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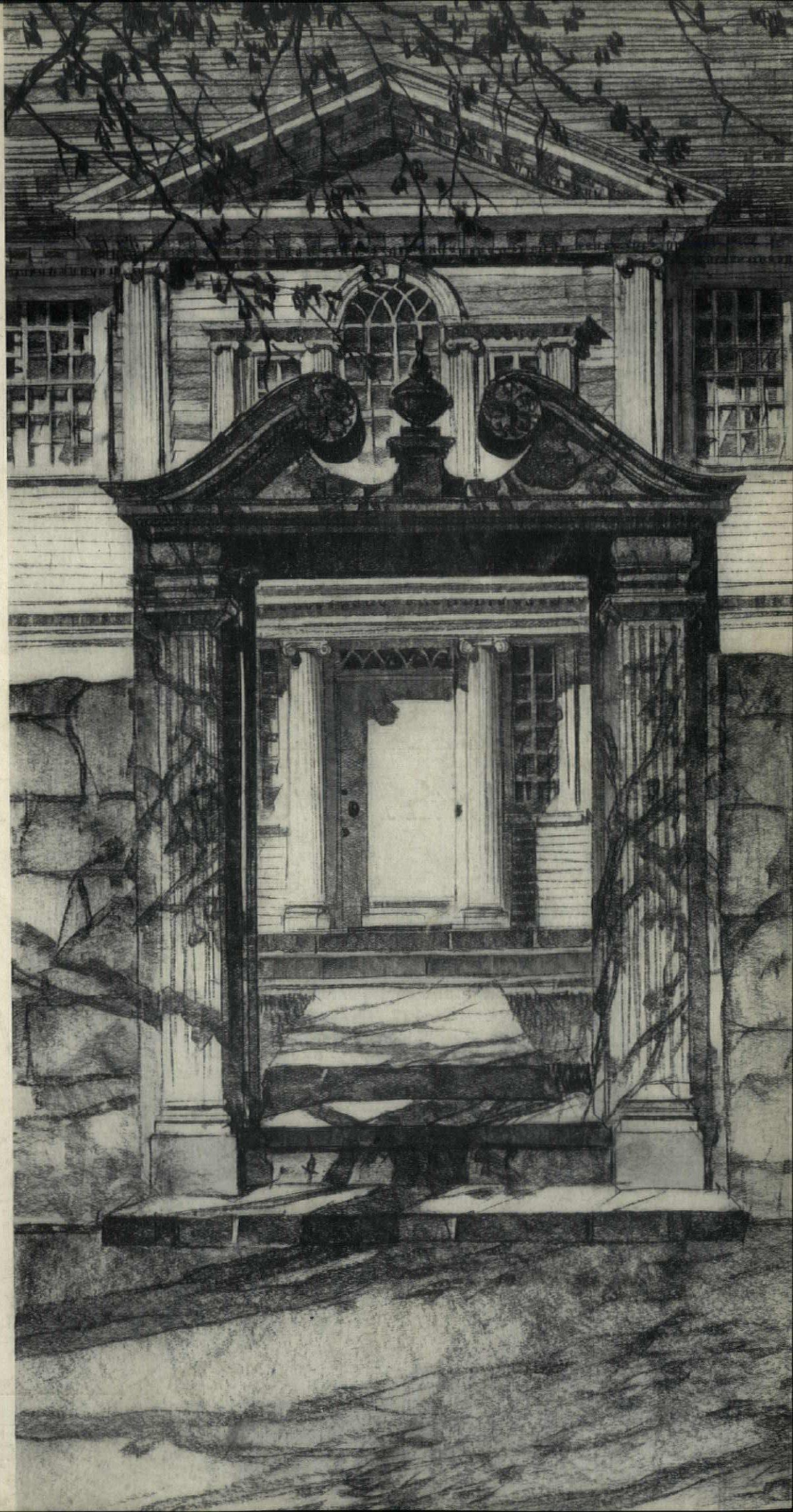
*April 1935*



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# PENCIL POINTS

*A Journal for the Drafting Room*

**APRIL, 1935** **VOLUME XVI, NUMBER 4**

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


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READERS' COMMENT *for future reference*


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Pencil Points is being indexed regularly in The Art Index.

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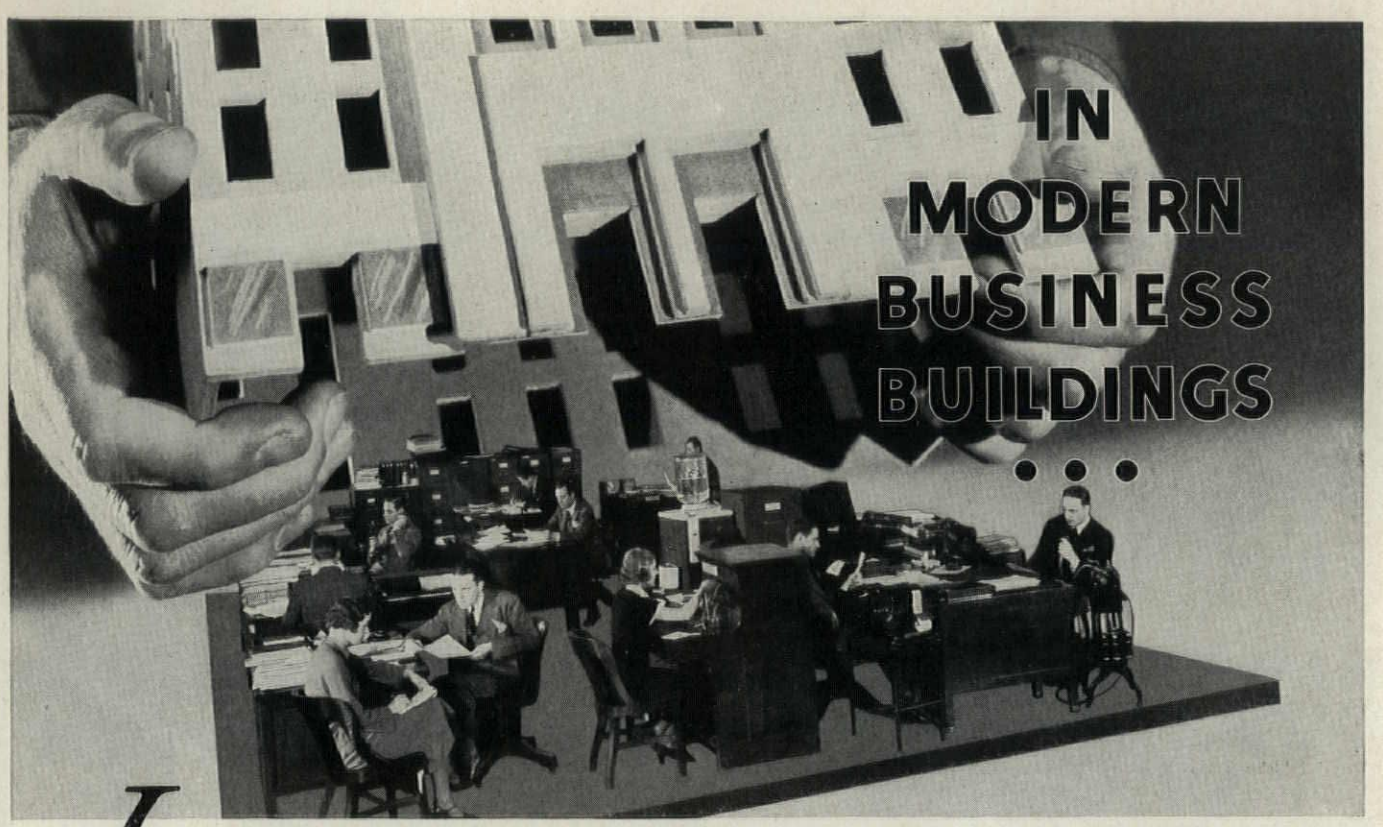


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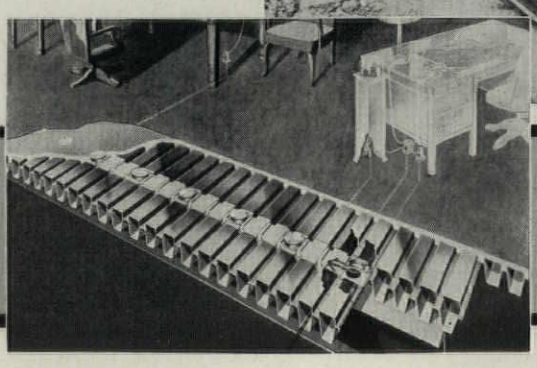

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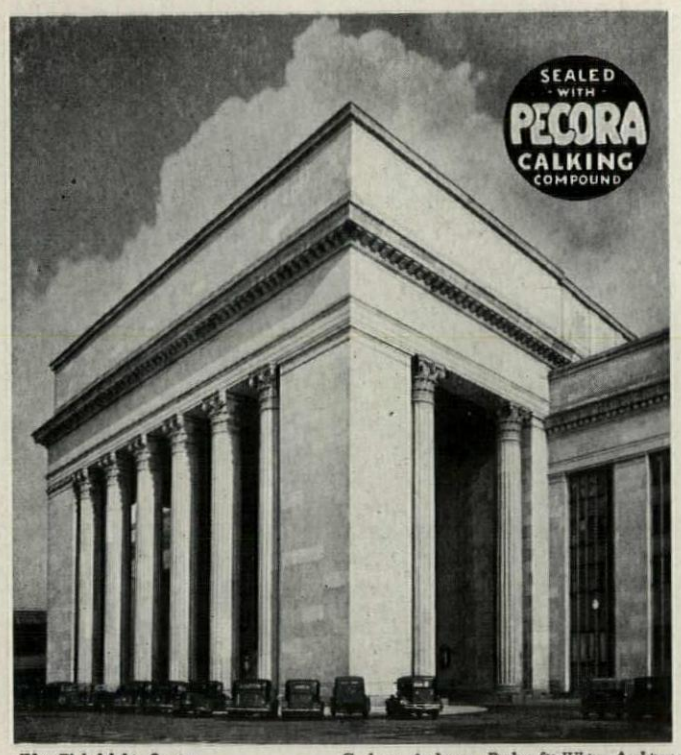


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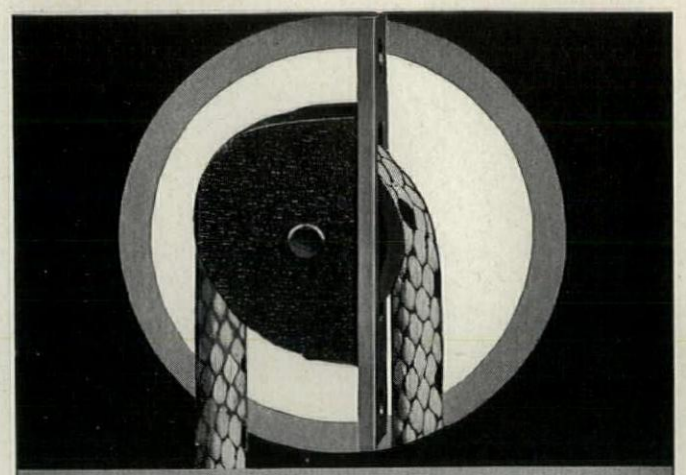

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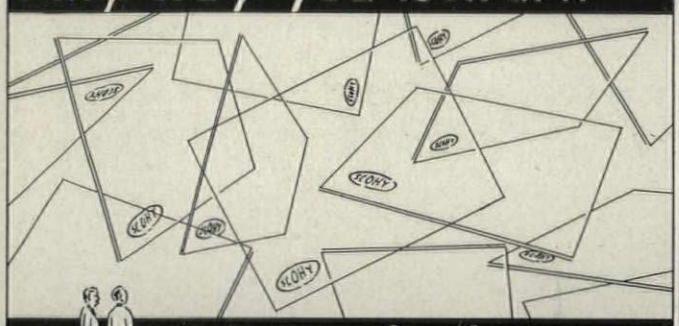

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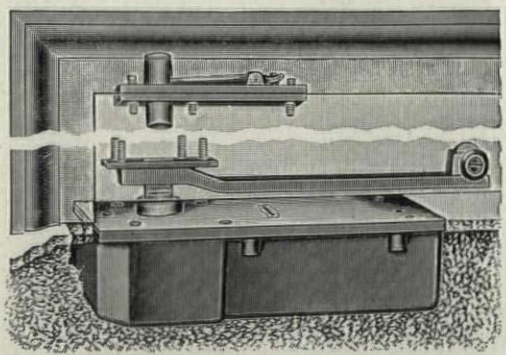

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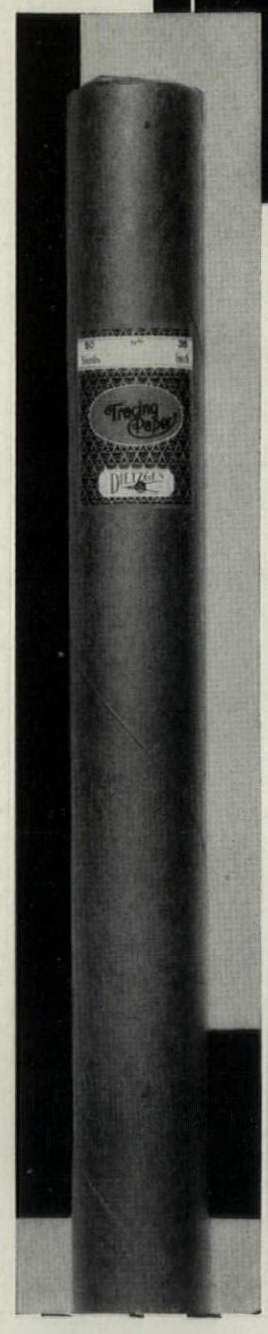


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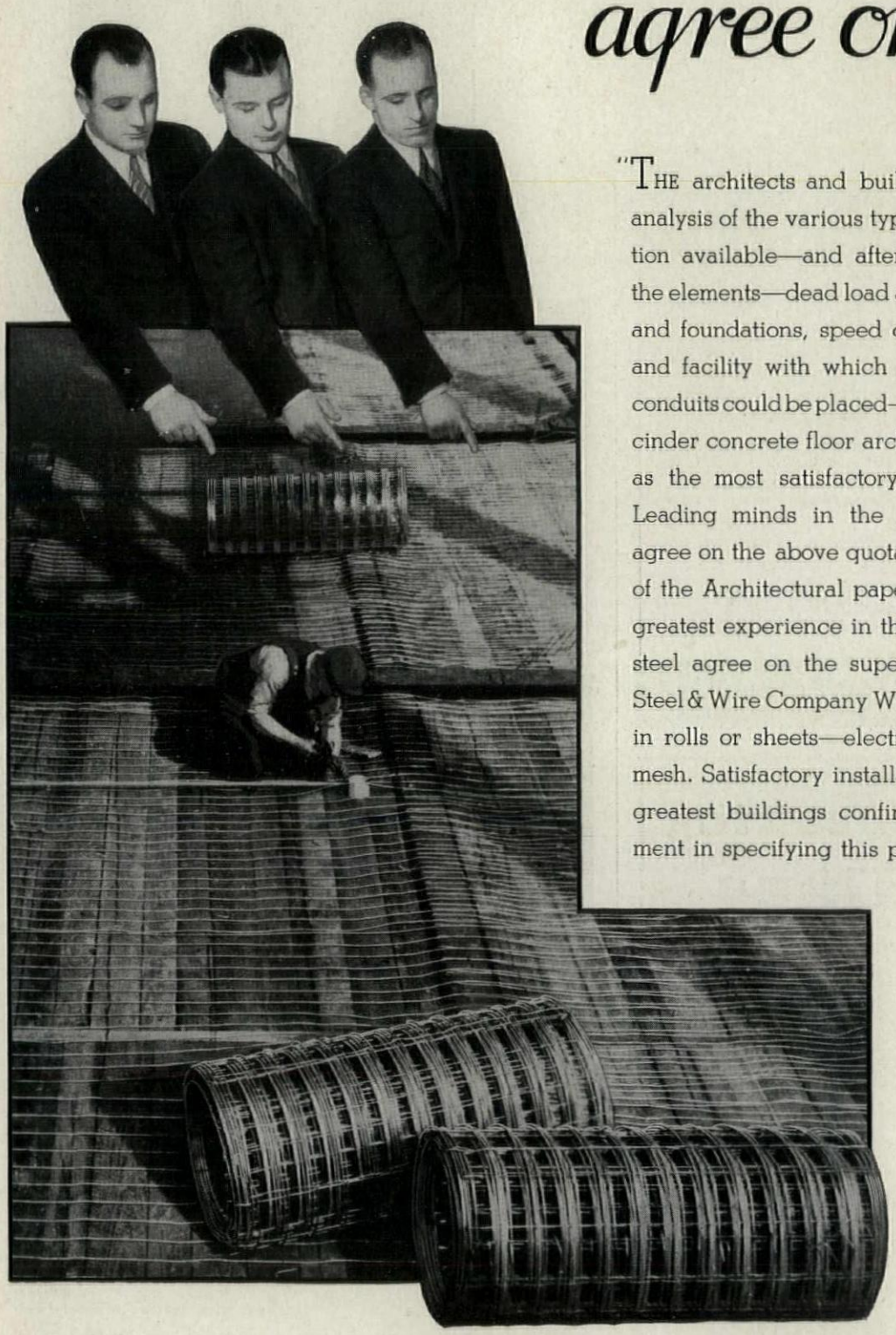

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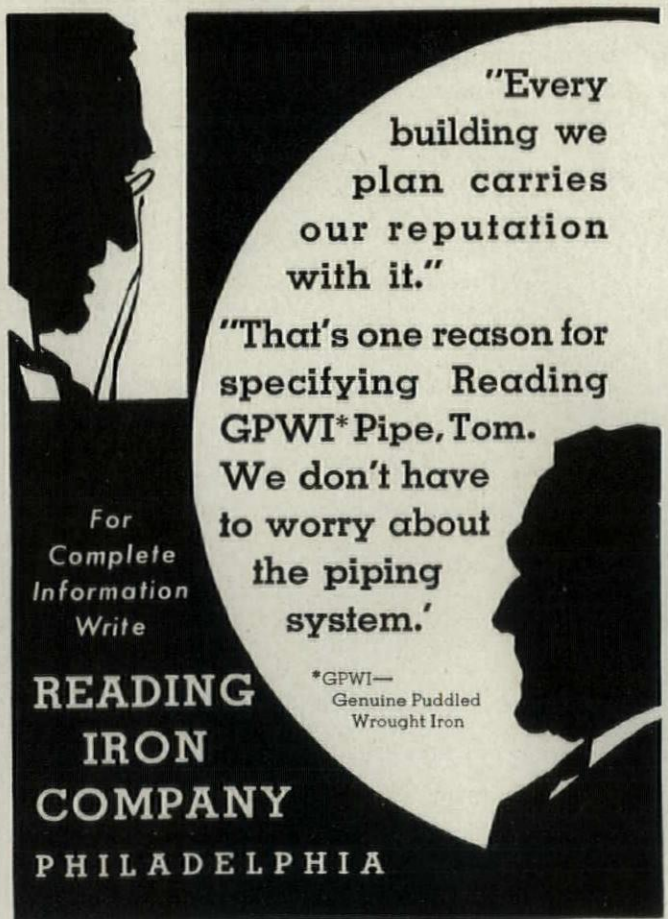


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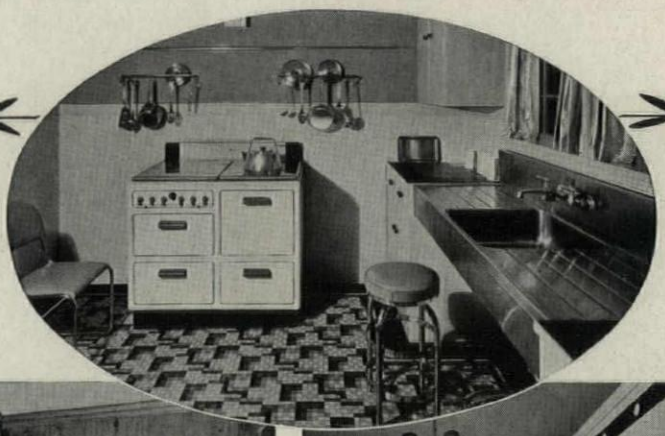

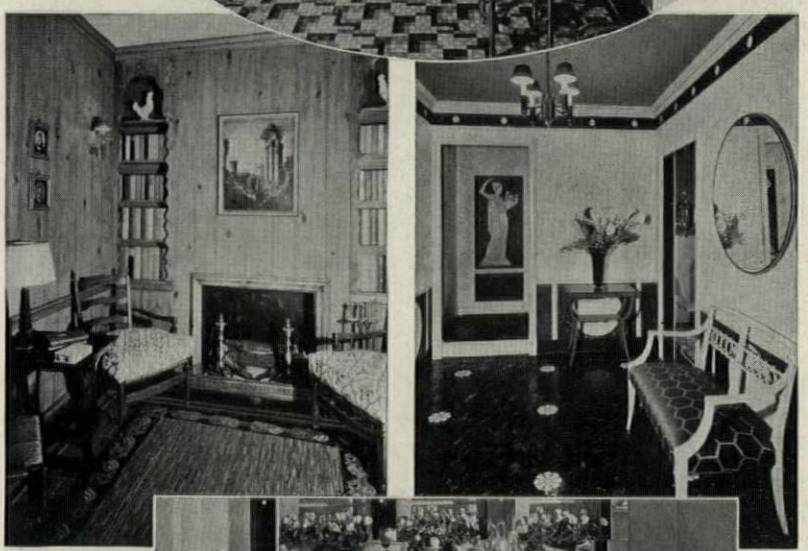

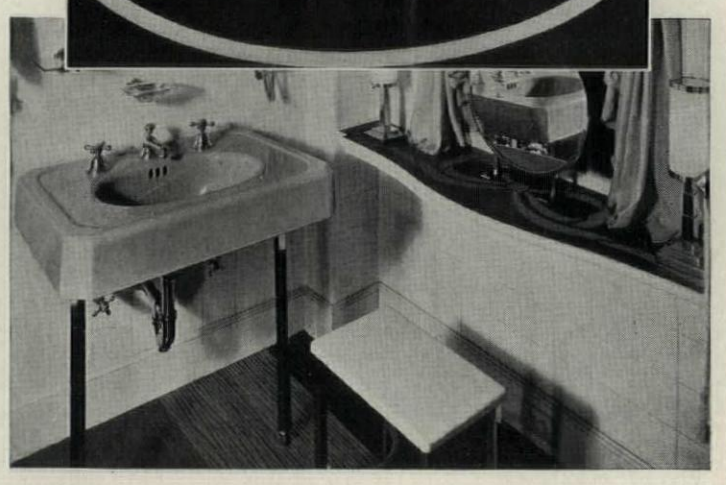

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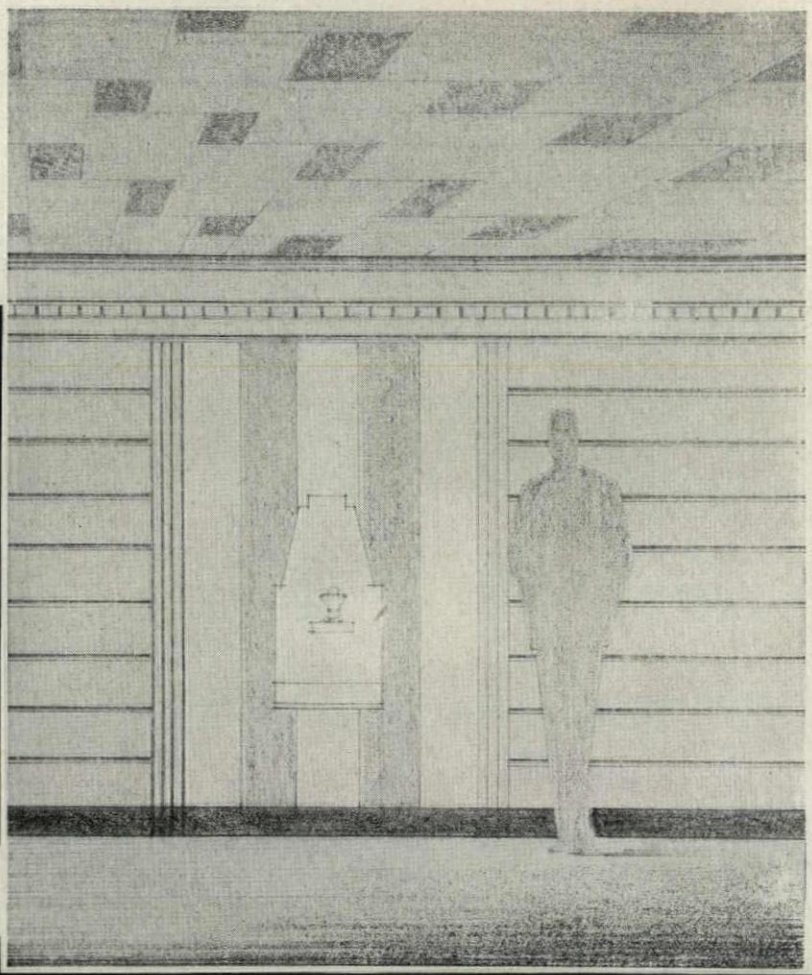

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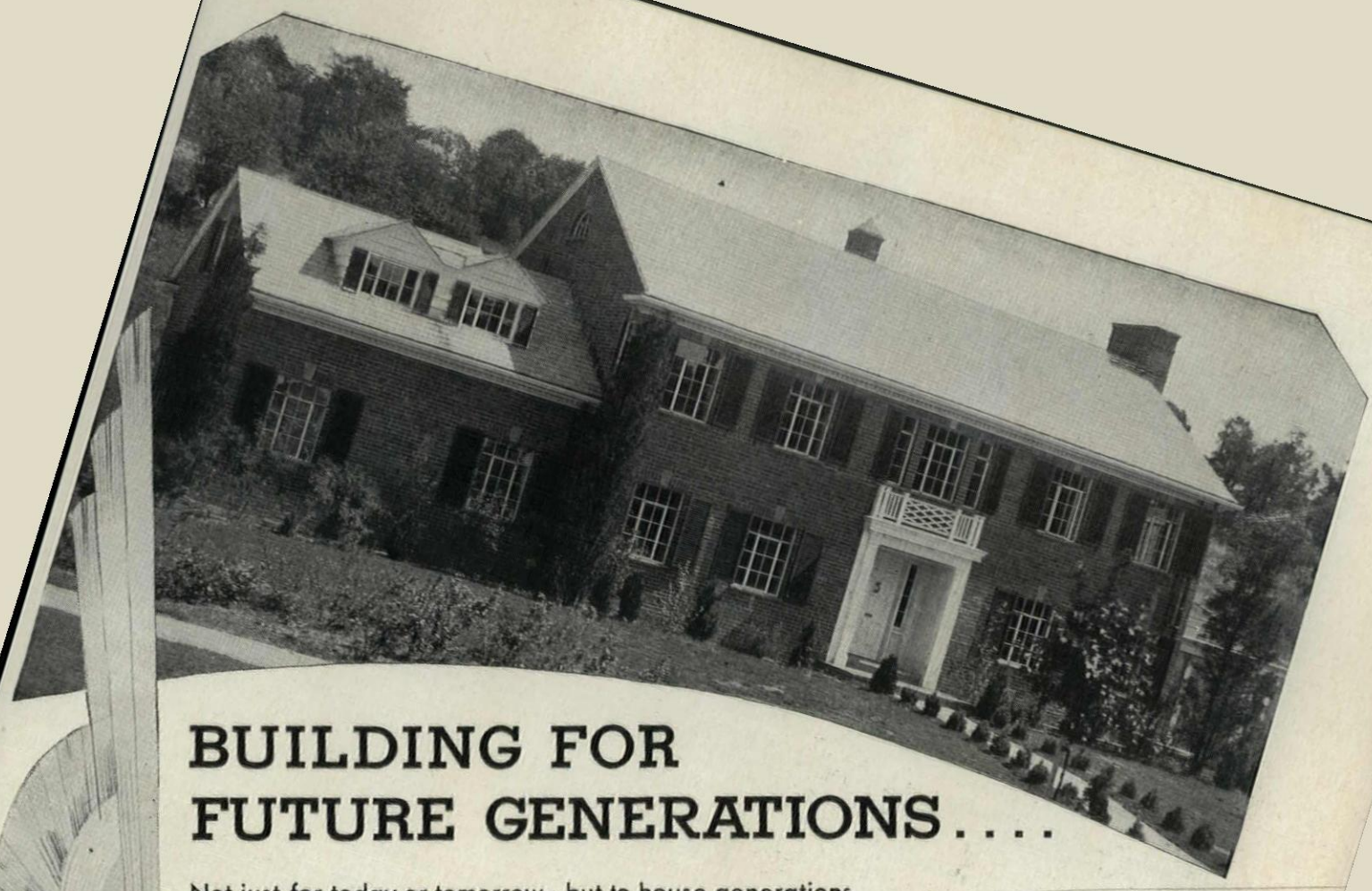

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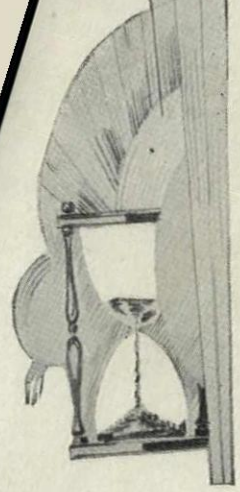

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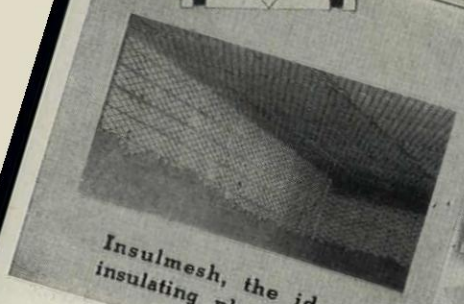

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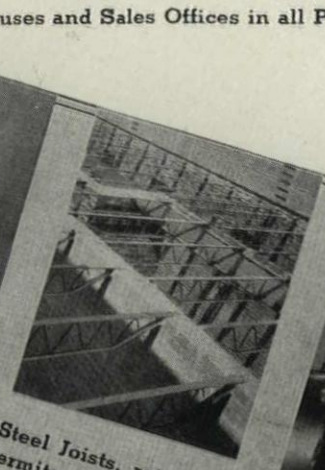

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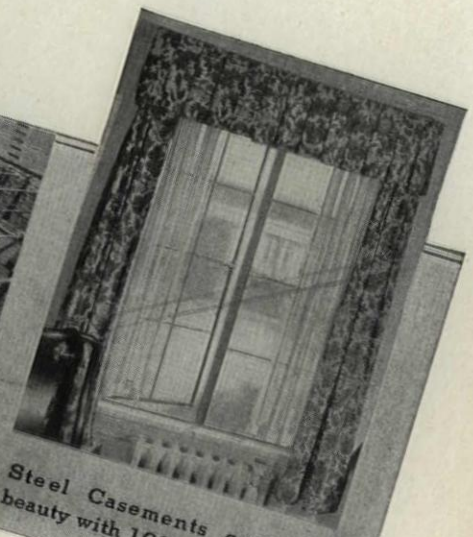


Steel Casements combine beauty with 100% ventilation.

# HERE, THERE, THIS & THAT

### *G-E Architectural Competition Awards*

Architectural firms in Cleveland and Chicago shared the two grand prizes and architects in New York carried off the two first awards in the home electric architectural competition sponsored by the General Electric Company in co-operation with the Federal Housing Administration. The competition opened January 1, continued 10 weeks, and more than 2,000 sets of plans were submitted from every state in the union. A selection of drawings will appear in May PENCIL POINTS

A total of $21,000 was awarded in 52 prizes. The two grand prizes, each $2500, were awarded to Hays and Simpson of Cleveland and to Paul Schweikher and Theodore Warren Lamb of Chicago. The two first prizes, each $1500, were awarded to Stephen J. Alling, a young architect who finished his studies at the Massachusetts Institute of Technology but a year and a half ago, and to J. Andre Fouilhoux and Don E. Hatch, jointly, both of New York.

Four second prizes, each $1250, were awarded to Ralph H. Burkhead, Richard C. Hoyt and Angelo Messina, jointly, of New York; John Ekin Dinwiddie of San Francisco; Arthur Martini and Jonas Pendleburg, jointly, of Flushing, L. I.; and to Richard J. Neutra of Los Angeles.

Four third prizes, each $1000, were awarded to Verner Walter Johnson and Phil Birnbaum, jointly, of New York; Herman A. L. Behlen, Ardsley, Pa.; John Hironimus of New York; and John Donald Tuttle of New York.

Forty who received honorable mention and checks for $100 each were Geoffry N. Lawford of New York; Jonas Pendlebury of Scarsdale, N. Y.; Kenneth Kassler of Princeton, N. J.; H. Lee Smith of Toledo; Frederick M. Moss of Washington, D. C.; Paul Schweikher of Chicago; Roy E. Nelson of E. Cleveland; Phillip D. McFarland of Seattle, Wash.; Constantin A. Pertzoff of Boston; Walter H. Bruber of New York; R. Raymond Carter of Stillwater, Okla.; Phillip Sanfilippo of Brooklyn; Albert W. Ford of Long Beach, Calif.; Louis A. Thomas of Los Angeles; Arthur R. Hutchason of Los Angeles; Burton A. Bugbee of New Rochelle, N. Y.; J. R. Sproule of Seattle, Wash.; J. V. Wilson of Pittsburgh, Pa.; Stanley C. Reese of Chattanooga; J. B. Tuttle of New York; H. T. Lindeberg of New York; Melville Nauheim of New York; Charles F. Pope of Park Ridge, Ill.; Herman Frenzel of St. Paul; Byron E. Laidlaw of New York; W. E. Campbell and F. T. Hogg of Boston; A. R. Hutchason of Los Angeles; W. D. Lambdin of Baltimore; Howard A. Topp of Los Angeles; John T. Grisdale of Philadelphia; Harvey Stevenson of New York; George Palm, Jr., of Cleveland; W. K. Oltar-Jevsky and N. T. Montgomery of New York; Jason S. Trespel of New York; Cecil Claire Briggs of New York; and Walter L. Moody of Los Angeles.

The Jury of Awards consisted of eleven members; seven architects representing the different sections of the United States; one expert in child training; one domestic science expert; one general contractor; and one realtor. Ralph T. Walker, of Voorhees, Gmelin and Walker, New York, was chairman; Kenneth K. Stowell, A.I.A., and former editor of *Architectural Forum*, was professional adviser; John F. Quinlan, of General Electric, was manager of the competition. Architects on the jury of awards were Franklin O. Adams, of Tampa, Fla.; Ernest A. Grunsfeld, Jr., of Chicago; Charles T. Ingham, of Pittsburgh; H. Roy Kelley, of Los Angeles; Charles W. Killam, of Cambridge, Mass.; and Eliel Saarinen, of Bloomfield Hills, Mich.

Other jury members were Katharine Fisher, Director of Good Housekeeping Institute; Harold D. Hynds, engineer of New York City; Dr. Grace Langdon, child training expert and Director of Educational Advisory Service, New York; Hugh Potter, realtor of Houston, Texas, and President of the National Association of Real Estate Boards; and Henry F. Richardson, engineer, of New York City.

### *Federal Reserve Board Building Competition*

Arthur Brown of San Francisco; Coolidge, Shepley, Bulfinch & Abbott of Boston; Paul Philippe Cret of Philadelphia; Holabird & Root of Chicago; and Delano & Aldrich, John Russell Pope, James Gamble Rogers, Egerton Swartwout, and York & Sawyer, all of New York, are at work on a competition being held to select the architect to design the proposed new building for the Federal Reserve Board in Washington. The building is to be erected on Constitution Avenue adjacent to the National Academy of Arts and Sciences, designed by the late Bertram G. Goodhue. The program, prepared by Dean Everett V. Meeks of Yale School of Fine Arts, provides for a structure of white marble, to conform with the material of its neighbors. A significant clause in the program states that "it is further suggested that the use of columns, pediments, and other similar forms may be omitted and should be restricted to a minimum consistent with the character of the building."

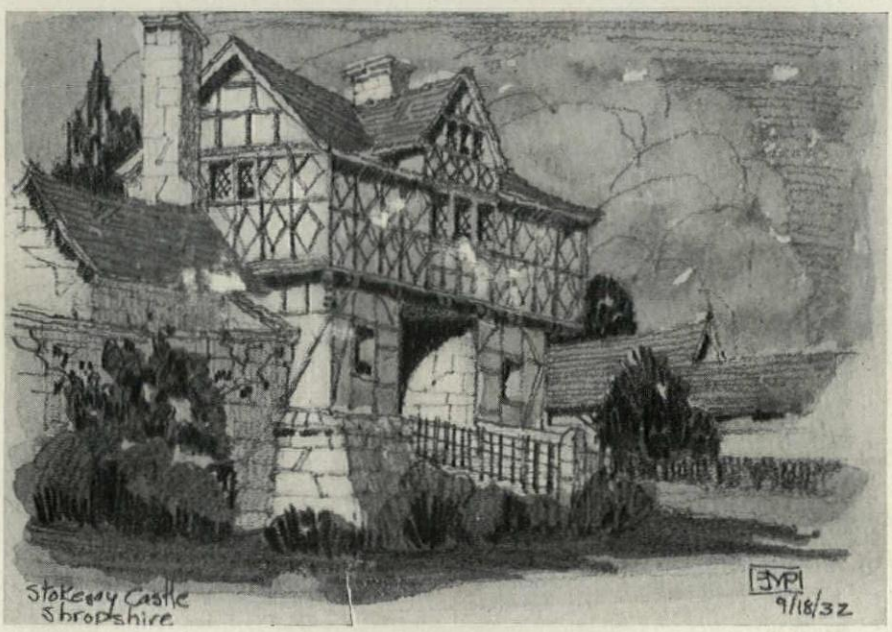
The Jury of Award consists of Dean William Emerson of M.I.T. Department of Architecture; John W. Cross and John Mead Howells of New York; Frederic A. Delano, Chairman of the National Capital Park and Planning Commission; and Adolph C. Miller of the Federal Reserve Board.

### *New Italian Exchange Scholars Selected*

Columbia University has appointed Edward B. Wilkens of 3268 Cambridge Avenue, New York, and Seymour Saltus of Morristown, N. J., as exchange scholars at the Royal Institute of Architecture in Rome for 1935-36. Two Italian students will be selected by the Italian Government to study architecture at Columbia. The American students will receive free tuition and a monthly stipend from the Italian Government. Like provision for the Italian scholars will be made by Columbia. The Italian scholars, besides pursuing University courses in architecture, will study American methods of building and planning, and visit architectural monuments and the offices of leading architects. A similar plan of study has been mapped out for the American scholars in Rome.

Saltus and Wilkens were chosen because of outstanding work at Columbia, according to the announcement. Each has received several medals and first mentions. Both will graduate in June.

Saltus, a native of Morristown, is twenty-seven years old and a graduate of Yale College in the class of 1931. Wilkens was born in New York, and was graduated from Columbia College in 1932.




*"Stokesay Castle"* — *Pencil and wash sketch by E. M. Pierce*

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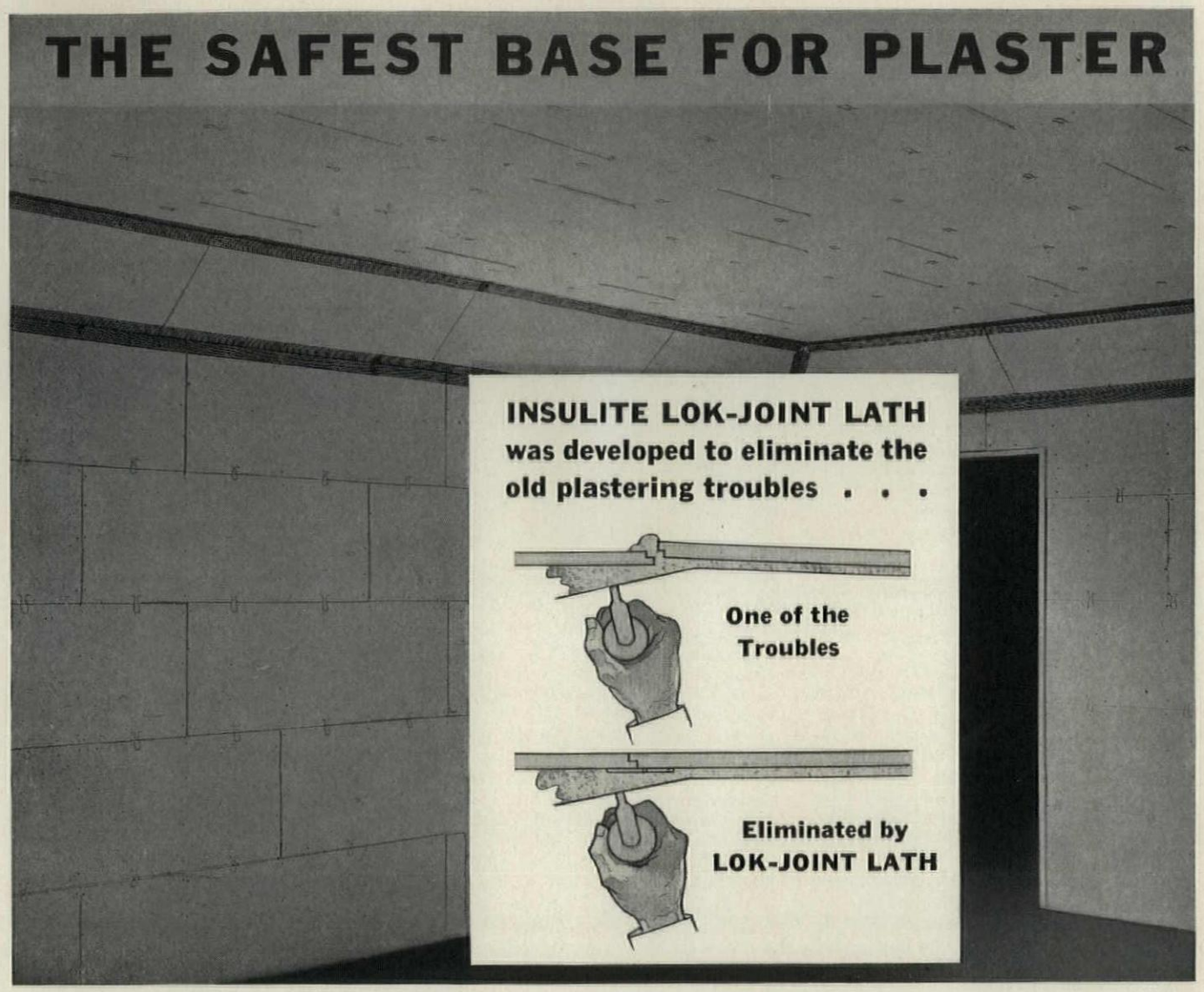


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Added to these inherent qualities of Insulite Lok-Joint Lath are its insulating efficiency, making heating equipment more efficient during the winter, and cooling equipment more efficient during hot summer months . . . its sound-deadening efficiency reduces the passage of noise through walls of adjacent rooms or between floors.

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### *Conference on Church Architecture*

A notable conference on Church Architecture will be held on Tuesday, May 7, from 10 a.m. to 5 p.m. at Old Synod Hall, Cathedral of St. John the Divine, New York. Some of the prominent speakers will be Rt. Rev. William T. Manning of New York, whose address is entitled "The Cathedral Idea and Ideal"; Walter H. Thomas, F.A.I.A., of Philadelphia, who will speak on "Trends in American Church Design"; and Charles J. Connick of Boston, who will speak on "Stained Glass." In addition there will be an illustrated lecture on remodeling and discussions. It is expected that there will be a lively discussion on "Modernism and Its Place, if any, in Church Design." Mr. Thomas recently designed the two-million-dollar Chapel at Girard College in Philadelphia which was awarded to his firm as a result of a competition.

### *A.I.S.C. Bridge Design Competition*

The ten students selected out of a field of ninety-four competing in the seventh annual Bridge Design Competition held by the American Institute of Steel Construction and who will now compete in the final stage are: Messrs. Paul O. Deragon, Henry H. Wiss, and George M. Dabbs of Rensselaer Polytechnic Institute; Albert J. Sailer and Fred A. Thompson of Iowa State College; Alexander Matthews, Jr., of Yale School of Engineering; David Hiat of New York University; Jerome Raphael of Massachusetts Institute of Technology; Walter Jacobsen of Montana State College; and Gene J. Mackey, Jr., of Carnegie Institute of Technology. From these ten, on May 1, the Jury will select a prizewinner who will receive $100 and another for a second prize of $50. Certificates of merit will be awarded to those winning third, fourth and fifth places.

### *Scholarships at Syracuse*

One $300 and four $150 scholarships have been announced by the Department of Architecture at Syracuse University to be awarded to entering freshmen on the basis of a competition on Saturday, July 13. The competition will be in two fields —art and mathematics. Contestants must each send to the College of Fine Arts, not later than Monday, July 8, a portfolio containing not more than 20 examples of their own original art work—preferably freehand and mechanical drawing, sketches and water colors. Competitors will also be examined in Elementary and Intermediate Algebra, and in Plane and Solid Geometry by means of an examination paper prepared at the University and mailed to the student's high school principal. The paper must be returned for grading before July 8.

Each portfolio of drawings must contain the name and address of the student and a statement from the principal of the student's high school that the drawings are original work by the student submitting them. Stamps for the return and insurance of the portfolio must be sent to Dean H. L. Butler, College of Fine Arts, Syracuse, N. Y.

### *Have You Seen This Man?*

The above photograph is of Lieutenant James F. Harris, U.S.A., who has been mysteriously missing since December 31, 1934, on which day he was last seen in St. Paul, Minn. It is feared that he either met with foul play or became seized with amnesia. He is 23 years of age, 5 ft. 11 in. tall, weighs 170 lbs., has blue eyes and light curly hair. When he disappeared he wore a brown felt hat, brown overcoat, dark grey suit, tan shoes, fur gloves, red scarf, and overshoes. He is an accomplished pianist and habitually plays for hours at a time. Just before his disappearance he reported for duty to a new assignment with Co. B, 3rd U.S. Infantry, at Fort Snelling, Minn.

Anyone locating him will confer a favor upon anxious parents by communicating with F. P. Harris, his father, who is Manager of the Purchasing Department, Incandescent Lamp Division, General Electric Company, Nela Park, Cleveland, Ohio.

### *Architects League of Northern New Jersey*

Under the terms of the will of the late Anton L. Vegliante, Architect and Charter Member of the Architects League of Northern New Jersey, an annual award consisting of the income of the sum of $5000 is awarded to some member of the League who has distinguished himself during the preceding year in the architectural world, or who, because of his achievements and accomplishments, merits such an award.

At a well attended meeting of the League at its headquarters on Thursday, February 21st, at Hackensack, N. J., by unanimous action and vote of the membership meeting, this award was made to Clarance H. Tabor, Jr., Architect of Ridgewood, for the year 1934.

Mr. Tabor has been President and Secretary of the League and at present is Editor of its monthly bulletin *Quid Nunc* which will resume publication this month. Mr. Tabor has been very active in the affairs of the League since its formation in 1928 and has actively interested himself in advancing the practice of architecture.

In 1933 this Award was given to Harry Lucht, Architect of Cliffside Park, N. J. The Architects League of Northern New Jersey meets on the third Thursday of each and every month at 285 State Street, Hackensack, N. J., at 8 p.m. All architects are invited to attend. Dues are but $3.00 annually and applications for membership are solicited. The Secretary is Norman J. Hunter, 426 Cedar Lane, Teaneck, N. J. Meetings are of general interest and topics of current interest and import are dealt with. The League will hold its Sixth Annual Dinner in April in regard to which details and date will be announced later. A large attendance is expected now that the architects have adjusted themselves to present conditions.

### *Paris Prize Finals*

The four men who survived to the final stage in this year's competition for the Paris Prize in Architecture are Adrian Waldorf of Brooklyn, N. Y., who is entered from New York University; L. W. Smith of Brooklyn who represents Princeton School of Architecture; T. T. Russell of Baltimore from University of Pennsylvania; and T. M. Heffernan of Ames, Iowa, from Harvard School of Architecture. The final stage consists this year of three 36-hour problems, the first of which will be judged May 25, the second on June 1, and the third on June 8.

### *N.Y.U. Architectural Department Becomes an Independent School*

The Council of New York University recently voted to raise the status of the Department of Architecture to that of an independent school, with the same standing in the University as the professional schools of Medicine, Law, and Liberal Arts. The accomplishments and the prestige attained by the Department, in the estimation of the Council fully justifies giving it this added dignity and importance. Professor Bossange who for six years has been dean of the College of Fine Arts and who organized the Department will be dean of the new School of Architecture and Allied Arts.

Though New York University's Department of Architecture is one of the youngest in the country, it has grown rapidly and its students have been highly successful in competitions and in practice. Since 1928, when the State gave the Department the right to grant degrees, its students have won eighty-four medals and two hundred and thirty-eight awards above a mention in the Beaux-Arts Institute of Design competitions. The Paris Prize was won twice and also the Howes Prize, the *Municipal Art Society Prize, the Emerson Prize, the Hepburn Prize* and the medal of the Diplome Society was awarded to the school in both 1932 and 1934.

Beginning with a class of twenty-three eight years ago, the registration increased rapidly, notwithstanding the depression period. For several years the enrollment has exceeded 350 each year.

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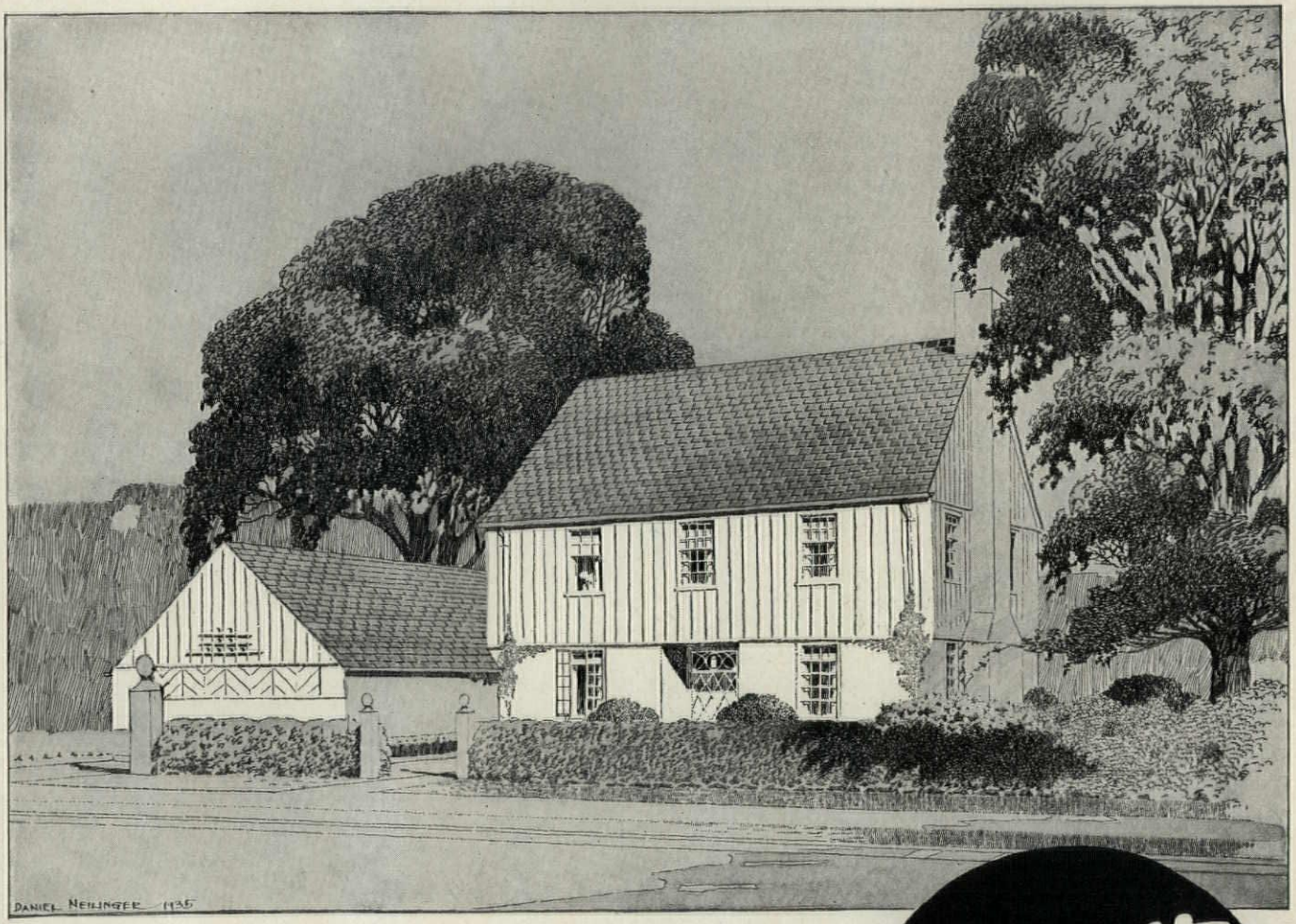


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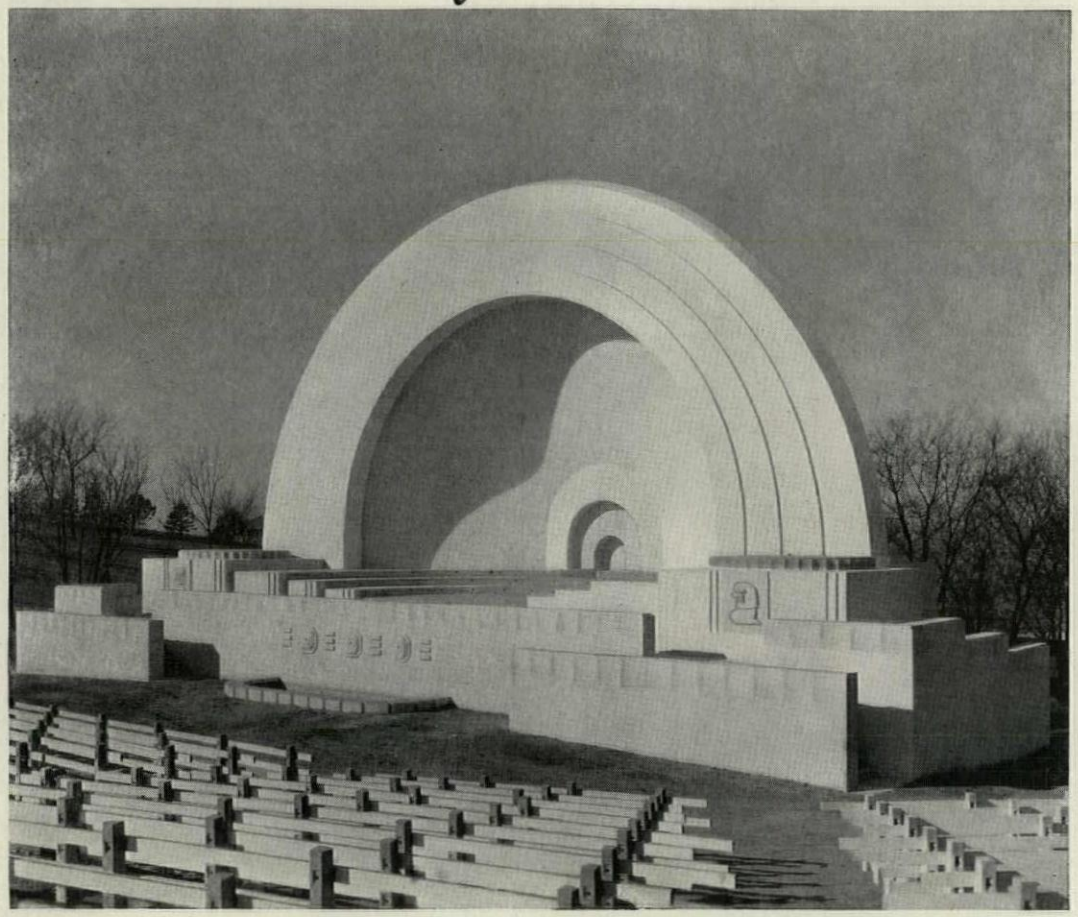

Winters are not mild in Sioux City—and it takes plenty of *hot* summer weather to grow Iowa's famous corn. So this music pavilion has to take plenty of weather. It *will* take it, and come up smiling, because it is built of concrete with a permanent, durable finish of Atlas White stucco.

"THE work . . . gives promise of *great durability*." That's the way Architect Henry L. Kamphoefner describes his monumental concrete music pavilion erected as a CWA project in Sioux City.

There is only three-quarters of an inch of stucco over the concrete on this project—one-half inch of brown coat and one-quarter inch of white stucco made with one part Atlas White portland cement and two parts Platte River sand, floated down with carpet over wood. But that three-quarter inch of stucco is enough to give a permanently beautiful finish to this permanent, beautiful structure.

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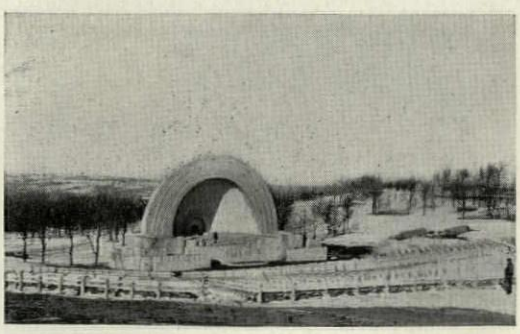
## STUCCO *made with* ATLAS WHITE PORTLAND CEMENT

"Because of the winter dampness on the interior of the building," says Architect Kamphoefner, "the six dressing rooms and toilet rooms were plastered the same as the exterior." That means with durable, beautiful Atlas White portland cement stucco.



## *Kate Neal Kinley Memorial Fellowship*

Applications for the 1935-36 Kate Neal Kinley Memorial Fellowship in Architecture, which is open to graduates of the College of Fine and Applied Arts of the University of Illinois and to graduates of similar institutions of equal educational standing, should reach the committee not later than June 1, 1935. Application blanks and instructions may be obtained from Dean Rexford Newcomb, College of Fine and Applied Arts, University of Illinois.

Applicants should *not* exceed twenty-four years of age on June 1, 1935, but the Committee reserves the right to deviate *slightly* from this provision in the case of *very promising* candidates.

The period of study is for one academic year, upon a program approved by the committee. The place of study may be at home or abroad, in an approved educational institution, or with an approved private master. The Fellowship should yield the sum of one thousand dollars towards defraying the expenses of the study.

## *Structural Design Charts*

*Albert Design Charts*, by Odd Albert; 24 charts, 8½" x 11"; price $2.40; published by the Opla Company, P. O. Box 66, East Orange, N. J.

For the engineering-minded architect this set of Albert Design Charts should be invaluable and the serious architectural student in engineering design should find them a stimulating source for study. The average architect might very well be bewildered, but any time taken to understand the many short-cuts offered in these sheets would repay him for his efforts. On the theory that a little learning is a dangerous thing, these comprehensive charts should be used with a certain amount of caution unless the user has a thorough grounding in the Mechanics of Materials.

An interesting complement to the design sheets is formed by two charts in the same series, sponsored by the Brick Manufacturers' Association, giving costs of brick walls and masonry mortar. *D. G.*

## *Summer Courses at Michigan*

Emil Lorch, Director of the College of Architecture at the University of Michigan, announces classes for architectural men to be held during the Summer Session from June 24 to August 16. The subjects to be covered are Elements of Architecture, Elementary Architectural Design, Intermediate Design, Advanced Design, Architectural Design, Elements of Office Practice, Outdoor Drawing and Painting, Outdoor Painting, and Domestic Architecture and Housing.

## *A Letter from W. M. Haussmann of Washington, D. C.*

"I should like, quite frankly, to know how long Mr. Magonigle is to be allowed to use the pages of PENCIL POINTS as a lance for his Don Quixotic tilting at windmills. I am quite well aware of the utter futility of this voicing of a complaint, the inception of which dates back to months ago, but I felt that it might interest you to know that there are those who find his sentiments and his criticisms not only intolerant but intolerable.

"A great many words could be wasted in a detailed description and analysis of the objections I have to Mr. Magonigle's method of approach and to the subject matter contained in the various articles to which you have so lavishly given space, but they may be limited to a very brief summation.

"Mr. Magonigle, to my mind, trespasses rather dangerously or 'kids himself' or, more kindly, rationalizes, if he really feels himself competent to criticize, on 'the upper ground' (!) His views are so definitely intolerant, his mind so closed to reason and so poisoned with prejudice that, to any clear thinking mind, his views are at worst to be entirely discounted and at best irritating. And as for his effort to rejuvenate the architectural profession—a sort of Ecole des Beaux Arts variety of John Calhoun—the thing is laughable! There hasn't been any architectural profession for a long, long time. We shall always have the *art* of architecture with us, but the sooner its interpretation is freed from the hands of those who have been comfortably deluded by their academic training into thinking themselves architects, the sooner we shall see examples of it.

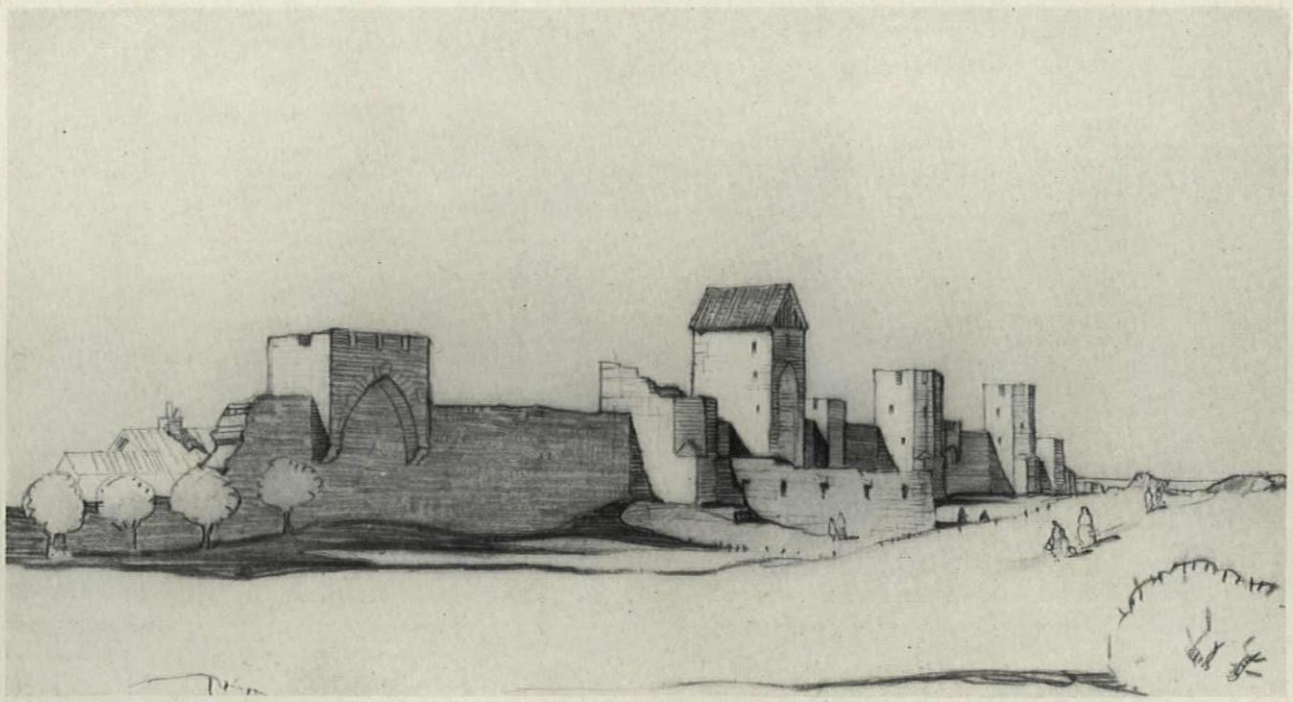
"Isn't it a bit too much for you to ask of us to present, in lieu of the dear departed PENCIL POINTS, a one-man monograph by Mr. Magonigle?"

## *We Still Need Photographs*

Last month's appeal for photographs of American architectural views to be used as subjects of the cover drawings by Samuel Chamberlain brought some response but most of those submitted showed distant views rather than close-ups as requested. There must be many draftsmen who have taken good pictures of details of noteworthy buildings that would lend themselves to this purpose. PENCIL POINTS will pay three dollars for any prints used and will return the print safely to the sender after using.

## *A Correction*

Our attention has been drawn by Miss Elise Eppes of Hopewell, Virginia, to an inadvertent error in connection with the publication of one of the sketches by L. M. Gudger appearing on page *10* of the February issue. The subject of the sketch was the outside kitchen, not the house itself, and the place is known as Appomattox Manor, not Epps Manor as stated in the caption as published.



*"Old Wall, Visby, Sweden"* — *Carbon pencil sketch on cameo paper by Linn A. Forrest*

*Now* YOU CAN DESIGN FOR THE EFFICIENT USE OF

# STEEL

In light occupancy construction—schools, hospitals, churches, apartments and similar structures—there is no longer any need to forego the advantage of steel, nor, in using steel, to pay any penalty of overweight. Carnegie Light Weight Structural Sections have been added to the popular wide-flange CB Series. These new light beams, stanchions and joists have the same efficient distribution of metal with corresponding high strength factors. They merit your consideration, from the standpoint of both efficiency and economy. Carnegie engineers will be glad to consult with you. • • •

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## CARNEGIE STEEL COMPANY • PITTSBURGH

*United States Steel* Corporation Subsidiary

*This month's frontispiece shows a colossal figure of "Eve" done by Warren T. Mosman in Rome during his studies as Fellow of the American Academy there. The figure is eighteen feet high and is painted and decorated with gold leaf. This most dramatically lighted photograph was taken in the sculptor's studio by his contemporary at the Academy, George Nelson. The smaller figure at the left is Mosman's conception of "Hercules and the Poison Cloak."*

# 1935

# PROGRAMME

## PENCIL POINTS ARCHITECTURAL COMPETITION

For the Design of

## A HOUSE FOR A FAMILY OF FIVE

*Authorized by* Reinhold Publishing Corporation
Publishers of PENCIL POINTS
330 West 42nd St., New York

*Sponsored by* Iron Fireman Manufacturing Co.
Cleveland, Ohio, Portland, Oregon,
and Toronto, Canada

*Conducted by* RUSSELL F. WHITEHEAD, A.I.A., *Professional Adviser*

*with* KENNETH REID, P.C.R., *Assistant Professional Adviser*

### THE AWARDS

REINHOLD PUBLISHING CORPORATION agrees to pay, immediately after the Judgment, the following Prizes in Cash:

| | | |
|---|---|---|
| For Design Placed | First | $1000.00 |
| " " " | Second | 500.00 |
| " " " | Third | 250.00 |
| " " " | Fourth | 100.00 |
| " Designs Mentioned—25—each | $50.00 | 1250.00 |
| Total Prizes | | $3100.00 |

The above prizes are *net*—no further drawings will be required of any competitor as a condition of receiving an award.

### THE JUDGES

Dwight James Baum, F.A.I.A., *New York*
Edward W. Donn, Jr., F.A.I.A., *Washington*
Walter S. Frazier, A.I.A., *Chicago*
Ralph W. Gray, A.I.A., *Boston*
Hal F. Hentz, A.I.A., *Atlanta*
Edwin H. Hewitt, F.A.I.A., *Minneapolis*
Frank B. Meade, F.A.I.A., *Cleveland*

REINHOLD PUBLISHING CORPORATION, THE IRON FIREMAN MANUFACTURING COMPANY, and the COMPETITORS agree that the Judges have sole and complete authority to make the awards and that their decisions shall be final.

ALL ARCHITECTS AND DRAFTSMEN ARE CORDIALLY INVITED TO PARTICIPATE
Contestants may submit more than one design.

NOTE: Under a ruling by THE AMERICAN INSTITUTE OF ARCHITECTS' Committee on Competitions, Institute Members are free to enter this competition.

***This Competition closes at 8 P. M., Monday, June 3rd, 1935***

PROBLEM: *Mandatory.* The design of a house for gracious and, so far as may be, effortless living, in which an American business man, his wife, three-year-old daughter, two sons, aged seven and twelve, can, with the aid of a "general-house-worker" who lives in, enjoy the comforts of a well-planned and intelligently mechanized home—a house which will be an asset to the community in that it is "neighborly" in all that the term implies.

Our client is a self-made man, possessing Yankee shrewdness, and fairly successful. He has celebrated his thirty-eighth birthday and, being strong and healthy, is putting all his pep into directing both production and sales for the small manufacturing enterprise he has built up from its beginning. His necessary business trips to New York, Boston, Atlanta, Chicago, and other distributing centers, last for several days at a time, but he is determined not

to delegate these duties to others in his organization. He was born in the town, grew up as "one of the boys," belongs to a reputable "lodge" and, in spite of his wife's mild disapproval, likes to stage late parties in his home for his "hail-fellow-well-met" friends. He encourages his wife to pay her social obligations during the day. A normal fellow he, without pretense, who frankly prefers musical comedy to Eugene O'Neill, Irving Berlin to Debussy, and Edgar Wallace to Henry James. At the same time, he is tolerant of his more bookish wife's interest in cultural things and humors her in her striving toward cultivation, believing it to be for the welfare of all concerned, especially of his children for whom he wishes the advantages he missed in his own childhood.

He owns a piece of land in a recently developed section of the town, for which he has paid $4,000, in full. The time is ripe, he decides, thanks to Title II of the National Housing Act, to build his home. The rectangular lot acquired has a western frontage of 100 feet on a paved street, which runs north and south, and a depth of 200 feet. It is encompassed by properties of similar dimensions, on which houses designed by architects were built in 1926, 27, and 28, and occupied by friends of the family. The property is accessible to a school and near the markets. The usual utilities are available and the local coal yards distribute all grades of anthracite and bituminous. He proposes to build a house containing not more than 40,000 cubic feet.

The client is emphatic about a number of requirements and most liberal concerning others, which he feels only the profession can suggest. His wife wants a house which will have character, significance, and individuality, with the quality of a home (rather than a "machine for living") which will be apparent to anyone who views it from the outside and even more apparent to one who stays any length of time in the house. He wants more than the minimum of room sizes, closet areas, bath and lavatory facilities, and window spaces, and he demands that the service and equipment be in accordance with good practice. He also requires a two-car garage. Beyond these suggestions he will depend upon the designer to select the materials of construction and to work out the number and sizes of the rooms, porches, terraces, circulations, and accessories, and their arrangement. He wants to utilize the basement for other than mechanical purposes, in fact, he uses the Ziegfeld phrase "glorify" in connection with the rooms to be provided below the first-floor level. It would not seem to him inappropriate to plan the basement space for purposes of recreation for both children and adults. Having these thoughts in mind, he has been intrigued with the advertisements of the Iron Fireman,"The machine that made coal an automatic fuel," and has ascertained that this apparatus is most flexible and will fit practically every type of heating plant or arrangement of basement.

Both client and architect are fully aware that the re-sale value of the proposed house will be appraised by the local bankers and by the "F.H.A.," as insurer of the mortgage, and that the house should have a permanent value during a twenty-year amortization period.

CONSIDERATIONS OF THE JURY OF AWARD:

1. The Architectural Merit of the design and the ingenuity shown in the development of the plans to fit the requirements of the problem.

2. The intelligence with which the basement space, set free by the Iron Fireman, is utilized for appropriate purposes.

3. Excellence of delineation and composition of the drawings on the sheet. This, while desirable, will not have undue weight with the Jury as compared with the first two considerations.

COMPUTATION OF CUBAGE: *Mandatory.* The cubage is to be the cubic space enclosed within the outer surfaces of outside or enclosing walls and between the outer main surfaces of the roof and a plane six inches below the finished surfaces of the lowest floors. Pent houses, garages, enclosed porches, and other enclosed appendages are to be included as a part of the cube of the building. Any permanently roofed terraces or porches outside the bearing walls shall be figured at one fourth their gross cubage, measured from outside face of wall, outside face of columns or posts, finished floor, and finished roof.

*Designs found, upon checking, to exceed 40,000 cubic feet total cubage will not be considered.*

PRESENTATION DRAWINGS: *Mandatory.* The drawings shall be made in full black ink and shown on *one* sheet of opaque white paper trimmed to exactly 26″ x 36″. Single border lines are to be drawn so that space inside them will be exactly 25″ x 35″. Diluted ink, color, or wash; cardboard, thin paper, or mounted paper is prohibited. The sheet shall be composed with its long dimension vertical.

The following drawings are required:

1. *Perspective* of the residence, rendered in pen-and-ink, clearly indicating the character of the exterior finish and the surrounding landscape. Heights are to be measured on the corner of the building nearest the spectator at scale of ¼″ equals 1′-0″.

2. *Plans* at the scale of ⅛″ equals 1′ of the basement and all other floors. The walls and partitions are to be solid black. Lettering must be susceptible of being read easily when original drawing is reduced to one-quarter its size.

3. *A pen and ink bird's-eye perspective sketch* of the entire basement, as it would appear with its ceiling removed (and, if necessary, portions of the walls and partitions), so handled as to show clearly the arrangement of rooms, the coal storage, and the placing of the principal furniture and equipment. This sketch is to occupy a space on the sheet at least as large as that occupied by the ⅛″ scale basement plan.

4. *Elevations* of the two façades not shown by the rendered perspective, at the scale of ⅛″ equals 1′.

5. *Plot plan,* at small scale, showing location of house, garage, and driveways on the lot and suggesting other developments of the property which would add to the completeness and attractiveness of the house.

6. Cubage Diagrams: (1) A small but clearly drawn, dimensioned Section. (2) A single line Plan Diagram. (3) A Tabulation showing how the total cubage figure is arrived at.

7. The drawing shall bear the title, "A HOUSE FOR A FAMILY OF FIVE" with the sub-title "PENCIL POINTS-Iron Fireman Architectural Competition" and shall be signed with a *nom de plume* or device.

COMMUNICATIONS: *Mandatory*. As this is an open competition, no queries will be answered. The contestants shall not communicate on the subject of this competition with either the Professional Adviser or any member of the Jury or any other person in any way connected with it, except anonymously and in writing. Competitors requiring specific information relating to the Iron Fireman should address Mr. Dale Wylie, 3170 West 106th Street, Cleveland, Ohio.

ANONYMITY OF DRAWINGS: *Mandatory*. The drawings submitted shall contain no identifying mark other than the *nom de plume* or device. No competitor shall directly or indirectly reveal his or her identity to the Professional Advisers or to any member of the Jury of Award. With each drawing there must be enclosed a plain, opaque sealed envelope containing the true name and complete address of the contestant. The *nom de plume* of the contestant shall be placed on the outside of the envelope. The envelope will be opened by the Professional Adviser in the presence of the Jury only *after* all the awards have been made.

DELIVERY OF DRAWINGS: *Mandatory*. The drawings shall be securely wrapped, in a strong tube, not less than 2½" in diameter, or flat and addressed to Russell F. Whitehead, Professional Adviser, PENCIL POINTS-Iron Fireman Competition, 330 West 42nd St., New York, N. Y. Contestants sending drawings by registered mail or by express must obliterate the return name or name on express label and must not demand return receipt.

Drawings shall be delivered to PENCIL POINTS office—330 West 42nd Street, New York, or placed in the hands of the post office or express companies *not later* than 8 P. M., Monday, June 3rd, 1935. The receipt stamp will serve as evidence of delivery. Drawings will be accepted at any time before the close of the competition.

Drawings submitted in this competition are at the competitor's risk. Reasonable care will be exercised, however, in their handling, safe-keeping, and packaging for return.

EXAMINATION OF DESIGNS: The Professional Adviser will examine the designs and records of their receipt to ascertain whether they comply with the mandatory requirements of this Programme. The Jury will place out of the competition and make no awards to any design not complying with mandatory requirements.

The Professional Adviser alone will have access to the drawings until they are placed before the Jury of Award. No drawing, whenever received, will be shown or made public until after the Award of the Jury.

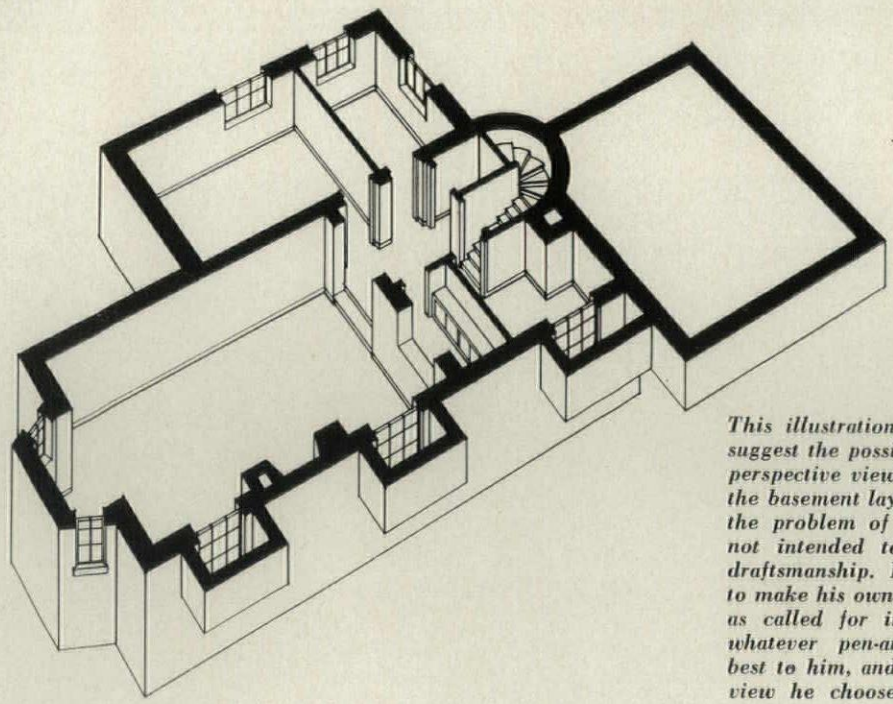
JUDGMENT: The Jury of Award will meet at the Yama Farms Inn, Catskill Mountains, New York, on June 13th, 1935. Their deliberations will continue for as many days as are necessary to give fair consideration of the submitted designs.

ANNOUNCEMENT OF THE AWARDS: The Professional Adviser will send, by mail, to each competitor, the names of the winners of the Prizes and Mentions as soon as possible after the awards have been made and the envelopes have been opened. The announcement will be published in the July, 1935, issue of PENCIL POINTS. Requests for this information by telephone and telegraph will not be answered.

REPORT OF THE JURY: A full report, stating the reasons for the awards and offering helpful criticism and comment upon designs not premiated, will be published in PENCIL POINTS. The winning designs and other meritorious designs, selected by the Jury, will also be published in PENCIL POINTS.

THE PRIZE DESIGNS: The designs awarded Prizes and Mentions are to become the property of PENCIL POINTS. The right is reserved by the Publishers and by the Sponsors to exhibit or to publish any or all of the designs not premiated. In every case where a competitor's design is shown it will be clearly and fully identified as his or her work.

RETURN OF DRAWINGS: Non-premiated designs which are not reserved for exhibition or publication will be returned to the competitors within a reasonable time, postage and $50.00 insurance prepaid.



*This illustration is appended merely to suggest the possibilities of the "bird's-eye perspective view" as a means of showing the basement layout. It is not based upon the problem of this competition and is not intended to serve as a model of draftsmanship. Each competitor is free to make his own sketch of a similar view, as called for in the Programme, with whatever pen-and-ink technique seems best to him, and from whatever point of view he chooses as being appropriate.*

# THE UPPER GROUND

## *Being Essays in Criticism*

*By* H. VAN BUREN MAGONIGLE
D. ARCH., F.A.I.A.

*"'Take the upper ground in manœuvrin', Terence,' I sez, 'an' you'll be a gin'ral yet,' sez I. An' wid that I wint up to the flat mud roof av the house and looked over the par'pet, threadin' delicate."*

*R. K. "My Lord the Elephant."*

I HAVE not been able recently to give as much attention to current work in the periodicals as I should like; I am a good deal behind with it and will try to catch up. Truth to tell, the letterpress has been more interesting than the plates in most instances.

* * * *

In the December number of *Architecture* Boston's Prado is fully illustrated and we select the dismal tenements it replaced and a view of the open space created by their demolition. It is the work of Arthur A. Shurcliff, Landscape Architect, and was designed "to provide a pleasant and shady open space for the inhabitants of Boston's North End, and . . . to open up a vista between two of its historic churches, Christ Church and St. Stephen's, a distance of four hundred and eighty feet by eighty-five feet at its widest. Forty-seven European lindens and thirty-one Lombardy poplars are provided for and the number will be increased."

This is a fine type of slum clearance.

* * * *

The "Editor's Diary" is one of the most interesting pieces of architectural journalism now current and has been running for some time with undiminished interest and variety. The Editor constantly meets and talks with all sorts of men, with all sorts of views upon all sorts of topics: and having apparently a most enviable digestion attends many luncheons, dinners and meetings, and gives a synthesis of what he hears with very illuminating comments. It ranges from the humorous Murchison to the Government in architecture, and what it is doing and what the architects have done to produce the impression in Administration circles that we are "merely another group of job-hunters."

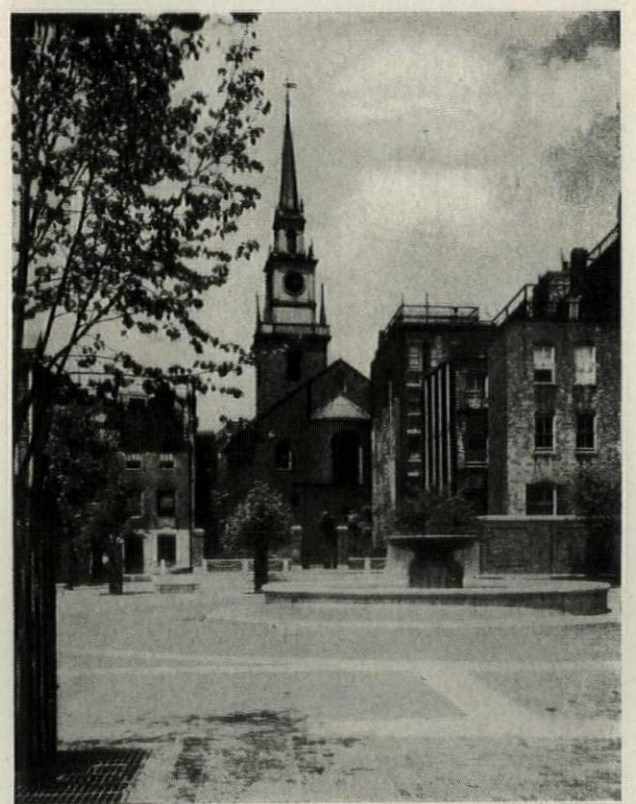
* * * *

In January he refers to the New York Chapter's anxiety about "what they consider to be the Treasury Department's threat to eliminate the private office." There is good reason for anxiety, for as I recently pointed out, with great originality, bureaucratic institutions have a way of perpetuating themselves after the "emergency" which brought them into being has passed. Whether the best method was devised is seriously questioned by many men by no means fools. Mr. Saylor says the men who are now in Washington, benefiting by it, like it, are enthusiastic about it. I hope that when the new program of the Institute's Committee on Public Works gets under persuasive way that the whole question of Public Work may be ameliorated to the real and permanent benefit of the whole profession. It would not, under such a program, be merely treated as an emergency relief measure but as a reconsideration of the best method for the country and for the mass of the profession.

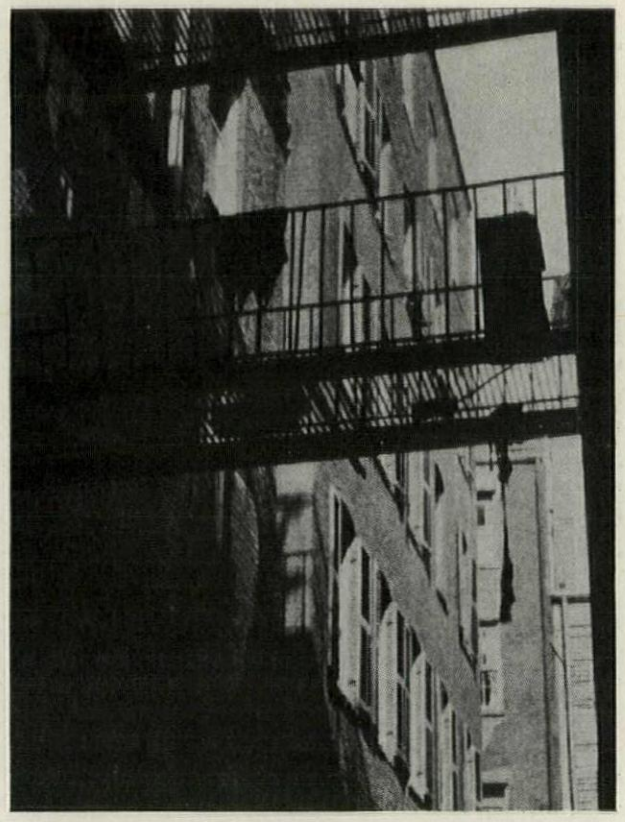
* * * *

In January also Mr. Saylor, noting the quaint things that come to an Editor's desk, says that he was asked "to get behind Ex-Governor Kohler of Wisconsin in his effort to make the State more Cheese Conscious!"

The very thing for an architectural periodical—but better for the schools of architecture. They should add a course in cheese consciousness to their curricula along with democracy, sociology, politics and economics. Hereafter: when a boy from the schools comes in for a job, the first ques-



*"Boston's Prado." Designed by Arthur A. Shurcliff, Landscape Architect.* Reproduced from December *Architecture*



*The "Prado" before demolition in October, 1933.* Reproduced from December *Architecture*

tion I shall ask him will be "Are you cheese conscious?" and if he isn't he won't get a job. Rally round the cheese, boys—rally round the cheese!

* * * *

In the February *Architecture* is reproduced the new Home of the R.I.B.A. in London of which we illustrate the side of the building on Weymouth Street. Mr. G. Grey Worum is the architect and the sculpture is by Bainbridge Copnall and James Woodford. Mr. Worum won it in a competition open to every member and every student of the Institute in Great Britain and overseas. It is of special interest as showing what conservative Britain evidently considers worthy of being the headquarters of the Royal Institute. It has the merit of being simple, almost too starkly so, without freakishness.

* * * *

Mr. Edwin Bateman Morris in his "Reflecting Pool" seems to support the bureaucratic view of Governmental architectural methods. It is quite natural that he should, for he has been for some time, and still is, one of the staff of the Supervising Architect. His views, however, are not entirely shared by the profession outside. Mr. Morris is a persuasive apologist for the Governmental view at present exemplified and the Lord knows it needs apologists.

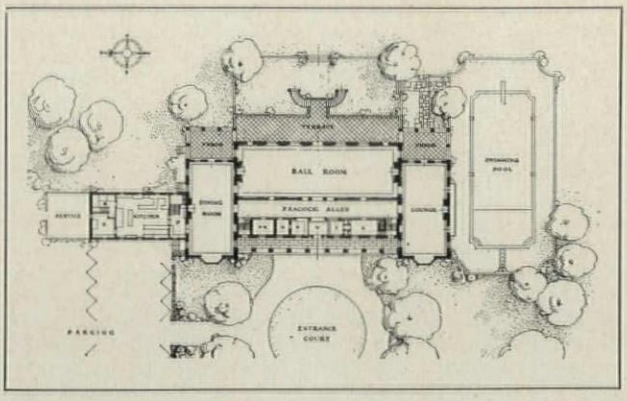
* * * *

The March number contains some good things such as Aymar Embury's Country Club at Charlotte, N. C., and the Gate and Lodge of the Acadia National Park by Grosvenor Atterbury and John Almy Tompkins. The former carries out the gracious traditions of the South, and the latter a very determined quasi-Mediæval picturesqueness, perhaps suggested by the early French history of Mount Desert Island. There is a considerable display of textures in various materials which reminds me of Cousin Egbert's views on ham and eggs in "Ruggles of Red Gap." He complained that in Paris they "done sompthin' French to 'em that hadn't oughter be done to ham and eggs." By which parable I mean that in the old picturesque buildings of France textures are very simple and unobtrusive; they are there, but they are not insisted upon. Over here, when we do a picturesque thing we are prone to say in effect "Look at all those bully textures." To me these deliberately managed and obtrusive textures detract from the interest of the whole.

* * * *

In his "Diary" Mr. Saylor, in referring to the present course taken by Government for the distribution among architects of public buildings, proceeds with a suggested program that is full of meat and good sense and which I recommend to the careful study of everyone interested in a solution of the many perplexities that beset Government and practitioner alike. It is a reasoned argument

*The new Home of the R.I.B.A., London. G. Grey Worum, Architect.* Reproduced from February *Architecture*



*Country Club at Charlotte, North Carolina. Designed by Aymar Embury II, Architect.* Reproduced from March *Architecture*

for Competition for public work, for decentralization and better distribution. It is the best statement I have heard of the case for Competition—and I have sat in a number of conferences on this subject of late. It is clear and definite, seems to cover the ground, and I wish it might be tried.

* * * *

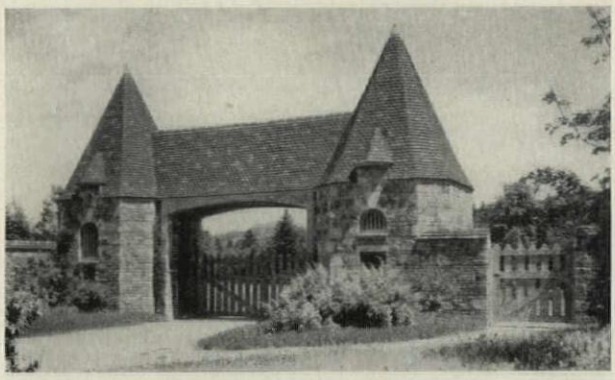
Talking with Eric Gugler the other day, Mr. Saylor stated his "impression that the architects may have lost something of the standing they should now have with the public through too great an insistence on the æsthetic side of their service." He thought the layman would be far more impressed by "a service which assures to him a well-planned economical building, soundly built, and easy to maintain, than he would be by a service which promises him beauty alone." Gugler replied in effect that there are those in the profession—among them members most revered—who believe just the opposite. That the architect would stand much higher in the estimation of his fellows if he were known more definitely "as a creator of beauty in buildings" particularly in these days "when beauty is beginning to have a tangible value in commercial circles."

I find it hard to believe that any architect would be so foolish and narrow-minded as to stress "beauty alone." Beauty in building, as in any other work of art, is indubitably the prime objective. But who can believe that an architect's service stops with beauty. Beauty in building is not skin deep—it is rooted in structure and grows from it; good structure contains all the elements Mr. Saylor refers to. As an example, the Boston Public Library never seems beautiful to me because it has such a very bad plan and on the side streets doesn't fit the plan at all. It was a grave error to make the arcaded motif which expresses Bates Hall carry all around. The size and uses of the rooms on the side streets made a satisfactory elevation of reasoned beauty impossible. The beauty of this building as an organism is superficial. Beauty must transpire through plan and must inform every element of structure. It was not for nothing that the Greeks inscribed upon the Temple of Apollo at Delphi "Measure In All Things." An architect might well make that immortal phrase his touchstone and motto.

* * * *

In *California Arts and Architecture* for August, 1934, which has just come to my attention, there appears from the pen of Mr. Mark Daniels, A.I.A., the following under the title "The Credit Snatchers":

> "When are we architects going to begin building for our clients rather than solely for our reputations?
>
> "Once I motored through Pasadena and Beverly Hills with a very talented Architect. A particularly beautiful house attracted my attention and I asked whose it was.
>
> "'Oh, that is a Gordon Kaufman job,' he replied.



*Gate and Lodge of the Acadia National Park. Grosvenor Atterbury and John Almy Tompkins, Architects.*
From March *Architecture*

"I checked an impulse to say that what I really wanted to know was who owned the house, whether it gave any clue to what kind of a man the owner was and was he the kind of a person who would live in just that kind of a house. Then I decided to try again. Invariably the reply was the same. This was one of Roland Coates's jobs, that one a Carleton Winslow, the one with the lovely tower was one of Wallace Neff's. Who lived in these houses was of no consequence. Each was a Neff job, or a Coates job, or a Winslow job.

"There are those who argue that this is all wrong and I am one of them. Even if we are not artists enough to design a house that will express some of the personality of the occupant we might be big-hearted enough to admit his tenancy. If St. Peter's were in Los Angeles, which heaven forbid, I wonder would they call it 'one of those Michelangelo-Bramante jobs'?"

A portrait of Henry the Eighth or one of his many wives or members of his court draws its value from its authorship, not from its subject. Any work of art, in painting, sculpture, architecture, music, be it portrait, house, symphony, or poem derives its interest to posterity from the man who did it. If a man goes to a Winslow, a Neff, a Coates, or a Kaufman, it is presumably because he wants the kind of house that a Winslow, a Neff, a Coates, or a Kaufman will design for him. If a man goes to a Sargent for a portrait it is a Sargent portrait he wants—his personality seen athwart that of the artist. Examples could be multiplied indefinitely —but to what end.

* * * *

Mr. Ellis F. Lawrence, Dean of the School of Architecture in the University of Oregon, writes, in the *American Architect* for November, 1934, an article entitled "How Shall We Train Future Architects?"

After citing various points that have been touched upon in this department from time to time, he says: "The educators alone cannot answer these questions. The Profession must, before preparation for practice can be solved. For what are we preparing?"

In which he is perfectly right. But as long as the educators continue to mix up the study of architecture with "democracy," "group thought," and that sort of thing, as in the following quotations, no matter what the profession does the student will not be prepared for practice in a rational, or useful, or acceptable manner. I quote:

"What we want is to find antidotes to the poisons which have brought our present predicament. I submit, with all humbleness, three of these poisons and suggest possible antidotes:

"First: The mechanism essential to enlightened group thought and action is faulty.

"Group thought and action are the keys to any successful democratic undertaking. Until we build from the bottom up and not from the top down, we cannot know if democracy can work or not. In education the mechanism by which the group functions is just as vital as in industry or government, for it deals with the relationships between individuals and groups. . . .

"We, the teachers, can't really educate the students. We can't superimpose on them a group thought or ideal. It must evolve from the group itself. To do this, students and teachers should be self-governing, free, not under orders. Freedom without license should be a product of education. . . . Why not now fix the mechanism under which we labor and let democracy, education and human nature have a chance to survive?"

"Group thought and action" means that kind of Teutonic and Slavic social doctrine most repugnant to American feeling—regimentation. What in thunder has group thought and action to do with the teaching or learning of architecture? And what has "democracy" to do with them either? It isn't necessary for a student of architecture to know whether democracy will work or not. What he needs to know is whether his plan and elevation and section will work.

Mr. Lawrence speaks here of a "mechanism" (horrendous word in connection with an art) and later refers to the freedom of the student, who is nevertheless to work under a "fixed" mechanism.

Moreover he says that the mechanism is essential to "group thought" and then that "we can't superimpose on them a group thought." Aside from this confusion, what on earth has "group thought and action" to do with learning about architecture, its technique and its origins and history? A student is not a group—unless the educator sees double. The very freedom Mr. Lawrence pleads for indicates that the student is an individual, to be taught as an individual, to think as an individual, to design as an individual. A "group" is "any assemblage of persons or things"; if that is true, and we have the authority of the Century Dictionary for it, then the individual comes first. If so, he must be at the bottom. But Mr. Lawrence evidently places the group at the bottom! I confess that I cannot follow the argument.

"Second: We have attempted to build a social consciousness without correlating the component parts which make up its totality . . . in architectural education we can free intuition and emotion to the advantage of the intellect. *We can make a program for a design-project the vehicle of teaching sociology, politics, education, economics, yes, and ethics—as well as one for teaching structure, hydraulics, illumination, and design.*"

Here we have a confusing pronoun "we." Who is it that has attempted to build up a social consciousness, the professors of architecture, or society at large, or the profession? And if it is the professors, what are they doing in that galley? Why aren't they teaching architecture, not social consciousness? And if it is society at large, what has a student of architecture to do with social consciousness in his courses, framed presumably to fit him to take a place in his future profession? If this is the kind of stuff that is being given architectural students today it is small wonder that most architects prefer men in their offices who have more architecture and less social consciousness. The cult of the cheese is needed to round out his s.c.

I draw particular attention to the words I have italicized in the paragraph under review. Practicing architects don't care a whoop in Hades whether a boy from the schools knows anything

about sociology, politics, education, or economics. If he has had some grounding in those in his academic courses, well and good. But what we want is boys thoroughly grounded in *architecture* æsthetically and structurally. I have said before that the time of the student is being wasted, and here is the proof.

An advantage the college-trained boy has, over the man who has not been able to attend college, is in the cultural courses he should be presumed to have had before he embarks upon his architectural work. But once so embarked, the subject of architecture is so vast that he should give all his time to it. The ambitious man in the office, with brains, will manage somehow or other to educate himself in the things that make life richer and fuller, and carry his weight in the office at the same time.

> "Third: We lack the fixed idea or deep conviction.
>
> " . . . Fixed methods of teaching are of little value compared with the teacher's personality.
>
> "Architecture is the product of group effort. This means team play, harmony in diversity, without loss of freedom, and the closest understanding of the arts involved. Architecture is a projection of the society it serves. It cannot be well taught separated from the ideals and standards of that society."

I have a definite sense of confusion. In one breath he seems to lament the absence of the "fixed idea" and in the next calls it of little value.

Architecture is not the product of group effort at all. It is the product of individual effort. No process of regimentation will produce architecture with what is most precious in it—the evidence of personality.

And suppose the ideals and standards of a society are low? Does that mean that the architect must lower the standards of design to the level of a society, or try to raise the standards of society? To take a plain case: There are unquestionably communities in this country where the local standards are low. Every architect who has practiced widely has been confronted by them. Is it for him to pander to a low standard of taste or to set a new and better standard for that community? The answer is clear.

* * * *

I have received the following letter from Mr. Walter B. Sanders, Instructor in Architecture at Columbia University, resulting from a personal conference with him, at which he made the suggestion which I have italicized, and which seems to me to be admirable and progressive. He has already sent it to his correspondents and friends on the teaching staffs of a number of schools, and I sincerely hope that the idea may be carried out.

It is his opinion, in which I share, that this offers a man a new door into the profession and which supplements, for the undergraduate, the Junior Membership in the Institute provided for the graduate. The Committee on Education, if this should meet the eye of, is respectfully requested to take this suggestion under consideration and assist in any way it can.

> My dear Mr. Magonigle:
>
> "I have just reviewed your articles and the opinions expressed in your open discussion column regarding rehabilitation. It would seem the profession desires a more progressive and active attitude of the A.I.A., or the founding of a separate organization which will not leave unheeded the ideals, duties and obligations of such a body if it is to remain truly representative.
>
> "Whichever reform occurs, may I suggest on behalf of the younger men that consideration be given their own potentiality, and a scheme adopted that will allow them some expression in the profession which they have chosen and been trained for.
>
> "The A.I.A. has never successfully bridged the gap between the academic and the practical, and any move to acquaint the novice with his relation to society, service to humanity, and loyalty to profession, would decidedly be in the right direction. It would not only make for a more inclusive representation, but also afford a wider and wiser choice of ultimate leadership.
>
> *"University chapters could be instituted, made up of members of the staff who each year would select those students best qualified, upon graduation, to become active members. Other professional societies, primarily the A. S. C. E., have used such a scheme with success for a number of years.*
>
> "I shall be pleased to hear your own reaction to this suggestion, plus any discussion it may evoke."

## TO THE PROFESSION:

WORLD opinion is in a state of flux. Old groups are dissolving and re-forming. Here in America we used to call ourselves Republicans or Democrats or by the name of some one of the minor parties. Little by little those old divisions have become blurred, and more and more men, following the European custom, are grouped according to their opinions into Right, Left, and Centre.

I have been using rather clumsy designations for the groups that have developed in our profession, such as "professionally-minded men" and "business-minded men." Hereafter I shall use "Right" and "Left" as briefer and more indicative of trends of thought—for it is thought we are dealing with —it is men's thoughts, men's minds, that determine the direction we shall take as a profession.

In the Right Wing I take the liberty of placing those who approach architecture from the standpoint of design, who regard architecture as an artistic profession, who place professional service above business profit, who believe that architects, as presumably gentlemen, will not advertise, who regard a new commission as a new opportunity to render better service and to bring new beauty into the world: who are able to design, specify, and construct their own work in all its branches when necessity arises.

In the Left Wing I place those who approach architecture from a business standpoint, from the pseudo-scientific side, who think or refer to it as "the Industry," who would forsake our time-

honored status of professional men in favor of a virtual or real identification with the building trades that will gradually obliterate the present distinction between those who practice for service and those who do business for profit, and whose next step will inevitably be to take contracts for the buildings they hire others to design for them; who advertise in one way or another their readiness to place speed and a pretended business efficiency above the slower but more enduring process of maturing a design in all its aspects with the end of fine architecture in view at all times. In it I include also the broker-type who are unable themselves to design and who hire talent prostituted to a lower ideal. Also those who dabble in promotion and real-estatery, and amateur sociology.

These are both brief summaries. I omit a Centralist group because the line of demarcation is more sharply drawn by its omission. Centrists are straddlers—one is either an architect or else something on the Left.

In the Right Wing I also include those who, in design, respect tradition without being either reactionary or tradition's slaves: who believe that our predecessors have not said the last word and work toward freshness of vision, for sound progress in the arts of design; who do not cast aside as of no worth the experience of thousands of years of building; who are too well balanced to be led astray by advertising blurb about "new" materials or methods and embrace whatever someone tells them is better than tried and sound specification.

In the Left Wing I include the "space merchant" and those who discard all the experience of the race in favor of the ugly shapes and masses and surfaces of a foreign cult alien to our lineage and its traditions; those who prate of "new responsibilities" and "new materials" as though there were a special virtue in the mere fact of newness irrespective of its quality and suitability, and as though there had suddenly sprung into the world a lot of brand-new duties for the architect to perform: who look for inspiration to the advertising pages of the periodicals, and form their "talking points" and "sales talk" upon the ideal furnished by the copy of advertising agencies.

* * * *

The time is upon us when we must decide to which wing we belong. The profession cannot survive half bond, half free. Members of the Institute will have the opportunity at Milwaukee in May to choose their leaders from these two wings. It is the personal, ineluctable responsibility of every one of us to decide in which wing we prefer to be.

To the three men to whose nomination I referred last month has been added a fourth. They are all of the Right Wing. Do you want to be represented and led by the Right or the Left?

ARE YOU A RIGHT WINGER OR A LEFT WINGER? WHICH DO YOU CHOOSE?

H. Van Buren Magonigle

# LETTERS AND COMMENTS:

Editor's Note:—*In the letters that follow the names of the writers are placed at the head of each. Mr. Magonigle's comments occur, as usual, in indented italics, placed immediately after the matter to which they pertain.*

### Hubert Hammond Crane, Architect
*Fort Worth, Texas*

A slight illness has contributed sufficient time for me to express my appreciation of and gratification for "The Upper Ground."

I am one of that sad group whose formal education was interrupted by the war, and who for fifteen years have practiced Architecture with the handicap of a secret inferiority toward those more fortunate men graced with the sanctity of a degree.

For the whole of these fifteen years I have spent ten hours each week in study and research in the hope of overcoming this handicap but with no yard stick by which I could gauge the measure of my success. I have never made application for membership in the A.I.A. because I doubted my own qualifications, though I have enjoyed a long and pleasant friendship with most of its members in Texas.

The coincidence of my ideas with your own and with the opinions you have expressed of so much of modern work has done more to lend me the courage of my own convictions than any happening in the last fifteen years.

Since the inception of my own office, I have never employed any but Architectural graduates. My experience with these young men has built up in my mind ideas of present-day Architectural education that I had not the courage to express. With three sons, all of whom express a desire to study Architecture, I find myself in something of a quandary.

My own practice is confined to residence work. In spite of my handicaps I have a nice business and I get a slightly higher fee than other men in this section of the country. Where can I send my boys and feel that they will receive a type of training to equip them for this work? I have never had a man in my office who came with the least idea of what constituted a good dwelling.

I have always thought of my work as an art that should contribute materially to the contentment of the client and I have judged my success by the continued respect and friendship of old clients. I have developed a method not unlike the "case history" kept by doctors and have tried to solve my problems with an eye to the physical, mental and æsthetic needs of the client. I have never quite been able to believe that my idea of a house was more important than that of the client and I may have been guilty, before experience taught me methods of handling people, of doing some rather bad Architecture.

Am I right in believing that there is a "Service" as well as an Art of Architecture? If so where can I find a school that will impart something of this idea to my boys?

I do not write in a spirit of ridicule but frankly there is so little need in the Southwest for Halls for The League of Nations, so many of the railroads have already done their worst in the way of stations that I hesitate to ask my boys to spend four or five years in the study of these problems. On the other hand I would willingly submit them to the ordeal rather than have them carry the doubt caused by the lack of a formal degree.

Your opinion has already done me a world of good, would it be asking too much to ask that you give some space to my particular problem in your articles?

*It is very good of you, Mr. Crane, to ask me to suggest some solution of your problem, which is one that disturbs a good many parents and a good many sons just now. But I think there is plenty of ground for hope. The schools of architecture are, I am sure, awake to the ne-*

*cessity for an adjustment of the academic view to the realities of practice and the future architectural life of their students. Their difficulties are very real. In too many colleges and universities the school of architecture is forced to fit itself into a pedagogical frame of the wrong shape and color, and the study of architecture, which should above all things be free and independent, is hampered by various and intolerable restrictions.*

*I can think of nothing more likely of results than to advise you to have a personal interview with Professor Goldsmith of the University of Texas, who is sure to be sympathetic and helpful; he has been long enough in your State to know what your immediate problem is, and I am too far away to be of any but general service.*

*H.V.B.M.*

### D. D. Carrough
*Highland Park, Illinois*

This is in the nature of a fan letter. Your two series of articles which have been appearing lately in Pencil Points have been of much interest and inspiration to me and I enjoy them a great deal. My habit is to tear apart my copies of the magazine about once a year and assemble articles of a series and file them. Some which were published a few years ago by H. G. Ripley have been re-read until I am quite familiar with them. Yours, I am sure, will be put to similar treatment.

The discussion in the recent critical material of educational trends seems quite to the point. In some respects you appear to be of one mind with Leicester B. Holland, who expressed very sensible ideas on the subject in an address at one of the A.I.A. meetings. If the school would bequeath to the student a method of attack for a problem, a number of well understood general principles, and an honest, open, critical attitude, the school years would be well spent.

*Your letter is kind and gratifying. It is pleasant to know that one's voice is not merely a noise in the wilderness. The discussion of the methods of the schools has brought out a lot of "fan mail" some of it from the professors themselves—and it will be interesting to see what they will do about it!* *H.V.B.M.*

### Dwight James Baum, F.A.I.A.
*New York*

Please add my name to your list of architects who desire to do everything possible to restore our profession to the position it held in the days when men of the type of Carrère, Swartwout, Delano and yourself were presidents of our chapter.

I do not feel that we should give the impression of endeavoring to break away from the Institute but, instead, I would like to see an academic body of restricted membership, self-perpetuating and partly made up of the Fellows of the Institute who have reached their standing in the profession from the designing instead of the business side of architecture. This group could be, in some ways, an advisory group and in others act like the old Vigilantes group that once existed in the Architectural League. You will probably remember, with mingled emotions, the fight that Horace Moran, you and myself waged about three years ago to try and bring back the old days of charm and dignity of the Architectural League. While the organization never formally acknowledged the letters of protest as to the manner in which the League was being managed at that time, later events showed this part of our battle had been won.

I am glad that you again are starting a good fight for a worthy cause. I protested at the Washington Convention against the need of a Code of Business for a professional society and before going to Washington, I did likewise at the pre-convention meeting at the New York Chapter. At that time I stated that the only reason I could see for a Code would be to determine a minimum professional fee so that the Government, itself, would have to recognize it. I was informed that a decision had been handed in stating that this would not be legal. I then asked if there was any reason why we should go on record for a Code. No one answered this question and the meeting proceeded to forward the Code procedure as some of the officers of that time were the prime movers in this matter.

I also feel that it is the drift of the times and not the individual that is to blame for our present difficulties. I hope that from the list of those who answered your appeal, a group can be organized which will influence the selection of not only the future officials but those who are at heart real architects and who can spread the gospel of our profession in a dignified yet convincing manner.

### Daniel D. Streeter, A.I.A.
*Brooklyn, New York*

Your article in the November Pencil Points should be broadcast to every voter in our United States. Can I help you?

### Leon Bishop Senter
*President, Oklahoma Chapter, A.I.A.*
*President, Oklahoma State Society of Architects*
*Tulsa, Oklahoma*

Yes, I have read Mr. Magonigle's "Essay" in the current issue of Pencil Points. It is, in my opinion, very timely and the entire architectural profession, including Mr. Magonigle, must wake up. The article would have been much better reading had the author used the word "we" instead of "you."

It is my privilege to read most of the leading architectural magazines and to keep myself fairly well posted on what goes on architecturally in the United States. So far I do not remember having read when, how nor where Mr. Magonigle has done anything to prevent the situation we now find confronting us, and for which he seems to blame every other architect except himself.

*Charming! Mr. Senter appears to have joined the Institute in 1921, and one is not surprised that the record of service of a much older member is unknown to him. It is much too late in the day for me to defend that record, and I would not have Mr. Senter waste his time informing himself.*

I agree that if the present condition continues, and not necessarily for very long, the architect will cease to exist as a professional man. Of course, there will always be architects, for they are as necessary and important to life as any other agency contributing to the evolution of mankind, but he will be a clerk in the Government employ on public works and a draftsman in the employ of the contractor on private work, as predicted.

"An architect is above all a man of constructive imagination," writes Magonigle. So far so good, but unless that imagination is balanced with good sound business judgment then he is not an architect qualified to represent his client in the real sense of the word.

*I entirely agree with Mr. Senter. He is not the only one of our correspondents who seems to think I mean that a real architect is a kind of "arty" ass, who is helpless when he is confronted with the grim realities of practice.* *H.V.B.M.*

We are told by Magonigle that "the architect is a professional man and the contractor is a business man." If that be true then for heaven's sake let us inoculate the architect with a few drops of "business." However, I do not intend that this inoculation should make of us promoters, realtors, space merchants and their ilk, but let's drop this "Holier Than Thou" complex and become human beings thus giving the general public a chance to like us and learn where we fit into the general scheme.

*Charming again! Let us preserve the amenities. H.V.B.M.*

I daresay seventy-five per cent of the people look upon the "employment" (I am sorry but I do not know of a better word to use) of an architect as a luxury, and that being true we have no one to blame but ourselves. Let us, through the Daily Press, because only those who are already interested in architecture read the architectural magazines, tell the world about ourselves, not as individuals, but as an all-important and indispensable profession.

*This of course means the advertising propaganda that has been advocated so often, and has been so often tried. Perhaps if we just behave like architects and professional men, that may be found to be a surer road to public esteem. Telling those who are not "interested in architecture" what fine fellows we are might be taken as special pleading.* *H.V.B.M.*

None of us can deny that the contractor is prepotent compared to the architect. One does not hear of the Government encroaching on their field of endeavor as it has the architect's, and there is only one answer. The contractor, being a business man, built his fences and prevented the attack while the architect was so wrapped up in his "art" and so busily engaged in admiring himself and his creations that his "business" was gone before he found out the Government and the *Contractor* had taken it away from him.

*Respectfully referred to those who admire themselves and their creations.* *H.V.B.M.*

The entire profession is utterly weak and lacking in the very fundamentals required to prevent and correct the shameful conditions that confront us, else we would not now be writing on this subject. This thing did not just happen since June 29th, but has been forming and shaping for the past decade, so Mr. Magonigle, what did you do to prevent it?

*Mr. Senter seems to be slightly peeved with my alleged supineness. Well, Tulsa is a long way from the centres where I am best known and I do not complain. H.V.B.M.*

You have suggested an "Architects' Professional League." Let's hear more about it and see if such a thing would be a solution, or would it be better to take the sixty-odd chapters of the American Institute of Architects that already blanket the United States, and fortify each one with the necessary information and propaganda to call an immediate halt to this situation and compel the Government to employ "Private Architects" on all public works, regardless of the cost of the project to be constructed, thus sending the hundreds of architects and draftsmen now in Washington back to their respective homes and consequently to work for the private architects. The relief furnished in this way would be spread over the entire Nation and not centralize in Washington. The grocer, the landlord, the doctor, the merchant, etc., throughout the Nation does not profit by having these men located in Washington. It is not only the architect who is suffering from this condition but the communities at large.

The New York Chapter of the American Institute of Architects recently started a very fine move to call a halt to the Government's apparent attempt to take over the architectural profession of the Nation, but the start was made too late to be of much effect on the new Congress and Senate, except possibly in their own locality. The situation calls for a united action throughout the entire Nation.

No other action by the Government could more thoroughly show its contempt for our profession than its order that private architects, at the Government's bidding, must go to Washington and accept temporary employment on a salary basis if they are to participate in the work that rightfully belongs to them, and no other action by the architects could more forcibly demonstrate the weakness of the profession by accepting such an insult and reporting to Washington for work as had been done in some twenty cases up to the first of November. The list of projects I have before me ranges in cost from $100,000 at Beltsville, Maryland, to $1,500,000 at Fort Worth, Texas, and Bronx, New York.

I pledge the support of the architects of Oklahoma to any worthy architectural organization, whether it exists now or is yet to be formulated, having a plan of action which will again restore the architectural profession to the Architect, and forever prevent the return of the "Plan Foundry" now existing.

*If Mr. Senter will keep his eye on the doings of the Committee on Public Works of the Institute he will, I hope, be pleased by its approach to the Governmental aspect, which is only one aspect, of our problem. For the others, I have during the past few months endeavored to suggest that the "Architects' Professional League" was intended to indicate a League, within the frame of existing organizations, of those who wish to restore the profession to its former status. It is a League of like-minded men working quietly every day for the honor of the profession.* *H.V.B.M.*

JOHN STONE THORNLEY
*White Plains, N. Y.*

May I at this time offer the following suggestion which I have had in mind for years as a possible constructive aid to our profession?

Now that Architecture is definitely established by law on a par with medicine, I propose that—like the Nurses who take the Florence Nightingale oath, and the doctors who take, I believe, the Oath of Hippocrates—upon receiving the title Architect each recipient swear to an oath of service similar to the one I herewith now enclose which is written off without study or redrafting and could of course be worked out better with study.

THE ARCHITECT'S OATH

I, JOHN DOE, UPON MY HONOR AS A MAN (WOMAN) AND ARCHITECT DO SOLEMNLY DEDICATE MY LIFE TO AN HONEST AND UNSELFISH PRACTICE OF ARCHITECTURE. FURTHERMORE, I SHALL ALWAYS HOLD MY POSITION AS ONE OF TRUST AND CONFIDENCE. AND, FINALLY, I SHALL TO THE BEST OF MY ABILITY LIVE AND ACT TO MAINTAIN AND ELEVATE THE TRADITIONAL AND CONTEMPORARY HIGH AND NOBLE STANDARDS OF MY PROFESSION, SO HELP ME GOD.

Sig.....

Upon a proven violation of the above before a competent jury the architect would be restrained from practice by law.

*I urge Mr. Thornley's idea upon every architectural school in the country and upon the Boards of Registry in every State as worthy of respect and adoption, whether in his form or some other that shall be agreed upon as uniform. I am not informed whether the oath taken by the medical profession is written into the law or not—but ours should be.* *H.V.B.M.*

# A BEAUX-ARTS BAND PAVILION

## *Sioux City Builds a Paris Prize Preliminary Design*

*By* JOHN E. LERCH

SELDOM if ever have projets entered in the various competitions of the Society of Beaux-Arts architects materialized as permanent structures. Yet this has actually befallen one that received Half Mention in the First Preliminary Trial for the 1933 Paris Prize of which the subject was a monumental band stand. The entry by Henry L. Kamphoefner has been erected in Sioux City, Iowa, at the cost of approximately $51,000—the money being obtained through government sources.

Sioux City knew what it wanted. As a community it had for years cherished musical activities in its band, its symphony orchestra, its *a capella* choir. All this in spite of no adequate facilities for performance, necessity requiring the use of the high school auditorium or a rented theatre. For outdoor concerts nature came to the rescue, providing in a park a site of sloping ground like a bowl long recognized for its theatrical character by its use for pageants and concerts. For the latter a wooden band-shell had been built long ago before which the assembled group sat on the grassy covered bank of the glen.

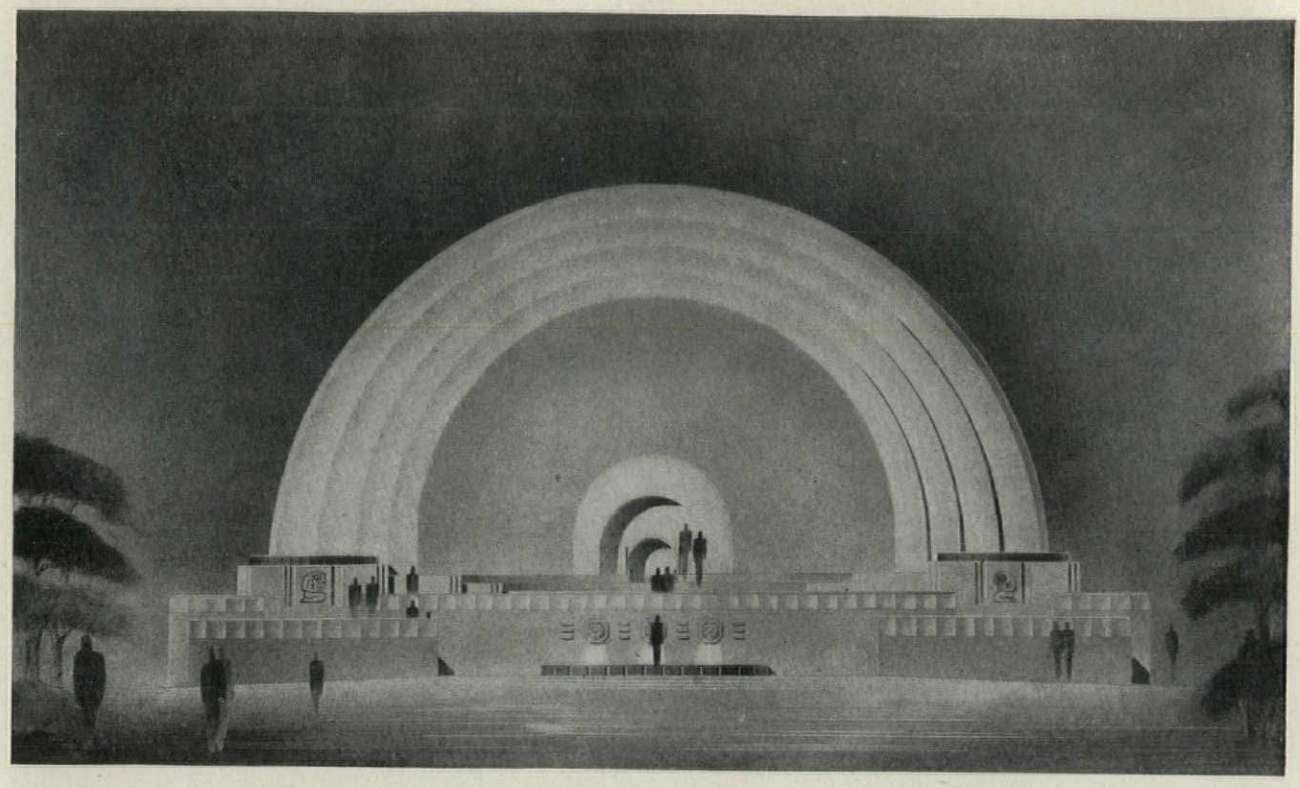
Therefore, when an exhibition of Kamphoefner's architectural drawings was held under the auspices of the Sioux City Society of Fine Arts for which prominent clubwomen acted as hostesses, the public immediately responded to that particular projet of a monumental band stand. Coincidence provided that local requirements were exactly the same as those of the Beaux-Arts problem: accommodations for musicians within an acoustical shell (300 vocalists or 100 seated musicians), and suitable for erection in a natural amphitheatre, wherein spectators at a great distance could hear even the most delicate note due to competent placement and structure of the shell.

As in ancient Greece, the people were willing to replace the wooden structure of a public building honored by time and use with a new incarnation of it in permanent material. The strongest musical organization, the Monahan Legion post band, five times winner of the national band contest of the American Legion, immediately sent its manager before the city council to urge the construction of this music pavilion as a CWA project. The architect then submitted the design and a plan of procedure for obtaining financial assistance through the federal relief commission for unemployment to nineteen civic organizations, as a definite proof of public endorsement.

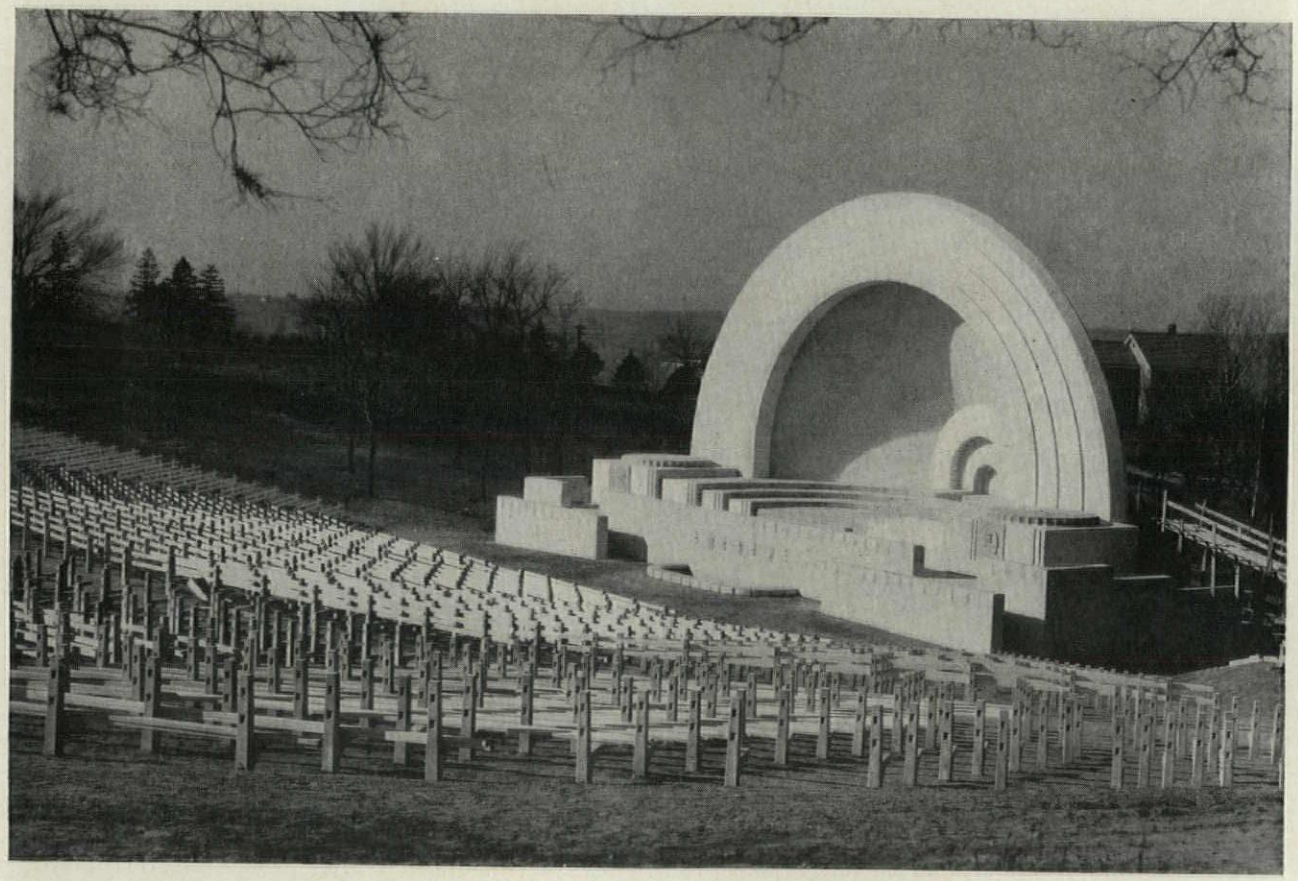
Then the architect, with the assistance of the city building contractor and the district engineer, prepared the application forms which upon the recommendation of the commissioner of parks and public property were signed by the mayor and by the chairman of the county emergency relief committee. By the time the mayor personally placed the application and plans in the hands of the state and federal authorities at Des Moines, an attitude of approval already existed due to two previous visits upon the state authorities by the manager of the Monahan Post Band. The latter had received the congratulations of President Roosevelt in which he expressed his "deep appreciation of the very fine public spirit and vision manifest by those who are creating this valuable social and recreational asset." On February 26, 1934, the state engineer, acting as executant of the CWA, approved the application and within ten days sod was broken.

The band shell is placed in a hollow deep enough to give ample seating space which is figured to accommodate 10,000 people although only 6,000 seats are at present provided. Spectators can descend from the park roadway on all sides to the seats of wood and of reinforced concrete understructure. Upon these they can sit with especial comfort for long periods of time because 2″ x 12″ planks are used for seats and for the backs are two 2″ x 4″s. In every instance there is an adequate view of the musicians below since each row of benches is 6½″ above or below the preceding one. This visual contact between the audience and the performers has been a great factor in the architect's conception of the whole lay-out, so that the spectator truly feels himself a part of the entire spectacle of the music pavilion instead of a chance listener to a hillside pastorale.

The spherical ellipse of seats is harmoniously intersected at its lowest point by a vertically erected semi-circle of smooth white concrete 51′ high, actually the rim of the truncated right circular half-cone which is partially sunk into a podium 102′ along the front. The pitch of the cone inside is adjusted to that of the hillside according to acoustical mathematics in order to provide the proper reflection of sound. From either end of the podium are returned staircases that debouch in front to either side of a pool fed from three fountains with aluminum caps gracing the center of the structure. The staircases, all equipped with aluminum handrails, are accessible from the side and also from the back, so that processions of the most elaborate nature can reach the stage from any di-



*1933 Paris Prize First Preliminary design by Henry Kamphoefner which actually was built in Sioux City*



*The Sioux City Music Pavilion as built from Kamphoefner's design. A young architect's dream come true*

rection desired. In connection with this it may be mentioned that the central aisle of the orchestra is on the main axis of the building and there are two secondary aisles on the axis of two great drums which lie on pedestals rising above the staircases and which also visibly terminate the thrusts of the great circular arch.

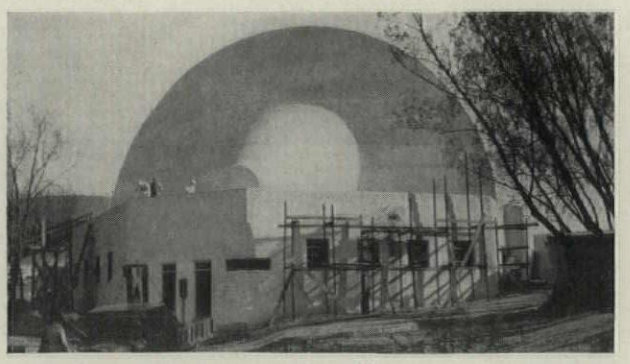
Viewed from the rear of the orchestra it is impossible to overlook the simple grandeur of this study in curved and squared masses. Seeing the disc partially revealed above the immediate tree-planted landscape and silhouetted against the distant round hills makes one aware of a tremendous sense of scale, something akin to that relationship between nature and architecture peculiar to the ancient Greeks. No mistaken notion of trying to be Greek, however, led the architect to use any of the classic orders on this band shell. Where there might be danger of the visual overlapping of the white surfaces of the podium, fluted bands along the top edges distinguish the masses and at the same time emphasize the horizontality of the podium in contrast to the springing lines of the brim of the shell which is splayed in four stepped bands as if to emphasize the waves of sound emanating from this funnel. By decreasing the width of the top of the great arch (so called to differentiate it from the smaller recessional arches within the cone itself), the structure achieves power at the base and lightness above, thus avoiding the unimaginative stolidity of a simple round arch. This was manœuvered by dropping the center of the outside circle of the great arch four feet below the center of the inside circle of the same arch. The arched recessions in the back of the reflecting cone prevent the focusing of the sounds of the various instruments. In design they are treated conversely to the great arch—the width at the top of each arch being greater than the width of the respective sides. In other words these arches are stilted to avoid the conformity of concentric circles. Thus by means of design do the arches in the cone and the great arch achieve a harmonious equilibrium.

The shell and its base are one monolithic concrete structure, obviously the proper method due to the difficulties of true arch construction of stone. In the whole building are 4250 bags of Portland cement, 300 bags of white cement, and 52 tons of reinforcing steel made in ¼″ to 1″ bars. The great arch is 16′ at the base, 12′ at the top, and 3′ thick, and of cellular structure—the walls of the cells being 6″ thick. The fluted bands and the two sculptured plaques of pre-cast concrete inserted in the podium walls directly beneath the sections of the great drums and therefore on the axes of the side aisles are the only applied ornaments.

The two symbolical figures, "The Tragic Muse" and "The Pastoral Muse," at the face of the great drums or die-blocks were designed in the Public Works of Art Studios in Iowa City by Herschel Elarth of Omaha.

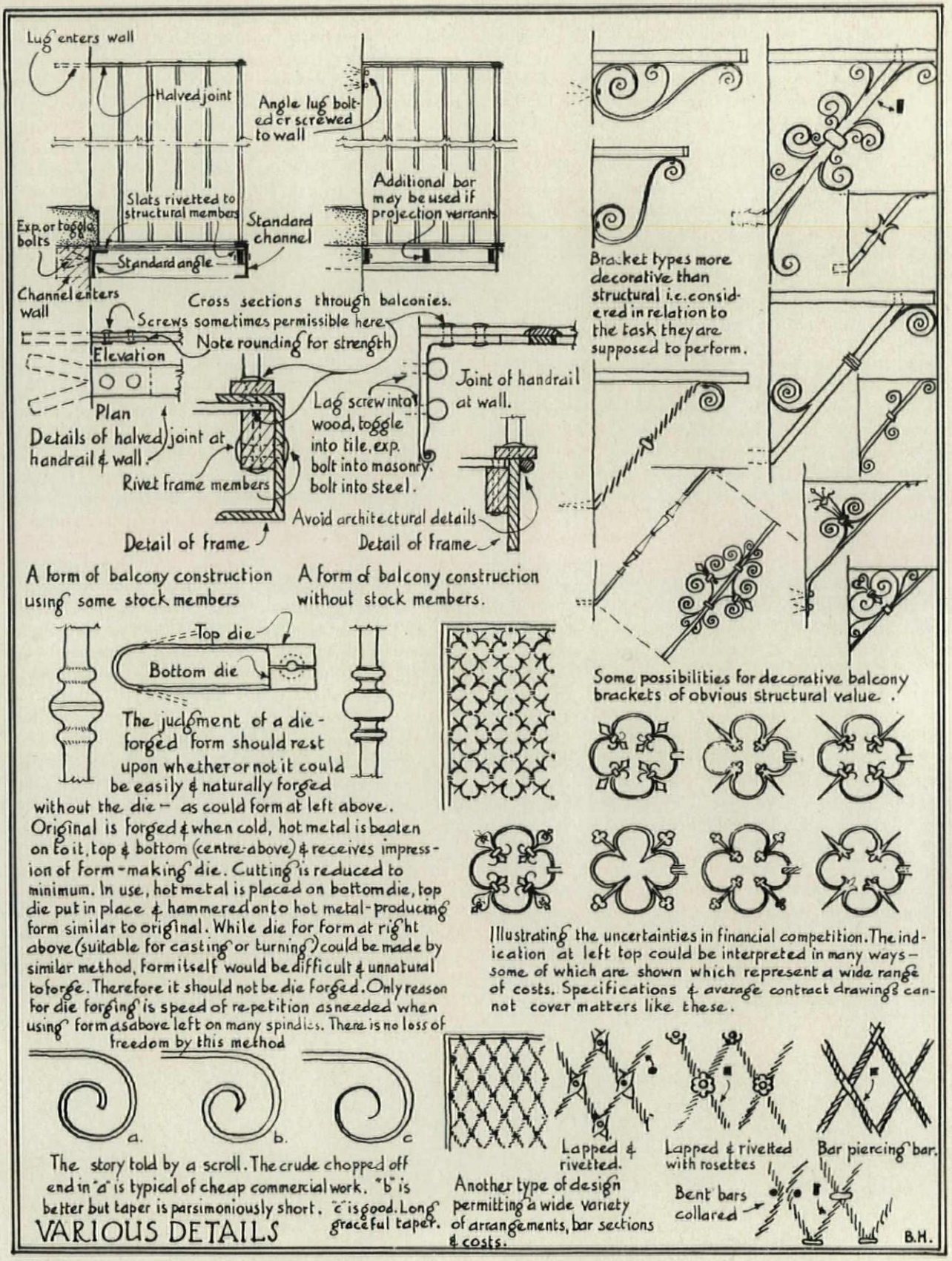
As planned, employment could be given 440 local men: 320 common laborers, 70 skilled laborers, 28 semi-skilled laborers, four timekeepers, four foremen, three draftsmen, a supervising architect, and 10 truck drivers. The total estimated cost of the project was $51,236 of which $47,436 had to be paid from CWA funds and the remainder, $3,800, had to come from the city according to the general requirement that a certain percentage of material costs on the civil works projects must come from the city benefited. These material costs were figured at slightly more than $14,000 including the city appropriation. Labor costs were expected to be about $34,500 and the costs of teams and trucks for grading work would cost $2,500.

With continuous labor the project would have been completed by May 1 but the CWA plan came to an official conclusion by March 31. Excavation and grading for the amphitheatre and band stand had already taken place and the concrete footing placement was completed. Materials worth $14,000 had been purchased by the government and delivered. The city stepped in and employed men from April 7 to April 15 to pour concrete in the wooden frames already placed but then came a complete lull in activity until work was resumed on June 20th under the Federal Relief Emergency administration to which a new application had to be presented by the city. During this time the architect had the post of architectural supervisor. The last concrete was poured October 17th.



*Rear view of the pavilion near completion*

*Compare this elevation with the original design*




*Miscellaneous Wrought Metal Details, designed and drawn by Bernard Heatherley. See article opposite*

# WROUGHT METALWORK

## *12—Concluding Remarks*

### *By* BERNARD HEATHERLEY

FOR the metalworker, a balcony involves merely a railing problem unless the floor and supports are required in metal, when advantage may be taken of certain steel angles and channels to save the expense of making by hand shapes applying similar principles. Such material should be worked in the fire, and particular attention paid to the protective finish. Several of the common balcony brackets give little, if any, support—to the despair of any engineers concerned in the matter, who often demand adequate cantilever construction. This questions the legitimacy of the bracket's decorative value. A demand that iron follow its natural bent, and be structural as well as decorative, would bring a welcome relief from the hackneyed S scroll so many brackets are allowed to become.

In the matter of finish, paint has already been condemned because it harms texture, hides color, and even changes form. Because it hides much it permits much. The same applies to the several modern so-called rust preventers and to the age-old practice of tinning ironwork. Iron can only be and appear as iron should through proper care and the application of the simplest of finishing materials. We talk of "patina" on iron—as on wood—the best patina being beautiful and protective. And, as with wood, the way was shown by the effect of touching by numerous hands and deposits of hand grease. Even since men have used other greases and oils, patinas have required time to develop—and a quickly obtained semblance falls short of full protection. A good finish for exterior work is obtained as follows: the iron, in the same condition as it leaves the fire, may be lightly rubbed (or not) with fine emery cloth. No bright polish should be given exterior work. The iron is then oiled with a mixture of boiled linseed oil and turpentine, wiped thoroughly and dried. This oiling is then repeated. A clear exterior varnish may then be applied and in special cases repeated. The high shine and sticky appearance of the varnish is overcome and further protection imparted by two coats of wax—one applied before and one after erection. The presence of oil with the turpentine and beeswax prevents this from turning white as ordinary housewax does when exposed outside. All the foregoing materials are transparent and—most important of all—are applied so sparingly that the iron is as visible as before finishing. In this condition ironwork passes to the owner. The effectiveness of the finish varies in different localities, but it has been known to last well over a year before showing the slightest need of attention. It is not, however, intended to be more than a good start toward the ultimate finish any more than the paint on a house is expected to last forever. A wise owner anticipates the assaults of nature and knows that in refinishing (at ever increasing intervals) he is doing more than just "freshening up." He is definitely creating a practically impregnable patina of great beauty and thus increasing the value of the work. Actual rust should be removed by gentle rubbing with the finest of steel wool. The robust character of iron does not prevent its surface from being easily marred. The loosened rust may be allowed to merge with the finish materials—doing no harm and adding to the rich brownish tone that comes to iron with time—or it may be wiped off. After rust is removed, the oil, varnish, and wax process may be repeated. If refinishing is done before rust shows, varnish is unnecessary and frequently oil may be omitted—wax alone sufficing.

Finishes for interior work may range from the darkness of exterior finish to a polish almost as high as that on silver. A meaningless term has come into use in this connection, namely, "Swedish Iron Finish." Now Swedish iron takes a finish similar to any other iron and it is practically impossible to distinguish it from any other kind by its *surface*. And although the vague term usually means a brightly polished finish, soft steel will polish brighter than any other iron. The polishing is done with emery cloth, steel wool, etc., and small objects buff to a beautiful effect. Before being rubbed, the work is often painted with flat lamp black, most of which is removed but enough remaining to emphasize the iron's texture. After polishing, two coats of boiled linseed oil with turpentine are applied, wiped, and allowed to dry. Then a good house or furniture wax may be used, dried, and rubbed with rags. The waxing may be repeated as frequently as desired but the sparing use of these materials must be emphasized. Protection comes from a series of light coats—not from a few heavy ones.

Monel metal and aluminum may receive finishes by methods similar to those used for iron, but there is no need for varnish for such metals. Each will manifest its own surface changes which may be removed with steel wool or merged with future oilings and waxings. Brass, bronze, and copper may be left to nature's effective treatment or may be burnished bright. No lacquering or like treatment will help their appearance. Zinc and lead are best left alone. Tin is best painted for exterior use and may be painted or not for the interior.

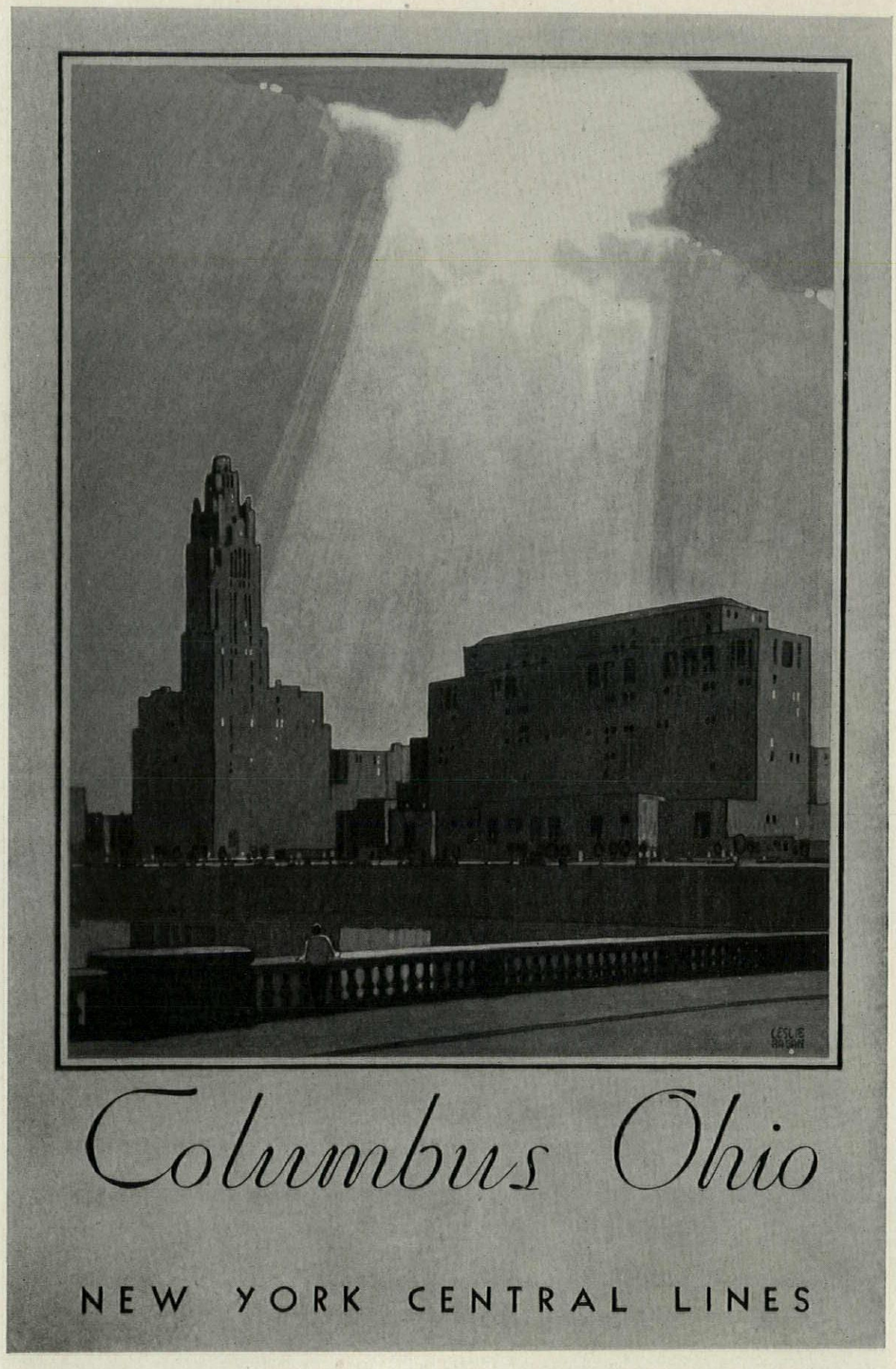
There is an unfortunate inference in architectural specifications as currently written: that a contractor will not give his best unless legally held to it—a result, no doubt, of the evils of competitive financial bidding which sometimes forces even the architect to work with men he would not choose. The specification which prescribes the metalworker's sizes of materials and technical processes is unfortunately often the sightless leading the seeing and ignores the fact that what is desirable in metalwork hardly can be specified—that specifications are unnecessary to a good man and useless to a poor one. That they put all bidders on an equal basis is not a valid claim, for seldom are they equal to a craftsman's self-imposed requirements —thus they favor the less particular man. And lip service to good principles does not mitigate the results of bad taste. So it is difficult for the craftsman to answer when he is asked, "What *shall* I specify?" The difficulty extends to drawings. If the average architect will not cede his right and fun in making metalwork drawings, he provides, in his small scale drawings, the chance for many different interpretations and estimates; while at full size he may show expensive or wrong details and at least saves the expense of re-design for the metalworker who is content to follow them. So we must examine some better methods of obtaining bids.

First, the wrought metalwork should never be part of the general contract—or should appear in it only as an allowance to be included in the general contractor's bid. It should be handled in the same manner as sculpture or mural painting, this eliminating the need of specification. Its inclusion in the general contract frequently leaves the selection of the metalworker to the building contractor who, however fine a builder, is not expected to be a judge of metal craftsmanship; and who, as a business man, knowing he may hold his subcontractors to the letter of the specification, may incline to the lowest price. The work in these cases often shows frantic efforts to keep within the low price.

With the work outside of the general contract, the architect may confer with the craftsman direct, showing him a rough indication of what he wants or asking the craftsman to prepare sketches to meet given conditions. The latter may then make estimates. If the amount is excessive or if more money is available, adjustments may easily be made. Once the available price is known, the craftsman may be asked to show what he will do for it and in the matter of design or value for money, the power of acceptance or rejection still lies with the architect. The only specification necessary is the stipulation that the work be done in the "best possible manner"—the architect having beforehand satisfied himself that the metalworker is capable of so working. It is not fair to ask a second or third craftsman to follow the above course until the first has been rejected. All the evils of unauthorized architectural competition apply to uncontrolled competition in craftsmanship and the general price of work must be made to cover the drawing expenses of people who do not obtain the contract. Unfortunately the evil practice of asking one craftsman to bid from another's design is not extinct. It should be obvious that the estimate of a man who has been put to the expense of making designs would have to exceed that of the man who has not—if that were the only consideration! Perhaps the client, the architect, and the craftsman will some day again be protected by Guilds and will be able to end this practice by making a charge for designs—whether accepted or not. In legitimate competition—which the good craftsman can not object to—it may be necessary to ask for samples of work before an award is made. In this case, the samples should remain the property of the craftsman—not of the client or architect as is sometimes specified—so that he can incorporate them in the finished work. Thus can a saving be effected for the client and the losing metalworker is not asked to make a gift. Cases have existed where an unaccomplished metalworker, seeing the standard set by a craftsman's sample, has demanded a greater price than the craftsman to attempt similar work. Having fallen into bad habits, he finds difficult what the craftsman finds facile. All samples should be made from the metalworker's own drawings, since, if he is practicing metalwork, he should be able to conceive and represent a good, harmonious, and suitable design for any required conditions. However, many details of metalwork cannot be adequately shown on paper so that the hammer finally must be the more important designing medium than the pencil.

And so we come to the end of this brief analysis of wrought metalwork—leaving much unsaid, necessarily—but establishing a few of the main principles. These principles are the same whether applied to gates or railings as we have seen, or to summer-houses, furniture, weather-vanes, sundials or others of the myriad things that may be made in metals by hand. Whatever tricks the future may play, however much we work backwards by producing materials before they are needed and then forcing them into uses—when we talk of hand-wrought metalwork we know that only by obedience to certain well tried laws can we achieve proper results. If this sounds like the imposition of restrictions against which the artist always seems to protest, a glance might be passed over any of the great past periods of artistic prowess. The greatest works were always done—the greatest fertility always shown—when certain laws of form were recognized; yes, and when knowledge was limited. As soon as knowledge increased to a point where it encouraged anarchistic expression the decline began. If the present rather morbidly analytical tendencies produce too self-conscious and effete works, perhaps the cure lies in substituting for our available freedom a self-imposed discipline.

*One of a group of paintings for railroad posters by Leslie Ragan, shown at the Grand Central*




*Another poster design by Leslie Ragan offers valuable suggestions to architectural renderers*

*A notable architectural monument forms the subject of this dramatic poster by Leslie Ragan*

*The two biggest New York skyscrapers lend themselves to a poster painted by Leslie Ragan*

# WASHINGTON MONTHLY LETTER

*By* CHESTER M. WRIGHT

HOW much business there will be for architects this year depends to a large extent upon the legislation which Congress is now considering and upon the activities of the federal government departments already organized to deal with construction problems.

Assurances received from the President indicate that much of the $4.8 billion appropriation for work-relief will be spent through regular construction channels in which designing services will be paid on a fee basis. What that means will not be known in detail until the work-relief administrators make their interpretations, but architects and general contractors are cheerful regarding the outcome.

Earmarking of the appropriation helped pave the way for the bill's passage. When flood control and irrigation expenditures were specified, it brought enough senatorial votes to change the stand which the Senate took originally in favor of paying the prevailing rate of wages and insured passage of the Russell amendment as a compromise. Other earmarked appropriations include:

Highways, roads, streets and grade-crossing elimination, $800,000,000.

Rural rehabilitation and relief in stricken agricultural areas, $500,000,000.

Rural electrification, $100,000,000.

Housing, $450,000,000.

Projects for professional and clerical persons, $300,000,000.

Civilian Conservation Corps, $600,000,000.

Public projects of States or political subdivisions thereof, $900,000,000.

Sanitation, prevention of soil erosion, reforestation, forestation, flood control, and miscellaneous projects, $350,000,000.

LIMITED DIVIDEND HOUSING. Study of limited dividend enterprises by the FHA reveals opportunities for their future development under the Federal Housing Act which are full of promise for architects and builders. Applications for financing of limited dividend corporations run into the billions of dollars, but the number of impossible projects is considerable so that a weeding out process reduces the possible projects to more reasonable totals. An estimate of possible construction under the limited dividend clause is not practicable now, but what is practicable is a brief summary of why limited dividend housing will receive a big boost under the operation of the FHA.

Limited dividend companies have had a good record financially. Where exploitation of real estate values was not the first consideration, planning and construction have been sound and social and economic considerations have had weight.

Six per cent dividends, as permitted under the FHA, with its 2½ per cent annual tolerance for the distribution of surplus, are a good return upon an investment. In these days of large corporation refunding operations at lower rates such dividends are especially attractive. With Federal Housing Administration insurance added, limited dividend housing will come into the good bond class of financing. Investors in these securities will be protected in their investments by the eligibility rules of the FHA. (See February, 1935, PENCIL POINTS.) The restrictions imposed will be welcomed by the investors and will aid promoters in selling the securities. Insurance companies and other large investors will find such securities attractive and safe.

Inasmuch as there is little likelihood that the Administration will assume that it has any responsibility for providing housing except on a profit-making basis, or that it will go into slum clearance and rehousing on any extensive social basis, the limited dividend projects are in many ways the most hopeful housing possibilities in sight.

Home building is the bright spot in the construction industry. During the first two months of 1935 there was a 32 per cent increase over the same period in 1934. But non-residential activity is 27 per cent under last year, and public works and utility awards are deepest in the hole—57 per cent under the first two months of 1934.

SELLING MODERNIZATION. The courses in salesmanship which Uncle Sam is offering free to those who enlist for the spring selling campaign for better housing can now be obtained from the FHA. They are beautiful booklets. Classes are being formed all over the United States.

Installment selling is getting another boost—this time with housing. The book advises: "With interest definitely focused on some specific improvement or repair, mention the cost in terms of Modernization Credit. Mention it in terms of *so much per month*." (The italics are not ours.)

Instructions for the architect—how he can sell his services—are included in the literature. For instance: "The architect is justified in making a canvass of all property owners with properties listed as for sale and for rent and to recommend certain specific changes structurally and otherwise to the owners of such properties . . . . Architects' fees are a recognized expense in modernization

and repair and may be included in the cost of any modernization, repair, or alteration job . . . . A young architect in the South recently made a 'confession' which startled his less aggressive fellows. After making definite efforts in the modernization field, he was able to report that:

"(1) He had 252 new modernization contracts.

"(2) Some paid moderately and some paid well.

"(3) His total number of contracts was sufficient to keep him busy for the entire year—including overhead, drawing account, and a profit.

"(4) From these 252 customers he developed 17 contracts for new home specifications—and he anticipated at least a dozen more.

"(5) He had put five draftsmen to work!"

MODERNIZING MAIN STREET. Modernization of Main Street is one of the next objectives of the FHA modernization program. A booklet is in process of preparation outlining its business and employment possibilities. It is part of the drive being made by canvassers in the cities carrying on better homes campaigns. Trade journals are featuring it. Interested industrial corporations are backing it. A Visomatic reel is being prepared. News reels are showing its possibilities.

It has possibilities for architects in the way of new business even now. But it will have twenty-five times as much interest when Congress enacts the amendment to the Act which will permit maximum modernization loan insurance of $50,000, instead of $2,000, on commercial properties. Such a maximum provision puts this kind of business into the class which is profitable enough to justify the architect in giving to it the time necessary to stimulate it.

When it is possible to interest property owners in an entire block in a city to do a job of putting the best face forward the business will assume major proportions. Some cities are planning to do improvement, alteration or restoration jobs to meet the recommendations of planning commissions.

HOUSING ADVISORY COUNCIL. Architects and members of the construction industry are submitting their problems and proposals relating to the work of the Federal Housing Administration to the Housing Advisory Council of the FHA. Many members of the Council are architects. Its membership includes: James D. Dusenberry, FHA, *Chairman;* F. L. Ackerman, Robert J. Barrett, Alexander M. Bing, Lewis H. Brown, Louis Brownlow, Merrel P. Callaway, F. S. Cannon, Jacob L. Crane, Franklin D'Olier, John Waller Edelman, Robert V. Fleming, Rolland J. Hamilton, Joseph W. Holman, Sullivan W. Jones, Charles F. Lewis, M. J. McDonough, Charles A. Miller, Hugh Potter, C. C. Sheppard, Benjamin Taub, S. F. Voorhees, George B. Walbridge, Franklin H. Wentworth, Coleman Woodbury, Wayne F. Palmer, *Executive Secretary.*

AS TO TITLE II. Enabling legislation permitting lending institutions, in addition to National banks, to loan up to eighty per cent of the appraised value of property insured by the Federal Housing Administration has been passed in twenty-eight states this year. This legislation was necessary in order to remove one of the obstacles to effective functioning of the Federal Housing Act in insuring mortgages for construction of new homes. Thirty-eight states in all had laws preventing state banks from lending fifty or sixty per cent of the appraised value of a house on a first mortgage. All of these states will eventually enact enabling legislation, but some legislatures have not yet convened and others will not meet until next year. The net result this year is highly gratifying to the FHA.

The states which have acted thus far are Connecticut, Delaware, Florida, Georgia, Illinois, Iowa, Kentucky, Maryland, Massachusetts, Minnesota, Mississippi, Missouri, Nebraska, Nevada, New Hampshire, Pennsylvania, Tennessee, Virginia, Vermont, and Wisconsin.

Another hurdle which has not yet been taken has been the formation of national mortgage associations as permitted under the Act. The government is relying upon private enterprise to develop them. But private enterprise is waiting. An initial supply of insured mortgages has not been provided upon which the national mortgage associations can function. In order to facilitate the early development of these associations, the Administration expects Congress to reduce the capital requirements of such associations from $5,000,000 to $2,000,000.

Banks are not waiting, and need not wait upon the formation of these associations. They are lending money without demanding the ultimate in bank liquidity largely because most of them have surplus funds for which they can not find investments. They know that in a short time the associations will be formed to insure that liquidity. They know, also, that there is a market for the sale of these insured mortgages to insurance companies and to trust funds. The decisions of the Federal Reserve Board permitting trust funds to purchase mortgages insured by the FHA are recent and are not yet widely appreciated.

FHA is not making official announcements yet about the number of loans insured under Title II covering new construction. Its administrators feel that they talked too soon about the number of loans insured under the modernization provisions of Title I. The reticence is confirmation of the suspicion that not many such loans have been made. With spring construction in sight, however, loan insurance applications have begun to come in in greater volume. It may not yet have exceeded the $15,000,000 mark. That's too small to talk about, so there's no talk.

Unofficial sources indicate that the applications for insurance run about 70 per cent to re-insurance of old mortgages and only 30 per cent to insurance

on new home construction. That is about what was anticipated. There are still too many old mortgages accumulated in a frozen state in banks to make the bankers generally as liberal as prospective home builders would like them to be.

Opposition to the FHA program is still strong. It is organized and determined. Many bankers profited too much from the old mortgage racket to give it up without a struggle. It is felt that the Administration's intention to reduce interest rates may be defeated, or emasculated to some extent, by concentrating sniping upon the FHA, by introducing into inner circles conservative type officials whose policy would be to maintain interest rates as nearly as possible in line with old rates.

Difficulties with banks throughout the country who are not inclined to cooperate with the FHA insurance program for one reason or another has led to the decision of the FHA to permit borrowers to apply directly to the Administration through any of its insuring offices for appraisal of property, approval of credit responsibility of the borrower, and determination of the eligibility of the mortgage for insurance. This will be good news to people throughout the country who would like to build homes and who would like to have the assurance of values and insurance of risks provided under the FHA program. Once the informal commitment of the FHA has been obtained, there should be no difficulty for the borrower in obtaining the funds he needs. This additional facility is for the benefit also of those who wish to refund an existing mortgage. The FHA will assist the prospective borrower to find a financial institution qualified as an approved mortgagee and willing to make the loan. This service of the FHA is not free. The established appraisal fee of $3 per thousand dollars of the principal amount of the mortgage loan will be charged. But there will be no additional appraisal fee collected when the definite commitment is finally issued.

WORK RELIEF PROSPECTS. Not until the President was ready to leave for his fishing trip to Florida waters and passage of the work-relief bill was assured did it become known what plans he had made for administering the expenditure of the $4.8 billion dollar appropriation.

Rexford Guy Tugwell, Under-Secretary of Agriculture, was slated to be in charge of the whole land-use program, including rural rehabilitation, soil-erosion work, sub-marginal land activities, and, perhaps, the Mississippi Valley development. It will make him the disburser of $950,000,000.

Harry L. Hopkins, now Relief Administrator, went with the President on his vacation, which seemed to confirm the fact long understood that he has been selected to direct all administration housing activities, publicly and privately financed, under the new program. It was expected they would discuss details on the trip.

Part of the jig-saw puzzle is clarified by the announcement that James A. Moffett, Federal Housing Administrator, has indicated to President Roosevelt his intention of resigning soon.

Rear Admiral Christian J. Peoples will be a third member of the board to act under the President, but it was not certain whether he would direct the $800,000,000 work on highways, roads, streets, and grade-crossings elimination and other public works or merely supervise all expenditures.

General Robert E. Wood, president of Sears, Roebuck & Co., is in the picture, possibly as an advertiser. Secretary Ickes' place in the picture was still in doubt when the President left for Florida.

Bids for construction of the big Indianapolis low-rent housing project undertaken by the Public Works Administration as part of its national program of slum clearance and low-rent housing will be opened April 30.

The Indianapolis project, for which $3,000,000 was allotted, is the fifth recent Federal low-rent housing project. It will cover 22 acres in a former slum area. It will consist of 23 apartment buildings and 96 row houses accommodating 748 families.

With the land-acquisition phases of PWA's $150,000,000 slum clearance and low-rent housing program being surmounted, the construction side of the program is speeding up. Three limited dividend housing projects are occupied and three others are approaching completion. The PWA believes the Indianapolis project will be one of the outstanding civic developments in the country. It is a community within itself, with parks, gardens and recreational space surrounding the new homes.

Apartments are laid out on the "chevron" plan, roughly in the form of a right angle.

The inside of the site will be kept clear of streets. Buildings will cover 20 per cent of the site.

The buildings will be finished in buff colored brick and the apartment buildings will be three and four stories in height. A few pent-house apartments will be provided.

Each dwelling will have modern equipment for bathrooms and each kitchen with incinerator, combination sink and laundry tray, ample cupboard space, an electric refrigerator, and an electric stove. Central laundries in basements will have hot plates, laundry trays, ironing boards, and drying rooms. Basements will have perambulator rooms and storage space and, in some of the buildings, club and play rooms.

There will be no central hallways in the apartments, each dwelling opening off a stairwell.

The FHA has taken over radio broadcasting in a big way in the interests of greater construction activities. The "Master Builder" is the principal character. Seventy-seven stations in a coast-to-coast network carry his message every Saturday night at 6:45 o'clock, Eastern Standard Time. There are four other FHA programs.

"What Home Means to Me" goes over the air at 12:15 p. m., E.S.T., Sundays, over the NBC Red Network, during which a nationally known speaker tells what it means to him.

"The Story of $1,000" appears Wednesday at 12:45 p. m. over Columbia. "Martha Holmes," the Better Housing reporter, traces the $1,000 spent on the modernization of the home of Mr. and Mrs. Anderson through the homes of the carpenter, the electrician, the painter and the plumber who worked on the repairs.

"The House Detective" appears Thursday at 11:30 a. m. over the NBC Red Network, and represents a new Sherlock Holmes who finds out what is robbing home owners of comfort.

"Ruth Hubbard" talks Friday at 11:15 a. m. over the American, introducing authorities on home and home problems for a morning discussion on how the home can be bettered.

In addition to these direct government stimuli to better housing and new construction, private industry is on the job. The American Radiator Company has its own program. Johns-Manville finished one series and is planning others. William Wrigley and General Mills have tied in with the Federal Housing broadcasts.

It is by noticing the miscellaneous activities along housing lines that an appreciation is gained of the fact that the trend is upward. The canvassing program of the FHA has so far meant that 6,283,000 homes have been canvassed for the Better Homes program; 1,119,667 repair jobs have been pledged, totalling $306,671,979 in value; 106,058 loans have been reported up to March 12.

# THE MAN WITHOUT A COUNTRY

## *By* HARRY F. CUNNINGHAM

There was a man who drew some plans,
(Even as you and I)
For a place where they turned out Garbage Cans
And Radio Sets and Electric Fans;
A BIG PLACE—wide and high.

He had a wondrous File of Plates,
(We have not, you and me)
Where A's for Arcade and G's for Gates;
They'll fit all over the United States.
It's easy, don't you see?

He looked in his file under "FACTORY,"
(And again he is not like us)
And he found a façade satisfactory,
Though the plans were a bit refractory.
But that worried him not—that cuss!

So, he took up a pen full of jet-black ink.
(We do that, you and I)
But he bothered no bit to study or think—
He scarcely stopped for a smoke or a drink—
Gosh! How the ink did fly!

In a twinkling his paper was covered with lines,
(Even as ours has been)
With doors and windows and symbols and signs
And inches and feet, by sixes and nines,
And walls both thick and thin.

And the Blues were finally made and dry,
(Even as thine and mine)
And the Factory Building so wide and high
Was solidly footed and soared to the sky
And looked just like all others—Oh FINE!

Now days will come, and days will go,
Even as minutes and hours.
And there's one thing that's certain, as all of us know,
You can't ever change it—it's bound to be so—
The end is a wagon with flowers.

So, he came to the end of his File of Plates,
(We haven't them, you and me)
And his cord was cut off by one of the Fates
And his soul, so they tell me, set out for the Gates
Of Hell and Eternity.

He came to the good old River Styx,
(We'll come there too some day)
Where the Landing Stage of Clinker Bricks
Is laid in a grout of 1:2 mix;
(The thing is built to stay).

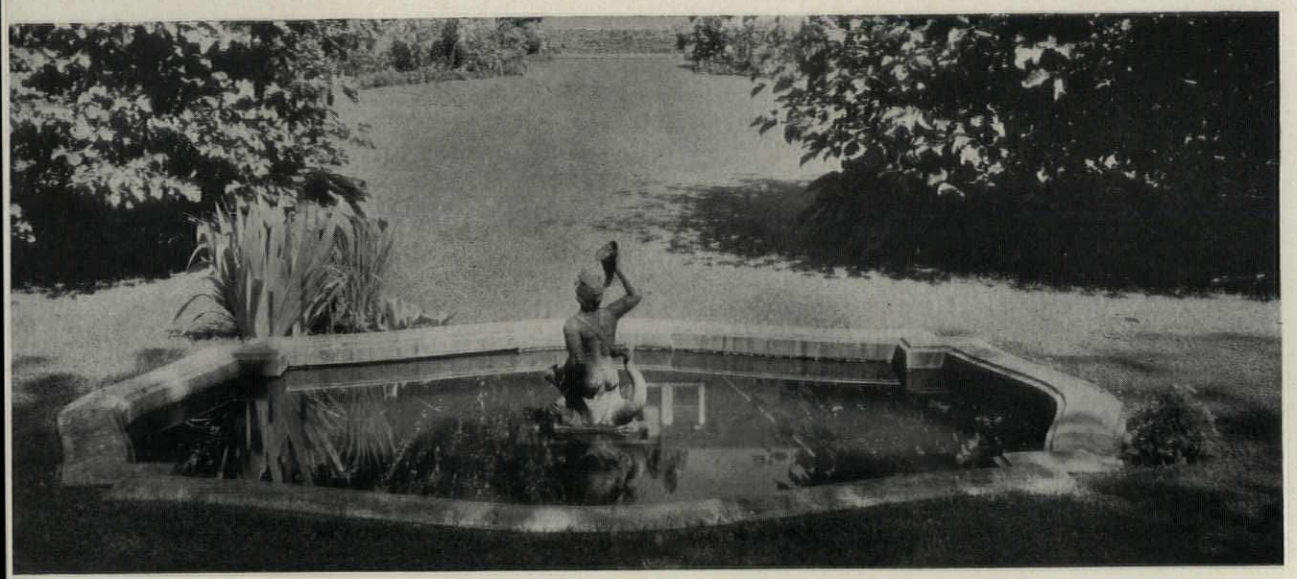
He grabbed at the rope of the BIG BRONZE BELL,
(We'll do the same in time)
And he rang it out loudly, he rang it out well,
And it wakened the Ancient Boatman of Hell
As the echoes boomed in the slime.

The Boatman came over and leaned on his oar
And said with an hellish grin,
"Oh we heard you were coming and bolted the door
And the lift is stuck down at the fortieth floor;
You surely cannot come in.

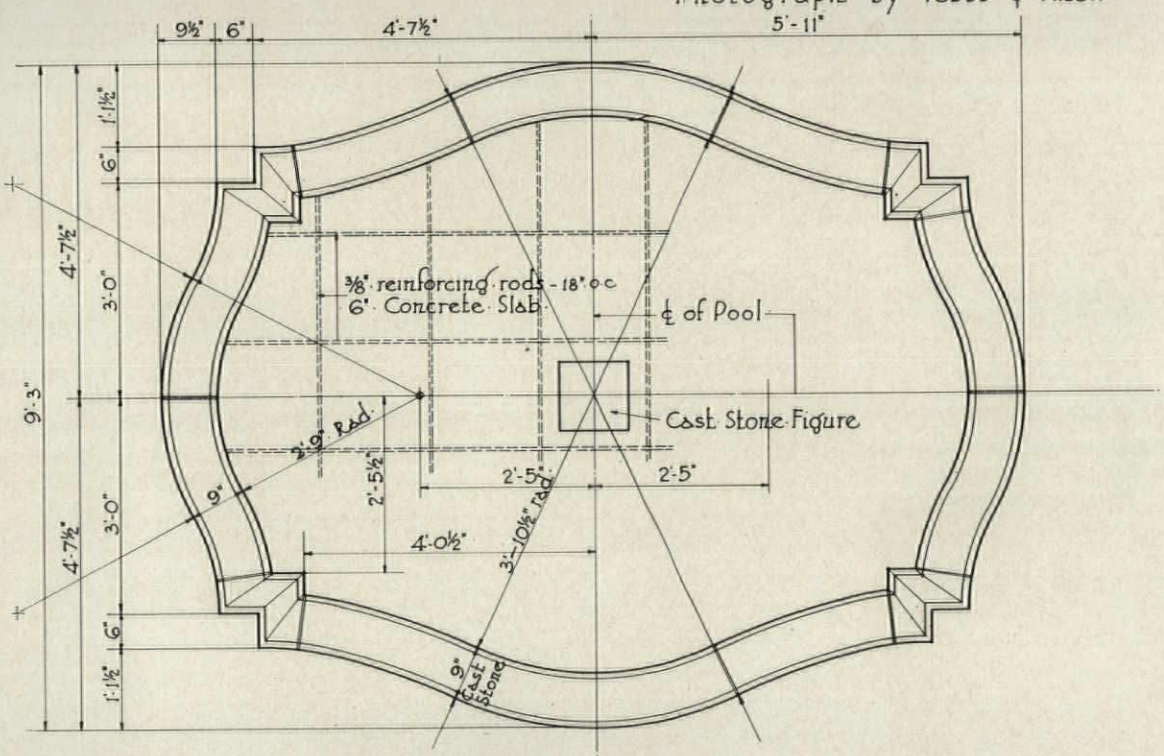
"This place is for those whose sins are GREAT,
(Even as yours and mine)
And not for the Thief of the Picture Plate
Who has sunk so low in disgraceful state
That he's not at all in our line.

"You'll have to go sit in a Pot of Glue
On the shore of the SEA OF SLIME;
And you'll copy the house—that's what you'll do—
Of the poor Old Lady who lived in a shoe,
Up 'til the end of Time.

"And the Glue is sticky and smells like the deuce.
But, for copying Plates, there's no excuse.
That's the worst of all things mean and loose.
GET OUT OF HERE—STEP ON THE JUICE!!!!!"
He got.

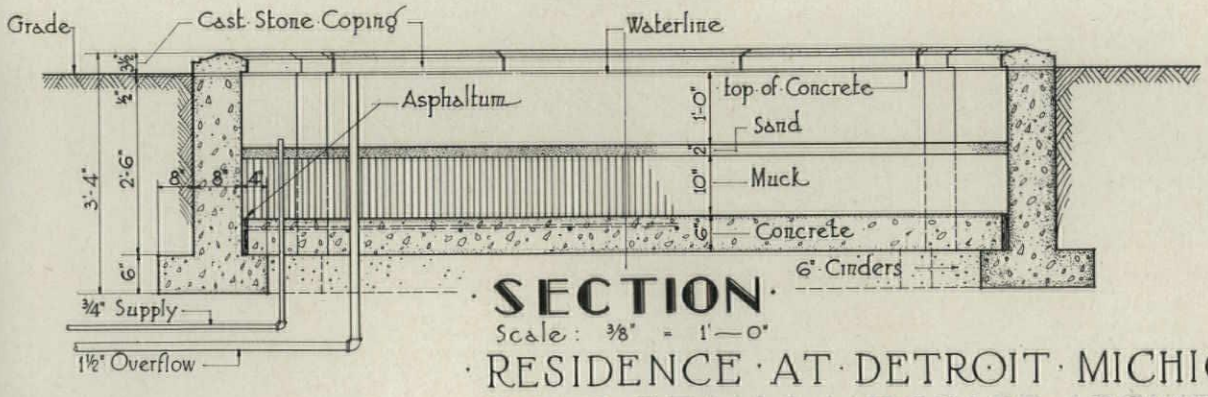


· Photograph by · Tebbs & Knell




## PLAN

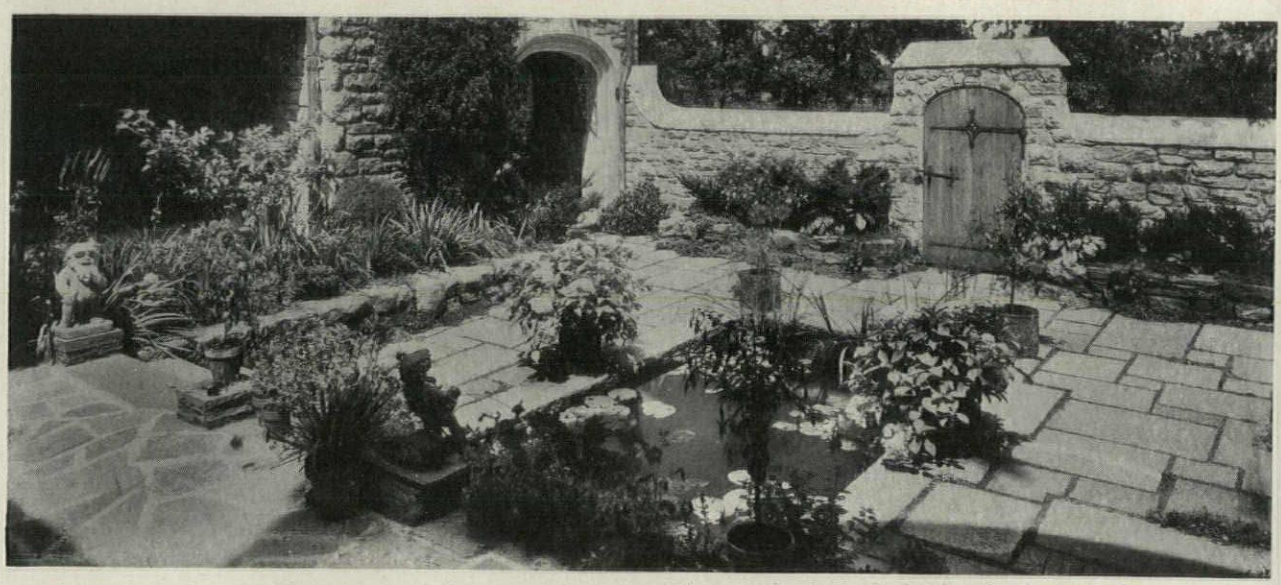
Scale : 3/8" = 1'-0"



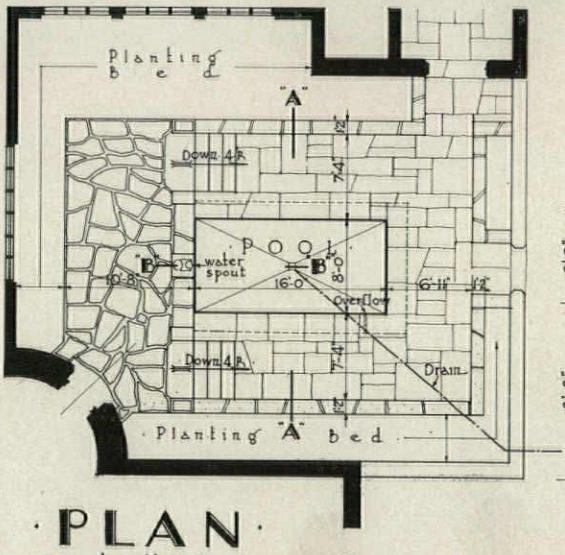

## SECTION

Scale : 3/8" = 1'—0"

· RESIDENCE · AT · DETROIT · MICHIGAN
· RUTH · DEAN · LANDSCAPE · ARCHITECT

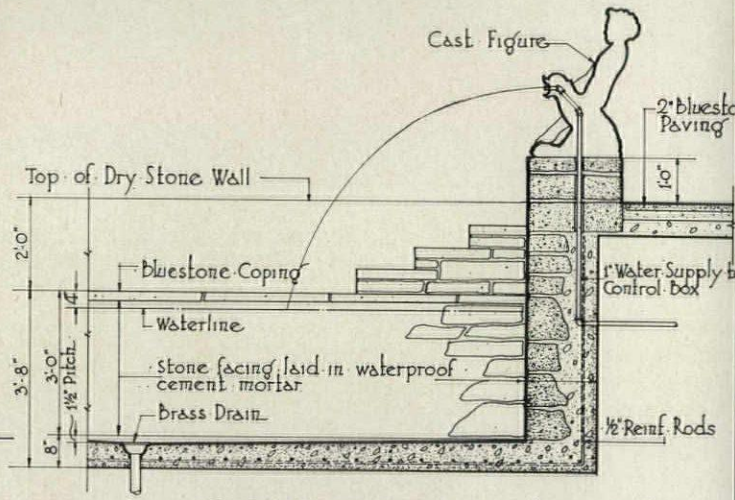


Photograph by Robert Maclean · Glasgow



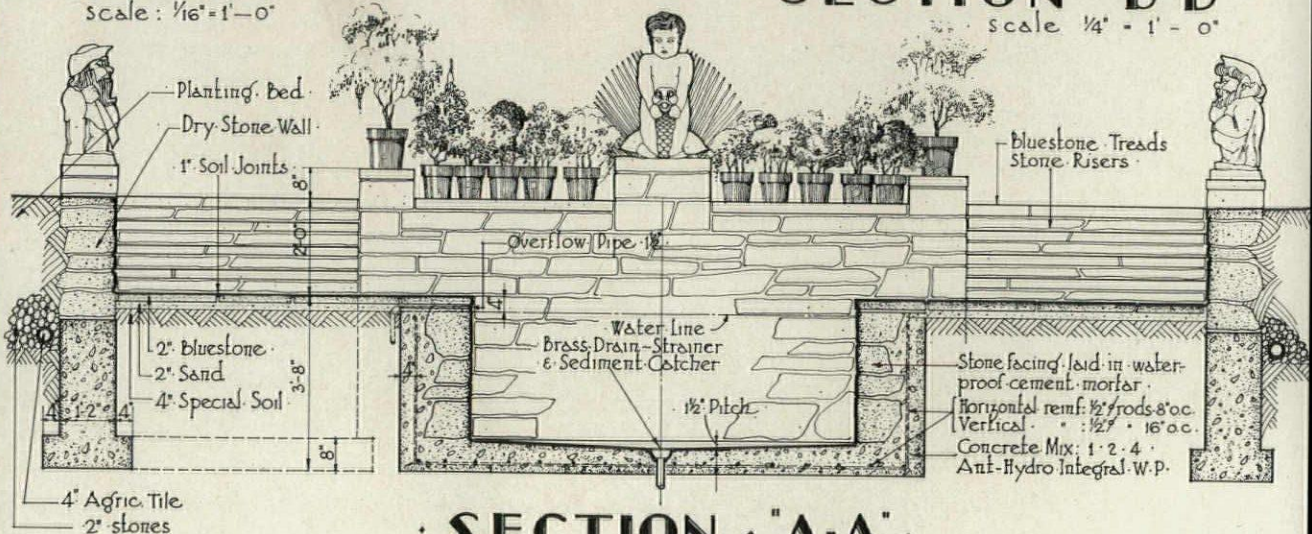

## · PLAN ·

scale : 1/16" = 1'—0"




## · SECTION · "B-B" ·

scale 1/4" = 1'-0"

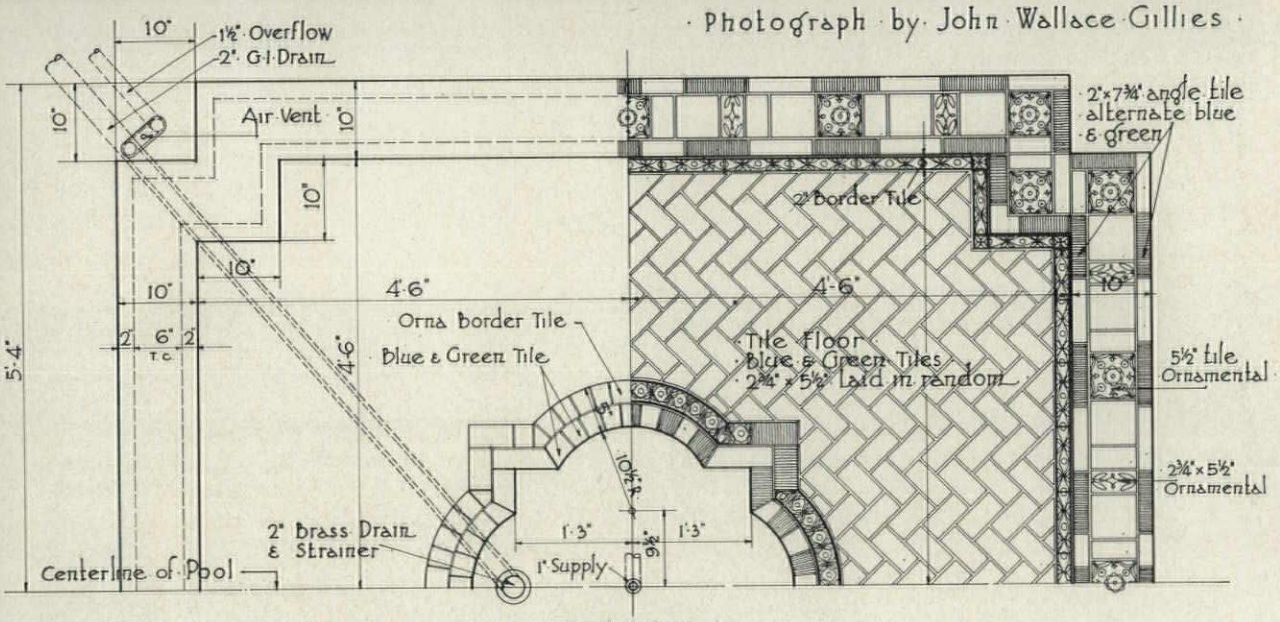



## · SECTION · "A-A" ·

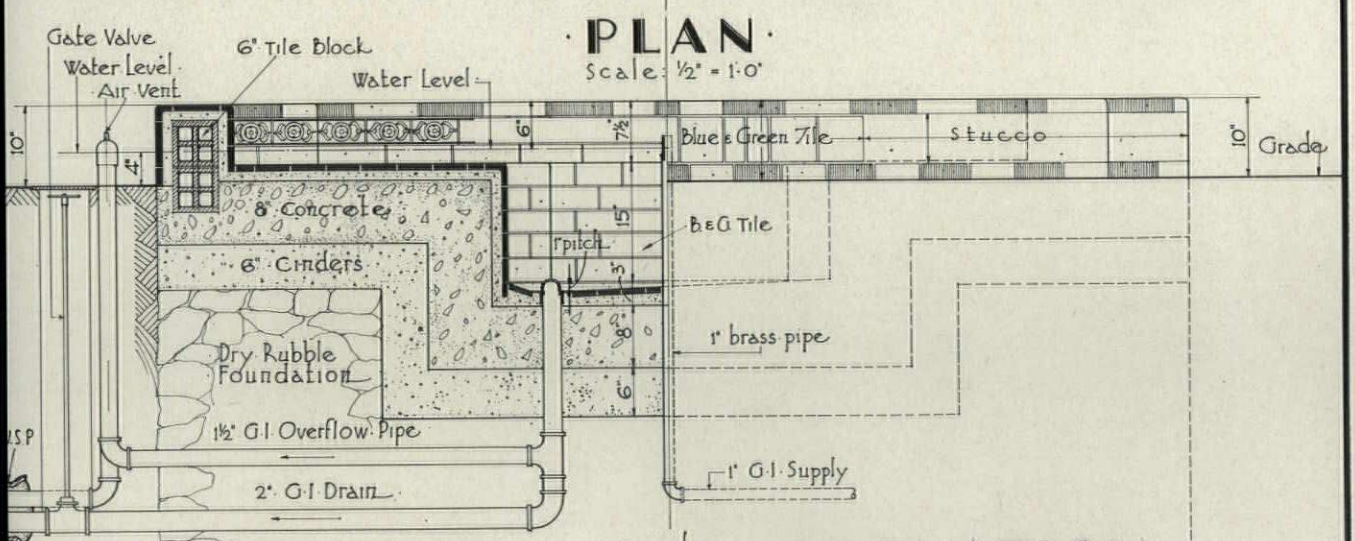
Scale : 1/4" = 1'—0"

· RESIDENCE · AT · GOLDENS · BRIDGE · NEW · YORK ·
· ROBERT · LUDLOW · FOWLER · LANDSCAPE · ARCHITECT ·

· Photograph · by · John · Wallace · Gillies ·



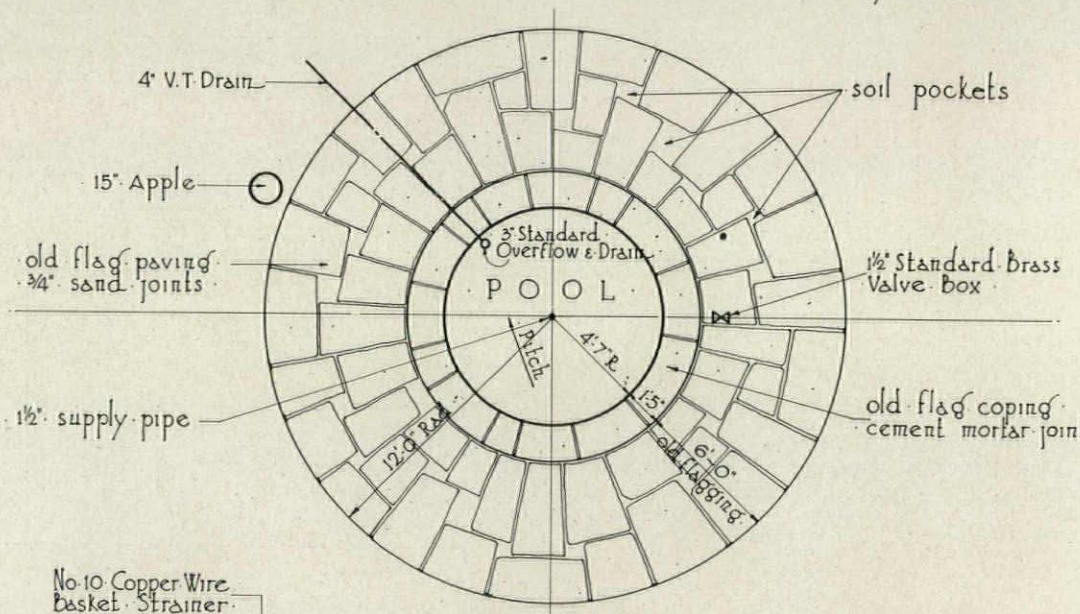

· PLAN ·
Scale: ½" = 1'-0"




SECTION · Scale ½" = 1'-0" · ELEVATION

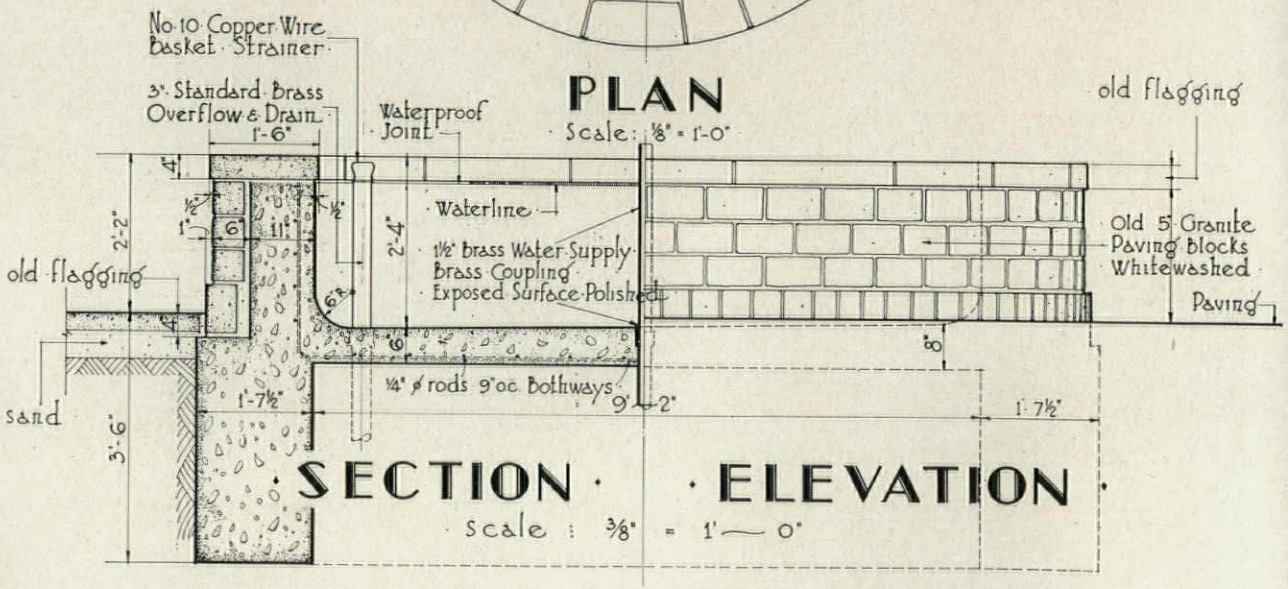
· RESIDENCE · AT · FAR · HILLS · · · N · J ·
· ELLEN · SHIPMAN · LANDSCAPE · ARCHITECT ·

Photograph by Samuel H. Gottscho




PLAN

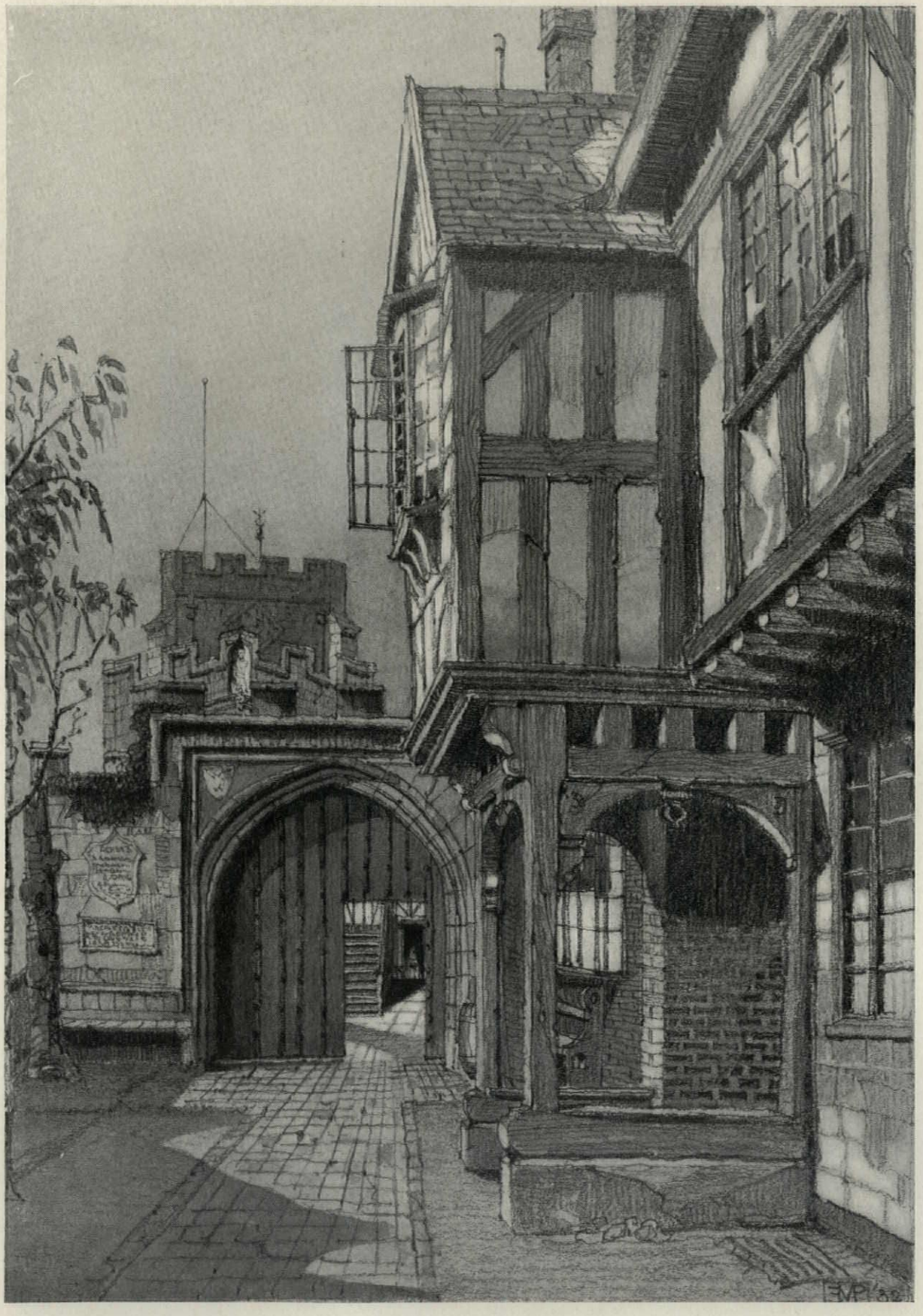
Scale: ⅛" = 1'-0"



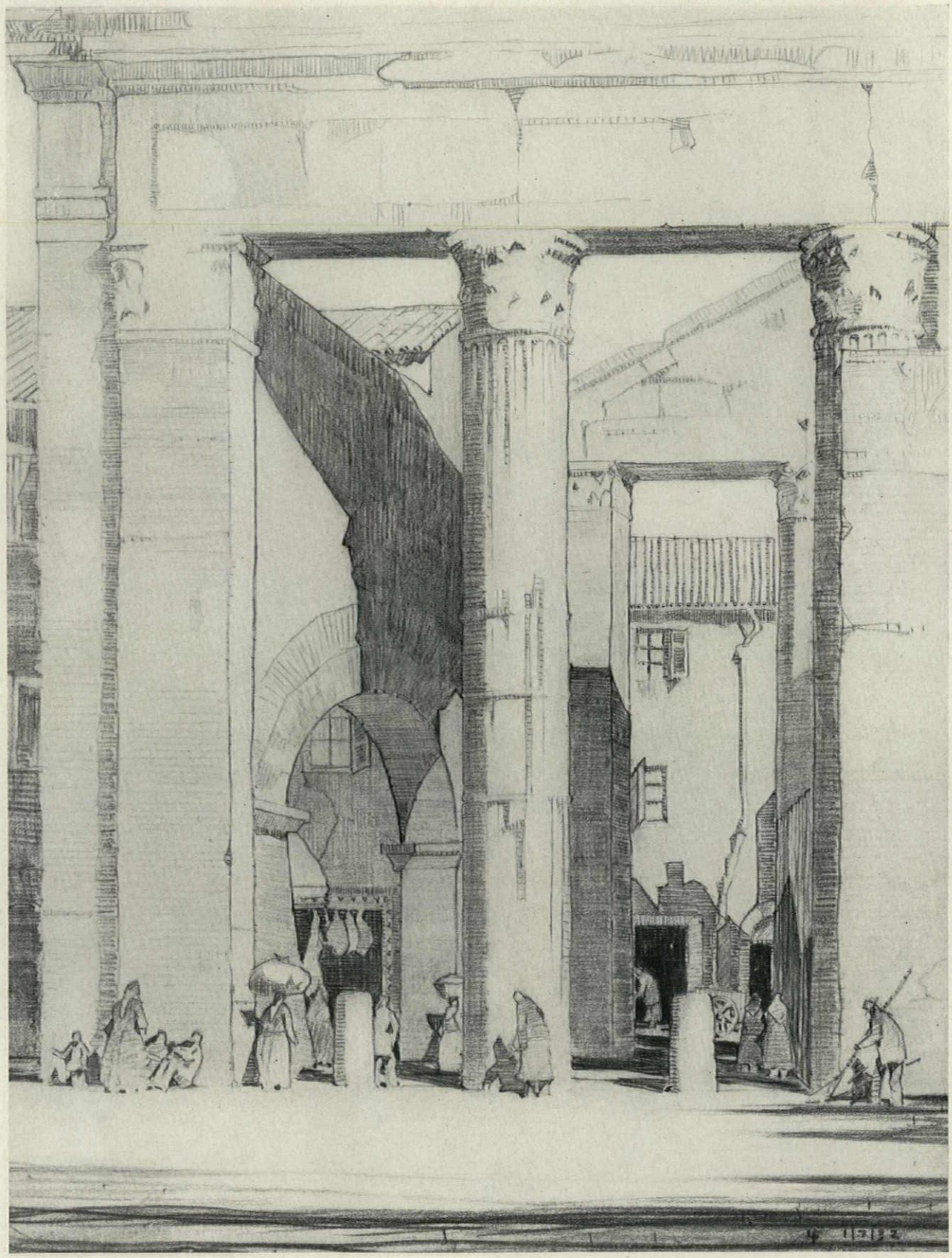

SECTION · · ELEVATION ·

scale : ⅜" = 1'— 0"

· RESIDENCE · AT · GREENFIELD · HILL · · CONN
· FERRUCCIO · VITALE · LANDSCAPE · ARCHITECT



*"Leicester Hospital, Warwick"* — *Pencil and wash drawing by E. M. Pierce*



*"Street Markets in Old Rome"* *Sketched with carbon pencil on Bristol board by Linn A. Forrest*

# A. L. Guptill's Corner

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

THE NEWS OF THE DAY HEREABOUTS

The grand, stupendous, marvelous Guptill's Corner Sketch Competition (see February issue) has come to an end. As I write, it is too early to prophesy on its success, though as in the case of all competitions it's safe to say the winners will feel like kissing the judges while all others will want to kick them. Next month we'll be able to announce the prize winners and publish some of the drawings, with comments on the whole thing.

A frequent question which reaches PENCIL POINTS is "When is that long-promised Color Book coming out?" We can't tell positively, but I'm in the midst of a final revision of the ms. (abbreviation for mess), and when this is delivered a few weeks should see the thing through the works. If I don't have your copy ready to help you with your summer sketching it surely will reach you to aid you in rendering for the fall building boom. So hang on to any shekels you may be able to grab, for color books just can't be cheap.

Don't overlook the 1935 PENCIL POINTS Architectural Competition, announced elsewhere in this issue.

THIS HERE MODERNISTIC STUFF

What a how-de-do there is just now for and against modernistic architecture! Guptill's Corner will be left behind if I don't take sides, though blessed if I know which side to take. I'll just type a few jottings and see what works out. I'd like the exteriors better—residences in particular, if the clouds and trees could be squared or rounded into closer geometric harmony with them. If it weren't for the awful expense, I'd be strong for the idea of putting houses on turntables so they could be swung to take advantage of sunshine and breezes. But I'd want each house so geared that when undesirables came a-callin' it could be set to spinning at merry-go-round tempo, with music and all. Even if they were able to climb aboard you wouldn't have to go 'round with 'em long: they'd be off for parts unknown before you could say "Jack Robinson." As to the non-rotating houses, which seem vastly in the majority to date, I especially like some of the interior features. I always did want a fireman's brass rod to slip down in a hurry when the pancakes were ready: now it seems they may become standard equipment at so much, F.O.B. Detroit. But why can't a catapult be fixed up to toss one back again? With an inner-spring mattress at the top to light on.

SO THEY CAN'T SLIDE A'STRADDLE

Did you read, by the way, of that meanie architect who steam-heated the chromium pipe stair rail so the kids couldn't coast down it a-straddle? I calls that a pretty kettle of fish: no wonder architects aren't popular. But I'm not against piping the house for beer (for them that wants it). And I think that that hose-connected, plug-in vacuum gadget which catches flies, sucks in cigar ashes, and snakes out your dandruff is a peach.

Seriously, there are lots of things that can be done to our houses to make life easier and more pleasant, and what I like about this modern movement is that it's slowly but surely bringing about their accomplishment. As an instance of natural development, up in Williamsburg, Ontario, where the famous Dr. Locke has his clinic, and practically every house in town is filled with patients, mostly lame and many badly crippled, ramps to the entrance doors are gradually taking the place of steps. This is a substitution that would be practical in many residences the country over, for healthy folks and all, as I'll bet hundreds of baby carriage pushers and pullers will agree.

THIS TIME MY AIM IS DOUBLE

The present Rendering Project (Sheet 11) has a dual purpose. First, it is designed to remind you that there are many large crayons of wax, carbon, and even graphite, which, for some strange reason, few architects use. You should get to know them, for they are really great time savers, and result in most interesting work. Sam Chamberlain's PENCIL POINTS covers exemplify this, as do the drawings by Detlie in recent issues—see February, 1935. Of the many available types some come not only in black but in white and colors. The large graphite sticks are particularly useful. Note on Sheet 11 what huge strokes they make. Sometimes one end is sharpened to meet special conditions. Again they are employed in conjunction with ordinary graphite pencils. This pairing of large and small leads is also possible in carbon, wax, etc. Even the material used for the leads of many colored pencils is available in crayon (square stick) form.

My second aim is to point to the fact that many of these crayons and pencils can be applied, in conjunction with some solvent, for wash-like effects. Almost everyone knows by now of the so-called "water color" pencils (which are really nothing in the world but the old familiar copying pencils put to a new use) with which a colored drawing is made in the usual way, after which water, added with the brush, dissolves and blends the hues. These are very tricky and, though capable of good results, require considerable practice for anything approaching mastery.

WATER HAS SURPRISING USES

Carbon leads and some others can also be blended with brushed-on water, or the paper can be thoroughly dampened and lines or tones drawn on this moist surface. This was the method followed in the upper right-hand corner of Sheet 11. The same crayon was the principal tool used for the sketchy rendering at the bottom, which was done one-third larger than here on ordinary illustration board. It took scarcely more than a half-hour. The crayon was dragged sidewise over the paper to tone the larger areas, a similar pencil being selected for the detail. Water was the only solvent. The method is equally practical for work of far greater finish.

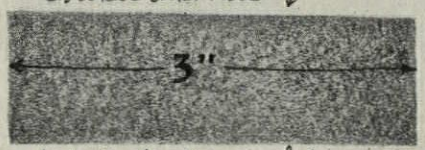
It is not so commonly known that practically all pencils, whether black or colored, can be used for similar "painted" effects, if we substitute for water some other solvent. Gasoline, benzol, benzine, turpentine, carbon tetrachloride and the like are good. Even our old friend the graphite pencil is capable of unique results if we first make a drawing with it, perhaps sketchily, and then brush on one of these. Turpentine works well, and I have seen extremely pleasing drawings done on regular artists' canvas in graphite, softened and spread by means of linseed oil.

# PRACTICAL PERSPECTIVE RENDERING PROJECTS

## SHEET 11 • • THE SOLUBLE CRAYON •

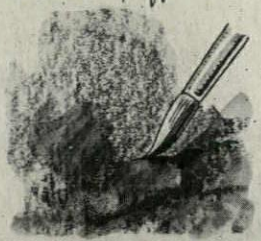
1. There are many large crayons, more or less like this, some black and some colored →

2. They will make huge side (corner) strokes like this →



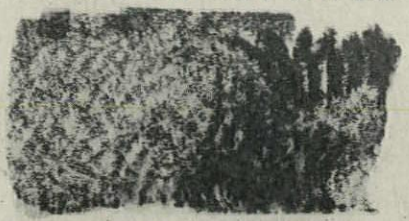

and send strokes on this order ↓

3. For most of them a solvent can be found—water, benzine, turpentine, oil, carbon tetrachloride—making them capable of unusual and highly interesting effects.



SOLUBLE IN WATER

DRAWN ON WET PAPER



4. As to method, it is mainly up to you. Experiment. Originate. Try different crayons, different papers, different solvents. Try blacks and colors, and the two in combination. It's a big field.

SUCH A METHOD IS USUALLY BEST FOR RATHER BOLD, SKETCHY IMPRESSIONS

# PENCIL POINTS DATA SHEETS

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

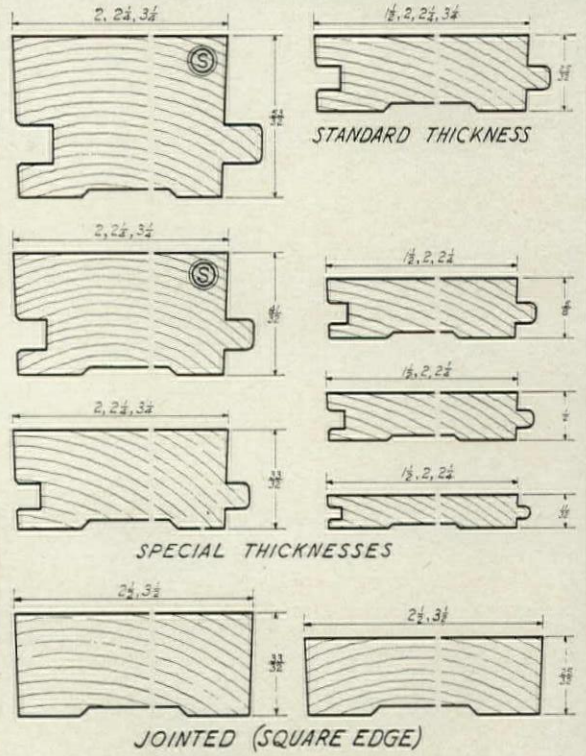
PENCIL POINTS DATA SHEETS

# FLOORING STANDARDS MAPLE, BIRCH, AND BEECH

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

Sheet No. **F1h**

Apr., 1935




The $2\frac{25}{32}$" thickness is most commonly used for general purposes. The $5\frac{3}{32}$" and $4\frac{1}{32}$" thicknesses are marked "S" on the drawing to indicate that they are seldom carried in stock and are usually made only to fill special orders. The $3\frac{3}{32}$" thickness has ¼" more depth of wearing surface than the Standard Thickness, and is recommended where floors are to be subjected to extraordinary strain and wear. The $\frac{5}{16}$" and ½" thicknesses are manufactured for special purposes and can be obtained on special order if desired.

The $1\frac{1}{32}$" thickness is used over old floors, but care should be taken that the underfloor is dry, sound, and of uniformly even surface.

Square edge or "Jointed" flooring possesses the advantage of easy replacement in industrial floors.

In the 3¼" and 3½" face widths two channels in the back are usual, the other face widths having one channel as shown.

*Courtesy Maple Flooring Manufacturers Association.*

## FACTS AT YOUR FINGERTIPS

**Five companies are announcing free sets of *Data Sheets* in this issue of PENCIL POINTS. Turn to the advertising pages for these announcements by:—**

**Scovill Manufacturing Company, Waterville, Conn.**
**Koppers Products Company, Pittsburgh.**
**Stanley Works, New Britain, Conn.**
**Jones & Laughlin Steel Corp., Pittsburgh.**
**Iron Fireman Manufacturing Company, Cleveland, Ohio.**

**These free sets may be had for the asking. Simply fill out the coupon accompanying each advertisement and send it to the sponsor. These *Data Sheet* sets are identical in format and method of presentation with the editorial sheets appearing regularly on these pages.**

**Other prominent building manufacturers are planning announcements of *Data Sheet* sets on their products in the May issue of PENCIL POINTS.**

**Are there any manufacturers in whose products you are especially interested? If there are, and you would like to have *Data Sheets* prepared to put this information at your fingertips, write the manufacturer and say, "Why don't you put out a free set of *Don Graf* PENCIL POINTS *Data Sheets* on your products?"**

**Thousands of architectural men have adopted the *Data Sheets* as an important help in their work.**

DATA SHEET NO. F8c. *This is the third of a series of* Data Sheets *on Acoustics. Next month the fourth sheet will appear on the subject of Reverber-*

PENCIL POINTS DATA SHEETS

# INSUFFICIENT LOUDNESS

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

Sheet No. **F8c**

Apr., 1935

Insufficient Loudness is more serious for speech than music, since adequate loudness thruout an auditorium is necessary for speech to be understood. The larger an auditorium, the louder a speaker must talk to make himself heard. Since the average speaker's voice power is limited, it is necessary to use loud speakers in auditoriums larger than about 500,000 cubic feet in volume. In rooms this large, electrical amplification is necessary even though all other acoustical conditions are perfect. On the other hand, loud speakers are of little or no help in any auditorium unless other acoustical conditions are satisfactory.

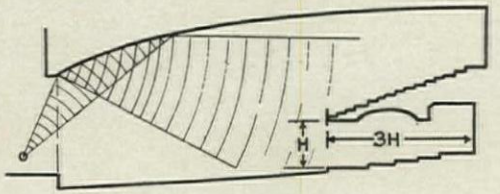
For legitimate theater productions, the distance from the curtain line to the last row of seats will be limited so that delicate voice shading may be audible. One authority has established this distance as 75'-0" for a theater with a balcony, and 100'-0" for a theater without a balcony.

The volume of an auditorium also has a bearing on the number of instruments that are suitable for musical renditions. In Circular No. 380 of the Bureau of Standards an empirical rule is given as follows:

| *Volume of Room* | *Number of Instruments* |
|---|---|
| 50,000 | 10 |
| 100,000 | 20 |
| 200,000 | 30 |
| 500,000 | 60 |
| 800,000 | 90 |

Loudness may be somewhat increased by locating the speaker or musicians near hard, sound-reflecting surfaces which reinforce the direct sound. A stage should be furnished with veneer "flats" or similar surfaces rather than heavy, sound-absorbing curtains. Musicians particularly prefer a sound reflecting stage.

Loudness is sometimes insufficient because of an excessively wide seating area. Auditors in the front corners do not receive the full loudness because the speaker's voice is directed away from them at a wide angle. If the seats are arranged within the proper angle for correct vision, they will generally be satisfactory for hearing.




Loudness is sometimes inadequate in excessively deep underbalcony spaces. The depth of such spaces should not be more than three times the height of the opening, as shown in the illustration. In the average auditorium loudness is usually adequate in the front and center of the seating area, but insufficient at the sides and rear. The use of a fan-shaped floor plan and a ceiling sloping up from the stage will help to overcome this defect. Sound from the stage is reflected by the walls and ceiling to the sides and rear, where it increases the loudness by reinforcing the direct sound. If such a design is impractical, a proscenium having soffit and sides at a 45° angle is of some benefit.

PENCIL POINTS DATA SHEETS

# ELECTRIC WIRING SYMBOLS (Cont.)

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

Sheet No. **E3e**

Apr., 1935

THESE CHARACTERS MARKED ON TAP CIRCUITS INDICATE:

- 2 № 14 Conductors in ½" Conduit.
- 3 № 14 Conductors in ½" Conduit.
- 4 № 14 Conductors in ¾" Cd Unless Marked ½".
- 5 № 14 Conductors in ¾" Conduit.
- 6 № 14 Conductors in 1" Cd Unless Marked ¾".
- 7 № 14 Conductors in 1" Conduit.
- 8 № 14 Conductors in 1" Conduit.

NOTE-If larger conductors than № 14 are used, use the same symbols and mark the conductor and conduit size on the run.

- Feeder Run Concealed Under Floor Above.
- Feeder Run Exposed.
- Feeder Run Concealed Under Floor.
- Pole Line.
- Push Button.
- Buzzer.
- Bell.
- Annunciator.
- Interior Telephone.
- Public Telephone.
- Clock (Secondary).
- Clock (Master).
- Time Stamp.
- Electric Door Opener.
- Local Fire Alarm Gong.
- City Fire Alarm Station.
- Local Fire Alarm Station.
- Fire Alarm Central Station.
- Speaking Tube.
- Nurse's Signal Plug.
- Maid's Plug.
- Horn Outlet.
- District Messenger Call.
- Watchman Station.
- Watchman Central Station Detector.
- Public Telephone – P.B.X. Switchboard.
- Interconnection Telephone Central Switchboard.
- Interconnection Cabinet.
- Telephone Cabinet.
- Telegraph Cabinet.
- Special Outlet for Signal System As Described in Specification.
- Battery.
- Signal Wires in Conduit Concealed Under Floor.
- Signal Wires in Conduit Concealed Under Floor Above.

This is the second of two sheets presenting symbols for use on architectural drawings, as recommended and adopted by the Association of Electragists, International; the American Institute of Architects; and the American Institute of Electrical Engineers; and approved by the American Engineering Standards Committee on March 6, 1924.

*Reprinted by Permission.*

*ation. Reverberation is the most common acoustical defect encountered in buildings and one which has been surrounded by the greatest confusion. The Acoustical Materials Association has cooperated in the preparation of the materials for this series of* Data Sheets.

DATA SHEET NO. F1h. *The Maple Flooring Manufacturers Association has furnished the information for this* Data Sheet *on the standard patterns for Maple, Birch, and Beech finishing flooring. 25/32-inch thickness is the most commonly used for new construction under conditions of ordinary wear. The thicker patterns are adaptable to floors subjected to extraordinarily severe conditions.*

DATA SHEET NO. F2d. *The U. S. Department of Commerce has established a commercial standard for wood shingles. This standard has been accepted by about 30 associations and over 400 firms representing consumers.*

DATA SHEET NO. E3e. *This is the second of two* Data Sheets, *giving the standard wiring symbols to be used on drawings. These symbols are ten years old and present some inconsistencies and some defects, but it is hoped that the sponsors will cooperate at an early date with the American Standards Committee to revise them. Until this is done, it is well to employ them for the sake of the uniformity that has been built up by their common acceptance.*

PENCIL POINTS DATA SHEETS

# WOOD SHINGLES

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

Sheet No. **F2d**

Apr., 1935

Shingles covered by this standard are known as "No. 1 Grade" and are from the following species which constitute the highest class of decay resistance: Western Red Cedar *(Thuja plicata)*, Southern Cypress *(Taxodium distichum)*, Redwood *(Sequoia sempervirens)*. Their high durability, close grain and even texture make them especially suitable for roofing shingles.

WIDTH. Maximum width shall be 14". The minimum width for shingles 16" long and 18" long shall be 4". Shingles shall have parallel sides.

THICKNESS. Shingles are measured for thickness at the butt ends and designated according to the number of pieces necessary to make up a specific unit of thickness. For example: 4/2 indicates that 4 butts measure 2" in thickness.

| *Length in inches* | *Thickness in inches* | *Maximum exposure to weather on roofs* | *Maximum exposure to weather on walls* |
|---|---|---|---|
| 16" | 5/2 | 5" | 7½" |
| 18" | 5/2¼ | 5½" | 8½" |
| 24" | 4/2 | 7½" | 11½" |

Arranged from *Commercial Standard CS 31-33*

MINIMUM ROOF PITCH. Wood shingles should not be used on a roof with a slope of less than 6" rise in 12" run. 8" in 12" is a better minimum.

WOOD SHINGLE ROOF CONSTRUCTION. Shingles are applied either to wood sheathing or strips. When 1 x 3 or 1 x 4 strips are used they are spaced the same distance apart on centers as the shingles are exposed to the weather. Such construction without tight sheathing should be used only when heating costs are not a consideration, or when special precautions have been taken to insulate the building. Laying shingles on strips allows free circulation of air, and is thought to retard their decomposition.

Roof sheathing or boarding laid tight and covered with good building paper is considered a better base for shingles, providing a desirable degree of heat insulation. The individual boards which make up the roof-boarding are called "roofers." The roofers may be either square edge or matched boards. A double course of shingles should start the roof at the eaves.

WOOD SHINGLE SIDE WALL CONSTRUCTION. The shingles may be laid on either strips or tight sheathing as for roofs, with the same advantages and disadvantages for the two methods.

CHARACTERISTICS OF SHINGLE ROOFS. The wooden shingle is light in weight, has excellent insulating value, can be easily applied, results in pleasing architectural effects, and high-grade shingles properly applied have great durability. The main objection to their use is the fire hazard. Sparks or flying embers are more likely to roll off the smooth surface of a newly shingled roof than from an old roof having shingles with curled edges. For this reason any treatment of shingles, such as staining or creosoting, which will tend to maintain a smooth surface incidentally improves their fire resistance. If rain water for household purposes is to be collected from the roof, care must be taken to select treated shingles that will not contaminate the water.

***SUBJECT:*** *St. Giles, Wrexham, Denbigh, Wales, 1370-1450*

PENCIL: **This drawing was done with only 4 degrees of ELDORADO—H for the delicate sunlit surfaces; HB for light shadows; 3B for darker grays; 4B for the deep blacks**

PAPER: **Kid finish Bristol Board**

Watson's pencil actually shows the climatic quality of northern sunshine, on a tower of rich architectural form. The paper chosen is important; with the correct degrees of ELDORADO leads, the result is noteworthy for its naturalness. No need to buy imported pencils when American-made ELDORADO is obtainable wherever fine drawing materials are on sale. Pencil Sales Department 167-J, JOSEPH DIXON CRUCIBLE 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.*

## PERSONALS

DRAGON & SCHMIDTS, *Architects*, have moved their office from 3016 Telegraph Avenue to Room 205, 2068 Allston Way, Berkeley, Calif.

CRAFT, GILL & WALSH, *Architects*, 247 Park Avenue, New York, have dissolved partnership. Mr. Alton L. Craft will practice individually at 6 East 45th Street, New York. Mr. Harrison Gill will also practice individually at 247 Park Avenue, New York. Mr. Harold V. Walsh will not be engaged in active practice.

HUGO K. GRAF, *Architect*, formerly of the firm of Trueblood & Graf, has opened offices at 2825 Olive Street, St. Louis, Mo.

HAROLD F. ANDREWS, *Architect and Structural Engineer*, has moved his offices from 128 State Street to 82 State Street, Albany, N. Y.

ROBERT HELMER, *Architect*, has withdrawn from the firm of Halsey, McCormack & Helmer, Inc., and has established his own office for the practice of architecture at 219-50 141st Avenue, Springfield Gardens, Long Island, New York.

FREDERICK S. CATES, *Architect*, has opened an office for the practice of architecture and residential development at 1202 Lynch Building, Jacksonville, Fla.

## THE MART

Wood Engraver's Tools for Sale. Complete set of 75 pieces selected and used by an expert. Also sharpening stones and pad. All in good condition. Address *The Mart* care of PENCIL POINTS.

The McCormick Company, Inc., 121-127 S. Negley Avenue, Pittsburgh, Pa., would like to purchase a used copy of *Good Practice in Construction*, Part 1 and Part 2, by Philip Knobloch.

Thomas B. Chang, Suite 4, 34 Massachusetts Avenue, Cambridge, Mass., would like to purchase the following numbers of the *Bulletin of the Beaux-Arts Institute of Design:* January through September, 1925; October, November, and December, 1926; all except June, July, and August of 1927; January through April, 1928.

Robert Ronowski, 410 N. Edgewood, LaGrange, Ill., has some architectural magazines and books for sale at reasonable price.

Herbert F. Detlefsen, 530 East 22nd Street, Brooklyn, New York, would like to purchase the following copies of the Tuileries Brochures which were published by the Ludowici-Celadon Company: *Provincial Architecture of Northern France*, May, 1931; *A Visit to Vezelay*, September, 1932; *Memories of Rural France*, November, 1932; *French Architecture as a Source of Material*, January, 1931; *Some Minor Architecture of Normandy*, March, 1931; *Dijon—Capital of Burgundy*, November, 1931. He will pay 20c per copy if in good condition.

Hubert E. Allen, 205 Forest Avenue, Glen Ellyn, Ill., has the following issues of PENCIL POINTS for sale: all of 1926, except February and December; 1927, complete; 1928, complete; March through August, 1929. Copies are in excellent condition. He would like to sell the complete years as a lot.

Belle A. Dinwiddie, 1200 W. Poplar, Rogers, Ark., has the following for sale: December, 1933; January through April, 1934, of *Architectural Forum*, at 65c per copy postpaid. February through July, 1934, of *Architectural Record*, at 45c each, postpaid. July, 1928; July, 1929; March through December, 1930; January, February, April, June, September, October, and December, 1931; February through December, 1932; December, 1933; June through December, 1934, of PENCIL POINTS, at 45c each, postpaid.

Miriam F. Jones, 1323 Avenue B, San Antonio, Texas, has the following copies of PENCIL POINTS for sale: November and December, 1922; January through November, 1923; 1924 complete; January through March, May through July, September through November, 1925; May through December, 1926; all except July and September, 1927; all except April, 1928; January through July, 1929; also extra copies of October, 1924, and June, October, November, and December, 1927.

Serafin Yde Guzman, Samal, Bataan, P. I., would like to purchase the following: loose leaves of all winning designs with plans published by PENCIL POINTS from 1920 through 1932, bound or unbound; all of those published by the *American Architect* from 1915 through 1927 or 1930; all in *Architectural Forum* from 1920 through 1934.

Lester A. Cramer, 2334 Vestal Avenue, Los Angeles, Calif., has for sale the following, at reasonable price: special numbers from 1922 to 1932 of *Architectural Forum;* 1921 to 1930, *Architectural Record;* 1927 to 1934, *American Architect;* 1923 to 1926, and 1931, *Architect and Engineer;* 1926 and 1927, *Architecture; Through the Ages* by Vermont Marble Company, 1931, 1932, 1933, bound; *The Gypsumnist*, 1925 to 1930, inclusive; *Shapes of Clay* by Gladding McBean Co., 1925 through 1930; *Tuileries Brochures* by Ludowici-Celadon Co., 1929 through 1932; *Building Superintendence* by Clark. Will be glad to send on approval if postage is paid.

A. Mansur, 15 Somerset Street, Bangor, Maine, has almost complete sets of PENCIL POINTS since 1927 for sale.

Phineas Cheadlee, 5903 N. E. Wygant Street, Portland, Oregon, has the following for sale: *American Architect* for March, October, and November, 1932; May, 1933. PENCIL POINTS for February, 1932. All in perfect condition, price $2.00 plus postage for the lot, or 50c each.

## MANUFACTURERS' DATA WANTED

FREDERICK S. CATES, *Architect*, 1202 Lynch Bldg., Jacksonville, Fla. (for A.I.A. file).

LOTT L. TAYLOR, *Architect*, 1601 Rosario Street, Laredo, Texas.

CAMILO PANERAI, *Architect*, 13 No. 21 (Vedado), Havana, Cuba.

HUGO K. GRAF, *Architect*, 2825 Olive Street, St. Louis, Mo. (desires complete new file).

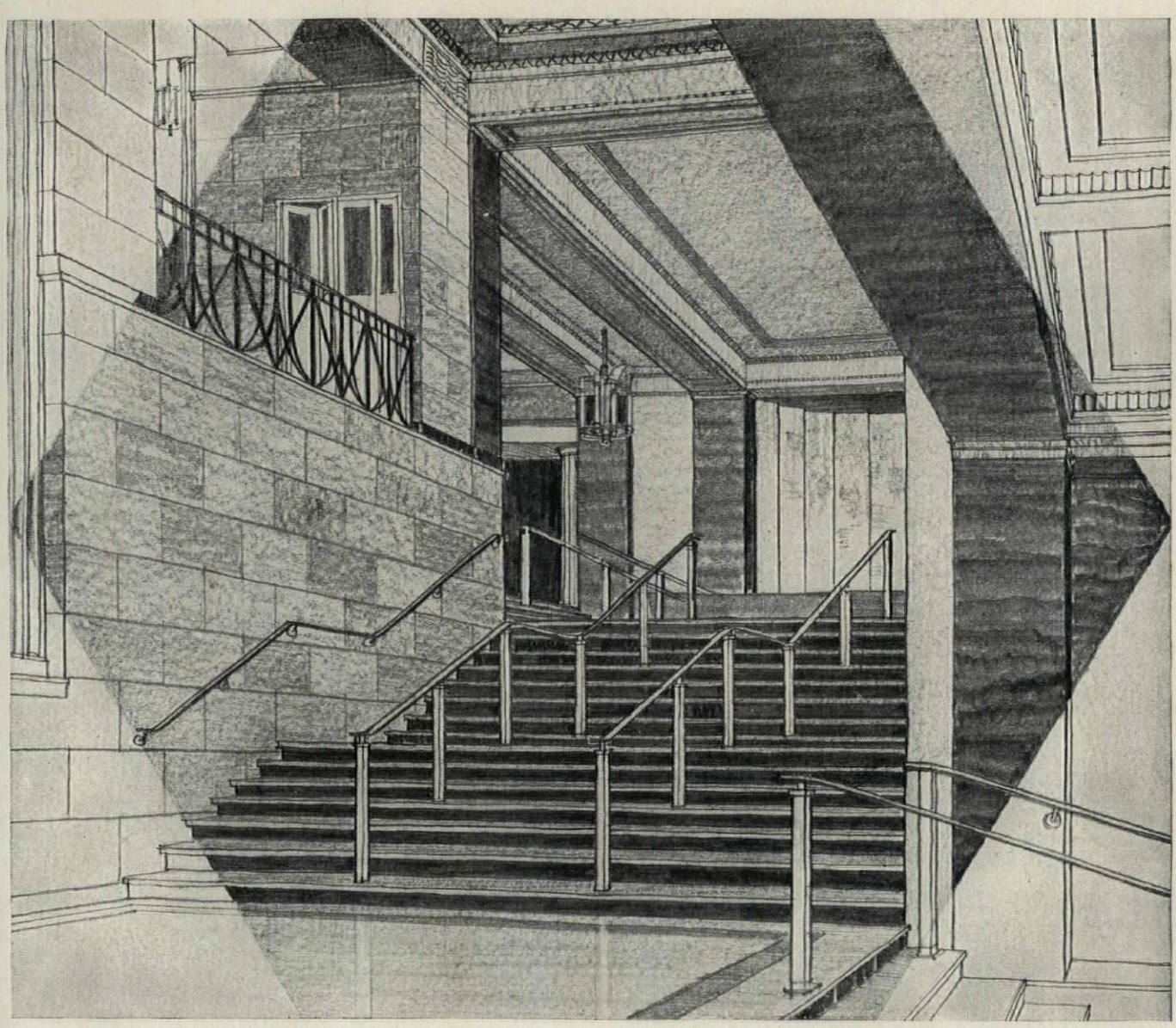
ALTON L. CRAFT, *Architect*, 6 East 45th Street, New York, N. Y.

FLOYD S. KLINE, *Architect*, 216 E. King Street, Lancaster, Pa. (for A.I.A. file).

F. C. STERNBERG, *Architect*, 4461 Olive Street, St. Louis, Mo.

CHARLES WELLS, *Designer*, 4046 North Keystone Avenue, Chicago, Ill.

*(Service Departments continued on page 49, Ad Section)*



**Grand Staircase of Commerce Hall, New York City, (8th Avenue at 15th Street), drawn by Gerald K. Geerlings entirely with a 4B Microtomic Van Dyke Pencil exactly this size on smooth paper.**

**Commerce Hall, newest and largest exposition center in New York City, is owned and operated by the Port of New York Authority, (who, incidentally, are users of Microtomic Van Dyke Pencils).**

## DON'T BREAK YOUR STRIDE

**Go up or down this main staircase at Commerce Hall, New York City, and it seems equally easy. Landings do not make you falter and break your stride. A good pencil should serve you in the same way. Whether you are drawing lines up or down, left or right, freehand or ruled, whether gray-and-thin or wide-and-black, you shouldn't be required to change pencils. Hunting all over the board for a suitable grade is both extravagant and unnecessary. In producing the illustration above *only* a 4B Microtomic Van Dyke Pencil was used, and that required resharpening of the wood only once. Difference in texture was secured by using the lead flat against the paper in wide strokes, using differing pressure for the plaster ceiling, for marble walls, and for black slate steps.**

**FREE SAMPLES of any two degrees of the Microtomic Van Dyke Pencil are yours for the asking. Write to the Eberhard Faber Pencil Co., 37 Greenpoint Ave., Brooklyn, N. Y. Made by the New Eberhard Faber Chemical Process, in 18 consistently accurate degrees — 7B softest to 9H hardest.**

**PRACTICAL HINT—to prevent lead from breaking when using it flat against the paper, sharpen only a slight amount of wood away on one side of the pencil (exposing only 1/8th-inch of lead), while on the opposite side cut it well back (expose about 1/2-inch or so). The extra wood on the upper face will obviously reenforce the lead.**

## MICROTOMIC VAN DYKE
## EBERHARD FABER

# 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.

CORNING-STEUBEN ARCHITECTURAL GLASS.—A.I.A. File No. 26. New looseleaf, spiral-bound catalog virtually constitutes a textbook on the subject of sculptured glass. As an introduction, a brief history is presented of the developments and uses of glass from its discovery to present-day applications. Data is given on the physical properties of glass, preparation of specifications, properties in illumination, and cementing materials. A selection of fifty stock and proprietary designs of decorative fixtures, exterior and interior illumination panels, lighting and ventilating grilles, pilaster caps, wall tile, fluted tubes, mouldings, etc., are listed and illustrated, accompanied by full size profiles and dimension drawings. Included are information sheets with examples showing methods of illuminating architectural glass. 118 pp. 8⅞ x 11¾. Corning Glass Works, Architectural Division, Corning, N. Y.

J & L JUNIOR BEAM FLOORS FOR RESIDENCES.—A.I.A. File No. 13-b. Handbook giving detailed information on the construction of a residential floor system of steel and concrete, built around the J & L Junior beam. Specifications, details, loading tables, sizes, weights and properties, etc. 24 pp. 8½ x 11. Jones & Laughlin Steel Corporation, Jones & Laughlin Bldg., Pittsburgh, Pa.

EXIDE-KEEPALITE EMERGENCY LIGHTING BATTERY SYSTEM.—A comprehensive presentation of the need and advantages of an emergency lighting and power system in hospitals, theatres, public buildings, hotels, stores, industrial plants, etc. 12 pp. 8½ x 11. The Electric Storage Battery Co., Philadelphia, Pa.

ROBERTSON KEYSTONE BEAM STEEL FLOOR.—Looseleaf reference book for architects and engineers devoted to the Robertson Keystone beam steel floor, a cellular structure, taking the form of keystone-shaped steel beams, adaptable to various types of floor finishes, and acting as an electrical floor duct system. Complete engineering data, detail drawings, loading tables. 36 pp. 8½ x 11. H. H. Robertson Co., Grant Bldg., Pittsburgh, Pa.

*Published by the same firm, "Robertson Keystone Beam Steel Floors for Low-cost Housing and Apartments." A.I.A. File No. 13-g-2. Illustrated publication discussing the adaptability and advantages of a type of steel flooring for apartment and low-cost housing construction. Included are descriptions of details of wall anchorage, framing methods around openings and assembly of the floor units with related construction. 12 pp. 8½ x 11.*

HOSPITAL FOOD SERVICE PLANNING DATA BOOK.—A.I.A. File No. 35-c. Valuable data book for architects dealing with all phases of the planning of proper facilities for the preparation and service of food in hospitals and institutions. Different types of service, practical kitchen layout, diet kitchens, nurses' cafeterias and other vital factors are all covered fully. 64 pp. 8½ x 11. The John Van Range Co., Fourth and Butler Streets, Cincinnati, Ohio.

NORGE REFRIGERATORS, COOKING AND HEATING EQUIPMENT.—A.I.A. File No. 32. New catalog covering the full line of Norge products, including Rollator refrigerators, gas and electric ranges, Whirlator oil burners, commercial refrigeration and Aerolators. Dimension drawings, kitchen layouts and other related data. Norge Corporation, Detroit, Mich.

WATER PIPE SIZES.—Booklet containing tables and data on water pipe sizes for plumbing fixtures, branches, risers and mains. Included is data on Bridgeport copper water tube and information on Bridgeport brass and copper pipe. 24 pp. 5½ x 8⅜. Bridgeport Brass Co., Bridgeport, Conn.

SERVICE FIXTURES, AND EQUIPMENT BY BRUNSWICK.—Catalog completely describing and illustrating a full line of service fixtures and equipment for hotels, clubs, restaurants, taverns, etc. 136 pp. 6 x 9. The Brunswick-Balke-Collender Co., 623 South Wabash Avenue, Chicago, Ill.

*Published by the same firm, "Bars by Brunswick." Looseleaf catalog illustrating a large number of bar installations in hotels, clubs, restaurants, etc. 50 pp. 10¾ x 14½.*

VICTOR NO-DRAFT FANS FOR 1935.—New catalog describing and illustrating a full line of Breeze-Spreader fans, combination fan and lighting fixtures, heat boosters and exhaust fans. Specifications. 20 pp. 8½ x 11. Victor Electric Products, Inc., 712 Reading Road, Cincinnati, Ohio.

G-E GRADED WIRING SYSTEMS.—A.I.A. File No. 31-C-61. A reference manual on the use of graded wiring systems, with time-saver specification tables to facilitate the work of architects and engineers. Included are descriptions of a complete line of wiring materials. 42 pp. 8½ x 11. General Electric Co., Merchandise Dept., Bridgeport, Conn.

HENDRICK PERFORATED METAL GRILLES.—A.I.A. File No. 30-e. Catalog showing standard and special designs of Hendrick grilles together with dimension tables giving the necessary information as to the daylight opening of the various styles and sizes of grilles. 36 pp. 7¾ x 10½. Hendrick Manufacturing Co., Carbondale, Pa.

BETTER WINDOWS.—A.I.A. File No. 16-e-1. New brochure fully illustrating Kawneer window construction in aluminum and bronze for many different uses. Descriptive data, detail drawings, etc. 22 pp. 8½ x 11. The Kawneer Company, Niles, Mich.

MODERN RADIATION.—New catalog with useful information for architects and heating engineers on the design and construction of Shaw-Perkins convector-radiators for residential, commercial, industrial and marine heating systems. Tabular matter, piping connections, etc. Shaw-Perkins Manufacturing Co., Oliver Bldg., Pittsburgh, Pa.

B & G HOT WATER HEATING DESIGN MANUAL.—A complete design manual for forced circulation hot water heating systems. The instructions are simplified into six steps, easy to read and apply. Included also are tables of heat loss coefficients and instructions for determining radiation by the B.T.U. heat loss method. 20 pp. Bell & Gossett Co., 3000 Wallace Street, Chicago, Ill.

GUTHFAN CONDITIONAIRE.—Catalog No. 6 describes and illustrates several new designs of Guthfan Conditionaires, also numerous popular types. Specifications. 16 pp. 8½ x 11. The Edwin F. Guth Co., St. Louis, Mo.

DELCO-HEAT.—Catalog giving complete descriptive and engineering data on Delco-Heat products, including automatic conditionaire units for residences and similar buildings, automatic residence heating units and automatic oil burners in types for small residences to commercial uses. 16 pp. 8½ x 11. Delco Appliance Corporation, Subsidiary of General Motors, Rochester, N. Y.

RIC-WIL CAST IRON CONDUITS.—Bulletin discussing the advantages of a line of cast iron conduits for insulating steam pipes under or near railroad tracks. 8½ x 11. The Ric-Wil Co., 1562 Union Trust Bldg., Cleveland, Ohio.

*Published by the same firm, "Ric-Wil Tile Conduit." Folder with descriptive and dimension data covering a type of heavy duty tile conduit for steam lines under traffic. 8½ x 11.*

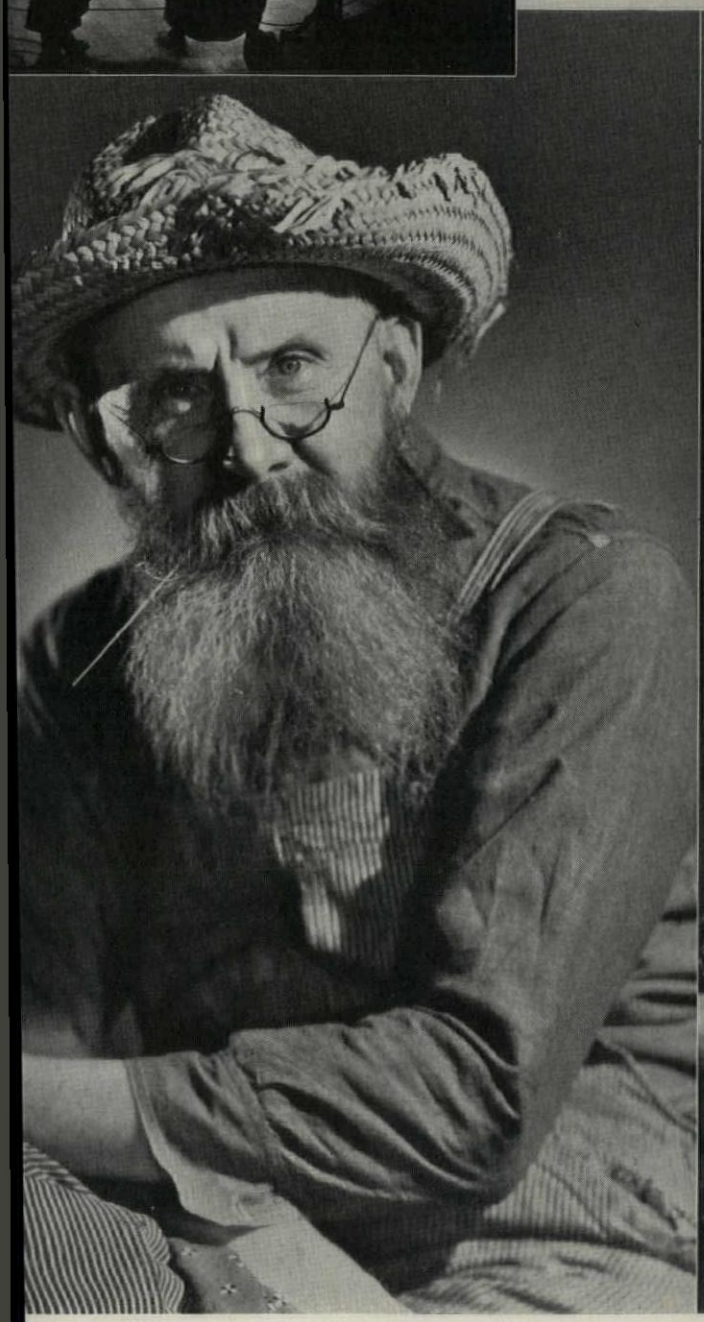
EVANS VANISHING DOOR.—A.I.A. File No. 28-b-33. Catalog N fully describes and illustrates numerous types of vanishing door wardrobes for use in schools, hotels, hospitals, offices, apartments and homes. Construction and installation details. 8 pp. 8½ x 11. W. L. Evans, Washington, Ind.

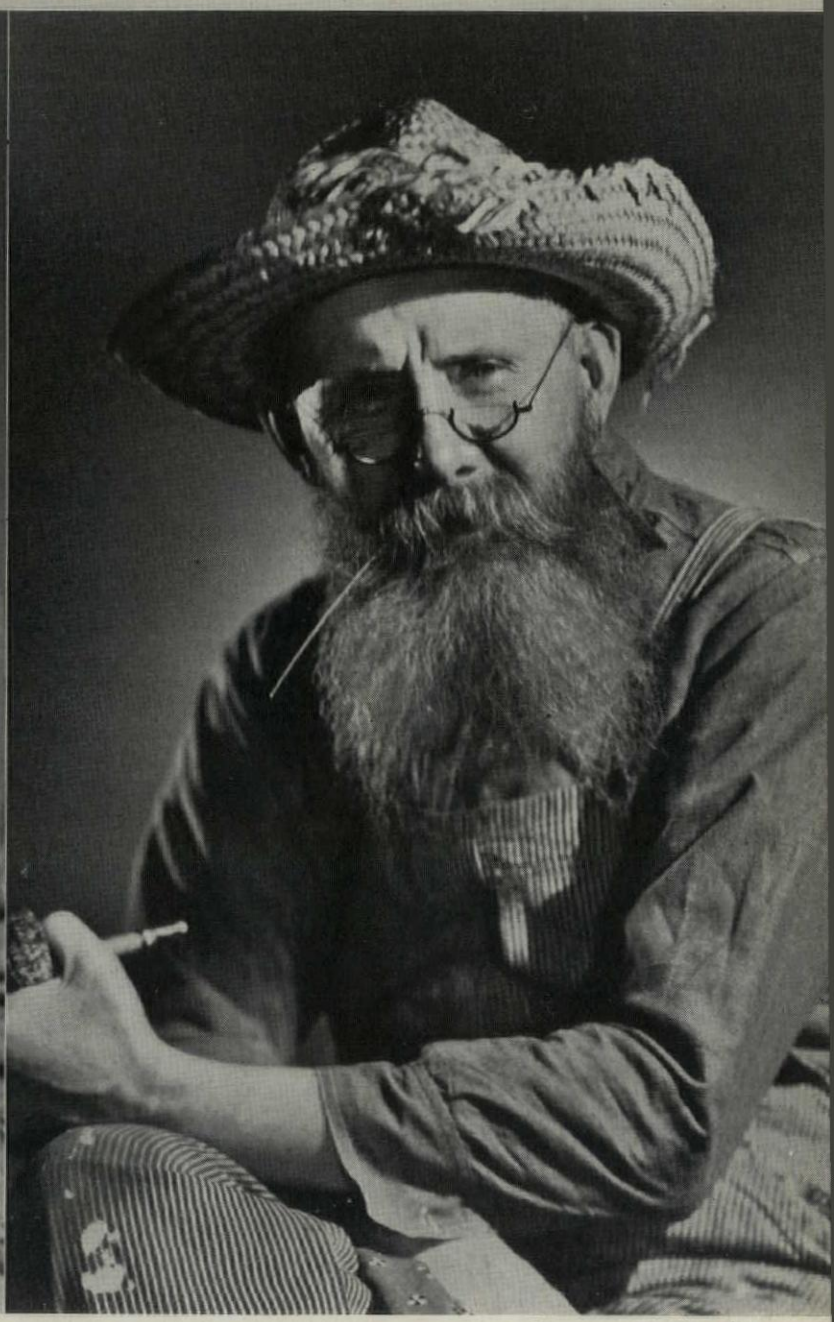
BRONZE FACTS.—Folder discussing the merits of genuine cast bronze for memorial statuary. American Art Bronze Foundry, 4921 West Lake Street, Chicago, Ill.

*(Continued on page 34)*

# Even the PHOTOGRAPHER was stumped

**Even the photographer was stumped! John Paul Pennybaker, of Underwood & Underwood Illustration Studios, took these two photographs . . . one THROUGH a piece of L·O·F Quality Window Glass, and the other with NOTHING between the camera and the subject. When a proof of this page was shown to him EVEN HE COULDN'T TELL WHICH WAS WHICH.**





**en the keenly critical eye of a camera fails to pick the st indication of distortion through a piece of window hat is surely obvious indication of extreme clearness tness. No technical test, to be sure, but a very practi· monstration of quality . . . evidence enough to explain many leading architects write a closed specification To protect the architect, the client and the Libbey· Owens · Ford standard of quality, each light of L·O·F Quality Window Glass is plainly labeled. It is advisable to instruct contractors to leave the labels on.**

**Libbey · Owens · Ford Glass Company . . . Toledo, Ohio.**

**LIBBEY · OWENS · FORD QUALITY GLASS**

# PUBLICATIONS ON MATERIALS AND EQUIPMENT

*(Continued from page 32)*

PERSONALITY BATHROOMS AND CHARACTER KITCHENS.—Handsome brochure, printed in full colors, illustrates numerous designs for bathrooms and kitchens showing the various wall treatments made possible with Carrara structural glass. 16 pp. 8¾ x 11½. Pittsburgh Plate Glass Co., Grant Bldg., Pittsburgh, Pa.

CALDWELL SASH BALANCES.—A.I.A. File No. 27-a-1. Complete descriptive and installation data covering the Caldwell line of sash balances. Specifications, installation details, hardware specialties. 20 pp. 8½ x 11. Caldwell Manufacturing Co., Rochester, N. Y.

STAINLESS IN THE HOME.—Booklet intended to visualize the numerous possible uses of stainless metal in the home. 12 pp. 6 x 9. The American Stainless Steel Co., Commonwealth Bldg., Pittsburgh, Pa.

ANACONDA THROUGH-WALL FLASHING.—Descriptive bulletin covering a line of through-wall flashings. Coping, parapet and cornice details. 4 pp. 8½ x 11. The American Brass Co., Waterbury, Conn.

YORKCO COLD STORAGE DOORS.—Looseleaf catalog describing the construction features of a line of cold storage doors. Detail drawings, hardware, etc. 34 pp. 8½ x 11. York Ice Machinery Corp., York, Pa.

LAMINEX PLYFORM.—A.I.A. File No. 4-d-2. New publication discussing the advantages of Plyform, a special plywood adaptable for concrete form construction. Specifications, charts, drawings. 8 pp. 8½ x 11. Wheeler-Osgood Sales Corporation, 122 S. Michigan Avenue, Chicago, Ill.

SLOANE-BLABON LINOLEUM FLOORS.—A.I.A. File No. 23-j. Useful reference guide for architects and specification writers dealing with the subject of Sloane-Blabon linoleum. Color plates, specifications, tabular matter. 10 pp. 8½ x 11. W. & J. Sloane Selling Agents, Inc., 577 Fifth Avenue, New York, N. Y.

*Published by the same firm, "Terano and Marbletone Inlaid Linoleum." A collection in booklet form of 25 four-color reproductions of Sloane-Blabon inlaid linoleum patterns. 20 pp. 8½ x 11.*

THE NEW DURO-BRACE TEXSTEEL SHEAVES.—Bulletin No. 2188 is devoted to a description of the newly-developed Duro-Brace Texsteel sheave for Texrope drives. Tabular matter. 12 pp. Allis-Chalmers Mfg. Co., Milwaukee, Wis.

STEWART PLAIN AND ORNAMENTAL IRON PICKET FENCES.—Catalog No. 76 presents designs and photographic views of standard Stewart plain and ornamental iron picket fences and gates. Included is information on chain link wire fences and gates. Construction details. 88 pp. The Stewart Iron Works Co., Inc., Cincinnati, Ohio.

*Published by the same firm, "Stewart Chain Link Wire Fences." Catalog No. 75. A presentation of the Stewart line of chain link wire fences. 44 pp.*

*"Stewart Book of Designs." Catalog C contains many interesting illustrations of Stewart fence installations of a special and highly ornamental nature. 96 pp. 9 x 12.*

ANDELCO AIR CONDITIONING EQUIPMENT AND SYSTEMS.—A reference guide for architects and engineers dealing with the subject of Andelco air conditioning equipment and systems. Typical layouts, capacity tables, roughing-in dimensions. 20 pp. 8½ x 11. Andel & Co., 4630 N. Lamon Avenue, Chicago, Ill.

*Published by the same firm, "Lightproof Curtains." A.I.A. File No. 35-d-55. Descriptive folder with detail drawings covering a line of lightproof curtains for school auditoriums, lecture and class rooms, laboratories, etc. 6 pp. 8½ x 11.*

FEDDERS COOLING AND DEHUMIDIFYING COILS.—Catalog No. 91. Data book covering a new line of cooling and dehumidifying coils for air conditioning. Capacity tables, charts, etc. 28 pp. Fedders Manufacturing Co., 57 Tonawanda Street, Buffalo, N. Y.

NATIONAL SAFECOTE "FIRE-STOP" WIRES AND CABLES.—A.I.A. File No. 31-c-671. Catalog with complete descriptive and specification data covering the National line of rubber covered wires and cables. Color chart, test data, tabular matter. 32 pp. 8½ x 11. National Electric Products Corporation, Pittsburgh, Pa.

ZURN BUILDING DRAINAGE PRODUCTS.—A.I.A. File No. 29-c. New looseleaf catalog containing 125 blueprint details with dimension charts and list prices covering a full line of drains, fittings, interceptors and specialized building drainage products. Indexed. 8½ x 11. J. A. Zurn Manufacturing Co., Erie, Pa.

ARCHITECTRAL CONCRETE.—A.I.A. File No. 4. Among the concrete structures featured in issue Number 4 of this new series of brochures are the Music Pavilion at Sioux City, Ia., Krape Park Bridge, Freeport, Ill., and the Grand Palace at Brussels, Belgium. Detail drawings in this issue cover copings and parapets. 22 pp. Portland Cement Association, 33 West Grand Avenue, Chicago, Ill.

EAGLE-PICHER HEAT INSULATION.—Useful reference manual, for architects and engineers on the subject of heat insulation, describes and illustrates a complete line of fill materials, flat materials, plastic materials, pipe insulation and home and building insulation. Reference tables. 54 pp. 8½ x 11. The Eagle-Picher Sales Co., Temple Bar Bldg., Cincinnati, Ohio.

CHASE ARCHITECTURAL BRONZE EXTRUDED SHAPES.—A.I.A. File No. Q-1.1. Valuable looseleaf reference guide presenting the information necessary for specifying Chase architectural bronze and nickel silver in extruded form. Photographs and detail drawings have been included to show actual applications of standard extruded bronze shapes to current problems of design. The illustration of extruded shapes, together with the working drawings and specifications, provide tools from which designs may be detailed. 100 pp. 8½ x 11. Chase Brass & Copper Co., Inc., Waterbury, Conn.

*Published by the same firm, "What to Do About Remodelling." A book of helpful information in remodeling, repairs and replacements, with special reference to Chase brass and copper building products. 24 pp. 8½ x 11.*

LATE AMERICAN FLOORS.—Catalog presenting a discussion of the problems confronting architects and engineers in connection with the installation of mastic-set wood floors, together with a brief history of old and modern flooring types, resilient floor construction, concrete subfloors, mastics, accessories and Ironbound floors. Patterns, details, specifications. 44 pp. 9 x 12. Robbins Flooring Co., Rhinelander, Wis.

MARSHTILE.—A.I.A. File No. 23-d. Bulletin covering a modern low-cost tile wall finish for home and commercial use. Descriptive, specification and application data, color chart, etc. 4 pp. 8½ x 11. Marsh Wall Tile Co., Dover, Ohio.

*Published by the same firm, "Marshmarble." A.I.A. File No. 23-1. Descriptive data sheet on the subject of Marshmarble, a permanent, sanitary and actual reproduction of rare imported marbles in the original colors, in large lightweight panels, easily applied over old or new walls. 8½ x 11.*

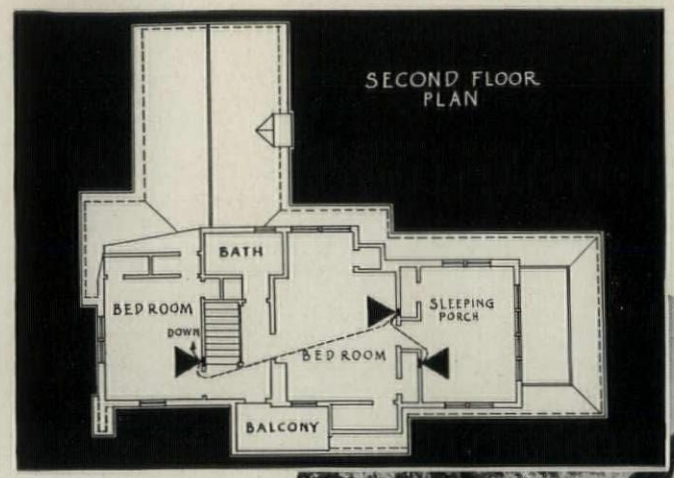
SYLPHON AUTOMATIC RADIATOR VALVES.—Bulletin No. 255 presents a detailed description of Sylphon thermostatic radiator valves for the automatic modulation of building temperatures. Application data, specifications, dimensions, etc. 28 pp. 8½ x 11. Fulton Sylphon Co., Knoxville, Tenn.

O'BRIEN THERMOLYZED TUNG OIL PAINTS AND VARNISHES.—New publication discussing the development of thermolyzed tung oil and describing the various finishes produced with this new type of oil. Specifications. 20 pp. 8½ x 11. O'Brien Varnish Co., South Bend, Ind.

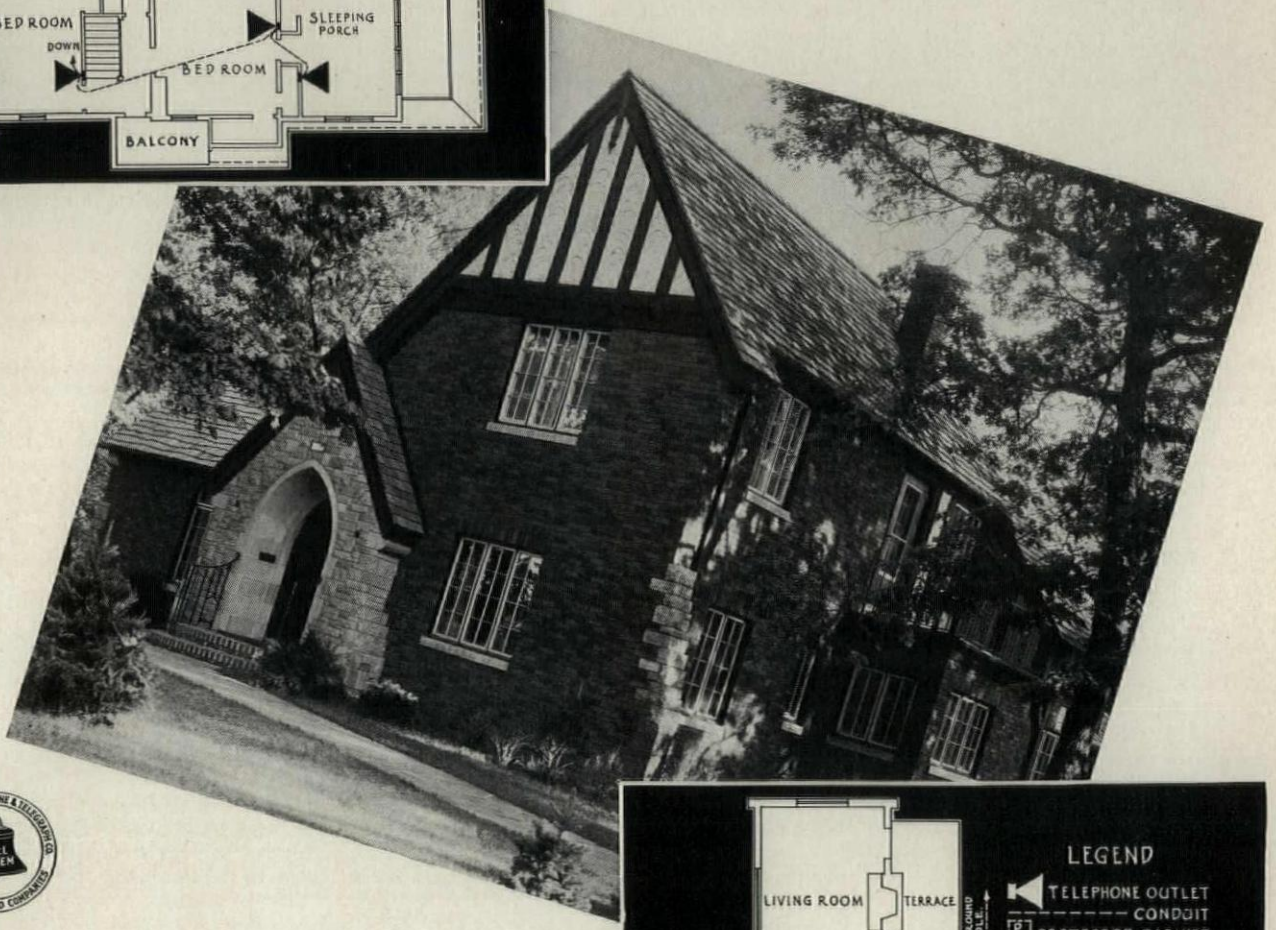
BURNHAM AUTOMATIC COSY COMFORT HEAT.—Attractive brochure, giving a detailed description of the Burnham built-in oil burning boiler. Specification data and measurement tables. 16 pp. 8½ x 11. Burnham Boiler Corporation, Irvington, N. Y.

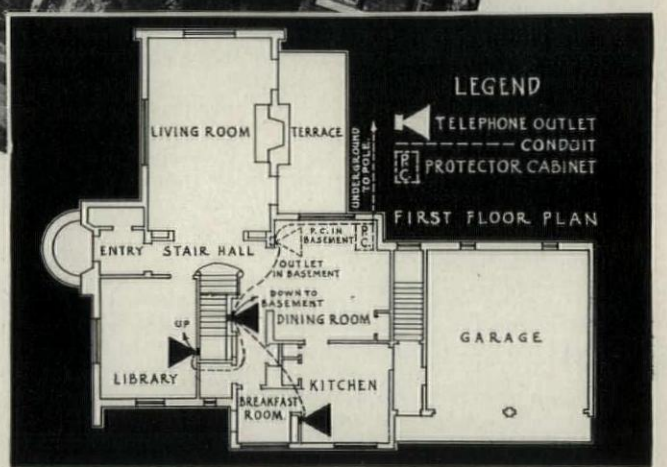
*Published by the same firm, "Burnham Home Heating Helps." Catalog covering the Burnham line of automatic gas, oil and coal fired heating boilers, radiators, valves and hot water systems. 22 pp. 8½ x 11.*

*(Continued on page 36)*




# Well-planned, built-in telephone arrangements help make this A MODEL HOME






*Built-in conduit and seven outlets, including one in the basement, provide for telephone convenience in the residence of Mr. Carl Mussetter, 1116 Chautauqua Parkway, Des Moines, Iowa. This was the 1933 model home sponsored by the "Des Moines Register & Tribune." Carl V. Johnson, Architect, Des Moines.*

**The architect of this model home comments: "Certain features must be incorporated in the home of today for the fullest comfort and convenience of the owner. Proper telephone provision is one of them. Too often it is neglected on the excuse, 'We can always get the telephone in.' While this is true, it cannot be done as easily and neatly as when properly planned for.**

**"Since it *is* so easy and inexpensive to provide adequate telephone arrangements at the time of building, I believe it should be carefully considered — telephone service brought in like electric service in the least conspicuous way — and telephone outlets located where they may be needed for the present and the future."**

**Because of increased activity in home modernization and new home construction, there should be many projects in which the installation of telephone conduit will make grateful clients. Just call your telephone company Business Office for full details.**

*FOR FURTHER INFORMATION ON BELL SYSTEM TELEPHONE SERVICES AND EQUIPMENT, SEE SWEET'S CATALOGUE*

# PUBLICATIONS ON MATERIALS AND EQUIPMENT

*(Continued from page 34)*

SOLVE YOUR FLOORING PROBLEMS WITH GENASCO TRINIDAD LAKE ASPHALT MASTIC.—Illustrated publication, dealing with the subject of Genasco Trinidad Lake asphalt mastic, describes its preparation, uses and methods of application. 36 pp. 6 x 9. The Barber Asphalt Co., 1600 Arch Street, Philadelphia, Pa.

HOPE'S COTSWOLD CASEMENTS.—A.I.A. File No. 16-2-1. New bulletin with specification and descriptive data covering Hope's screened Cotswold casement. Types and sizes, full size details. 4 pp. 8½ x 11. Hope's Windows, Inc., Jamestown, N. Y.

*Published by the same firm, "Hope's Leadwork." A.I.A. File No. 16-e-1. New folder illustrating inexpensive but well designed examples of rainwater materials in cast lead and lead coated copper for moderately priced residences or for larger projects. 4 pp. 8½ x 11.*

CABOT'S CREOSOTE SHINGLE AND WOOD STAINS.—A.I.A. File No. 25-c-11. Descriptive booklet, accompanied by color chart, covering the Cabot line of creosote shingle and wood stains. Samuel Cabot, Inc., 141 Milk St., Boston, Mass.

PACEMAKING IN DECORATION.—New brochure showing numerous suggested wall and ceiling treatments with Nu-Wood predecorated interior finish units. Application instructions, specifications and wall and ceiling patterns. 24 pp. 8½ x 11. Wood Conversion Co., First National Bank Bldg., St. Paul, Minn.

STANDARD SPECIFICATIONS FOR GYPSUM PLASTERING.—A.I.A. File No. 21-a-2. New publication giving complete specifications covering the mixing and application of the different kinds of gypsum plasters applied to various bases. Included are specifications covering the mixing and application of the usual type of finishes commonly employed. 12 pp. 8½ x 11. Gypsum Association, 211 West Wacker Drive, Chicago, Ill.

*Published by the same firm, "The Fire Resistance of Gypsum Plaster." A.I.A. File No. 21-a-2. New document presenting factual information on the fire protection afforded by gypsum plaster, which data is taken from the reports of fire tests conducted by the Underwriters' Laboratories and by the Bureau of Standards. 8 pp. 8½ x 11.*

ANDERSEN CASEMENT WINDOW.—Bulletin with detail drawings and descriptive data on a complete casement window unit, including frame, sash, hardware, and screen. Table of sizes. 6 pp. 8½ x 11. Andersen Frame Corporation, Bayport, Minn.

*Published by the same firm, "Andersen Master Frame Sizes." Bulletin on the subject of Andersen master frames giving tables of glass sizes, sash openings and rough openings. 4 pp. 8½ x 11.*

GIMCO ROCK WOOL.—Bulletin No. 100 describes briefly the various types of Gimco rock wool insulation that are available and the conditions and purposes for which they are designed. Test data. 8 pp. 8½ x 11. General Insulating and Manufacturing Co., Alexandria, Ind.

CELOTEX SPECIFICATIONS.—A.I.A. File No. 37-a-1. Useful reference document for architects and draftsmen on the subject of Celotex building board, lath, sheathing and tile board. Included are specifications, physical properties and general information on Celotex products. 12 pp. 8½ x 11. The Celotex Co., Chicago, Ill.

NEW ACOUSTICAL MATERIALS ASSOCIATION BULLETIN.—Bulletin No. 2 includes test data on a number of new acoustical materials. Data on some obsolete materials have been eliminated. Acoustical Materials Association, 919 North Michigan Avenue, Chicago, Ill.

MASONITE TEMPRTILE SPECIFICATIONS.—Bulletin presenting instructions and specifications for installing and finishing Masonite Temprtile, suitable for both new construction and for modernizing present buildings. 4 pp. 8½ x 11. Masonite Corporation, 111 W. Washington Street, Chicago, Ill.

MILCOR REVISED PRICE LIST.—Revised price list covering a complete line of sheet metal building products and fireproof building materials. Among the new building products listed and illustrated are American metal tile, Milcor special ventilator, bull nose corner beads, steel basement windows and Steelcraft plaster base. 130 pp. Milcor Steel Co., Milwaukee, Wis.

RICHARDS-WILCOX OVER-WAY DOORS.—A.I.A. File No. 27-c-6. Catalog A-75 deals with subject of sectional and one-piece "Over-Way" doors for private and public garages, industrial buildings, airplane hangars, etc. Included are construction and installation data and drawings, also information on electric operators. 16 pp. 8½ x 11. Richards-Wilcox Manufacturing Co., Aurora, Ill.

KLIEG STAGE LIGHTING EQUIPMENT.—Bulletin No. 106 features Klieglights and other studio lighting equipment and accessories for motion picture, sound and commercial photography, including the new Klieglights and several other entirely new units lately placed on the market. It gives a complete description of the various units, their applications and other details. 16 pp. 8½ x 11. Kliegl Bros., 321 West 50th Street, New York, N. Y.

H & H WIRING DEVICES.—Catalog "V" lists and illustrates a complete line of wiring devices, including flush and lamp receptacles, sockets, switches, plates, attachment plugs, combination units, etc. Wiring diagrams, list prices, etc. Indexed. 58 pp. 8½ x 11. Hart & Hegeman Division, The Arrow-Hart & Hegeman Electric Co., Hartford, Conn.

RED TOP WEATHERWOOD INSULATING BOARD.—Attractive brochure designed to show largely by illustration the use of Weatherboard insulating board and tile as an interior wall and ceiling finish in homes, gymnasiums, schools, libraries, churches, offices, stores, theatres, etc. Color plates show variety of patterns and decorative possibilities of this material. 32 pp. 8½ x 11. United States Gypsum Co., 300 W. Adams Street, Chicago, Ill.

ARCHITECTURAL CONCRETE.—First of a series of useful monographs, aimed to keep the architect, engineer and contractor informed of developments pertaining to the use of reinforced concrete as an architectural material, describes and illustrates a group of well-designed reinforced concrete buildings of several types. Included is a set of detail plates intended for filing purposes. 24 pp. Portland Cement Association, 33 W. Grand Avenue, Chicago, Ill.

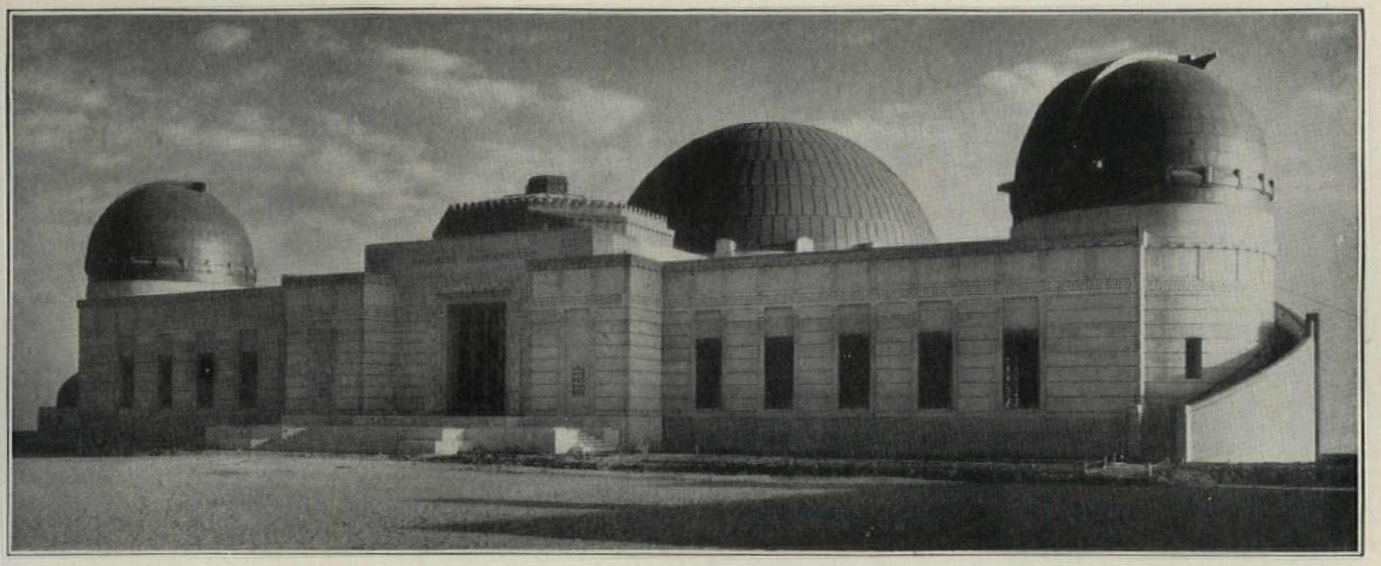
PITTCO STORE FRONT METAL.—A.I.A. File No. 26-b-1. Folder announcing and completely describing a newly designed metal store front construction, which offers a double yielding cushion grip on glass. Included is set of detail drawings showing various applications of this new store front metal, including its use with Carrara structural glass. 8½ x 11. Pittsburgh Plate Glass Co., 2316 Grant Building, Pittsburgh, Pa.

VENEER AND PLYWOOD (PANELS) SPECIFICATIONS AND DESCRIPTIVE DATA.—A.I.A. File No. 19-e. New bulletin presenting for the first time fully illustrated information essential to clear descriptive and accurate specification of panel faces for the various types and large variety of face veneers. The information is designed to enable the architect, designer, woodworker and manufacturers to secure the precise effects desired. All of the principal native cabinet woods as well as many foreign varieties have been included. 8 pp. 8½ x 11. American Walnut Manufacturers' Association, 616 South Michigan Avenue, Chicago, Ill.

ARMSTRONG'S TEMLOK BUILDING INSULATION.—A.I.A. File No. 37-b-4. Useful reference manual for architects and specification writers, presenting complete specifications and data for the use of Temlok for general applications in building construction. Application details. 16 pp. 9¼ x 11¾. Armstrong Cork Products Co., Temlok Division, Lancaster, Pa.

COPPER-COVERED ROBERTSON PROTECTED METAL.—Bulletin illustrating and describing a new product which consists of the standard Robertson protected metal with a surface of Anaconda electro-sheet copper, suitable for roofing and siding applications. Blue print details. 4 pp. 8½ x 11. H. H. Robertson Co., Grant Building, Pittsburgh, Pennsylvania.

*(Continued on page 38)*



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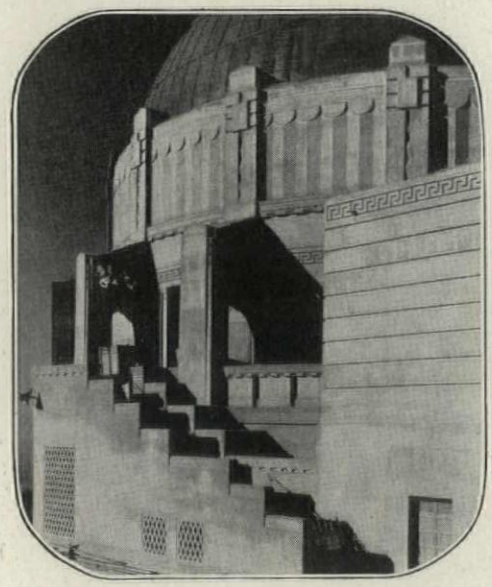
# Generations Yet Unborn will admire and enjoy this monument of MONOLITHIC CONCRETE

"FOREVER AND EVER" men may search the eternal stars from the Griffith Observatory and Hall of Science. All that men have learned about building since they labored on the pyramids, was available to those who planned it. They demanded a structure that would rest in distinctive beauty on the everlasting slopes of Hollywood Mountain, defying time and fire and storm and decay and even earthquakes. Monolithic concrete was chosen as the ideal means of attaining all these objectives.



*Detail of Griffith Observatory. Domes over the Planetarium and the Foucault Pendulum are of concrete and copper.*

Exceptional care was exercised in the selection and grading of aggregates. The proper cement-and-water ratio was rigidly adhered to. All concrete was adequately manipulated. Rustication, vertical ornaments and other architectural features made it possible to deposit concrete in masses of reasonable size. Scientific design was matched by conscientious supervision of construction.

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# PUBLICATIONS ON MATERIALS AND EQUIPMENT

*(Continued from page 36)*

"WHAT ABOUT YOUR ROOFS?"—New brochure dealing extensively with roof construction and maintenance problems. Among the subjects discussed are included the importance of the "stitch-in-time" on roof repairs; the physical properties and characteristics of various types of built-up roofing materials; and roof insulation. A new complete roof unit, which combines steel deck, insulation and waterproofing, all in one unit structure, is also described. 18 pp. 8½ x 11. Johns-Manville, 22 East 40th Street, New York, N. Y.

BASMOR GAS-FIRED BOILERS.—A.I.A. File No. 29-F-4. Architects' and engineers' handbook dealing with the subject of gas-fired boilers for steam, vapor and hot water heating systems. Descriptive and technical data, tabular matter. Specifications. 20 pp. 8½ x 11. Crane Co., 836 South Michigan Avenue, Chicago, Ill.

*Published by the same firm, "Crane Gas Water Heaters." Bulletin explaining in detail the construction and operation of Crane automatic gas water heaters. Installation data, specifications, tank capacities, suggested hook-ups, etc. 16 pp. 8½ x 11.*

HOW TO PAINT CONCRETE STUCCO AND OTHER MASONRY SURFACES.—New publication on the subject of Medusa portland cement paint shows how exterior and interior masonry and concrete surfaces can be painted in white or colors. Complete directions for using cement paint and floor coating are included. Profusely illustrated. 20 pp. 8½ x 11. Medusa Portland Cement Co., 1000 Midland Building, Cleveland, Ohio.

RED TOP METAL LATH RESILIENT SYSTEM.—New publication giving detailed description of a fireproof plastering system designed to reduce transmission of sound. Construction data, specifications, construction details. 8 pp. 8½ x 11. United States Gypsum Co., Steel Products Division, 300 W. Adams Street, Chicago, Ill.

ARMCO STAINLESS STEELS.—New bulletin setting forth the outstanding features of Armco stainless steels. 4 pp. 8½ x 11. The American Rolling Mill Co., Middletown, Ohio.

JOHNS-MANVILLE ASBESTOS FLEXBOARD.—New folder, dealing with the subject of Flexwood, shows the four pastel shades in which this material is furnished and names and illustrates a few of the many uses for it in homes, stores, restaurants, commercial buildings, etc. 4 pp. 8½ x 11. Johns-Manville, Inc., 22 East 40th Street, New York, N. Y.

CORCORAN CABINETS.—New catalog covering a wide range of one-piece steel bathroom cabinets. Dimension data. 16 pp. 8½ x 11. The Fries & Son Steel Construction and Engineering Co., Covington, Ky.

THRU-BOND CORRUGATED EXPANSION WALL FLASHING.—A.I.A. File No. 12-h-1. Folder describing and illustrating the advantages of a metal wall flashing formed with alternating corrugated and flat surfaces. Specifications, detail drawings, etc. Thrubond Flashing Corporation, 525 East 136th Street, New York, N. Y.

THE NATIONAL LINE.—New booklet illustrating and briefly describing a complete line of National bonded heating and hot water supply boilers and Aero radiators and convectors. 24 pp. National Radiator Corporation, Johnstown, Pa.

SILENTITE—THE MODERN WINDOW UNIT.—New catalog describing the construction features of a pre-fit window unit, consisting of a frame, window, spring balancing, weatherstripping devices, trim, screen, storm sash and attaching hardware. 16 pp. 8½ x 11. Curtis Companies Service Bureau, Clinton, Iowa.

THE NEW SEDGWICK ELECTRIC ROTO-WAITER.—A.I.A. File No. 33-d-1. Folder with descriptive and specification data covering a new type of automatic, electric dumbwaiter equipment. 4 pp. 8½ x 11. Sedgwick Machine Works, 150 West 15th Street, New York, N. Y.

QUIETILE.—New bulletin describing a decorative interior tile finish used to absorb sound and correct noisy conditions in offices, banks, restaurants, schools, theatres, auditoriums and hospitals. Color charts. 6 pp. 8½ x 11. United States Gypsum Co., Sales Engineering Division, 300 W. Adams Street, Chicago, Ill.

HEATING DATA.—Handy pocket-size booklet for architects, engineers and contractors, giving the necessary information for layout, design, checking and installation of heating and oil burning equipment. Ratings and dimensions of Gar Wood units are also included. 16 pp. Gar Wood Industries, Inc., Air Conditioning Division, 7924 Riopelle Street, Detroit, Mich.

HEAT ACCELERATION.—New publication on the subject of heat acceleration explaining what it is and how it differs from heat anticipation. Included is complete data covering the construction and operation of the T17 heat accelerated thermostat. 20 pp. 8½ x 11. Minneapolis-Honeywell Regulator Co., Minneapolis, Minn.

STANDARD LIGHT-WEIGHT FAN SYSTEM DIRECT EXPANSION COOLING SURFACE.—A.I.A. File No. 30-c-4. Bulletin D.E.-34, just issued, describes a new line of standardized light-weight fan system cooling surface for direct expansion refrigerants. Detailed information and data in the form of tables, charts and diagrams, which may be used to apply Aerofin cooling surface to a variety of cooling and air conditioning problems, is a feature of the new publication. 16 pp. 8½ x 11. Aerofin Corporation, Newark, N. J.

BETHLEHEM LIGHT SECTIONS.—New catalog No. 78, discussing the advantages of Bethlehem light beams, columns, joists and stanchions for the economical construction of buildings where the loads are relatively light, such as hospitals, schools, apartment houses, hotels and large residences. Nominal dimensions and weight data are included. 16 pp. 8½ x 11. Bethlehem Steel Co., Bethlehem, Pa.

OUTMODED STORES BROUGHT UP-TO-DATE WITH NEW PITTCO STORE FRONTS.—New publication illustrating many "before" and "after" views of typical modernized store fronts. Detailed description of the various products used in their remodeling is included. 24 pp. 8⅜ x 11. Pittsburgh Plate Glass Co., Grant Bldg., Pittsburgh, Pa.

NEW WEBER-COSTELLO BLACKBOARD CATALOG.—A.I.A. File No. 35-b-12. A comprehensive blackboard catalog, prepared especially for architects, includes details, specifications, installation directions and other important reference information. Catalog and separate envelope containing duplicate pages of details and specifications are enclosed in handy file folder equipped with two pockets containing architects' samples. 8½ x 11. Weber-Costello Co., Chicago Heights, Ill.

PECORA HIGH PRESSURE CARTRIDGE CALKING GUN.—New bulletin illustrating and describing the operation of a new cartridge gun for applying calking compound. 4 pp. 8½ x 11. Pecora Paint Co., Third Street and Sedgley Avenue, Philadelphia, Pa.

THE NEW ROPER GAS-FIRED HEATING AND AIR CONDITIONING SYSTEMS.—Folder explaining the outstanding features of a new complete forced air heating and air conditioning system. Sizes and capacities. 8½ x 11. Geo. D. Roper Corporation, Rockford, Ill.

ROPER GAS-FIRED WARM AIR GRAVITY AND FORCED AIR FURNACES.—Catalog S. A looseleaf reference manual for architects and heating engineers covering a line of gas-fired warmed air furnaces. Included is detailed description of the Roper air conditioning system, together with tabular matter and suggestions for figuring furnace installations and estimating heating costs. 26 pp. 8½ x 11. Geo. D. Roper Corporation, Rockford, Ill.

ENDURO 18-8.—Booklet 125-A. New edition of the subject booklet containing latest authentic data on the various members of the Enduro 18-8 family of stainless steels. Information is included on the following: Enduro 18-8, Enduro 18-8-S, Enduro 18-8-STI, Enduro 18-8-SMO, Enduro 18-8-B and Enduro 18-8-FM. Included is a table showing the degree of corrosion-resistance exerted by Enduro stainless steel, types 18-8, S and AA in the presence of several hundred individual chemicals, solutions and other reagents. Republic Steel Corporation, Massillon, Ohio.

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POSITION WANTED: Connection with some good construction company having offices in foreign countries desired. E. Dean Cowley, 1592 Pine Avenue, Long Beach, Calif.

POSITION WANTED: Graduate in architectural engineering from University of Detroit desires position with structural engineer or architect. Age 22, single. Will go anywhere. Harry Newman, 2482 Clairmount, Detroit, Michigan.

POSITION WANTED: Junior draftsman experienced in clerical work. Senior year in architectural schooling at Columbia and Beaux-Arts. Ornamental metal, detail work and small residence experience. George L. Werra, 3706—81st Street, Jackson Heights, N. Y.

POSITION WANTED: Architectural draftsman, 42, desires employment in Latin America, Japan, Manchukuo or other Oriental countries. More than 11 years' experience, preparing working drawings and details of residences, apartments, small industrial buildings, schools, etc. Salary open. Draftsman, P. O. Box 2402, Honolulu, T. H.

POSITION WANTED: Secretary-stenographer, part time. Thoroughly experienced in architect's specifications. Will call for and deliver work. All work neatly and carefully done most reasonably. Call ENdicott 2-5198 evenings.

POSITION WANTED: Single man, 33. Bachelor of Architecture; work practically complete toward M.A. degree. Small-house experience, with intensive work in pen rendering for publication and in perspective. Bookkeeping and typing experience. Model making and landscape design training. Wish to make connection where I can grow up with firm, with view of eventual junior partnership. Will go anywhere. References. Correspondence invited. A. F. Bordeleau, 4537 First Avenue South, Minneapolis.

POSITION WANTED: Young man, 21, unable to attend college, desires to enter architect's office to learn. Have had 4 years of architectural training, Smith-Hughes course at Lane Technical School in Chicago. Also a year of drafting experience. Willing to travel. Living expenses only wage expected. Edward Kuklinski, 906 N. Trumbull Avenue, Chicago, Ill.

PARTNERSHIP WANTED: An architect, age 34, is looking to buy a partnership or outright an office in a town between 50,000 and 150,000 population. Office must show good income before 1930. Have had 16 years' experience in architecture and schooled at Armour and Art Institute, evenings, Chicago, Ill. Prefer office where architect is expecting to retire from business. Must have good reputation. Am able to take complete charge of any office. Will be interested in any place in the United States or Canada. In replying state as much as possible so as to avoid any unnecessary correspondence, giving fully town, class of work, amount of contemplated work and your proposition. Box No. 400.

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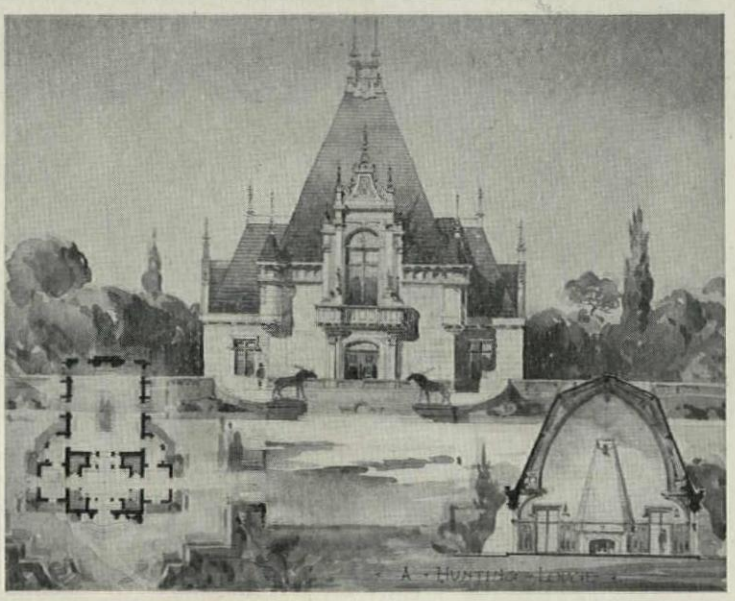

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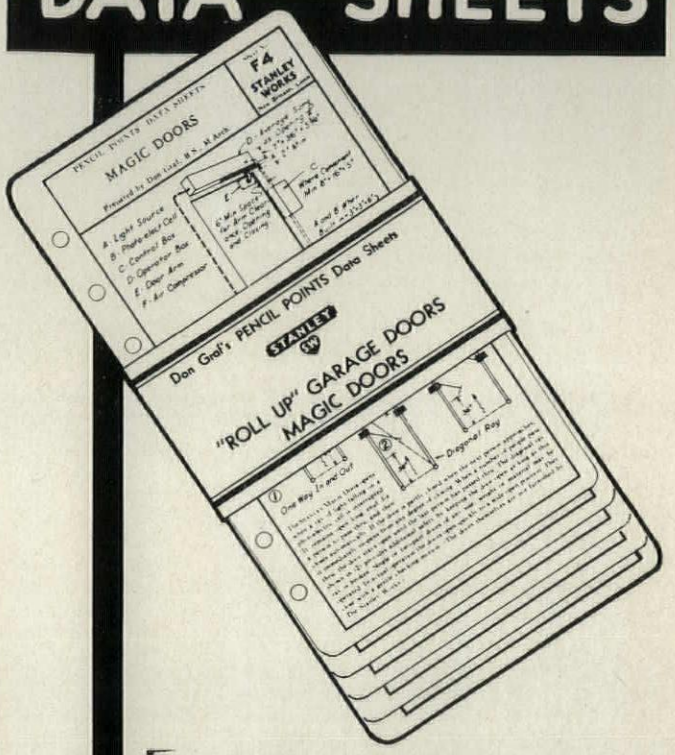


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## *New York Chapter Enlarges Its Educational Program*

Encouraged by the success of its first lecture course "History of the American Labor Movement," the New York Chapter of the Federation of Architects, Engineers, Chemists and Technicians has decided to repeat its eight lectures on this subject. Mr. David Lurie, M.A., a research worker in American history, gives in this a survey of employee organization in America from the Revolutionary War to the present day. Emphasis is placed on recent efforts in white collar worker organization.

A new course in Public Speaking will be given as an answer to the Federation's need for trained speakers who can present its program to civic and labor groups. Fees for each of these two courses are $1.00 for employed and 50 cents for unemployed Federation members.

To those who like their architecture mixed with metaphysics, the education committee has presented the following group of lectures in New York under the heading: "Is Architecture Dead? Are Architects Extinct?" Eugene Schoen discussed "The New City"; Catherine Bauer, "The A. F. of L. and Housing" (March 29); Clarence Stein, "The Old Method and the New Technique" (April 3); Lewis Mumford will show "Why the Architect Must Be a Sociologist" (April 10 at 9:00 p.m.); and Meyer Schapiro will prophesy on "The Future of the Architect" (April 17 at 8:00 p.m.). Admission is twenty-five cents to all, members and visitors. Considerable time is allowed for discussion after each lecture.

## *Organizational Activities of the New York Chapter*

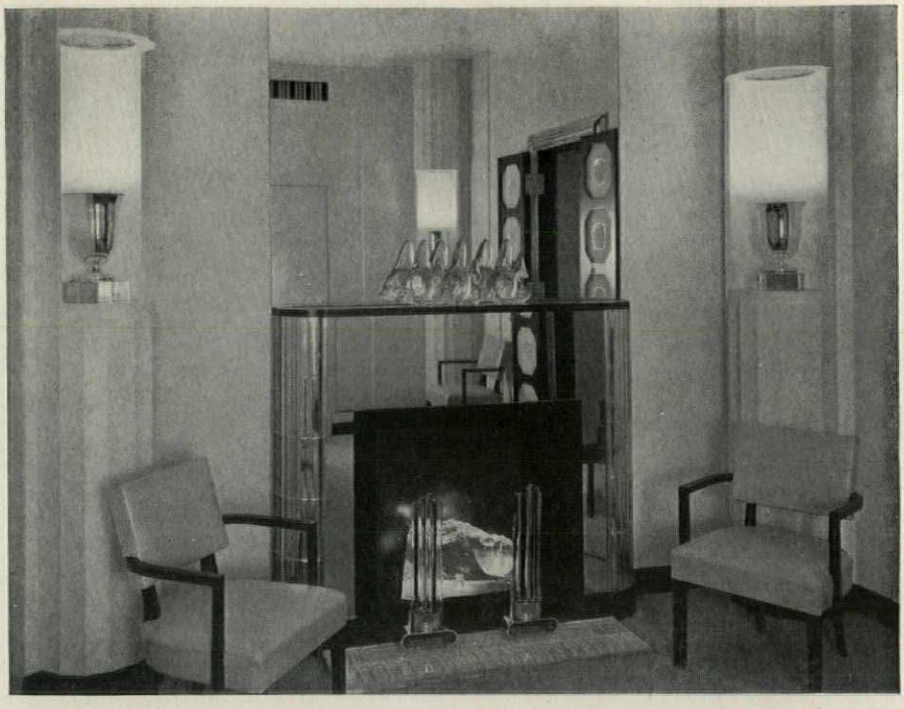
Recently, the Executive Committee of the New York Chapter decided to publish the "New York Technical Record." This publication will be printed independently of the National organ, "The Bulletin." It will concern itself solely with news affecting the architects, engineers, chemists, and technicians in New York. It will also serve to notify members of all section meetings and will be mailed free of charge to all dues-paying members. The first copy of this has already been sent out.

To assist the architectural employees on work relief projects, the Chapter has formed a Project Delegates Council. Through this council the relief worker can get an effective expression of his own grievances which he cannot get by individual action. The delegates to this Council, elected by the men on the job, meet twice monthly. This Council has a grievance committee which meets with Emergency Relief officials every Saturday. The New York organizer or a member of this Council is always ready at F.A.E.C.&T. headquarters to listen to individual grievances.

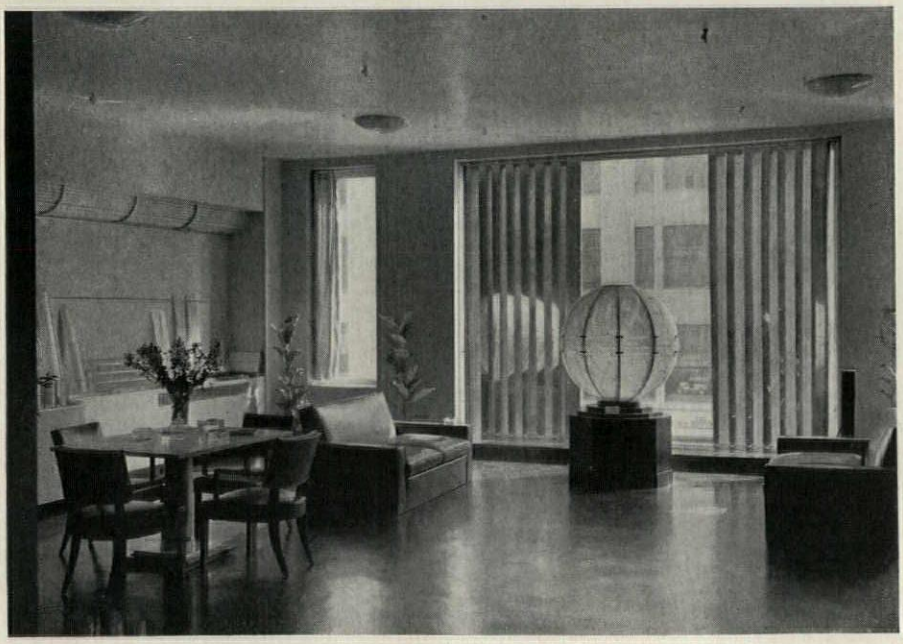
Corresponding in the private industry field to the Project Delegates Council in the relief field is the Representative Council of Offices. This contains one representative from each of the Federation organized offices or "locals."

*The Federation is a union for technical employees. Its purpose is to protect and advance the economic interests, the salaries, hours, and general working conditions of the technical professional and subprofessional employees. All are eligible for membership who have technical scientific training or who are employed as architects, engineers, chemists, draftsmen, surveyors, construction superintendents, fieldmen, laboratory workers. Other technical employees in supervisory, consultative, or research capacities are eligible for membership. Race, creed, color, political or other beliefs and affiliations are not bars to membership. The Federation is organized nationally into local chapters. There are at present chapters in New York, Philadelphia, Baltimore, Washington, Rochester, Cleveland, Boston, Buffalo, Pittsburgh, San Francisco, Newark, Youngstown, Chicago, Detroit, Denver, and Madawaska, Me. The Architects' Section of the New York Chapter meets the second Wednesday each month.*

ALAN MATHER
Architects' Section



*A hearth of clear, heat-resistant glass and furnished with glass andirons is one of the most attractive exhibits at the architectural glass exhibition at 748 Fifth Avenue by the Corning Glass Works. The hearth mouldings are of silvered glass. The huge chunk of illuminated glass inside serves as a decorative piece when the hearth is not in use. The room is indirectly lighted through silvered glass vases, set in niches, in four wooden columns, one in each corner of the room. The sources of illumination, the electric bulbs, are concealed within the pillars. Another view of the show is below.*



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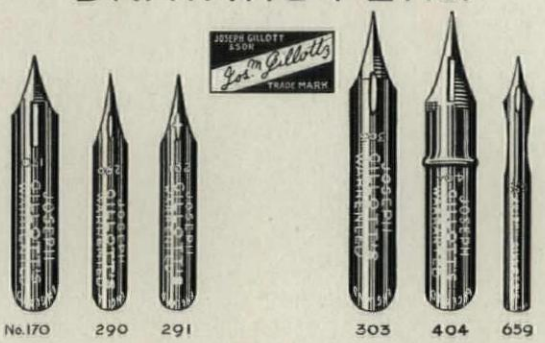


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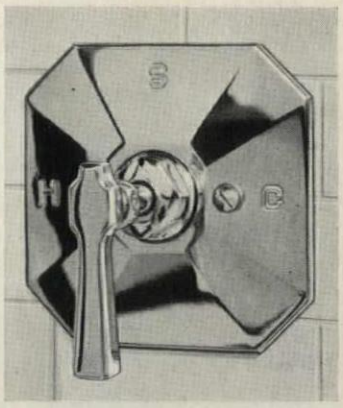

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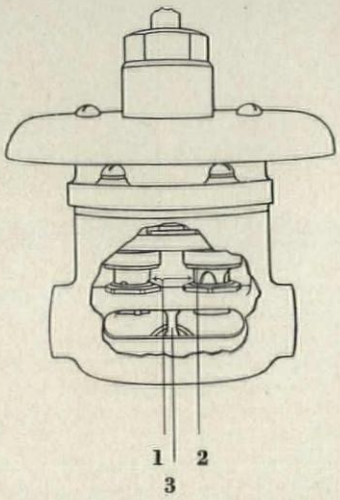


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# ARCHITECTURAL GUILD LETTER

Well, well, all things come to him who waits, and times seem to be picking up for the draftsman. Besides the large P.W.A. employment in Washington, many other civil programs are taking their shares of the unemployed architectural man. Last month the New York City Parks Architectural Department took on a large number at $42 per week, up. Of course, draftsmen cannot always expect such superlative treatment. In fact, the much publicized proposed Federal program to spend four billion plus dollars on civil works, if not wrecked or badly bent by Senatorial action, will provide us with "living (we hope) wages" of $50 per month. We "see by the papers" that twenty-three of these United States have Prevailing Wage Laws. These require the payment of the prevailing (labor union) wage to all mechanics employed on *public* works. Now, we would like to know what will happen to the quotas of those states, when and if the four billion dollar program passes with provisions for $50 a month "living" wages. Of course, we really don't have to worry. Being draftsmen, we are not building mechanics and our higher standing entitles us to starve as gracefully as possible, while leaving our social inferiors to worry about the so-called "prevailing" wage—we haven't any.

Among other things, the Guild is investigating the insurance field. So many of us have had to realize on our policies, that a great number no longer possess any. We hope to announce in the near future arrangements for life insurance, which by virtue of group cooperation will have substantially lower premiums than individual policies. In the meantime, any draftsman who is interested in protecting his furniture from fire, for the very low premium of 10c for each $100 insurance, irrespective of locality or character of dwelling, should write to the Guild's Committee on Insurance.

This month has been enlivened by correspondence with a group of draftsmen in Birmingham, Alabama, on the subject of affiliation. We also have to report twelve new members from Providence. This brings the Rhode Island total to around forty, and we venture to predict that next month we can announce another Guild Chapter.

We receive so many inquiries on how to start a Chapter that we are giving preliminary details this month to save some of you a little corresponding.

Ten members are required to start a Chapter. When you have that number, send in a short petition to the National Executive Board requesting a charter, signed by all ten members and accompanied by any outstanding dues or initiation fees. The Board will probably immediately send you a temporary charter. Meanwhile, your group can elect temporary officers and set up a number of committees, such as Relief and Employment, By-Laws, Membership, Economic Relations, etc. Until a temporary charter is issued, dues are payable to the National Treasurer. Upon receipt of the charter, your local treasurer collects the dues and forwards the per capita tax monthly to the Guild. For more details, write us.

F. H. K.
*for the Guild*

*Anthemios, Co-Mother Chapter of Alpha Rho Chi Fraternity, Entertains the Convention at Champaign, December 30-31, 1934. Front row (left to right): Eugene C. Schramm, Ohio State University; Kenneth A. Smith, Convention Secretary; Efflo E. Eggert, Editor of "The Archi"; Prof. C. E. Palmer, Convention President; Dwight P. Ely, National President of Alpha Rho Chi; Savo M. Stoshitch, University of Illinois; William P. Crane, II, Alumni, University of Illinois.*

*Second row (left to right): Clifford H. James, University of Texas; James T. Lendrum, Alumni, University of Michigan; John N. Sill, Carnegie Institute of Technology; Kermit O. Johnson, University of Minnesota; J. G. Cooke, University of Southern California; Frederick Baessler, University of Michigan.*

*Third row (left to right): George F. Fritzinger, Donald T. Jordon, Paul B. Marxen, William L. Horstman, Lewis C. Wilcox, Fred H. Jobusch, and Frederick P. Cole, all of the University of Illinois.*

## *A New Specification Book*

*Architects' Specifications,* by Goldwin Goldsmith; 128 pages, 8½" x 11"; price $2.50; published by John Wiley & Sons, Inc., New York.

This book is not a collection of specifications. It is a textbook on the art of specification writing. It should be extremely valuable as a textbook for classroom and no less useful to the professional specification writer. For a great many years the lack of an adequate guide in the preparation of architectural specifications has been felt and "Architects' Specifications" effectively recognizes this need of the specification writer. It may appear somewhat idealistic, but none will deny that it represents all that is desirable in the handling of this difficult contractual problem.

The author, Goldwin Goldsmith, is a Fellow of the American Institute of Architects, and Chairman of the Department of Architecture of the University of Texas. Through wide experience in this field, Mr. Goldsmith is eminently fitted to have prepared such a volume.

Tom Thumbtack wrote many years ago, "Specifications are the essence of things hoped for, the image of things not seen. The perfect specification writer should have graduated from Columbia Law School and Drummond's Detective Agency and then taken a course in Palmistry to cover the unforeseen contingency. He should then be fitted to sufficiently becloud the issue." Tom Thumbtack's ideas of specification writing are, unfortunately, shared by a great many contractors and clients and also, strangely enough, by many architects. After reading Mr. Goldsmith's text, however, this misconception should be dispelled.

The whole procedure in Specification Writing has been outlined into a logical process of clear thinking. The author should achieve undying fame for having omitted the usual long list of specification "don'ts," if not for the general excellence of the work. *D. G.*

## *Architect Writes Book "It's About Time"*

One enterprising architect has taken advantage of the depression to write a book that has nothing to do with architecture. He is Gerald Lynton Kaufman of New York and his book is called "It's About Time." It is described as the first book to treat Time as a Pastime and it contains puzzles, tricks, fun, games, problems, science, curiosities, and philosophy —all having to do with Time, 170 pages of it. Any architectural man with time on his hands and a dollar and a half to spare can escape ennui by ordering this book from his bookdealer or from Heyday House, 244 Madison Avenue, New York.

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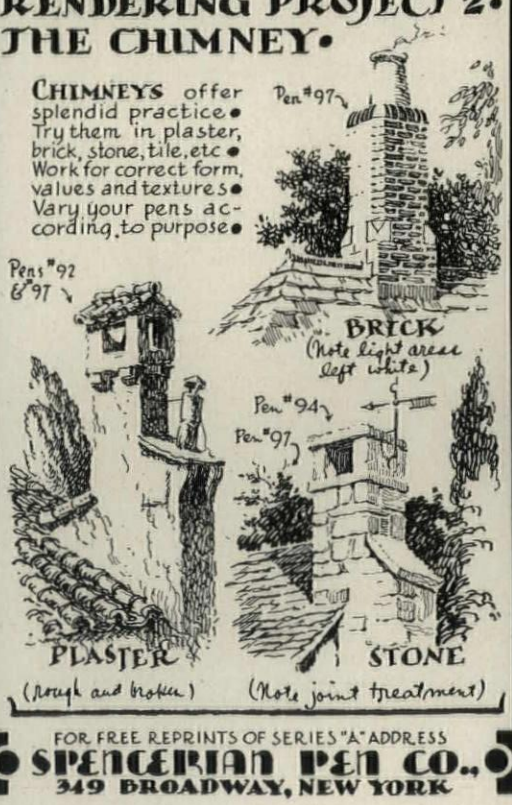


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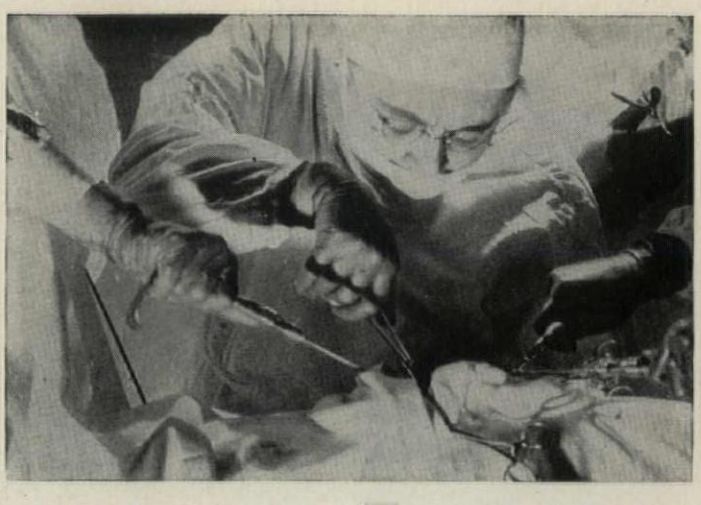

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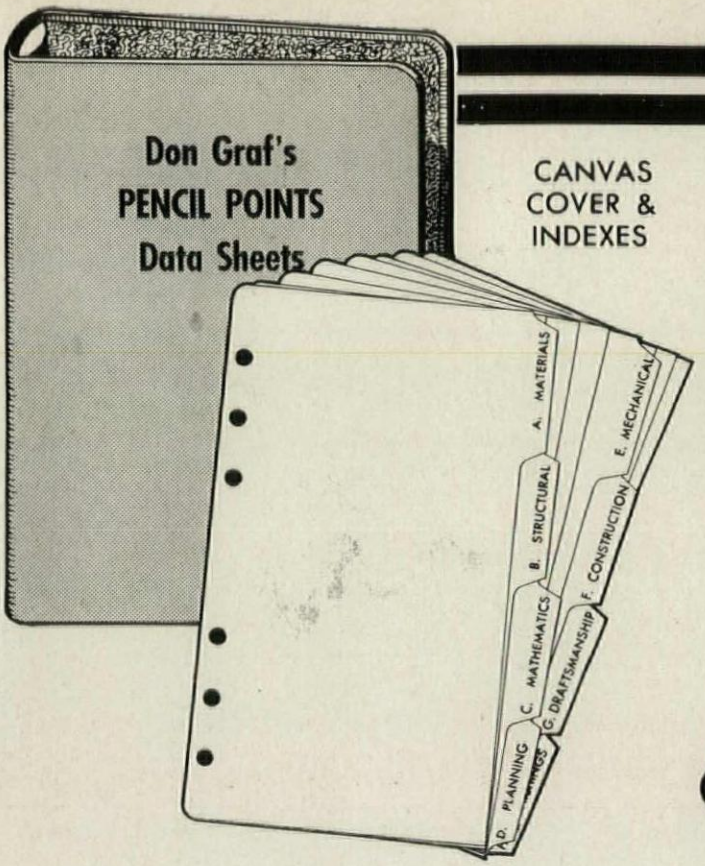
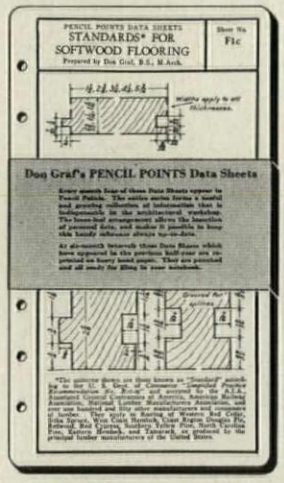
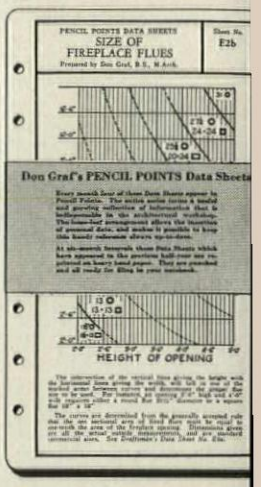



SET NO. 1




SET NO. 2

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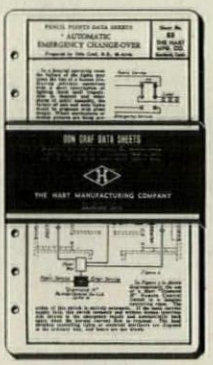
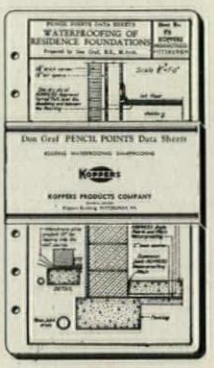
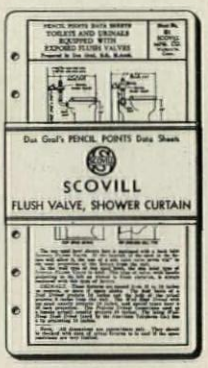
## SEND FOR THESE MANUFACTURERS' SETS OF FREE DATA SHEET




HART MFG.



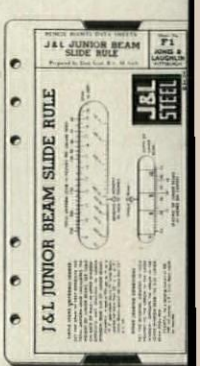

KOPPERS PRODUCTS




SCOVILL MFG.

STANLEY WORKS

IRON FIREMAN




JONES & LAUGHLIN

**HART MANUFACTURING COMPANY.** This company has sponsored a set of eight Data Sheets, showing the economies to be effected in electric wiring by the use of Remote Control Switches. These sets may be obtained by addressing a request on your letterhead to the Hart Manufacturing Company, Hartford, Conn.

**KOPPERS PRODUCTS COMPANY.** This company has sponsored a set of twelve useful Data Sheets. These show the construction of Swimming Pools, Shower Baths, Tunnels, Foundations, Dampproofing Floors, and the proper roof to use for various slopes. They may be obtained by addressing a request on your letterhead to the Koppers Products Company, Pittsburgh, Pa.

**SCOVILL MANUFACTURING COMPANY.** Do you know how a flush valve works? This set of four Data Sheets will tell you this and give you many other helpful facts in the planning of toilet fixtures. They may be obtained by addressing a request on your letterhead to the Scovill Manufacturing Company, Waterville, Conn.

**STANLEY WORKS.** This set of four Data Sheets te you how to frame garage openings for doors and al tells you how to arrange Magic Doors which open aut matically. Obtain this set of Data Sheets by filling o the coupon appearing in the Stanley advertisement this issue of Pencil Points.

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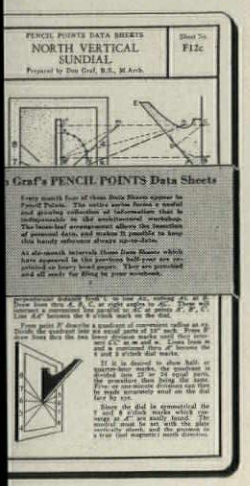
**JONES & LAUGHLIN STEEL CORPORATION.** A Sli Rule and six Data Sheets are offered by this compan This is an actual Slide Rule that fits into your Data She Notebook and tells you instantly the size and spacing beams required for any load or span. Fill out the coup appearing in the Jones & Laughlin advertisement in t issue of Pencil Points.

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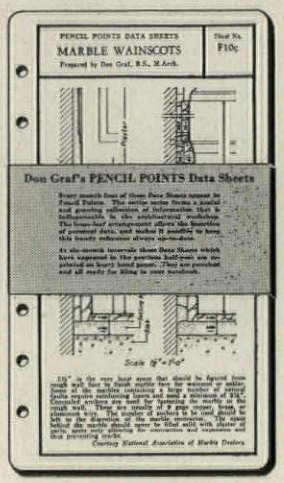


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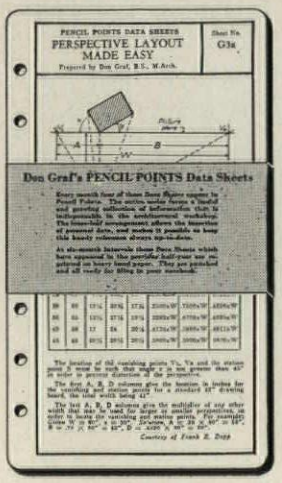


SET NO. 5

SET NO. 6

# AT YOUR FINGERTIPS

## OUR DATA SHEETS APPEAR EACH MONTH IN PENCIL POINTS

ch month since January, 1932, four Data Sheets have eared in Pencil Points. They have contained a wealth information constantly needed in the Architect's rkshop. The demand for back numbers of the Data ets became so insistent that it has been necessary to rint them for separate sale. Six sets of 24 Data Sheets set have been reprinted. The seventh set will be ready ut July 1st. Each set represents those Data Sheets ch appeared in Pencil Points during six-month peri-, and are all punched and ready for the notebook. ist of subjects covered by the various sets follows:

**NO. 1. From Pencil Points — January-June 1932**

is Courts, Motor Car Dimensions, Double Bed Hotel Room, Sizes of os, Gravity Type Retaining Walls, Entasis of Columns, Hand and Bevel oors, Orientation Charts, Heights for 2½", 2⅝", 2¾", 3", and 3¼" Courses, Capacity of Tanks, Septic Tank Sewage Disposal, Standard of Clay Flue Linings, Standards for Softwood Flooring, Dormers in Framing, Mutuled Doric Order.

**NO. 2. From Pencil Points — July-December 1932**

nts for 2⅞" and 3⅛" Brick Courses, Standard Dimensions of Soft-Lumber, Septic Tank Sewage Disposal, Determination of Roof Leaders, ursed Stonework, Standard Sizes of Partition Tile, Standard Sizes of Construction Tile, Standard Sizes of End Construction Tile, Joints in Cotta Washes, Solid One-Way R. C. Slab Table, Solution of Right ngles, Decimals of a Foot, Decimals of an Inch, Circular Arcs, Chords Segments, Horseshoe Courts Official Standard, 1932 Motor Car Dimen-, Standard Plumbing Symbols, Size of Fireplace Flues, Wattage of ric Outlets, Stock Wood Door Patterns, Spell it Right, Dimensioning lls, How to Draw an Ellipse.

**NO. 3. From Pencil Points — January-June 1933**

Many Risers; Horizontal Sundial; Weights of Materials; Freight Clearance Diagram; Instant Joist Chart; Coursed Stonework; Kitchen ning; Tangents 0° to 45°—Cotangents 45° to 90°; Linoleum Floors; of Bedroom Furniture; The Circle and the Square; Tangents 45° to Cotangents 0° to 45°; South Vertical Sundial; Sizes of Beds; Dining e; Sines 0° to 45°—Cosines 45° to 90°; Typical Hotel Guest Room; Finish Flooring; Sines 45° to 90°—Cosines 0° to 45°; North Vertical ial; Cubic Cost Calculator; Period Furniture.

**NO. 4. From Pencil Points — July-December 1933**

nts 0° to 45°—Cosecants 45° to 90°; Flashing of Stone Joints; Squash s; West Vertical Sundial; Characteristics of Glass; Safe Loads on stone Lintels; Widths of Brick Piers; Blue Print Inks and Fixatif; cal Shear; East Vertical Sundial; Areas of Plane Figures; How to e Reactions; Dead Loads of Building Materials; Secants 45° to 90°— ants 0° to 45°; Sizes of Dining Tables; Marble Wainscots; Recessed Twin Mail Chutes; Tile Floors; Balloon Framing; Surface Type Mail ; Garden Steps and Walks of Brick; Billiard Rooms; Planning the Chute System; Mail Chute Receiving Box.

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**SET NO. 6. From Pencil Points — July-December 1934**

Safe Loads on Douglas Fir, Eastern and Sitka Spruce, and Norway Pine Joists; 1934 Automobile Dimensions; Croquet Courts; Hardwood Veneer Plywoods; Lacrosse Field; Old English Lettering; Brick Patterns for Walks; Standard Nomenclature for Lumber, 4 sheets; Kitchen Planning; Symbols for Solid Rolled Windows and Doors; Metal Toilet Partitions; Standard Swimming Pool Dimensions; Terrazzo Floors; Modern Lettering; School Seating Schemes; Slide Rule Multiplication and Division; Basketball Courts; Lightning Protection; Concrete Sidewalks; Typical Office Building Unit.

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☐ Architect ☐ Draftsman or.....

# NEW PRODUCTS

## *Changes in Personnel, etc.*

### A NEW KITCHEN SINK

Crane Co., Chicago, has recently placed on the market a new kitchen sink, called the Sunnyside cabinet sink. Ideal for installation in small homes and apartments, it lends itself to the demand for compactness and working efficiency in kitchen layouts. This new sink can be furnished in white or in color. It may also be furnished for either a right or left corner installation, as a unit by itself, or as part of a continuous table top cabinet arrangement.

The Sunnyside cabinet sink is made of cast iron with all exposed surfaces porcelain enameled, regular or acid-resisting, of the double drainboard type, 60-in. long x 25¼-in. wide, with 8-in. back which permits installation below a window; this sink packs the utmost of utility into a given space. The basin is 22 x 18 x 8-in. deep and is furnished with utility waste having removable cup strainer. Back, drainboards and basin being all of one piece, there are no cracks or crevices for water to seep through or food particles to lodge in.

### ARMSTRONG ORGANIZES BUILDING MATERIALS DIVISION

Organization of a building materials division to provide greater concentration of sales effort on the company's products for the building field is announced by the Armstrong Cork Products Company, of Lancaster, Pa.

The new division will be headed by H. R. Peck who has a broad background of fifteen years of experience with the company. G. C. Denebrink, who has had wide experience in sales and merchandising activities of the company, will be assistant general manager of the division.

Six departments will be coordinated in the building materials division. T. R. Nunan will be in charge of the low temperature insulation department which will handle the sale of corkboard, cork covering, and the materials required for their erection; J. L. Allison will head the high temperature insulation department; L. E. Cover will be manager of the Temlok department, in which will be grouped the fibreboard insulation products made by the company for residential and general building construction; H. D. Stewart will be manager of the floor tile department; R. H. Craig will head the acoustical department; and J. C. McCarthy will be manager of the Linowall department, which will handle the sales of the company's linoleum-type wall covering.

### "CEL-O-GLASS" FOR DECORATION

Acetol Products, Inc., Wilmington, Del., announces a new use for wire-coated cellulose acetate material. Tests have shown that for interior decoration effective and colorful effects can be obtained. Used as decoration for cove lights and columns, it will greatly brighten dark corners and draw attention to any section, and in many ways increase the effectiveness of interiors.

It has been found that this material can be used for lighting and decorative purposes most attractively and economically in stores, theatres, auditoriums, churches, hospital corridors and reception rooms, etc.

When used in columns for lighting effects, it will not buckle or become unsightly. It is light, inexpensive and easily handled and, because of its flexibility, it permits many novel designs and shapes. It is easy to cut with an ordinary pair of scissors; is durable and weatherproof; will not warp, crack or tear, and will not break like ordinary glass. Also, it is heat resisting.

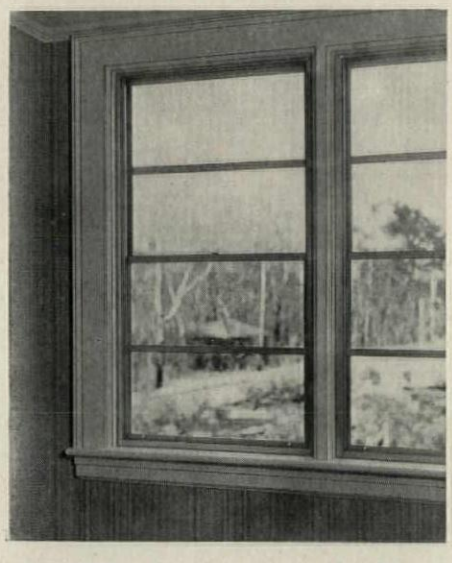
### READING IRON COMPANY ANNOUNCES CHANGES

W. S. Shiffer, general manager of sales of the Reading Iron Company, announces that S. H. Blackwood, formerly assistant district sales representative in the New York territory has been made district sales representative in Southern territory with headquarters at 1104 Continental Bldg., Baltimore, Md. Mr. Blackwood takes the position held for many years by W. J. White, who recently resigned. W. N. Johnson has been appointed as salesman in the New York territory.

### NEW RESIDENTIAL WINDOWS

An advanced type of weight-hung window, made of aluminum and designed in simple, striking lines for wide residential use, is announced by The Kawneer Co., Niles, Mich.

Sash, frame, and weights are built into one unit, glazed and ready for quick installation. Wide mullions, hitherto considered unavoidable between double-hung windows, are reduced from approximately 5½ inches to 1 inch. These narrow mullions, together with narrow sash members and frames, admit, it is stated, more daylight for any given window size than does ordinary construction.



Many unique advantages are claimed for the new window by its makers. Shrinking, swelling, warping, rattling, rusting and rotting out have been eliminated. The solid aluminum sash and frame members withstand the elements indefinitely without further protection or renewal. Upkeep and maintenance expense have been reduced to an absolute minimum. Although sash may always be operated with very slight effort, they fit snugly against the frame, slide on integral weatherstrip guides, and effectively keep out rain, snow, wind, or dust.

Because of its simplicity of construction and design, this new window is said to harmonize with the most modern domestic architecture, as well as with all conventional styles.

The Copper & Brass Research Association announces the removal of its office as of April 1st, from 25 Broadway to 420 Lexington Ave., New York.

C. B. Nolte was elected president of Crane Co. on March 26. J. B. Berryman, who had been president since 1931, and who has been connected with the Crane organization since 1892, became chairman of the board.

The Best Brothers Keene's Cement Company, who have maintained their general offices at their plant in Medicine Lodge, Kan., for nearly fifty years have just recently removed and established their general offices in Chicago Daily News Building, 400 West Madison St., Chicago. John C. Best, president of the company, is actively in charge of the general offices. The move was made to expedite the handling of business matters for the company and brings the Best Brothers offices into the recognized center of the gypsum industry.

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## *in every residential job on your boards . . .*

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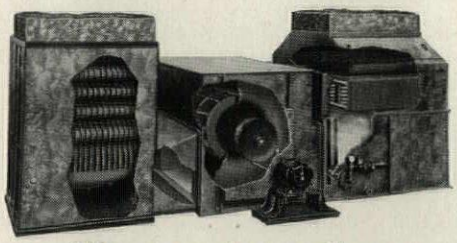

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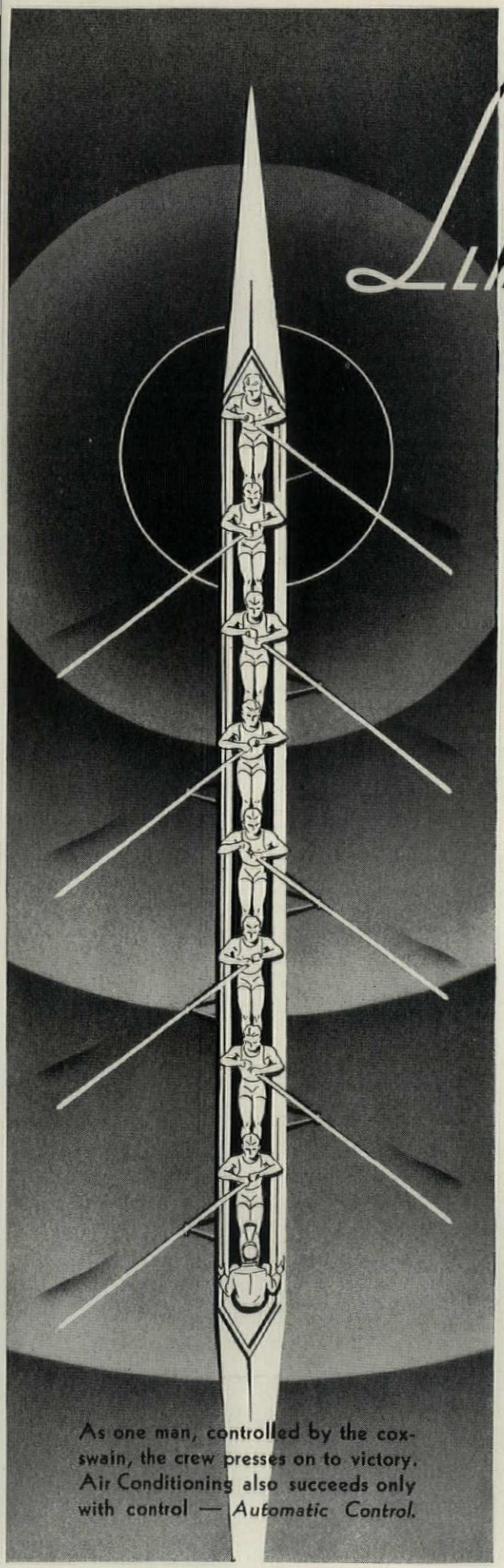

As one man, controlled by the coxswain, the crew presses on to victory. Air Conditioning also succeeds only with control — *Automatic Control.*

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## AIR CONDITIONING

*Succeeds Only When*

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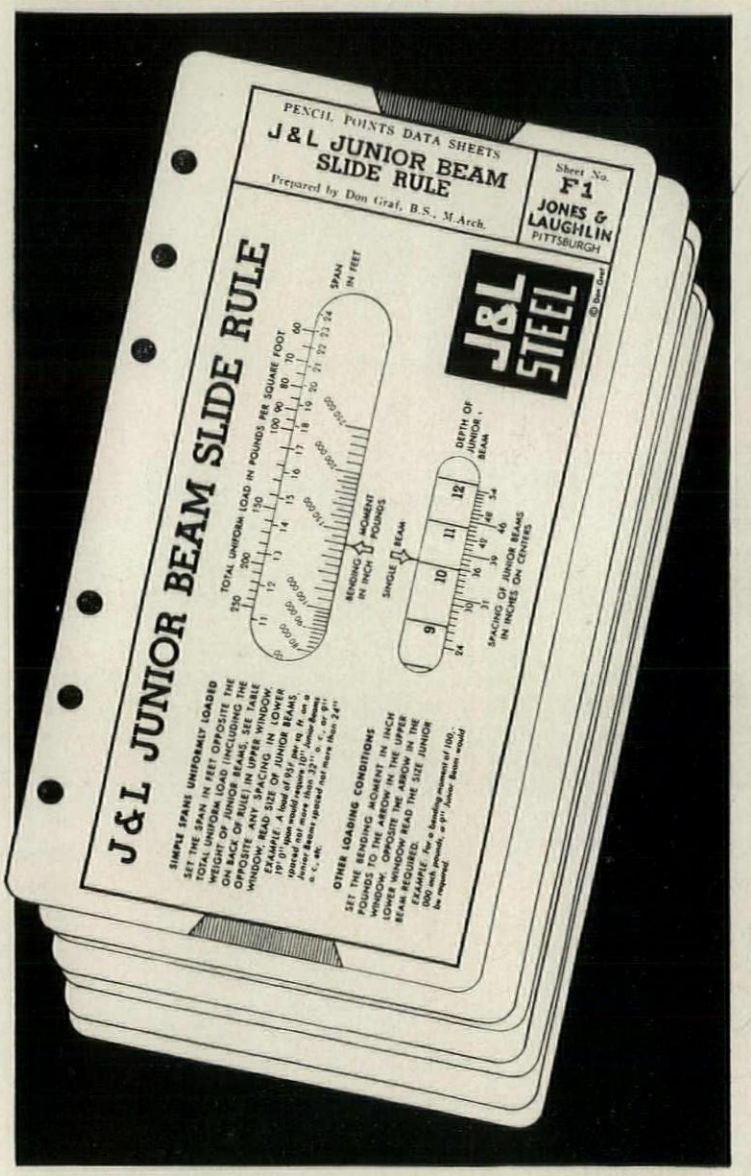
## DESIGN DATA ON RESIDENTIAL CONSTRUCTION YOURS FOR THE ASKING

THIS set of six data sheets and slide rule Calculator constitute a convenient architectural manual for the use of Jones & Laughlin Junior Beams in residential construction. The material was prepared by Don Graf, B.S., M. Arch. It is presented in Pencil Points Data Sheet form, the sheets being punched and indexed for insertion in your Notebook.

Complete design data is presented, including sizes, weights and properties of Junior Beams, details of floor framing, and other essential information.

The Junior Beam Calculator is an ingenious slide rule device for quickly and accurately determining depth of beam and spacing to use for given spans and loads. It is mounted and punched for filing as a data sheet. The Calculator is also available in card form of convenient pocket size.




**FREE ON REQUEST**—Your name, address and title or occupation in a letter, or on the margin below, will bring a set of J & L Junior Beam Don Graf Data Sheets, including the Calculator—without obligation. Please indicate if you want an additional Calculator in pocket size.

J&L STEEL

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# AN ACTUAL CASE *

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THE SUPERINTENDENT OF BUILDINGS HAS A PROBLEM

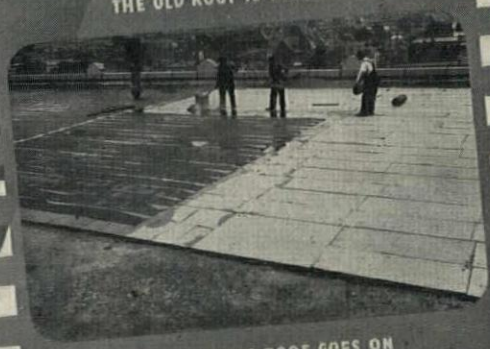
HERE ARE THE CONDITIONS THEY FOUND ON THE ROOF

$2,000 FOR REPAIRS IN THE LAST TWO YEARS

THEY DECIDE TO RE-ROOF

THE KOPPERS ROOFER IS CALLED IN

THE OLD ROOF IS TAKEN OFF



THE KOPPERS ROOF GOES ON

AND HE HAS A 20-YEAR BOND AS A GUARANTEE

Facts! Figures! This case happened in Pittsburgh. But it can be duplicated in almost every city. These failures of certain roofings (NOT coal tar pitch) on flat decks are the talk of the year in the roofing business. Everyone *thought* those roofings would last as long as coal tar pitch roofs, but they did not. Yet the coal tar pitch roofs still last 20 to 40 years. Specify coal tar pitch on all flat decks. Let us send you the folder "Do's and Dont's on Roofing."

(*) Name on request to responsible inquirers.

**KOPPERS PRODUCTS COMPANY, Koppers Building, Pittsburgh, Pa.**

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