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Pencil Points is being indexed regularly in The Art Index.

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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 operator or real estate owner is urged emphatically to retain his own architect for working out his own specific problem.

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The G-E Radial Wiring System offers many advantages to home owners. It is simple in design and construction. It reduces voltage losses to the minimum, making the current paid for do useful work without waste. It provides new-type, efficient circuit breakers at convenient points throughout the house. These circuit breakers act also as switches and are so compact as to actually fit in standard outlet boxes. And when additions or changes are necessary in the future, they can be made easily and inexpensively.

The Radial Wiring System is based on the principle of sub-circulating branch circuits arranged in radial runs from circuit breakers. This decentralized distribution system eliminates the obviously poor practice of placing a large number of outlets on a branch circuit. It substitutes back feeders to convenient points throughout the house where it places controls for the radial circuits. It is adequate in copper, using wire sizes suited to modern loads. All details, of course, conform to National Electrical Code requirements.

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.

The Advantages

The sub-circulating of branch circuits and radial runs, which are characteristic of the G-E Radial Wiring System, is adequate from every standpoint. There are full provisions for fixed electrical appliances for lighting and convenience outlets. There is copper adequacy which prevents voltage losses in the system. Electricity is carried efficiently to appliances and outlets with minimum loss of current. Another important advantage is the ease of remodeling and extending the system in the future. The problem of breaking into a limited sub-circuit and its rerouting is simpler than where a long circuitous, concealed run must be revamped to suit changes.

This G-E Radial Wiring System utilizes only General Electric Wiring Materials. A booklet has been prepared giving detailed specifications of the new G-E Radial Wiring System as applied to one of the smaller “New American” Homes. Send for a copy of this manual at once. Write Section CDW-8410, Merchandise Department, General Electric Company, Bridgeport, Connecticut.

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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, living room, small library, (to be entered through the living room), a butler's pantry, an airy kitchen with adequate cabinets, 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 committee 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 & Cramer. The Jury consisted of Mrs. Edward Duble, Mrs. William Henecken, and Mrs. Stafford Hendricks of the Model House Committee, with John Gross 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, C. W. Murison.

The awards for the two-story shop and office building 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.


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; Underwriters' 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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"The credit for results achieved is due to Paul H. Helms, President of Helms Bakeries, whose understanding could visualize the outcome of these recommendations; to Ed. Westberg, Los Angeles, plastering contractor; and to Watkins Company, Los Angeles, cast stone manufacturer.

"Credit is likewise due to the expert craftsmen on the job, without whose skill and painstaking effort a satisfactory finished result is impossible on any job, specifications, first-class materials and supervision notwithstanding.

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

NOVEMBER 1935 PENCIL POINTS 15
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, was 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 the subject for architecture should be well 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 foliage, I strolled over to pass the time."

**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 Wisconsin 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 Seidenschwarz, should have been given as 2104 North 64th Street, Wauwatosa, 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 size of 23" x 36".

**Mediterranean Cruise**

"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 nectarous fluids and essences that, when rightly proportioned, produces the Perfect Cocktail." H. G. B.
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NOVEMBER 1935 PENCIL POINTS 17
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ALCOA ALUMINUM
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.
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 summing-up 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 that ongoing conflict: the most outstanding student, and his work 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...
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 fenestration, 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
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 facade 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.
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 noneommittal façade, providing it with separate stairways. His design shows the strong leaning towards the antique which characterizes much of the Swedish architecture of the time, but the treatment, as in the private bank, is anything but classic in the archaeological 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 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.

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

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

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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 residence, offices, and other buildings, forming a major problem during the school year.

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'.
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 Hartford."

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.
YES, WE ARE ALMOST BURIED

You competitors are anxious, of course, to hear how the Pen Sketch Competition is coming along. Well, sir, it's proving a grand success! As I write, the drawings have all been received (somewhere in the neighborhood of a hundred and thirty, I should say) and have gone under lock and key until next week (the last week of October) when the judges do their stuff. No less a high light than Shell Lewis has already consented to serve on the jury. And will that jury save a job! For there are so many swell drawings have all been received (somewhere in mail) that the winners will be notified promptly.

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 that "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 (right angle—see upper plan, Diagram 6), which in mass can therefore be drawn in its true unforeshortened form. By placing the vanishing point quite near one of the receding fore-fronts 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, perspective, and 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 instrumental construction was accurate enough, all that portion of the room which lies to the right makes the leading vanishing point look 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 lamps shades, 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 room to be reproduced. The 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 locating such a position suggested at 6 of the utmost value, the plan 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. Those 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 to locate the desired position), which mark the extremities of the area to be pictured.

A NATURAL POSITION IS IMPORTANT

WE SEE ROOMS PULLED OUT OF SHAPE

TRY ALWAYS TO AVOID DISTORTION

Though the present series of plates on interiors and furniture has to do with rendering, primarily, rather than perspective layout, I am convinced that a word on the avoidance of distortion would prove worth while. For no matter how capable a man he may be at rendering, if his layout looks misshapen his best efforts will be in vain. There are as distorted interiors than exteriors, 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 no means be within the room.

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A typical plan for a parallel perspective. (Don't stand too close.)

6. ROOM PLAN
   A typical plan for a parallel perspective. (Don't stand too close.)

7. A TYPICAL DISTORTION (WRONG)
   (Both vanishing points on the same side.)

8. THE SAME SUBJECT CORRECTED
   (The vanishing points at left and right)

Effects of distortion are generally due to faulty layout.
SUBJECT: Pulpit, encircling the great pier in St. Stephen's Cathedral, Vienna, 14th and 15th centuries.

PENCIL: ELDORADO. A variety of pencil techniques was dictated. The pier was rendered with a very soft lead (3B), tortillon stump producing the horizontal, dark stonework, kneaded eraser rubbing out the light streaks. Ironwork called for a very sharp point of 2B or B lead; also the carved stairs and pulpit.

PAPER: Smooth white kid finish.

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THE MART

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LEWIS E. WARNER, Jr., Architect, has opened an office for the practice of architecture at 214 Atlas Building, Columbus, Ohio.
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.

MANUFACTURERS' DATA WANTED

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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.)
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EDWARD BONACCI, Civil Engineer, 2165 Hours Avenue, Bronx, N. Y.
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LOUIS B. MORGAN, Student, 8416 86th Road, Woodhaven, N. Y. (Data on small house construction.)
STANLEY GLYNN, Student, 214 Atlas Building, Malden, Mass. (Data on small house construction.)
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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.

RESILENT 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. 8 1/2 x 11. Congoleum-Nairn, Inc., 356 Marshall Street, Benwood, Wheeling, West Virginia.

SIMP-oLED 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 specific set of 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, III.

UNBLEACHED ARNOLD DRAWING AND WATER COLOR PAPERS.—Booklet containing 24 samples of unbleached Arnold drawing and water color papers. Japan Paper Co., 140 East 21st Street, New York, N. Y.

KEM-TRI-TILE.—Folder announcing and describing Kem-try 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 1/2 x 11. Newman Brothers, Inc., 660 West Fourth 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, enclosing construction details, piping, connection details, ratings, performance data, special applications. 32 pp. 8 1/2 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 commercial home. Specifications, ratings and data, dimensions, outlets, inlets. 8 pp. 8 1/2 x 11. American Radiator Co., 40 West 40th Street, New York, N. Y.

IRON FIBRE.—NATIONAL STOKERS—BOILER COMBINATIONS.—Folder describing the new Iron Fireman—National Premier steel boiler—stoker unit. 4 pp. 8 1/2 x 11. Copies can be secured by writing either the National Radiator Corporation, Johnstown, Pa., or Iron Fireman Mfg. Co., Cleveland, Ohio.

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KEWANEE RESIDENCE TYPE R BOILER.—A.I.A. File No. 30-C-1. New edition. Catalog No. 83g describes and illustrates a line of steel-welded boilers for heating small homes and small buildings. Specifications, dimension drawings and tables, etc. 16 pp. 8 1/2 x 11. Kewanee Boiler Corporation, Kewanee, III.

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. 7 1/4 x 9 3/4. 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 steppped weld, point flag and antenna poles. 6 pp. 8 1/2 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 J-M built-up roofing and flashing. Specifications, capacity tables, dimension drawings, 20 pp. 8 1/2 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, churches, certain school rooms, offices, institutions, etc. Capacity and dimension tables, wiring data, installation details, specifications, etc. 20 pp. 8 1/2 x 11.

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KOLOR KRAFT BATHROOM TRIMMINGS.—A.I.A. File No. 29-G. FOLDER No. 21 illustrates a line of bathroom trimmings finished in vitreous porcelain colored enamels. 4 pp. 8 1/2 x 11. American Enameled Products Co., Mt. Pleasant, Mich., Published by thesame firm, "Unbreakable Recess Fixtures." Folder No. 22 contains color reproductions of a wide range of unbreakable bathroom fixtures. 4 pp. 8 1/2 x 11.

PENCIL POINTS NOVEMBER 1935
TEIRIRAZZO HAS THESE USES

For the convenience of architects in planning interiors, here is a check-list of the specific uses of terrazzo.

1. FLOORS. Terrazzo, richly colorful, placed in any design, durable because it is concrete, finds principal use as a flooring material. The range of color in marble chips and pigments used in terrazzo enables the designer to plan floors that carry out the exact color scheme of any interior. In interior design, whatever motif is created for walls and furnishings may be continued in harmonizing pattern in a floor of terrazzo. And terrazzo’s surface (85% marble, 15% portland cement matrix) is smooth and hard, free from breaks, easy to clean, hard to mar or stain, wear-resistant under heaviest traffic.

Because they retain their original fine appearance under severe wear with minimum upkeep, terrazzo floors find wide use in public and commercial structures. Floors in vestibules, lobbies, corridors and offices; floors in halls, private rooms and wards, sun parlors, operating rooms, laboratories; floors in display and sales rooms; floors in dining rooms and kitchens, ballrooms, lounges and barrooms; floors in lavatories, bathrooms, shower and steam rooms; floors in class rooms and dormitories; floors in creameries and freezing rooms—these are some of the floors that are built of terrazzo for economy, service and appearance.

And with their acceptance so established, terrazzo floors have started to make their appearance in homes. Wherever a floor needs to be good-looking, to wear like concrete and to be economical to install and maintain, terrazzo meets all requirements.

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 any desired form. Or it may be precast for special shapes and placed in units. It is often advantageous to add abrasive aggregates to the terrazzo mix, so that the final surface is proof against slipping or sliding.

3. COVES AND BASES. Of special value where utmost cleanliness is essential, as in hospitals, laboratories, kitchens, are coves and bases made of terrazzo. Because the floor and cove or base are monolithic, there are no cracks or breaks to collect dirt.

4. PARTITIONS AND WAINSCOTS. Placed on metal studding and lath over a scratchcoat of portland cement and sand, partitions of terrazzo serve exceptionally well in shower rooms, toilet rooms, and for similar installations. For wainscots, terrazzo may be applied to any height against any type of wall backing, over a scratchcoat of portland cement and sand. Wainscots may be extended directly up from coving. Both partitions and wainscots may be installed on the job, or precast.

5. ORNAMENTAL UNITS. Ornamental terrazzo, though usually job made, is sometimes precast. It may take any desired form—from statuary to table tops. It is often used in connection with terrazzo flooring, being designed and colored to harmonize with the floor.

6. SIDEWALKS. One of terrazzo’s newest uses, and a use which holds promise of unusual development, is in the sidewalk. While commercial use of terrazzo for this purpose waits upon designers’ enterprise, the increasing number of entrances to stores and buildings, outdoor dance floors, the colorful walks of Rio de Janeiro and the walkways and esplanade leading to the Adler Planetarium in Chicago continue to prove terrazzo’s durability and beauty in outdoor installation.

This information is presented by The National Terrazzo and Mosaic Association, Inc.—an organization of qualified terrazzo contractors formed for the purpose of establishing and maintaining quality standards in terrazzo installation. Detailed information and established specifications for terrazzo may be obtained from the Secretary of the Association, 524 Brook Street, Louisville, Kentucky.

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POSITION WANTED: Graduate in architectural design and engineering from University of Notre Dame, 1934; post graduate work in reinforced concrete. Objective, experience in eastern architectural firm of good standing. Single, age 25. Box No. 1103.

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

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


POSITION WANTED: High School graduate desires position as junior draftsman in architect's office. Box No. 1106.

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

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POSITION WANTED: High School graduate desires position as junior draftsman in architect's office. Box No. 1106.

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

POSITION WANTED: Architectural draftsman. Rapid, dependable, over 15 years' experience in architectural design and engineering. Desires position with architectural firm. Has thorough knowledge of modern housing; is acquainted with Federal, State, and City departments and routine. Box No. 1104.
A SWEEP OF THE ARM... a gentle tap... and a sheet of Pennvernon Window Glass is cut. The surfaces of this glass are unusually dense of structure, and therefore more resistant to wear and abrasion. But Pennvernon Glass cuts truly and easily with the ordinary tool. Notice the accurate reflection of this Pennvernon Craftsman's hand in the glass.

Photograph by Johnston & Johnston

Our new booklet, called "The Making of a Leader", describes in dramatic pictures the manufacture of Pennvernon Window Glass. To get your free copy of this interesting book, sign and mail this coupon to PITTSBURGH PLATE GLASS COMPANY 2158 Grant Building, Pittsburgh, Pa.

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NOVEMBER 1935 PENCIL POINTS
11. Although the Institute will exercise all possible care, all posters entered in the contest are submitted at the risk of the owners. The Institute will not be responsible for posters unduly delayed, damaged, or lost in transit, either from the contestant to the Institute, or from the Institute to the contestant; neither does it assume such responsibility while posters are in its possession or on exhibition.

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.

13. Five members of the Art Directors Club, whose decision will be final, will serve as the Jury of Award, namely: Charles T. Coiner, Byron Musser, Gordon Aymar, Edward F. Molyneux, and Edwin Georgi.

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 Vovodick, 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 Administration.

(Continued on page 34, Ad Section)
..attractive floors that MEAN BUSINESS!

In retail stores, colorful custom-designed floors of Armstrong's Linoleum can increase your client's sales by guiding customers to back-of-the-store displays that might otherwise be overlooked. And by being unlike other floors in town, they can serve as "trade-mark" for your client's store in his customers' minds. He'll appreciate both these advantages.

He'll also appreciate the low cost, long life, and inexpensive maintenance of Armstrong's Linoleum Floors. Armstrong's Linoleum requires only simple washing and waxing to keep it fresh and beautiful for years. Expensive refinishings are unnecessary.

For complete information on the design possibilities of Armstrong's Linoleum, write now for file-sized "Public Floors of Enduring Beauty." For colors and grades, see Sweet's, Section 15, Catalog 35. Armstrong Cork Products Co., Building Materials Division, 1206 State St., Lancaster, Pa.

Armstrong's LINOLEUM FLOORS

In retail stores, colorful custom-designed floors of Armstrong's Linoleum can increase your client's sales by guiding customers to back-of-the-store displays that might otherwise be overlooked. And by being unlike other floors in town, they can serve as "trade-mark" for your client's store in his customers' minds. He'll appreciate both these advantages.

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For complete information on the design possibilities of Armstrong's Linoleum, write now for file-sized "Public Floors of Enduring Beauty." For colors and grades, see Sweet's, Section 15, Catalog 35. Armstrong Cork Products Co., Building Materials Division, 1206 State St., Lancaster, Pa.
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 thirty-hour 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 unemployment. The Guild asks that local organizations support 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 sub-organizations, 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.
The Insulux glass block is a hollow, translucent, partially evacuated unit of clear glass. Of sufficient compressive strength to be self-supporting to any practical height, this sturdy glass block lends itself to a great variety of uses—both functional and decorative.

Depending upon the design impressed upon the face, Insulux blocks transmit from 11.7% to 86.5% of the incident light falling upon them.

In addition to its properties of transmitting diffused light without glare, Insulux is an excellent insulator against heat. Its resistance to heat loss by conduction or infiltration reduces the cost of maintenance for air conditioning and artificial heating. Tests show that Insulux has an insulation value three times that of common brick masonry.

Insulux glass blocks are available in one rectangular and two square sizes. For details, descriptions, specifications and design possibilities, write for the new Insulux brochure. Owens-Illinois Glass Company, Insulux Division, Muncie, Ind.
Ready December 10!

THE LONG AWAITED
PENCIL POINTS BOOK

BY ARTHUR L. GUPTILL

• 350 BIG PAGES; the text crammed with helpful instruction in the technique of drawing and painting in COLOR, the plate pages sparkling with faithful reproductions of the work of many artists and renderers whose skill in COLOR handling will inspire both beginner and advanced student.

• 195 FULL PAGE PLATES; most of them costly reproductions in full COLOR—many of them prepared especially for this book by the author to give systematic and comprehensive instruction in COLOR theory, composition, and technique, by means of easily understood charts and step by step diagrams — more of them by recognized leaders in the field of COLOR sketching and rendering.

• 70 TEXT ILLUSTRATIONS; drawn by the author to clarify points brought out in the text as to materials, equipment and methods of working in COLOR with brush, air-brush, pastel, etc. They also bring out graphically and vividly the tricks of technique and refinements of composition that might otherwise escape one's attention.

• A COMPLETE INDEX; in addition to the 350 pages mentioned above. This feature will make the volume of maximum usefulness to the student of COLOR, saving him time in looking up illustrations or text matter covering what he is interested in at the moment—and the author, an experienced teacher, knows what needs to be indexed.

CHARTERS, PART I

1. ON THE CHOICE OF ONE'S PIGMENTS
   Presenting the Palettes of Prominent Artists

2. ADDITIONAL ITEMS OF EQUIPMENT
   Boxes, Brushes, Tables, and Like Accessories

3. PAPER: ITS VIRTUES AND ITS FAULTS
   Kinds, Surfaces, Weights, Sizes, Colors, Etc.

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   Comparative Methods of Preparing Paper for Use

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   Instructions in Laying Flat and Graded Washes

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   Building a Firm Foundation for Color Study

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   The Color Qualities and Their Measurement

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   Practical Hints on Mixing and Matching Colors

10. COLOR ILLUSIONS: VISUAL PHENOMENA
    After-images; Simultaneous Contrast; Activity

11. SOME POINTERS ON COLOR HARMONY
    With Definite Suggestions for Color Schemes

12. MINGLINGS AND THEIR APPLICATION
    And Hints on Developing the Aesthetic Sense

13. THE REPRESENTATION OF TEXTURES
    Tricks of the Professional Artist Explained

14. PROFITING FROM THE PHOTOGRAPH
    A Consideration of Some of Its Varied Uses

15. VITAL HELP FROM OTHER ARTISTS
    How to Gain from Paintings Past and Present

16. ON ALTERATIONS AND CORRECTIONS
    Useful Expedients the Student Needs to Know

17. STILL LIFE IN WASH AND IN COLOR
    Complete Instructions, and Analysis of Examples

18. AND NOW FOR OUTDOOR SKETCHING
    A Comprehensive Discussion of this Vital Work

19. MORE ABOUT SKETCHING OUTDOORS
    Being Mainly a Comparison of Some Sketches

20. TREES AND LIKE LANDSCAPE FEATURES
    With Strong Emphasis on Honest Outdoor Study

REINHOLD PUBLISHING CORPORATION

PENCIL POINTS NOVEMBER 1935
IN SKETCHING AND RENDERING

21. MORE ABOUT TREE REPRESENTATION
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   Brief Considerations of Flowers and Grass
23. POINTERS ON SKIES AND CLOUDS
   Mixing Some Instructions with Some Examples
24. ON STIPPLE, SPATTER, AND SPRAY
   The Air Brush and Like Instruments Explained
25. THE TREATMENT OF REFLECTIONS
26. EMPHASIS; DISTANCE; DETACHMENT
   And Suggestions on the Use of Graded Tones
27. UNUSUAL MATERIALS AND METHODS
   Opaque Pigments, Inks, Oils, Pastels, Etc.

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1. REPRESENTING PARTS OF BUILDINGS
   Rendering Windows, Chimneys and Like Details
2. RANDOM THOUGHTS ON COMPOSITION
   Showing How to Compose Original Renderings
3. CUTOUTS: AN AID TO COMPOSITION
   Presenting a Practical Stunt of Real Value
4. RENDERING THE COMPLETE STRUCTURE
   With Each Progressive Step Fully Demonstrated
5. THE RESIDENCE AND ITS SETTING
   A Critical Review of a Number of Examples
6. TREATMENTS OF LARGER BUILDINGS
   Typical Churches, Banks, Schools and the Like
7. BUILDINGS OF THE SKYSCRAPER CLASS
   Emphasizing the Unusual Problems Involved
8. NEXT WE COME TO THE ELEVATION
   Suggestions on Appropriate Conventionalities
9. SKETCHING AND RENDERING INTERIORS
   Some "Whys" and "Hows" Concerning This Work
10. HANDLING THE INTERIOR ELEVATION
    A Group of Individual Studies, with Comments
11. FURNITURE AND LIGHTING FIXTURES
    Together with a Few Examples of Stained Glass
12. PEOPLE; AUTOMOBILES; ACCESSORIES
    The Beginner's Faults and How to Avoid Them

THIS VOLUME was first conceived as a text and reference book for the person primarily interested in Architectural Rendering in COLOR. In its final form, however, while still ideal for that purpose, its scope has been so enlarged that it offers a vast fund of information on practically every phase of representative painting in water COLOR and related media. Step by step, the text leads through particularly complete elementary chapters to later professional considerations. Every point is fully explained and graphically illustrated. Numbered exercises are offered for the student forced to work without a teacher.

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 Haflner, Harry Sternfeld, Camille Grapin, and a host of others.

ONLY AN EXAMINATION of this remarkable volume can reveal its wealth of content. Use the coupon above and see for yourself. It is well worth double the price at which it is offered.

$10 a Copy

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NOVEMBER 1935 PENCIL POINTS
When you buy sheet metal, you must defeat these three racketeers—Wear, Weather and Corrosion. Whether you win depends on the metal you choose. GOHI Pure Iron-Copper Alloy has proved its wear-resisting qualities under the most difficult conditions; proved that it protects buildings over a greater number of years, and at less cost per year of service. It is the pure iron, alloyed with the right amount of copper, that gives GOHI its almost indestructible qualities and makes it the most durable low-cost ferrous metal money can buy. Take no chances—specify GOHI for every sheet metal use. Samples and full information on request.

GOHI Pure Iron-Copper Alloy is available in all sizes and gauges. Produced exclusively by The Newport Rolling Mill Company, Newport, Kentucky.
In 1935 Dietzgen has passed the half century mark in serving the men who create this world. Many a renowned machine designer and architect proudly lays his hand on a Dietzgen set and says, “My first drawing instruments, too, were Dietzgen.” This friendship and respect so widely expressed for the Dietzgen name are a source of both pride and inspiration to Dietzgen craftsmen. It shows constantly in the higher standards they set for their own work... a plus value in every Dietzgen product which seasoned buyers readily recognize.

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Under its new policy and regime (with the renowned host, Achille Borro, as managing director) the hotel will remain open throughout the year. While cuisine and appointments are dominantly French, the Sevilla-Biltmore is hospitably American in its comforts, conveniences and—yes—cocktails. Of course the courteous staff speaks English. An innovation in service is a special department to handle all technical and travel details for its quests—such as attending to luggage and customs inspections, entry of personal cars, arrangements of parties beyond the hotel, tours of the island and any other personal service desired.

It's still the famous Sevilla-Biltmore—tallest building on the Prado, in the heart of Havana's beautiful downtown area—but it has many new attractions to enhance its old charm. With the Sevilla-Biltmore's reopening, Cuba is again really Cuba!
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BUILD for tomorrow—but in building for the future, do not overlook today's need for speed and economy in floor slab construction. In this connection—you will find American Steel & Wire Company Wire Fabric the ideal reinforcement material. Available in rolls—it is exceptionally easy to handle—and keeps labor costs down to a minimum. This Wire Fabric—of highest quality and perfected design—reinforces the concrete slab in every direction. It provides continuous action from one end of the structure to the other—and high elastic limits and ultimate tensile strength due to cold drawing. It is truly called "The Giant Backbone of Permanence." Interesting literature is available covering the use of this material in the nation's leading structures. This—along with technical data—will be forwarded on request.

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NOVEMBER 1935 PENCIL POINTS
GILLOTT PENS
The Entrance Porch of Lincoln's Inn, London, drawn by Harry C. Wilkinson of Old Greenwich, Conn., with Gillott Pens 290 and 303.

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

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This well known aid to the development and training of the student’s technique consists of eight reproductions, printed on drawing paper, suggestively outlining in gray the illustrations on pages 74, 90, 113, 123, 124, 127, 136 and 139 of “Sketching and Rendering in Pencil.”

The student should practice pencil technique directly upon these sheets, using the printed lines as a guide for proportion and referring to the corresponding illustrations in the book for suggestions as to the quality and direction of the pencil strokes themselves. The text of the book makes clear the best types and grades of pencils for such work and explains the method of procedure.

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A large telephone company installed a Scovill Flush Valve for testing in actual service in 1929. The chief engineer reported the test entirely satisfactory—and ordered 550 valves as a result.

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NOVEMBER 1935 PENCIL POINTS
NEW PRODUCTS
Changes in Personnel, etc.

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 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 two-pipe 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 thing 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.

PENCIL POINTS NOVEMBER 1935
A NEW PRE-FINISHED BUILDING MATERIAL

The Farley & Loetscher Manufacturing Co., Dubuque, Ia., has announced a new synthetic building material, pre-finished 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 sub-floors 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. The finish obtained on the material is very durable. It withstands heat up to 250° F. 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 1899, 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.

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:

1. That the names and addresses of the publisher, editor, managing editor, and business managers are:
   Publisher: Reinhold Publishing Corporation, 330 W. 42nd St., New York City.
   Managing Editor: Kenneth Reid, 330 W. 42nd St., New York City.
   Business Manager: Philip H. Hubbard, 330 W. 42nd St., New York City.

2. That the owner is: (If owned by a corporation, its name and address must be stated and also immediately thereunder the names and addresses of stockholders owning or holding one per cent or more of total amount of stock. If not owned by a corporation, the names and addresses of the individual owners must be given. If owned by a firm, company, or other unincorporated concern, its name and address, as well as those of each individual member, must be given.)

Reinhold Publishing Corporation, 330 W. 42nd St., New York City.

L. F. Thompson, 330 W. 42nd St., New York City.

3. That the known bondholders, mortgagees, and other security holders owning or holding one per cent or more of total amount of bonds, mortgages, or other securities are: (If there are none, so state. None.)

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.

5. That the average number of copies of each issue of this publication sold or distributed, through the mails or otherwise, to paid subscribers during the six months preceding the date shown above is 88. (This information is required from daily publications only.)

PHILIP H. HUBBARD, Business Manager.

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

CIVIC: C. ROBINSON,
Notary Public.

(My commission expires March 30, 1936.)
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