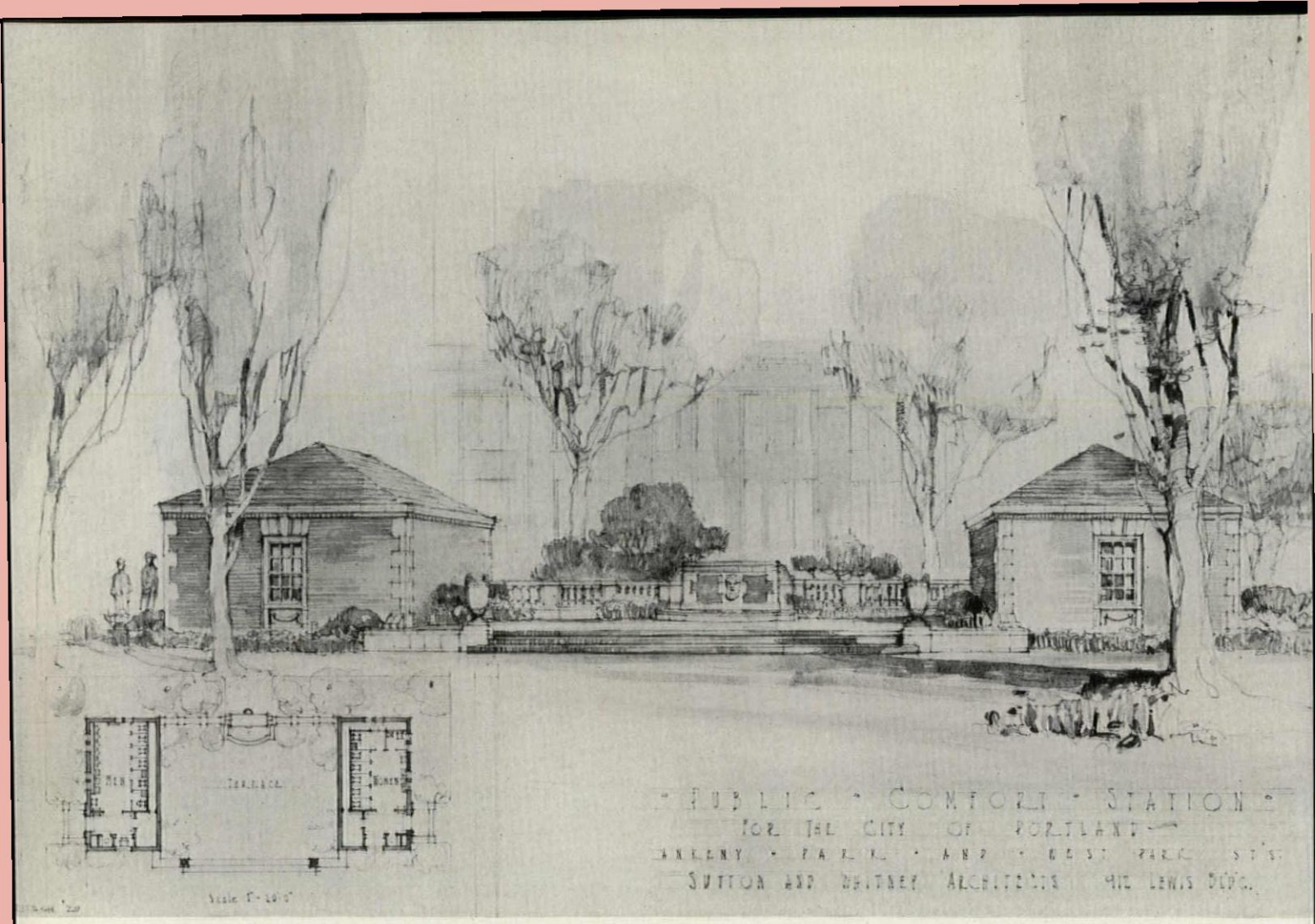
An Appreciation of a Rare Spirit in the Profession

By ROI L. MORIN, A.I.A.

IT is curious to speculate on what might have been accomplished by certain talented men had the productive portion of their lives not been racked by pain and illness, or what triumphant heights they might have reached had their years not been shortened by untimely death. How many more *Boule de Suifs* might DeMaupassant have created had he died at 63 instead of 43? What would the precocious Aubrey Beardsley have drawn or the pathetic Heinrich Heine have written? Or were their precious talents inevitably linked with their physical ailments? Is there in the scourge of ill-health some secretion of the human body that forces out the genius of men? "I feel," wrote Poe toward the end of his days, "that I have been touched by genius, but that my life has been steeped in misery!" Though from his accomplishments the name of Fred Fritsch may not be grouped with those of Keats, Poe, and Heine, yet he was one of that vast brotherhood of talented men whose best years have been brushed by genius but condemned to the misery and despair of continued ill-health.

Frederick Armbrust Fritsch was born in Portland, Oregon, on April 7th, 1891, and he died in the same city, by his own hand, on October 27th, 1934, after a long, discouraging, and apparently incurable illness, at the premature age of forty-three. His parents were of German and French descent; his paternal grandfather, F. J. Fritsch, being a German painter and engraver who came over to this country about 1841 and prepared painstaking colored engravings of military and historical American scenes. His father was a skilled upholsterer and cabinetmaker who was well thought of in Portland. Because of pecuniary circumstances at home—Fritsch was the third of four children—he was deprived of a formal architectural education, and, shortly after graduation from high school, was apprenticed in the office of Whidden & Lewis (former McKim, Mead & White men), then the leading architectural firm in Portland. In 1911, he entered the office of Morris H. Whitehouse, then Whitehouse & Fouilhoux (J. Andre Fouilhoux, later associate of Raymond Hood, was then a partner of "Molly" Whitehouse's), where he remained, except for a short interval, until 1917, at which time he was chief draftsman. During a period of four years (1912-1917) he was active in the Portland atelier of the Beaux-Arts Institute of Design and developed considerable skill both in design and rendering.

It was during this early formative period that two men came into Fritsch's life who influenced his later development; first Louis Macomber—then designer for A. E. Doyle—a profound student, meticulous draftsman, and a master of ornamental detail; and second, Louis C. Rosenberg, the architectural renderer and later well-known etcher. Until the day of his death, Fred Fritsch never ceased to admire the skill of these two men. Macomber he hardly knew personally, but from study of several fine buildings that Macomber had designed in Portland, he drew that extraordinary patience and invention of detail that made his own work refreshing. From Rosenberg, his close friend, he drew his talent for rendering, for his best renderings, although softer and more delicate in line and tint, were always what we in the profession in Portland recognized as, and termed, the "Rosenberg" style. Later, in more mature and philosophic years, he searched for gods abroad. The writings of Prof. Lethaby became his bible, and when his illness incapacitated him for further work, his volumes of W. R. Lethaby's teachings became well thumbed. In the 1920s, his best period, he ad-



Pencil and water color rendering by Fred Fritsch of one of Sutton & Whitney's minor commissions. Here his artistic kinship with Louis Rosenberg is evident

mired, studied, and sought to emulate the skill in design and draftsmanship of Bertram Goodhue and George Howe. In 1931, after a two-year sojourn in Philadelphia, he returned to Portland with praise for the work of Edmund Gilchrist.

Early in 1915, "Freddie" Fritsch and his friend "Louie" Rosenberg started out on what was to be an architectural jaunt around the world. The first stop was San Francisco where both men stayed to see the Fair. They obtained work in an architectural office, but a few months later the pilgrimage came to a sudden end as Fritsch's mother died and he returned to Portland.

In the year 1917, Fritsch joined the staff of Dean Ellis F. Lawrence's architectural department of the University of Oregon at Eugene, as instructor in architectural design, taking the place left vacant by Louis C. Rosenberg. He served in this capacity for two terms. Later, in 1924, he served as instructor in architectural design for the University of Oregon's Extension Division in Portland.

In July, 1917, he joined the University of Oregon Medical School Unit of the Medical Corps of the U. S. Army, but did not begin active service until March, 1918. He served a year overseas at Base Hospital No. 46, at Bazoilles-sur-Meuse, where, as his friend Harold Doty so aptly put it, he was "Admiral of a fleet of hospital vessels." He was honorably discharged in June, 1919.

After his return to Portland, his talents as a designer and renderer caused his services to be in demand in several offices, but it was at this time that he formed the association which was to last until his fatal illness and during which period he did his best work. Harrison A. Whitney of the firm of Sutton & Whitney, of Portland, and Sutton, Whitney and Dougan, of Tacoma, Wash., called upon Fritsch to make several renderings. The new association soon became permanent, and Fritsch entered the offices of Sutton & Whitney where, after Mr. Sutton's death in 1923, he, together with Fred Aandahl, became associates. Under the skilful executive capabilities of Mr. Whitney, together with the understanding and sympathetic cooperation of Fred Aandahl, Fritsch's talents were allowed to flourish. The Tacoma office of the firm had a great deal of work at that time and within a period of four years, the organization designed the Rust building, the Tacoma First National Bank, the Annie Wright Seminary, the College of Puget Sound, and the Tacoma Scottish Rite Temple.

In 1922, a competition was held in Portland for the proposed Scottish Rite Cathedral of Oregon.

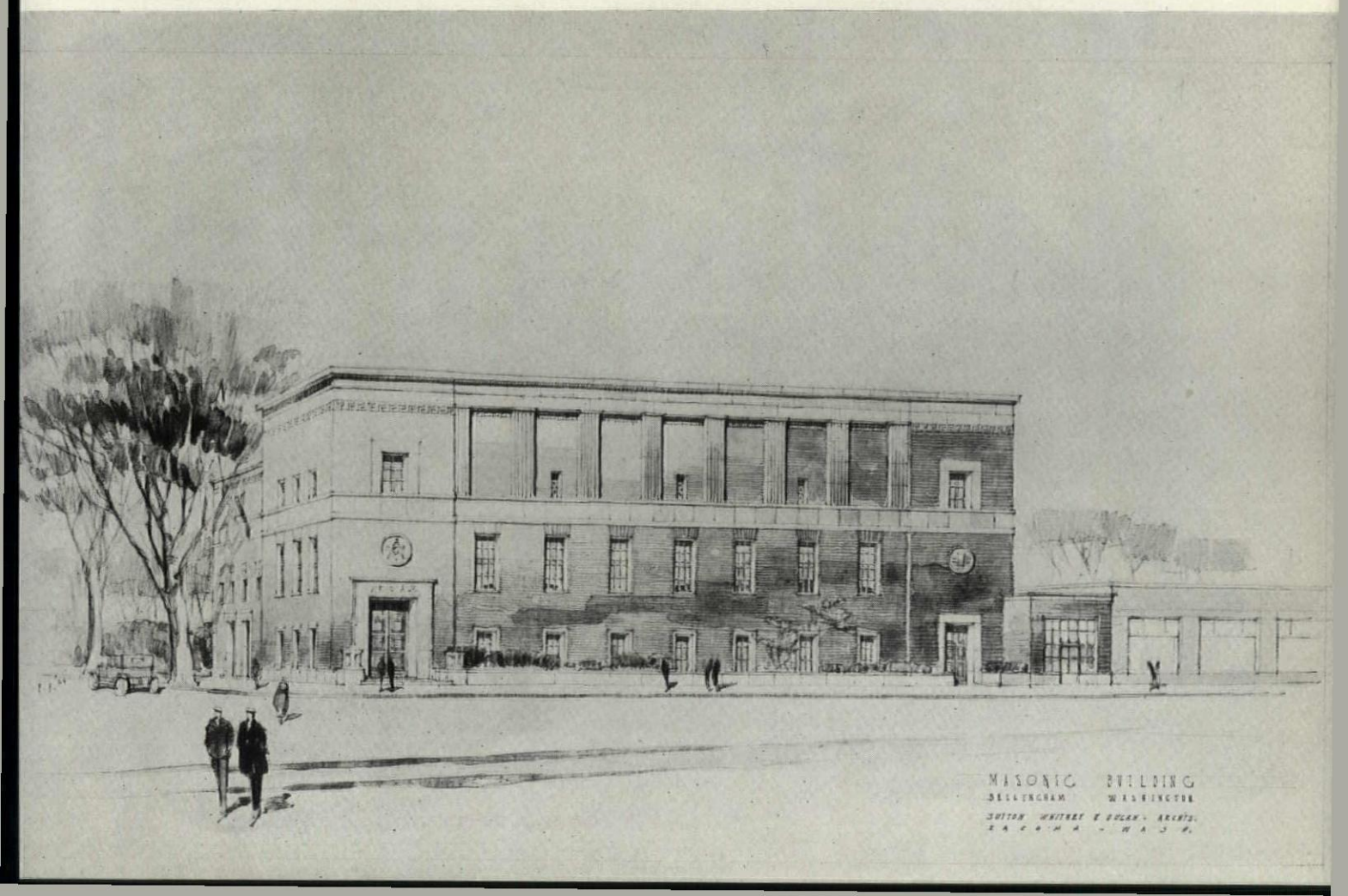
The Sutton & Whitney entry won and though the building was never erected, Fritsch said he received the greatest compliment that was ever paid him when a writer in a well-known architectural periodical linked his competition design together with Goodhue's Nebraska State Capitol drawing, and denounced the two as "showing too much of the modern German influence." In 1924, there was staged again in Portland a competition for the largest single commission that had been awarded up to that time in the state of Oregon, that of the new Masonic Temple. The prize-winning entry again was Sutton & Whitney's, and for a period of three years this building occupied most of Fritsch's time —the office detailing everything down to the lighting fixtures, hardware, and furniture. As a result this building is recognized today as one of Portland's finest monumental structures.

From this time until the depression, a large number of important and beautiful buildings issued from this office, noteworthy among which were the Blumauer-Frank Drug Co. building, the Meier & Frank warehouse, the J. K. Gill building, the Meier & Frank Delivery Depot, the John A. Roebling building, the Multnomah County Hospital, the Shriners' Hospital, the Emmanuel Hospital, the Weatherley (office) building, the Beth Israel Sunday School, the Bates Motoramp Garage, the Neighbors of Woodcraft building (a large fraternal structure), the Oak Grove powerhouse, several fine private residences, and finally the building which the firm still considers its supreme achievement (an opinion in which we all concur), the beautiful little Fruit and Flower Mission. Thus in a ten-year period, this office turned out more than fifteen millions of dollars worth of buildings, with the help of never more than five draftsmen in addition to Messrs. Whitney, Aandahl, and Fritsch.

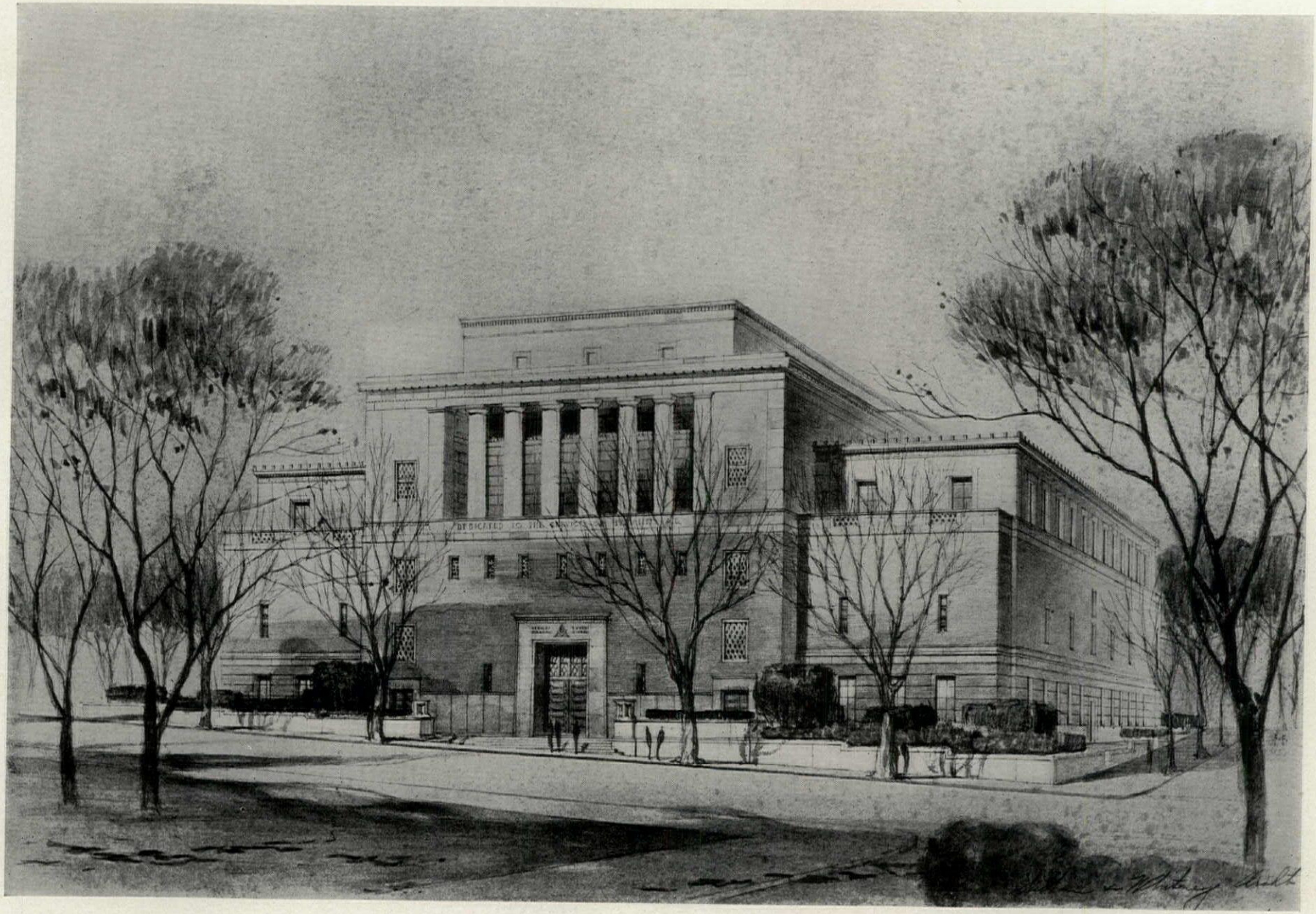
In September, 1928, Fred Fritsch was married to Margaret Goodin, whom he had met and taught in one of his University Extension classes, and who was also an architect. Early in 1929, ill-health, from which he first began to suffer in 1924, during the Masonic Temple competition, caused him to discontinue his work at Sutton & Whitney's and to travel east in search of medical treatment. The years of 1929 and 1930 were spent in Philadelphia, where, while he was under medical care, Mr. and Mrs. Fritsch were associate architects on the Tri-Delt sorority house at the University of Pennsylvania. This was Fritsch's last job for, although he did a few perspectives for various firms upon his return to Portland, he was too ill to work on any more designs. From 1931 until the time of his death in the fall of 1934, he lived very much alone with his wife, rarely venturing forth from his apartment.

* * * *

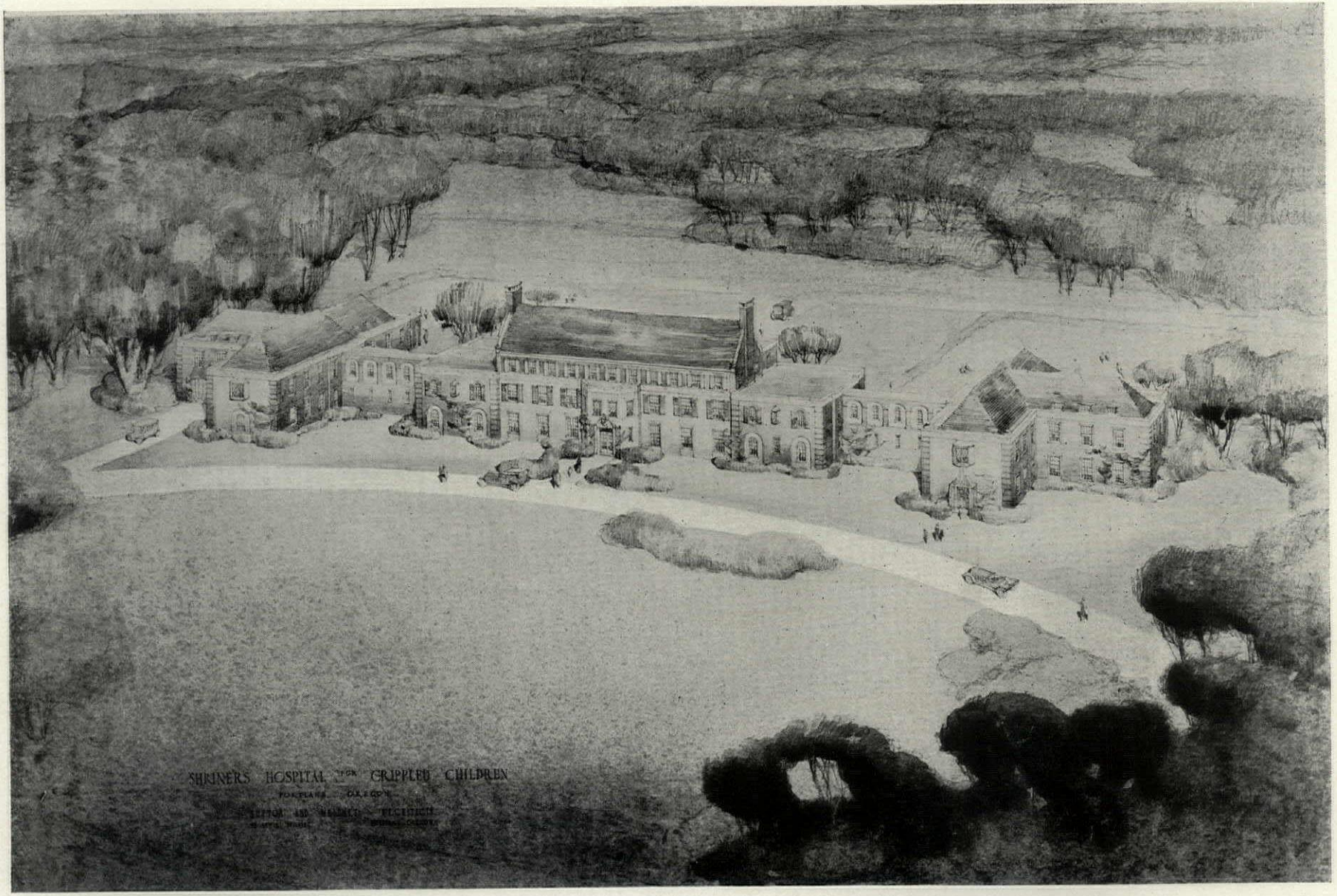
So much for the chronological history. Of the man, many tales are told, of a keen judgment in matters of scale and proportion, of an inexhaustible patience in the selection of materials and textures, and a subtle understanding of colors, and finally of ironical thrusts, witticisms, and pungent



Rendering in pencil and water color by Fred Fritsch of a proposed Masonic Temple in Bellingham, Washington. Drawn in 1924 for Sutton, Whitney & Dugan



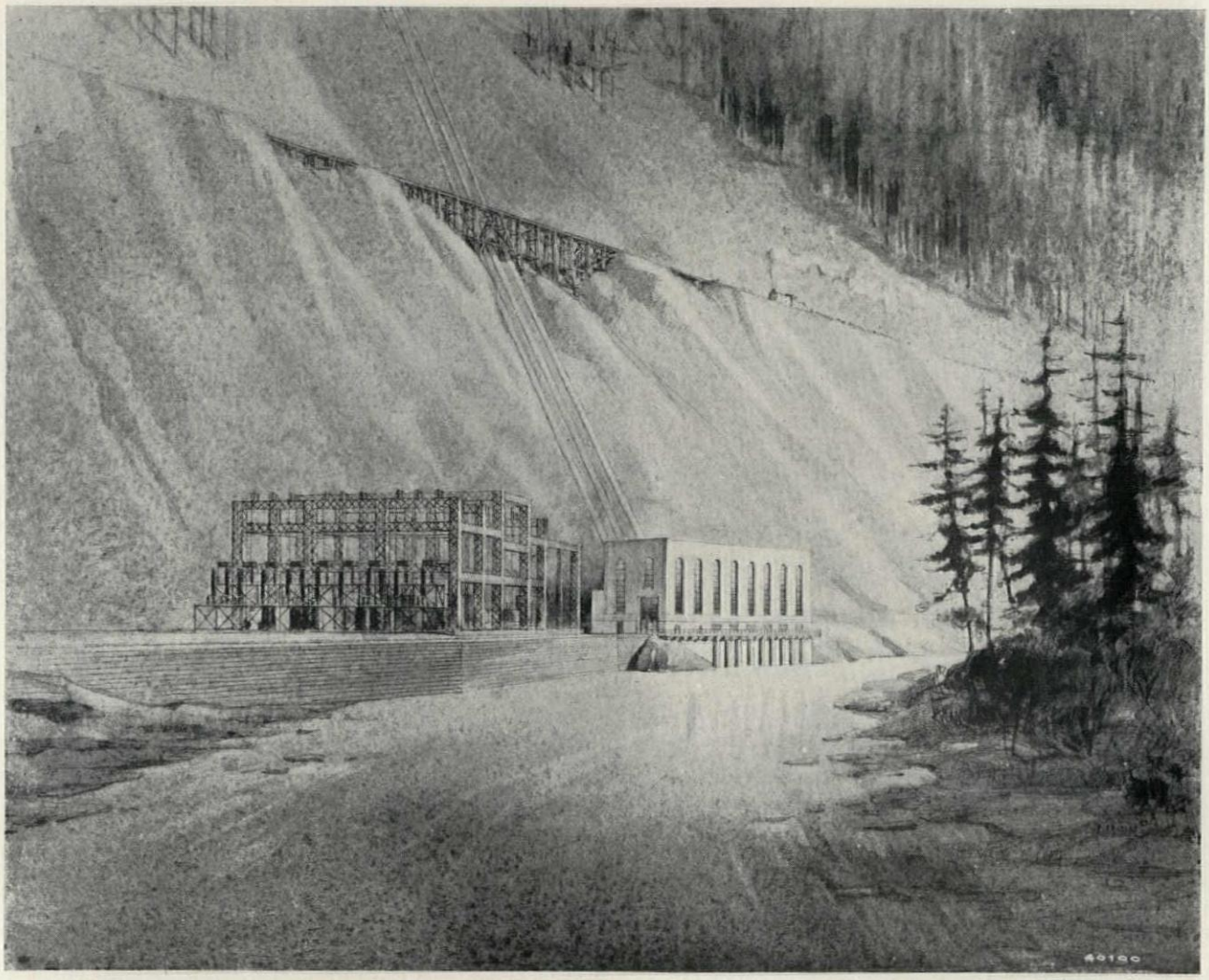
Fred Fritsch's rendering of the Masonic Temple in Portland, Oregon, designed by Sutton & Whitney, Architects; Aandahl and Fritsch associated



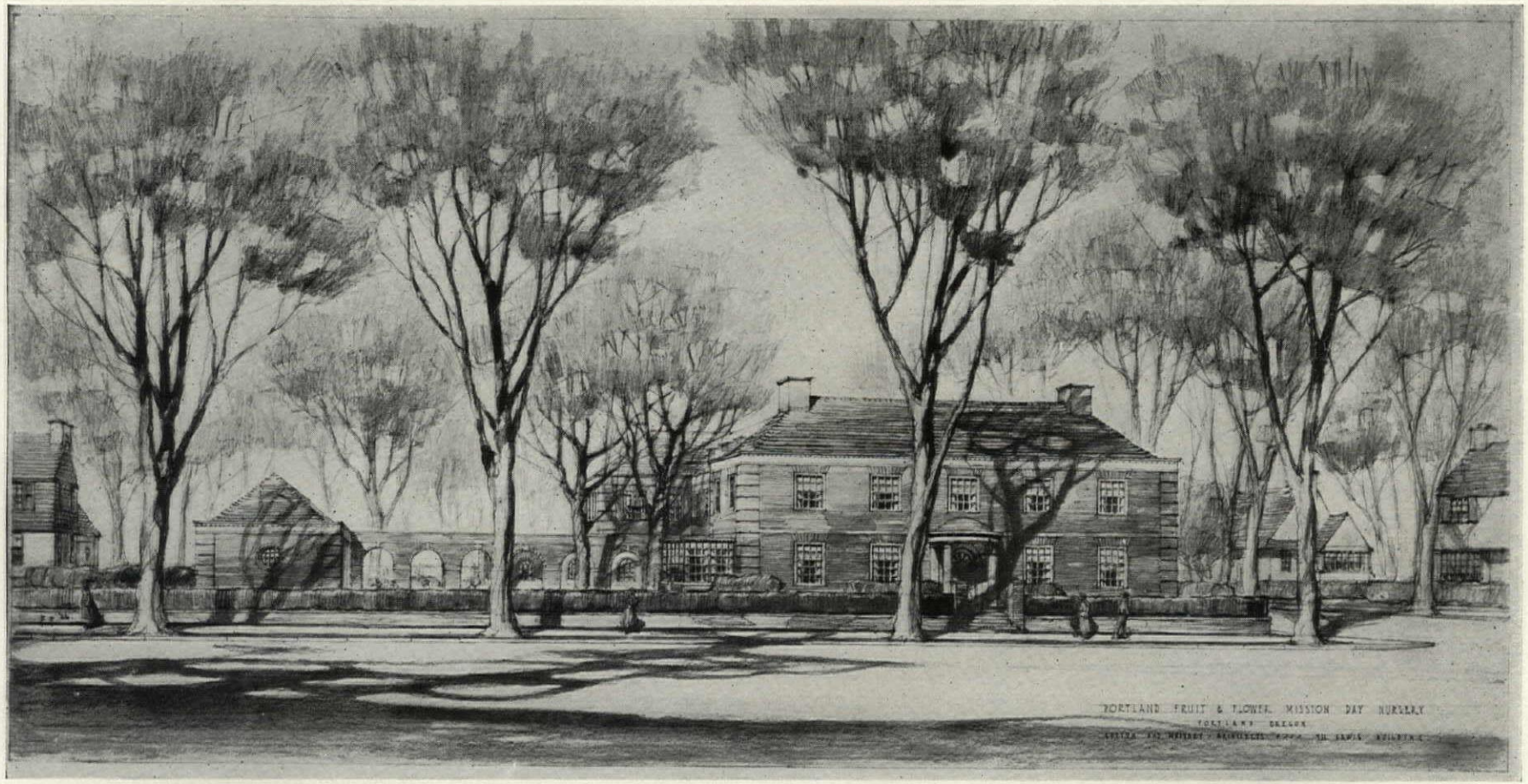
The Shriners Hospital for Crippled Children, by Sutton & Whitney, as rendered by Fred Fritsch

criticism. Naturally reserved, of a cynical and introspective character, he was not a morbid type until the period of his final illness. "Freddie" Fritsch loved life; he loved the color and charm and gaiety of life and women, and was not one to contemplate suicide until he had exhausted all hope for a better tomorrow. He was rather whimsical and debonair, with dark laughing eyes, a queer way of looking at you with his head thrown back and a cigarette raised in his thin, white fingers. He was a sceptic, and did not fancy new enthusiasms or new heroes, nor make new friends very readily. He would rarely seek out another man, but because he was held in such esteem by his fellows, men drifted to him instead. He was diffident in conversation, but entertaining when on subjects that interested him, such as architecture, painting, history, and philosophy, and even during his last illness, groups of us, architects of his own age, would visit his apartment and spend afternoons and evenings in riotous and often ribald discussions of the modernists, the traditionalists, and the new movements in design. He was keenly interested in the modern movement and was outspoken in praise of the "finesse" of modern Swedish art. He was shy except with his most intimate friends, and there was something in his manner and make-up that reminded one of stories one has read or heard concerning that fine draftsman, Joseph Wells, of the early McKim, Mead & White days.

Architecture was his whole life—he lived it, felt it and loved it, at or away from his work. The quest for financial success or for fame that motivates most Americans never touched him. He never sought glory, and shunned authority, but let any man so much as change the full size profile of one of his mouldings and he was implacable. He would often go to the office after the draftsmen had gone home and spend the whole night long revising profiles and details. He was not, nor did he consider himself, a master of the "grand plan," or the elegant broad "parti." He never sketched in a broad, free manner, and was not a "picture maker." His forte was detail and at this important phase of architectural design and building he had few



Rendering by Fred Fritsch of Sutton & Whitney's Oak Grove Power Plant, done in 1923



An extremely handsome and sympathetic drawing by Fritsch of what the authors consider to be Sutton & Whitney's finest work—the Portland Fruit and Flower Mission Day Nursery. Aandahl and Fritsch were associated with the firm on this job. The frontispiece shows an entrance detail

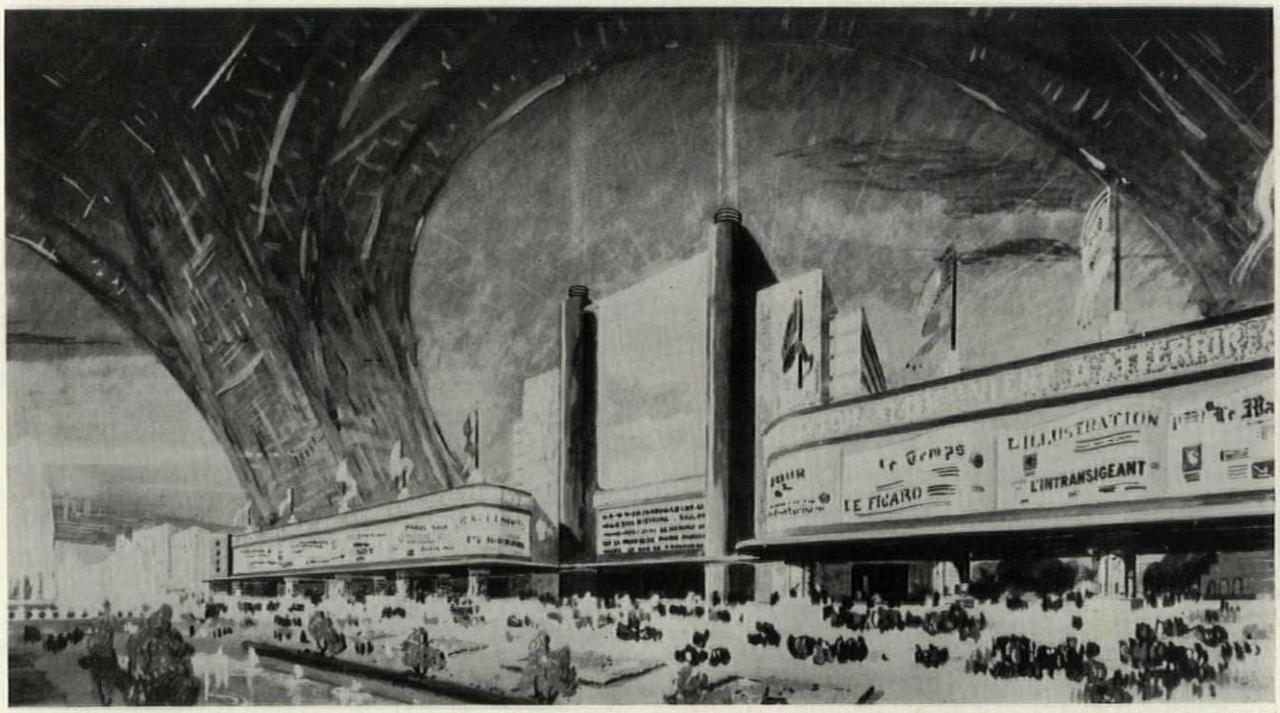
equals. He was not one to make brilliant sketches to turn over to subordinates to detail. The exteriors of the buildings he designed might be stamped as Classic, English Renaissance, or Colonial, but little precedent for the mouldings and details could be found in Letarouilly, Belcher & McCartney or the Georgian Period. The façades might be pigeonholed according to periods, but the profiles of cornices, bandcourses, and architraves were very personal, delicate, and very much "Freddie" Fritsch's. Though a "cerebral" type of designer, he spent a great deal of time and effort "emotionalizing" details.

He was short of patience with building craftsmen who lacked understanding and feeling for their work and the building fraternity in Portland knew that he was the most difficult man in the profession to please, and it was rare that the portals of Sutton & Whitney's office were open again to a bungling mechanic or contractor once Fritsch was dissatisfied with a piece of work. On the other hand, when craftsmen understood what he wanted, they liked and were proud to work with him, as his office details were always clear and thorough. He represented a happy combination of an artist and a practical man as he had a clear understanding of engineering principles and respected them. He had a most inquisitive nature and wanted to know exactly how everything was put together and worked, and was considered an authority on methods of waterproofing, flashing and millwork, a rare trait in a designer and renderer. Most of his renderings were done in pencil, silhouetted in some instances with dilute ink, and given faint color washes. His renderings were never deliberately "dramatic."

Work of other architects interested him tremendously and he would often read into new buildings ideas that never had occurred to their creators. He would study new structures issuing from other offices, and his comments on them were often sharp and destructive, much to other men's discomfiture. He was, however, keenly critical of his own work and was never satisfied that he had arrived at the perfect solution. Years after a building was finished he would often study it, and wish that he had done this or that detail differently. Just as he was influenced by Goodhue, Howe, Macomber, and Rosenberg, so he in his turn influenced the younger men in Oregon and there exists today a whole school of architects who not only design and detail but also render like Fritsch, insofar as they are able. He was a member of the Oregon Chapter, A.I.A.

Just as Bertram Goodhue was so fondly called "the idol of the drafting rooms," so Fred Fritsch was, in his own small sphere, "the terror of the drafting rooms," for his ridicule was merciless and sharp as a scalpel. He was at one and the same time the most considerate and the most ruthless of men. Would that there were more of this caustic criticism in American architectural life—it might tend to mitigate the flood of bad buildings that overwhelms us year after year. It is said that during the Renaissance, citizens of the Italian towns would knife each other on the streets over divergent views on new architectural creations. Such conduct is unbelievable in modern America because no one cares a fig about a new building except its architect, its owner, its builder, and the tenants who suffer from its discomforts and ugliness. So do we, his colleagues, now mourn his passing. His work and his personality were an inspiration and influence to us, young and old. Many of us consciously or unconsciously sought his approbation of our work, and the loss of "Freddie" Fritsch will be felt for a long time in the architectural profession in Oregon.

EDITOR'S NOTE:—*The foregoing article was signed by Mr. Morin and by four other Portland, Oregon, architects who knew and loved Fritsch, namely: Harold W. Doty, Herman Brookman, Wade Pipes, and Hollis Johnston.*

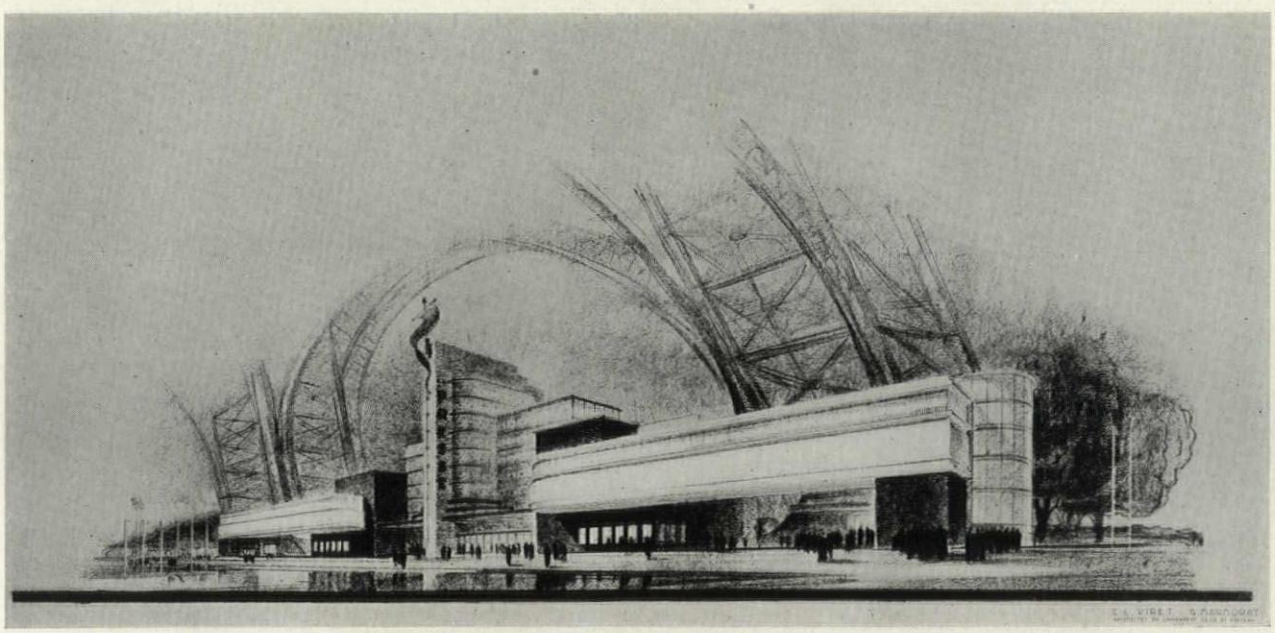


Study for the "Pavillon du Cinema et de la Presse" by architects De Saint Maurice and Lemaire

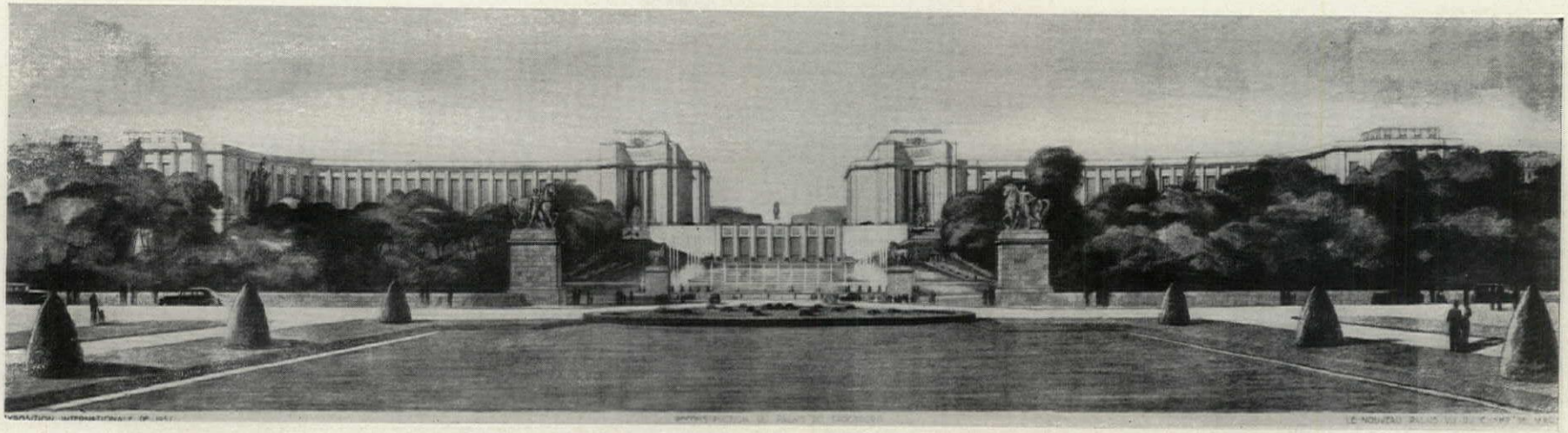
PARIS - 1937

A Group of Drawings for the International
EXPOSITION OF ARTS AND TECHNIQUES OF MODERN LIFE

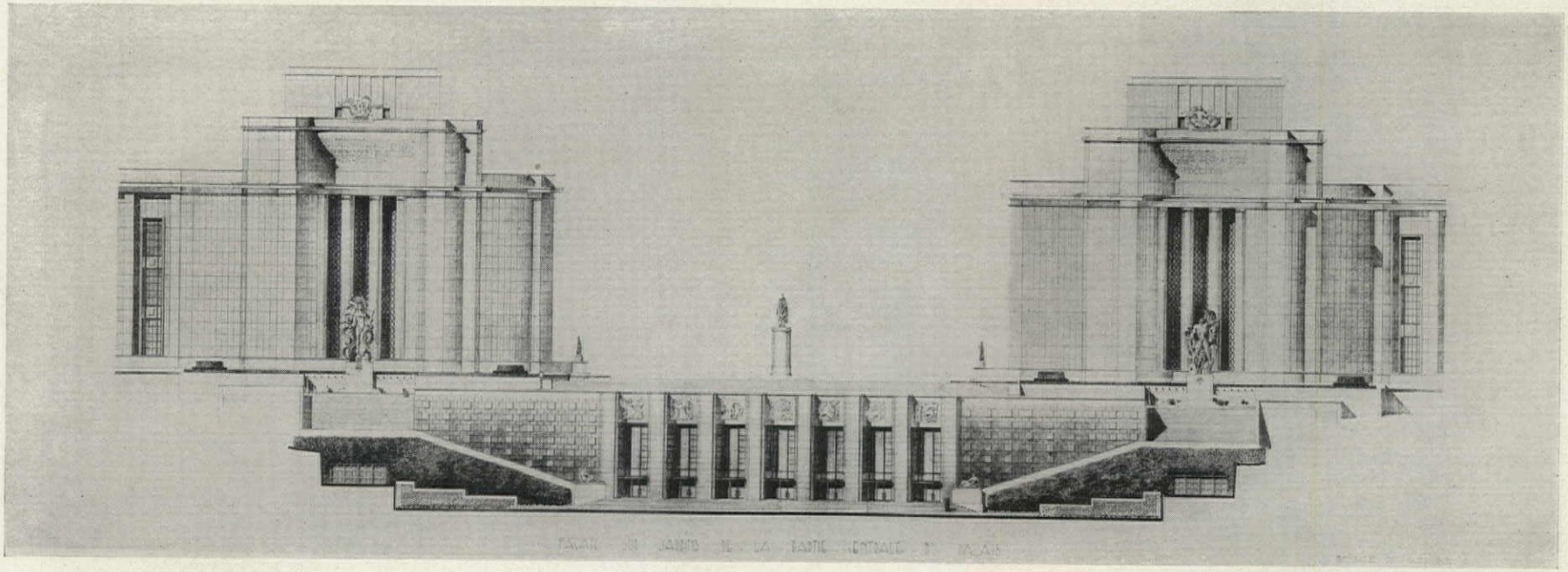
Jacques Greber, Architect-in-Chief



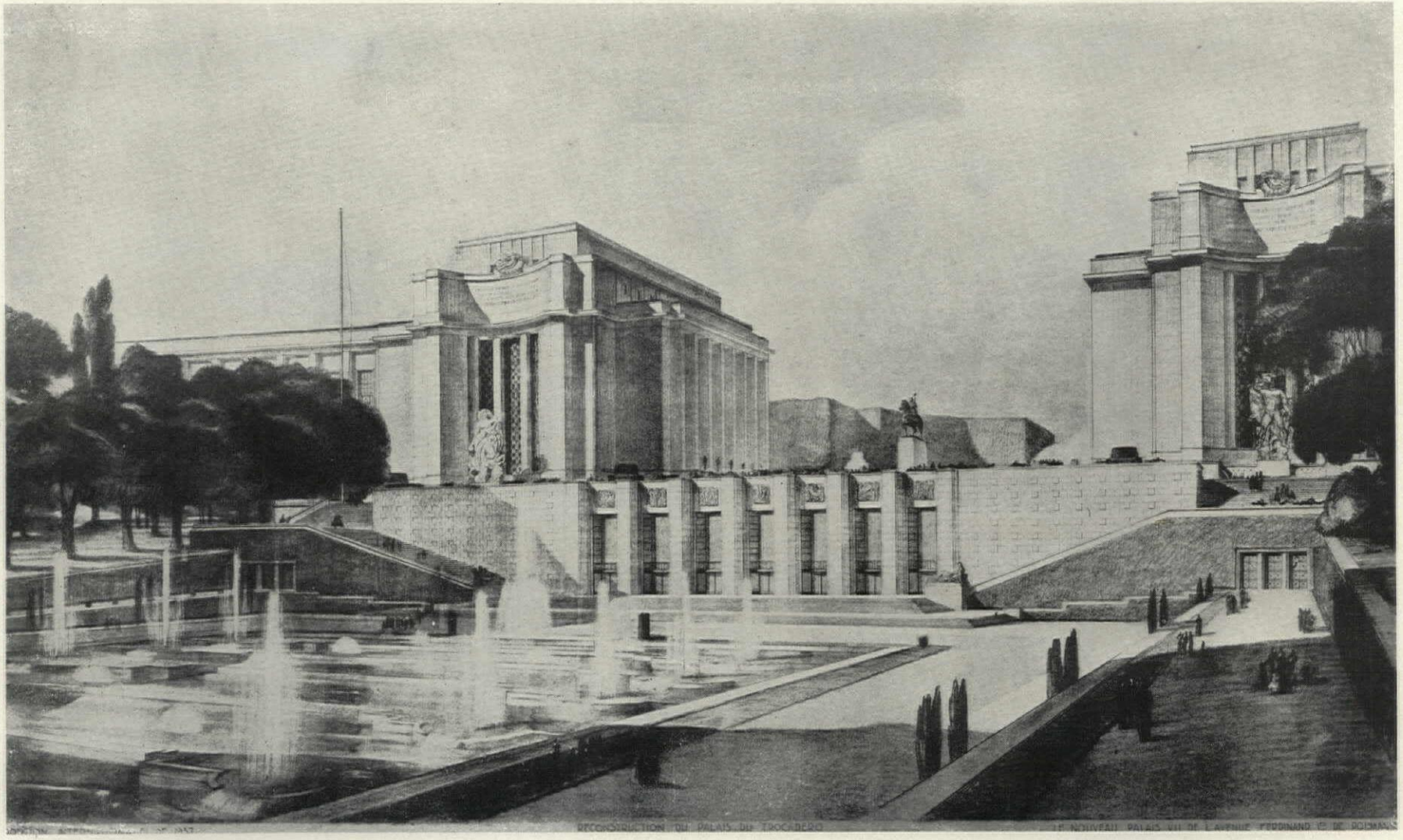
"Le Pavillon de la Presse" as projected by E. L. Viret and G. Marmorat, Architects



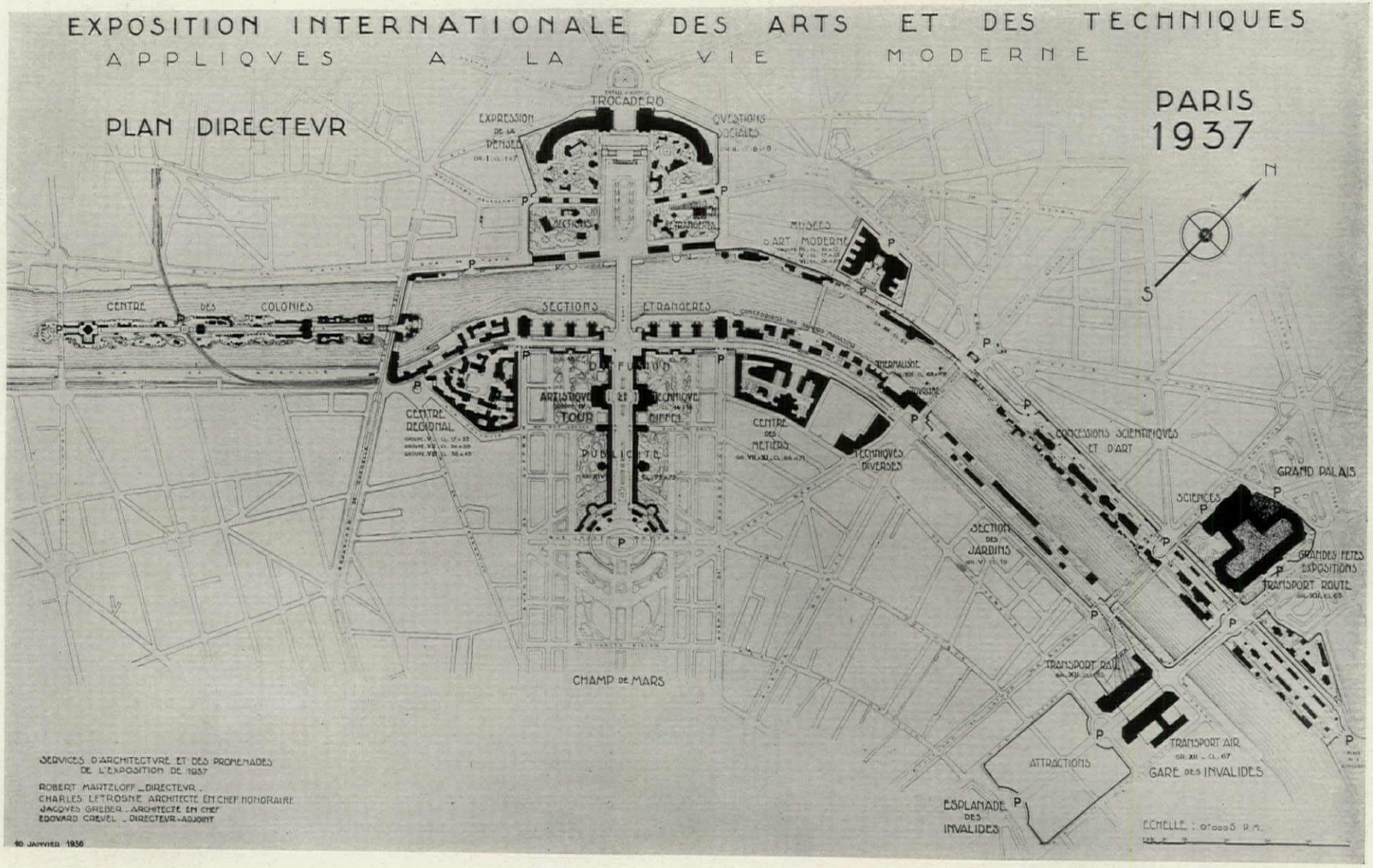
The Trocadero as it will appear when reconstructed under Jacques Carlu's direction



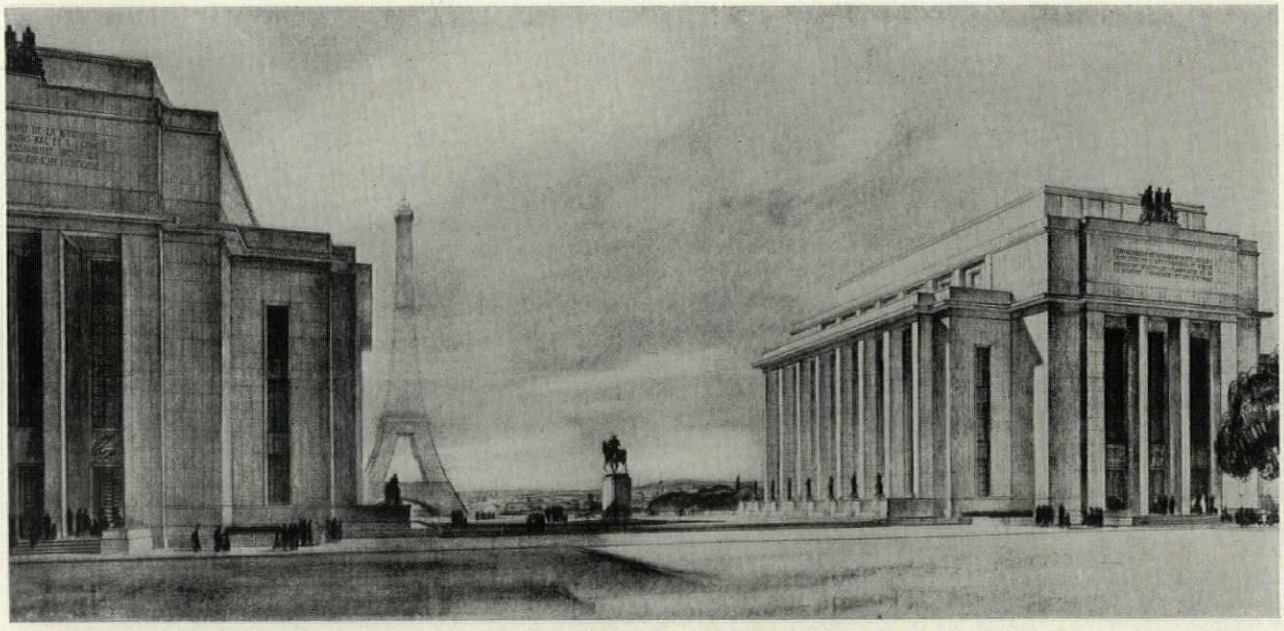
Garden façade of the new Palais du Trocadero as redesigned by Jacques Carlu for the 1937 International Exposition of Arts and Techniques



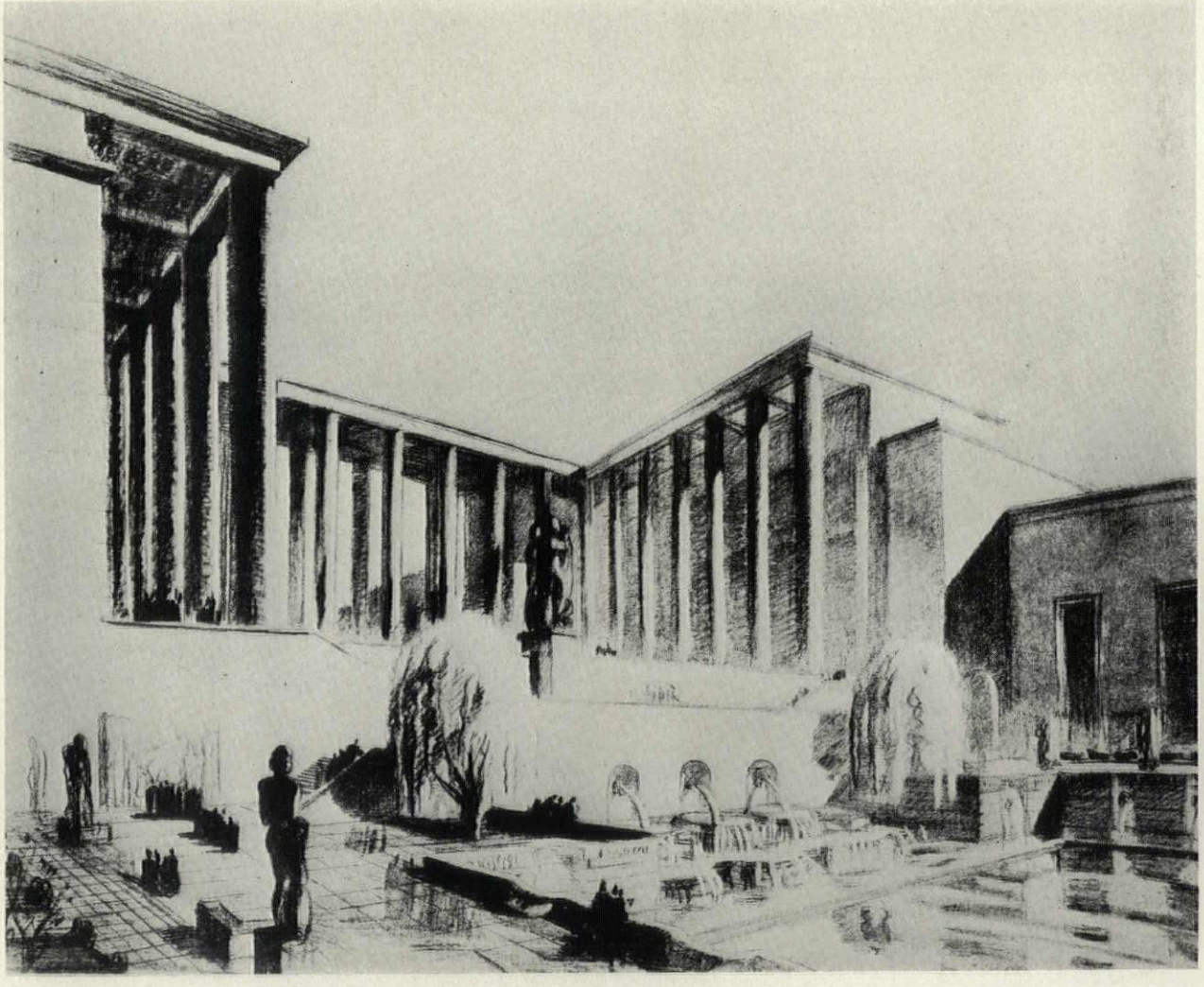
Perspective view of the Palace of the Trocadero as seen from the gardens. This new Palace will afford space for the Museum of Historical Architectural Sculpture and the Museum of Ethnography, as well as for the Naval Museum (now in the Louvre) and a new Museum of Photography



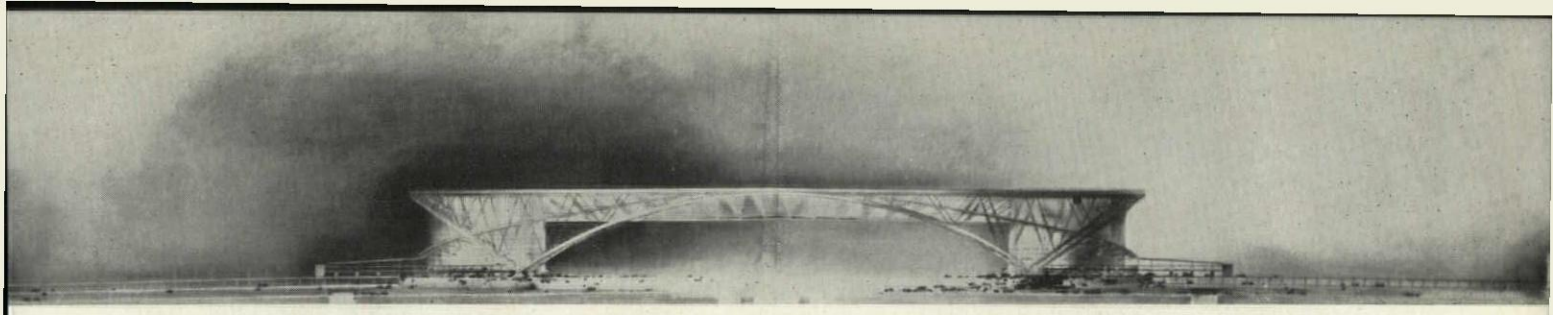
"Plan Directeur" of the coming International Exposition of Arts and Techniques to be held in Paris in 1937. The exposition will occupy about 156 acres in the center of Paris and will extend for two miles along the Seine from the Pont Alexandre III to the Pont de Grenelle. The Isle des Cygnes between the Pont de Passy and the Pont de Grenelle is also included. The new Trocadero and the Champ de Mars are linked on the axis



Looking from the Gate of Honor at the Trocadero across the Pont D'Iena towards the Eiffel Tower



A sketch showing a portion of the Museum of Modern Art at the 1937 Paris Exposition



ARCHITECTS OF EUROPE TODAY

9—Eugène Beaudouin, France

By GEORGE NELSON

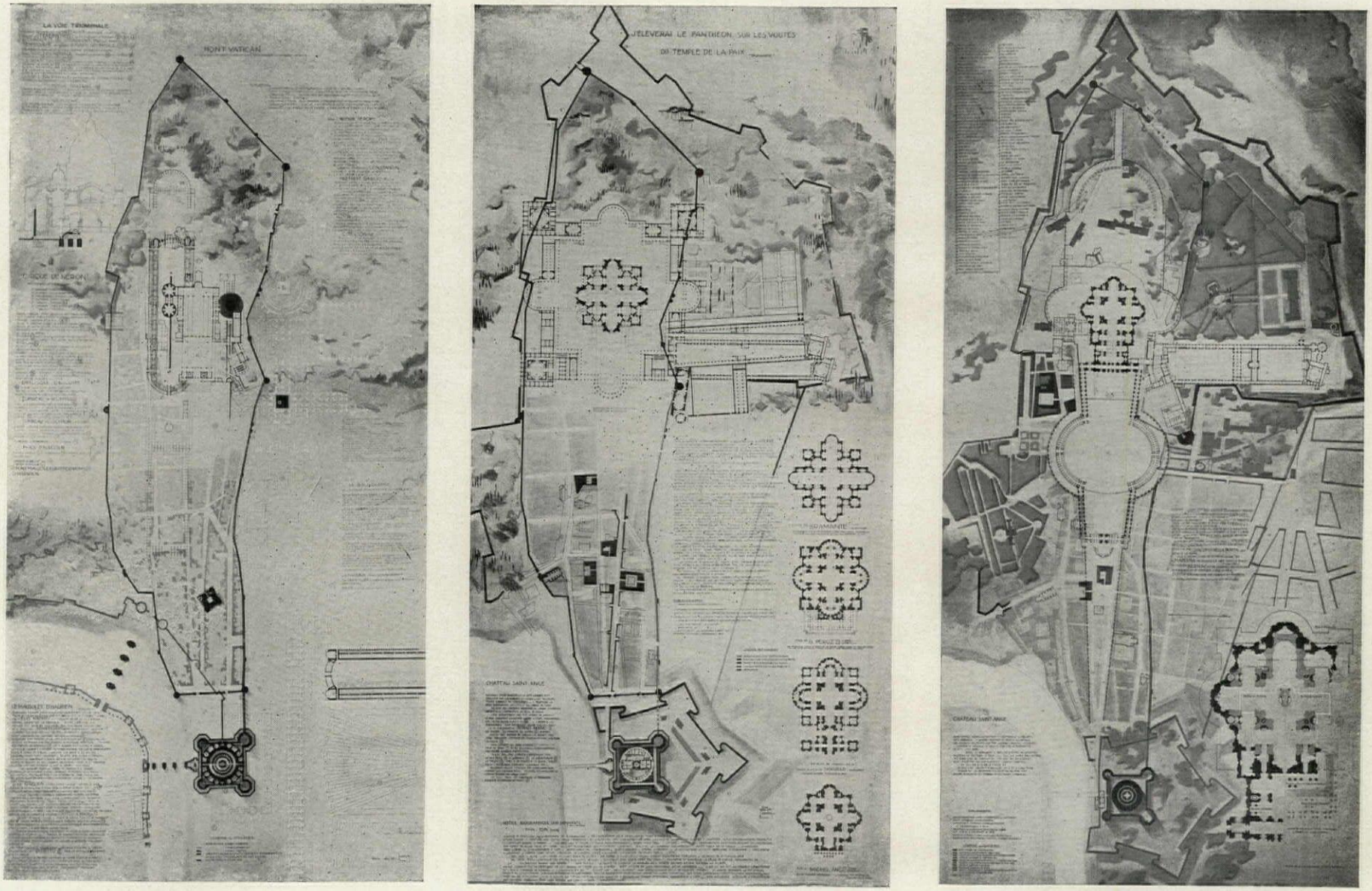
"THE Beaux Arts," once remarked Miës van der Rohe, with a certain amount of asperity, "is dead." One does not take issue lightly with the Grand Mogul of modernism and Beaudouin may be an exception proving the truth of Miës' assertion; but as long as the school turns out men of this caliber, it might perhaps be safer to replace the "dead" with "dormant"—and to realize that there is probably more than one way of training men to produce good architecture. For Beaudouin possesses to a remarkable degree the qualities that go to make an outstanding modern architect; few of his contemporaries show more promise, and none have done more significant work than this young Frenchman who has still some time to go before reaching his fortieth birthday.

What makes a modern architect? Those readers who have been repeatedly irritated by the series of buildings which have illustrated this series might select a combination of knavery and imbecility as the most likely qualities. It is hard for the confirmed traditionalist to admit that the men whose creations apparently violate every established idea of what constitutes beautiful building, are continuing in the great tradition of architecture. The ugliness of certain modern buildings, so often advanced as an argument against the entire movement, differs only from the ugliness of the buildings around us in that it is less familiar. A Westchester suburb is probably the most pretentiously hideous sight in the world; yet its inhabitants, blithely unconscious of the ghastly mixture of fake French, Italian, Spanish, and Early American houses that surround them, will squeal in righteous indignation if a modern house be added to the potpourri. Architecture, to the vast majority, is still the elegant pastime of erudite amateurs, and work that is different is disturbing because it has no copybook ancestry. The revolution brought about by the machine, and its unmistakable effects on every part of the social structure, may not be news; few recognize it, nevertheless, when they see it in steel and stone. Beaudouin is a modern architect, but his buildings and his expressed ideas reveal no qualities that could not be possessed by the true builder of any period. If his work seems odd to the style-minded, let it be remembered that he has been solving problems that were not in existence fifty years ago and structurally his resources are of even more recent development. Three characteristics in particular mark Beaudouin as one of the leaders of his time: a keen historical sense, a brilliant grasp of the structural and esthetic possibilities of modern techniques, and a profound social consciousness.

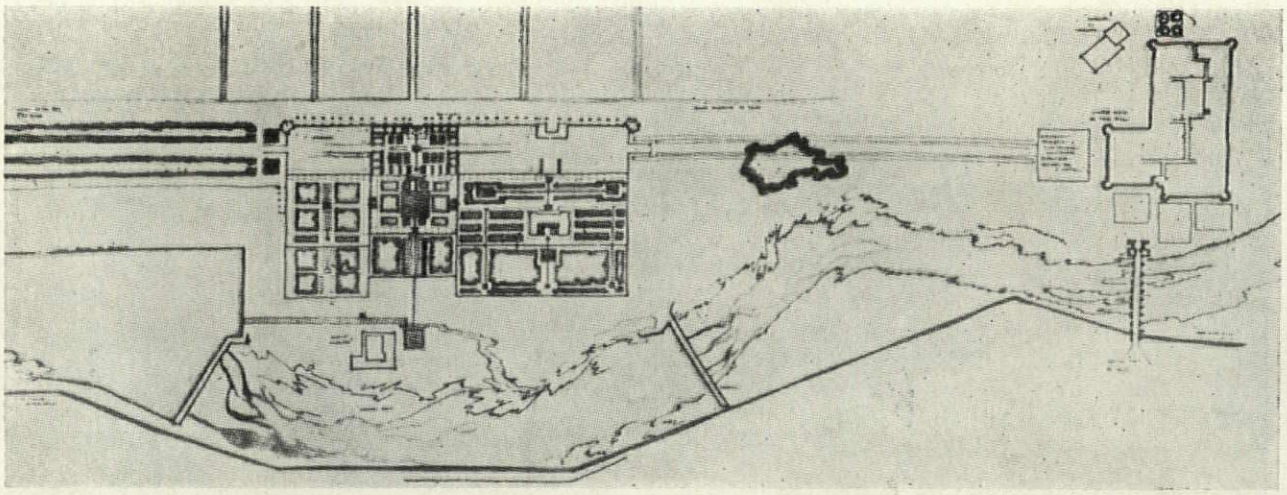
He began respectably enough: a conventional education, the decision to become an architect, and entrance into the Ecole des Beaux Arts in Paris. His work from the beginning was good, and after he moved up from the elementary classes his *projets* began to stand out. He had tremendous vitality, a capacity to think to the point, and discrimination—and his solutions, good or bad, were invariably worked out with a freshness and finish that was almost unique. By the time he was in the first class it was practically a foregone conclusion that he would win the Prix de Rome. And he did, with a series of drawings that left no doubt in the minds of the jury.

Rome made a tremendous impression on him. While still a student at the Ecole he had already become interested in town planning, and Paris in itself was an inspiring example. But Rome, first city of Latin Europe, had a story to tell that no architect could ever forget. Buildings of every period remain as evidence of thousands of generations of building; layer upon layer, city on city, with each style "modern" in its time, it presents a cross section of living architecture unequalled by any city in the world. Rome is no place to breed rebels: the picture of a splendid architectural continuity is too vivid. Beaudouin, knowing his styles perfectly, now builds with prefabricated sections—but not as a gesture of futile revolt. The effect Rome had on him can be seen in his choice of a study of the Vatican City for his first year's *envoi*. What interested him, as he stated, was "the development of an independent urban organism through the ages, particularly worthy of study because of its link with ancient history and its spiritual influence on our own time." From this time on, he left no doubt as to his interests in the larger aspects of architecture.

Beaudouin has a number of traits not common to his race; among them is a passion for traveling.



Three plans of the Vatican City, presented by Beaudouin as his first year's envoi while at the French Academy in Rome. Drawn at very large scale, the plans represent three stages in the development of this unique group from Roman times to the present day. This set of drawings, based upon exhaustive research, is one of the best illustrations of the innumerable influences, accidental or planned, which go to make a monumental composition

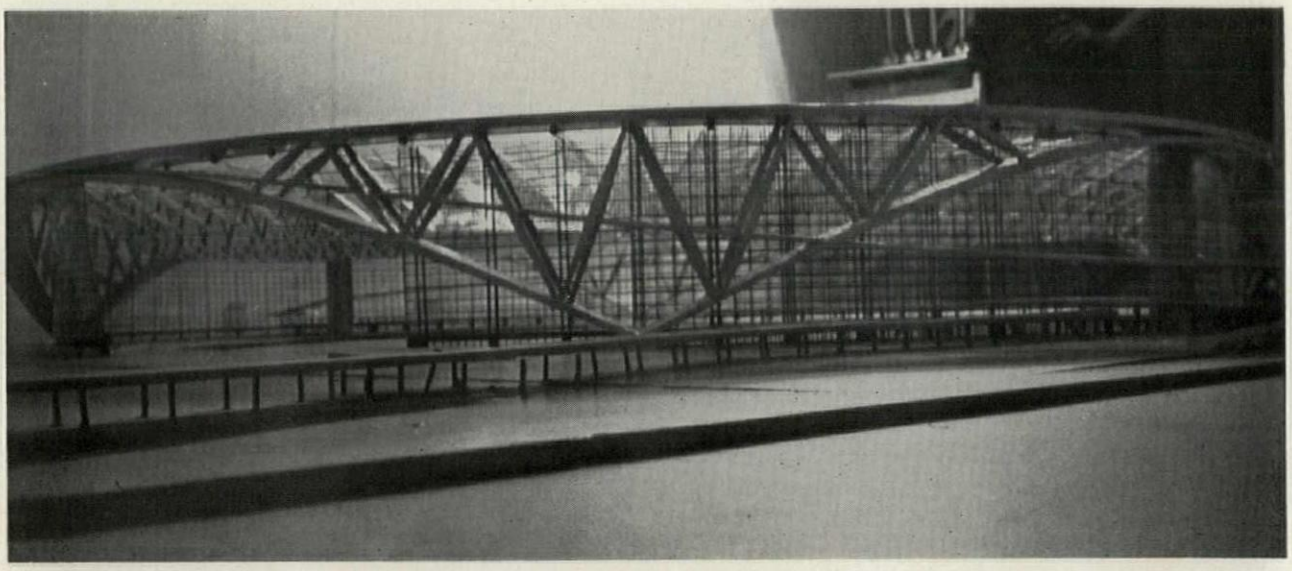


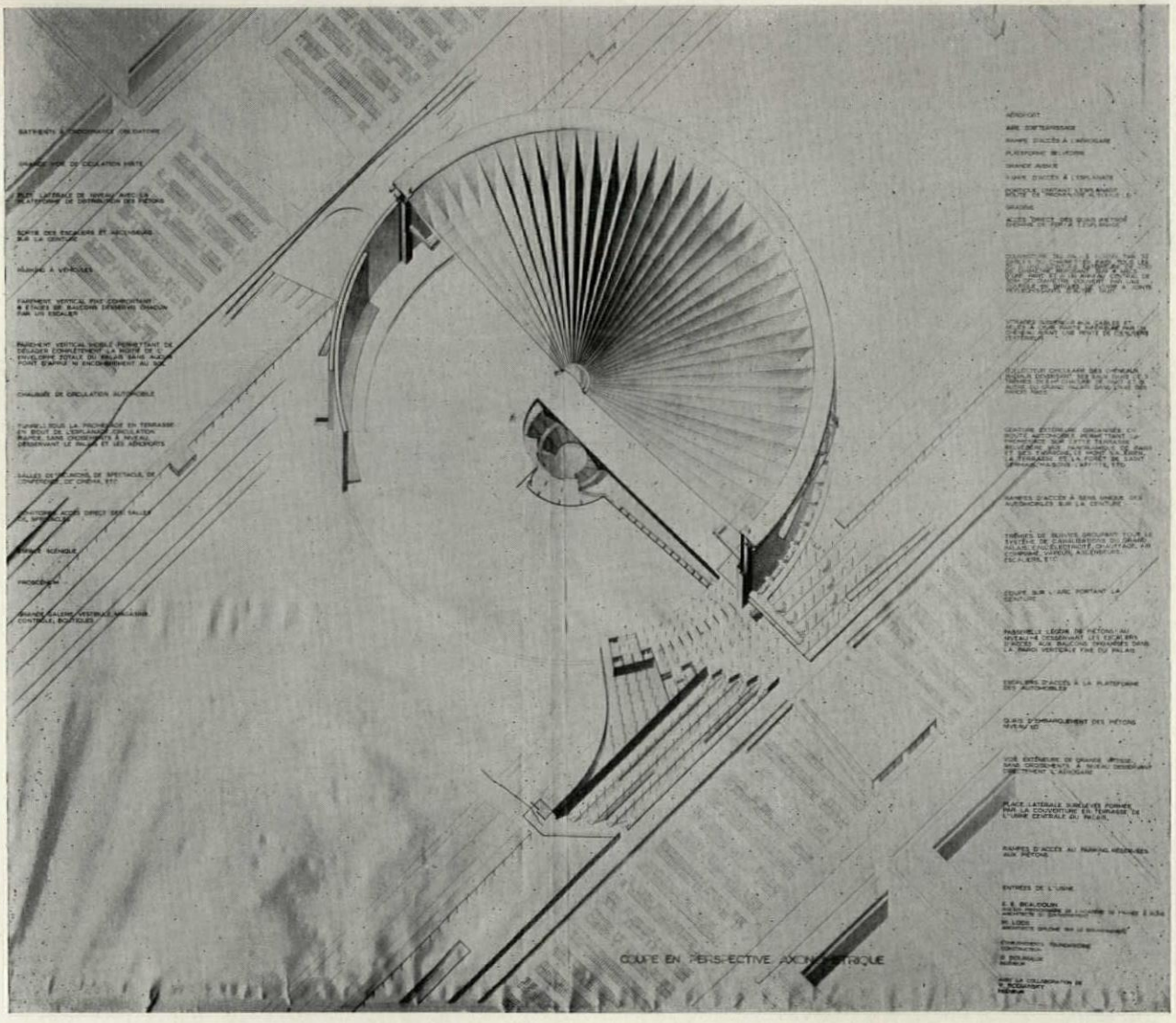
An example of the type of sketch Beaudouin makes on his travels. The plan is paced off and drawn as he walks; the result is a brilliant bit of indication which gives the essentials of the scheme with accuracy

The customary itinerary of a student in the French Academy includes Italy, Greece, occasionally Egypt and North Africa, but not much more, and the popular procedure is to spend most of the year in the pleasant villa on the Pincian and then run up to Paris for a change. Beaudouin would have none of this—he wanted to go places. One of his little jaunts, taken during his last year at the Academy, involved nothing less than a motor trip to Persia, where, with his infallible instinct for finding town plans on the grand scale, he made a bee-line for Ispahan. On this trip he had the company of his wife and Paul Herbé, a friend who had been working in Paris. It is rather typical of Beaudouin's personal charm and the admiration he aroused in those who knew him, that Herbé would throw up a perfectly good job and travel hundreds of miles over deserts and mountains just for the pleasure of helping Beaudouin measure a forgotten city in an inhospitable country. The trip, according to Herbé, was something to remember with mixed feelings. At Ispahan they remained for two months, measuring mosques, bazaars, palaces, ending up with a plan of almost the entire city. Persian art reached a high point during the 17th century, and Ispahan is its finest architectural expression. In fact it is one of the great architectural creations of the world; Beaudouin, knowing this, did not care how far he had to go to see it. When traveling it was the custom to stop at every town that looked interesting, so that he might sketch—not pretty pictures of façades, but plans. Beaudouin's ability to grasp the essentials of a town plan after a seemingly casual stroll is one of his most extraordinary accomplishments; from this practice he learned more about scale and the relation between buildings and open areas than any number of books could have taught him. Later, in a housing project outside of Paris, he was to show the result of his town planning studies in a most unexpected fashion.

A man who has won the Grand Prix in architecture has little to worry about in France; an honorary government post is usually given him after his return, carrying with it a modest stipend. To Beaudouin, who was already moderately well off, the post meant not security, but a chance to get important work. And he got it. One of his first jobs was a housing project at Bagneux, containing 1000 apartments. With his partner, Marcel Lods, he worked out a simple arrangement of four- and five-story walk-ups, leaving ample space for recreational areas. While the arrangement was not unconventional, the construction was. The factory, insisted Beaudouin—not the field—was the place to do the building, and every possible means was employed to arrive at this ideal of prefabrication. A light frame of standard steel members, not sufficiently strong to carry the entire load, was erected. Then walls and floors of precast concrete units were attached, joining with the frame to form a rigid, economical structure. On the strength of this performance he later obtained a much larger commission at Drancy, where he and Lods produced the most talked-of series of dwellings in Europe.

Beaudouin, it might be noted, has a flair for getting himself talked about. His brilliant and lucid study of Ispahan attracted much favorable attention in Paris; so did Bagneux, for different reasons. The tower tenements in Drancy were the first things of their kind in the world, and aroused a storm of controversy in government as well as architectural circles. At Suresnes he added another "first" to his growing collection, this time the first open-air school in France, and he did a magnificent job on it in the bargain. His recent project for a mammoth exposition building of steel and glass received no award from the jury; it caused more excitement, however, than all the other submitted designs put together. Beaudouin does not go out after this publicity: solutions are what interest him; his keen intelligence and a fresh outlook





A project for a steel and glass exposition hall in Paris, employing cables instead of trusses to support the roof, based upon the idea that the use of steel in tension is the most efficient way of spanning long distances. The scale is enormous, with an over-all diameter of twelve hundred feet

have produced some startling solutions, but these are always a result, never a deliberate attempt to attract attention. Personally the man is completely unassuming, entirely absorbed in what he happens to be doing. He has certain peculiarities, to be sure; he likes exercise, is interested in sanitation, wears no hat, approves of America, and lives all year round on a houseboat on the Seine. But in Paris, where personal idiosyncrasies are generally accepted without comment, no measure of Beaudouin's reputation can be laid to his habits.

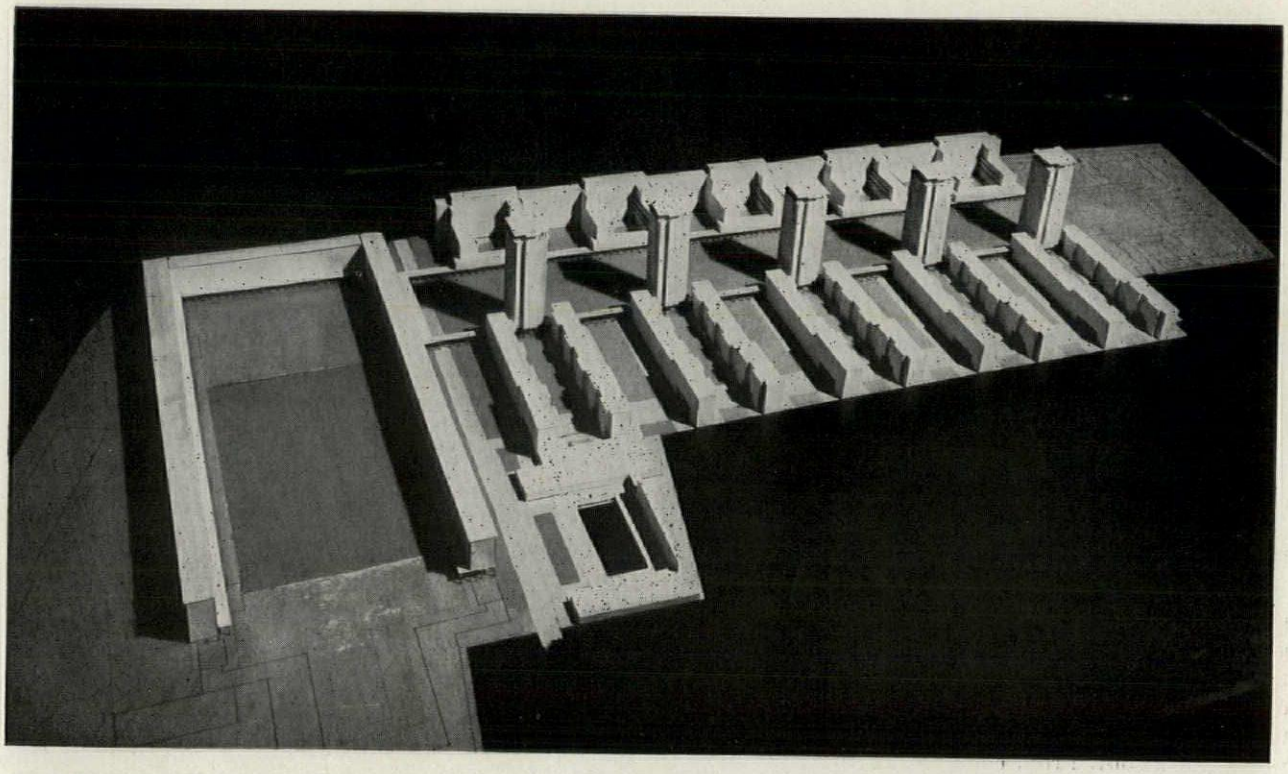
The open-air school in Suresnes is a particularly interesting piece of work; it fascinated Beaudouin, who has strong convictions on the subject of architecture as an instrument for social betterment. The school was built for children who were physically under par, but not actually sick, and occupies a wooded slope facing the south and a view of Paris. Beaudouin put his large building on the northern boundary to break the wind, creating in effect a glorified sun-trap. The large building is entirely glass on the south side, and sliding windows allow the classrooms to be opened to the air. A separate octagonal building houses the kindergarten; here the eight windows drop into pockets, leaving only posts and a roof. From each end of the large building runs a covered passage, off which are classrooms. These also present a blank wall to the north, opening on the remaining three sides. Above the classrooms are terraces where the children can rest and take sunbaths. After the preliminary studies Beaudouin laid out the proposed group on the site, in order to spare as many trees as possible; so loose was his plan that only about a dozen out of several hundred had to be cut down. Among the trees he set a series of clearings; these, in good weather, are used as classrooms, and he even went so far as to design the furniture so that the children could carry it without difficulty.

Architecturally the school is most satisfactory; it has a grace and lightness entirely in accord with the means employed to produce it, and its chief charm lies in the fact that it looks exactly like what it is. Technically the building is a marvel of ingenuity; difficult problems of heating, construction, and the design of equipment such as the special doors and windows were all worked out with patience, intelligence, and a complete disregard of cost to the architect. He even eliminated all stairs, substituting gently sloping ramps to remove another possible source of danger to the children. He has since had schools to do—and small wonder!

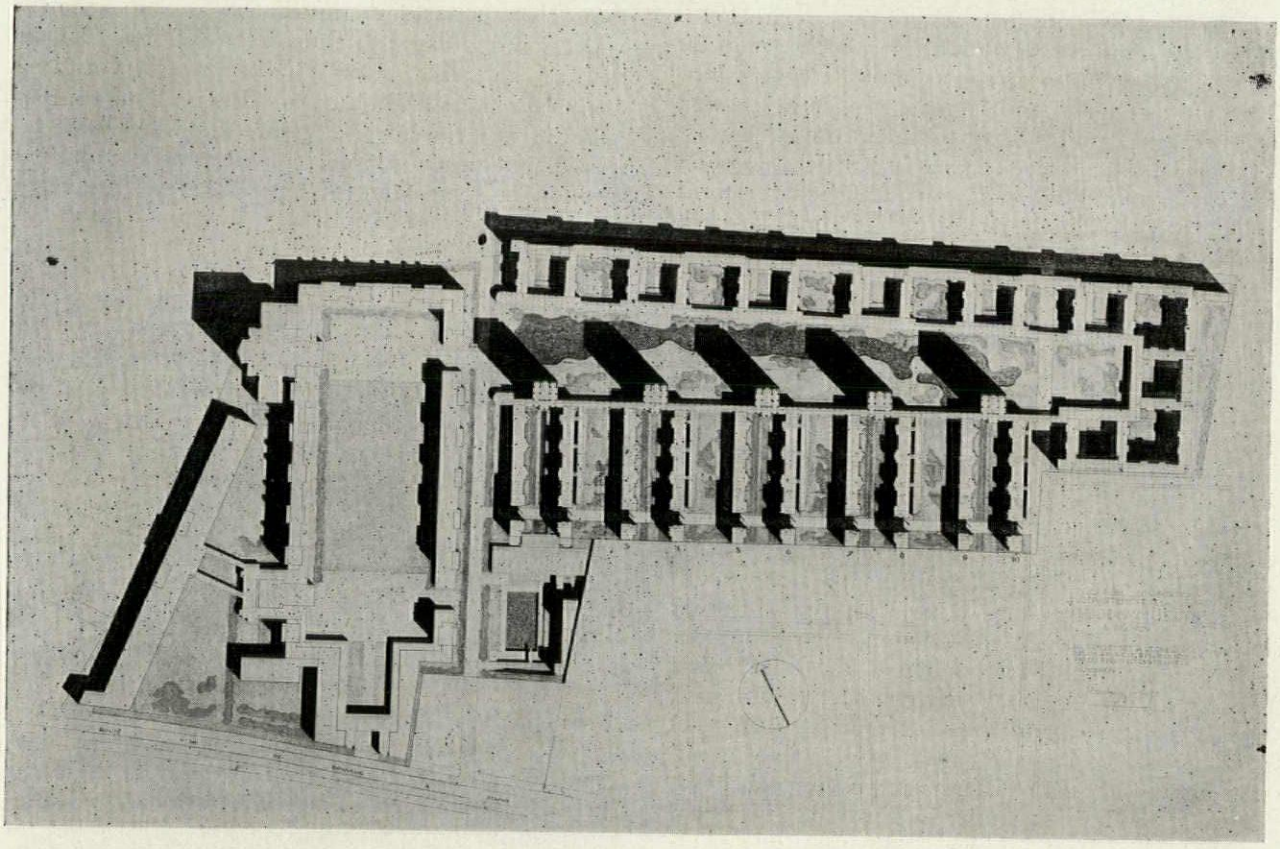
Drancy was another departure, this time of a different nature. A factory suburb of Paris, Drancy grew at a great rate of speed—from 6,000 in 1918 to 42,000 at the present time. Its growth was uncontrolled, and as a result the town now can boast some of the choicest slums in Europe. The problem that faced Beaudouin was the usual one of redistributing the population of a congested town, but it had a special twist: only 27 acres were available for the accommodation of 12,000 families. Had the usual two-story dwellings been erected it would have meant the creation of another slum area; had a uniform limit of five stories been set, recreational space would still have been inadequate and the appearance of the group far from inspiring. Beaudouin reviewed all of these unsatisfactory possibilities, and then, taking the bull by the horns as usual, he pushed five of his units up to fifteen stories, redistributing the rest in the usual low buildings. Criticism was later made of this separation of the high dwellings into five units, but Beaudouin knew, from a careful study of preliminary models, that this was the only way to assure sunlight for the group. The same system of light steel and precast concrete units was used here that had been employed at Bagneux, resulting here in a saving of 20 per cent over conventional structural methods, and this saving was put into equipment and interior finish. Rents range from $65 to $165 a year—not bad for skyscraper apartments! With one of the finest housing developments in Europe in their midst, the slum-dwellers of Drancy are not happy, however. The towers are too high, too clean, too much like New York. Whether they will learn to like them or not remains to be seen. In the meantime, Walter Gropius has given the project his most enthusiastic commendation, architects from all over have come to see it, and Beaudouin and his associates find themselves experts on housing as well as schools.

Other work came to the office, although not on such a grand scale, and they did a number of large competitions as well. Among these was a competition for a large hospital group at Lille, which he won. Beaudouin's summary of the problem and his solution is a masterly piece of straight thinking, and it was typical of him that he continually emphasized the importance of hospitals as social functions. A hospital is a monument, a machine with a definite psychological effect on its inmates—these things Beaudouin took as granted and solved the problems they presented. But the important thing is that it is a necessary part of the social organism; for a prosperous young Frenchman, Beaudouin gets very close to the communist ideal at times. Few architects have a stronger sense of architecture as a living part of society; it is not accident that his work has a corresponding vitality. Incidentally, it was quite characteristic of the way his office works that they spent so much studying the problem as to use up all the prize money.

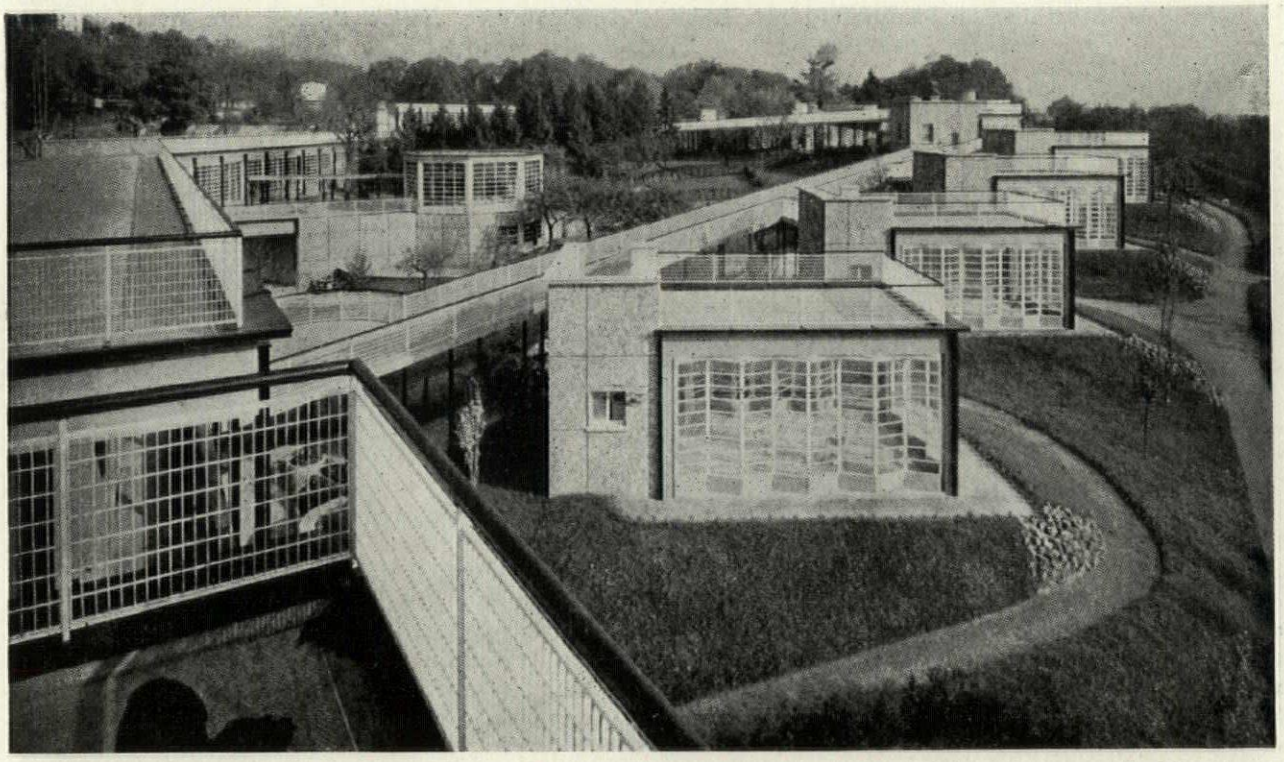
All of Beaudouin's competitions and executed works are of absorbing interest. But in none of them did he make so magnificent a gesture as his project for an exposition hall in Paris. The program was given out by a group similar to the Steel Institute in America, and required that a hall, rectangular in shape and with a flat ceiling, be designed to cover a 30-acre plot without any intermediate support. This was a sort of thing Beaudouin



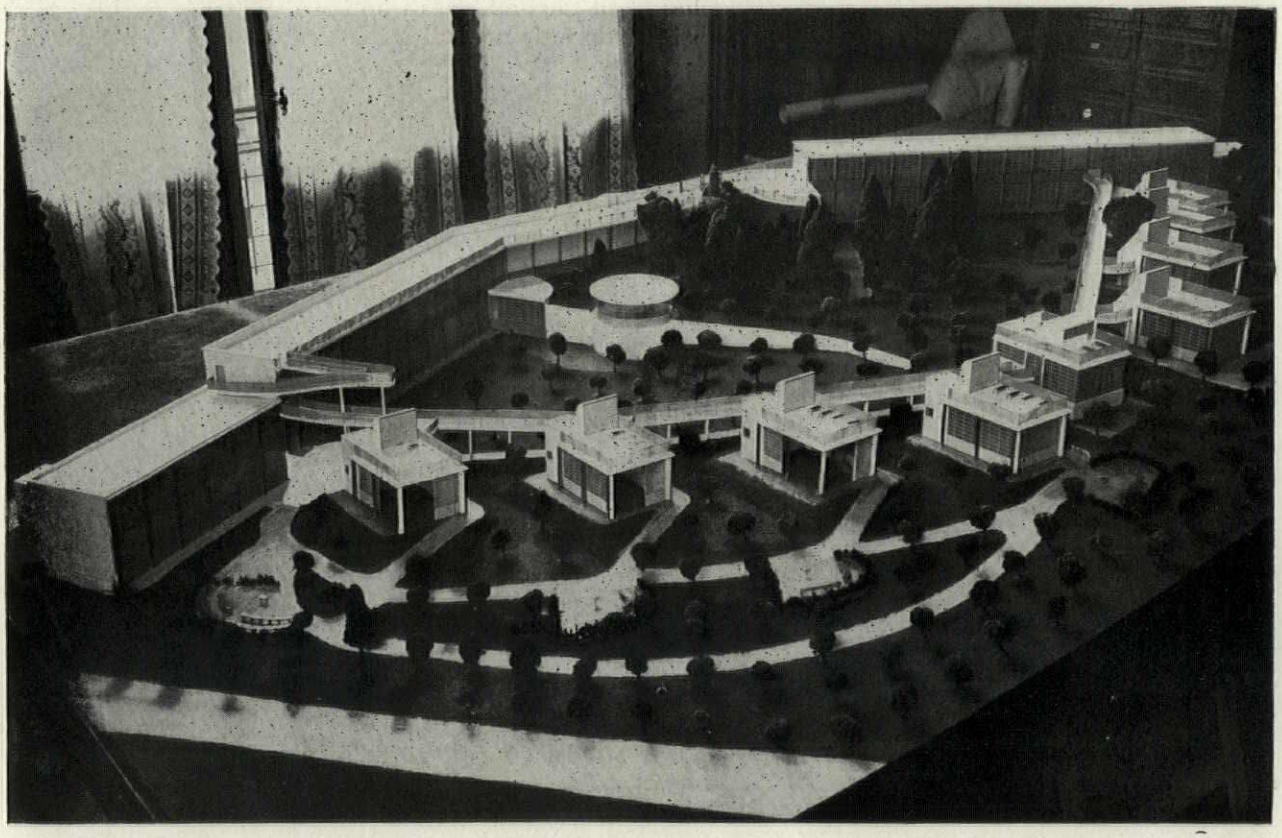
Model of the Cité de la Muette at Drancy, one of the largest housing developments in France. Many similar models were constructed to study shadows and the relation of buildings to recreational areas



The plan of the group as built, with its great open areas and well-lighted buildings, is the best justification of Beaudouin's unprecedented use of towers for low cost housing. See perspective on front cover



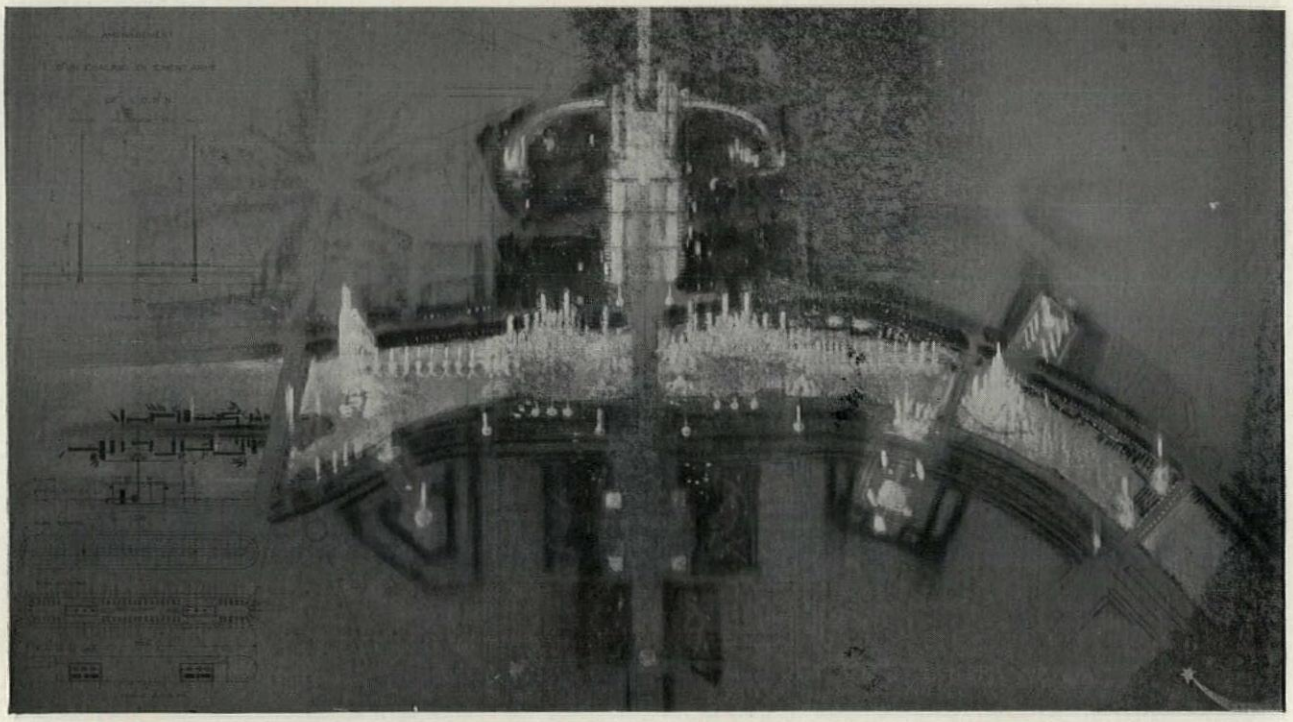
Functional architecture in one of its finest expressions, the open air school at Suresnes derives its undeniable architectural quality from harmonious use of simple materials and effectively repeated elements



The purpose of the group, as shown in model form, needs no description. Open to sun and air, protected from north winds, the school suits its purpose with maximum efficiency and minimum complication

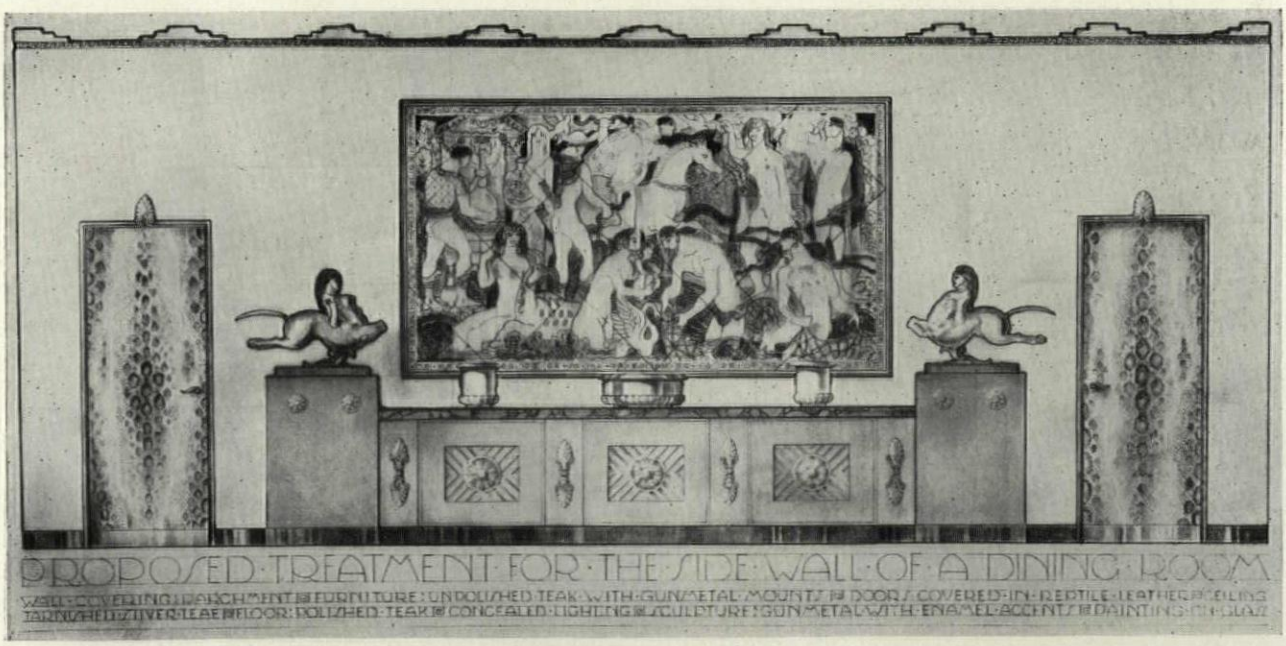
loves, and he threw himself completely into it. All possible variations were studied, all means of spanning the huge space were investigated, and when he got through he wasn't satisfied with any of them. A steel truss 800 or 1000 feet in length had to be colossal, and most of its tremendous weight was effective near the center of the span rather than at the supports, a situation demanding a most wasteful use of the material. Beaudouin's studies finally led him to the conclusion that the most logical thing to do would be to use the steel in tension, and he finally arrived at a fantastic result—a ring 1200 feet in diameter, with cables stretching to another small ring in the center. He knew that the design would be thrown out of the competition, because the program required a rectangular hall, but by this time he was more interested in the problem than in winning the competition, so he went ahead, had a model constructed, figured the steel and all details of construction and equipment with engineers, and worked out the surrounding area to take care of existing roads and to provide for the influx of traffic such an edifice would attract. The design was thrown H. C., as he had expected, but it caused a sensation. The jury of award had no choice in the matter, of course, but Beaudouin and his associates were quite unanimously applauded for having so deliberately departed from the too inflexible program.

At present he is busy with the coming World's Fair, as are many other architects. His sketches for a treatment of the waterfront, one of which is illustrated on the frontispiece, are lovely, sensitive drawings, recalling forcibly the rich vein of fantasy that is part of Beaudouin's make-up, a part which has found little direct expression in the severely utilitarian buildings which have made up the bulk of his practice. What will come after the Fair remains to be seen. Probably more houses and more schools—but it is not likely that he will settle down and become a specialist. In the meantime, he admits, life is very pleasant. His office has become imbued with his own ideals, and in it he is just one of a group at work. Lods, while somewhat overshadowed by his partner's brilliance, is no silent member of the firm; Bocquillon works out models of everything as studies progress; Henrot, another draftsman, photographs them in his spare time, and Paul Herbé, of the famous trip to Ispahan, does much of the designing with Beaudouin. When work is rushed Beaudouin wears himself to a frazzle, and when it is over goes away on a long trip, usually managing to collect more ideas, more sketches of town plans, and more photographs of exciting buildings. One of his trips took him to America a short time ago. His comments, when he came back, covered everything from mass production to New England cemeteries, and were penetrating and objective—and singularly fair. Beaudouin accepts good where he finds it; his only aim is to produce fine architecture, and success has not diminished his fresh outlook. He is the youngest of the architects who have appeared in this series; there is no indication that he will ever grow old.



A plan sketch for a proposed lighting arrangement of the Paris 1937 Exposition. A perspective of the scheme forms the frontispiece of this article. Rough, but brilliantly indicated, the sketches amply demonstrate Beaudouin's ability to present his ideas with a minimum of effort

PROPOSED MURAL TREATMENT FOR A DINING ROOM



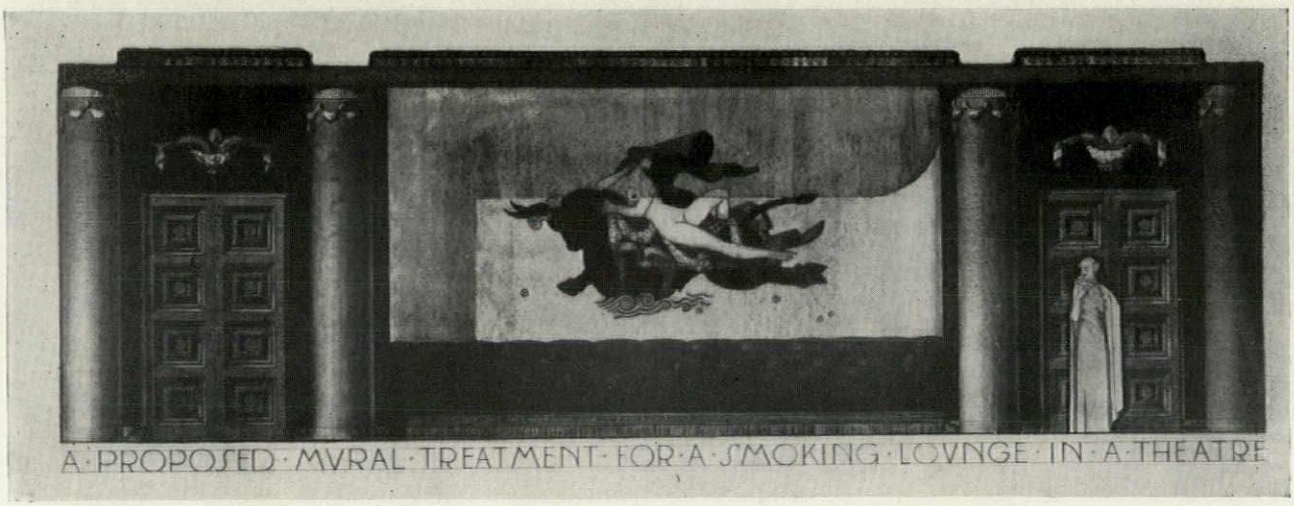
PROPOSED TREATMENT FOR THE SIDE WALL OF A DINING ROOM

WALL COVERING PARCHMENT FURNITURE UNPOLISHED TEAK WITH GUNMETAL MOUNTS DOOR COVERED IN REPTILE LEATHER CEILING TARNISHED SILVER LEAF FLOOR POLISHED TEAK CONCEALED LIGHTING SCULPTURE GUNMETAL WITH ENAMEL ACCENTS PAINTING

Sketches for two proposed mural treatments by James Owen Mahoney, recently returned Fellow in Painting of the American Academy in Rome. The central paintings are shown at larger size on the two following pages. The paintings were exhibited recently at the Grand Central Galleries in New York

"Fruits of the Earth," a painting on glass by James Owen Mahoney, designed for a setting as suggested by the sketch on page 137. The panel measures 12 feet by 5½ feet and was executed on the backs of sizeable squares of glass fitted together and fastened in place by pins at the corner junctions. Paintings done on glass in this way are completely permanent and are thoroughly protected against the action of the atmosphere

"The Judgment of Paris" as composed by James Owen Mahoney, Fellow in Painting of the American Academy in Rome from 1932 to 1935. Designed to be placed in a dining room in accordance with the sketch shown on page 137. The large face of Hélène is surpainted in gold over the figures



Two more sketches for proposed mural treatments by James Owen Mahoney. The subject of the upper decoration is Bellerophon while that below is, of course, the Rape of Europa. The Theatre Lounge is designed to have tobacco brown walls, columns of coral, oiled cedar doors and crimson velvet seats

REGISTRATION?

By HUBERT G. RIPLEY

HOWEVER desirable a Registration Law for Architects may be, it seems grotesque to those who regard Architecture as a Fine Art. This may be due to a misunderstanding of the purpose of such laws, which feeling is fostered by the imperfections and confusion resulting from the conflicting provisions in the thirty or forty existing statutes in as many states. When Registration for Architects was first proposed, the A.I.A. decided to issue a model form, which it was hoped all states would adopt without material change. This the states did not do, and the result was a series of compromises that have perforce been accepted by the sponsors of the bill in lieu of something better, trusting that future amendments would bring sunshine to all. At the present time, architects in more than three-quarters of the states of the Union are compelled by statute to become Registrants, and oftimes to submit to unnecessary annoyance and hardships in order to retain the use of their title. However, both the A.I.A. and the R.I.B.A. have arrived at the conclusion that, although architecture may be a Fine Art, it is desirable to confine its practice to those who understand and follow the high standards established by these two bodies. There is a fundamental difference in such laws now in effect in Great Britain and the United States. Let us examine, for the moment, the British method.

A Registration Act was passed by both houses of the British Parliament and went into force on January 1st, 1932. The beginning of the movement for the voluntary registration of Architects in Great Britain dates from 1791, over 140 years ago, when the Architects' Club was founded by a number of distinguished architects including Sir William Chambers, Robert Adam, John Soane, and S. P. Cookerell. The principle of the formation of a Register of Architects by and under control of the R.I.B.A., therefore, had been acknowledged and accepted in Great Britain for more than one hundred years; but it was not until 1884 that the first attempt to secure Statutory Registration was made, and not until the 11th of February, 1927, was the bill, which has been modified into the present law, introduced into the House of Commons.

At the time the promoters of the bill were asked to agree that the word "registered" as a prefix to architect be added. The effect of the amendment relating to the title "Registered Architect" was to restrict the title "Registered Architect" to persons on the Register and to leave it open to anyone to continue to use the title "Architect," thereby rendering the measure permissive, and altering the bill from compulsory to voluntary registration.

The notes on the British Law are extracts from a book written by Mr. Charles MacArthur Butler, the first registrar to the Architects' Registration Council of the United Kingdom, and may be found in "The Growth and Work of the Royal Institute of British Architects," first published on the occasion of the Centenary Celebration in 1934. Mr. Butler observes further that amending the bill from compulsory to permissive in effect does not destroy the principle which it was the object of the promoters to establish in Parliament. A summary of the bill, which is too long to be quoted in full, includes the further statement that the Architects' Registration Council of the United Kingdom will set up and maintain a register of architects, entry to which will be regulated by an admission committee composed of registered persons and representatives of the engineering, surveying, and building institutions. The qualifications for admission without examination, provided a person makes application within two years after passing of an act, are much the same as set forth in the A.I.A. model registration law. However, architect members of the Royal Academy, the Scottish Academy of Art, and anyone who has gained a degree or diploma recognized by the Council as qualifying for registration can apply to be admitted to the register at any time. Other applicants are required to submit to a test of qualifications which may include the passing of examinations held by the Board of Architectural Education or a committee recognized by the Council.

Registered persons are entitled to use the designation "Registered Architect" and there are penalties for improper use thereof and obtaining registration by false representation. The Council has power to make regulations prescribing the admission, examination fees, and generally for administering the act, and the Council must put aside at least 50% out of the total of the amount of fees received for the purpose of providing scholarships and maintenance grants to assist students.

The Constitution of the Council is composed of representatives of all the architectural bodies in the United Kingdom in proportion to their numerical strength, with the addition of one representative appointed by each of the government departments interested, and the leading bodies representing engineering, surveying, and building have a right to appoint one representative each if they desire to do so. The second schedule of the bill deals with the constitution of the Education Board which includes representatives of the universities and schools of architecture in Great Britain, certain teaching bodies, the Royal Academy, and the Royal Society of Arts, and registered persons appointed by the Council. The Admission Committee is composed of registered persons appointed by the Council, and representatives of the chief engineering and surveying institutions and the building industry. The nature of the Act is permissive, and no one need ask registration unless they desire to do so as the title "Registered Architect" is restricted to registered persons, but its use

by them is not compulsory. Mr. Butler further points out that the setting up of a statutory register of architects and of a statutory examination for admission, should give a greater impetus to architectural education, and in due course there will be no person on the register who has not had at least a minimum of training in his profession which will entitle him to hold himself out as competent to advise those members of the public requiring the services of an architect. This will be all to the good of the public and of architecture. The statutory examinations for admission to the register will also have the useful effect of indicating to would-be architects, their parents or guardians, and to the directors of education generally, the minimum qualifications which are expected of those who desire to enter the profession by this means, and it will serve as a useful deterrent to persons who might otherwise waste considerable time and money in preparing to practice a profession for which they have very little or any aptitude. The passage of the act makes no difference to persons who are at the time practicing as architects, nor does it interfere with activities of persons in discharge of any duties or calling which they were legally entitled to carry out or to practice before the act was passed. Those who are already chartered architects, or who may become so, will not be compelled to register, but they will presumably desire to do so in order to secure the legal status and protection which the statutory register will provide without necessarily assuming the title "Registered Architect."

One of the criticisms of the Registration Act in Great Britain while the bill was in Parliament was to the effect that the object of the R.I.B.A. in promoting the act was of a selfish character, having for its aim nothing more than aggrandizement of the Institute. Mr. Barnes, who wrote the chapter on registration in the above-quoted book, says; "The R.I.B.A. needs no Registration Bill either to consolidate or to aggrandize its position. This position is unique among all the professional organizations of the world. In no profession is there any single body which has achieved so commanding a position." The whole empire is covered with a network of architectural organizations which are founded by the R.I.B.A. so that you may not go into any part of the British Empire where you will not find already in being or coming into being an organization of architects who, while directing their attention to their own affairs in their own locality, are yet linked not only by sentiments of interest, but more formal ties to the R.I.B.A.

This achievement has been carried out apart from registration, and the position of the Institute depends on no provisions in a registration bill. It has an attractive force which has brought within its ranks, and which will continue to bring within these ranks, architects of repute and distinction.

As previously noted, imperfections exist in all the laws for the registration of architects in the United States, and all are constantly being amended. They are not reciprocal so that in many cases architects whose practice extends throughout several states are compelled to become registrants in each, or else associate with some registered person. This is an annoyance and a hardship which might easily have been avoided by following the British example in making all registration laws permissive. A fundamental mistake in the A.I.A. model registration law is its compulsory provision. Whether it is constitutional or not to deprive a person of the right to the title, "Architect," a prerogative enjoyed for centuries, is beside the point. Our registration laws, if I am not mistaken, are all compulsory, hence unsound in principle and consequently unstable. It is fallacious to argue that registration laws are for the protection of the public, because they do not protect the public against badly designed architecture. Safety in construction and planning are proper subjects for compulsory legislation and that legislation already exists in most states and communities. Where it does not exist, or is not properly enforced, the A.I.A. and its chapters might better exert their influence to correct the situation. Furthermore architects' registration laws should really be national in character,* sponsored and administered by the American Institute of Architects, and the excellent R.I.B.A. law might be advantageously studied in framing those for this country. Due to the involved character and unsound principles in many, if not all, of our registration laws, it has been found somewhat of a task to get them through the various state legislatures. It would be still harder to repeal them, and probably too late to do much about the thirty or forty statutes now in existence, but it is not too late to do something about the proposed laws for the remaining states where none exist. It is ignoble for a great profession to accept unsound, faulty, or imperfect registration as an "entering wedge," on the theory that a bad statute is better than none at all. It is comparable to accepting the bastard Colonial or the rotten Romanesque of the 80's and 90's as something better than the dignified old buildings of the 60's and 70's, whereas with all their failings and uglinesses, the old Mansard roofed villas and cast iron façades were, and still are, well mannered and sound.

Apparently the British registration law is a honey, for they've studied the subject and considered it thoughtfully, off and on, for 140 years, so evidently there's no great hurry about it. There is no reason in the world why we can't have at least equally good registration laws in the United States. Just because we started off on the wrong foot twenty years or so ago, it does not necessarily follow that we must remain sesquipedalian always.

*This could be readily accomplished by amending all existing registration laws (and framing those for the remaining states) so as to make them all permissive.

A. L. Guptill's Corner

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

A NEW GUPTILL'S CORNER COMPETITION LOOMS OVER THE HORIZON

Yes, you pushers of pen, pencil and brush, it won't be long, according to present plans, before we offer Guptill's Corner Sketch Competition No. 3. You have asked for it and shall have it.

While the matter is before us, I should perhaps report that too few ballots came in response to my request for a popular vote on the previous contest to be worth tabulation. I heartily thank you who voted, however. And to show the trend of the thing—especially how opinions in such matters vary—I have just picked up a half dozen of the ballots at random; here they are, along with a few of the comments which accompanied them. To prevent embarrassment I have omitted senders' names.

Ballot 1 (from B. C. H.); places the first seven winners in this order.

(See December issue for comparison.) Genn, Smith, Twiddy, Jensen, Rankin, Sproat, Ochs.

Ballot 2 (from "a non-contestant"); Genn, Jensen, Smith, Rankin, Williams, Spiess, Twiddy.

Ballot 3 (from R. A. E.); Spiess, Jensen, Ochs, Sproat, Smith, Twiddy, Hillier.

Ballot 4 (from H. M. S.); Jensen, Spiess, Twiddy, Hillier, Genn, Smith, Kral.

Ballot 5 (from H. T. W.); Jensen, Smith, Spiess, Gaiser, Ochs, Genn, Aulicino.

Ballot 6 (from E. W. G.); places Gaiser first and Smith second.

I feel that had more readers voted they would have confirmed, on the whole, the judgment of the jury, though the comparatively few votes submitted may have run a shade stronger for Jensen, Smith or Genn for first prize. We must remember, however, that those concurring fully did not trouble to vote.

GET TO KNOW YOUR TREES

The architect should know his trees. They form a prominent part of the setting of much of his architecture, and as such he frequently has to draw them. Usually he is poor at this. How about you? Now, while the deciduous types are still free from foliage, why not get busy learning something of their skeletons? Sketch trees as you see them, leafless. Then in a couple months, when the foliage is full, sketch them again. Such comparison is ideal.

Last month I had quite a bit to say about how the interior renderer adjusts his values of light and dark so as to give emphasis to those parts of a rendering which he considers most important. Sheet 6 continues the same thought.

If he is making a rendering of a room which is too low from floor to ceiling to suit, he can gain an effect of increased height by the means expressed at 1, toning down the areas at left and right with sharp grades. Sketch 2, contrarily, shows the width of the room emphasized, this being the same room as before but with floor and ceiling toned with sudden grades. Crude and extreme as these sketches are, the method which they illustrate has no end of applications wherever there is desire to increase or decrease the apparent height or width of a room.

I remember that once years ago, when it was my practice to wander from office to office as designer and renderer, I was called into an office to render a Gothic interior with heavy carved trusses. One rendering had already been attempted, but in it the room from the trusses down looked squat or compressed. We overcame this by the use of reflections on the floor, something as in little Sketch 4 here.

The renderer often finds it worth while to have a good working knowledge of reflections. They can be of real help under many conditions. He should understand, at least, the reflections common to such horizontal surfaces as floors, table tops, etc. He should not confine himself to interiors; I have known of many cases where, in rendering squatty exteriors, the artist has improved his effects by the use of reflections in the street, thus subtly overcoming the inadequate height of his subjects.

As to reflection shapes, one can think of his own reflected appearance in the mirror. He sees himself in reverse position, but otherwise unchanged. If we have a street, floor, or table top which is flat and glassy (the street must be wet), it will image objects much as a mirror in the same position might do. A pail resting on a smooth, shiny floor (A, Sketch 3), for example, would have a reflection like the pail itself, inverted. This reflection could be laid out in instrumental perspective just as a likeness of the pail would be. If the pail were raised above the reflecting surface, the reflection would drop an equal distance below it (B). Not only would these reflections be like the objects themselves (inverted) in form, but they would take on their colors and values, just as your image in the mirror shows your coloring. These hues and values would be modified somewhat, however, by the tone of the reflecting surfaces, being dulled and made less definite. Reflected shapes would be modified, too, due to the fact that reflecting surfaces are seldom truly flat and smooth. Irregular reflecting surfaces develop distorted reflections. Sketch C shows this.

REFLECTIONS ARE OFTEN DISTORTED

Fortunately the renderer doesn't have to picture all reflections just as they actually exist. If he were to show them with shapes as complex as they often appear and with hues and values as strong, they would attract too much attention. Usually they are simplified and conventionalized. As to form, it is quite common on horizontal surfaces to interpret reflections almost wholly by means of vertical suggestions. See D, which does not show the full curve that a true reflection of the cabriole leg would develop. Often absolutely straight lines are carried down from chair and table legs, etc. At 4 emphasis is again mainly on the vertical, though the "X" of the table is shown reflected in its own form.

Observe in this sketch at 4 an illustration of several points. First, as already seen, the room looks higher because of the vertical reflections. Again, the fact that the intersection between the floor and sidewall is largely lost adds to this illusion of height. And, finally, in severe rooms a bit of reflection can lessen the severity, the patterns formed by means of reflection taking the place of other patterns such as are often present.

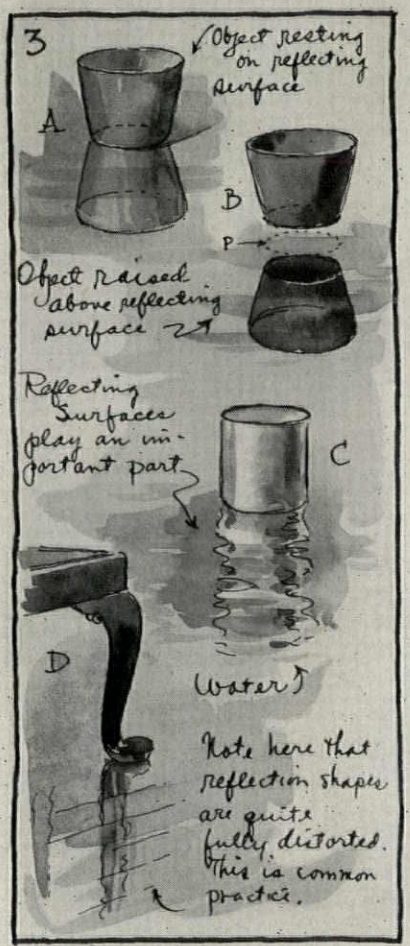
This matter of reflection is so important to the renderer at times that in my new book on color I have offered several sheets of illustrations. These deal with reflections not only on horizontal surfaces, but also on those which are vertical or tipped. Reflections of reflections are likewise considered, so that I think I have covered the subject there rather fully. Incidentally the sale of the book is proceeding with gratifying steadiness and reports from purchasers indicate that they are finding it helpful.

RENDERING INTERIORS AND FURNITURE

SHEET 6 • MORE ABOUT VALUES • USES OF REFLECTIONS •

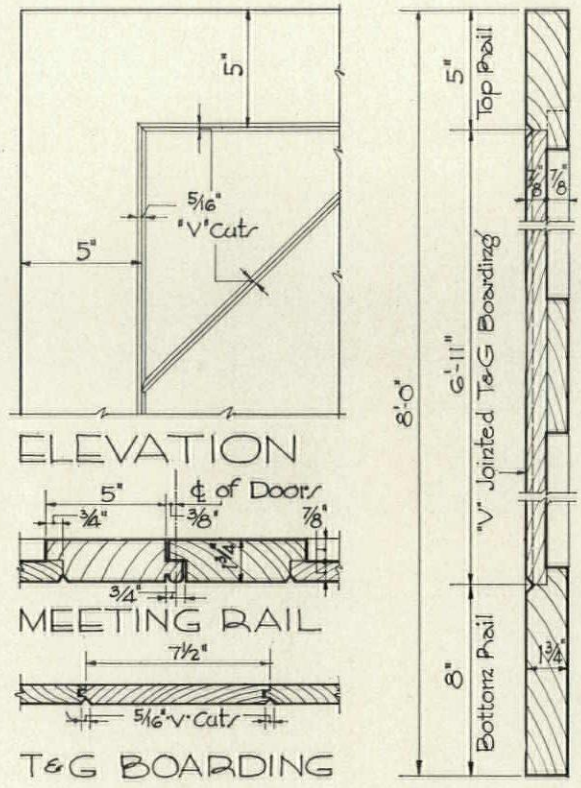
GRADATION TO RIGHT AND LEFT

GRADATION TO TOP AND BOTTOM



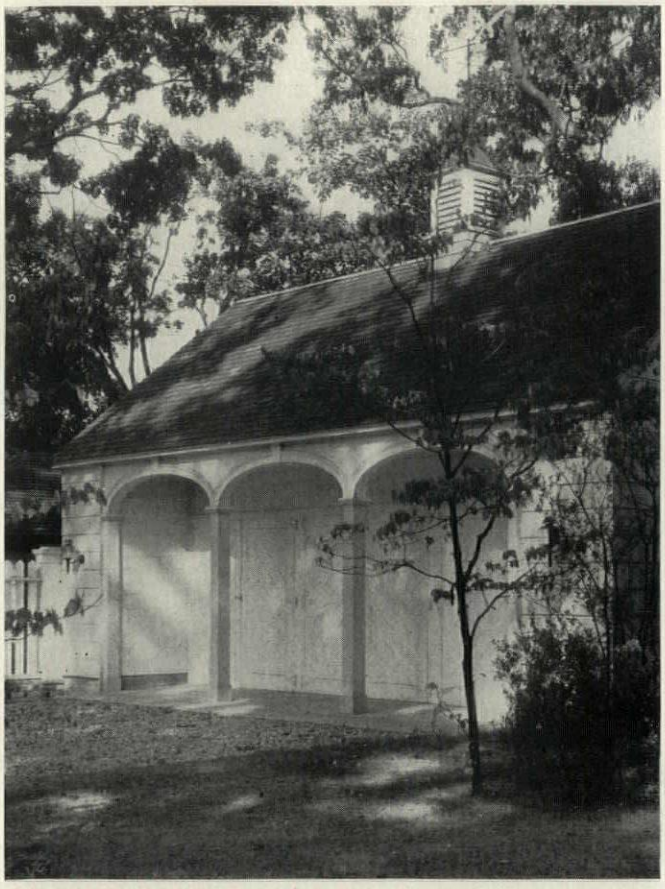
REFLECTION LAYOUT

REFLECTIONS HAVE MANY PRACTICAL USES

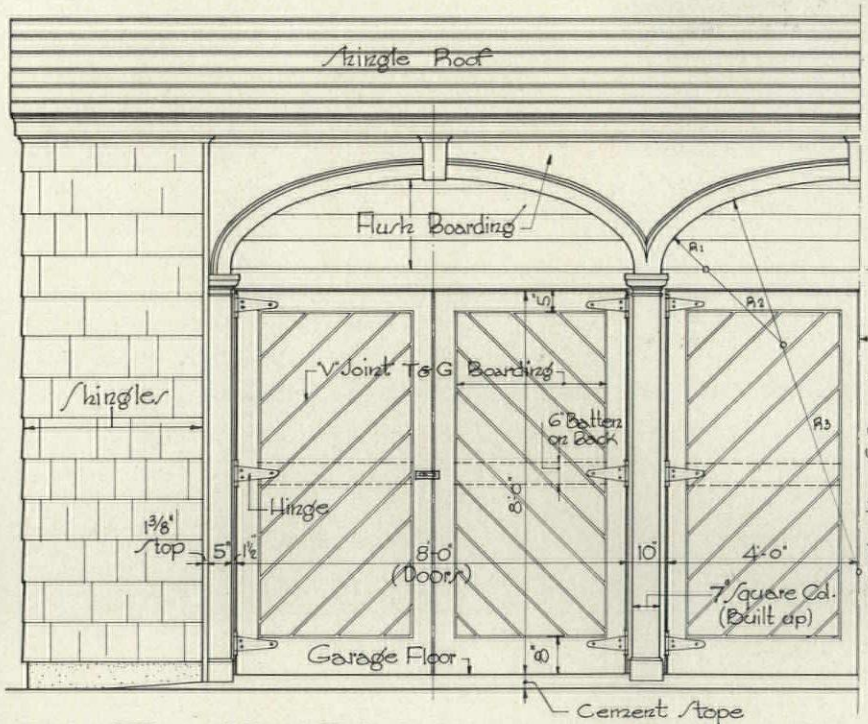


DETAIL · OF · DOOR

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

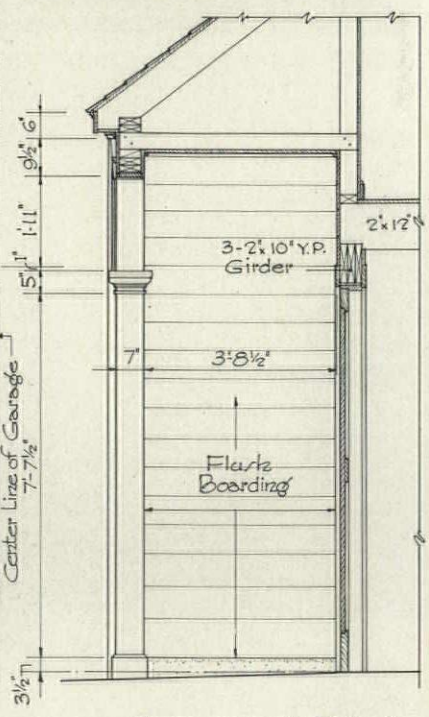


George · H · Van Arda ·



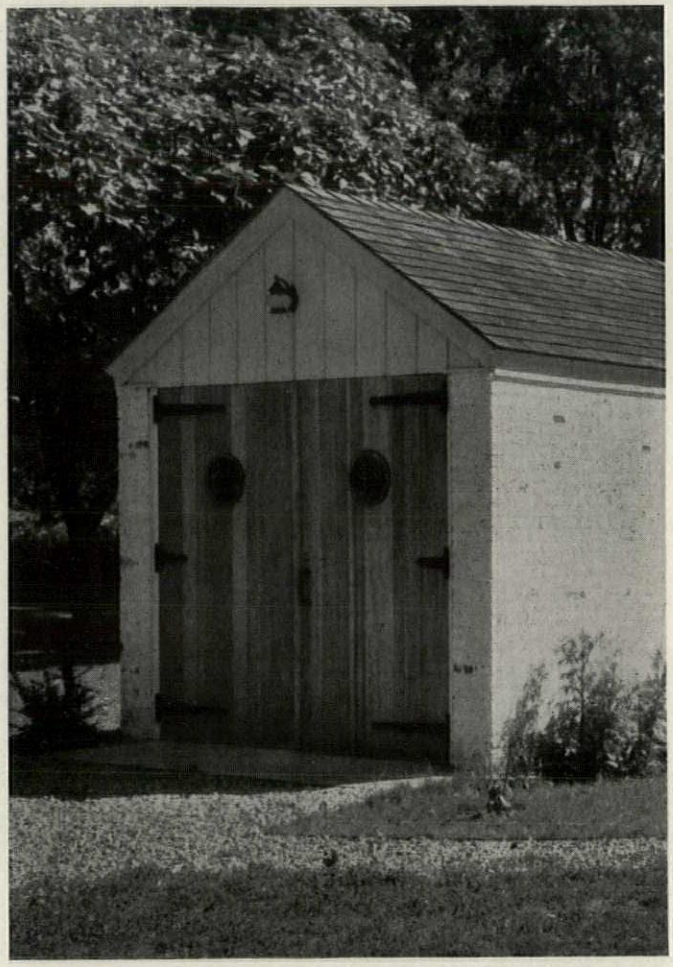
ELEVATION ·

SCALE: 1/4" = 1'-0"

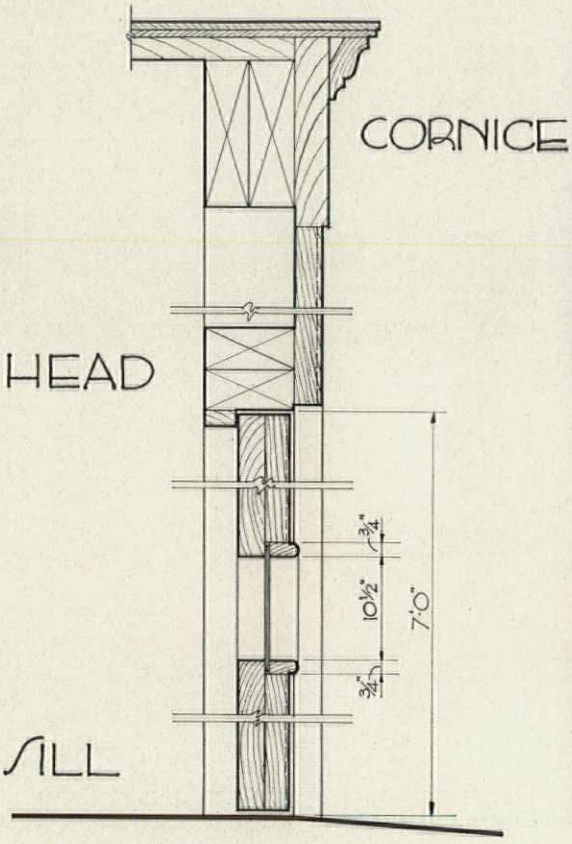


· SECTION ·

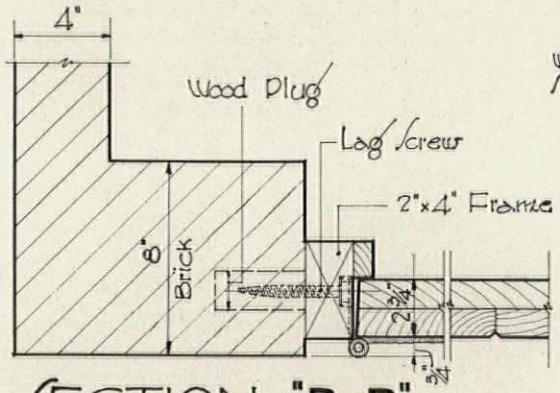
· ALFRED · EASTON · POOR ·
ARCHITECT



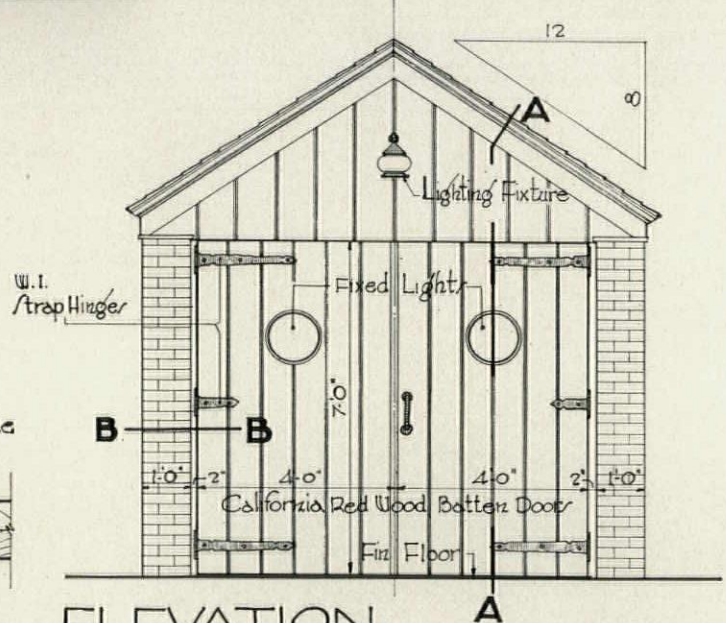
Geo. H. Van Anda



SECTION · "A-A"
SCALE: 1½" = 1'-0"

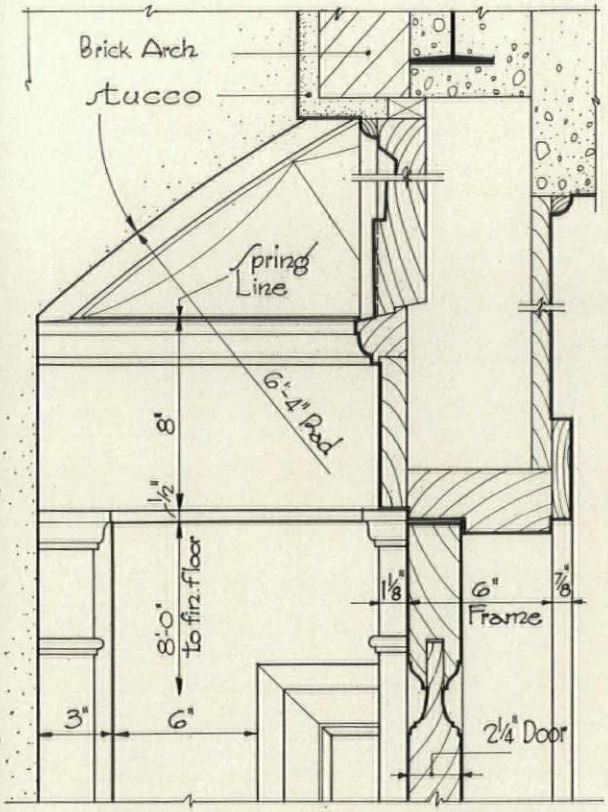


SECTION · "B-B"
SCALE: 1½" = 1'-0"



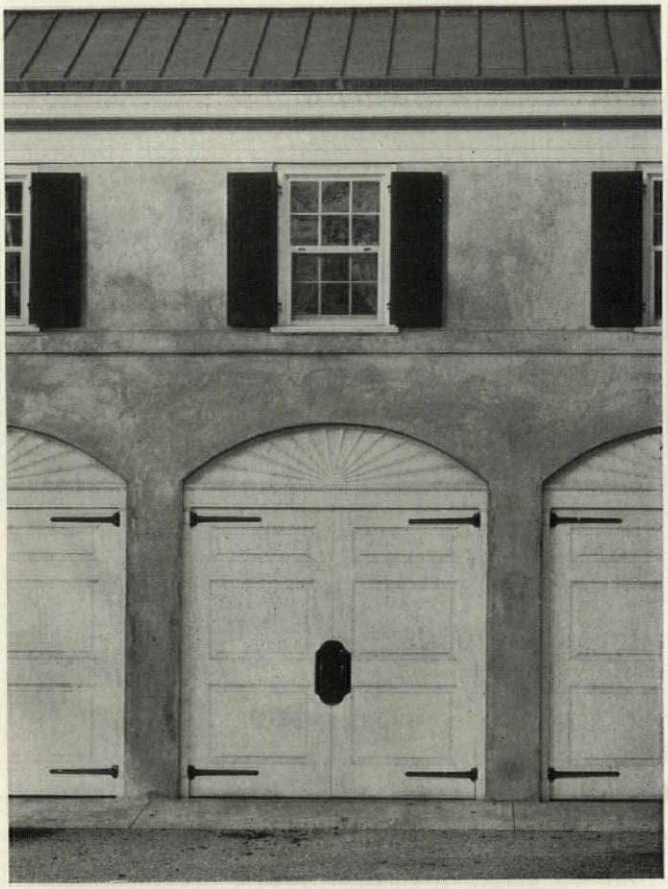
ELEVATION
SCALE: ¼" = 1'-0"

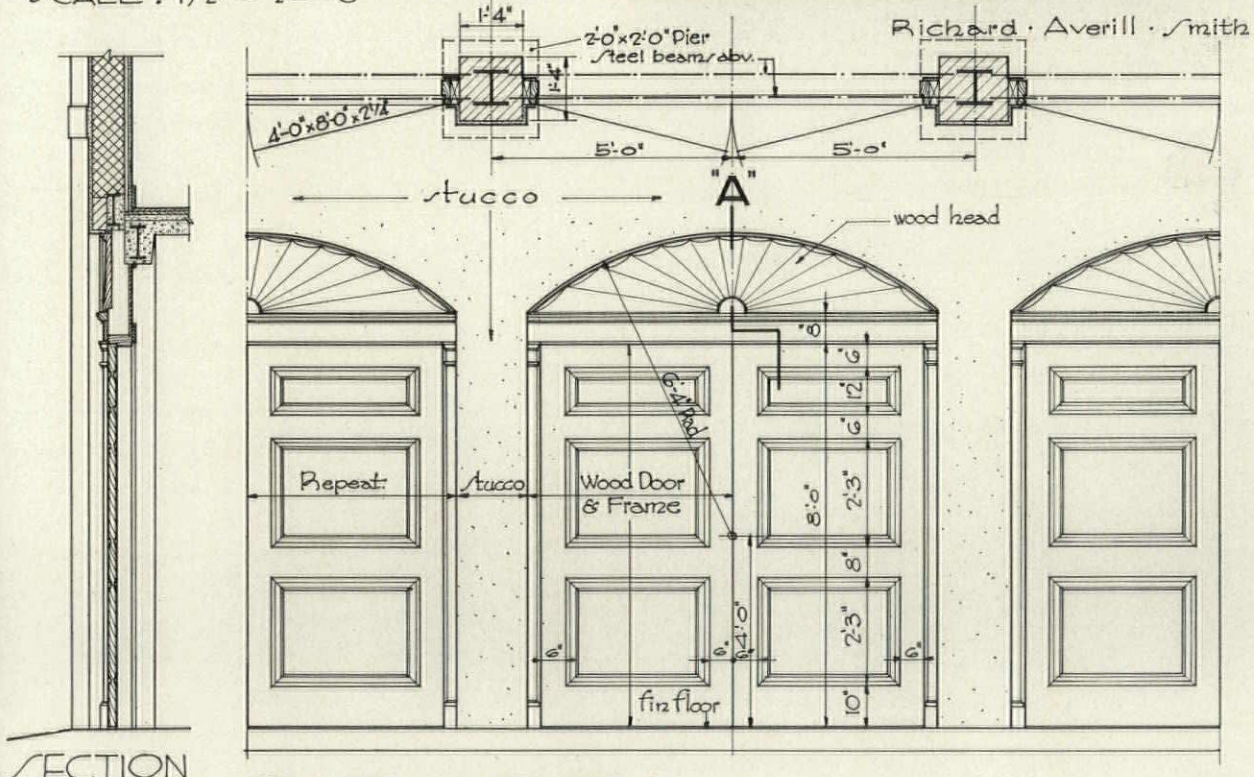
· HARRISON · GILL ·
ARCHITECT



DETAIL · AT · "A"

SCALE : 1½" = 1'—0"





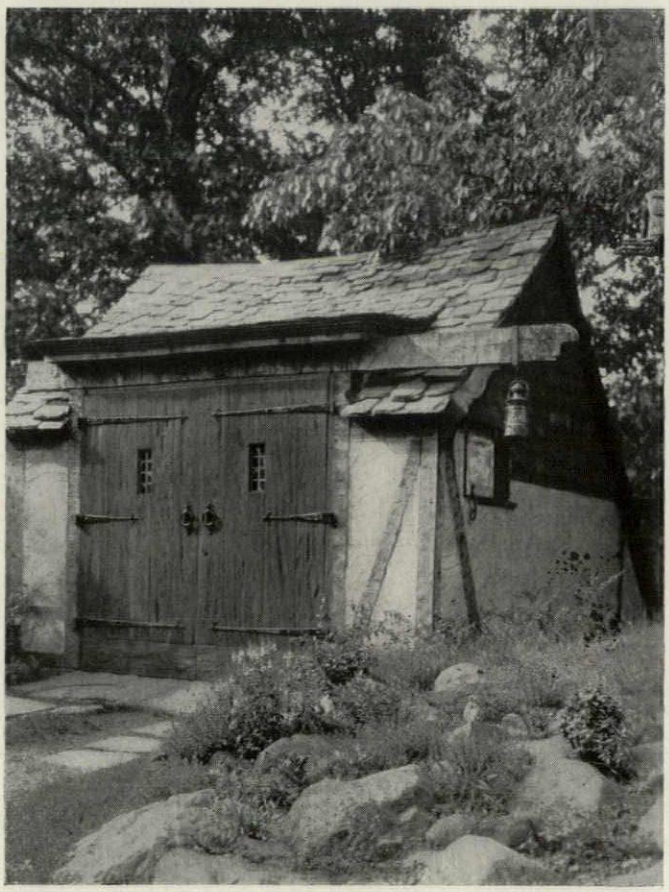
Richard · Averill · Smith

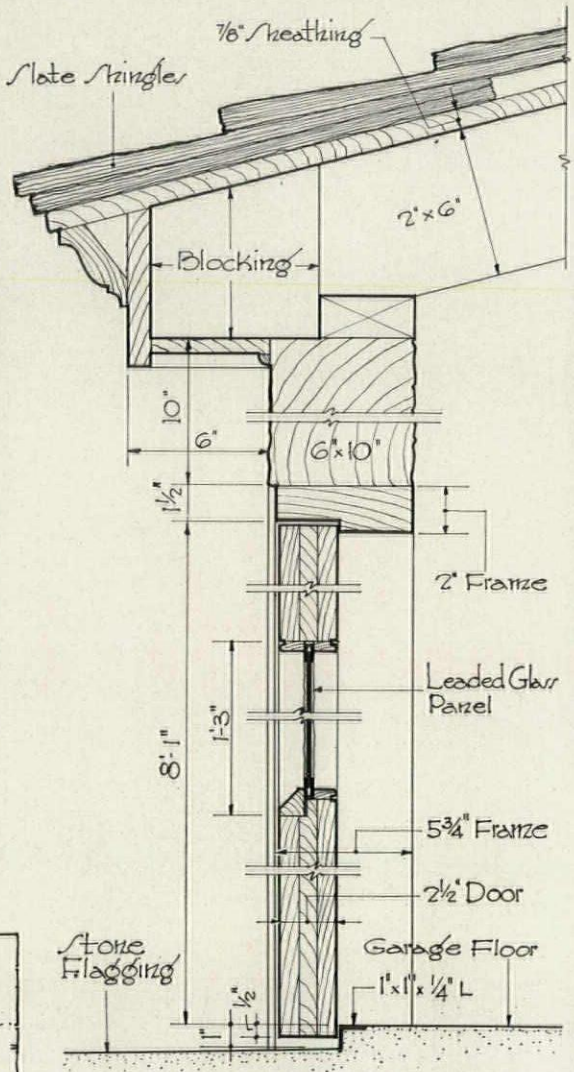
SECTION ON E

ELEVATION

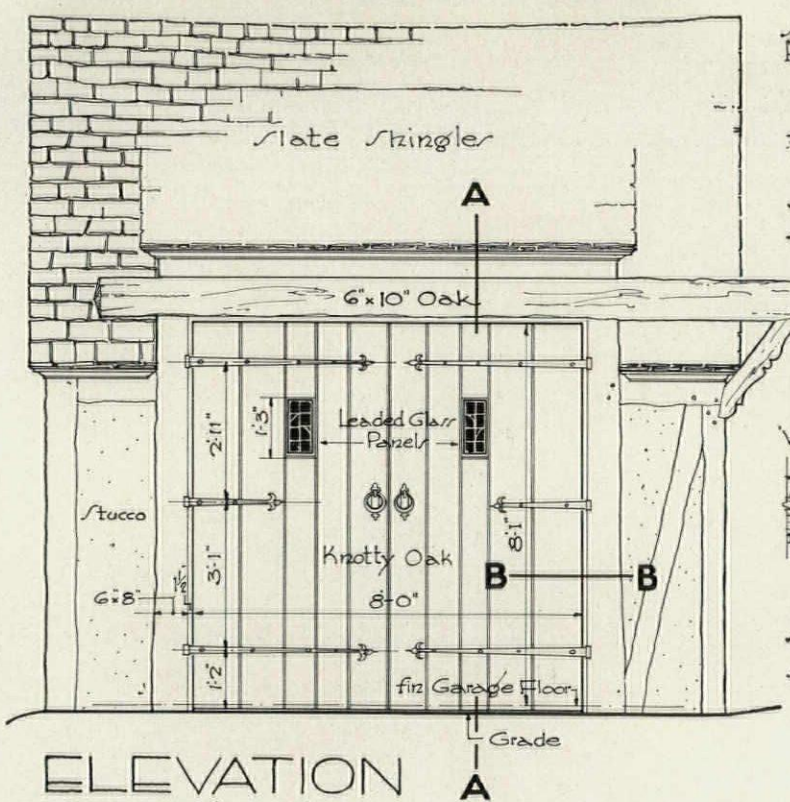
SCALE : ¼" = 1'—0"

F · NELSON · BREED
ARCHITECT

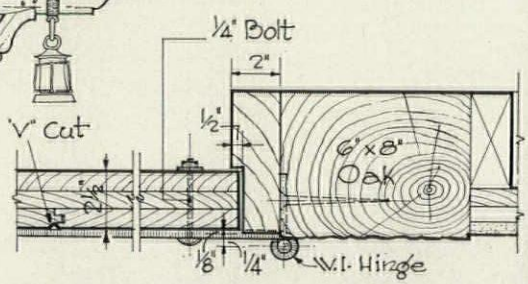




SECTION "A-A"
SCALE 1½" = 1'-0"

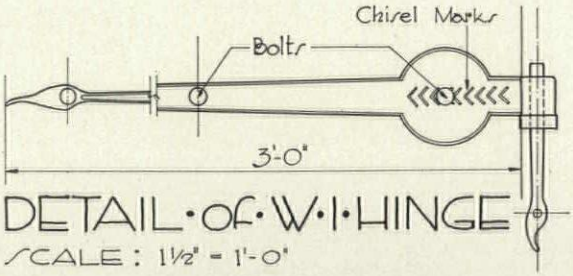


ELEVATION
SCALE: ¼" = 1'-0"



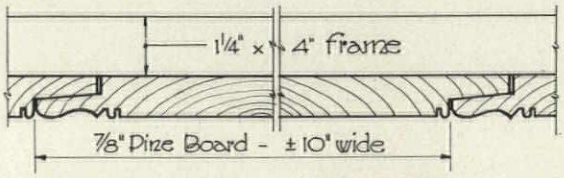
SECTION "B-B"
SCALE: 1½" = 1'-0"

· BERNHARDT · E · MÜLLER ·
ARCHITECT



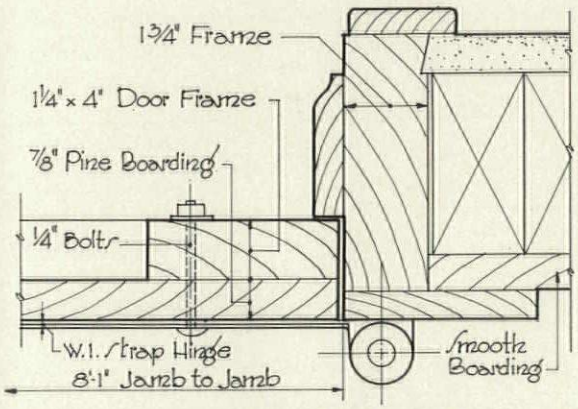
DETAIL · OF · W·I · HINGE

SCALE : 1½" = 1'-0"



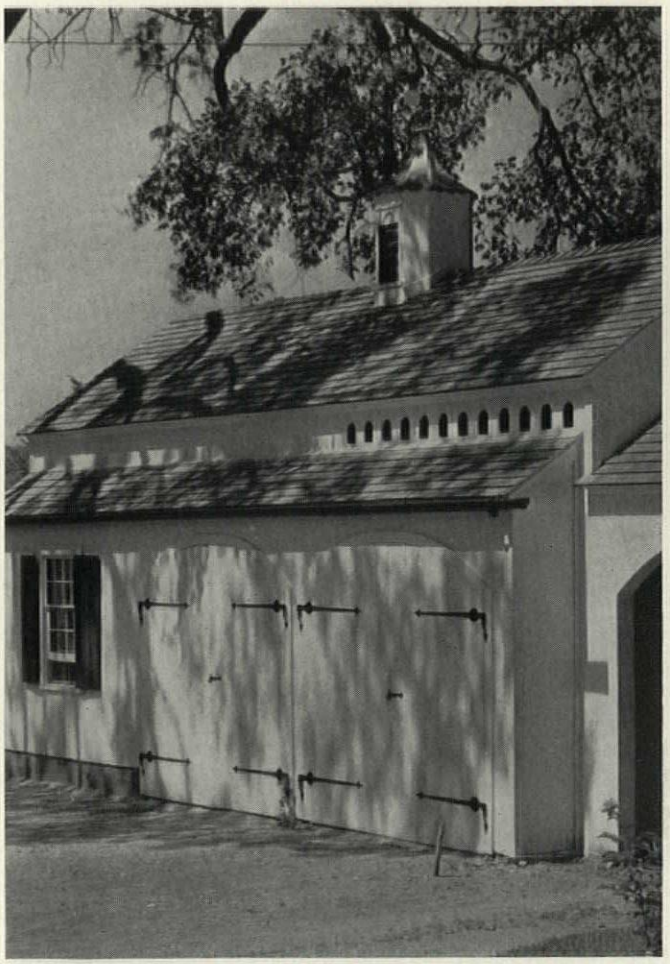
SECTION "A-A"

SCALE: 3" = 1'-0"

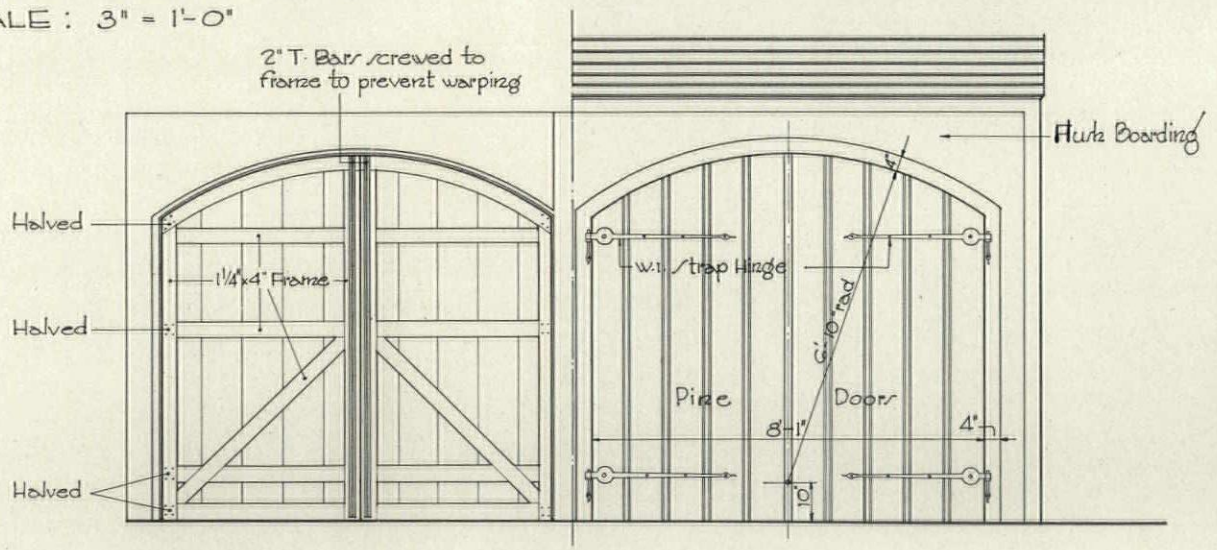


SECTION "B-B"

SCALE : 3" = 1'-0"



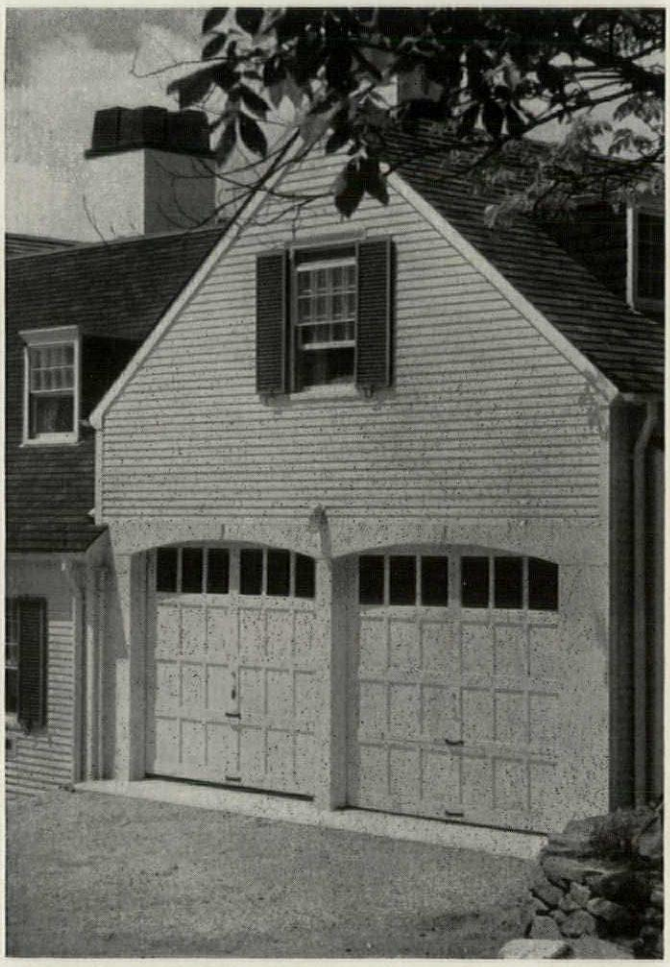
George · H · Vanz · Arda



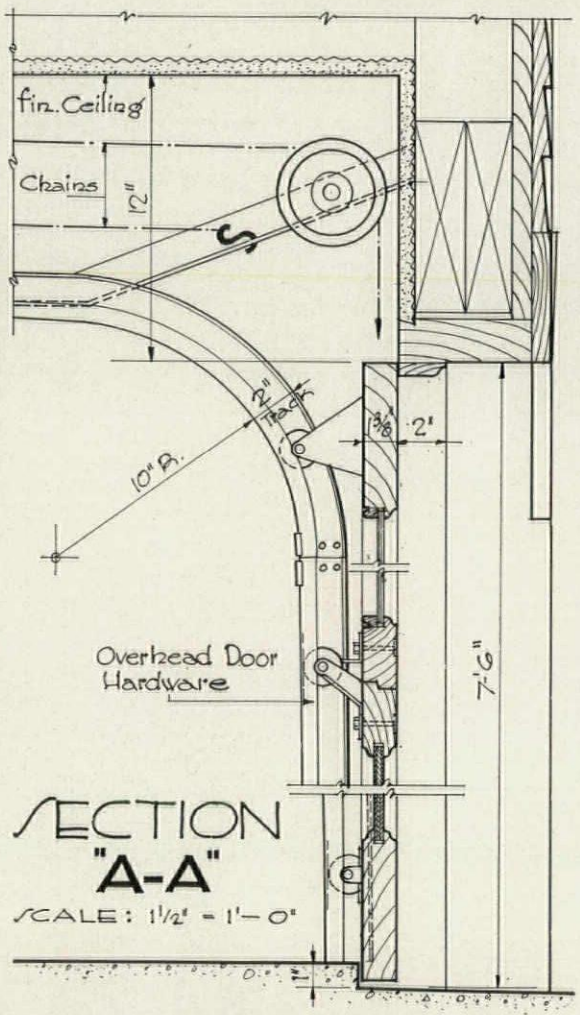
INSIDE OUTSIDE

SCALE : ¼" = 1'— 0"

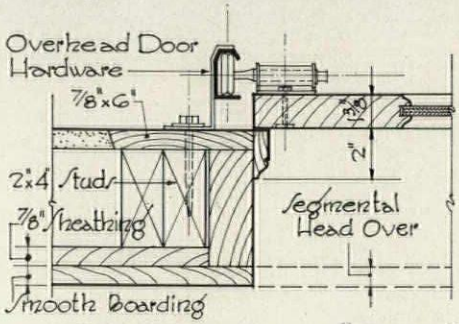
·ALLAN·McDOWELL·
ARCHITECT



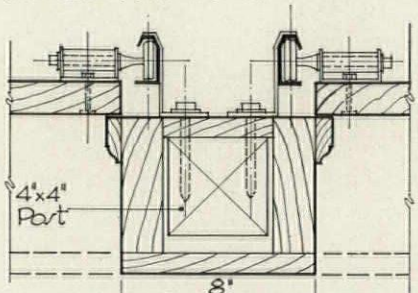
George · H · Van · Arda



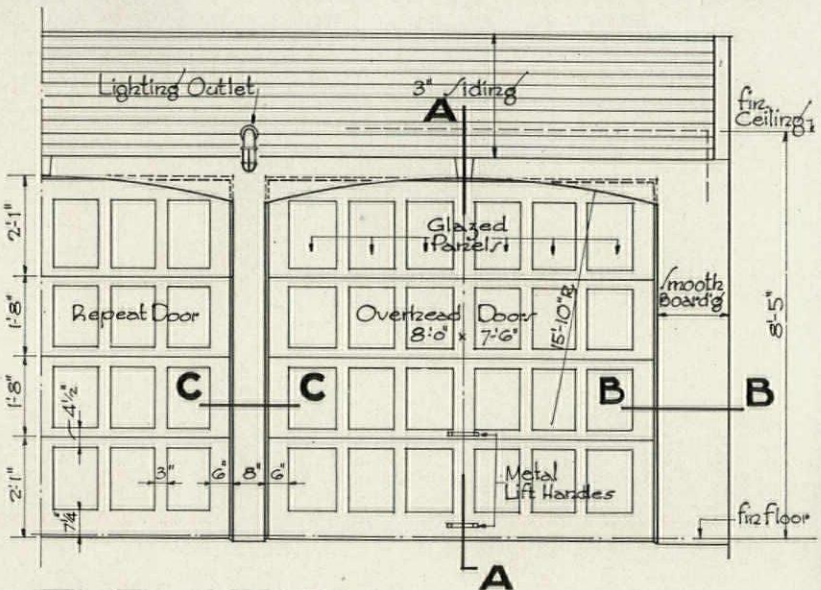
SECTION "A-A"
SCALE: 1½" = 1'-0"



SECTION "B-B"
SCALE: 1½" = 1'-0"

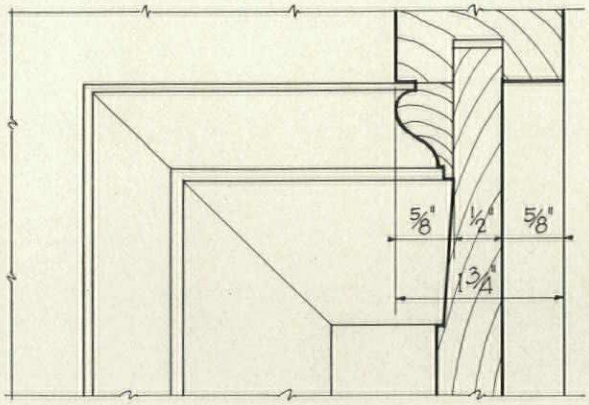


SECTION "C-C"
SCALE: 1½" = 1'-0"



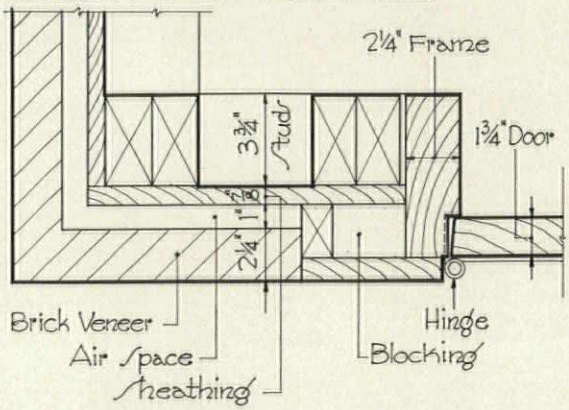
ELEVATION
SCALE: ¼" = 1'-0"

CAMERON · CLARK
ARCHITECT



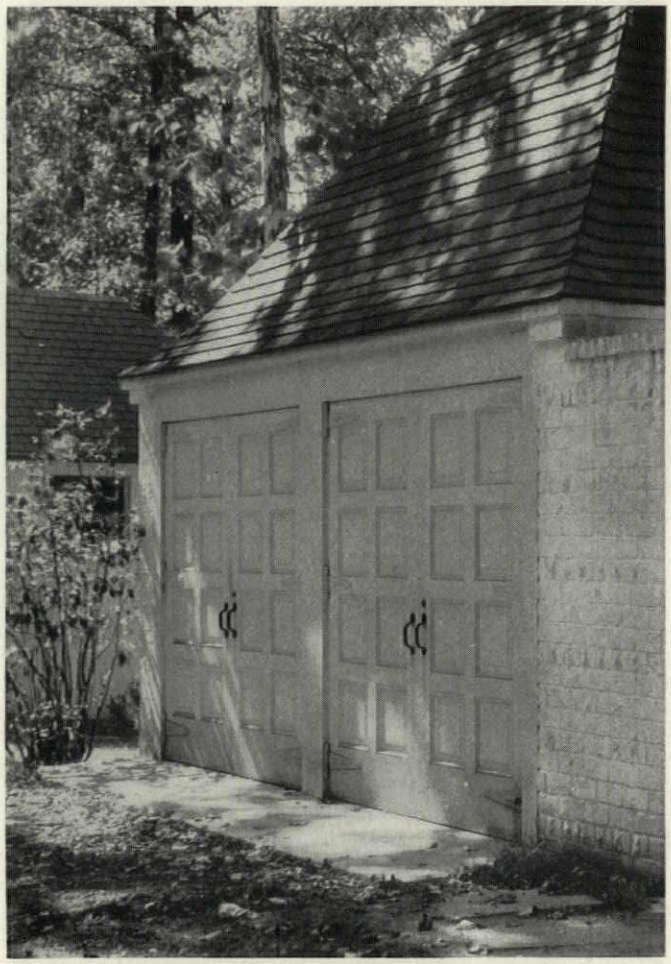
DOOR · PANEL

SCALE: HALF · FULL · SIZE ·

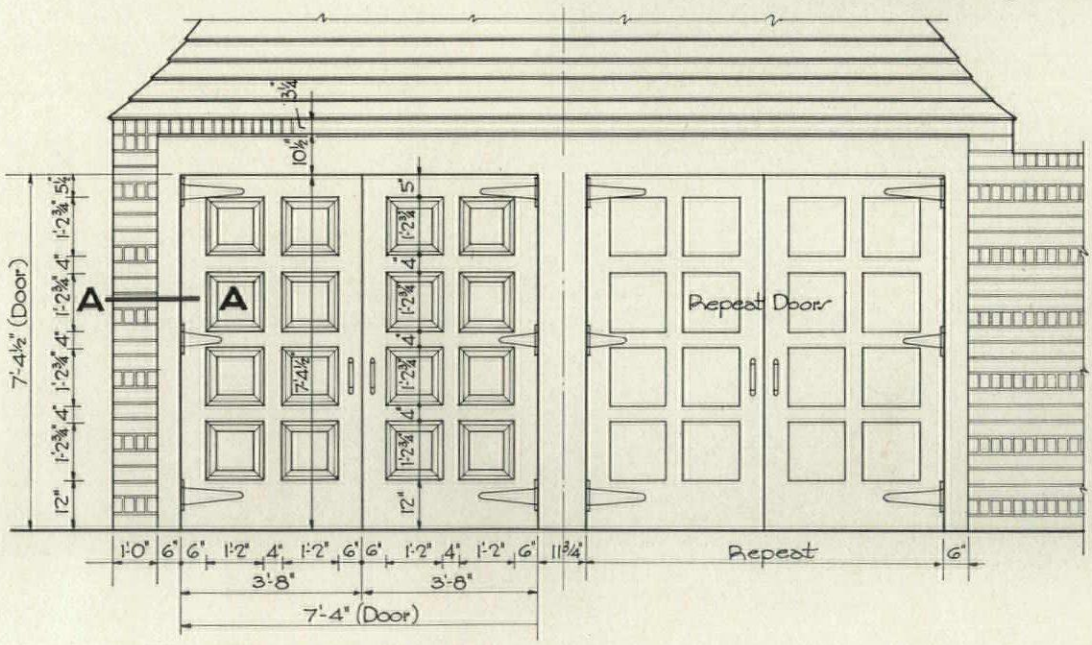


SECTION · "A-A"

SCALE: 1½" = 1'—0"



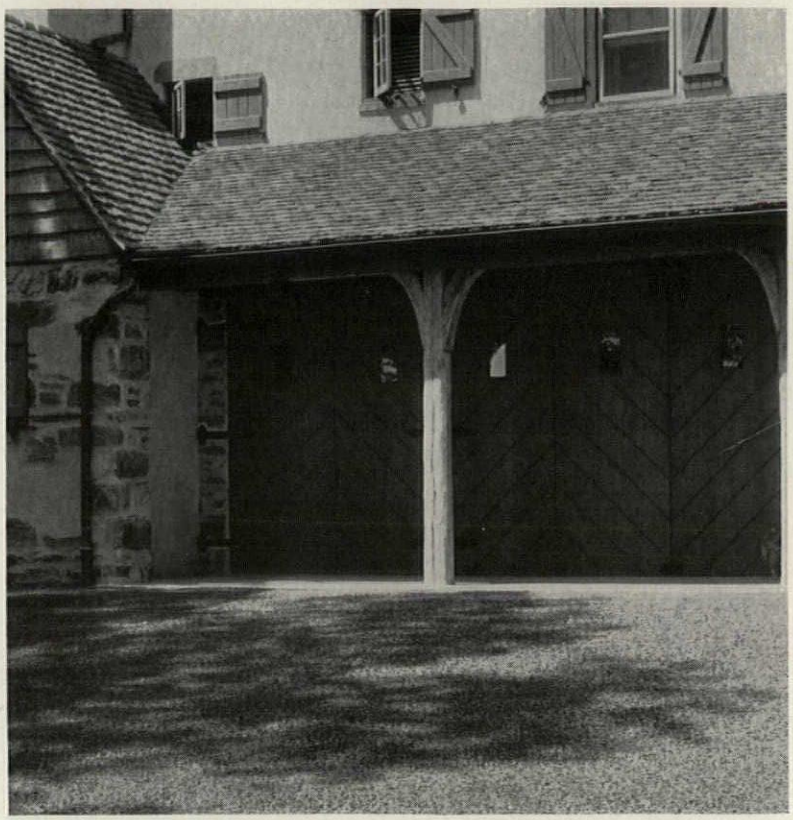
George · H · Van Arda



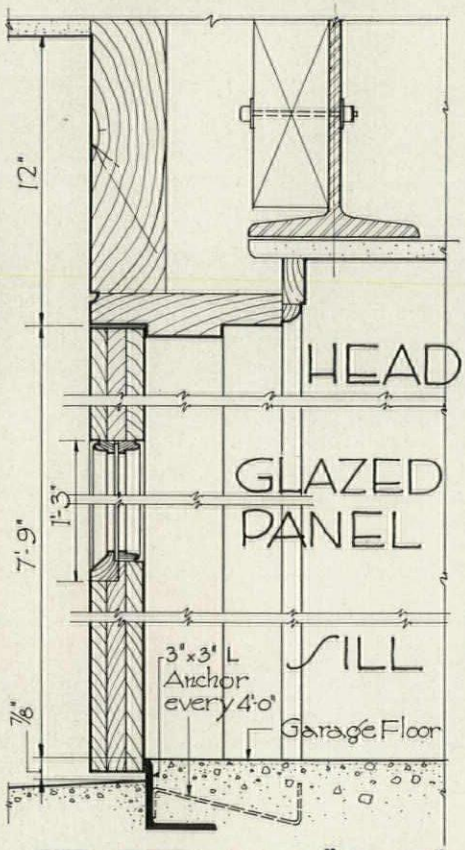
ELEVATION

SCALE · ¼" = 1'—0"

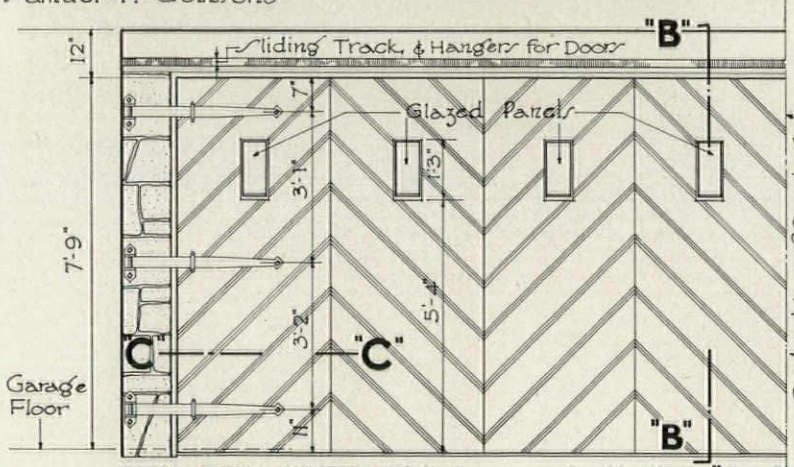
· PERRY · DUNCAN ·
ARCHITECT



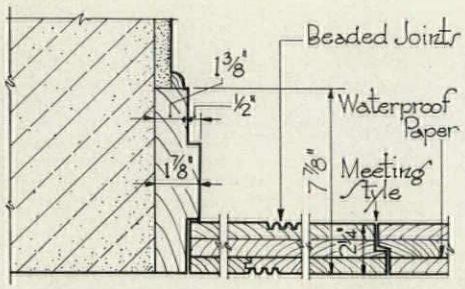
Samuel · H · Gottscho



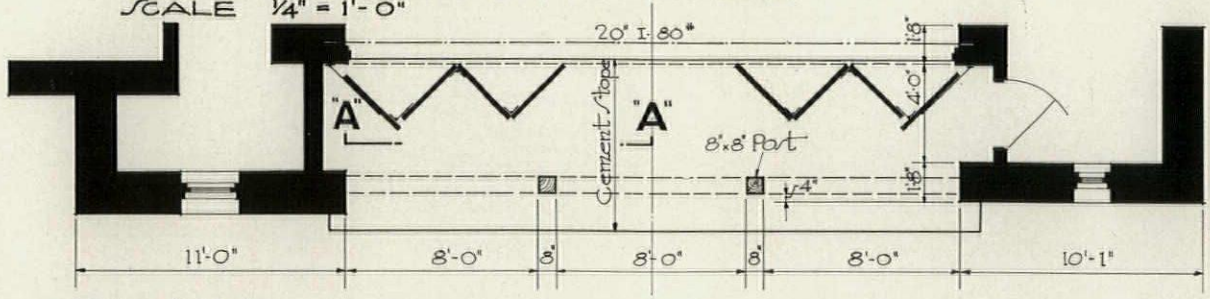
SECTION "B-B"
SCALE · 1½" = 1'-0"



ELEVATION · ON · LINE · "A-A"
SCALE ¼" = 1'-0"



SECTION · "C-C"
SCALE 1½" = 1'-0"



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

WILLIAM · F · DOMINICK
ARCHITECT

PENCIL POINTS DATA SHEETS

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

PENCIL POINTS DATA SHEETS

AREAS OF REINFORCING RODS

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

Sheet No. **B4b**

Mar., 1936

Spacing in Inches	Area of Steel in Square Inches per Foot Width of Slab					
	¼	⅜	½	½	⅝	¾
3	0.20	0.44	0.78	1.00	1.23	1.77
3½	0.17	0.38	0.67	0.86	1.05	1.51
4	0.15	0.33	0.59	0.75	0.92	1.33
4½	0.13	0.29	0.52	0.67	0.82	1.18
5	0.12	0.26	0.47	0.60	0.74	1.06
5½	0.11	0.24	0.43	0.55	0.67	0.96
6	0.10	0.22	0.39	0.50	0.61	0.88
6½	0.09	0.20	0.36	0.46	0.57	0.82
7	0.08	0.19	0.34	0.43	0.53	0.76
7½	0.08	0.18	0.31	0.40	0.49	0.71
8	0.07	0.17	0.29	0.38	0.46	0.66
8½	0.07	0.16	0.28	0.35	0.43	0.62
9	0.07	0.15	0.26	0.33	0.41	0.59
9½	0.06	0.14	0.25	0.32	0.39	0.56
10	0.06	0.13	0.24	0.30	0.37	0.53
10½	0.06	0.13	0.22	0.29	0.35	0.51
11	0.05	0.12	0.21	0.27	0.33	0.48
11½	0.05	0.11	0.20	0.26	0.32	0.46
12	0.05	0.11	0.20	0.25	0.31	0.44

Spacing in Inches	Area of Steel in Square Inches per Foot Width of Slab				
	⅞	1	1	1⅛	1¼
3	2.40	3.14	4.00	5.06	6.25
3½	2.06	2.69	3.43	4.34	5.36
4	1.80	2.36	3.00	3.80	4.69
4½	1.60	2.09	2.67	3.37	4.17
5	1.44	1.88	2.40	3.04	3.75
5½	1.31	1.71	2.18	2.76	3.41
6	1.20	1.57	2.00	2.53	3.13
6½	1.11	1.45	1.85	2.34	2.89
7	1.03	1.35	1.71	2.17	2.68
7½	0.96	1.26	1.60	2.02	2.50
8	0.90	1.18	1.50	1.90	2.34
8½	0.85	1.11	1.41	1.79	2.21
9	0.80	1.05	1.33	1.69	2.08
9½	0.76	0.99	1.26	1.60	1.97
10	0.72	0.94	1.20	1.52	1.88
10½	0.69	0.90	1.14	1.45	1.79
11	0.66	0.86	1.09	1.38	1.70
11½	0.63	0.82	1.04	1.32	1.63
12	0.60	0.79	1.00	1.27	1.56

The 11 sizes of rods shown above have been approved through *Simplified Practice Recommendation R26-30*, promulgated by the U. S. Department of Commerce, and adopted by the Concrete Reinforcing Steel Institute and representative manufacturers and users.

FACTS AT YOUR FINGERTIPS

If you have written to manufacturers for sets of their *Data Sheets* that were announced in the January issue and you haven't received them as yet—don't be impatient. The 8 manufacturers who offered these *Data Sheets* have received thousands and thousands of inquiries from architectural men all over the country, and you will receive your requested *Data Sheets* just as soon as they can be mailed. If you have not yet requested these *Data Sheets*, do so now. Do not send to PENCIL POINTS, as the sheets are only available from the individual manufacturers who sponsored them. In the advertising pages of last month's issue you will find a complete check list of the manufacturers who have sponsored free sets of *Data Sheets* for PENCIL POINTS readers, to date.

We have some extremely interesting material planned for presentation on these pages in the coming months. Many sets of manufacturers' free *Data Sheets* are in preparation at this time on subjects not yet covered in *Data Sheet* form. These new manufacturers' *Data Sheets* contain a wealth of information on basic principles, and are fully as valuable as reference material as are the sheets appearing on these pages. No *Data Sheet Library* will be complete without them. These manufacturers' sheets will not contain sales talk for the manufacturers' product—to say that a manufacturer has had his product "data-ized" is the same as saying he has had his literature debunked.

PENCIL POINTS DATA SHEETS

1936 AUTOMOBILE DIMENSIONS

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

Sheet No. **D4g**

Mar., 1936

Make	*L.	*H.	*W.	*D.W.	*T.D.
Austin	10′-2″	4′-11″	4′-4″	8′-1″	32′-0″
Austin	10′-4″	5′-0″	4′-5″	8′-1″	32′-0″
Willys-Overland	●13′-6″	5′-7″	●4′-10″	● 9′-0″	●34′-0″
Ford	15′-3″	5′-8″	5′-10″	10′-10″	40′-0″
Chevrolet	15′-3″	5′-8″	——	10′-9″	——
Graham	15′-5″	5′-8″	5′-9″	——	45′-0″
Ford	15′-6″	5′-8″	5′-10″	10′-10″	40′-0″
Chevrolet	15′-6″	5′-10″	——	11′-3″	——
Dodge	15′-8″	5′-8″	5′-6″	10′-6″	37′-0″
Oldsmobile	15′-9″	5′-8″	6′-0″	9′-8″	37′-0″
Pontiac	15′-10″	5′-8″	5′-10″	10′-4″	40′-0″
Hupmobile	16′-0″	●5′-6″	6′-2″	12′-8″	——
Nash "400"	16′-0″	6′-0″	6′-2″	9′-11″	●34′-0″
Hupmobile	16′-2″	●5′-6″	6′-3″	12′-11″	——
Dodge	16′-2″	5′-8″	5′-6″	9′-9″	37′-0″
Graham	16′-2″	5′-8″	6′-1″	——	45′-0″
Studebaker	16′-2″	5′-9″	5′-7″	10′-1″	39′-5″
Pontiac	16′-3″	5′-8″	5′-10″	11′-6″	41′-6″
Oldsmobile	16′-3″	5′-8″	6′-0″	9′-8″	38′-0″
Terraplane	16′-3″	5′-10″	5′-10″	10′-2″	40′-5″
Packard	16′-3″	5′-8″	6′-0″	10′-1″	——
Buick	16′-4″	5′-9″	5′-11″	11′-7″	40′-10″
Reo	16′-4″	6′-0″	6′-0″	10′-7″	50′-0″
La Salle	16′-6″	5′-10″	6′-2″	10′-11″	44′-4″
Studebaker	16′-10″	5′-11″	5′-7″	10′-1″	43′-2″
Hudson	17′-3″	5′-10″	5′-10″	10′-2″	43′-9″
Nash	17′-3″	5′-11″	6′-0″	9′-11″	45′-0″
Pierce-Arrow	17′-11″	▲6′-2″	6′-2″	10′-2″	50′-11″
Buick	18′-1″	5′-11″	6′-4″	10′-11″	49′-6″
Pierce-Arrow	18′-8″	▲6′-2″	6′-2″	11′-3″	▲52′-4″
Packard	19′-5″	——	6′-2″	▲14′-8″	——
Cadillac	▲19′-10″	6′-0″	▲6′-5″	11′-6″	51′-0″

*(L.) Length overall including bumpers. (H.) Height. (W.) Width with doors closed. (D.W.) Overall width of car with doors open. (T.D.) Turning diameter, i.e., diameter of smallest walled-in circle in which the car will make a complete turn. Dimensions are given to the nearest whole inch above fractions.

● = Smallest dimension in column. (Austin excluded.)
▲ = Largest dimension in column.

Information has been supplied by the automobile manufacturers, through whose courtesy they are hereby reproduced. Where makes are repeated, they refer to the largest and smallest models.

RANGE OF SIZES FOR LAST SIX YEARS†

Maximum length	1935 Cadillac (16)	20′-0″
Minimum length	1936 Willys-Overland	13′-6″
Maximum width	1936 Cadillac	6′-5″
Minimum width	1936 Willys-Overland	4′-10″
Maximum height	1931 Hupmobile	6′-3″
Minimum height	1936 Hupmobile	5′-6″
Maximum turning diameter	1932 Cadillac	56′-7″
Minimum turning diameter	1931 Ford A	34′-0″

† For companies reporting, Austin excluded.

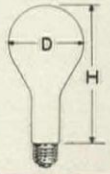
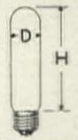
PENCIL POINTS DATA SHEETS

ELECTRIC BULBS

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

Sheet No. **E3a**

Mar., 1936

TYPE LAMP	BASE	WATTS	DIMENSIONS H	D
Standard "A" Lamps 	Medium	15	2 7/16"	2 1/8"
		25	3"	2 3/8"
		40	3 1/2"	2 3/8"
		50	3"	2 3/8"
		60	4"	2 3/8"
		75	4 3/8"	2 3/8"
		100	5 1/8"	2 3/8"
		150	6"	3 1/8"
		25-40	3 1/2"	3 1/8"
		100-200-300	5 1/8"	3 3/4"
Pear Shaped 	Medium	150	6"	3 1/8"
		200	7 1/16"	3 3/4"
	Mogul	300	8 1/2"	4 3/8"
		500	8 3/16"	5"
		750 to 1500	11 1/2"	6 1/2"
Straight Side 	Candlebra	6	1 1/4"	3/4"
	Intermediate	10	1 1/2	1 3/8"
	Medium	6	2 5/16"	1 3/4"
		10	2 5/16"	1 3/4"
Tubular 	Intermediate	25	4 5/16"	3 5/16"
	Medium	25	4 5/16"	1 1/4"
		40	10 5/16"	1"

Candelabra **Intermediate** **Medium** **Mogul**

The lamps shown are those commonly used in building service. They are available in many colors, for indoor and outdoor use and for various burning positions. Check special fixtures for feasibility with local lighting companies.

DATA SHEET NO. B4b.

Old tables on rod areas usually give many rod sizes which are not standard and their use will result in confusion. Use this Data Sheet *and avoid such difficulty.*

DATA SHEET NO. D4g.

Most of the automobile manufacturers responded willingly and promptly to our questionnaire on the sizes of 1936 cars which are presented here. Note that we have added a new dimension to the table, namely the over-all width of the car with the doors standing open. The importance of this was recently brought to our attention by a residence garage which allowed the entrance of the car but did not permit the passengers to get out because the doors could not be opened in the narrow space available.

DATA SHEET NO. E3a.

Here is a handy chart to be used as a guide in the design of special lighting fixtures, coves and concealed lighting. Electric bulbs are made for special uses and burning positions so that you should check with your local lighting company on the correctness of your design before having it executed. These dimensions do not apply to foreign-made bulbs.

DATA SHEET NO. H3a.

We hope to present additional material on lockers at a future date, giving construction details of recessed lockers and typical locker room plans. The use of standard lockers is recommended as an effective means of reducing waste in industry through simplification and standardization.

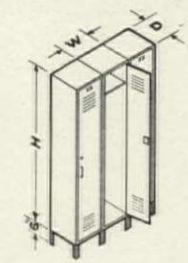
PENCIL POINTS DATA SHEETS

STANDARD* STEEL LOCKER SIZES

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

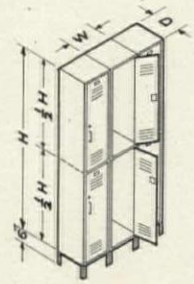
Sheet No. **H3a**

Mar., 1936



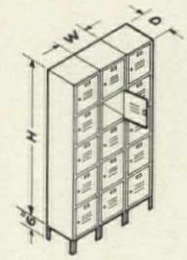
SINGLE TIER LOCKERS

W	D	H
1'-0"	1'-0"	5'-0"
1'-0"	1'-3"	5'-0"
1'-0"	1'-6"	5'-0"
1'-3"	1'-3"	5'-0"
1'-3"	1'-6"	5'-0"
1'-6"	1'-9"	5'-0"
1'-0"	1'-0"	6'-0"
1'-0"	1'-3"	6'-0"
1'-0"	1'-6"	6'-0"
1'-3"	1'-3"	6'-0"
1'-3"	1'-6"	6'-0"
1'-6"	1'-6"	6'-0"
1'-6"	1'-9"	6'-0"



DOUBLE TIER LOCKERS

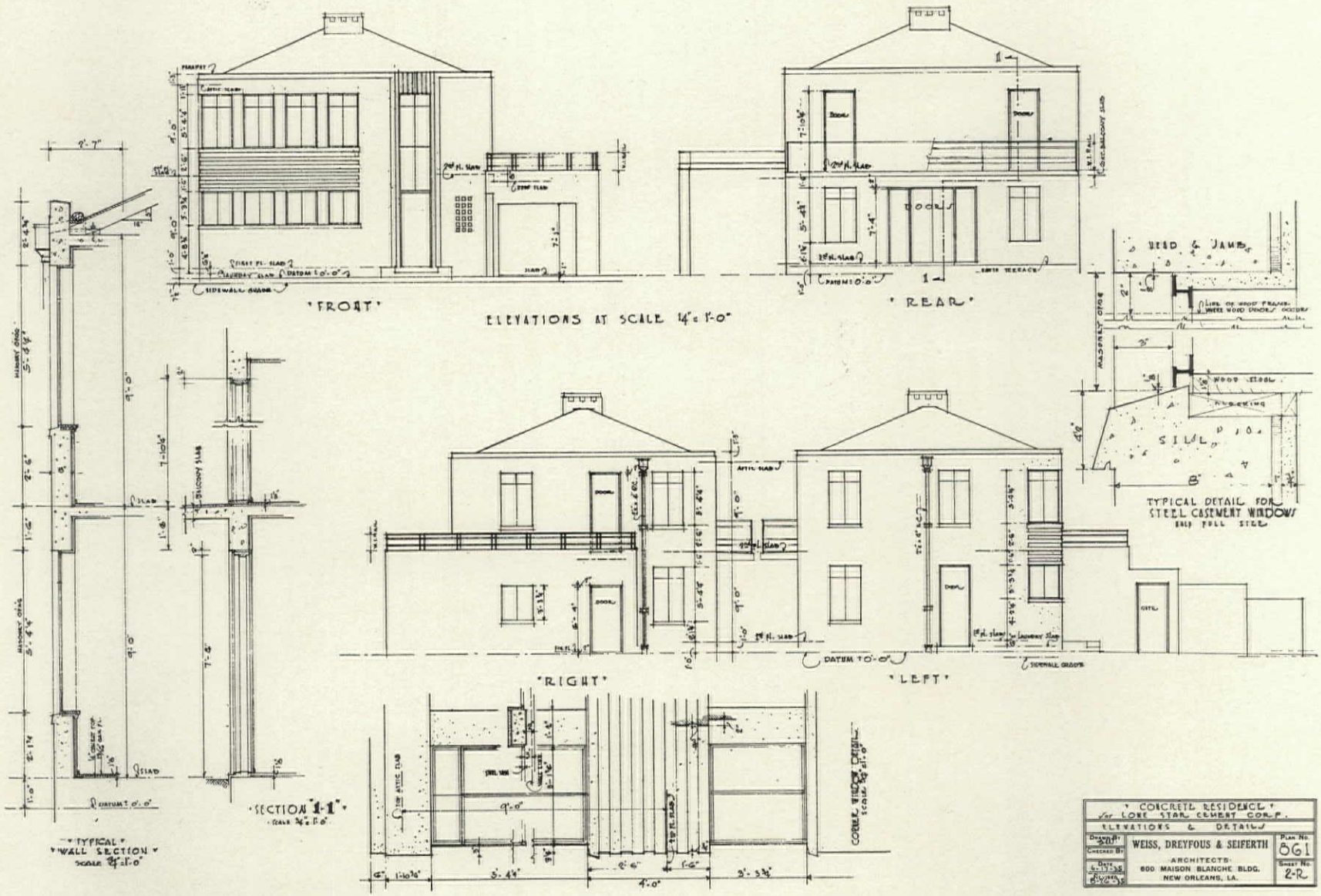
W	D	H
1'-0"	1'-0"	5'-0"
1'-0"	1'-0"	6'-0"
1'-0"	1'-3"	6'-0"
1'-3"	1'-3"	6'-0"
1'-0"	1'-3"	7'-0"
1'-3"	1'-3"	7'-0"



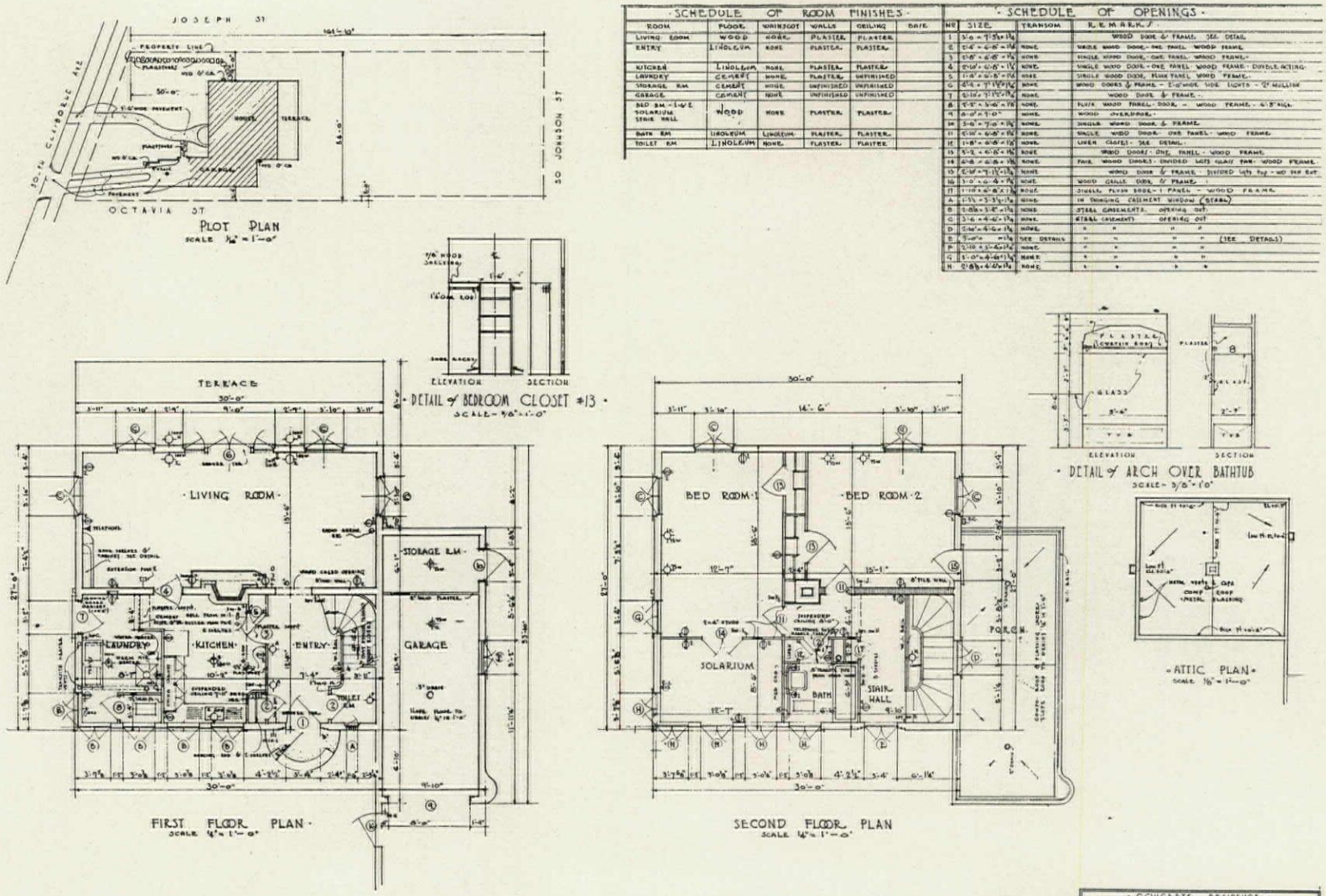
BOX LOCKERS

TIERS HIGH	W	D	H
5	1'-0"	1'-0"	5'-0"
6	1'-0"	1'-0"	6'-0"
5	1'-0"	1'-3"	5'-0"
6	1'-0"	1'-3"	6'-0"
5	1'-3"	1'-3"	6'-0"
4	1'-3"	1'-3"	5'-0"

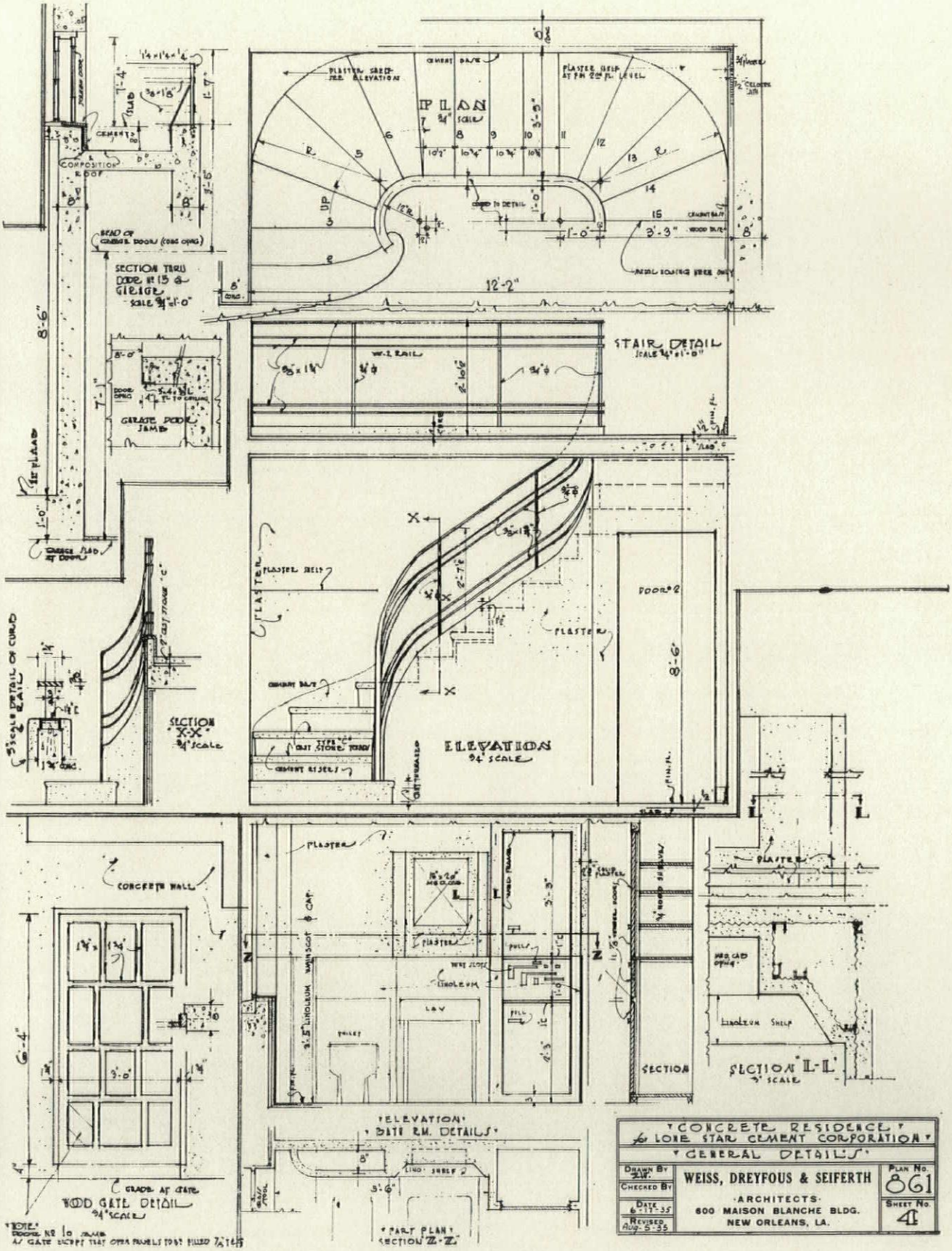
*Sizes shown are those adopted by leading manufacturers and users, promulgated in *Simplified Practice Recommendation No. 35* of the U. S. Department of Commerce. Some Steel Lockers are manufactured which do not exactly conform to this "Standard," the leg heights varying from 5" to 7½", and the height (H) varying up to 5/8" more than that shown above. Lockers to be recessed should be ordered without the legs. The Locker Mfrs. Assn. recommend that lockers only be included in locker contracts to get best competitive bidding.



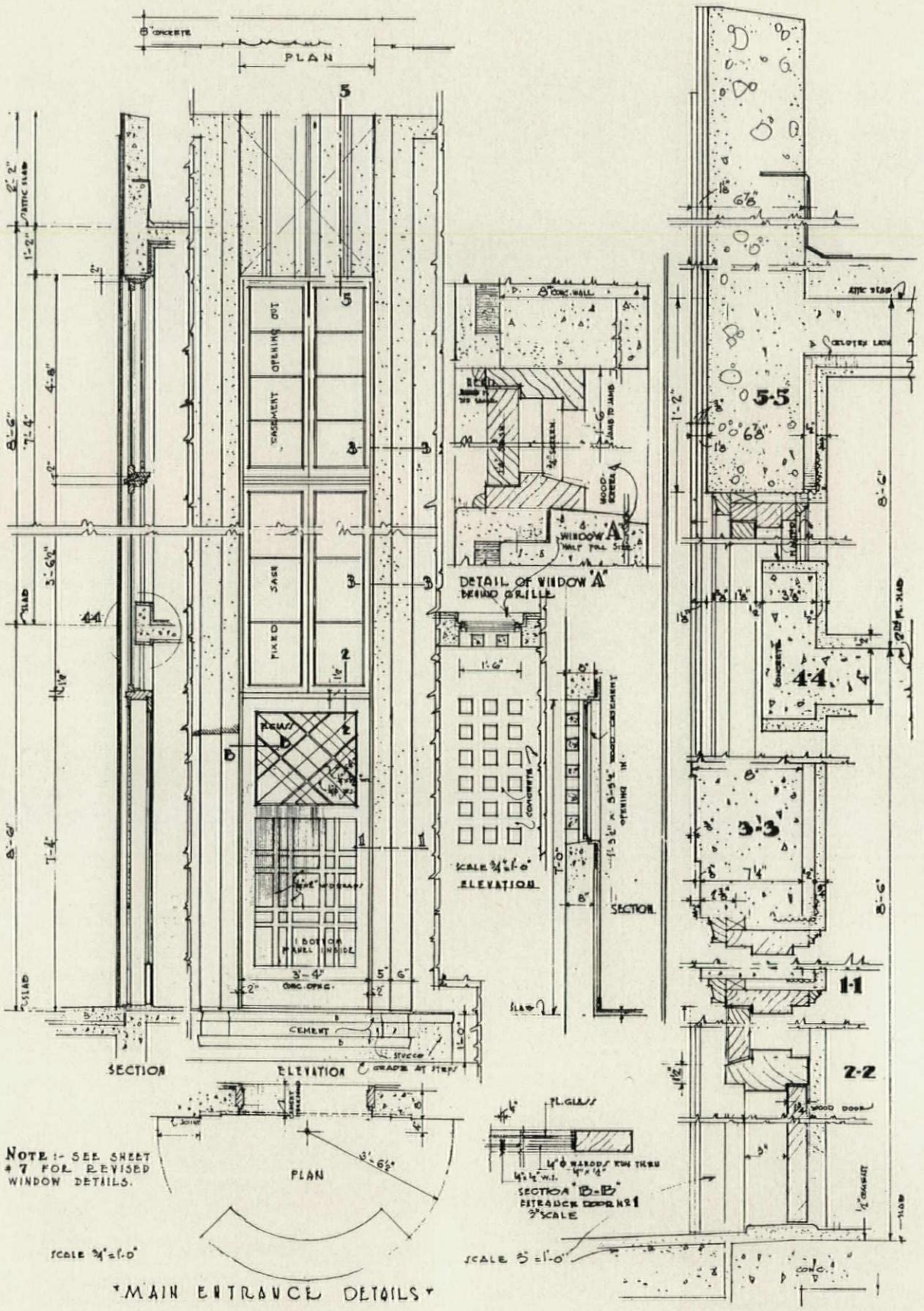
Elevations and details of the Concrete Residence designed for the Lone Star Cement Corporation by Weiss, Dreyfous & Seiferth of New Orleans. Built on a budget to demonstrate the possibility of erecting individually designed firesafe houses at low cost. This one cost $10,000



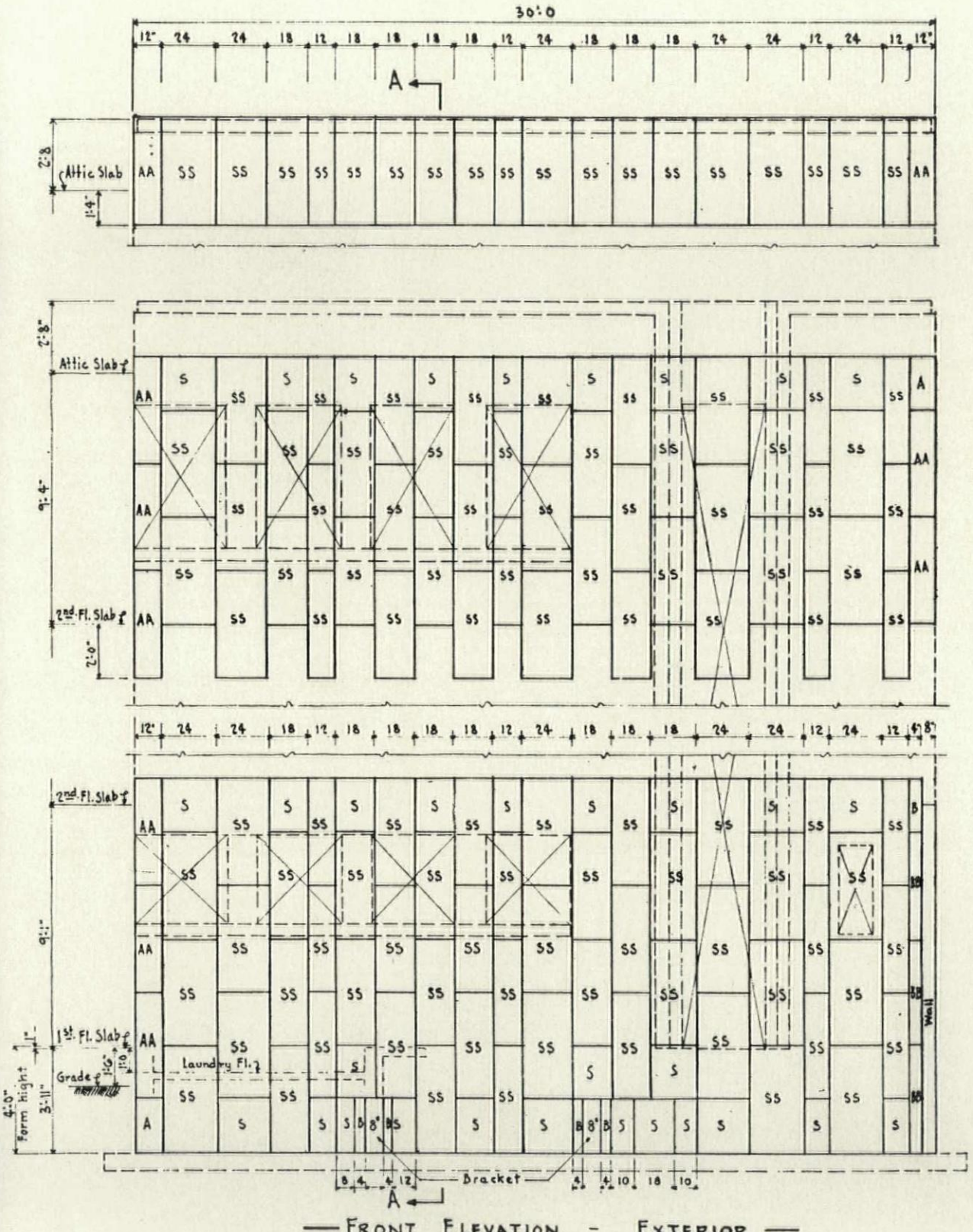
Plans of the Concrete Residence designed for the Lone Star Cement Corporation by Weiss, Dreyfous & Seiferth, elevations of which are shown on the preceding page. The house faces south on a lot 55 feet wide by 165 feet deep. The living room opens to the north



General Details of Lone Star Concrete House by Weiss, Dreyfous & Seiferth, Architects. Note that plaster walls and concrete stairs with cast stone treads carry out the idea of fire safety with full consistency

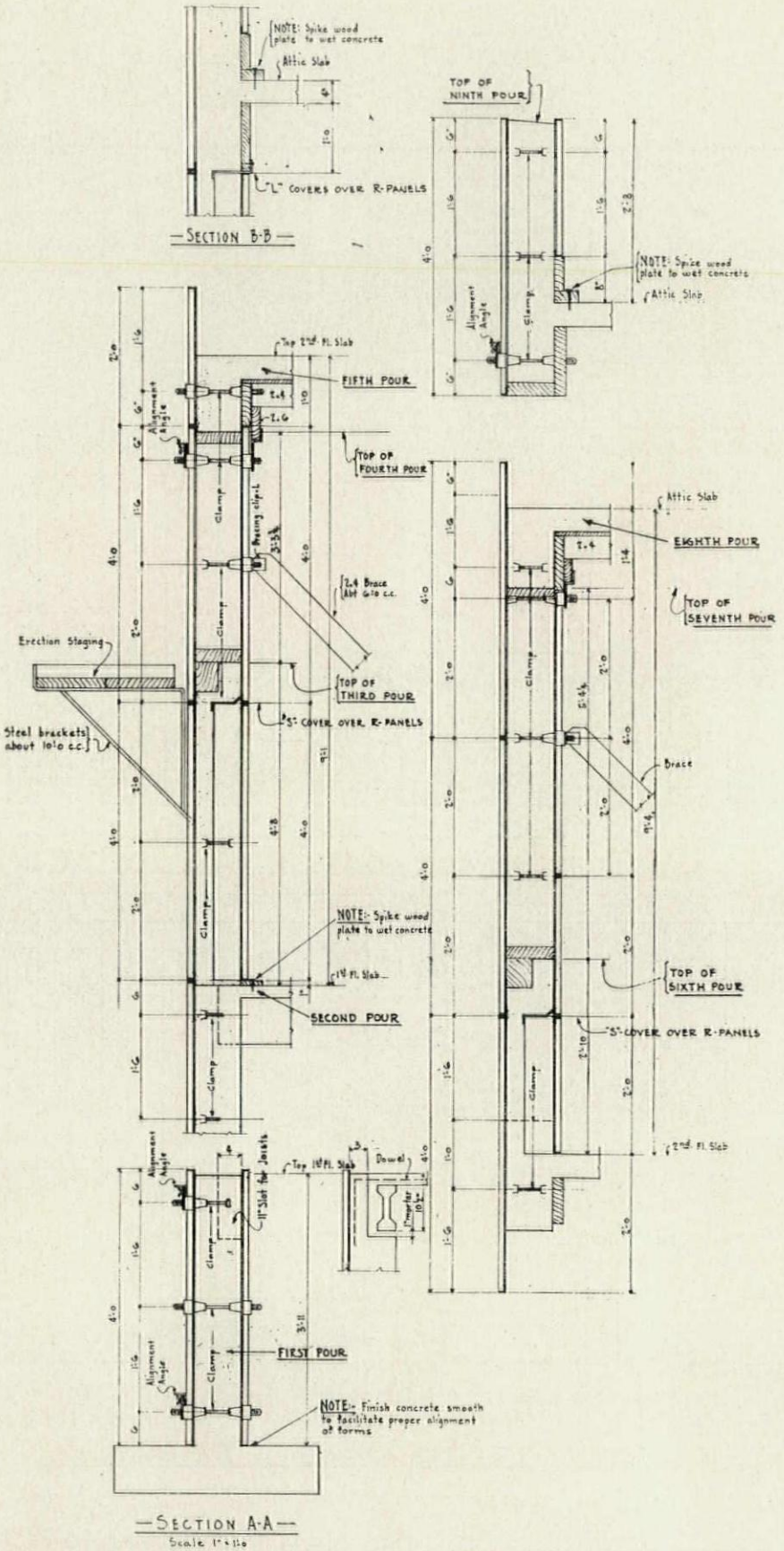


Main Entrance Details of Lone Star Concrete House by Weiss, Dreyfous & Seiferth, Architects. The material has been used simply and in accordance with its nature to gain a modern feeling



FRONT ELEVATION - EXTERIOR

Drawings like this were made for all elevations to show the disposition of the patented metal forms used in constructing the Lone Star Concrete House, Weiss, Dreyfous & Seiferth, Architects, New Orleans



Sections showing the manner of placing the metal forms used in constructing the Lone Star Concrete House. Weiss, Dreyfous & Seiferth, Architects. The form system had much to do with the low costs

ELDORADO
CONTEMPORARIES

This reproduction is slightly smaller than the original pencil drawing which was rendered on Cameo paper with the softer Eldorado leads—5B, 4B, 3B and B.

esk and book case are of Australian walnut and Macassar ebony. A razor blade was useful in simulating ins of these woods. Scraping with the corner of the blade produced many of the vertical grain markings. oss fibres were produced by gentle scraping with the whole length of the blade resting on the paper.

ay coating in Cameo paper permits of considerable scraping and offers possibilities for a great variety cts. The razor blade can be used in a similar manner on tracing paper, but in that case the surface paper itself is not scraped as in Cameo, the graphite is merely removed by the blade.

of the foundation tones were brushed in quite quickly with the flat of a 5B lead. This is evident on the nder the chair where the technique remains sketchy. Pencil Sales Dept. 167-J, JOSEPH DIXON CIBLE COMPANY, Jersey City, N. J.

SERVICE DEPARTMENTS

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

Purl Anderson, High School, Greenwich, Conn., would like to purchase etchings or fine prints for classroom decoration, also any British or American yearbooks on etchings, or books on sculpture.

Frank D. Pechmann, 114-46 173rd Street, St. Albans, L. I., New York, would like to obtain a second-hand copy of *Architectural Graphic Standards* by Sleeper and Ramsay.

G. Douglas Morse, 542 High Street, West Medford, Mass., has the following for sale: *Five Orders of Architecture*, Pierre Esquie, in good condition, price about $4.00; an Altineda set of drawing instruments, and other drawing material, such as Alba tracing paper, etc.

Edward D. Koso, 1735 De Sales Street, N. W., Washington, D. C., would like to obtain two used copies of Guptill's *Sketching and Rendering in Pencil.*

Ambrose C. Cramer, 820 Tower Court, Chicago, Ill., would like to obtain the following issues of the *White Pine Series:* Vol. 2, Nos. 1 and 3; Vol. 4, Nos. 1 and 4; Vol. 19, No. 2.

Leslie H. Gardner, Fairport, New York, has the following books for sale, all in new condition: *Drafting Room Practice,* Clute; *Practical Requirements of Modern Buildings,* Clute; *Little Known Towns of Spain,* a book of unusual water color reproductions by Vernon Howe Bailey; *Architectural Details of Southern Spain,* published by Helburn; also a "Quiksum" adding machine for adding whole numbers and fractions. Prices reasonable. Will trade any one of the books for copy of Sleeper and Ramsay's *Architectural Graphic Standards* or Knobloch's *Good Practice in Construction,* Vols. 1 and 2.

Charles F. Risavy, 29 Cooper Avenue, Dumont, N. J., has a complete outfit of a Universal drafting machine which he would like to sell or exchange for a portable typewriter.

Fred V. Annis, Woodbridge Avenue, Chillicothe, Ohio, would like to obtain the following copies of PENCIL POINTS: December, 1932; April and November, 1933; January and October, 1934.

Herbert C. Anset, 300 Iowa Savings Bank Building, Burlington, Iowa, would like to purchase a copy of Louis C. Rosenberg's *English Cottages and Farmhouses,* complete and in good condition.

S. W. Dodd, P. O. Box, Barberton, Ohio, has the following copies of the *Architectural Record* for sale: August, 1917, through September, 1922, complete. Price $15 F.O.B.

PERSONALS

M. LOUIS KROMAN and ISADORE H. BRAUN, *Architects,* have become associated and will continue their practice of architecture under the name of Kroman & Braun at 180 No. Michigan Avenue, Suite 1610, Chicago, Ill.

LOUIS SKIDMORE and NATHANIEL A. OWINGS, *Architects,* have formed a partnership under the firm name of Skidmore & Owings, with offices at 104 South Michigan Avenue, the Monroe Building, Chicago, Ill.

JAMES B. HAWKINS, *Architect,* has moved from 1928 Ekin Avenue to 405 Elsby Building, New Albany, Indiana.

MANUFACTURERS' DATA WANTED

R. L. IGNELZI, *Architect,* Bloom Township High School, Chicago Heights, Ill. (for A.I.A. file).

FRANK D. PECHMANN, *Architect,* 114-46 173rd Street, St. Albans, L. I., New York (Data on building construction and mechanical equipment).

W. LOCKWOOD MARTLING, JR., *Architect,* 401 Wisconsin Avenue, Oak Park, Ill.

ALBERT HASKINS, *Architect,* 500 Whitaker Mill Road, Raleigh, N. C.

E. AUSTIN BEIHL, *Architect,* 1509 20th Street, N. W., Washington, D. C.

WALTER H. ROTHE, *Architect,* 210 Fruit Exchange Building, Yakima, Washington.

LOUIS PARANT, *Architect,* 934 Ste. Catherine Est, Montreal, Canada (Data on moving picture theatres and equipment).

J. H. JOHNSON, *Engineer,* 2921 76th Court, Elmwood Park, Ill.

ALVIS O'KEEFE, *Engineer,* W. Garro Street, Plymouth, Ind. (Data for A.I.A. file).

STEPHEN ZAK, *Draftsman,* 113 East 3rd Street, New York, N. Y.

RALPH APPLEMAN, *Draftsman,* 515 Pennsylvania Avenue, Plymouth, Ind. (Data on homes and small buildings, for A.I.A. file).

JOHN B. COUGHLIN, *Student,* University of New Hampshire, Durham, N. H.

JAMES SHIGLEY, *Student,* 1137 8th Street, N., Fargo, N. D.

HENRY D. MORGAN, *Student,* 1207 Bay Street, Toronto, Ont., Canada.

EDGAR ODELL, *Student,* 215 Taylor Street, Taft, Calif. (Data on residential work).

HARRIS V. HARTMAN, General Electric Company, Home Bureau, 570 Lexington Avenue, New York, N. Y. (Data on home equipment).

A. W. ICKE, *Designer,* 7106 W. North Avenue, Wauwatosa, Wis. (Data on small house equipment and materials).

KEWANEE STEEL BOILERS

FOR COAL
Hand or Stoker Fired
OIL or GAS

Battery of Kewanee Portable Boilers "teamed up" with Stokers in the Y. M. C. A., Evanston, Illinois.
Chester Wolcott, Architect
Wm. Lees, Heating Contractor

No matter what fuel is used—nor how it is fed into the boiler—whether it be coal or oil or gas—*a good boiler is always the basis of a good heating plant.*

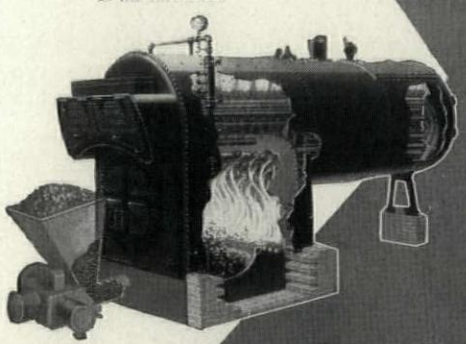
The finest coal stoker built is almost useless unless it is operating under a good boiler: For, after all, while a good stoker *makes heat efficiently*; it's up to the boiler to *use that heat* economically. The same is true of an oil or gas burner.

Swing to Oil or Gas or Stoker firing as you like. But don't overlook the fact that the boiler must be right.

In choosing a boiler for these later fuels and newer method of firing you can't do better than stick to Kewanee *with its 68 years of experience* and its record of highly successful operation with every known fuel.

Thorough tests made "on the job" and in our own laboratory have proved the ability of Kewanee Boilers to burn every kind of fuel to the complete satisfaction of the building owner.

There is a type and size Kewanee for heating every building, regardless of its size or the fuel used.



KEWANEE BOILER CORPORATION
division American Radiator & Standard Sanitary Corporation
KEWANEE, ILLINOIS · *Branches in Principal Cities*

Kewanee Products May be Financed on the Kewanee Time Payment Plan

11,385 Kewanee Steel Boilers are Heating 7,286 of America's Finest Schools

The Efficiency of Any Heating Plant Depends Primarily on the Boiler

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.

REPORT ON SURVEY OF CONCRETE HOUSE CONSTRUCTION SYSTEMS.—Valuable reference book for architects, engineers and contractors presenting detailed information on a large number of monolithic concrete, precast unit and stucco-structural frame house construction systems, including those most extensively used. Drawings and photographs are shown together with a brief written description of each individual system. 124 pp. 8½ x 11. Portland Cement Association, 33 West Grand Ave., Chicago, Ill.

KINNEAR ROLLING DOORS.—A.I.A. File No. 16-d-13. New catalog covering the Kinnear line of steel rolling service doors, fire doors and shutters, motor operated doors, metal rolling grilles, wood and steel bifolding doors, wood and steel garage doors, garage door hardware, etc. Complete descriptive data, specifications, detail drawings, dimension tables, etc. 32 pp. 8½ x 11. The Kinnear Manufacturing Co., 820 Field Ave., Columbus, Ohio.

Published by same firm, "Kinnear Rolling Grilles." A.I.A. File No. 35-p-8. New folder describing the construction and methods of installation and operation of a line of rolling grilles built in steel, stainless steel, bronze and aluminum. Clearance dimensions, specifications.

HERMAN NELSON AIR CONDITIONING FOR RESIDENCE AND COMMERCIAL USE.—Folder announcing the introduction of a new line of air-conditioning equipment, including an oil burning air-conditioning furnace unit, oil burner and self-contained summer air-conditioning unit, designed for residential and commercial use. 6 pp. 8½ x 11. The Herman Nelson Corporation, Moline, Ill.

NU-WOOD INTERIORS FOR EVERY WALL AND CEILING.—Attractive new brochure featuring the uses of Nu-Wood interior finish units—tile, plank and wainscot—as wall ceiling treatment for all types of rooms. Included are four-color reproductions of the various units, together with a series of photographs of actual installations in homes, clubs, offices, churches, schools, restaurants, stores, theatres, studios, etc. 32 pp. 8½ x 11. Wood Conversion Co., St. Paul, Minn.

Published by the same firm "Balsam-Wool Sealed House Insulation." New publication discussing in detail the advantages of Balsam-Wool as an insulating material in home construction. Profusely illustrated. 16 pp. 8½ x 11. "Balsam-Wool Duct Insulation." Folder with application drawings, descriptive and specification data covering Balsam-Wool duct insulation for air-conditioning systems. 4 pp. 8½ x 11.

BAYLEY STEEL WINDOWS, STEEL DOORS AND OPERATORS.—New catalog, G.C. 36, covering a complete line of steel windows, steel doors and operators. Detail drawings, layouts and sizes, hardware, etc. 20 pp. 8½ x 11. The William Bayley Co., Springfield, Ohio.

RELIANCE AIR CONDITIONERS.—Descriptive folder covering a line of air conditioners suitable for installation in homes, stores, offices, factories, etc. 4 pp. 8½ x 11. Reliance Sales Corp., 223 W. Jackson Blvd., Chicago, Ill.

AMERICAN BONDED CHROMIUM METALS.—Brochure illustrating numerous uses of chromium in the form of American bonded metals for decorative display and sign work. 20 pp. 8½ x 11. American Nickeloid Co., Peru, Ill.

NEW KOHLER CATALOG K-36.—A complete presentation in book form of the entire line of Kohler plumbing and heating products. For the first time, a section is devoted to Kohler heating, with ratings for boilers and radiators. Descriptive and dimensional data accompanies illustrations. Included are full color reproductions, together with practical floor plans and practical hints of four bathrooms, a kitchen and a lavette, designed by Gerald K. Geerlings. 128 pp. 8⅝ x 11¼. Kohler Company, Kohler, Wis.

NEW DESIGN OF PYRAMID STAINLESS STEEL SNAP-ON MOULDING.—Descriptive folder announcing the addition of a new line of corrugated patterns to the present designs of Pyramid stainless steel snap-on mouldings. 8½ x 11. Pyramid Metals Co., 455 North Oakley Blvd., Chicago, Ill.

JOHNSON AUTOMATIC TEMPERATURE AND HUMIDITY CONTROL.—A.I.A. File No. 30-f-2. New condensed catalog briefly describes Johnson automatic temperature and humidity control equipment for all types of heating, cooling, ventilating and air-conditioning systems in buildings and for all similar problems encountered in manufacturing processes. 24 pp. 8½ x 11. Johnson Service Co., Milwaukee, Wis.

PERFEX UNIT HEATERS.—A.I.A. File No. 30-d-11. Looseleaf catalog giving detailed description of construction features of a line of unit heaters. Capacity tables, dimensional data, specifications, typical installations. 16 pp. 8½ x 11. Perfex Radiator Co., Milwaukee, Wis.

1936 SANDURA AND FELTONA FLOOR COVERING PATTERNS.—Handy pocket size catalog containing 72 patterns, reproduced in full colors, of Sandura and Feltona rugs and floor coverings. 60 pp. Sandura Company, Inc., Finance Bldg., Philadelphia, Pa.

THERMAX NEWS REFERENCE FILE.—Standard filing size folder with first of series of news bulletins dealing with the subject of Thermax fireproofing insulation and Absorbex acoustical corrective in school building construction. Thermax Division, Northwest Magnesite Co., Farmers Bank Bldg., Pittsburgh, Pa.

MIRRORS IN THE NEW AMERICAN HOME.—New brochure dealing with the subject of mirrors shows a wide variety of interesting applications in homes, hotels, restaurants, bars, shops and theatres. 28 pp. 8⅞ x 11⅞. Price 25c. Copies may be secured upon application to the Mirror Manufacturers Assn., 2217 Tribune Tower, Chicago, Ill.

HEIL COMBUSTION OIL BURNING EQUIPMENT.—New looseleaf reference manual covering a complete line of oil burning equipment including conversion burners for installation in any type of home heating plant; boiler-burner units for steam, hot water and vapor heating service; furnace-burner units for warm air heating and air conditioning service; industrial oil burning equipment. Specifications, capacities, dimension drawings. 42 pp. 8½ x 11. The Heil Co., 3000 West Montana St., Milwaukee, Wis.

HOLD-HEET 4-UNIT AIR CONDITIONING.—New catalog presenting descriptive and technical data covering a type air conditioning equipment for duplex and warm air heating systems. Included is data control and filter equipment. 8 pp. 8½ x 11. Russell Electric Co., Inc., 340 West Huron St., Chicago, Ill.

SIMP-L-ON FURRING SYSTEM.—A.I.A. File No. 20-a. Folder with detail drawings and text explaining the various parts which form the Simp-L-On furring system. 4 pp. 8½ x 11. Simplon Products Corp., 551 Fifth Ave., New York, N. Y.

THE FRIEZ WINDOWSTAT.—Bulletin W, just issued, illustrates and describes in detail a device which provides automatic protection against condensation on windows. Installation instructions are included. 4 pp. 8½ x 11. Julien P. Friez & Sons, Inc., Baltimore St. and Central Ave., Baltimore, Md.

Published by the same firm, "Friez Comfortrol." Bulletin E describes the operation and installation of an instrument which provides automatic control in terms of effective temperature with simple heating or cooling equipment only. 4 pp. 8½ x 11.

(Continued on page 43, advertising section)

"There's a Great Idea"

Engineers, Architects, Designers, Artists, Professional Draftsmen All Enthusiastically Endorse This Newest DIETZGEN Set.

Regardless of the instruments in your kit today, *this* new DIETZGEN *Professional* Drafting Set will appeal to you. It's an array of *working* instruments, to do correctly the unusual as well as the regular jobs of everyday drafting. Circles up to 3 *feet* in diameter with the micro-adjustable Beam Compass. A sturdy man-sized Bow Pencil that gives you new accuracy and time-saving

DIETZGEN *Professional* DRAFTING SET

Modern instruments of superb craftsmanship in a compact velvet lined case

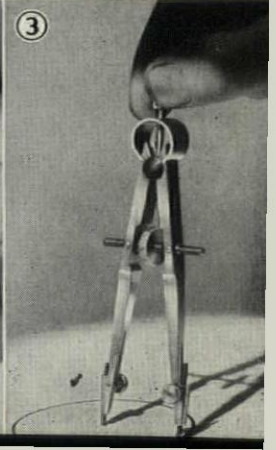
CAT. No. 968AB, Complete as shown, LIST PRICE $15

(1) Beam Compass may be used as dividers or to draw circles up to 37.5 inch diameter in pencil or in ink.

(2) The streamlined Master Ruling Pen has unusual ink capacity coupled with feather-touch balanced design.

(3) 80% of all circles drawn on commercial boards fall within the 8 inch range of this super-fast rigid Master Bow Pencil

on all circles up to 8″ diameter. One trial of the new *lined* Master Ruling Pen and you'll know you have met a must have. The features of this set are no more spec- than its amazingly low price. Write for descriptive folder.



EUGENE DIETZGEN COMPANY

• New York • New Orleans • Pittsburgh • San Francisco
Milwaukee • Los Angeles • Philadelphia • Washington

ETZGEN *World Famous* **QUALITY**

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*

SALES ENGINEER WANTED: Prominent manufacturer of automatic control equipment has several openings for sales engineers. Previous University training or experience in air conditioning and heating and an acquaintanceship with architects and engineers is essential. Box No. 316.

POSITION WANTED: Young man, 23 years of age, graduate of Stuyvesant High School, also completed architectural course at Cooper Union. Have had two years' experience at the drafting board. Willing to travel if necessary. Box No. 300.

POSITION WANTED: Experienced draftsman and construction foreman, registered master plumber and heating engineer, can sell clients, an expert in quick sketching, neat work. Will work 6 months beginning March 15 for $25 a week, worth $75. Joseph O'Neil, 135 Larkspur Street, Springfield, Mass.

POSITION WANTED: Young man, 21, graduate of high school and Mechanics Institute, one year of college. Drafting, freehand drawing and rendering in various mediums, especially in pen and ink. Own perspectives. Some experience, 5 months with a large manufacturer of store fixtures. L. R., 211 Quentin Road, Brooklyn, N. Y.

POSITION WANTED: In architect's office. Am inexperienced but offer service, intelligence and a desire to work and to learn the business. Salary at employer's discretion. Box No. 301.

WANTED: An established interior decorator is seeking the services of an architect to represent them in a sales capacity on major contract work. An unusual opportunity for an architect with sales ability who is thoroughly familiar with furniture and interior furnishings. State your qualifications in detail. Box No. 302.

WANTED: Designer-draftsman, about 30 years of age for residential work in Westchester County, N. Y. Experienced in making snappy sketches and able to execute complete working plans. State experience in detail. Box No. 303.

POSITION WANTED: Registered architect, 12 years' successful private practice, as principal, in New York City and the Middle West, wishes to form connection as executive, sales engineer or representative, in the United States or abroad, for a reputable and well established manufacturer or jobber of building products or equipment. Three University degrees. Member American Institute of Architects and past president of one of its chapters. Four years spent abroad, in Europe, the Near East and the Far East. Familiar with foreign ways and customs. Very widely traveled in the United States. In complete charge of the executive, administrative and selling end of his business. Broad general experience in all classes of buildings and all types of construction, and especially well versed in specification writing, building materials, and the supervision of construction. Also a few years' commercial experience in the wholesale implement business. Man of culture and refinement. Very highest references. Position must be permanent one requiring the services of a man of education and experience, and of standing in the architectural profession. Box No. 304.

POSITION WANTED: Preferably temporary employment by an experienced man. Moderate compensation. R. Pester, 1560 Third Avenue, New York City. Care of Pritchard.

POSITION WANTED: Conscientious young man, age 25, desires work as draftsman. Graduate of High School architectural course. At present studying I.C.S. architectural engineering course. Neat and accurate draftsman. Have thorough knowledge of architecture. Will accept position in or near Milwaukee. Box No. 305.

POSITION WANTED: Clerk of works, superintendent and/or specification writer. References by prominent New York architects. Box No. 306.

POSITION WANTED: Apprentice, 18, three years' experience, wishes position where knowledge of architecture can be extended. Location immaterial. John G. Ochsner, 8 N. Hood Ave., Audubon, N. J.

POSITION WANTED: Young man, 26, College graduate in architectural engineering, desires work. Experience in steel and construction details and residential work. Post graduate work in Pedagogy and Psychology. Interested in sales engineering if given training. Will go anywhere for moderate salary. Can speak Spanish fluently. Box No. 309.

POSITION WANTED: Architectural designer, college graduate, 15 years' experience including several years in charge of office. Can handle any type building from start to completion. Excellent delineator, draftsman and detail man. Recent experience with residential work and housing. Location immaterial. Box No. 310.

POSITION WANTED: Architect, draftsman, young, single, Columbia University, broad and varied experience, capable of carrying job from sketches to completion, desires connection with architect, engineer or builder doing work in foreign country. Capable of representing concern and negotiating detailed business. Box No. 307.

POSITION WANTED: Boy, 17, graduate of two-year course in architectural drafting in Murray Hill Industrial High School, also 8 months' supplementary work in Textile High School. Would appreciate an opening with an architect or drafting concern. Has had experience on small outside jobs. Vincent Pierce, 423 W. 42nd Street, New York City.

TO FREE LANCE MEN: Architect is in need of perspectives done in either pencil, pen and ink or water color from time to time. Some would be small, quickly made, pencil renderings, others more elaborate. The essence of it all is speed and economy. I would send the plan and design and would expect the work back in a week. Box No. 308.

POSITION WANTED: A draftsman of advanced age desires employment (temporary) or for part time at about $18 a week. City buildings, plans, elevations, tracings, etc. General work preferred. Telephone SAcramento 2-5855 (New York).

POSITION WANTED: Draftsman, age 23, Christian. Graduate architectural construction and design Pratt Institute. Desires any beginning position with architect, builder or contractor in office or outside. Especially interested in free-hand design, in charcoal and pencil. Will work anywhere in Greater New York or Westchester County. Willing to do any kind of work at moderate salary to get practical experience. Box 311.

POSITION WANTED: As apprentice in architect's office, 18 years of age, High School graduate. Will go anywhere in the United States. Box No. 312.

POSITION WANTED: Position or partnership with an architectural firm to act as contact man in securing jobs. Personality considered good for such work. Have been successful in securing work in competition with other architects. Have also had design, specification writing and supervision experience. Box No. 313.

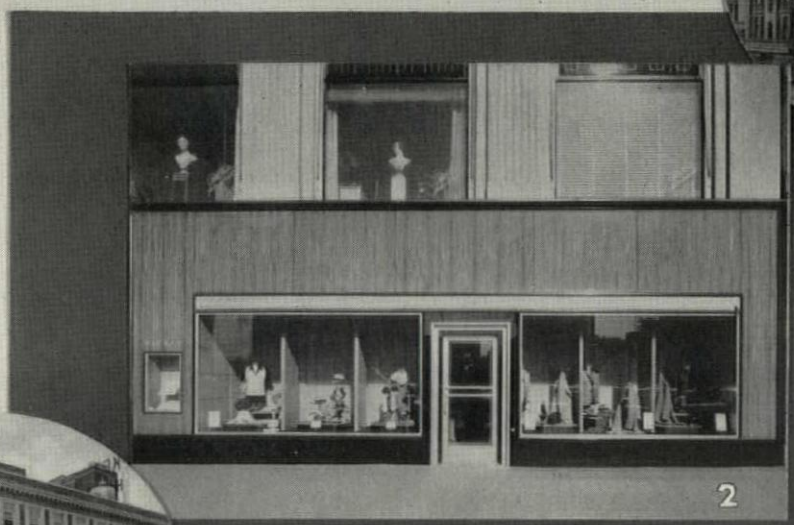
POSITION WANTED: A mechanically inclined young man of 21, with a High School education, seeks apprenticeship training in a drafting office in Metropolitan New York. Two years of mechanical drawing at Mechanics Institute, and a knowledge of machine shop work. Salary secondary. Box No. 314.

POSITION WANTED: Young designer, renderer and draftsman, architectural graduate, wishes steady employment in architect's office. Practical experience includes two years' large construction field experience, two and one-half years' industrial design and oil burner engineering and architectural office experience including school, institution and house construction. Box No. 315.

VERSATILITY

AN IMPORTANT CHARACTERISTIC OF TRANE SYSTEMS BECAUSE OUR COMPLETE RANGE OF EQUIPMENT GIVES FLEXIBILITY OF DESIGN

FOR ANY TYPE OF BUILDING



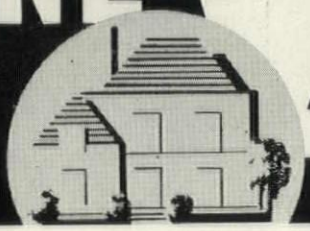
1. **Hochschild and Kohn Department Store — Baltimore**
2. **Hickey Store — Detroit**
3. **Kemp Hotel — Wichita Falls**

Air Conditioning equipment must be flexible enough in arrangement to meet the requirements of every type of building. TRANE provides the most complete range of equipment available in individual units for room installation; or coils and similar equipment for central systems using either direct expansion refrigerants, brine or water as the cooling medium. And back of this equipment is a field performance experience secured from hundreds of installations. There are no limitations to your air conditioning system design when you specify TRANE. We will be glad to send complete data for your files together with lists of installations in every type of building.

TRANE

THE TRANE COMPANY, La Crosse, Wisconsin
Also Trane Company of Canada, Ltd., Toronto, Ont.

AIR-CONDITIONING



Student Scholarships

This month there are several additional scholarship competitions open to architectural men. Harvard University School of Architecture offers three Special Student Scholarships to men eligible for admission or already admitted as special students in the school. Each of these carries an income equal to the tuition fee for the academic year 1936-37. Candidates should apply immediately to Dean Joseph Hudnut, Robinson Hall, Cambridge, Mass., since their application form must be submitted not later than Monday, March 9th.

The Harvard Graduate School of Landscape Architecture also offers a scholarship with an income of $400, equal to the tuition fee for the year 1936-37. Candidates must have received their Bachelor's Degree within the past three years. Inquire before March 31st of the Chairman, School of Landscape Architecture, Robinson Hall, Cambridge, Mass.

The College of Fine Arts at Syracuse University has available one $300 and four $150 scholarships for the next academic year, to be granted by competition on Saturday, July 11th. Complete information as to the requirements for entering this competition may be had from Dean H. L. Butler, College of Fine Arts, Syracuse, N. Y.

The Thirty-sixth John Stewardson Memorial Scholarship in Architecture, which carries $1000 for the purpose of study and travel in this or foreign countries, is open to candidates between twenty-two and thirty years of age as of March 28th, 1936, who have had four years of training in collegiate schools or architectural offices or a combination of both. Also, candidates must have studied or practiced architecture in the State of Pennsylvania for at least one year immediately preceding the scholarship award. Registration blanks, which may be had by applying to Edmund R. Purves, Architects' Building, Seventeenth and Sansom Streets, Philadelphia, must be filled out and returned to the Committee not later than March 14th, 1936.

A Letter from the Architectural Guild of America

"Two matters of vital concern to economic standards of architectural men are now being pushed to final action by the Guild. One is the payment of prevailing wages to architectural men engaged on work financed by the Public Works Administration. The second is for this same wage rate to be paid by the Works Progress Administration.

"The Guild petition for an order establishing the payment of prevailing wages on P.W.A. projects was sent to the President, who informs us that he is studying the matter. This resolution has already been referred to the Housing Division which declined to endorse the prevailing wage clause. The answer of A. R. Clas, Director of Housing, states that the Division has developed a policy for payment of standard wages to architectural men directly employed, and rules for payment of those employed by private architects. A detailed answering brief to the Housing Division has been sent to the President with evidence that wages of $1.00 per hour have been paid on three of the largest housing projects, which rate corresponded exactly with the relief wages being paid. The Guild asks every group or organization to cooperate on this important matter by sending a resolution to the President, embodying any factual information which may aid our case. Letters by individuals to the P.W.A. and the President will also be of great value. The following is the form of the Guild resolution:

"RESOLUTION

To The President of the United States, His Excellency, Franklin D. Roosevelt, The White House, Washington, D. C.

WHEREAS, it is the purpose of the Federal Emergency Administration of Public Works to sponsor or create works to afford employment, and

WHEREAS, it is the general policy and definite promise of the Administration that the wages and other costs on such work shall be at the prevailing level, and

WHEREAS, this policy has been effectuated for all concerned except Architectural employees, and

WHEREAS, the Housing Division has sponsored many projects, in various localities, where a relief wage was paid to Architectural employees instead of a prevailing wage, and

WHEREAS, the Housing Division disclaims responsibility for payment of low wages because of the Executive Order which specifically excludes professional employees from protective government rulings on wages and working conditions, and

WHEREAS, the absence of a protective Executive Order has helped reduce standards of Architectural men to relief standards, and permits unfair advantage and profits to employers of these men, and

WHEREAS, the purpose of the emergency work is, in part, to aid and not harm Architectural employees, now, therefore,

BE IT RESOLVED, that we, the Architectural Guild of America, representing two thousand Architectural employees, do hereby respectfully request an Executive Order calling for the payment of prevailing wages to all Architectural employees engaged on work financed by the Federal Emergency Administration of Public Works.

"The following quotations, on which we comment, are from the letter of A. R. Clas, Director of Housing, Federal Emergency Administration of Public Works. 'In all cases wage rates of architectural employees engaged on work in connection with the Housing Division projects have been of a standard equal to or beyond the prevailing wage payable within the locality.' The Guild has, on a number of previous occasions, given definite proof that sub-standard wages were paid and Mr. Clas has heretofore disclaimed responsibility, jurisdiction, and even knowledge of the matter. 'With special reference to the New York projects, you have been informed that an agreement exists between the Housing Division and the New York City Housing Authority which calls for payment of the agreed salaries to architectural employees engaged by them in accordance with local wage conditions, and at a rate higher than the rate advanced by the Works Progress Administration during the period of such employment. Before the architects on these projects can receive payment for their services, they are required to furnish affidavits to that effect to the Housing Division.' If such an agreement were made with architects it has not been carried out and we have taken particular exception to the use of the WPA (relief) wage as a criterion or basis for work of the Housing Division.

"Where the Housing Division has taken over projects and employed men itself, Mr. Clas informs us that the following rates were paid:

Architectural Consultants, $25 per day.
Associate Architectural Consultants, $20 per day.
Architects, $4000 per annum.
Associate Architects, $3200 per annum.
Assistant Architects, $2600 per annum.
Junior Architects, $2000 per annum.
(The above is for an eight-hour day, payment when actually employed.)

"Mr. Clas contends that because architectural men are, on the information in his letter, receiving wages in excess of relief wage he finds it inadvisable to endorse our resolution to the President.

"When Senator Wagner took up the Guild plea for payment of prevailing wages Mr. Clas informed him that the PWA could not help because the Executive Order setting up prevailing wages on PWA projects had specifically excluded professional employees. Mr. Clas now appears to be directly opposed to the payment of prevailing wages despite the overwhelming evidence that only in this way can standards of architectural men be protected.

"The Guild urges that all architectural men take part in the important campaign to establish the Guild wage schedule on work financed by the government. Inquiry on organization of the Guild and cooperation by groups or organizations of architectural men is invited."

JOHN F. ST. GEORGE, *Executive Secretary*
15 East 40th Street, New York City


1500
PEOPLE
HAVE BEEN MADE
HAPPY
TO DATE, BY BUYING
A. L. Guptill's
COLOR
IN SKETCHING
AND RENDERING
You CAN BE
HAPPY, too. Just
send $10.00 for your
copy! Circular on request

GILLOTT PENS

The Entrance Porch of Lincoln's Inn, London, drawn by Harry C. Wilkinson of Old Greenwich, Conn., with Gillott Pens 290 and 303.

Ever since the steel pen was invented by Joseph Gillott, over one hundred years ago, the name "Gillott" has been synonymous with the word "quality" in the minds of leading artists and architects.

At leading dealers—or send 25c in stamps for a sample set of Gillott Drawing Pens, six popular points.

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

for these conditions · · ·

- **New homes in which standard roof insulation is not specified.**
- **New homes where additional roof insulation is desirable.**
- **Modernization of old homes.**

This is the only shingle built with outside slate surface for weather protection and cork layer underneath for insulation. Insures a cooler home in summer—warmer in winter. Saves fuel!
Extra thickness and modern non-fading colors enhance roof beauty. Time-tested. Approved by Underwriters Laboratory. Samples and full details on request.

The PHILIP CAREY CO.

Dependable Products Since 1873

Lockland, Cincinnati, Ohio Branches in Principal Cities

WHEN THE LAYOUT CALLS FOR A LAUNDRY

• Call in an American Laundry Advisor

AS a member of a far-seeing profession, you know the value of practical collaboration. That's why, when your specifications reach into the laundry field, you will want to use the services of an American Laundry Advisor. He has a portfolio full of actual floor plans and installation photographs that will save a lot of your time and your client's money. He can help you iron out the wrinkles right there on your drafting board. His services are confidential and will not obligate you in any way.

THE AMERICAN LAUNDRY MACHINERY COMPANY
CINCINNATI, OHIO

USE THIS COUPON

The American Laundry Machinery Co.,
Norwood Station, Cincinnati, Ohio.

Please send me your Don Graf Data Sheets on Laundry Planning.

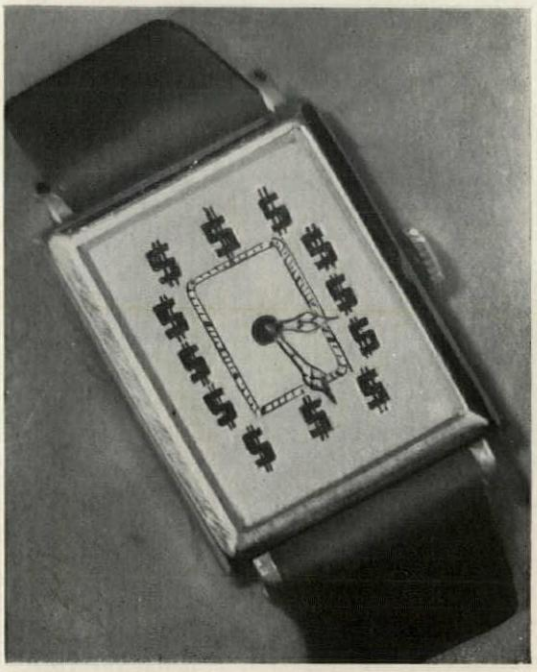
Name .....

Street .....

City ..... State.....

I am an ( ) Architect, ( ) Draftsman

or.....



DATA

Take Advantage of this Special

An opportunity is now offered to obtain any or all of the *Data Sheet* sets alone, or in combination with a new or renewal subscription for PENCIL POINTS—at a money-saving price. You can complete your *Data Sheet Notebook* and keep informed of new sets of free *Data Sheets* offered by manufacturers in the advertising pages of PENCIL POINTS.

And besides, every month PENCIL POINTS will bring you an abundance of other helpful and interesting features which have made it the most widely read publication of the architectural profession. Use the convenient order form attached.

For those who do not have a complete file, the *Data Sheets* which have appeared in PENCIL POINTS have been reprinted on heavy bond paper. They are all punched and ready for your notebook. These reprinted *Data Sheets* are available in "sets" of 24 sheets. Each set represents those *Data Sheets* which have appeared in PENCIL POINTS issues during a six months' period. A complete list of subjects covered by the various sets will be sent on request.

Suppose you waste only 15 minutes a day hunting for information that you need on drawings —in a month it has cost you more than the price of the *Data Sheets* complete and a one-year subscription for PENCIL POINTS. Can you afford to be without Don Graf's PENCIL POINTS *Data Sheets*—the original time and temper-saving device for instantly bringing needed facts to your finger-tips? The *Data Sheets* are convenient, handy in size, dependable. They are being used profitably every day by thousands of architectural men.

The top illustration shows the 4 special *Data Sheet* binders with index guides, contained in a permanent box. The contents of each volume are stamped in gold on the backbone. These binders will hold all 8 sets of the *Data Sheets* which have been printed to date and will

SHEETS

REALLY *save your time!*

Subscription-and-Data-Sheet Offer

allow ample room for future additions as the series continues. Each book has the contents on the inside front cover and a complete index on the inside back cover. Binders of similar quality would cost $1.20 to $1.50 each if purchased at retail. The 4 binders are stiff cover type in green leather cloth.

The bottom illustration shows a special stiff canvas cover binder for *Data Sheets*. The backbone is without stamping. Index guides are included. The single binders are offered for those who wish to build up their *Data Sheet* library one volume at a time. Similar binders cost $1.20 to $1.50 at retail.

ORDER FORM

PENCIL POINTS, Dept. S.
330 West 42nd Street, New York City

I inclose herewith $..... for the items checked below.

[Regular subscription price $3.00 per year
Regular Data Sheet price 75c per set]

	Without Pencil Points Subscription	With 1-year Pencil Points Subscription
Any 1 set	☐ $ .75	$. . .
Any 2 sets	☐ 1.30	. . .
Any 3 sets	☐ 1.95	☐ 3.50
Any 4 sets	☐ 2.50	☐ 4.00
Any 5 sets	☐ 3.00	☐ 4.50
Any 6 sets	☐ 3.50	☐ 5.00
Any 7 sets	☐ 4.00	☐ 5.50
All 8 sets	☐ 4.50	☐ 6.00
Four 1" binders with index guides, boxed (no Data Sheets included)	☐ 3.00	☐ 4.50
Four 1" binders, boxed, with index guides and 8 sets of Data Sheets	☐ 6.00	☐ 7.50
1" stiff canvas binder with index guides (no Data Sheets included)	☐ .85	. . .

Send Data Sheet Sets ☐1 ☐2 ☐3 ☐4 ☐5 ☐6 ☐7 ☐8

☐ Begin my subscription with the current issue.
☐ Continue my subscription from date of expiration.

Name .....

Street .....

City ..... State .....

☐ Architect, ☐ Draftsman, or ☐.....

Note: Canadian subscribers add 50 cents, and Foreign subscribers add $1.00 to the above prices to cover additional postage for mailing the 12 issues of PENCIL POINTS.

PUBLICATIONS ON MATERIALS AND EQUIPMENT

(Continued from page 32, advertising section)

DOOR-WAYS.—First issue of recently resumed series of publications sent regularly to architects and contractors dealing with the subject of Richards-Wilcox garage door hardware, conveying systems, fire doors, mill type doors, etc. 24 pp. Richards Wilcox Manufacturing Co., Aurora, Ill.

H & C AIR CONDITIONING REGISTERS AND GRILLES.—A.I.A. File No. 30-e. New catalog containing much useful information of value to the architect and air conditioning engineer. A section is devoted to the problem of air distribution, and charts and forms are included to aid in the selection of the proper type and size of grille. In addition, installation and construction details of the complete line of air conditioning registers, grilles and intakes are given. 34 pp. 8½ x 11. Hart & Cooley Mfg. Co., 61 West Kinzie St., Chicago, Ill.

BRYANT GAS HEATING AND AIR CONDITIONING.—Attractive new brochure illustrating and describing in detail a complete line of gas-operated heating and air conditioning equipment for installation in homes. 16 pp. 8½ x 11. The Bryant Heater Co., 17825 St. Clair Ave., Cleveland, Ohio.

MASTER KRAFT FUEL SAVER.—Folder with installation details and description of a new device installed in either steam or hot water heating boilers which exposes the maximum amount of heating surface to the fire. 4 pp. 8½ x 11. Harvey-Whipple, Inc., 55 Emery St., Springfield, Mass.

AUTOVENT PROPELLER FANS AND VENTILATING PRODUCTS.—A.I.A. File No. 30-d-1. Series of bulletins with descriptive and technical data covering Autovent propeller fans, electric unit heaters, automatic louvres, self-contained cabinet ventilator, Coolvent system of ventilation and super type unit heaters. 8½ x 11. Autovent Fan & Blower Co., 1805 N. Kostner Ave., Chicago, Ill.

BENNETT FIREPLACE UNIT MODEL C.—A.I.A. File No. 14-e-2. Folder describing a new fireplace unit which includes flue damper, arch bar, heat grilles, completely formed chamber, down-draft shelf, etc. Included are suggestions and directions for fireplace construction. 8½ x 11. Bennett Fireplace Construction, Norwich, N. Y. *Published by the same firm, "Bennett Expanslip Throat Damper." A.I.A. File No. 14-e-2. Descriptive folder covering an improved type of throat damper as well as several other fireplace supplies. 4 pp. 8½ x 11.*

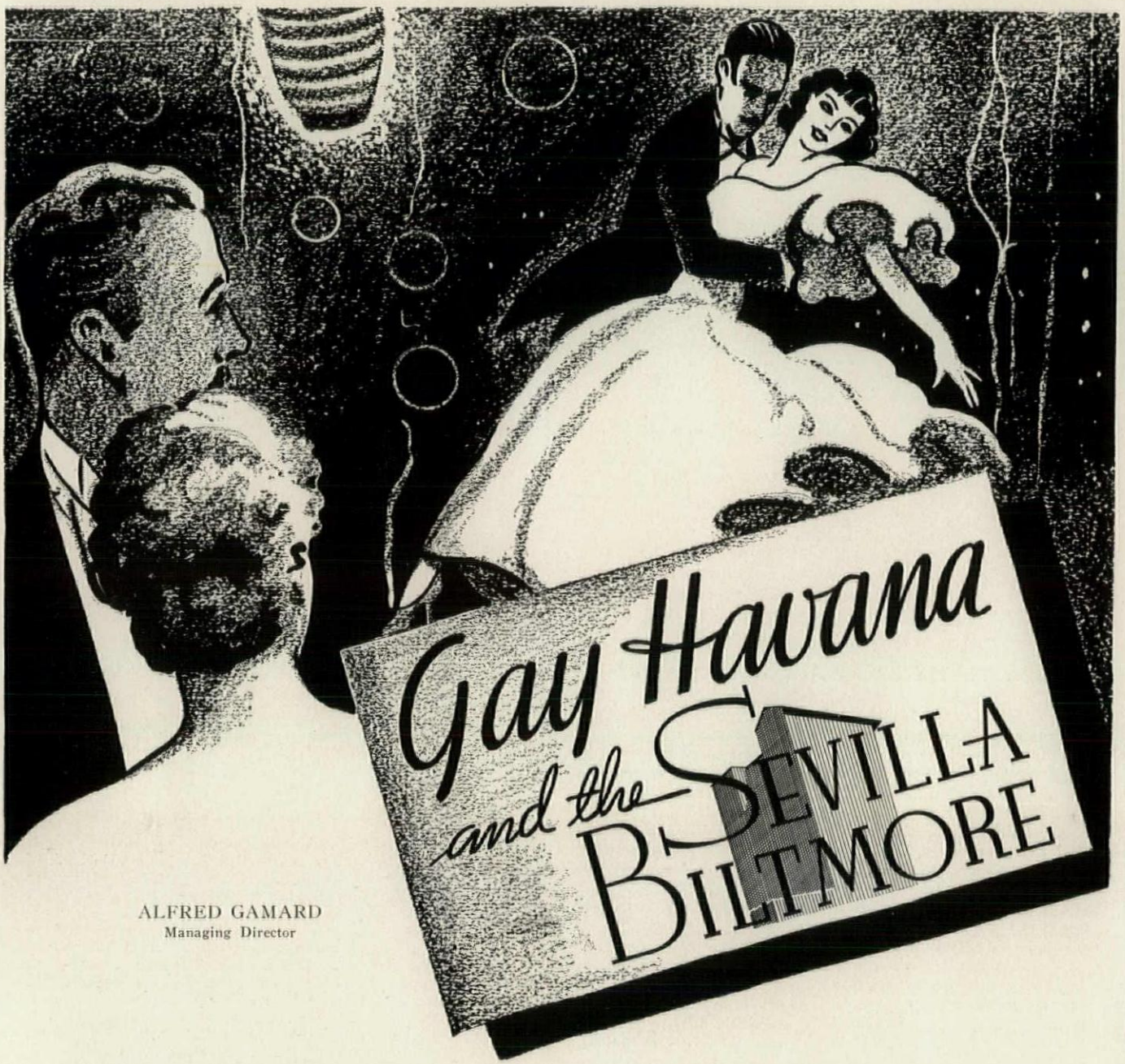
U. S. WARM AIR REGISTERS.—Handy pocket size manual, No. 25 just issued, covering a complete line of popular sizes of gravity and air conditioning registers. Indexed. 72 pp. United States Register Co., Battle Creek, Mich.

WHAT ARCHITECTS ARE DOING WITH PORCELAIN ENAMEL.—Architectural bulletin No. 13. Valuable brochure for architects and designers describing the use of porcelain enameled sheets for both exterior and interior finish. Included are numerous photographs showing actual installations accompanied by architects' drawings. 40 pp. 8½ x 11. The American Rolling Mill Co., Middletown, Ohio.

BRASCO METAL STORE FRONTS.—A.I.A. File No. 26-B-1. Filing folder with descriptive folder and a set of nine detail sheets covering Brasco shadow line and solid extruded store front construction. Specifications. 8½ x 11. Brasco Mfg. Co., Harvey, Ill.

SILVERCOTE INSULATION FABRIC, COREBOARD AND BOARD.—A.I.A. File No. 37. Catalog with general information, technical data and specifications for use in the application of Silvercote insulation fabric, coreboard and board in various forms of construction. Detail drawings. 16 pp. 8½ x 11. Silvercote Products, Inc., 161 East Erie St., Chicago, Ill.

THE FREE-MAN AUTOMATIC COAL BURNER.—Illustrated catalog giving detailed description of the construction and operating features of a line of automatic underfeed stoker equipment. 8 pp. 8½ x 11. Illinois Iron & Bolt Co., Carpentersville, Ill.



ALFRED GAMARD
Managing Director

HAVANA'S Sevilla-Biltmore, most famous hotel in Latin America, is open again. That's good news for the experienced traveler!

Under the new regime (the celebrated host, Achille Borgo, is managing director) the Sevilla bar has been modernized into the smartest rendezvous of the capital . . . the famed Sevilla patio enlarged for gay cocktail-hour throngs . . . the hotel refurbished throughout. From now on, the Sevilla-Biltmore will be *open the year 'round.*

SEASONAL TARIFFS ARE SENSIBLY SCALED TO MODERN TRAVEL BUDGETS

A thoroughly cosmopolitan hotel—the Sevilla . . . Cuban in its high-ceilinged rooms, tiled floors, balconies and other features adapted to tropic living . . . French in cuisine, service, atmosphere . . . American in comfort, conveniences and—cocktails!

Sevilla-Biltmore hospitality now includes a special bureau for personal service to guests, to handle their individual travel and entertainment details—such as luggage, customs inspection, entry of guests' automobiles, parties inside or outside the hotel, tours of the island and other particular service.

For information, rates, reservations: any travel agent . . . or Sevilla-Biltmore, Havana, Cuba. Cable address: "Sevilla."

NEW PRODUCTS
Changes in Personnel, etc.

AN INVITATION

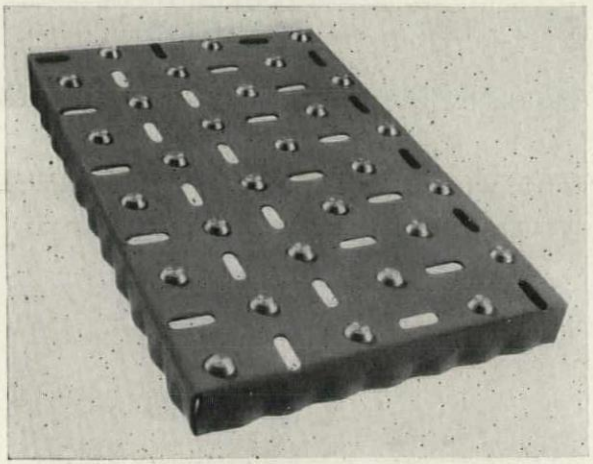
The General Bronze Corporation, Long Island City, will exhibit its latest improved and patented double-hung and casement windows in non-ferrous metals at the Biltmore Hotel, New York City, from 11 a. m. to 7 p. m. on March 18, 19, 20. The windows are said to be absolutely weather-tight, adaptable to and within the price range of all types of modern buildings. Keeping the more generally used units in stock will make available for immediate delivery a wide selection of single or multiple windows to meet varying architectural requirements.

Architects and builders are cordially invited to attend the exhibition.

BETHLEHEM STEEL PAVING PLATES

Bethlehem Steel Company, Bethlehem, Pa., has just placed on the market a new type of permanent and protective surfacing for concrete floors and paving, designated Bethlehem steel paving plates which are designed for installation on the surface of concrete slabs to which they are anchored and with which they become an integral part.

These plates are of ⅛-in. rolled steel, and are available in two sizes. One is intended for use on roadways; the other for plant floors, loading platforms, and docks. Both types are identical, except that the one for roadways is



equipped with button-head studs, making it a non-skid plate. As shown in the accompanying illustration, the sides are perpendicular to the surface, and are so crimped as to give the plates firm anchorage in the concrete. Additional anchorage is provided by studs which extend into the concrete. And, when these plates are laid the fresh concrete fills the slots to the top of the plate, providing additional bond between concrete and plate and, at the same time, increasing its non-skid surface.

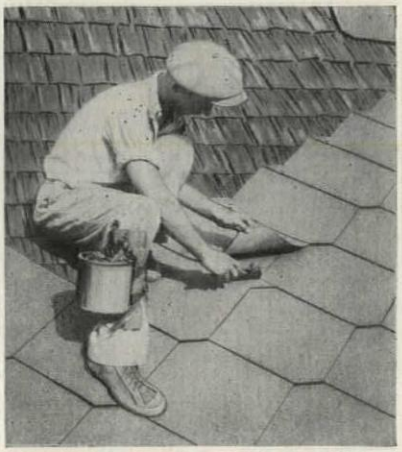
The floor-type Bethlehem Steel Paving Plate has a smooth surface, the long-shank anchorage studs, with flat heads, fastening through countersunk holes, making them flush with the top surface of the plate.

The anti-skid or road-type plate is applicable to thoroughfares, such as tunnels and bridges, that carry extremely heavy, continuous traffic.

The floor-type Bethlehem steel paving plates find application in warehouses, breweries, docks and loading platforms where heavy goods are ordinarily conveyed on trucks with steel wheels of small diameter and small flange width, which are very hard on floor surfaces. Like the road plates, Bethlehem steel paving plates of the floor type are anchored securely to the concrete slab and become, in effect, an integral part of it. They are built to stand up through unusually long periods of severe service. The standard size of these Bethlehem paving plates is 12 in. by 18 in., with 1½ in. sides.

GENASCO STA-RITE ASPHALT SHINGLES

A new line of individual shingles that lay up in symmetrical design on the roof, known as Genasco Sta-Rite asphalt shingles, is announced by The Barber Asphalt Co., Philadelphia, Pa. They are made with tough, long-fibred rag felt, selected because of its strength and power of absorbing the asphalt saturant.



These modern patented shingles are not only secured to the roof by concealed nails, but are sealed to each other with Sta-Rite plastic adhesive just as the flap on an envelope is sealed before mailing.

When Sta-Rite shingles are applied there is no flexing or reflexing—there is no chance for them to blow up and flop in the wind. They are reversible, self-spacing and self-aligning and are quickly and easily applied. Like all Genasco asphalt shingles they are waterproofed with Trinidad lake asphalt cement.

This new line of shingles is furnished in many attractive colors.

CHANGES IN TRANE COMPANY PERSONNEL

Norbert D. Downey, for many years advertising manager of The Trane Company, La Crosse, Wis., heating and air conditioning equipment, took complete charge of the company's unit heater and gas-fired heater department, sales and merchandising, on Feb. 1.

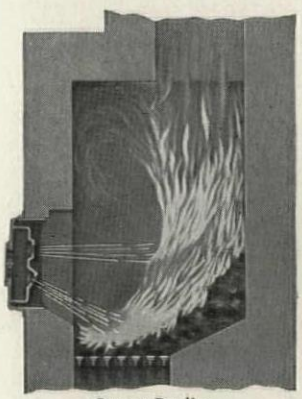
In announcing his plans for the new season, Mr. Downey states that the Trane line of unit heaters is to be further broadened and developed. Announcements for additions to the line will be made shortly.

Succeeding Mr. Downey as advertising manager is L. A. Trumble who rejoined the Trane Company organization two years ago after having previously been their advertising manager for many years.

KERNERATOR AIR TORCH INCINERATION

A complete new line of incinerators employing the air-torch principle of rubbish and garbage disposal is announced by the Kerner Incinerator Co., Milwaukee, Wis. This new method is said to be simpler, lower in cost and more efficient than the principle of flue-fed incineration used successfully for many years.

By means of an air box attached to the inside of the fire door, jets of air are made to impinge on the material in the grates, accelerating primary combustion. Another set of air jets, placed above the others, supply air to the gases, thus completing the secondary combustion.



Patents Pending

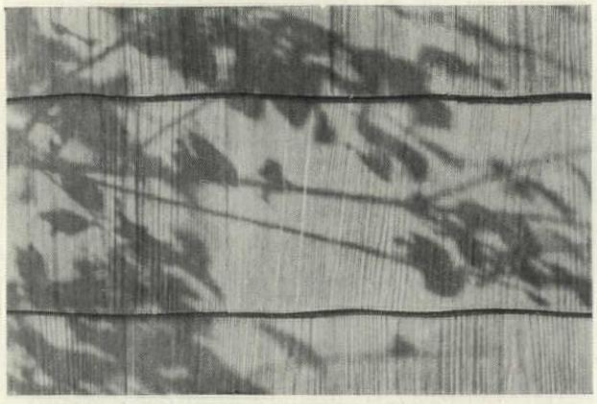
Since there is a definite relationship between the amount of air needed for primary combustion and that needed for secondary combustion, the orifices of the lower air jets are considerably larger than the upper set of orifices.

The draft up the flue accelerated by the hot gases during burnings develops a minus pressure in the incinerator, and the air box becomes a plenum chamber—similar to the plenum chamber in ventilator practice where a plus pressure is developed by a fan or blower. The volume and direction of the jets of air leaving the air box or plenum chamber is determined by the size of the orifices, and the plane in which they are located.

JOHNS-MANVILLE CEDARGRAIN ASBESTOR SIDING SHINGLES

Johns-Manville, Inc., New York, announces the introduction of a new line of cedargrain asbestor shingles designed for use as siding for houses. They are made from asbestor fibres and portland cement and are therefore fireproof, permanent and free from upkeep expense.

In this new product Johns-Manville has reproduced the



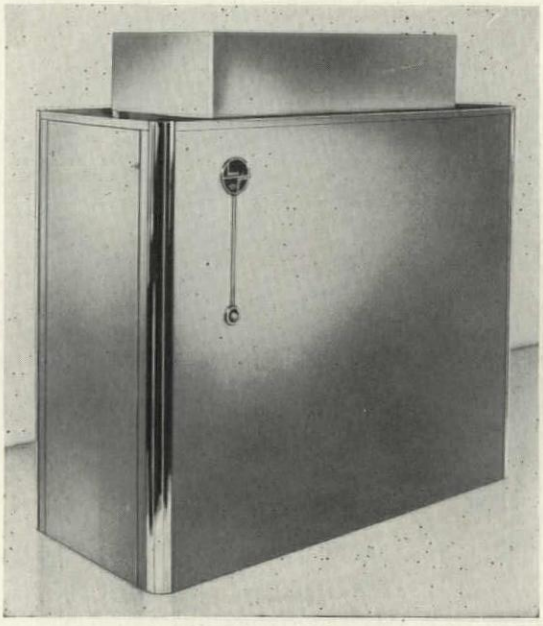
silvery-gray color of weathered cedar shingles. They do not require paint or other preservative.

Cedargrain shingles are equally adaptable for either new or existing structures. The cost of putting them on is said to be low because the large units, 57 shingles per square, are applied easily and quickly.

They are available in three designs including tapered or uniform thickness shingles with either wavy or staggered butts and a uniform thickness type with even butts.

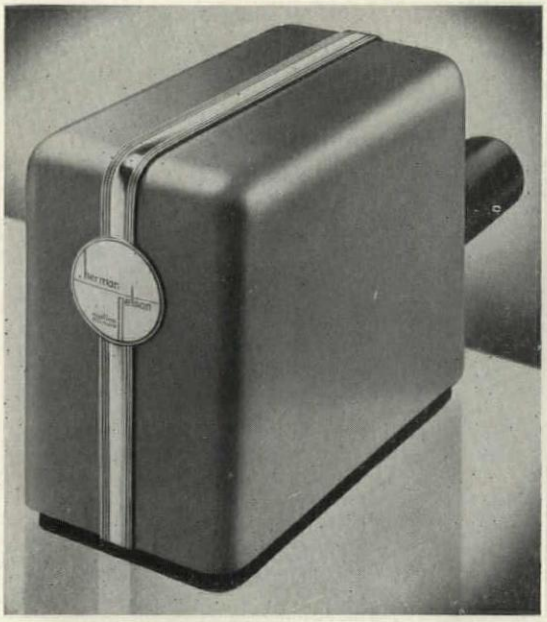
HERMAN NELSON CORPORATION INTRODUCES NEW AIR-CONDITIONING EQUIPMENT FOR RESIDENTIAL AND COMMERCIAL FIELD

The Herman Nelson Corporation, Moline, Ill., manufacturers of heating and ventilating equipment, including heating and air-conditioning units for industrial and school classroom application, has announced a new line of automatic heat and air-conditioning equipment for the residential and commercial market. The first group of these products to be presented consists of an oil burning air-conditioning furnace unit, a conversion oil burner and a self-contained unit cooler.



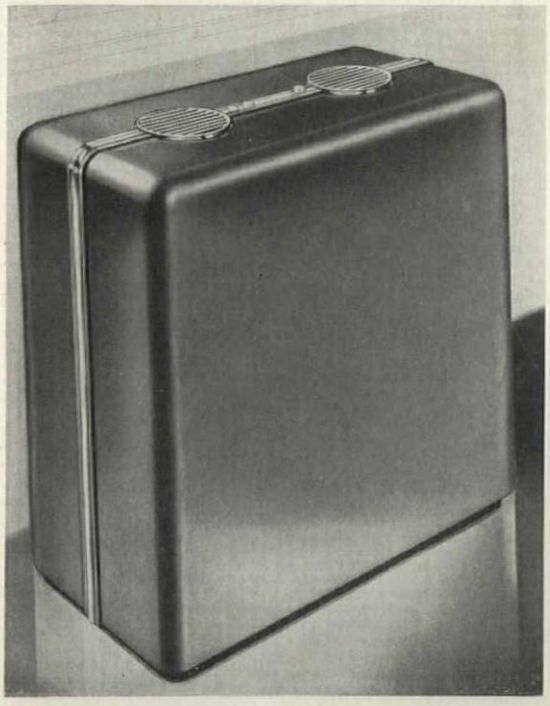
The oil burning air-conditioning furnace unit, attractively styled and finished, is designed to provide all the proper air conditioning for comfort; heating, air motion, humidification and air cleansing with optional cooling and de-humidification. The B. T. U. capacity is 150,000, burns No. 3 oil, 1.35 gal. per hour, and has an air capacity of 1500-200 c.f.m.

The new conversion oil burner is of the gun or pressure



type, modern in design, and is said to be unusually compact and efficient. Burns No. 3 oil, 1.35 to 4.00 gal. per hour, motor of 1/6 horse power, and speed of 1725 r.p.m.

The self-contained summer air conditioner, that cools,



circulates, and de-humidifies the air, has a heat absorption capacity of 8000 B.T.U.'s per hour, air capacity 425 c.f.m., and de-humidification capacity of about 2.5 lbs. per hour.

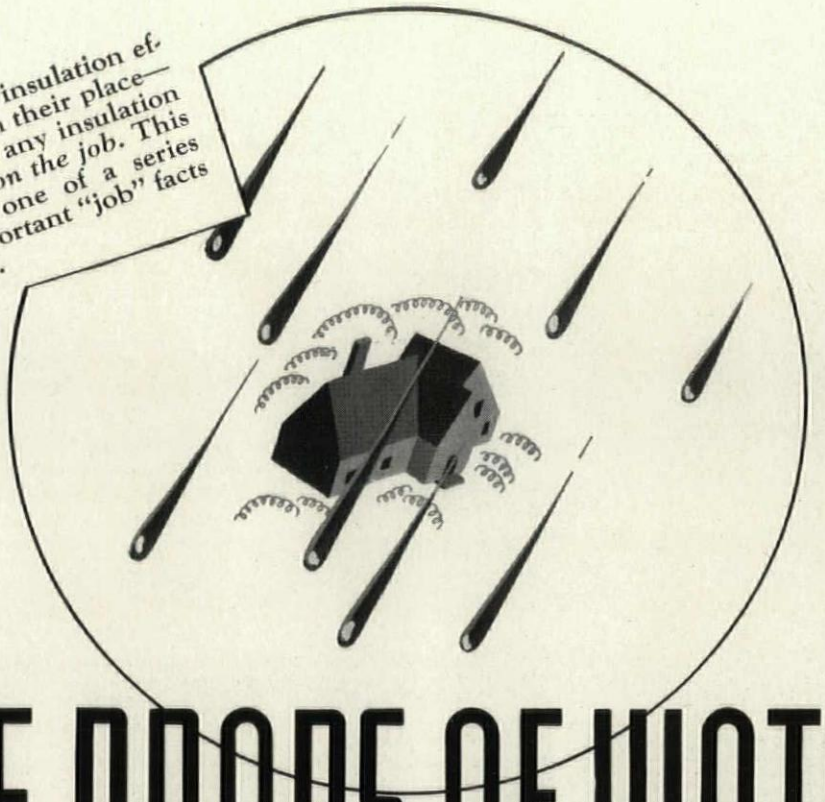
It is said that other Herman Nelson products of a relative nature will be announced at an early date to form a complete line of automatic heat and air-conditioning equipment.

The Central Foundry Company, New York, announces the removal of its Pacific Coast sales office from San Francisco to 278 Fourth St., Oakland, Calif. John Ponsaing, district sales manager; and E. A. Keithley and K. P. Hughes, sales representatives for the company's Nuhub soil pipe; valve, service and roadway boxes; Solus oil and gasoline separators; and universal water supply pipe, will make their headquarters at the new office.

INDEX TO ADVERTISERS

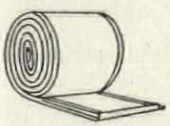
Advertising Offices: 330 West 42nd Street, New York, N. Y. Philip H. Hubbard, Vice-President and Advertising Manager. District Offices: 1133 Leader Building, Cleveland, R. M. Creaghead; 706 Straus Building, Chicago, G. A. Ahrens; 703 Market Street, San Francisco.

● Laboratory tests of insulation efficiency are useful in their place—but the final test of any insulation is what it will do *on the job*. This advertisement is one of a series dealing with important "job" facts about insulation.



LITTLE DROPS OF WATER

. . . don't let them spoil insulation value for YOUR clients!



Certainly you want to give your clients the most insulation value per dollar spent.

Then be sure that the insulation you specify is *fully* protected from moisture! For water and water vapor are deadly enemies of insulation. A good insulation material must be amply and positively protected from condensing moisture in walls, ceilings and roofs.

Balsam-Wool Blanket Insulation is *sealed* in a tough, waterproof covering. Moisture cannot get into this insulation to rob it of efficiency. There can be no condensation within the material to cause decay of framing members. Season after season, year after year, Balsam-Wool retains its high insulating value.

Unlike materials that are merely hand-packed or blown in, Balsam-Wool is fastened in place. It assures you of getting *continuous* insulation, with no uncovered spots for the wind to blow through. Balsam-Wool does not settle . . . does not change its form. In addition, it is vermin-proof and highly fire-resistant.

Balsam-Wool enables you to specify the right amount of insulation for every building and every climate. It comes in *three* thicknesses. With Balsam-Wool, you need never waste money by specifying *too much* insulation . . . never run the risk of specifying *too little*.

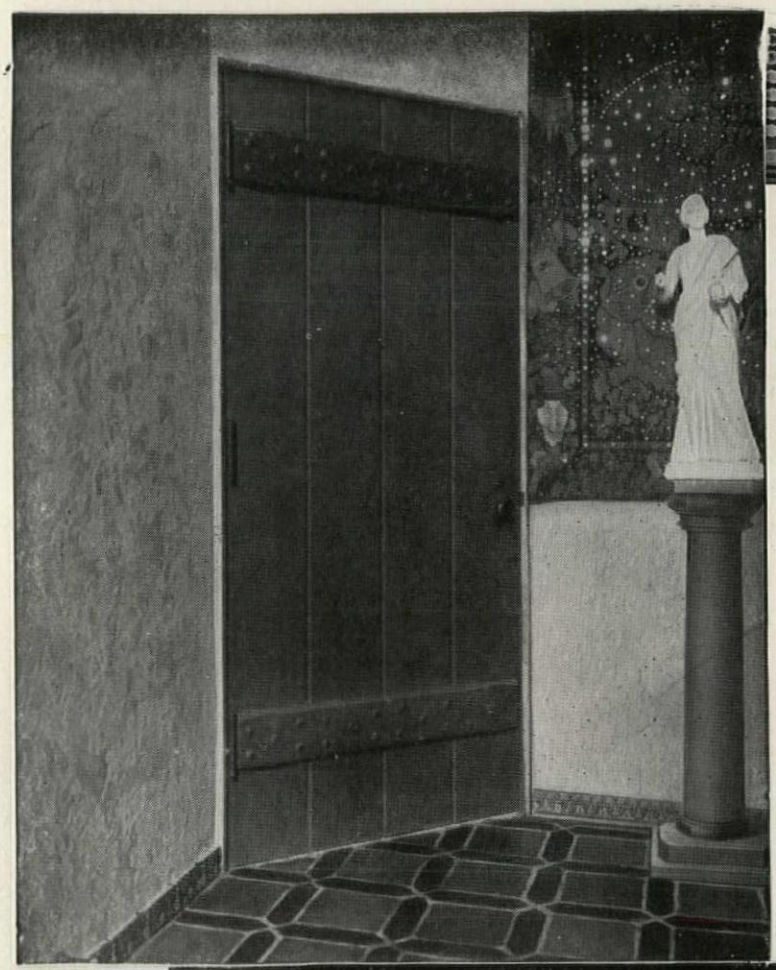
Complete information about Balsam-Wool is yours for the asking.

BALSAM WOOL — *Made By The Makers of* **NU-WOOD**

WEYERHAEUSER FOREST PRODUCTS

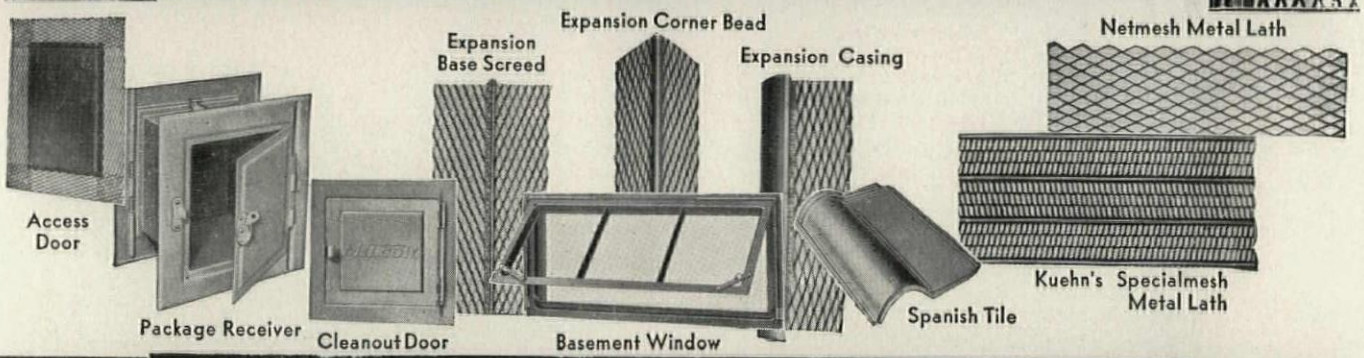
WOOD CONVERSION COMPANY — **ST. PAUL · · · MINNESOTA**

Products of Weyerhaeuser



Specify this Door and Window Casing For F. H. A. HOMES

Because of its beauty, practicability and low cost MILCOR EXPANSION CASING is ideally suited to homes built under the Federal Housing Act, which demands proper construction. The expanded metal wings assure a perfect key for the plaster . . . minimizing cracks and resulting in lower maintenance cost. The precise, neat metal molding of *Milcor* Expansion Casing may be finished in the same tone as the walls . . . adding a touch of beauty that is permanent and distinctive. This casing is one of the famous *Milcor* Fireproof Materials.



Sales Offices: New York, 22 East 40th St.; Boston, Mass., 136 Federal St.; Atlanta, Ga., 92 Fairlie St., N. W.; Los Angeles, Calif., 986 Arapahoe St.; Little Rock, Ark., 419 Center St.; Minneapolis, Minn., 650 Builders Exchange.

MILCOR STEEL COMPANY

Plants at
MILWAUKEE, WIS.
4103 W. Burnham St.
CANTON, OHIO
Chicago, Ill.
Kansas City, Mo.
La Crosse, Wis.

BRIXMENT

—THE LEADING

MASONS' CEMENT

WHEN any one product outsells its competition many times over, you have good reason to believe it's *the best* in its field. ★ ★ Brixment makes the best mortar you can possibly use—more plastic and easy-working—stronger—can't cause efflorescence or fading of colors—*water-proofed* at the mill. ★ ★ Because it combines *all* of these essential qualities, Brixment for years has been the largest-selling masons' cement on the market. 1 part Brixment, 3 parts sand. Five bags will lay approximately 1000 brick. ★ ★ Louisville Cement Company, *Incorporated,* Louisville, Kentucky.

Printing of Pencil Points by The Gillespie Bros., Inc., Stamford, Conn., U. S. A.