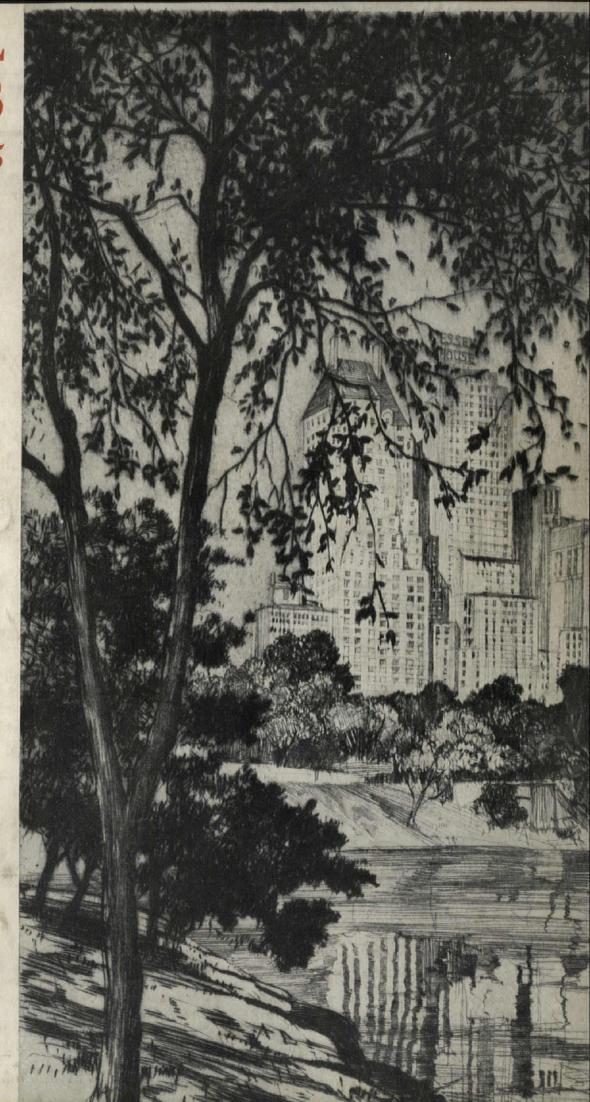
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### PENCIL POINTS

A Journal for the Drafting Room

NOVEMBER, 1935



VOLUME XVI, NUMBER 11

RUSSELL F. WHITEHEAD, Editor

KENNETH REID, Managing Editor

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Something for Everyone in the Architectural Profession Cover Design "Central Park, New York" by Samuel Chamberlain

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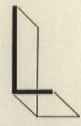
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### FEATURES EFFECTIVE DESIGNS TO MODERNIZE MAIN STREET

L·O·F Polished Plate (plain and colored), Vitrolite, Tuf-Flex and Blue Ridge Figured and Wire Glass are generously employed.



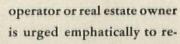
Store modernization is now one of the most active and profitable fields of architectural endeavor. Millions of

dollars are being spent in all parts of the country. Professional interest is indicated by the fact that more than 3,000 architects and designers entered the Modernize Main Street Competition sponsored recently by Libbey • Owens • Ford.

To stimulate modernization to an even greater degree, the fifty-two premiated designs in that competition



are now being published in book form, for distribution to logical prospects for modernizing. They are, of course, clearly described as general suggestions only and the store



tain his own architect for working out his own specific problem.



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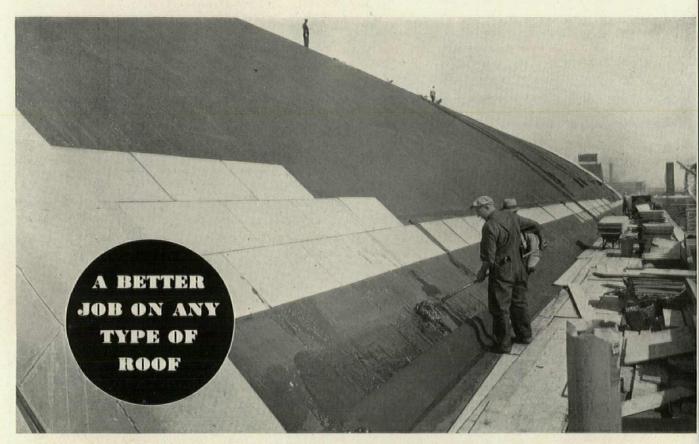


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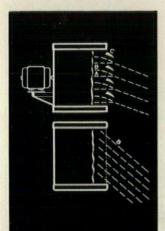
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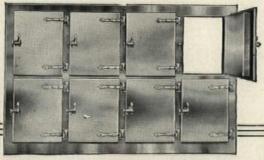
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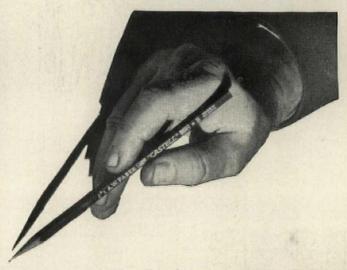
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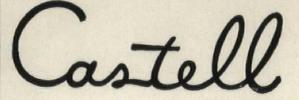
You can imagine that we received a diversity of reasons. Some like 'CASTELL'S' free-flowing smoothness, others its freedom from grit and hard spots; still others the fact that 'CASTELL' may be sharpened to a needlepoint without flaking or crumbling.

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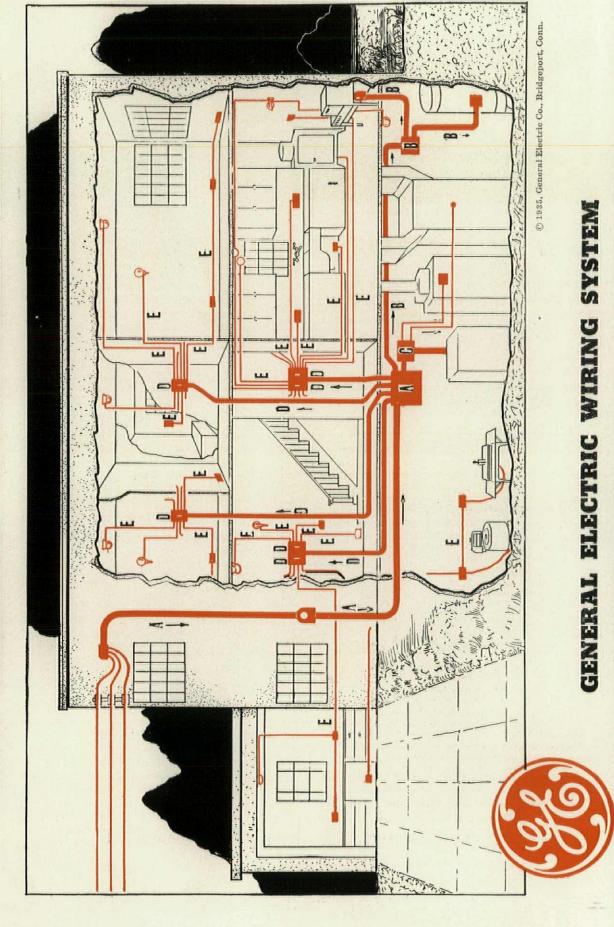


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In the schematic drawing, you can see exactly how the G-E Radial Wiring System functions. The specifications call for an all-electric home with major fixed appliances and a complete outlet and lighting system with modern switching. The wires marked A designate the service entrance cables going through the meter to the Totalizing Unit in the cellar. For all-electric homes, these should never be less than three No. 4's. The circuit marked B is a sub-feeder to the range and water heater made up of not less than three No. 8 conductors properly fused at the Totalizing Unit. A limiter device in this circuit cuts off use of water heater while range is in operation. The

sub-feeder circuits C of No. 10 wires lead from Totalizing Unit A to the Air-conditioning Panel from which the air-conditioning equipment is run.

The risers, labeled D consist of No. 10 conductors. They lead direct from the Totalizing Unit A to all Flush Branch Circuit Breakers. These Circuit Breakers or control units must be of suitable capacity to properly protect the wires which fan out into the devious circuits over the house. You thus see that we have 4 points of sub-control conveniently located around the house. These breakers are no more obtrusive than is the standard switch in the circuits of today. The home owner does not object to them because in their operation of protecting the circuit there is no fuse blowing — they are operated the same as a switch. The Circuit Breaker locations are centered to minimize all circuit lengths.

These sub-circuits of No. 12 conductors, labeled E are fanned out from the Circuit Breakers to the lighting or convenience outlets. Wherever possible, convenience outlets are circuited separately from lighting outlets. The kitchen circuiting is particularly noteworthy. Appliance outlets are protected by a 20-amp. Circuit Breaker served by one of risers D. From it, sub-circuits are fanned out to individual appliance outlets. Thus each of the No. 12 wires are subjected to the load of only one outlet. Such is the basic design of the G-E Radial Wiring System. Additions and modifications can be made to meet all conditions encountered in specific designs.

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### WIRING MATERIALS

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### HERE, THERE, THIS & THAT

Greenwich, Connecticut, Builds Model House

On pages 574 to 576 of this issue will be found drawings of the prize winning design by Phelps Barnum, Architect, awarded first place in the competition for a model house held under the auspices of the Greenwich Better Housing Program. This house was designed for a site selected beforehand and the program called for a living room, dining room, small library (not to be entered through the living room), a butler's pantry, an airy kitchen with adequate closets, a cold closet and screened porch, three or four bedrooms, two baths, a maid's room and bath, two-car garage, a dining terrace useful for three meals if desired, cedar closet, laundry, large linen closet, and extra cupboards in the bathrooms. The house was to be, in layout and conception, expressive of the mode of living of a modern American family in Greenwich. No particular style of architecture was favored, the comm'ttee feeling that the design should lead in the direction of modernism as an outgrowth of American architecture, not international style. It was to demonstrate the evolution rather than the revolution of American house architecture. Mr. Barnum's design was felt by the Jury of Award to be a satisfactory solution of their problem and the house is now being built.

Fourteen designs were submitted by Greenwich architects, to whom the competition was limited. Second prize, \$50.00, went to Philip Ives, and Third prize, \$25.00, to W. Stuart Thompson. Honorable mentions were given to J. Alden Twachtman and Blodgett & Gramer. The Jury consisted of Mrs. Edward Duble, Mrs. William Hencken, and Mrs. Stafford Hendricks of the Model House Committee, with John Cross as the architectural member. Douglas Orr, President of the Connecticut Chapter, A.I.A., acted as Professional Adviser.

### Chicago Architectural Club Competition

The Chicago Architectural Club announces the winners of the Terra Cotta Wall Block Competition under the joint sponsorship of the American Terra Cotta Company and the Northwestern Terra Cotta Corporation. The two separate design problems required by the competition program called for the design of a one-story shop building with a 100-ft. frontage and also a two-story shop and office building with a 50-ft. frontage. The program required the use of machine made terra cotta blocks in any color with an allowance of twenty per cent of terra cotta area for ornament.

The awards for the one-story shop building were as follows: First prize, Evald Young; Second prize, George Recher; Third prize, Roy Anderson; Hon. Mention, A. A. Zakharoff; Mention, A. A. Zakharoff; Mention, C. Koncevic; Mention, G. W. Murison.

The awards for the two-story shop and office build up were as follows: First prize, A. A. Zakharoff; Second prize, Herbert Rodde; Third prize, Charles Koncevic.

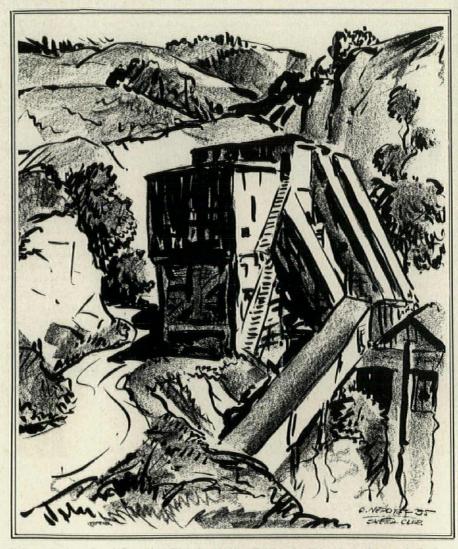
The Jury of Award was composed of the following men: Alfred Shaw, Andrew Rebori, Hugh Garden, Oscar Gross, and F. O. Turper-White.

A selection of the successful designs will be published in a later issue.

SPECIFICATION DOCUMENTS for Building Materials and Construction Classified and arranged by David H. Merrill, Assoc. Mem. Am. Soc. C. E. and Theodore C. Combs, Assoc. Mem. Am. Soc. C. E. 522 pages, cloth, \$5.00, fabricoid leather, \$7.50. Published for the Pacific Coast Building Officials Conference by R. C. Colling and Associates, Los Angeles.

Architects, engineers, contractors, building officials and, in fact, all who have to do with the construction of homes or business and industrial buildings, bridges and highways, will find this book of unusual value in a number of ways. It includes under one cover for the first time all specifications referred to in the Uniform Building Code under which 150 cities and counties in the United States operate. These documents are legally a part of the Code, and are required to be filed with city or county clerk. Until now they have been found only in pamphlet form separately and several only in typewritten or mimeographed sheets.

"Specification Documents" contains 63 standard and tentative specifications and test programs compiled from many sources, classified and arranged for ready reference. Nearly every major engineering and technical society has assisted in their preparation. The publishers mention among the sources the following: American Society for Testing Materials; American Concrete Institute; National Fire Protection Association; National Board of Fire Underwriters; Under-writers' Laboratories, Inc.; American Welding Society; American Wood Preservers Association; U. S. Department of Commerce, Bureau of Standards; American Institute of Architects; American Society of Mechanical Engineers; American Society of Refrigerating Engineers; and the Research Dept. of the Pacific Coast Building Officials Conference.



Prize winning sketch by Alex Nepote in the California School of Arts and Crafts sketch competition for 1935. The drawing was made with brush-and-ink and crayon

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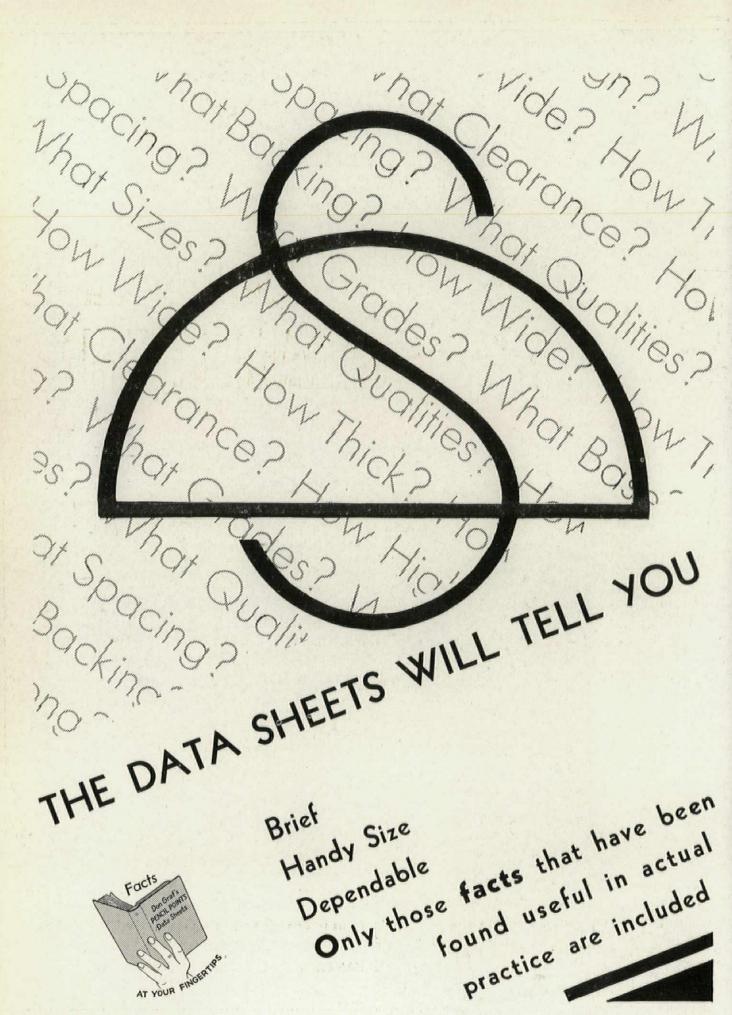
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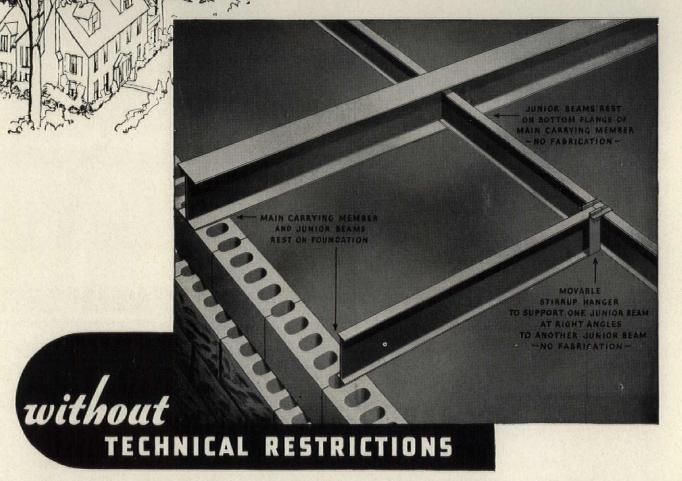
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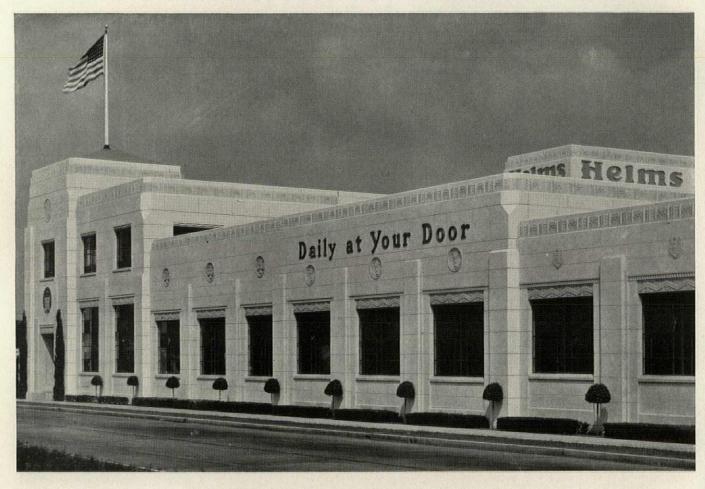
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### SCULPTURED in STUCCO



(Condensed from a letter from Grant & Bruner, Ltd.)

"Helms bakeries, Los Angeles, accepted the counsel of their architects and engineers as to what could be accomplished with a combination of stucco and cast stone; provided that properly selected materials and expert craftsmen were employed and nominal maintenance faithfully performed.

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"And also credit is due to Atlas White portland cement, used throughout, both in the stucco and the cast stone."

### ATLAS WHITE PORTLAND CEMENT

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### Architects League of Northern New Jersey

The next regular meeting of the Architects League of Northern New Jersey will be held at the Elm Chateau, 285 State Street, Hackensack, N. J., Thursday evening, November 21st, at 8 P. M. promptly. All practicing or licensed architects throughout Bergen, Passaic, and Hudson Counties are invited to attend.

Due to the fact that there is a steady increase in the amount of residential construction going ahead, architects are beginning to find themselves busy and confronted with some of the usual professional problems which call for cooperative activity through their organization.

An energetic plan of organization and activity is again being evolved and will be discussed at this meeting. Such matters as a campaign and slogan, "To assure proper results, insist upon architectural supervision, as well as design, by a Licensed Architect who maintains an established office," will be considered; also the matter of a permanent head-quarters and clubhouse for the League's use.

The renewal of the publication of the bulletin Quid Nunc will again be undertaken and it will be issued and distributed this month. The support of all Northern New Jersey architects is earnestly solicited for the mutual good of all concerned. Meetings are held the third Thursday of every month.

### New Appointments at Texas A. and M.

The Department of Architecture at Agricultural and Mechanical College of Texas has appointed Mr. Maurice J. Sullivan, of Houston, Texas, as critic in design. Mr. Sullivan is a member of the American Institute of Architects, a past president of the South Texas Chapter, and has had long and successful practice in Houston. He has done many interesting buildings, probably the best known of which is the Villa de Matel group in Houston. Mr. Sullivan has also done some very creditable work in schools and churches, as well as in commercial buildings. It is believed that his appointment to the staff will be of tremendous value to the department and its students.

Mr. Samuel B. Zisman, who has been an instructor in architecture at the Massachusetts Institute of Technology during the last five years, has also been appointed to the staff. Mr. Zisman will have direction of elementary work in design.

#### Medary Scholarship Award

George N. Lykos of Wilmington, Delaware, has been awarded the Medary scholarship of the American Institute of Architects for 1935-36, it is announced by Charles Butler of the Institute's Committee on Education. Mr. Lykos was graduated from the Massachusetts Institute of Technology in June, and will continue postgraduate work at that Institution. He was chosen from a group of twenty men, representing different colleges, who in their graduating year received A.I.A. medals for general scholastic excellence.

### Architects and Engineers Square Club Meetings

The Architects and Engineers Square Club of New York extends a cordial invitation to members of the profession to attend any of its regular meetings, held every fourth Friday at the clubrooms of the Building Trades Employees Association, 2 Park Ayenue, New York, N. Y.

The membership comprises architects, engineers, draftsmen and others interested in the allied arts, and the club's aims are of a social and technical nature. Guests will not be bored by business discussion. Prominent lecturers in their respective fields and entertainment of the better class is the usual order of the evening.

Drop in for a delectable dinner at six,

meet your old friends, relax and enjoy a pleasant and profitable evening.

### Producers' Council Meeting

The Twelfth Semi-Annual Meeting of The Producers' Council, Inc., will be held in Detroit, Michigan, on December 4th and 5th, 1935. The keynote of this meeting will be: Increased cooperation between governmental agencies, financing institutions, architects, builders, and material manufacturers to promote quality in the resurgent construction industry.

Prominent speakers from PWA, FHA, and HOLC have been invited to take part in the discussion which will also include representatives of banks, insurance companies, contractors, realtors, architects, and manufacturers.

The sessions will be open to the public.



Pencil sketch by M. Worth awarded prize in Annual Sketch Competition of California School of Arts and Crafts

### Add Ripley's Recipes

A letter from our favorite epicure, Hubert G. Ripley, is always an event in this office and his latest one, received a few days ago, may be of general interest to our readers. He writes:

"In 17th Century France cooking became one of the Fine Arts. Noted chefs received royal favors and decorations. Brillat-Savarin advocated the building of a temple to Gasteria, the tenth Muse. While we, of the Illuminati, like to consider Architecture a Fine Art, the dictionary and encyclopedias, while admitting that the best architecture should be so considered, are still hesitant to come out with a flat-footed statement.

"In the way of being helpful for the promotion of better design, perhaps the enclosed recipe will prove a stimulant toward the production of better things.

When the great ban was lifted, the public was deluged with numberless recipes for the promotion of good fellowship, and incidentally these helped the sales in package stores. A slow process of weeding out and testing has been going on ever since among amateur gourmets. When the great house of Smirnoff set up an establishment in Bethel, Connecticut, for the production of domestic Vodka, the very name of that famous tipple was a challenge in itself.

"Billy Kane has been most helpful, sympathetic, and tolerant as all true artists are, and his approach to the problem was tempered by an unbiased mind and a background of deep knowledge and experience. The recipe itself is a simple one based on sound fundamentals and yet the result is new for, to the best of my knowledge and belief, its elements have not hitherto been so combined.

"The other day, inspired perhaps by perfect weather and glorious autumn foliage, I strolled over to pass the time of day with Billy, asking him casually what suggestion he had to offer of a seasonable nature. How about one of your first loves?' he asked, and that is how the name was given.

#### FIRST LOVE

"A large bar glass (16 to 20 oz.) half full of finely chopped ice. Put in: One dash Orange Bitters

Two onces of Vodka, Smirnoff, 40% A few drops of Pernoud

Half an ounce (approx.) of French Vermouth, preferably Noilly-Prat

"Stir deftly with a long-handle spoon. The proper stirring of a cocktail is practically one of the Fine Arts, an emotional rite. In the hands of a master, this solemn ceremony promotes in the beholder a gustatory expectation and a sense of peace and good will toward his fellow-beings.

"Strain into a tall cocktail glass with a slender stem, and twist over it a bit of thinly peeled lemon rind.

"Billy Kane and I have been working on this for the better part of a year, and the experience has been a delightful one. The idea was mine, but the perfection of composition may only be tasted when compounded by one of the Old Masters. It is a most sensitive blending of nectareous fluids and essences that, when rightly proportioned, produces the Perfect Cocktail." H. G. R.

### State Associations of Architects

The list of State Associations of Architects, printed in the August issue of PENCIL POINTS, failed to include the New Hampshire Society of Architects which was organized in March of this year, an omission which the editors regret. The officers of this Society are: President, Eric T. Huddleston; Vice President, Howard A. Goodspeed; and Secretary, Carl E. Peterson. Mr. Huddleston may be addressed at the University of New Hampshire, Durham, N. H. The Society is not a member of the A.I.A.

The August list also erred in not including the State Association of consin Architects among those affiliated as members of the A.I.A. The Association became a member of the Institute last May. The address of its Secretary, Arthur Seidenschwartz, should have been given as 2104 North 64th Street, Wau-watosa, Wisconsin. These corrections should be noted on the original list.

### Poster Competition Open to Architects

A competition open to the artists of the United States and Canada (including architects and architectural draftsmen) is announced by the Institute of Foreign Travel, Maritime Exchange Building, 83 Broad Street, New York, for the execution of a poster to stimulate an increase of travelers to Europe in 1936. The following prizes are offered: First Prize, \$500 and a non-transferable passage to and from Europe in the highest class of liners selected by the winner; Second Prize, \$200; Third Prize, \$100. The rules of the competition are as follows:

1. Anyone living in the United States or Canada may compete, except members of the Institute of Foreign Travel or of the Art Directors Club.

2. Only one entry may be submitted by each artist. Canadian entries must be sent prepaid from some point within the United States.

3. Copy must be in full color, having due regard to the requirements of lithographic reproduction, and must be to

scale of poster planned, namely, an inside margin surface of 23" x 36"

4. Poster must be general enough in its appeal to stimulate travel to Europe as a whole and by all Steamship Lines; it must not, therefore, feature one country or the services of specific Lines.

5. Theme of art work should be built around the phrase, "SEE EUROPE NEXT." Entries must have distinct poster value, and no design known to be a copy of a photograph will be considered.

6. All entries must have the artist's full name and address in a sealed envelope clipped or glued to back of copy. The sealed envelope will not be opened by the judges until after the winners are selected. Posters submitted must be unsigned, but the ones awarded prizes will have signatures affixed before reproduction. Identification will be given to all posters used in public exhibition.

7. All posters must reach the Contest Director, Institute of Foreign Travel, 80 Broad Street, New York, not later than December 31, 1935, when the contest closes.

8. The three winning posters become the property of the Institute of Foreign Travel, with full rights of reproduction in any form.

9. The Institute reserves the right to retain posters for a period of one year after the date the award is made for such public exhibition as may be arranged.

10. The winner of the First Prize may select the ships for his trips between the regular Atlantic ports of the United States or Canada and the European ports from the vessels of the Lines listed below. Passages must be taken during 1936.

Anchor Holland America Arnold Bernstein Italian Canadian Pacific National Greek Cunard White Star North German Lloyd Donaldson Atlantic Red Star Fabre French Furness Gdynia-America Hamburg-Amer.

Norwegian America Scandinavian-Amer. Spanish Transatlantic Swedish Amer. **United States** 

(Continued on page 32, Ad Section)



Proposed design for Medford City Hall

Michael R. D'Orsi, Architect

### LET THIS FREE BOOK

### help you with your flooring problems

THIS new 1935 edition puts at your fingertips the facts you need to specify and install economical Maple Flooring jobs-in homes, stores, schools, office buildings, factories, mills and warehouses-new buildings or repair jobs. It tells how to lay and finish Maple, Beech, and Birch flooring, identifies the uses of the different thicknesses and grades-gives Standard Specifications and Grading Rules-and explains the special characteristics of these woods which are responsible for their remarkable service.

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If you do not find your copy in your files, write for a copy today and let this New Book help you with your flooring problems.

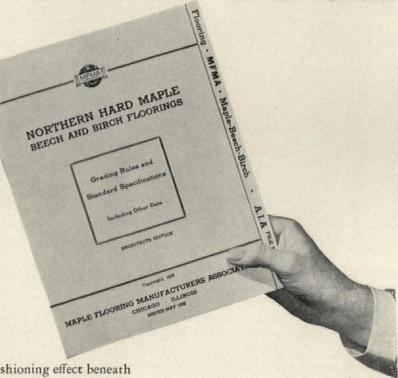
### MAPLE FLOORING MANUFACTURERS ASSOCIATION 1785 McCormick Bldg., Chicago, Illinois

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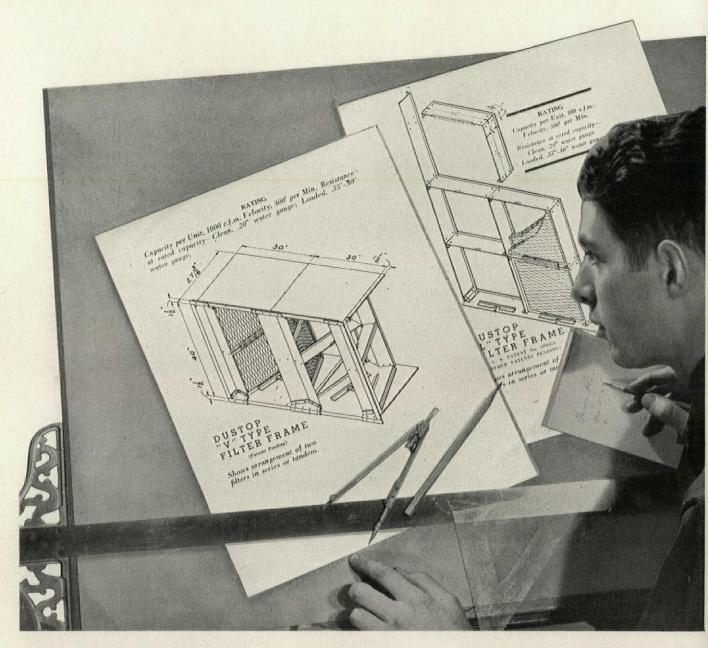
Cummer-Diggins Company Farrin Lumber Co., M. B. Holt Hardwood Company Kerry & Hanson Flooring Co. Kneeland-Bigelow Company North Branch Flooring Co. Northwestern Cooperage & Lumber Co. Gladstone, Mich.

Cadillac, Mich. Cincinnati, Ohio Oconto, Wis. Grayling, Mich. Bay City, Mich. Chicago, Ill.

Oval Wood Dish Corp. Robbins Flooring Company Sawyer Goodman Company Stephenson Company, I. West Virginia Pulp & Paper Co. Wells, J. W. Lumber Co. Wisconsin Land & Lbr. Co. Yawkey-Bissell Lumber Co.

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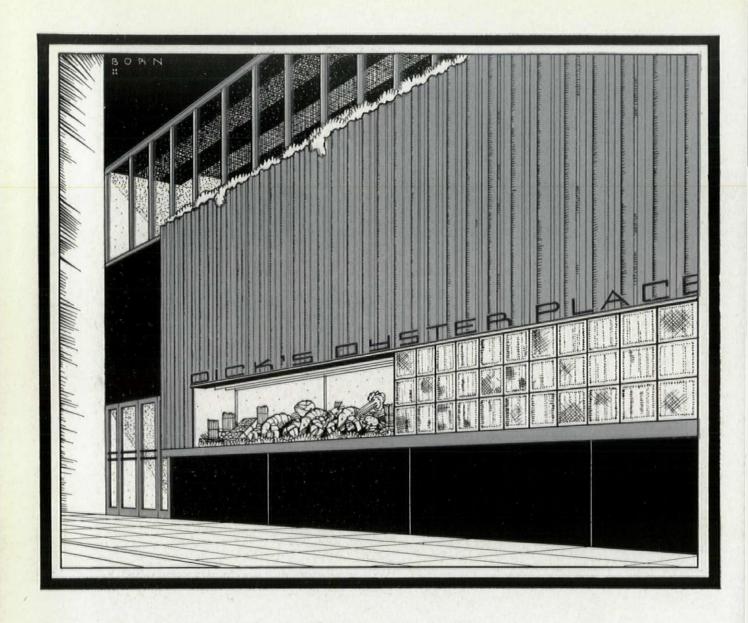
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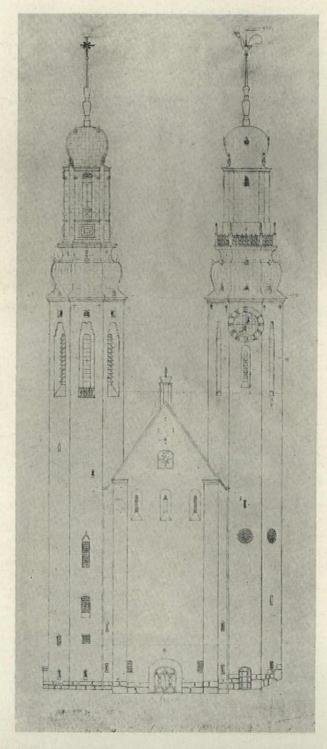
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The frontispiece this month shows an interior view of the greatest of modern Swedish churches, the Hogalid Church in Stockholm, designed by Ivar Tengbom, whose work is discussed in the article which follows. His drawing of the main elevation, reproduced above, shows the interestingly varied and entirely harmonious treatment of the two towers





### ARCHITECTS OF EUROPE TODAY

6-Ivar Tengbom, Sweden

By GEORGE NELSON

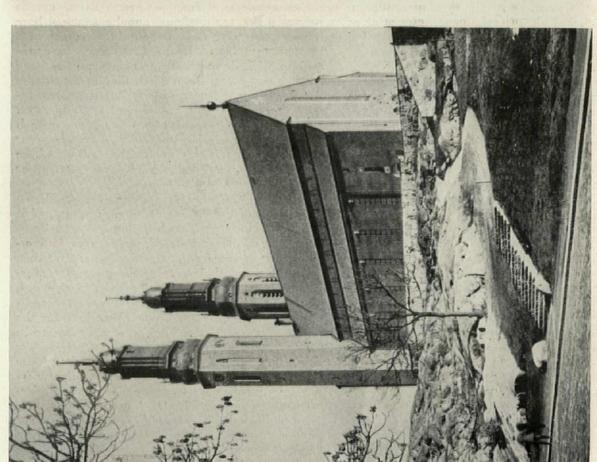
AS the train pulls into the station at Stockholm the traveler can catch an occasional glimpse of the tower of the Town Hall, alternately framed and blotted out by ascending clouds of steam, by blank warehouses and the other familiar objects of station yards. It is a very fitting introduction to the city, the curious dark pile whose heavy ornaments of bright gold gleam with barbaric effulgence against sombre masses of brick and the pale brilliance of a northern sky. This prodigious monument, which has already taken on a character of agelessness, is, as much as any organized collection of sticks and stones can be, the complete summingup of a culture. The infinity of traits which go to make up that thing called national character here find concrete expression, and to one sensitive in such matters, the very walls reveal those influences that through countless generations have moulded and emphasized the Swedish character. Today this building stands for other things as well: the multitude of forces battering against the old order in architecture—the machine and mass production, new ways of living, a growing need for simplicity -have precipitated a conflict not unlike that going on elsewhere in the world, and Stockholm's Town Hall emerges as the swan song, the final expression of an architecture that is changing beyond recognition. In this sharp division between the old and the new, one man comes to mind as preeminent in both, his essentially realistic point of view effectively preventing a fanatical adherence to one school or the other. This is Ivar Tengbom.

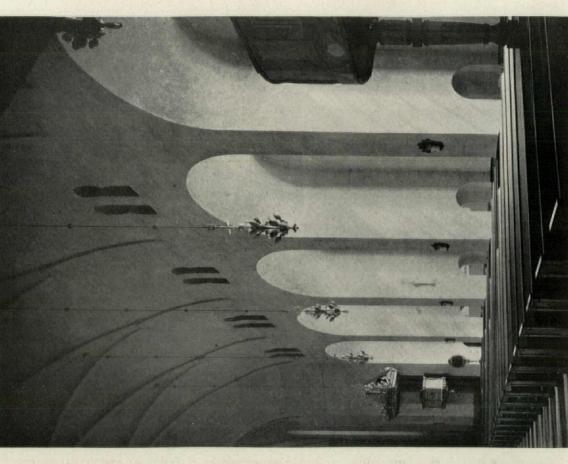
Among the men who have appeared in this series, all outstanding in a greater or less degree, there has been an extraordinary divergence of personalities: a fiery Swiss with visions of a new social order, a crafty Italian politician, sliding from one architectural mannerism to another as expediency dictates, a fleshy German, dreaming dreams of buildings closer to pure geometric abstractions than anything since the pyramids, all of these have

stood out as forces instrumental in the forming of a new architecture. Tengbom, totally different, is none the less a dominating personality. This man, whose distinguished bearing stands out in any group, has been from the beginning a superlatively able and practical architect whose mastery of the traditional modes of building is best illustrated by the liberties he has taken with them.

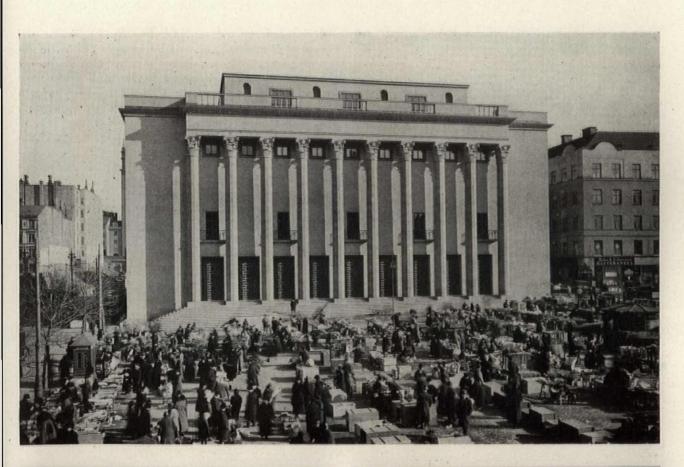
He was born in 1878, to a family which had numbered many soldiers and ecclesiastics among its members, but no architects. There does not appear to have been any specific event that led to his adoption of architecture as a profession, but it was settled while he was still in his teens, and when barely twenty he entered the Chalmers Technical Institute in Gothenburg. This institution was described as "a private college, but very good none the less"-an interesting comment on the importance of government schools at the turn of the century. After completing the course, which gave a thorough training in all practical matters relating to architecture, he went to Stockholm, entering the Royal Academy of Arts, which occupied somewhat the same position in Sweden as the École des Beaux Arts in France. He immediately became one of its most outstanding students, and his work gained for him the highest award that could be won: the Royal Medal, which carried with it the privilege of study and travel in foreign countries for several years. Tengbom went to Paris, then as now a Mecca for students, and he studied there for a considerable time, coming into contact with the best men in the Beaux Arts, whose influence on him, while later greatly transformed, was none the less important. Before returning to Sweden he traveled all over Europe, observing, sketching, acquiring a new sense of values, and learning much about the old styles which were to appear in such surprising forms in his later work. When he went back to Sweden it was not to the capital, where he had so distinguished himself as a student, but to Gothenburg.

Practicing in Gothenburg at the time was Ernest Torulf, one of the leaders of his profession, and it was with him that Tengbom became associated. Torulf had commissions of considerable importance, but it was during the five years that they were associated that some of the greatest competitions ever held in Sweden were announced, among them the competition for the Engelbrekt Church and the one for a new Town Hall for the city of Stockholm. That they took second place in each of these competitions in face of the stiffest opposition Sweden could offer was no doubt due in large part to Torulf, but nevertheless it was no small feather in the cap of a student recently returned from abroad. They had better luck on their other attempts and among their winning designs were the Town Hall for Boras, and the Arvika Church. Growing ambition, based on confidence gained from these successes, and the urge to go to





estration, and the handling of the towers all show the influence of earlier Swedish architecture on that of today. The interior shows the same quality of design, its splendid proportions and knowing simplicity placing it among Tengbom's most satisfying creations. Note the decorative lighting fixtures The distinctively national character of Tengbom's work is well illustrated by the Hogalid Church. The form of the main body of the church, the fen-







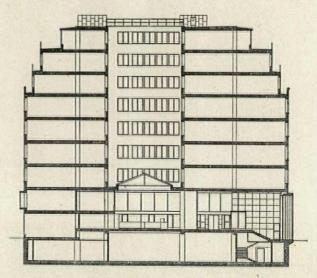
Here, in Stockholm's Concert Hall, the inspiration is obviously classic, but so changed are the proportions and details, so personal the approach, that the building attains an authentic character in no way dependent on the traditional criteria of "correctness." Swedish craftsmen contributed to its success

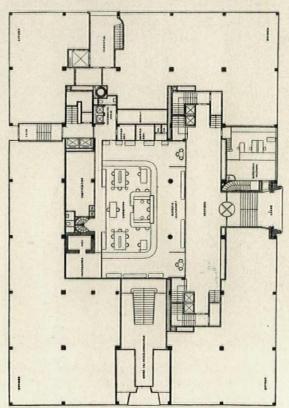


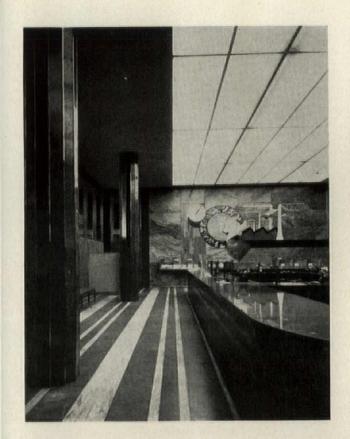
The Enskilda Bank, in Stockholm, Tengbom's first important commission, shows the freedom with which he characteristically treats traditional forms

Stockholm led him finally to sever his connections in Gothenburg. In 1912 he arrived in the capital, and opened his own office.

Tengbom brought with him more than the invaluable lessons he had learned from Torulf, more than the experience gained in the carrying out of actual buildings: a most engaging personality and excellent connections were by no means the least of his equipment. In 1915 these things bore fruit; he was given his first important commission, the Enskilda Bank of Stockholm. Here for the first time appeared those characteristics which gave his work so definite a flavor. It will be seen that the effect of this building is that of an Italian palace of the Renaissance; on second examination it becomes apparent that the entire composition has been treated with a disregard for stylistic correctness that approaches the monumental. The ponderous rhythm of the typical Italian rusticated base is interrupted by four groups of engaged columns, above which are set figures almost a story in height. The windows of the upper floors are the common windows of the country, and no attempt has been made to ornament them with frames and pediments; the cornice consists of a bold fascia and plain blocks below. The whole of this unusual design has been handled with such skill and strength that only study reveals its complete lack of conventionality. Note, too, that the design is in excellent character: the bank is a private one, as might almost be guessed from the exterior, and the work spaces above are well expressed by the severely utilitarian façade and plain windows. At the present time, when most of its contemporaries are acquiring a "dated" look, this building is quite as satisfying as when it was erected. An event of importance is marked by this work: it was the first of a series of collaborations between Tengbom and the greatest of living sculptors, Carl Milles. Haakon Ahlberg describes the building as a "substantial structure . . . a modern arrangement with old-time distinction." One might quarrel with the "old-time" but certainly not with the "distinction."



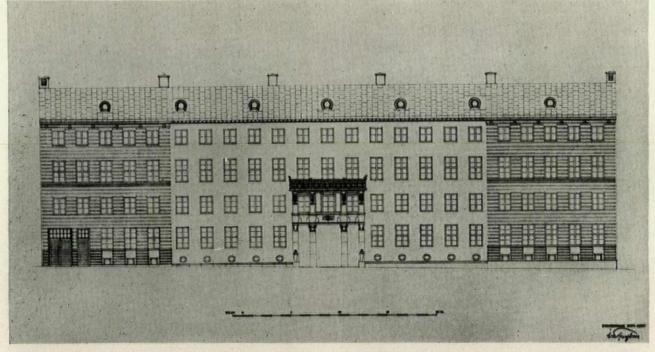






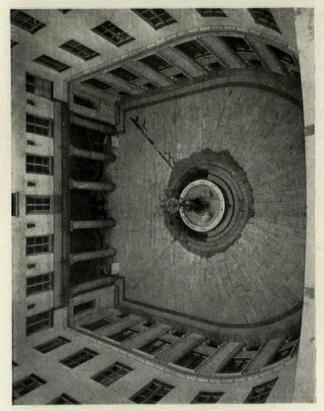


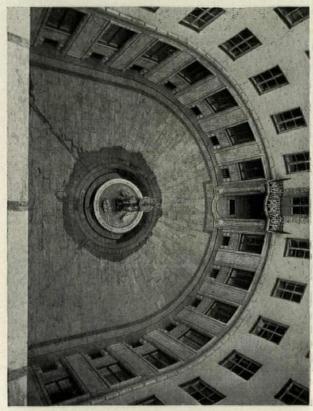
The City Building in Stockholm, a bank and an office building combined with a hotel in the upper stories. The rich but simple decorative treatment is as pronounced here as in his earlier, more conservative work. Modern architecture is not a style to Tengbom, but a solution to a special type of problem



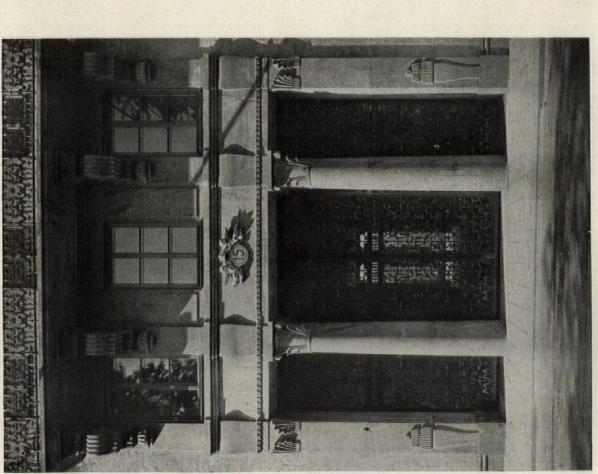
Final drawing of the Swedish Match Company's head office in Stockholm. The old buildings on either side show what care was taken not to destroy the harmony of the street—care not commonly exercised

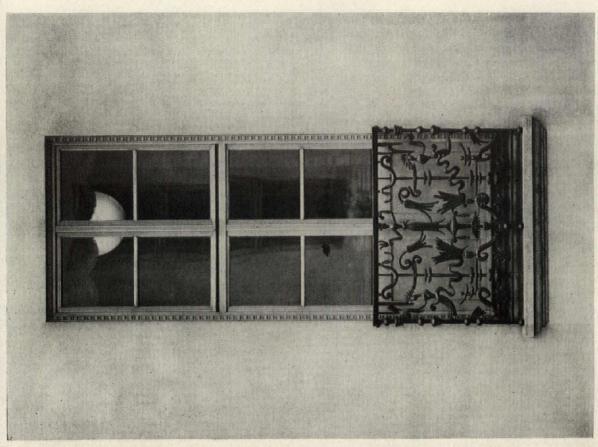
Work came in increasing quantities after the completion of the bank. Most of the commissions were for private houses and villas of more than average size, and Tengbom, by virtue of this work and the circles in which he moved, soon acquired the reputation of a de luxe architect, the man to whom one inevitably came for work of the most expensive sort. He did not allow himself to be pigeonholed, however; a person of rare energy, he designed factories, hospitals, schools, churches, and





Two views of the interior courtyard, of which the Diana Fountain by Carl Milles is the main feature





Bold, distinguished design and superb craftsmanship characterize the Swedish Match Company Building. The formality of the building is in striking contrast with the free design of the wrought iron gates and balcony railings. The ironwork on this building is among the finest examples of modern times. It was designed by Robert Hult and Gustaf Cederwall, the former of Tengbom's staff and the latter the sculptor for all the details sanatoria. But it was not until 1920, five years after the completion of the Enskilda Bank, that he had an opportunity to display his rapidly maturing talents in a monumental work. It was in this year that he won the competition for the Stockholm Concert Hall.

The problem was to design a building for a plot almost square in shape, one side of which was on a street, while the main elevation faced on an open market place. Two halls were required, and Tengbom placed one in the center of the mass, as in the typical French plans, and he tucked the other away behind an enormous noncommittal façade, providing it with separate stairways. His design shows the strong leaning towards the an-



A detail of the main entrance gates showing the rich texture and intricate design. Swedish Match Company Building

tique which characterizes much of the Swedish architecture of the time, but the treatment, as in the private bank, is anything but classic in the archæological sense. The elongated columns, the decorative scheme (which is an arresting combination of rigid geometry and the freest naturalism), the playful handling of the interior of the large hall, these are the work of a man who had preferences for certain types of traditional architecture, but whose tastes were so strongly personal as to produce something unlike anything seen before.

The Hogalid Church, finished a few years later, shows a shift from classic influence to native styles, but here, too, the bold freedom of treatment is the same. The great barn-like mass, with its twin



A lighting fixture designed by Simon Gate of the Orrefors Glass Works for the Swedish Match Company Building

towers, encloses what is perhaps his finest work. There are few church interiors of the past three or four hundred years which can be compared to this for moving simplicity, deep religious feeling, and consistent design, nor is it necessary to point to the expensive dream of a bygone day which will some day be the Cathedral of St. John the Divine,



Chair and desk by Carl Malmsten, Sweden's preeminent designer of furniture. Swedish Match Company Building



The City Building is a notably clean design, dependent for its effect only upon its proportions and materials. The absence of the more pronounced mannerisms of the International Style is clearly apparent

or to that masterpiece of architectural anachronism, Grace Cathedral in San Francisco, to further bring out this fact. When Tengbom indulges in a bit of architectural recapitulation, he invariably handles his theme in a manner which leaves no doubt in the mind of the beholder as to whether the architect knew what century he was living in or not.

It has already been remarked that Tengbom early in his career acquired a reputation as a designer of elegant and expensive buildings. It was the late Ivar Kreuger who gave him a chance to show what he could do when given absolute carte blanche. He proposed to move the quarters of the Swedish Match Company to one of the fine old streets of Stockholm, and he appointed Tengbom as the architect. Tengbom's summing up of the problem as he saw it is most revealing. He said, "The site for this building is steeped in tradition. Once one of Stockholm's finest residential streets, there remain today a few mansions that have been able to defy the onslaught of a new age. The street has characteristics, however, which made possible the preservation of its quality. The old houses were built to the same height as allowed by the present laws. Nor, in this case, was there any special necessity to disturb the street's physiognomy. The task was simply to build an office, and there were no room requirements of any special kind which could necessitate exterior peculiarities. It was the old and usual request for rooms of normal

size and window space, the same requirements that had been fulfilled in this street for several centuries. The usual modern office need for large rooms with walls of glass was not present here. There was nothing to prevent the newcomer from fitting in happily in the old street." Here is the conclusion of a practical architect, not a dreamer seduced by some beguiling idea of how a modern building should look.

The Swedish Match Company Building is the final development of Tenghom's personal style as based on an originally classic inspiration. Here the familiar motives are so changed as to be almost unrecognizable, and the freedom of his design is equalled only by its tremendous vigor. The list of craftsmen who collaborated with him reads like a roll call of the great names in contemporary Swedish art. Carl Milles did the famous Diana fountain in the courtyard and other sculptures: Carl Malmsten designed and built all the special furniture; Simon Gate of the Orrefors works did the lighting fixtures. The materials were splendid native marbles and finely grained granite; textiles, wood, and metals were all specially selected or designed. The craftsmen who worked on the job were limited only by the requirements of the problem, and Tengbom coordinated their efforts in a building worthy of the best they had to offer.

A sudden and radical change took place in his work in 1933. Two projects came up, one for a bank and hotel building, the other for a large printing company, and in both of them Tengbom "went modern." A preponderance of window area, horizontal lines, total absence of exterior ornamentation characterize both of them. To queries as to what caused this apparently revolutionary change in design his answer is brief: "I never had buildings of this type to do before." And in the light of past performances, it is convincing. It is notable, however, that in neither the "City" building nor the printing plant did he adopt the more pronounced mannerisms of the International School. The former, for example, has many large windows; they are not forced into horizontal strips for an effect. They are simply openings in a wall of the size which was required. The wall, incidentally, is not of stucco, but is made of large slabs of fine white stone, and the railings at the top are anathema to extreme modernists because instead of being made of pipes, they consist of rows of vertical members whose purpose is obviously decorative. The interiors, similarly, have a typically personal character which even the severity of the design could not entirely conceal. One can only come to the conclusion that between Tengbom's traditional and modern work there is no essential difference; the whole is always given consistency by a basic and sound approach.

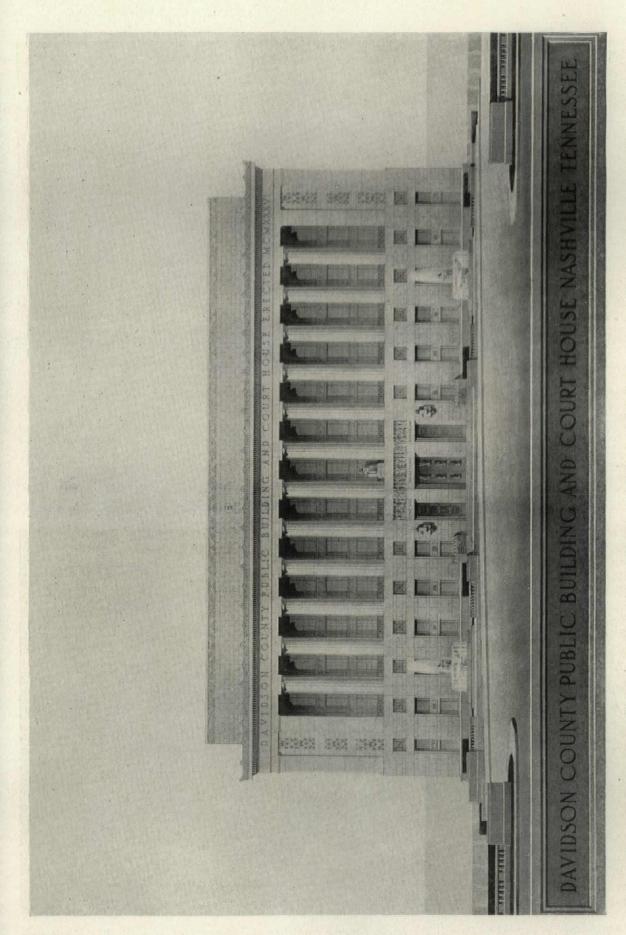
Of his attitude towards architecture there still remains one point of major importance. To Tengbom, architecture is more than the bare building; it of necessity includes the correlated efforts of

craftsmen, who, working under the guidance of the architect, the master builder, produce a finished and complete work of art. These efforts he describes as a "great union of forces working towards a common aim." Of recent developments in architecture he says, "They are the result of the social upheavals that followed the War. Social and mass problems have become the chief interest and the cult of machinery has found fertile soil. In this age of standardization, however, it ought to be worth while to foster the individual contribution, to leave some room for beauty and charm, if we wish to avoid mentioning such a fantastic idea as beauty." Always realistic in his approach, Tengbom will do a "modern" building when the program calls for it-he would not put Gothic buttresses on an engineering laboratory as a protest against the new order-but to him there is a fundamental difference between architecture in its noblest sense, and the commercial building of today, so aptly described by Christian Barman as a "collection of cubic feet."

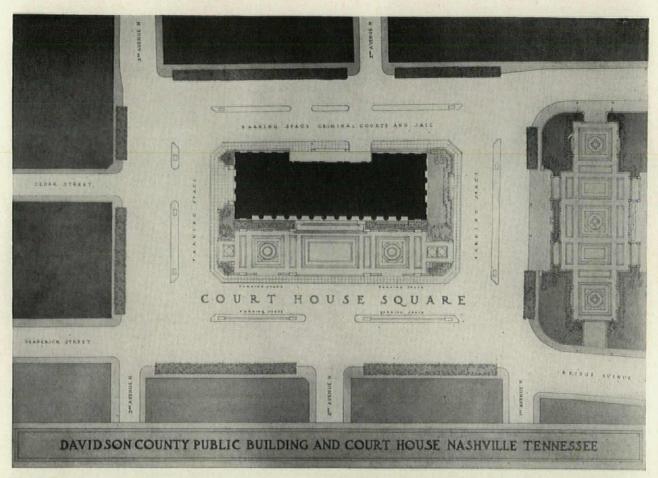
This insistence upon the broadest and most comprehensive aspects of architecture at a time when problems of a very special and complicated sort are clamoring for solution is not a popular point of view, and he realizes the situation and accepts it. Once, when referring to the Swedish Match Company and the craftsmen who worked on it, he said, "Without their help the result would have been a soulless construction." This strikes the keynote of his life's work, summed up in a sentence.



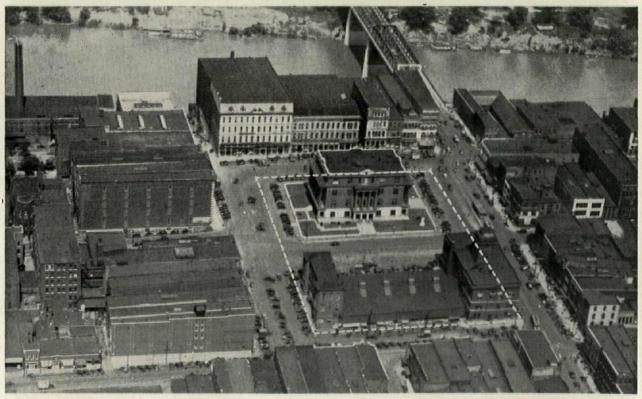
A night view of the Esselte Building in Stockholm. It houses printing company offices and equipment



Winning design by Emmons H. Woolwine of Nashville and Frederic C. Hirons of New York, Associate. Davidson County Court House Competition

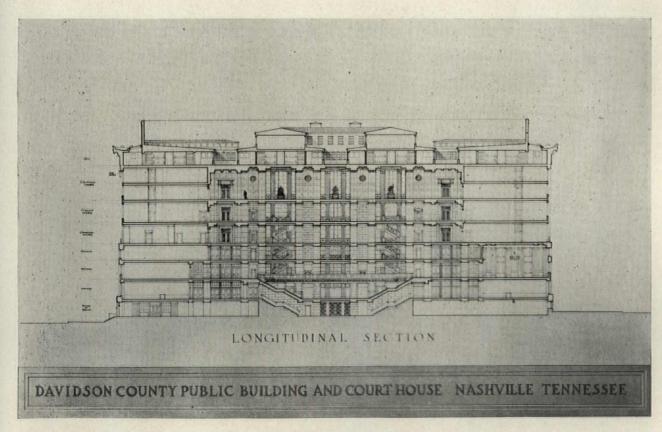


Site plan, winning design by Emmons H. Woolwine of Nashville and Frederic C. Hirons of New York

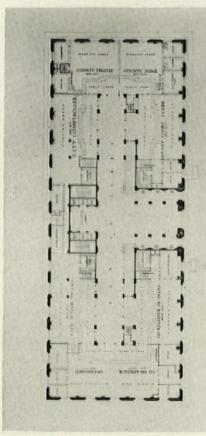


Bird's-eye view of site of proposed Davidson County Building and Court House, Nashville, Tennessee

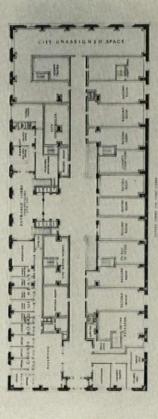




East elevation and longitudinal section of winning design by Emmons H. Woolwine of Nashville and Frederic C. Hirons of New York in the competition held during the summer and judged in Nashville



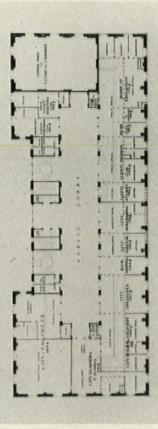
PLAN OF FIRST FLOOR



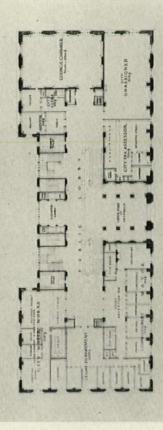
PLAN OF GROUND FLOOR

COUNTY AND CITY FLOORS

DAVIDSON COUNTY PUBLIC BUILDING AND



COUNTY AND CITY

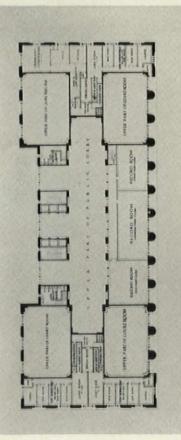


PLAN OF SECOND FLOOR

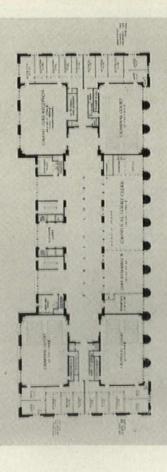
CITY OF NASHVILLE

DAVIDSON COUNTY PUBLIC BUILDING AND COURT HOUSE NASHVILLE TENNESSEE

Plans of lower floors, Davidson County Public Building and Court House, as shown in design by Emmons H. Woolwine and Frederic C. Hirons

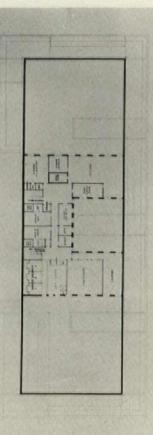


MEZZANINE FLOOR PLAN

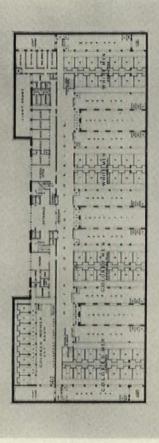


MAIN FLOOR PLAN
W CRIMINAL COURTS

DAVIDSON COUNTY PUBLIC BUILDING AND COURT HOUSE NASHVILLE TENNESSEE



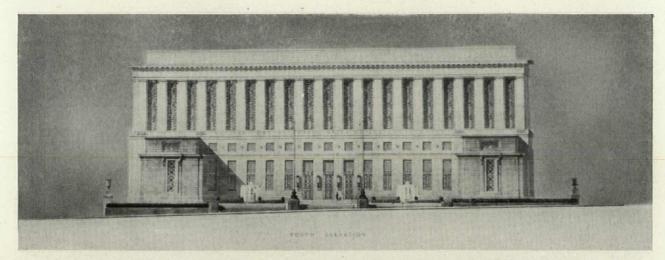
PLAN OF MEZZANINE



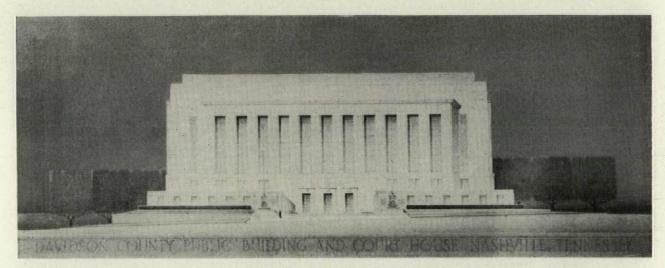
MAIN FLOOR PLAN

COURT HOUSE NASHVILLE TENNESSEE

Upper story plans of winning design by Emmons H. Woolwine and Frederic C. Hirons. The fourth and fifth floors (not shown) containing the Chancery and Circuit Courts are similar in arrangement to the Criminal Court floor shown here



Design placed second, Henry C. Hibbs, Nashville, and Paul P. Cret, Philadelphia



Design placed third, E. E. Dougherty, Nashville, and Holabird and Root, Chicago



Design placed fourth, Granbery Jackson, Jr., Nashville, and James Gamble Rogers, New York

## A NOTEWORTHY COMPETITION

A DISTINGUISHED group of architects took part in the competition for the design of the Davidson County Public Building and Court House to be located in Nashville, Tennessee, and the winning drawings by Emmons H. Woolwine of Nashville, associated with Frederic C. Hirons of New York, are reproduced here, together with the elevations of the designs placed second, third, fourth, fifth, and sixth. The Jury of Award, consisting of Otto R. Eggers, Henry Hornbostel, and Egerton Swartwout, agreed unanimously on the premiated design, Mr. Hornbostel pronouncing it

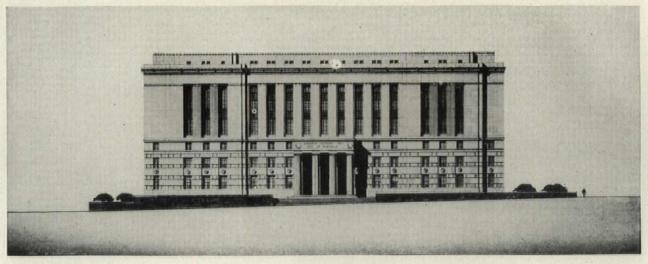
the most ingeniously designed public building he had seen in a long time and one that will undoubtedly serve as a model for other buildings of its type for years to come.

The Jury was impressed by the simplicity of the winning plan and its appropriate expression of a public building. Its report read, "It has well lighted, ample public lobbies providing direct access to all courtrooms and departments. The courtrooms and their dependencies are exceedingly well arranged and the separations between the public and the court officials are well considered. The rectangular form of the plan establishes the simplicity of the exterior, which is a dignified and successful expression of modern classic architecture. The placing of the building to the rear of the site allows a better view of the façade from the main thoroughfare and to those approaching from the bridge."

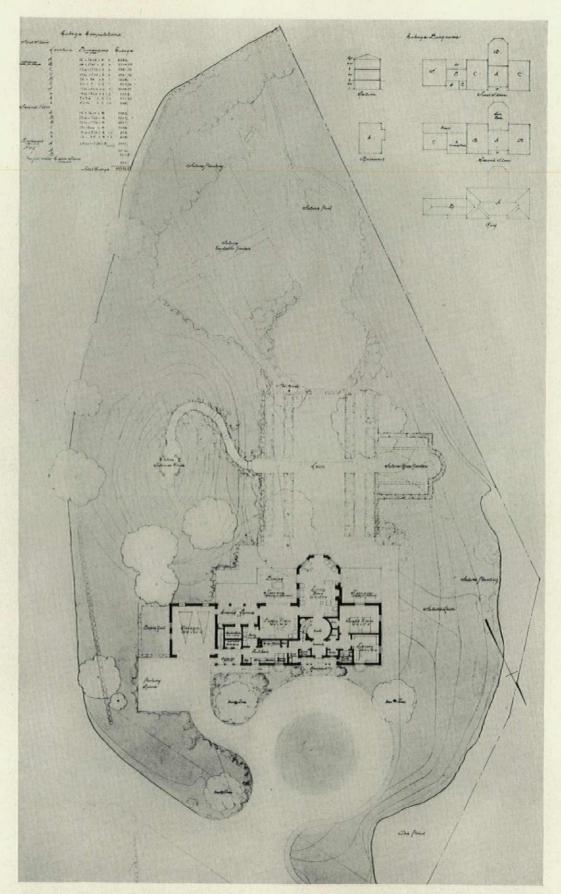
Francis P. Smith of Atlanta, Georgia, acted as Professional Adviser for the competition.



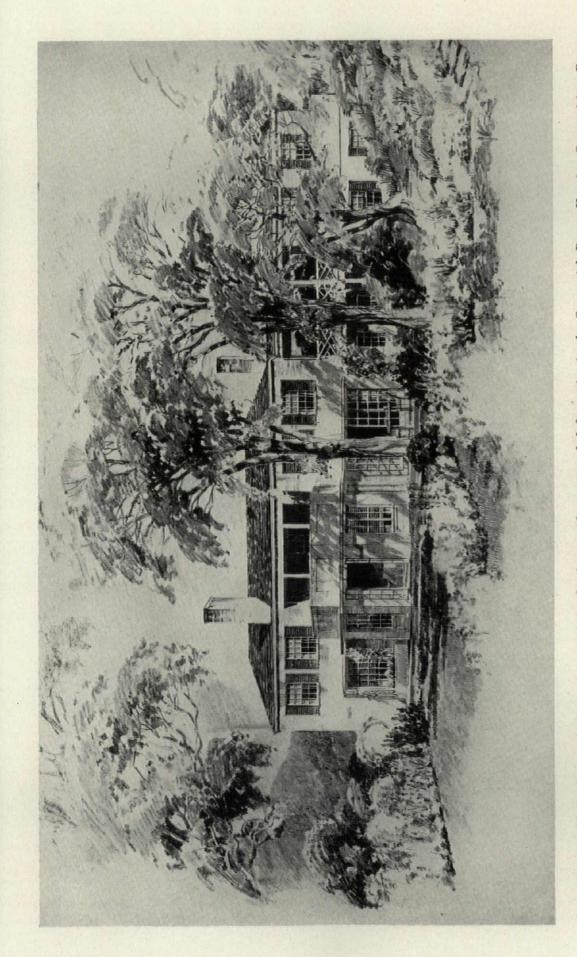
Design placed fifth, Warfield & Keeble, Nashville, and Corbett, Harrison & MacMurray, New York



Design placed sixth, Marr and Holman of Nashville, Tennessee

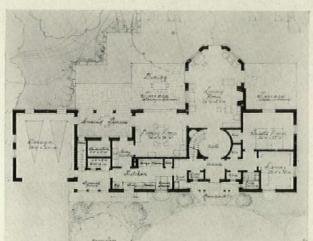


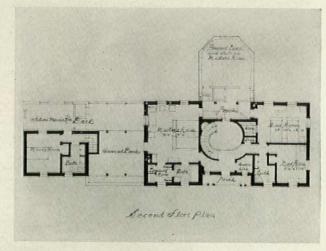
Site plan of winning design by Phelps Barnum, Architect. Greenwich (Connecticut) Better Housing Competition. The irregular plot was here appropriately treated

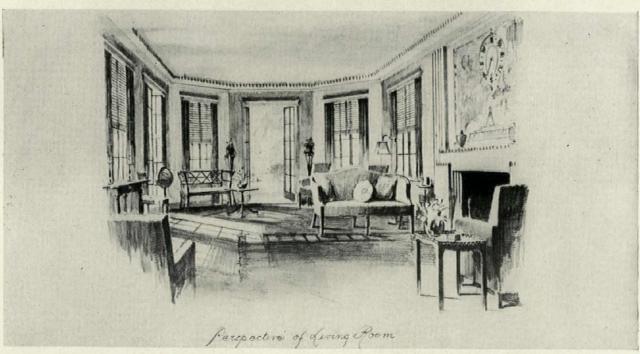


Perspective of Phelps Barnum's design for a 40,000-cubic-foot residence, awarded first prize in the Greenwich Better Housing Competition. Rendered in pencil by J. Floyd Yewell. The exterior is to be of common brick veneer, painted buff, with white trim and black shutters. Black slate roof

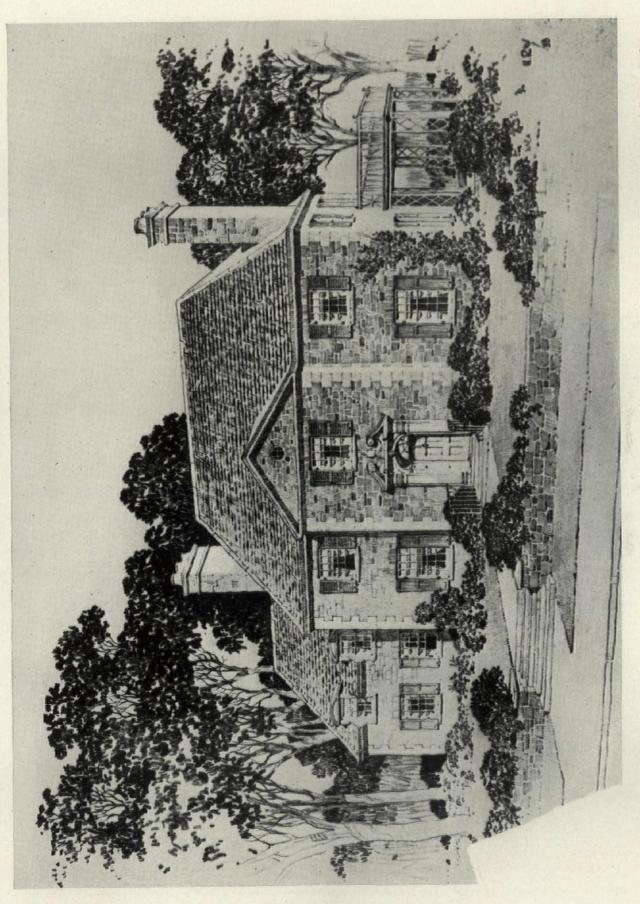






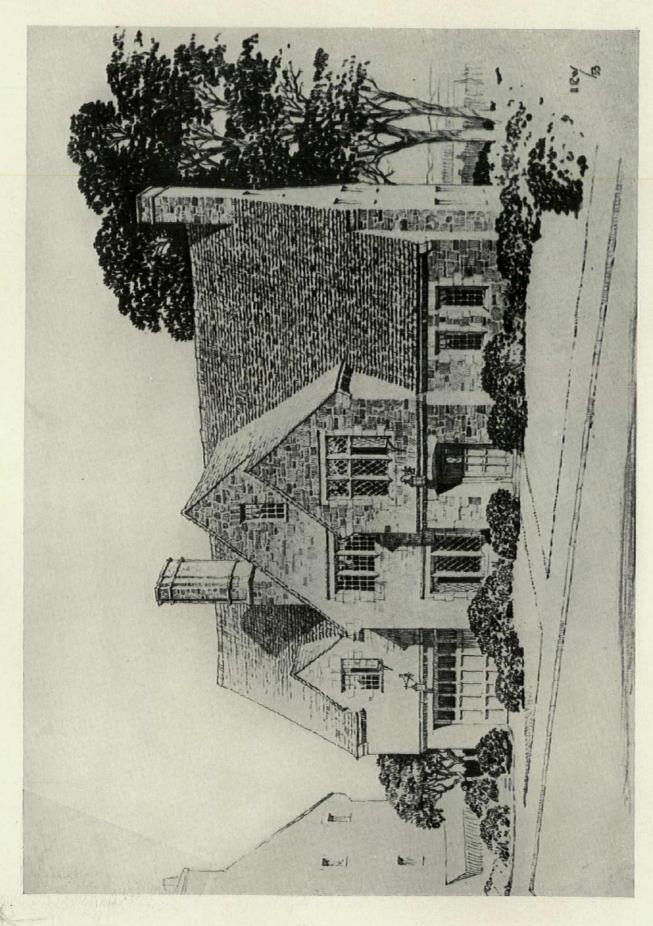


Plans, elevation, and interior perspective of design for a residence by Phelps Barnum, Architect, awarded first prize in Greenwich Better Housing Competition. Interior rendering by J. Floyd Yewell



stmount, Quebec

Designed and drawn by H. Ross Wiggs, A.R.I.B.A., Architect



House on Daulac Road, Montreal, Quebec

Designed and drawn by H. Ross Wiggs, A.R.I.B.A., Architect

## AN IMAGINARY VILLAGE MODEL

With Notes on How it was Made By ALBERT E. SIMONSON

THE accompanying illustrations show various stages in the construction of a most interesting model of "Middlesex Village," designed and built by students of the Cambridge School of Architecture and Landscape Architecture under the direction of Mr. Albert E. Simonson. The design of the community, including its town plan, the methods of approach, the circulation within the village, and the various civic, business, educational, recreational, and housing units, formed a major problem during the school year. The model was the final step, built to show in three dimensions and as realistically as possible the completed design.

An actual site, the Middlesex Fells Reservation, near Boston, was chosen as the location of the village and all of the existing topographical conditions were taken into account in working out the design. The model shows the central portion of the village development, exclusive of the schools and recreational areas, and represents approximately 150 acres out of the 3000 acres of the entire site. The Village Common is located on the highest elevation of the site, some 100 feet above the level of the lowest grade of the model. Facing the Common from the west the Community House occupies the central position, the Inn is situated on the left, and a church Group on the right. Surrounding the Common are blocks of residences, those on the western slope being more pretentious than the others, due to the desirability of the location. A description by Mr. Simonson of the process of building the model will be of interest.

"A table frame measuring ten feet square was so constructed that it could be readily knocked down and reassembled by bolting the various members together. The top was fashioned by twelve equal sized panels of one-inch stock cleated on the bottom. The top surface of these panels served as the lowest grade of the site or, in other words, the grade of Spot Pond and the reservoirs.

"The next stage consisted of building up the contours on each panel, using quarter-inch pine, which at the scale of the problem measured five feet in elevation. These contours were established by the general plan but constructed in scale five feet above the levels indicated by the finished grades. Each quarter-inch layer was thoroughly glued on both sides and nailed to the under layers. After all the panels had been built up, the model was assembled and, with a power sand grinder, the layers were ground down to the final established grades of the various ground elements, the lots, gardens, and roads.

"In the meantime, solid wood cores of the many municipal buildings and houses had been constructed. On these cores, paper templates of the walls and roofs were glued. These templates were rendered on light Whatman paper indicating the color and texture of the building materials as well as the fenestration. This method we found very satisfactory considering the small final scale (1''=20'), because it allowed for the projection of the eaves and minor breaks in the surfaces.

"The trees were built up, using heavy-gauge picture wire to form an armature. These metal armatures were dipped in a composition of glue, whiting and dry color and allowed to dry. The foliage consisted of finely ground green rubber sponge. The armature covering having dried, the branches were re-dipped in hot glue and then into a bath of the rubber sponge. While this was drying the branches were bent into their final form. This process resulted in trees of good scale, compatible with the scale of the architecture. The color of the foliage could be changed by painting the rubber sponge with tempera.

"The buildings were fitted into the model by cutting out corresponding sections in the main topographical model and were glued in place except in the case of a house situated on two of the panels. In this instance, the core was removable.

"After all the buildings had been incorporated in the model, all the ground areas were shellacked and, while the shellac was drying, fine sand was sifted over the surface. This surface was finally painted with oil paint. The use of fine sand gave good scale and texture for the indication of lawn areas.

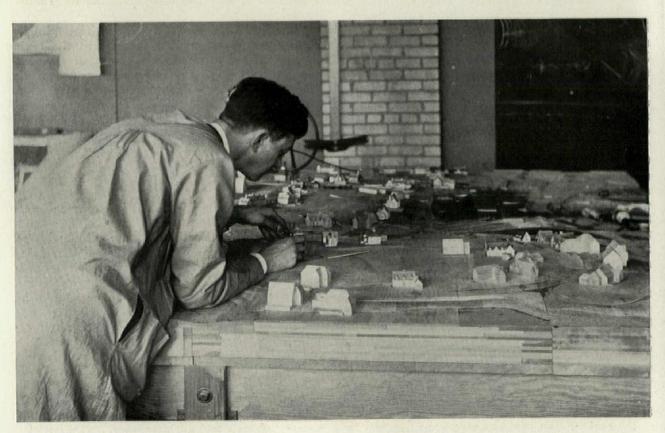
"The roads were ground to their proper levels and then covered with long strips of fine sand-paper well glued. The low planting, shrubs, hedges, and flower masses were made by pouring glue into the bath of finely ground sponge which gave a plastic mass capable of being molded into any form. After drying, these forms could be painted appropriately.

"The outcropping rocks, ledges, and minor exterior masonry elements were built up of "Albastone," a plaster that has very little shrinkage. A good bond was effected by partly sinking nails with wide heads into the wood core before the plaster was applied.

"By these various methods, we feel that a consistency of scale and an interesting indication of a variety of materials, as well as a pleasing and harmonious color were achieved."



View of model of "Middlesex Village" under construction showing how contours were built up in layers



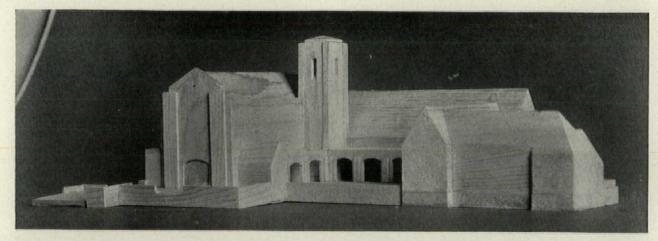
"Buildings" being put in place on the model of "Middlesex Village" constructed by students at the Cambridge School of Architecture and Landscape Architecture under the direction of Albert E. Simonson



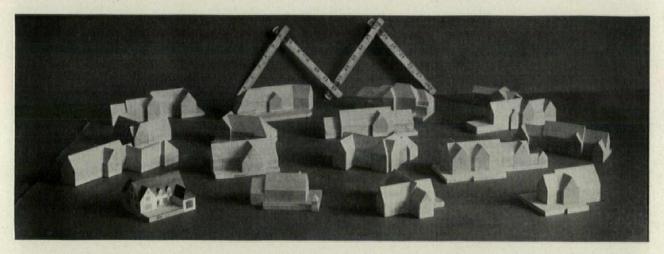
This shows the natural effect of the foliage made as described in the accompanying text. See page 579



Two views of the completed model of "Middlesex Village" built by students in the Cambridge School of Architecture and Landscape Architecture under the direction of Albert E. Simonson. See description



A close-up view of the solid wood core of the church group, ready for its paper surface

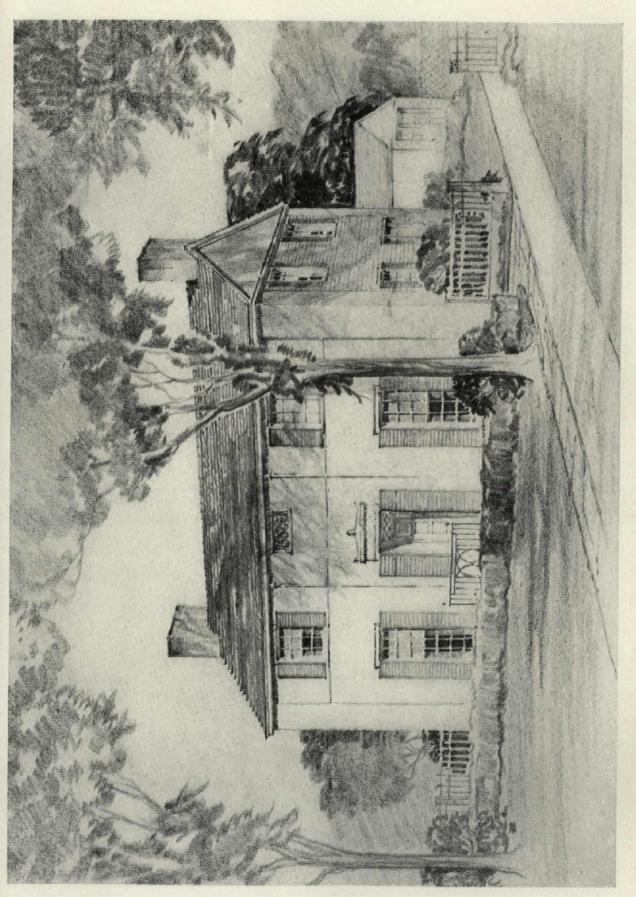


Models of various buildings of "Middlesex Village." One at lower left has paper skin attached



General view of the completed model of "Middlesex Village" built by students of the Cambridge School of Architecture and Landscape Architecture under the direction of Albert E. Simonson. Scale: 1"=20'

. 1

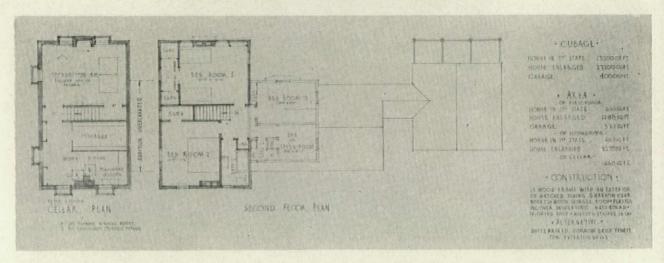


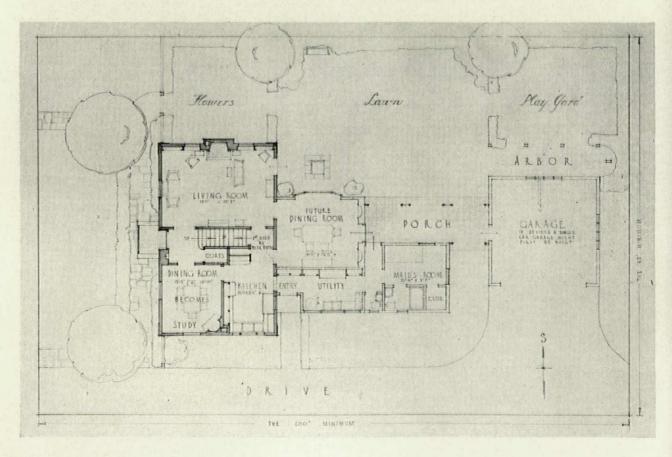
Perspective of winning design by Robert H. Lienhard of Newington, Connecticut, in Competition sponsored by the Capitol City Lumber Co.

Plans showing house to be built now and future additions according to prize winning design by Robert H. Lienhard in the Architects' Competition sponsored by the Capitol City Lumber Co.



The small perspective shows the house as it would appear at some future time when the additions were made. W. F. Brooks, A.I.A., of Hartford, Connecticut, acted as Professional Adviser





## THREE HOUSES THAT CAN GROW

Connecticut Architects Plan for Future in Competition

W. F. BROOKS, A.I.A., of Hartford, Connecticut, acted as Professional Adviser for an unusual competition, held last spring and open to registered architects in and near Hartford. The competition was sponsored by the Capitol City Lumber Company which put up three prizes of \$100 each. The unusual feature of the competition was that it called for the design of a house planned to take care of the immediate needs of a family of three and also for the future expansion of the house when the owner might be better able financially to afford the larger quarters he desires. Since the condition is typical of the situation of many prospective home builders today it may be of interest to quote from the program.

"This home is to be designed for a family of three, consisting of Mr. and Mrs. Newhouse and

their son, aged three.

"In 1929 their income exceeded their outgo by a very slight amount. Mr. Newhouse succeeded in saving some money when the various necessities were coming down during 1929, '30, and '31. In 1935 his one cut in salary has been returned to him, and his total income is about the same as it was in 1929. During the past twelve months, with the increase in his family and higher living costs, he has just about held his own.

"He would like to own a home of his own. He knows that it would be cheaper in the long run than renting. He has heard about inflation. He has heard that real estate, particularly the ownership of one's own home, is one of the safest and best investments during such a period. He does not expect to build or buy another house for at least ten years, so he is looking forward to what he will need in the way of rooms and equipment within this period

"He hopes that within this period, he will be able to afford and to have a home with eight or nine rooms, three baths, a two-car garage, open porch, study and possibly a recreation room. Although he wants all these things, he knows he cannot afford them at present, and could get along without some of them in a home of his own. He

is very much sold on all of the new and modern improvements in house construction. He wants all of them. If not now, at least eventually. He could get along without this number of rooms, and without all of these modern conveniences, just as he is now getting along without them in a two-family house.

"He cannot buy or build a house today with all of these conveniences, and with this number of rooms, without adding considerably to his current expenses. He does not feel that it would be a good investment to purchase a home today including just what he can afford, unless some method can be provided by which he can add to his house and its equipment economically later on. If he could build a five-room house today, and be assured that it would be a good-looking house, and be assured that he could still add to it economically and without spoiling its design during the next ten years, he would consider building at this time.

"The lot on which he would like to build is not less than sixty-five feet wide, and not less than one hundred feet deep. It is located in Greater Hart-

ford."

Drawings were called for to show the house as proposed to build it now and also to indicate the additions to be made later. The accompanying drawings show the three prize winning designs selected from among a total of fifteen submitted.

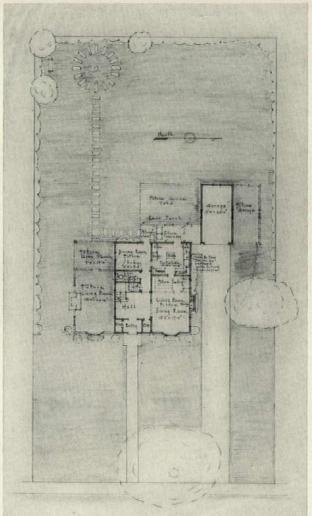
The First Prize design, by Robert H. Lienhard, starts with a five-room Colonial house of frame construction with an exterior of matched siding and narrow clapboards. An alternative exterior finish is of whitewashed brick. This house expands into a nine-room house with a recreation room and a two-car garage. Between the house and the garage is provided a utility room in the final development.

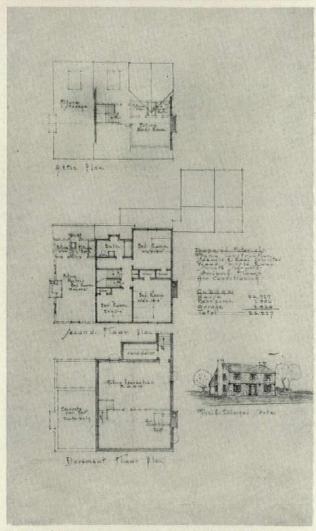
The design placed Second, by Mylchreest and Reynolds of Hartford, shows a six-room Colonial type house to begin with, to be later expanded into a nine-room affair. The exterior is of shingle over frame construction.

Third Prize went to a house by M. H. Lincoln, starting with a five-room arrangement and developing into a nine-roomer. This was also designed of frame construction with a shingle exterior. The perspective of another design by Mr. Lincoln, which was placed Fifth, is also reproduced here. An English type design by Donald T. Hiscox, not shown, was placed Fourth.

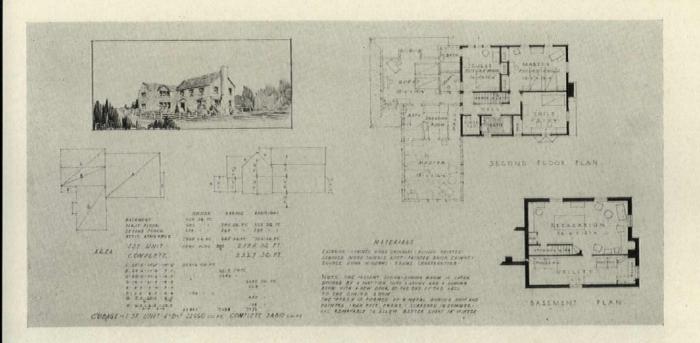
The members of the Jury of Award were Dean Everett V. Meeks of Yale School of Fine Arts, Douglas W. Orr, President of the Connecticut Chapter, A.I.A., and Lewis W. Slocum, Hartford Contractor. The awards were presented in the Green Gallery of the Morgan Memorial by Adolph Korper, President of the Capitol City Lumber Company, and the designs were thereafter exhibited to the public which reacted with surprisingly great interest.

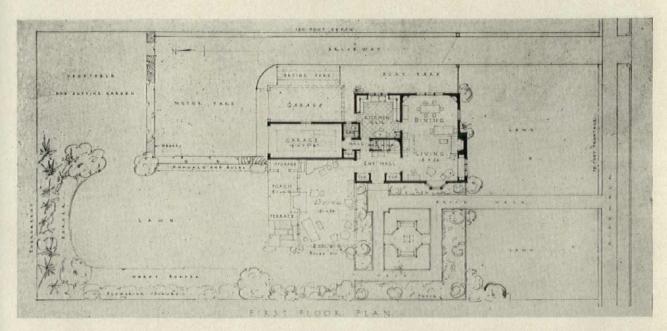






Second prize design by Mylchreest and Reynolds of Hartford, Connecticut, in the Architects' Competition sponsored by the Capitol City Lumber Co. Plans show provision for future alterations to be added





Plans for present and future construction of a house by M. H. Lincoln of Hartford, awarded third prize in the Architects' Competition sponsored by the Capitol City Lumber Company early in the spring



Perspective by M. H. Lincoln of his third prize design in the Capitol City Lumber Co. Competition



M. H. Lincoln's perspective of his design for another house which was placed fifth in the competition

# A. L. Guptill's Corner

LITTLE DEPARTMENT OF ARCHITECTURAL ESTHETICS, WITH MPHASIS ON SKETCHING AND RENDERING



You competitors are anxious, of course, o hear how the Pen Sketch Competition s coming along. Well, sir, it's proving grand success! As I write, the drawngs have all been received (somewhere n the neighborhood of a hundred and hirty, I should say) and have gone inder lock and key until next week (the ast week of October) when the judges to their stuff. No less a high light than schell Lewis has already consented to erve on the jury. And will that jury have a job! For there are so many swell ketches that it's bound to be hard to ome to a decision. But 'twill have to pe: the winners will be notified promptly oy mail and next month you'll get the whole story right from the front, and see eproductions of the drawings selected. ou will be surprised, I believe, at the emarkable variety of techniques and arangements. There seems nothing more I an say right now except "good luck, ompetitors!" and "thanks, everybody!" Oh yes. These prize drawings, plus

ome additions, will be available for exnibition purposes for awhile. Does your chool or atelier want them for a week or two? The pencil drawings from the ast Guptill's Corner Competition were enthusiastically received wherever hown; they are still on the road.

And thanks, too, for the suggestions or new books. I hope to get space to liscuss these at a later date. If you haven't sent yours, get busy now. See October issue.



TRY ALWAYS TO AVOID DISTORTION

Though the present series of plates on nteriors and furniture has to do with endering, primarily, rather than perpective layout, I am convinced that a vord on the avoidance of distortion hould prove worth while. For no matter low capable a man may be at rendering, if his layout looks misshapen his est efforts will be in vain. There are ar more distorted interiors than exte-

riors, largely due to the fact that all too often the draftsman stands unnecessarily close to his subject, or includes more than he should in relation to the station point he chooses. This point need by no means be within the room.

The diagrams on page 602, while not intended to demonstrate how to lay out perspective, should help to make clear a number of vital points. It is presupposed that the reader knows enough about instrumental perspective to follow our argument.

Diagram 1 reminds us of an advantage "parallel" or "one-point" perspective has over the more common "angular" or "two-point" type, for by its use we can show three walls (rather than two) in addition to floor and ceiling. In parallel perspective it is assumed the eye is looking directly at one wall (at right angles see upper plan, Diagram 6), which in main mass can therefore be drawn in its true unforeshortened form. By placing the vanishing point quite near one of the receding (foreshortened) walls, the other becomes less foreshortened, showing more plainly. By locating it near the ceiling, a greater area of the floor shows, and vice versa. If too far from the center of the picture, however, the danger of distortion is increased (see Diagram 4, offering a satisfactory proportion).

At 2 we have a common error in parallel perspective, the representation of a room corner or such a section of a room that the vanishing point comes at the edge of the composition. In this case we have merely detached a portion of the previous example. This appears unnatural, for if we study an actual room corner of this sort we normally see it in angular perspective. Test this: if you view a piece of furniture placed with a side and the top converging, as here, the near end will converge also (though in the opposite direction); it does not in this case, as it should. The scheme at 3, therefore, is less likely to be disturbing, perspectively, as it corrects this fault.

Frequently, in photographs as well as in renderings, we see rooms pulled out of shape, as in Diagram 5. Here, though the



WE SEE ROOMS PULLED OUT OF SHAPE

instrumental construction was accurate enough, all that portion of the room which lies to the right of the leading vanishing point looks wrong. Such effects do not satisfy the eye for real places do not look that way.

At 7 we see much the same unfortunate condition. This was laid out accurately in perspective, but from a wrongly selected viewpoint, far too much being included, so in this portion both vanishing points fall on the same side of the object (towards the right), a thing we would never see in real objects. The best of rendering could not disguise this tipped-up, elongated effect. If there were horizontal circles here, as in lampshades, they would show extremely conspicuous distortion. At 8 we have the same object, normally viewed, and it looks very different. It even seems of another size and shape.

How to avoid such faults as at 7? Mainly, as already hinted, by standing away a sufficient distance and by looking towards the approximate center of the mass to be represented. One reason why many interior photographs look so distorted is that the camera is too close to the subject matter. A special lens is necessary to overcome this difficulty. In drawing we can only stand back the necessary distance, even though this requires that we step outside the room, disregarding the intervening walls. A natural position (station point) is important. I have found the method of lo-

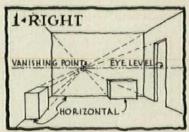


A NATURAL POSITION IS IMPORTANT

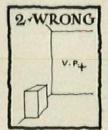
cating such a position suggested at 6 of the utmost value, the picture area being purposely limited. In the upper plan it was desired to show not only the end wall which is opposite the eye, but the left wall out as far as A and the right wall as far as B. These points A and B were decided on first: then through them 60° lines were drawn. Their point of junction was used as the station point and the work then advanced in the customary manner. Such an angle limits the amount included to just about what the eye could see distinctly without shifting, if looking directly towards the end wall. If one always stood far enough back thus to include only what would be contained within such a 60° angle (or, strictly speaking, cone, for such an angle is the plan of a cone of visual rays) he would seldom get even the slightest distortion. In angular perspective this is true, too, as indicated in the second little plan, where once more the station point was located by drawing 60° lines through the predetermined points A and B (the plan having been swung to the desired position), which mark the extremities of the area to be pictured.

### RENDERING INTERIORS AND FURNITURE

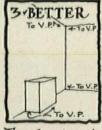
SHEET 3 . UNPLEASANT DISTORTION MUST BE AVOIDED .



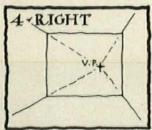
"Parallel" (one-point) perspective is practical, for by its use we can show three wells, as well as floor and ceiling-



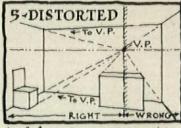
Yet a portion of the precious example seems wrong by itself.



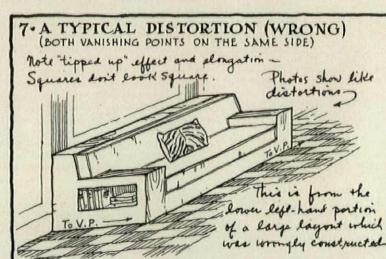
The last pubject looks better of in "angular" perspective.

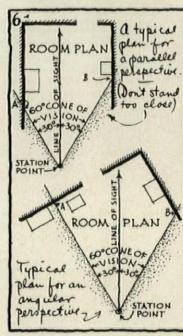


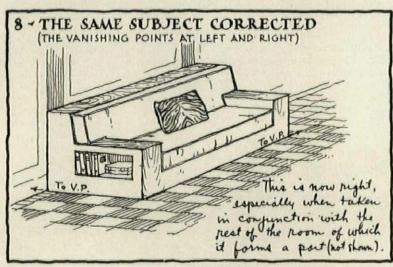
In parallel perspective the banishing point should never be far from the picture center.



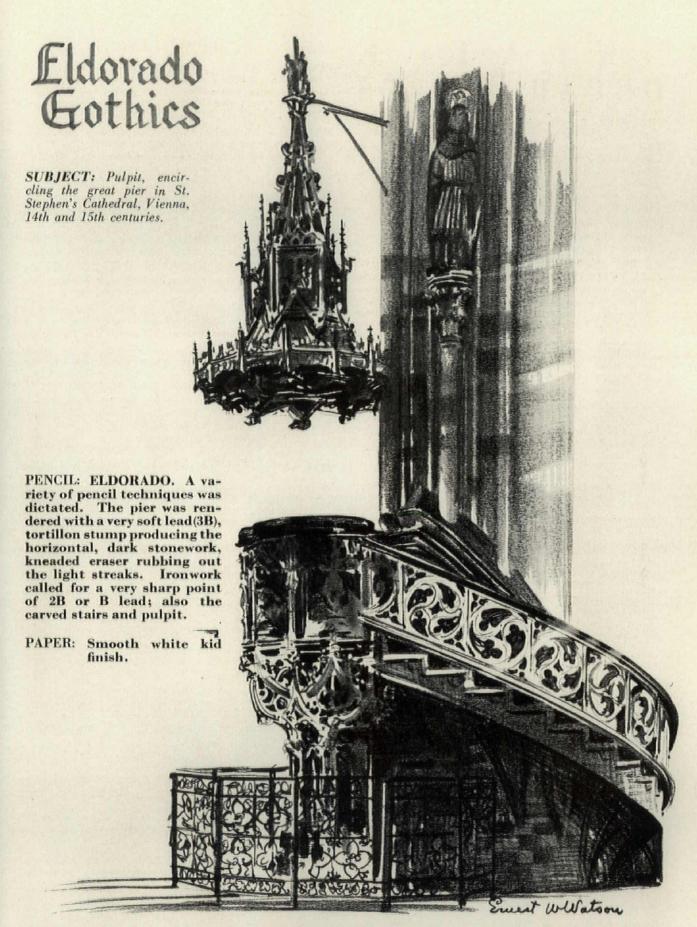
an "almost parallel perspective looks distorted. The area to the right of the vanishing point is wrong. The nest, if by itself, would look right - See Tand 8.







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- WARDEN H. FENTON, Architect, has opened offices for the practice of architecture at 101 Park Avenue, New York.
- SANFORD W. GOIN, Architect, has opened an office for the practice of architecture at 230 East Main Street, South, Gainesville, Fla.
- CLIFFORD H. JAMES, Architect, formerly of the firm of James & Zorns, now dissolved, has moved his office from 2422 West 15th Street, Lubbock, Texas, to 1710 Guadalupe Street, Austin, Texas.
- BJARNE C. DAHL, Architect, has opened an office for the practice of architecture in Room 1, the Schuman Bldg., Merchant and Alaskea Streets, Honolulu, Hawaii.

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- BJARNE C. DAHL, Architect, Room 1, Schuman Building, Honolulu, Hawaii.
- H. L. SCHWARTZ, Architect, 253 Charles Avenue, New Kensington, Pa. (For A.I.A. file.)
- LEWIS E. WARNER, JR., Architect, 214 Atlas Building, Columbus, Ohio.
- CLIFFORD H. JAMES, Architect, 1710 Guadalupe Street, Austin, Texas. (For A.I.A. file.)
- SEYMOUR J. HESS, Engineer, 506 Acequia Madre Road, Santa Fe, New Mexico. (Data on residences, small commercial buildings, schoolhouses, small hotels of ranch type.)
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- ROBERT M. COUSINS, *Draftsman*, 1439 Willow Street, Independence, Mo. (Data on building construction and mechanical equipment.)
- F. L. ZINZER, Draftsman, 1007 Drackert Street, Hammond, Ind. (Data on small house construction.)
- LOUIS B. MORGAN, Student, 8416 86th Road, Woodhaven, N. Y. (Data on small house construction.)
- STANLEY GLYNN, Contractor, 25 Blomerth Street, Malden, Mass. (Data on small house construction.)
- A. S. BECK SHOE CORPORATION, Construction Department, 139 Duane Street, New York. (Data on store front materials.)
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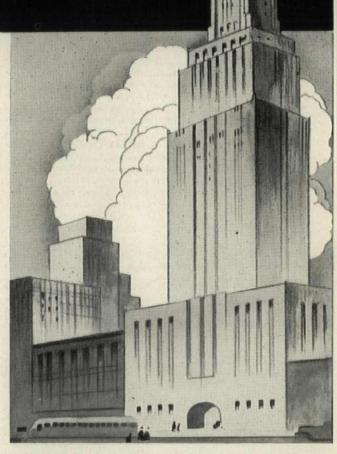
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Publications mentioned here will be sent free unless otherwise noted, upon request, to readers of Pencil Points by the firm issuing them. When writing for these items please mention PENCIL POINTS.

THE DUNHAM HAND BOOK .- No. 514. New edition. Comprehensive manual for architects and engineers dealing with the principles, designing, equipment and installation of heating systems which circulate steam under variable subatmospheric pressures, variable low pressures and variable volumes to give dynamically balanced temperature regulation in buildings. Contents include treatment of steam heating history, development of controlled heating, principles applied in the differential heating system, piping design and tables, equipment application with installation diagrams, ventilation, unit ventilator and air conditioning applications, unit heaters, concealed radiators, auxiliary steam service appliances, miscellaneous engineering and heating data and tables. 464 pp. C. A. Dunham Co., 450 East Ohio Street, Chicago, Ill.

ROCOR CEMENT PAINT.—Descriptive folder with application directions covering a type of cement paint for stucco, brick, concrete and other porous masonry surfaces. Artstone Rocor Corporation, 45th Street, Bush Terminal,

Brooklyn, N. Y.

RESILIENT FLOORS.—A.I.A. File No. 23-j. Valuable new handbook for architects, designers and specification writers covering the complete line of Sealex linoleums and linoleum tiles. Conveniently arranged in alphabetical sections containing specifications, structural details, technical and installation data and color reproductions of the various Sealex patterns. Included are illustrations showing a wide range of applications in residences, public and commercial buildings. 120 pp. 81/2 x 11. Congoleum-Nairn, Inc., Kearny, N. J.

SIMPLIFIED DESIGN OF CONCRETE FLOOR SYSTEMS, -New publication enumerates and discusses various concrete floor systems, shows their respective advantages and relative economies, and illustrates the method of design by typical examples. Different floor constructions suitable for a set of specific requirements are analyzed to illustrate the procedure in determining the most economical type. Safe load tables of numerous types of slabs and beams are included. 72 pp. Portland Cement Association, 33 West Grand Avenue, Chicago, Ill.

UNBLEACHED ARNOLD DRAWING AND WATER COLOR PAPERS.-Booklet containing 24 samples of unbleached Arnold drawing and water color papers. Japan Paper Co., 109 East 31st Street, New York, N. Y.

KENNEDY BEVEL-TILE.-Folder announcing and describing Kennedy bevel-tile cork flooring which eliminates all sanding on the job. David E. Kennedy, Inc., 58 Second

Avenue, New York, N. Y.

NEWMANCO CONCEALED AWNING ENCLOSURES. A.I.A. File No. 15-a. New catalog dealing with the subject of Newmanco concealed awning enclosures and glass setting moulds. Specifications, detail drawings, etc. 12 pp. 8 x 11. Newman Brothers, Inc., 660 West 40th Street, Cincinnati. Ohio.

THE AERO CONVECTOR.—New catalog prepared especially for the architect, engineer and heating contractor covering the Aero convector, a concealed heating unit. Included are data on the selection of convectors, dimensions, enclosures, construction details, piping, connections, ratings, performance data, special applications, etc. 32 pp. 81/2 x 11. National Radiator Corporation, Johnstown, Pa.

ARCO OIL BURNING BOILER NO. 11.—Bulletin announcing and describing a new oil burning boiler designed especially for use in the smaller home. Specifications, ratings and data, dimensions, outlets, inlets. 8 pp. 81/2 x 11. American Radiator Co., 40 West 40th Street, New York, N. Y.

IRON FIREMAN -NATIONAL STOKERS - BOILER COMBINATIONS .- Folder describing the new Iron Fireman-National Premier steel boiler-stoker unit. 4 pp. 81/2 x 11. Copies can be secured by writing either the National Radiator Corporation, Johnstown, Pa., or Iron Fire-

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SARCO GRADUATOR SYSTEM.—Bulletin No. 128 presents a detailed description of a newly introduced system of automatic temperature control for large buildings. 4 pp. 81/2 x 11. Sarco Company, Inc., 183 Madison Avenue,

New York, N. Y.

FACTS ABOUT BUILT-UP ROOFS.-New brochure presenting a wealth of useful information on the subject of built-up roofing and flashing. All of the many types of J-M built-up roofs are described in detail as well as the materials used in their construction. Condensed specifications, construction details, etc. 22 pp.  $8\frac{1}{2}$  x 11. Johns-Manville, 22 East 40th Street, New York, N. Y.

KEWANEE RESIDENCE TYPE R BOILER,-A.I.A. File No. 30·C·1. New edition. Catalog No. 88g describes and illustrates a line of steel-welded boilers for heating bungalows, homes and smaller buildings. Specifications, dimension drawings and tables, etc. 16 pp. 81/2 x 11. Ke-

wanee Boiler Corporation, Kewanee, Ill.

SARGENT ARTISTS' MATERIALS. - Binder containing series of catalogs covering the full line of Sargent oil and water colors, block printing inks, crayons, pen lettering inks, tempera colors, waterproof inks, etc. 54 pp. 734 x 934. American Artists' Color Works, Inc., 253-36th Street, Brooklyn, N. Y.

JOINTLESS POST RAILINGS.-Folder describing a line of fabricated, all-welded, all-steel jointless post railings. Included is data on stepped welded joint flag and antenna poles, 6 pp. 81/2 x 11. The Fabricated Steel Products Co., 365 Marshall Street, Benwood, Wheeling, West Virginia.

STURTEVANT UNIT VENTILATORS.—Catalog No. 377-1 presents complete descriptive and engineering data on the construction and operation of a line of unit ventilators. Specifications, capacity tables, dimension drawings, 20 pp. 81/2 x 11. B. F. Sturtevant Co., Hyde Park, Boston, Mass. Published by the same firm, "Sturtevant Speed Heaters." Catalog No. 396-2 covers a line of speed heaters adaptable for use in industrial buildings, hotels, hospitals, churches, certain school rooms, offices, institutions, etc. Capacity and dimension tables, wiring data, installation details, specifications, etc. 20 pp. 81/2 x 11.

ELECTROMODE BILT-IN-WALL ALL-ELECTRIC UNIT HEATERS.-New Data Book No. 236 illustrates and describes space heating by Electromode forced heat, gives cost comparisons with other methods of heating and illustrates applications of Electromode industrial, portable and Bilt-in-Wall all-electric fan type unit heaters, 24 pp. Electric Heater Co., Division of American Foundry Equip-

ment Co., 429 Byrkit Street, Mishawaka, Ind.

CRANE BOILERS AND RADIATORS.—New catalog describing and illustrating eight different styles of boilers, both round and sectional, plain and jacketed, for hot water, steam, vacuum and vapor heating systems, to burn all coals, coke, oil or gas, in sizes to fit the requirements of residential and commercial buildings. Included are engineering tables of technical data, charts, blueprint drawings, sectional illustrations, performance data records, etc. Similar facts are presented covering the Crane line of radiators-legless, bathroom, wall, hospital, humidifying, convectors, etc. 56 pp. 81/2 x 11. Crane Co., 836 South Michigan Avenue, Chicago, Ill.

KOLOR KRAFT BATHROOM TRIMMINGS.—A.I.A. File No. 29-S Folder No. 21 illustrates a line of bathroom trimmings finished in vitreous porcelain colored enamels. pp. 81/2 x 11. American Enameled Products Co., Mt.

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2. STAIRS AND RAMPS. The durability, excellent appearance and economy which make terrazzo a fine flooring material qualify it particularly for stairs and ramps. Because terrazzo is placed, like concrete, in a plastic condition, it may be shaped to

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### THE NATIONAL TERRAZZO AND MOSAIC ASSOCIATION

10

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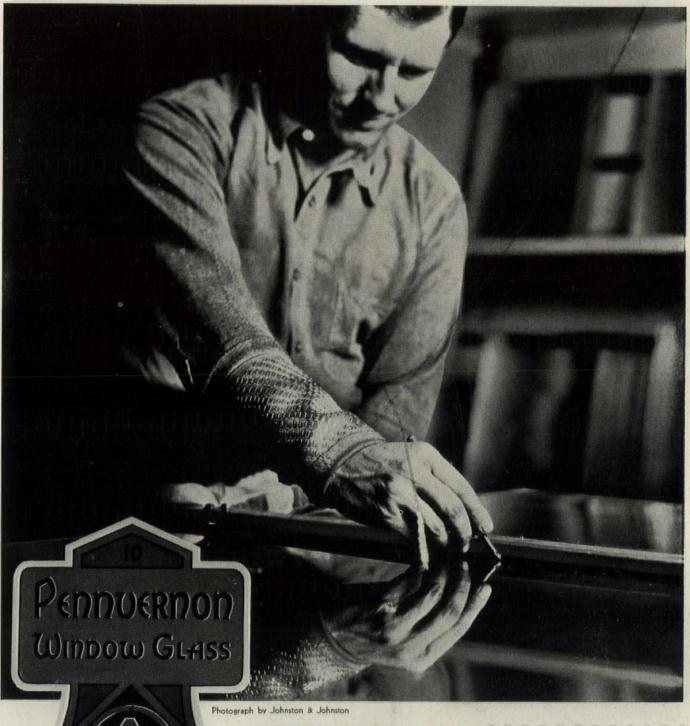
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(Continued from page 16, Ad Section)

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12. Any person upon entering the contest and submitting a poster agrees to accept as final the decision of the judges. He further agrees to all rules affecting the contest, or such other rules as the Institute may adopt during the conduct of the contest, relative either to the making of awards or the procedure regarding the acceptance of entries. It is also expressly understood that any poster entered in the contest may be publicly exhibited.

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14. All other posters entered will be finally returned by express collect.

Additional copies of the program may be had from Contest Director, Institute of Foreign Travel, 80 Broad St., N. Y. C. Architectural Guild of America

The Guild enters its third year of active work in improving the standards of architectural men with a group of new officers whose exceptional experience in architectural organization work assures great expansion of the national Guild. For president during the coming year the Guild has chosen Henry Sasch, a leader in Guild activities since its formation. The vice-presidents are Jesse L. Orrick, Gabriel Di Martino and Frederick Bernhard. Henry V. Rinderman is again treasurer and John F. St. George, executive secretary. The new Executive Board consists of Francis Kapp, A. J. Oliva, Theodore Voyvodick, George Holland, J. B. Wallach, H. B. Gould, George Dietz, Jr., Manuel Tavarez, H. Brinkerhoff, J. F. Kriner, A. Beresniakoff, and C. L. Hartmen. While these men are devoted to the objectives of the Guild, their success depends upon the cooperation of architectural men throughout the entire country. The Guild trusts that this support will be immediate and will result in the mobilization of the men of our profession to meet the pressing problems before us.

The campaign to obtain prevailing wages for architectural men on work financed by the Public Works Administration is progressing and the Guild reports a great deal of official support. The Housing Division of the PWA has, however, proved a great obstacle to the establishment of prevailing wages, not only by a lack of interest but by giving its consent to the payment of low wages on housing projects. The union scale of hours and rates for building mechanics was established by an executive order in which professional services were specifically excluded. The Guild feels that the prevailing wage ruling should cover all workers and has asked its members to demand that the application of this ruling include architectural employees.

"It is obvious," says a Guild statement, "that if we cannot enforce our standards on work financed by public funds, it will be more difficult to secure fair compensation in private work. It is a certainty that wages and working conditions in private work will be below the standards set on PWA work, but the establishment of Guild standards on government work will raise all standards."

In connection with the movement for prevailing wages on WPA, a number of organizations, representing all professions, have joined in a national movement to obtain employment for their members and to prevent the lowering of standards by the Works Progress Admin-

(Continued on page 34, Ad Section)



From a pencil sketch by Jack Frost of Boston, one of a series he is doing of "Homes of the Famous" to be published as a newspaper feature. This example shows "Springwood," the home of Franklin D. Roosevelt at Hyde Park, N. Y.

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# Armstrong's

BELOW—Hats and shirts, inset in a field of Armstrong's Pattern 09 Marbelle Linoleum individualize this floor of Armstrong's Linoleum in the Harry Kraus Shirt Shop, Indianapolis.





Below-Plain and Jaspe Linoleum form this custom-cut Armstrong Floor in shop of Duane Bakers, Baltimore. Colors are brown and tan.

(Continued from page 32, Ad Section) istration. A national organization has been formed and local groups are being organized. A conference will be held in Washington the first part of January, at which time the entire country will be represented by national and local organizations. The conference will take up the general and basic problems of the WPA and the individual professions will take up specific matters affecting them and will have the full support of the entire conference. The following are basic demands which were formulated by the Guild and are included in the general program of the Conference. 1. Payment of prevailing wage. 2. Maximum thirtyhour week, 3. Prohibition of use of WPA employees in the offices of private business or industry, or any free labor to other than public agencies. 4. Hiring through government or employee organizations only. An absolute regulation forbidding control of WPA employment by employer organizations. 5. Right of collective bargaining. 6. Additional appropriations to carry on WPA as long as necessary. 7. Initiation of projects to absorb all unemployed professionals in their own occupations. 8. Sick leave with pay and granting of leaves-of-absence, 9. Labor relations board in each administrative district with a fifty per cent employee membership. 10. Qualification and classification board with at least fifty per cent employee membership. 11. Basis of eligibility to be solely the fact of un-employment. The Guild asks that local

organizations su, ort this conference and cooperate with the Guild and with the professional organizations in their communities.

#### F.A.I.A.

People sometimes wonder what the letters "A.I.A." after the name of an architect stand for. Sometimes, but less frequently, an architect's name appears with four letters following it; namely, "F.A.I.A." which is still less frequently understood.

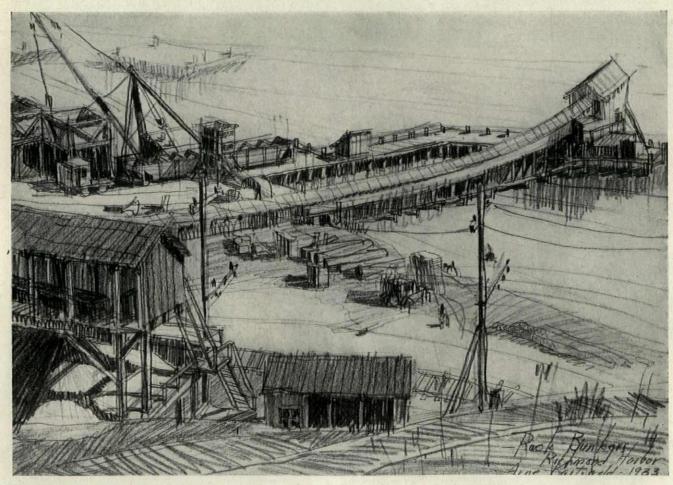
The letters A.I.A. refer to the fact that that architect is a member of the American Institute of Architects, the oldest and most conservative architectural organization, and comparable to the "Royal Society of British Architects" of Great Britain. Membership in this organization is secured on merit and ethical standing as judged by the members of the organization, and while it does not contain all the architects in the country who in the judgment of its members are eligible to membership, nevertheless those who are members can pretty generally be depended upon as capable and ethical in their dealings, and well thought of by the members of the profession generally.

The letters F.A.I.A. refer to the fact that the architect whose name they follow is not only a member of the American Institute of Architects, but that he has been elected by the Institute to the honorary degree of "Fellowship" in the Institute. Members of the organization are elected to Fellowship by a national jury of Fellows of the Institute only after a very careful consideration of some duration. Requirements for such consideration in accordance with the by-laws of the national organization require continuous membership in the Institute for not less than ten years and, in addition notable contribution to the advancement of the profession of architecture in design or in the science of construction, by literature or educational service, by valuable service to the Institute or its suborganizations, or by notable public service.

Fellowship in the American Institute of Architects constitutes only about 11% of its total membership, and less than 3% of the total number of practicing architects in the country. It is the highest honor that the American Institute of Architects confers upon its members.

### National Soap Sculpture Competition

The National Soap Sculpture Committee of 80 East 11th Street, New York, has announced its Twelfth Annual Competition for Small Sculptures, closing May 1, 1936. A total of \$2500 in prizes is offered by Procter and Gamble, the sponsors, divided among the following classes: Professional (\$500), Advanced Amateur (\$700), Senior (\$525), Junior (\$675), and Groups (\$100). Full information may be obtained on application.

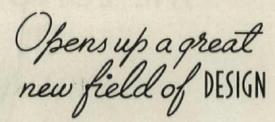


Rock Bunkers, Richmond Harbor, California

Pencil sketch by Arne Kortwold

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- IN ADDITION TO an exhaustive text and scores of drawings by the author, the book is embellished with examples of COLOR drawings by such well known artists and renderers as Birch Burdette Long, Vernon Howe Bailey, Ernest Born, Millard Sheets, J. Floyd Yewell, John Wenrich, Schell Lewis, Chester B. Price, Carroll Bill, E. Donald Robb, H. Raymond Bishop, Paul Watkeys, Frederick R. Witton, Francis Keally, Otho McCrackin, Hughson Hawley, James Perry Wilson, Robert Lockwood, Jacques Carlu, Jean Jacques Haffner, Harry Sternfeld, Camille Grapin, and a host of others.
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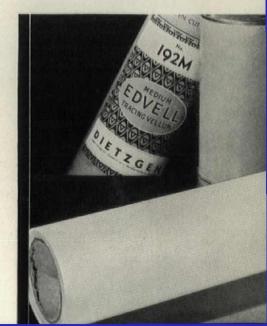
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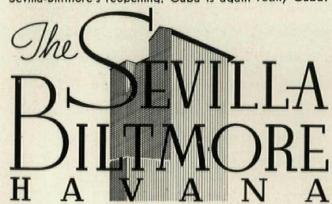
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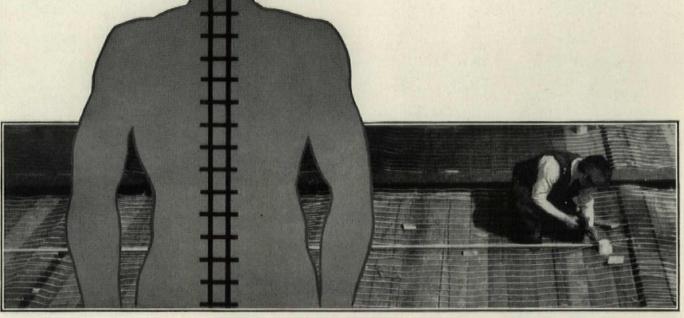
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#### **NEW PRODUCTS**

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#### TRANE AIR-O-LIZER

The Trane Co., La Crosse, Wis., has just introduced the 1936 model of the Trane Air-O-Lizer, a compact unit for school-room air conditioning.

Among the many advantages claimed for this unit, the most important is the introduction of directional flow grilles. With these grilles, it is possible to direct the heated air into the room in any desired direction so that intervening windows and bare wall spaces may be completely blanketed with a curtain of heat, eliminating cold spots and drafts.

The grille which accomplishes this is in the top of the unit and is composed of three sections, the main or central

section and two smaller end sections. It is the two smaller end sections which may be turned to any desired angle to control the flow of heated air.



The unit has

other important features such as ventilated pipe spaces which prevent freezing and in other ways increases the efficiency of the unit ventilator. One-piece lightweight balanced aluminum dampers require a minimum of power for operation and because these dampers are lined with felt, they are positively tight at the closed position.

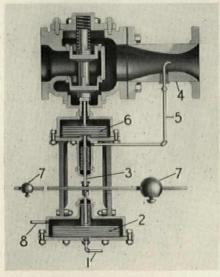
Multiple fans are used, the shafts for these being full floating mounted, thus eliminating noise and vibration. The unit is completely soundproof, insulated and the motor and power unit are cradled in felt.

The cabinet design has very simple, graceful lines and it is so made that the whole interior of the unit may be exposed by removing the one-piece front and top panel. The entire cabinet consists of only four pieces, the one-piece top and front panel and the two ventilated pipe spaces. These are also readily removable without the use of tools

so that installation is greatly simplified.

#### SARCO GRADUATOR SYSTEM

The Sarco Company, Inc., 183 Madison Avenue, New York, is placing on the market a new weather control for twopipe steam heating systems. It consists essentially of a



master control valve, shown in illustration, which is operated from an outdoor thermostat, and also from a special orifice installed ahead of the valve in the steam supply line itself. These two effects combine to give a throttling position to the valve, which will feed just the required

volume of steam to the system, depending on outdoor temperature.

An indoor thermostat is also connected to the valve to prevent overheating of the building when there are sudden changes in outside conditions.

An essential feature of the system is the use of special discs placed in the radiator inlet valves to proportion the steam flow to each radiator. These discs have openings which can vary automatically with the steam flow and are said to adjust themselves to assure the proper supply of steam to each radiator under all conditions, regardless of distance from the boiler or steam supply.

#### OWENS-ILLINOIS SPEEDS OUTPUT OF NEW GLASS BLOCK

Development of an improved glass block for building purposes, which has stood up under pressures of 72,500 lbs. to a single block and which reduces heat flow, deadens sound, transmits and diffuses light, deflects sun glare and resists fire has been announced by the Owens-Illinois Glass Co. Production of the glass blocks on a large scale is going forward at the Muncie, Ind., plant of the company.

Recent refinements in the manufacture of glass brick to make the material meet the most exacting requirements of builders is expected to play an important part, it is stated, in revolutionizing the trend of architectural design for certain types of buildings, including industrial buildings, dairies, breweries, laboratories, filling stations, apartment structures, houses, mausoleums and store fronts.

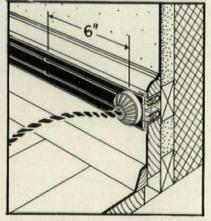
#### "PLUG-IN" STRIP

A new product, known as "Plug-In" Strip, which is designed to revolutionize wiring installation practice and add to the comfort, safety, and convenience of electrical installations, has been announced by the National Electric Products Corp., Pittsburgh, Pa.

"Plug-In" Strip makes electricity available at intervals of six inches around the walls of any room, eliminating the unsightly pyramided receptacles and the dangerous tangled extension wires that are now commonly found under carpets,

across floors, behind furniture, or nailed along the baseboard.

"Plug-In" Strip may take the place of all other wiring in a residence or apartment building, eliminating ceiling and bracket lights. In office work, it may be run around the chair rail; in show windows for window lighting; a self-wired unit for cove lighting. As a



matter of fact, it may be applied to any practical type of electrical work.

"Plug-In" Strip is made of a 1-3/16 in. wide channel, zinc treated to prevent rust, with a bakelite cap having plug openings every six inches. It is manufactured in one, two, three, four, and five-foot lengths, each unit being complete and ready for installation. A raceway channel is also provided from which oddities in the length of a room may be cut so that any size room may be wired conveniently. The system is complete with five fittings which consist of elbows, couplings, and junction box.

The strip is inconspicuous and is designed to be installed at a small cost. The thickness being that of ordinary baseboard, it may be readily incorporated in the baseboard by providing a 15/16 in. channel or by removing the baseboard capping, inserting the strip, and placing the capping on top of the strip or as a molding set into the plaster around the room at any desired height. It may be painted any color to match the color scheme of the room.

Its adaptability is limitless, as it may be installed anywhere where electrical appliances and lamps are used.

#### A NEW PRE-FINISHED BUILDING MATERIAL

The Farley & Loetscher Manufacturing Co., Dubuque, Ia., has announced a new synthetic building material, prefinished with decorative designs, suitable for general applications.

This material is made from a synthetic material, hot pressed under great pressure into large sheets of various thicknesses. It is especially strong and is said to be four times as hard as oak or maple. Its denseness reduces moisture absorption to the very minimum.

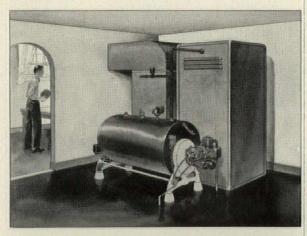
This new material has color designs and wood patterns molded into the surface with a Bakelite laminating varnish, which provides it with many distinctive properties.

The finish obtained on the material is very durable. It will retain its lustre under severe service. It is easily cleaned and does not stain. It resists the destructive action of water, salt water, common solvents, fruit acids, ammonia, grease, disinfectants, and ordinary cleaning compounds. It will also withstand heat up to 250° F. It is stated that boiling water, hot dishes, and even smouldering cigarettes will not injure the finish of this new material.

The material is equally well adapted for modernization as for new work, and may be used in most places where marble, wood paneling, or structural glass are employed. In the home Farlite is particularly well suited for bathrooms, kitchens, and pantries; also for doors and window sills. In restaurants it is in keeping with the modern trend of simplicity and cleanliness. Hotels, schools, office buildings, the dining rooms, office elevator cabs, barber shops and toilets all suggest practical applications of this decorative and economical building material.

#### WILLIAMS OIL-O-MATIC ANNOUNCES NEW HEATING, COOLING, AIR CONDITIONING SYSTEM

The Williams Oil-O-Matic Heating Corp., Bloomington, Ill., announces the development of a new air conditioning system to be known as Air-O-Matic. Low pressure steam, which is provided by an Oil-O-Matic oil burner, is supplied directly to a copper-finned heating coil within the central air distrib-



uting unit for heating service, which can be supplemented by direct radiation if desired. Proper provision for the addition of moisture is provided for winter heating service.

This same low pressure steam, through an especially developed absorption refrigeration unit, provides the proper degree of temperature and humidity reduction for summer comfort. A change from winter to summer operation can be effected almost instantaneously by means of a master control located in a suitable, convenient place.

The Williams low pressure steam absorption type unit has been especially developed to meet the particular requirements of air conditioning. It affords adequate comfort cooling facilities with unusual advantages of economical operation, mechanical simplicity, compactness and freedom from fire and toxicity hazards. Both the solvent and refrigerant are newly-developed chemicals and are essentially non-toxic, non-inflammable, non-corrosive to the common metals and chemically stable under all operating conditions.

#### NEW BEVELED CORK TILE

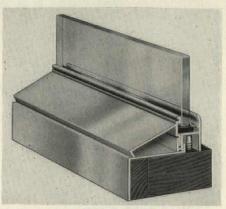
The Armstrong Cork Co., Lancaster, Pa., announces the addition of beveled cork tile to its line of resilient tiles. This new cork tile can be installed over rough suspended subfloors without the necessity for sanding. Surface irregularities in the subfloor are offset by the beveling of the tile. Since sanding is eliminated, the smooth, attractive surface given to the tile at the factory need not be removed. A beveled cork tile floor also is expected to meet with the favor of architects because of its pleasing appearance from a decorative standpoint.

#### KAWNEER ANNOUNCES AN ENTIRELY NEW STORE FRONT CONSTRUCTION

Extreme simplicity and a continuous spring grip are important features of a new store front construction in extruded aluminum or bronze, introduced by The Kawneer Company, Niles, Mich.

Kawneer's new store front sash consists of only 3 parts;

a self-supporting gutter, an interlocking face member, and a sturdy resilient, and continuous spring - which, when inserted in the gutter, pushes the glass outwardly against the face member. Among the advantages of this new construction are: perfect mitres and



sight lines because the glass is aligned with the face member instead of the gutter, as in the past; the use of glass of varying thicknesses without difficulty on the same job since the glass lines up on the outside face; elimination of caps; continuous spring grip, absolutely even pressure—avoiding concentration, one of the most common causes of glass breakage; greater ease, precision and economy of installation; self-supporting sash; better drainage and ventilation; attractive modern lines.

Accompanying bars and other members are designed to harmonize.

Descriptive literature on the new Kawneer store front construction and full size architects' details are available on request.

Announcement is made by M. G. Jensen, sales manager of The Insulite Company of the appointment of George A. Petters, as sales engineer at Chicago. Mr. Petters will make his office at 111 West Washington Street, Chicago.

Frank J. Rief, purchasing agent for the Chicago district of the newly formed Carnegie-Illinois Steel Corporation, has also been appointed general purchasing agent for the Universal Atlas Cement Company, another subsidiary of the United States Steel Corporation, to take effect Nov. 1.

The Southern Cement Company of Birmingham, Ala., has recently appointed The International Non-Staining Cement Co., Inc., 40 Thirteenth Street, Brooklyn, N. Y., as its exclusive representative for the distribution of Magnolia white stainless cement in the metropolitan district of New York City and outlying territory.

Edward L. Ryerson, Jr., has been elected vice chairman of the board of directors of the Inland Steel Co. Mr. Ryerson, who is president and a director of Joseph T. Ryerson & Son, Inc., was recently elected a director of Inland Steel Co. He entered the employ of the Ryerson Company in 1909, immediately after finishing college. After service in all departments of the company's business, he became vice president, in charge of operations and, in 1929, was elected president.

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POINTS published monthly at Stamford, Conn., for

October 1, 1935.
State of New York
County of New York
Ss.

Gounty of New York \$\} ss.

Before me, a Notary Public in and for the State and county aforesaid, personally appeared Philip H. Hubbard, who, having been duly sworn according to law, deposes and says that he is the Business Manager of the Corporation publishing Pencil Points and that the following is, to the best of his knowledge and belief, a true statement of the ownership, management (and if a daily paper, the circulation), etc., of the aforesaid publication for the date shown in the above caption, required by the Act of August 24, 1912, embodied in section 411, Postal Laws and Regulations, printed on the reverse of this form, to wit:

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4. That the two paragraphs next above, giving the names of the owners, stockholders, and security holders, if any, contain not only the list of stockholders and security holders as they appear upon the books of the company but also, in cases where the stockholder or security holder appears upon the books of the company as trustee or in any other fiduciary relation, the name of the person or corporation for whom such trustee is acting, is given; also that the said two paragraphs contain statements embracing affiant's full knowledge and belief as to the circumstances and conditions under which stockholders and security holders who do not appear upon the books of the company as trustees, hold stock and securities in a capacity other than that of a bona fide owner; and this affiant has no reason to believe that any other person, association, or corporation has any interest direct or indirect in the said stock, bonds, or other securities than as so stated by him. by him.

PHILIP H. HUBBARD, Business Manager.

Sworn to and subscribed before me this seventh day of October, 1935.

CURVILLE C. ROBINSON.

(My commission expires March 30, 1936.)

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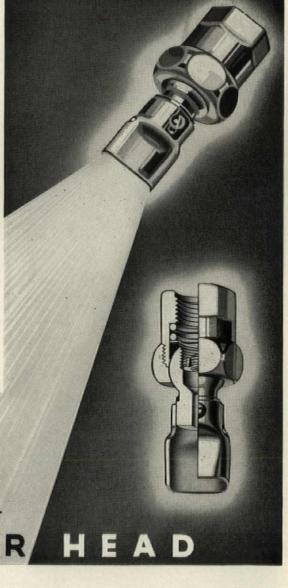
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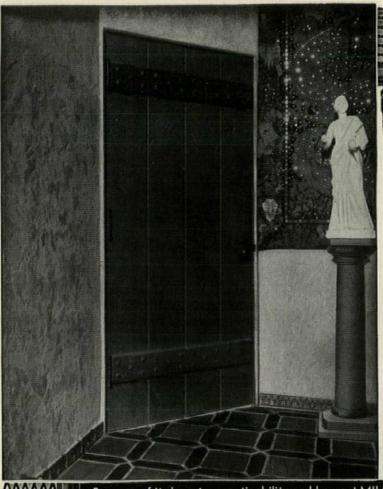
The new Economy Shower Head saves water because it directs water only at the bather—none is wasted as in a circular spray which is effective only at its center. Actually, only one-third the amount of water used by a 4-inch spray head is required by the Economy. Large diameter outlet resists clogging. Removable brass spreader breaks up the stream by a swirling

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