The Trend in School Building Design

BY JAMES O. BETELLE

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Downtown Department of the University of Chicago. Colors are inlaid. That means permanence. The 
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appearance, comfort, and maintenance as well as durability—Armstrong Floors are ideal for schools.
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Georgia Marble was used for trim for the following schools designed by Guilbert & Betelle:

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Virginia's Romantic Ruins
of Historic
Barboursville-The-Second

RECKON you recall that last month, we chatted together about lovely old Barboursville-the-First. Made mention then, that before reminiscing about Barboursville-the-Second, had a fairish passel of bricks to make. That job being done, while you sip your julep, I'll do some more talking.

The ruins of Barboursville-the-Second are but a stone's toss from the first house. Both, we would have you know, were designed by Mr. Jefferson. As the wealth and position of the founder of the Barboursville plantation increased, he decided to have himself "a big house" in keeping.

Forty years ago, just as Christmas dinner was being served in it, fire broke out. The guests turned to and saved all the family plate, china and most of the furniture.

And now, surrounded by magnificent tree box, and gradually being reclaimed by the softening hand of Time, the ruin is a thing of stately loveliness. An eloquent token of Virginia's fine old before-the-war days, when living was so enriched and unhurried.

The plan suggests Monticello. An octagon two-storied room opposite the entrance. A front-and-back four columned portico—one facing the grass ramp-reached drive, the other the garden. Brick columns, plastered. Base and caps of stone. Bricks, hand made right on the spot under Mr. Jefferson's surveillance. In size, same as our now-day Jeffersons. Headers squarish. Colors? Why ask that, when everybody knows no one can give an adequate description of such. However, you can let our present-day Old Virginia Brick show you, being as they are blood relatives. When it comes to using them, there's no waiting for them to time-tune. They are just plum born that way. Have that oldish look when coming from the kiln.

Next chat have a notion will be about the home Washington gave Nellie Custis. That means more romance. Dr. Thornton, you may recall, made the plan.

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with Mr. Jefferson as a Guide.

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5. MARYLAND TRUST BLDG.

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While others consider, Baltimore acts—with the result that these important buildings now have a distinct physical and financial advantage over those that strive to "get along" with obsolete, wasteful heating systems.

HUTZLER BROS. STORE: Converted 1930 to Improved Webster System with Moderator Control. First season showed a return of 23.9% on the investment in addition to comfortable, even temperatures appreciated by both customers and employees. Naturally, the new 1932 extension to Hutzler’s includes the same notable features of Moderator Control.

PARK BANK BLDG.: Remodeled and enlarged 1929. Now heated by an Improved Webster System with Moderator Control. Former heating complaints eliminated. A 72% increase in radiation due to remodeling has resulted in a but 6% increased heating steam consumption.

LEXINGTON BUILDING: Equipped late 1930 with an Improved Webster System and Moderator Control. Steam consumption substantially reduced. This twenty-one story structure is owned and operated by and is the main office of Consolidated Gas, Electric Light and Power Co., a prominent public utility and leader in development of modern "street steam" utilization.

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MARYLAND TRUST BLDG.: Converted late 1931 to Improved Webster System with Moderator Control. Results in the form of even heating and lower steam consumption are assured.

The many advantages of the Improved Webster Systems with Moderator Control are not confined to modernized buildings. New buildings in Baltimore which will have this modern system are the Enoch Pratt Library and the City Hospital Nurses Home.

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THE BULLETIN-BOARD

APPOMATTOX

THE jury appointed to select a design for the Appomattox Memorial, a monument at Appomattox Court House, Virginia, authorized by Congress for the purpose of commemorating the termination of the War between the States, makes the following awards. The successful competitors are Harry Sternfeld, architect; J. Roy Carroll, Jr., architect; Gaetano Cecere, sculptor, all of Philadelphia. Eight competitors received Honorable Mention by the jury:

Allmon Grant Fordyce and John Donald Tuttie, associate architects, New York City;
The Firm of Ely Jacques Kahn, architects, New York City;
Lunden, Hooton, Roosen & Schaeffer, architects, Bloomington, Ill.
Henry Philip Plunkett, architect, Milwaukee, Wis.;
Charles Shilowitz, architect, Jersey City, N. J., Alexis Dukelski and Joseph Shilowitz, collaborators;
William Greenough Thayer, Jr., architect, New York City;
Walter O. Thomas, architect, W. Edgar Baker, architect, New York City, Thomas H. Jones, sculptor;
Edgar I. Williams, architect, Norman T. Newton, landscape architect, Edmond Amates, sculptor, New York City.

Congress has not yet appropriated funds for the construction of the monument.

BETTER HOMES IN AMERICA AWARDS

THE gold medal "for the best two-story house constructed in America between 1926 and 1930" has been awarded to Dwight James Baum, architect, of Riverdale-on-Hudson, N. Y., for the residence of Francis Collins of Fieldston, N. Y., it is announced by the American Institute of Architects, making public the results of the 1931 small-house architectural competition conducted by Better Homes in America, of which President Hoover is honorary chairman, and Dr. Ray Lyman Wilbur, president.

The design of the prize-winning house, the first to receive a medal in the two-story group, represented, according to the Institute's journal "Better Homes in America," "a direct approach to the problem through simple means and the skillful handling of proportions, resulting in a house combining dignity and a homelike character."

In the one-story class the medal was won by Winchton L. Risley for the home of Miss Stella Smith of Palos Verdes, a suburb of Los Angeles, "for a simple and altogether charming solution of the problem.

The designs, the announcement said, were "of a distinctly higher standard" than those submitted in the first competition, held last year.

Honorable mention in the two-story group went to Windsor Soule and John F. Murphy, of Santa Barbara, Calif., for the residence of W. E. Risser of Santa Barbara; and to Mr. Baum for the residence of Thomas McCall of Fieldston, N. Y.

Architects receiving honorable mention in the one-story class were Charles S. Keefe of New York City, for the guest house at Homewood, on the estate of E. Hope Norton, Darien, Conn. (see Architecture, Nov., 1930), and H. Roy Kelley of Los Angeles, Calif., for the home of Gilbert Bloss, Palos Verdes Estates, Calif.

Honorable mention in the story-and-a-half group was awarded to Waldron Faulkner of New York City, for the residence of F. H. Corlett, Lake Katonah, N. Y.; to Winchton L. Risley of Los Angeles, Calif., for a house in Palos Verdes, and to Arthur Hutchason of Los Angeles, Calif., for a house for Mr. and Mrs. Herbert Hicks, San Marino, Calif. No medal was given in this class.

The purpose of the awards, it was explained, is to discover and call attention to the best small houses built during the given period, and to stimulate interest in overcoming the faulty design and construction of the really small house. While the medal is intended as an annual award, houses entered in the 1931 competition were those completed between 1926 and 1930. Designs of houses submitted in one year cannot be resubmitted in later years.

Arthur B. Heaton, Irwin S. Porter, and Waddy B. Wood of Washington, D. C., and William J. Sayward of Atlanta, Ga., were the other members of the jury, which in its report said:

While the designs submitted came from a very wide geographical area, many states were not represented. Consequently, the fact that the competition was open to houses completed between the years 1926 and 1930, inclusive, and that during the period, to the knowledge of the jury, many houses of excellent design were built, it is to be regretted that a larger number of submissions were not offered in competition.

APARTMENT-HOUSE AWARDS

THE New York Chapter, A. I. A., annually awards Honorable Mention to selected buildings in the effort to stimulate improvement of apartment-house design. The chairman of the Committee of Awards, Arthur C. Holden, recently announced the following awards for this year: To the Cord Meyer Development Company of Forest Hills, Long Island, for the group of apartments - The Livingston, The Kelvin, and The Lexington - built from the plans of Theobald H. Engelhardt.

The buildings are cited as "the outstanding example of intelligent planning for suburban apartments among material submitted" and were commended "for general excellence of plan and exterior design."

THE SAN FRANCISCO WORKING DAY

TO double the number of men employed, a working day of two shifts of five hours each in the construction industry is advocated by the California State Chamber of Commerce through the recently organized California Building Congress. Already inaugurated in San Francisco, the plan, its sponsors hope, will spread to other parts of the country.

The Congress has found that labor working five hours a day is actually producing more work per hour than on the eight-hour basis, according to Frederick H. Meyer of San Francisco, a director of the American Institute of Architects and chairman of the northern section of the Congress.

Thus, he points out in an appeal for cooperation sent to all members of the Congress, the decreased labor cost will offset any charges resulting from the changing of shifts. The arrangement contemplates an intermission of half an hour between shifts.

"Employers and employees," Mr. Meyer says, "are agreed that the two-five-hour shifts plan can be applied with advantage to all concerned, carpenters, laborers, excavators, truck-drivers, and brick- (Continued on page 17)
There are written and unwritten specifications. The ones by which size and shape and breadth and depth are regulated are the written specifications. The ones upon which prestige is built are the unwritten specifications. Speed, load, car size, controls, such terms as these are familiar in the written specifications for an elevator. Safety, satisfactory service, economy of operation, long life, these are associated with the unwritten specifications of an elevator manufactured by Otis. . . . Otis Elevator Company.
layers, with perhaps a few minor exceptions. The five-hour shift was adopted in preference to the four-hour shift, it being felt that four hours' pay would not provide a living income.

"The plan will provide a fifty-hour week as opposed to a forty-hour week under the universally adopted five-day week. It is obvious that this will effect a saving in overhead to the contractor, and will also deliver the building to the owner in a shorter period of time.

"The Bay District Council of Carpenters, in conjunction with the leading contractors of San Francisco, have officially endorsed the five-hour shift plan, which on January 18 began effective covering all the carpentry work on the War Memorial Building in the San Francisco Civic Centre."

PROFESSOR NEWCOMB APPOINTED FINE ARTS DEAN

REXFORD NEWCOMB, for the past fourteen years Professor of the History of Architecture at the University of Illinois, has just been appointed by the board of trustees of that institution as Dean of the newly established College of Fine and Applied Arts.

Professor Newcomb was born at Independence, Kans., in 1886. He was trained for his profession at the Universities of Kansas, Illinois, and Southern California. To this training was added extensive study and travel in Europe and the Orient. He was for five years director of the Department of Fine and Applied Arts at Long Beach (California) Polytechnic, and four years principal of the Long Beach Evening High School. In addition to his long service at Illinois he has held professorships at Southern California and the Agricultural and Mechanical College of Texas, being for a time College Architect at the latter institution.

LONGMEADOW LIBRARY

SMITH & BASSETTE have been commissioned to design the new William Salter Storrs Library which is to be built in Longmeadow, Mass., at a cost of approximately $50,000. William D. Austin, architect, of Boston, served as professional adviser in this competition, in which architects from Boston, Springfield and Hartford were invited to submit designs.

THE BULLETIN - BOARD Continued

COLONEL WILLIAM A. STARRETT, 1877-1932

COLONEL W. A. STARRETT, President of The Starrett Corporation, New York, whose death occurred March 25 at his home in Madison, N. J., was one of the best known figures in the American building industry and a member of a family all of whose names were prominently associated with building and architecture.

His older brother, Paul, who is the only one of five brothers to survive him, is Chairman of the Board of the Starrett Corporation and President of Starrett Brothers & Eken, Inc., builders of the Empire State Building, the Forty Wall Street Building, the block-sized Starrett Lehigh industrial building, and numerous other structures.

William Aiken Starrett was born June 14, 1877, in Lawrence, Kans., the grandson of a builder, the son of William Aiken Starrett, Presbyterian minister, and Helen Ekin Starrett, a prominent educator and writer, who founded "The Starrett School for Girls" in Chicago. Five boys and two girls formed the Starrett family, and it is interesting to note that all of the five boys became builders and architects and, as if to preserve the tradition, the two girls married builders.

Immediately upon leaving college the future builder embarked upon a strictly commercial career, but an early fascination for the "building game" led him in 1898 to join his brother Paul in the newly opened New York office of the George A. Fuller Company. In 1901 he left the company to join Theodore and Ralph in the formation of the Thompson-Starrett Company, builders, continuing as vice-president with this firm until 1913, when he joined his brother Goldwin Starrett and others in forming the architectural firm of Starrett & Van Vleck.

When the United States entered the war, as a major of engineers he took over the important post of Chairman of the Construction Committee of the War Industries Board, charged with establishing and conducting the entire armament construction programme—cantonments, hospitals, army bases, and all other army construction for war purposes in this country.

After the war, in 1919, Colonel Starrett went to Japan as a vice-president of the George A. Fuller Company, where he was responsible for the introduction into that country of the modern steel frame building especially designed to withstand earthquake shock.

In October, 1922, he joined Paul Starrett and Andrew J. Eken in forming Starrett Brothers, Inc., now known as Starrett Brothers and Eken, Inc., in which he served as vice-president at the time of his death.

Colonel Starrett was a member of many professional organizations, and was a registered professional engineer and architect. In addition to his building activities Colonel Starrett was almost as well known for his accomplishments as a writer and speaker; in fact, his building connections were often subordinated to his other interests. He was the author of the book "Skyscrapers," a series of articles on building in the Saturday Evening Post, and was a contributor to other magazines. He was a member of President Hoover's Organization on Unemployment Relief, of the President's Committee on Large Scale Building Operations, and was a territorial director of Harvey D. Gibson's New York Emergency Committee. He had expected to devote most of his activities during the coming year to the presidency of Associated General Contractors of America, an office to which he was recently elected, and to President Hoover's committee on unemployment.

PERSONAL

G. Edwin Brumbaugh, architect, announces the removal of his offices to the Girard Trust Company Building, Broad Street at South Penn Square, Philadelphia, Pa.

Braseth & Houkom, architects, announce the removal of their offices to 313 Black Building, Fargo, N. D.

Frederick D. Rink, architect, has opened offices at 55 West 42d Street, New York City, for the practice of residential architecture, and would like to receive manufacturers' catalogues and samples.

The architectural practice of the late Carlton Strong, 801 Keystone Building, or 324 Fourth Avenue, or 4731 Bayard Street, has been acquired by Kaiser, Neal & Reid, architects, 324 Fourth Avenue, Pittsburgh, Pa.

Leon & Lionel Levy, architects, announce the removal of their offices to 527 Fifth Avenue, New York City.
OFFERING YOU THE 
UTMOST IN SANITATION

Halsey Taylor fountains (No. 605 wall type illustrated above) provide positive and practical automatic stream control. Water always uniform, never too high, never too low! Two-stream projector makes lip contact impractical. Models with projector above rim in accord with A. P. H. requirements if desired.

• This Newark High School, as designed by Guilbert & Betelle, is an architectural masterpiece. In appointments and in refinements these architects have left nothing to be desired. • The fountains are Halsey Taylor No. 605, in black, in accord with the interior decorative scheme. Distinctive Halsey Taylor advantages assure school authorities trouble-proof service and maximum drinking safety and convenience! • The Halsey W. Taylor Co. Warren, Ohio

HALSEY TAYLOR 
DRINKING FOUNTAINS
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Entrance detail, Newark Public School of Fine and Industrial Art, Newark, N. J. Guilbert & Betelle, architects. Further details of this school will be found on pages 259 to 261.

Photograph by
Richard Averill Smith
The Trend in School Building Design

By James O. Betelle, F.A.I.A.

OF THE FIRM OF GUILBERT & BETELLE, ARCHITECTS, NEWARK, N. J.

Prosperous times for the past ten years, together with a greater demand for public education, have brought a great number of school buildings throughout the country. The erection of these buildings has furnished an opportunity, through experience, for the educators and architects to improve them, not only in design and construction but also in layout, thereby making them more suitable and usable as educational structures.

The present business depression and reduced municipal budgets, in so far as they affect public education, are only temporary. The citizens of our country have continually demanded better and better educational facilities for their children, and they will continue to do so as long as this country remains a republic. It must also be remembered that the country will continue to increase in school pupils, and existing buildings will become obsolete, so that the demand for new buildings will accumulate as it did during the World War, when new school construction was temporarily stopped. When better times come there will be an increase in building costs, so that now is the time to build, when the dollar will buy the maximum in both labor and building materials.

It is often asked: "Why is it that our present school buildings cost so much more than they used to?" Of course, one large item is the increased cost of labor and materials, though this is a matter which is correcting itself in a measure, due to the business depression. There are many other items, however, that have increased the expense of the present-day building over the school of generations ago, due to the fact that there is an insistent demand for better housing...
conditions and also more complete educational facilities than those that we were satisfied with in years past. To-day there is a demand for the use of special plaster on the walls and ceilings in noisy rooms and the use of some quiet floor material in order to eliminate noise. There is a demand for more elaborate electrical equipment and lighting throughout the building, the installation of radio receiving systems and for moving pictures with sound equipment. Larger auditoriums are installed, together with large gymnasiums with space for many spectators, and swimming-pools with their adjoining shower and locker rooms, more miscellaneous rooms for administrative and health work, lunch-room and kitchen, and rooms for extra-curricular activities. These and many similar items of improvement and refinement were not considered necessary, nor were they known about, a generation ago. There is no argument about the desirability, nor the educational value, of these various items, but they are simply mentioned to answer the persistent inquiry as to why there has been an increase in the cost of school buildings.

Another factor which places a mandatory increase on school-building costs is the multiplicity of school-building laws enacted by the various States. No amount of rules and regulations will make an incompetent architect design a good school building. On the other hand, these rules and regulations in such minute detail handicap the good architect and prevent him in many cases from exercising his skill and ingenuity in producing some new and worthwhile improvement in school design. The state school-building laws throughout the country are in great need of standardization, with variations to suit local conditions, as they now extend from nothing at all in some States to a code going into great detail in others, and also coming under the control of several state departments. The school-building inspectors of the various States have formed an association, and the standardization of state school-building codes is one of their objectives; they will no doubt bring order out of chaos in the next few years.

The consolidation of rural schools, while not altogether a modern trend, since it has been going on for some years, has been stimulated by the improved concrete highways and the safe and efficient motorbus transportation, which permits more readily than ever before the elimination of small rural schools and the consolidating of a number of them into one large unit. There are still thousands upon thousands of small, one-room schools existing throughout the country, but no more are being erected and many are being eliminated by consolidation each year. By consolidating the elementary and high school into larger units, a better quality of instruction and a lower cost per pupil are made possible.

In rural schools it has always been necessary to make some provision for the children to eat their noonday lunches. In times past the children simply brought a cold package lunch and ate it in their schoolrooms. It is now conceded by every one that for the health of the children something better than a cold lunch hastily swallowed should be provided, both in the rural and in the city schools, which means some sort of hot dishes and a better place in which to eat. To do this some kind of kitchen must be provided, and in the larger schools a cafeteria lunch-room as well. A considerable amount of room is occupied by a cafeteria lunch-room, and the modern tendency is not to leave this space idle and unoccupied except for possibly an hour or two at noon, but to make it serve some useful purpose all of the time. As the modern school has a minimum amount of basement and is built above the ground rather than in the ground, the cafeteria is as well lighted as any classroom. By closing off the kitchen and cafeteria counter, and with the use of folding doors, the large area of the cafeteria can be divided into spaces suitable for any school purpose where flat-topped tables and chairs make appropriate furniture, such as a study-room, ordinary recitation-rooms, etc.

Another modern trend which is noticeable is a reduction in the size of school auditoriums and their more intensive use. Until recent years, it was felt necessary that the auditorium be large enough to seat practically the entire school at one time. This made it a very large, expensive, and unwieldy room, and as a result it was used very little of the time, which represented a considerable waste of capital expenditure. It is now realized that to justify the expense of an auditorium it must be in constant use. For strictly school purposes, an auditorium seating about two hundred and fifty is large enough.
for a large elementary school, and one not larger than a third of the pupil capacity is big enough for a junior high school. In a high school the size of the auditorium depends upon how important it becomes from a community and civic standpoint. A town needs one large auditorium for civic meetings of all kinds, but even then the trend is toward reduction in size.

There is also a trend toward reduction in the amount of blackboard space provided in the classrooms, and a corresponding increase in the amount of corkboards provided for pinning up pupils' work or other exhibits. Modern teaching methods no longer send large groups of children to the blackboard at one time, so that there is now a tendency to provide blackboards only across the front of the room in back of the teacher's desk. The side and rear walls, where space is available, are covered with corkboard in a frame similar to the blackboards.

There is a new technic being evolved in modern education of which the architect must take note. Classroom instruction is becoming more informal, movable furniture is being used, and much more storage space is being made available in each classroom. This storage space takes the form of cupboards, drawers, etc., set flush with the walls, where possible, wherein the illustrative material, extra text-books, supplies, etc., are kept. There is also provided a series of cupboards or drawers where each individual pupil may keep his own working materials and books. In many classrooms a sink or washbasin is also provided. There is also a tendency to increase the area of the classroom slightly, or to reduce the number of pupils in each class, as the new educational methods need more space to carry out their projects than was needed in the older and more formal type of instruction, where fixed seats in rows were used. The type of education to be carried out in the building determines its layout, and the architect, to render the best services to his client, must be familiar with educational matters, as well as with architecture and building.

European school buildings have very little to offer us, so far as new ideas are concerned. Very few schools have been erected in Europe since the war, so that America has the best school buildings in the world to-day. Europe must come to us for new ideas in schools as she has always done in other lines. The one important thing Europe has contributed is the so-called "Modernistic" style of architecture used in the treatment of the exterior. There is a distinct trend in America to break away from the traditional structural forms. There is merit in this tendency and it is to be encouraged so long as it is not carried to extremes, of which there is no evidence as yet.

There are also some fundamentals in connection with school-building design which may not necessarily be modern in trend, because they have always held good, though not always followed, and which it might not be amiss to mention at this time:

1. An educational survey by competent au-
authorities, with definite recommendations as to the number, size, type, and location of the buildings, giving thought to the future development of the community, is always time and money well spent.

2. The adoption by the boards of education of a building programme, along the lines recommended in the educational survey covering a period of years, permits the purchasing ahead of time of sites for school buildings, thereby saving thousands of dollars to the taxpayers.

3. Consultation with architects as to the cost of a school building containing the educational accommodations recommended by the superintendent of schools before an appropriation to erect the building is asked.

4. The use of simple and substantial materials and the avoiding of imitations and substitutes which do not have the wearing qualities of the materials imitated.

5. Economy practised in its various forms, such as economy in plan or layout, economy in materials, and, last but not least, economy in the use of the building. Each of these types of economy must be used with discretion and judgment, otherwise they become mere forms of extravagance.

The most modern of educational facilities in our schools to-day are the radio and the sound picture, and it will not be long before television will also be available. All of these facilities bring the outside world into the classroom and are suitable for group instruction in certain subjects. Radio instruction by television will mean an adjustment in the plan of our schools to accommodate the larger groups, and just what these adjustments will be no one can foresee at this time. There will undoubtedly be a central sending station in one of our large cities, possibly in connection with a great university, where the finest instruction talent is available, which will broadcast lessons to pupil groups assembled in various parts of the country. These lessons will be amplified and explained by the classroom teachers in charge of each group.

One of the healthiest signs of the modern trend is the fact that superintendents of schools are taking courses of lectures at our higher institutions of learning dealing with the school-building plant, and architects are studying educational methods and routine. This will not make architects out of school superintendents, or educators out of architects, but it will bring about a better teamwork and a better understanding of each other's problems. It will also enable them to speak and understand a common language, and, by working for a common end, bring about better designed, more economical and usable school buildings, which above everything else is the trend of to-day.

Photograph by Richard Averill Smith

Essex County Girls Vocational School, Newark, N. J., built of fire-proof construction in light buff brick and limestone. Further illustrations will be found on pages 265 to 267
Some Recent School Buildings of Guilbert & Betelle, Architects

Plot plan of the New Rochelle High School, New Rochelle, N. Y. The two lakes were originally old ice ponds, and have been made available for boating and swimming in the summer, and for skating in the winter.

Below, a detail view across the entrancefront. The triangular form of the plan suggested the use of Gothic precedent as a point of departure, and, because of the traditions of the country, extending back to Rochelle, France, French Gothic was chosen.

Photograph by Richard Averill Smith
Below, first floor, and above, second floor of the New Rochelle High School. The peculiarities of the site brought about the development of this plan which, as will be seen on page 253, provides convenient public approach to the auditorium and a close connection between the gymnasium and the athletic field.
South Mountain School, South Orange, N. J., with plans of first and second floors shown below. The building is of light buff brick trimmed with limestone, is of semi-fireproof construction, and was completed February, 1930.
Detail of the main entrance, Jefferson School, Summit, N. J. Here, as in all of the architects' work, the cupola is entirely sheathed with copper. The cornice throughout is copper, the portico columns and tympanum, wood.
Photograph by Richard Averill Smith

Jefferson School, Summit, N. J., from the front. The plans below indicate the future additions, which explain the present long narrow form.
Below, first floor, and above, fourth floor of the Newark Public School of Fine and Industrial Art
Newark Public School of Fine and Industrial Art, Newark, N. J., in which the buff brick and limestone have been used in fireproof construction with a flat concrete roof. The windows are double-hung, of wood. Completed August, 1931.

Photograph by Richard Averill Smith
Auditorium in the Newark Public School of Fine and Industrial Art, seating 700. The ornamental plaster ribs are perforated for ventilation.

Studio for the use of the class in costume model in the same school.
State Normal School, Jersey City, N. J. A school in the English Gothic style, of red brick with limestone trim and a green slate roof. The construction is fireproof with reinforced concrete and timber for floors. The building was completed May, 1930.
A general view of the State Normal School, in which, as the plans opposite and below show, the auditorium seating 1,476 is given an entrance lobby beside the tower, with a gymnasium on the end of this ell.
Detail of the entrance in the middle of the classroom wing, State Normal School, Jersey City, N. J.

Photograph by Richard Aterill Smith
The Essex County Girls Vocational School, Newark, N. J., completed in January, 1930, is a striking example of the present trend in educational development. The plan below and the illustrations following show the marked departure from the traditional "three R's."
A class in dyeing in the Essex County Girls Vocational School, Newark, N. J.

Photographs by William F. Cone

A class in the beauty-culture laboratory
Instruction in dental nursing in one of the laboratories

Lobby in the same school, where provision is made for instruction in window dressing.
Main entrance of the State Normal School, Glassboro, N. J. The columns and the wall back of the portico are of marble

Photograph by John Wallace Gillies

Main entrance of Great Neck High School, Great Neck, Long Island. The portico is of limestone throughout

Photograph by Richard Averill Smith
Entrance detail of State Normal School, New Britain, Conn. Here, as in all of these porticoes, the wall at the back is of the same material as the columns.

The main entrance portico of Vernon L. Davey Junior High School, East Orange, N. J. The portico is of limestone, the main cornice of the building and the cupola being sheathed with copper.

Photograph by

Doris Duryn

Photograph by

Richard Averill Smith

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Here in the Essex County Boys Vocational School, Bloomfield, N. J., completed in September, 1931, is another example of the extent to which vocational training is changing school building design.
A detail of the front entrance, Essex County Boys Vocational School. A light buff brick has been used with limestone trim. The construction is fireproof, with a concrete roof.
Second-floor plan

First-floor plan

Ground-floor plan

Essex County Boys Vocational School, Bloomfield, N. J.
An entrance detail of the Montrose School, South Orange, N. J., built of red brick and limestone.

Entrance detail of West Side High School, Newark, N. J. Here again the architects have used one of their favorite combinations, red brick with limestone trim, in a fireproof structure. It was completed in 1929.

Photographs by Richard Averill Smith
Entrance detail of Thaddeus Stevens Junior High School, Williamsport, Pa. The upper floor of towers such as this is usually given over to the use of some extra-curricular activity.

Entrance detail of Summit High School, Summit, N. J.
Clinton School, Maplewood, N. J., built of red brick with limestone trim, and completed December, 1929. The construction is semi-fireproof. Below, plans of first and second floors.

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SECOND FLOOR PLAN
Detail of one of the two main entrances. The windows and entrance doorway are of wood, the cornice of copper, painted. Clinton School, Maplewood, N. J.
Columbia High School, South Orange, N. J. Another example in the English Gothic style, of brick with limestone trim.

Photograph by Richard Averell Smith
Detail of the main entrance, Columbia High School. The building is of fire-proof construction throughout, and was completed in March, 1928
Lee Lawrie's Recent Sculpture at Harrisburg

The Education Building and the pylons and keystone blocks of the Soldiers and Sailors' Memorial Bridge of the Pennsylvania capital, done in collaboration with Gehron & Ross, architects.

Photographs by Gilkison

Bronze doors of entrance to the Forum, in which the sculptor represents man's creative and recreative activities.
Bronze gate, main entrance to the Education Building, in which Mr. Lawrie symbolizes modern man's various forms of labor

Facing this page are the great pylons of the Soldiers and Sailors' Memorial Bridge
One of the great eagles topping the pylons. Some idea of the scale of this work may be gained from the photograph over-leaf. The pylons are 147 feet high and 16 by 20 feet at the base. For this bridge and the Veterans' Memorial Bridge, Rochester, N. Y., William Gehron, of Gehron & Ross, architects, received the Architectural League's Silver Medal in Architecture for 1932.
Mr. Lawrie's models of some of the keystone blocks used in the Soldiers and Sailors Memorial Bridge.
Bronze elevator doors in the main-floor lobby, Education Building
If you are so fortunate as to be at Blois, and still more fortunate, to be going back to Paris in an automobile, a few kilos to the northeast along the Loire you will have to slow down for a sign which reads "Cour." The paved road rushes by the hamlet itself, but if you are the inquisitive sort and are intrigued by roofs banked up behind groves of plane trees, there is considerable to reward an exploration on foot. The wealth of the architecture is behind high walls but the tidbits in plain sight are not to be scoffed at. The drawing shows a bit of a barn with a tile-corbelled cornice and a simple dormer. If there is no absolute necessity for a gutter, this solution of projecting tile one behind the other in straight and dog-tooth courses, may some time prove a handy trick to have up one's architectural sleeve. It will not look as expensive to the contractor's estimator if the specifications state that the architect will be on deck to show the workmen how easily it can be done. There is nothing about the dormer which is unusual except that it is French, and typically so. The forward projection is used for the block-and-tackle connection when hauling up supplies in the granary. Timbered members are of course dowelled together.

ST. NEOTS is a fair-sized English town situated in that rather drab district lying to the west and southwest of Cambridge. It has its quota of old pubs, small cottages of note, and a pleasant stream which flows under the name of Hen Brook. There cannot be said to exist any outstanding architectural characteristic in this part of Huntingdon, but occasionally a little detail pops up with something worth noting. Such a case is this dormer, which rises sheer from the face of the first-floor wall. The gambrel roof permits of pretty fair head-room so that the rather narrow dormer functions satisfactorily. When it comes to color, the ensemble is inclined to step out: yellow brick base, rich brown plaster, all woodwork green except windows, which are white, and variegated red tile roof.
This year the New York Chapter, A. I. A., gave its apartment-house medals to Vincent Astor, owner of 120 East End Avenue, illustrated above, of which Charles A. Platt was architect, and also to the Phipps Houses, Inc., Long Island City, designed by Clarence S. Stein. The Phipps six-story elevator units are illustrated below.

When in February we published the Chicago Board of Trade, a satisfactory exterior of the completed structure was not available. Here is one of the best efforts to picture it through the narrow canyons by which it is surrounded. Holabird & Root, architects.
Rollins College, Winter Park, Fla., has just dedicated the Annie Russell Theatre, shown in the foreground (Kiehnel & Elliott, architects), and the Knowles Memorial Chapel beyond, of which Cram & Ferguson are the architects.


Preliminary perspective of the accepted design for the new capitol of North Dakota. Bell de Remer & W. F. Kurke, architects; Holabird & Root, associate architects.

Preliminary perspective of the new post-office for Lake Forest, Ill. Ralph Milman and A. S. Morphett, architects, formerly associated with the late Howard Shaw.

Below, the winning design for the monument at Appomattox, Va., to commemorate the termination of the war between the States. Harry Sternfeld and J. Roy Carroll, Jr., architects; Gaetano Cecere, sculptor.

Preliminary elevation study in pencil, main entrance, Rufus King High School, Milwaukee, Wis. G. E. Wiley, school board architect.

Here are superb photographs of the architectural details and contemporary furnishings in three rooms from "Oak Hill," built 1800-1801 for Captain Nathaniel West. There are those familiar with Samuel McIntire's work who believe these rooms to be the best things he ever did. With the photographs there are seven measured drawings of the woodwork, reproduced at scale.


A selection of suburban houses representing contemporary work in Holland. There are no interiors, and each house is shown by one or two general views and the floor plans.


Here is the eighteenth edition, enlarged, of the indispensable Kidder. Harry Parker, who is now the editor of the Handbook, is professor of architectural construction in the School of Fine Arts, University of Pennsylvania, and a member of the A. I. A.


Here is an encyclopedia of home building. Miss Halbert was an active figure in the recent Conference on Home Building and Home Ownership called together by the President, and as research director of Better Homes in America she has had unusual opportunities for gathering together many facts. It would seem that no single question that might arise regarding home ownership, home building and home financing remains unanswered in this comprehensive volume.


Professor Wattjes gathers together periodically the significant architectural work of his country and puts it into the record. This time it is the small suburban homes that constitute his subject matter. Many of them show some minor detail that is ingenious and pleasing, but the collection as a whole impresses one with the widespread striving for originality and startling form that characterizes so much building, not only in Holland, but throughout the so-called civilized world at the moment.


Considering the architectural importance of our early work in Tidewater Virginia, our documents covering the subject have been pitifully inadequate. There is a practical reason for this—the inaccessibility of the monuments themselves. It was only the few within easy reach of Richmond that received a cursory examination by students. This lack has now been remedied by two men who have had unusual opportunity and adequate time for full study and measurement of fifteen houses, dating from the Adam Thoroughgood House, built before 1640, to Blandfield and Menokin, built about 1770. The profession and the antiquarians both owe a great debt to Mr. Waterman and the late Mr. Barrows for a comprehensive and authenticated architectural document.
Saturday, February 20.—Keith Schwinley, of Washington, sends me an interesting little snapshot of M. Deneau, reproduced herewith. Schwinley and Julian Levi spent an interesting hour or two with M. Deneau on our Paris pilgrimage of last spring. M. Deneau is the official architect of Rheims Cathedral. As is well known, all public monuments in France have an official architect—usually a Prix de Rome man—without whose sanction no changes can be made in the buildings. M. Deneau's work, however, has been much more constructive, since he has had to deal with the problem of rebuilding Rheims after the damages of war. The Cathedral is, of course, his life work: nothing else is permitted to interfere with his thought of it. In the photograph he is shown with a scale model of the flèche.

Tuesday, February 23.—The so-called Radio City, alias Metropolitan Square, is now to be called Rockefeller Center. "Radio City," however, is not to be dropped entirely, but is now to be applied to the four buildings in which radio activities will predominate. Each building in the group will have its own name.

Wednesday, February 24.—There seems to be a confusion of tongues in regard to our housing needs. On the one hand the Mortgage Bankers' Association of America, in fighting the proposed Home Loan Bank bill, says that we have too many houses now, and that further new building would deflake rents and sales values of all real estate. On the other hand, Frederick Bigger, chairman of the A.I.A. committee on economics of site planning and housing, quotes Dr. Raymond Unwin as advocating the building of plenty of good and commodious dwellings both in Great Britain and in the United States, with the provision, however, that the work should be done in accordance with carefully considered community plans.

To go back to the isolated island parallel, so frequently considered by the economist, would be the little group of inhabitants say, "Let us build no more houses, since we all have shelter."? Is it not more likely that, having time and energy to spare, they would say, "Let us build ourselves better houses."?

Thursday, February 25.—To-night, with the usual pomp and glory of guild robes, the architects, sculptors, painters, and craftsmen dined at The Architectural League, and immediately afterward proceeded to the Fine Arts Building to open the Forty-seventh Annual Exhibition. Julian Levi announced the awards, details of which will be found in connection with the pictorial review on another page. The show is an unusually good one, showing evidences of having been boiled down so far that it contains only material of an unusually high degree of excellence. The new scheme of limiting all photographs to certain sizes in black-and-white, uniformly shown in passepartout without glass, was on the whole successful, although the very close grouping made it a bit difficult in some cases to pick out the photographs of a certain subject and consider them together.

After a rather hasty inspection of the show, the Levis took twenty-five or thirty of us to their nearby apartment, where the discussion as to the awards and the exhibits continued among the group made up largely of past and present medalists.

Sunday, February 28.—Architecture is looking up. Two resignations from The Architectural League to-day achieve the front page of The New York Times. I could name lots of architects who would do more than resign from The League to make the front page. George Howe and William Lescaze resigned because of the fact that something of theirs sent in for The Architectural League Exhibition had been returned unaccepted. Mr. Howe seems to think that refusal of The League to show his work was based upon objection to the modern character of the design. This, of course, could not have been the case, since the show this year, and for some years past, has contained work no less radical. The League, as a matter of fact, has a hard time these days, what with the resignations of the extreme right wing members and the extreme left wing members, many of whom are fully convinced that The League has abandoned everything that is worthwhile in life and made itself unsuitable for the presence of these gentlemen. Architectural progress, I suppose, must be made in this way, by sloughing off the outworn, by testing out the most advanced thought, and thus, two steps forward and one back, slowly marching forward.

Monday, February 29.—Eugene Schoen has been appointed associate professor of architecture, School of Fine Arts, New York University, to direct the newly established course in interior architecture, which indicates that the course will veer towards the left wing rather than to the side of the fundamentalists.

Tuesday, March 1.—Dropped in to see Lorimer Rich's competition drawings for the Appomattox Memorial, which go off to-night. It is an interesting problem—the creation of an enduring symbol commemorating the termination of the War between the States. The number of entries will unquestionably be very great, and I suppose the number of sculptured figures of peace could be formed into a regiment. In a memorial like this, to be visited constantly by thousands of people, it seems to me that the simplest form possible is the solution. Into it will be read what is in the mind of the beholder, and it will be all the better for that. The simple form never goes out of date nor becomes tiresome—as witness the Washington Monument.

Thursday, March 3.—Professor Philip J. Turner, of McGill University, told us to-night at The League the fascinating story of Liverpool Cathedral—of Gilbert Scott's winning it in competition at the age of twenty-one, of his early association with Mr. Bodley in the work, and, after the latter's death, of Sir Gilbert's steady progress alone. It was good to hear that there are still architects in the world like Sir Gilbert, who has made every scale and full-size drawing required for the cathedral. I was particularly interested in the wide joints of his masonry—possibly three-quarters of an inch of mortar—also in the fact that he uses brick cores for his piers. It would be interesting to learn more of how he made sure that there would be no difference in compressive strength between...
DETAILS OF WATER-PROOFING
A SERIES OF WORKING DRAWINGS
BY JACK G. STEWART
PLATE №24
the brick core and the sandstone facing with its wide joints.

Friday, March 4.—There are some interesting facts about air conditioning in a report recently made public by the Metropolitan Life Insurance Company. In the first place, "It is doubtful whether there exists a single optimum acceptable to a group of individuals. Each individual of the group may have his own optimum, depending upon his physical condition, the condition of his skin, the amount of clothing worn, the nature of work performed and, no doubt, upon many other factors; and this optimum may change slightly from day to day.

"A temperature range between 68° F. and 72° F. is generally accepted as the proper temperature for sedentary workers. The optimum varies with the type and severity of work performed—the heavier the work, the lower the temperature.

"A range of relative humidities between 40 and 60 per cent appears to be practicable and acceptable.

"A ventilation rate of about 25 to 35 linear feet per minute is usually satisfactory.

"In summer, much as the above optimum temperature conditions seem desirable, their maintenance indoors, whenever the prevailing temperature outside is excessively high, is objectionable because of the sensations of intense heat or of chill experienced by those leaving and entering the building. Therefore, it has been found impracticable to reduce the indoor temperature more than ten to fifteen degrees below the outside temperature under maximum outside conditions.

"Overcooling in summer is inadvisable, though perhaps not quite so undesirable as overheating in winter."

Saturday, March 5.—A year or so ago there was much complaining over the fact that the Supervising Architect's office seemed to be attempting to design practically all the new public building rather than giving these out to private architects to be speeding up the work. The situation has changed. As of January 30, 1932, projects on the boards in the Supervising Architect's office total 106, costing $14,360,900. In the offices of private architects, on the other hand, at the same date, there were 144 projects, totalling $106,550,023.

Monday, March 7.—A new profession seems to have been born in our midst—the inspecting engineer. In an extensive architectural practice it is easily possible that the job of inspecting work in progress, particularly if it is scattered widely, would become too much of a burden for the architect's own organization. A firm of inspection engineers, on the other hand, by posting men in the industrial centres, could inspect this work at less cost, more promptly and more frequently. The new profession will probably prove its reason for existence very quickly when the building industry again speeds up to its normal progress.

Tuesday, March 8.—E. C. Wolf took me with him to the Town Hall Club today to hear Raymond Hood tell the members something of what architecture is in our generation, and where it is going. Hood made the point that for the first time in many generations we are throwing off the shackles that have bound us in the shape of rules, conventions, traditions and other like restrictions. There is no reason whatever why we should turn our backs upon beauty that has been achieved in the past, but there is also no reason why we should be bound by an age-old accumulation of rules. After all, our problem is to build shelter economically to fit the amenities of this age, to satisfy our aesthetic needs as well. Hood stressed the point that some of the things that shock us at the moment will come to be thought beautiful because they are logical and fitting. I am not so sure of that: it seems to me that we have got to build honestly, efficiently, and in line with modern knowledge, but that we must never abandon the attempt to create beauty as we know it now. The next generation may have other ideas of beauty, but, after all, the present generation has got to live with what it builds.

Wednesday, March 9.—Clare C. Houser joined the architectural editors at luncheon to-day, and answered a lot of questions we had to ask him about the conduct of the Architect's Small House Service Bureau. There is a great deal of misinformation circulated about the Bureau and its works, all of which will doubtless be threshed out on the convention floor at Washington.

Thursday, March 10.—The architects and landscape architects gathered in a formidable aggregation at The League to-night to dine amicably and then to fight good-naturedly over the great question of whether or not the architect is to be the big boss. Robert Ludlow Fowler, Jr., first showed some very beautiful lantern slides from European and American gardens; Mott B. Schmidt read a paper by Alfred Geiffert, Jr., setting forth the landscape architect's side of the argument, was read by Richard Newton; Archibald M. Brown summed up the points of new and good ideas as usual. The newspapers have been making something of a fuss over the fact that Henry Wright, at the Museum of Modern Art discussion on Thursday, February 19, spoke of the potential slums. For one hundred years it has served London well, but signs of subsidence appeared some years ago, and after detailed examination the bridge has been condemned. All sorts of alternatives were considered, including reconstruction providing for widening to accommodate four lines of traffic instead of three as at present. The final decision is to build a new structure to accommodate six lines of traffic. The work will cost £1,295,000, and will occupy at least five years.

Monday, March 14.—Reginald Johnson, who is achieving the standing of a commuter between the Pacific and the Atlantic Coasts, dropped in to-day, full of new and good ideas as usual.

Tuesday, March 15.—The John Simon Guggenheim Memorial Foundation appointments have just been announced—fifty-seven fellowships to scholars and artists. Lewis Mumford was given a fellowship to complete his book on "Form." Otherwise there was apparently no recognition of the architects or architectural students. Dancing, painting, sculpture, etching, music, historical and literary research, and the biological and physical sciences seem to interest the jury more than the architectural petitions, of which I know of several that seemed particularly worthy.
what constitutes architectural practice, including the intricate matter of fees. Most of the elder statesmen were present, and after considerable tinkering with small words and commas, the meeting decided that after all it was not a good time to bring out any new formulas, and laid the whole matter on the table.

**Tuesday, March 22.**—Archibald Brown gave one of the practically endless chain of tea parties for the unemployed draftsmen this afternoon at River House. Some of the photographs of this apartment were on view at the Architectural League Exhibition, but I am afraid no photographs can convey the full flavor of the apartment, which achieves just the happy medium in a treatment that is fresh, daring, but never verging on the bizarre.

**Tuesday, March 23.**—I wonder whether as a people we are becoming wholly indifferent to the appeal of the romantic, the historical, and the traditional among our architectural landmarks. Is it the utilitarianism and present-day efficiency leaving us without such affection for the monuments of earlier epochs? At the moment some of those who have not lost this respect and affection for the second oldest mint in the United States, established in 1815 at Charlotte, N.C., be preserved rather than, as proposed, torn down to make way for an addition to the United States post-office. Leicester B. Holland, chief of the Division of Fine Arts, Library of Congress, and chairman of the Committee on Preservation of Historic Buildings, A. I. A., is on the job trying to preserve this landmark. He warns us also that in Charleston the Manigault house is in danger, that in Philadelphia the Powel house has just been saved through the activity of Miss Frances A. Wister, although before its rescue a room had been sold to the Metropolitan Museum, and another to the Pennsylvania Museum of Art. Moreover, the Baltimore Art Museum has recently installed as a memorial gift a room taken from "The Abbey" at Chestertown on the eastern shore of Maryland, despite frantic efforts of the locality to retain it in place. Our museums, moved possibly by the consideration of the greatest good for the greatest number, seem to be among the chief offenders in the dismantling or destruction of our most-prized architectural heritage.

**Friday, March 25.**—Poor old Diana of the old Madison Square Garden pinnacle is having a hard time of it. Taken down when the New York Life Insurance Company demolished the Garden to put up its new building, she has been having her face lifted and other minor beauty treatments seeking to repair the damages caused by storms. St. Gaudens's statue was presented to the Pennsylvania Museum of Art, Dr. Fiske Kimball having undertaken to find a suitable resting-place for the famous weather-vane somewhere in Fairmount Park. Having been hounded from one place to another most of her life, Diana is not to be allowed to rest in peace now. The Rev. Mary Hubbert Ellis, pastor of the Primitive Methodist Church, chairman of the youth protection committee, vows that her committee will do something to prevent Diana's nakedness being observed by the school children of Philadelphia.

**Monday, March 28.**—An anonymous correspondent shows astonishing ingenuity in suggesting questions for discussion in The Diary. I wish he had expended some of his ingenuity in solving some of the topics he suggests, such as: Should an architect be told, and if so by whom, that he has no right, either from the standpoint of his own or his own client's best interests, to proceed with and blunder through a kind of work in which he has had no previous experience? Should the "practise" be taken out of the practice of architecture? Should the architect be compelled to do his own practising while he is being trained in an office, so that when he starts in for himself he will not have to practise on his clients? Can a one-man firm deliver full and proper architectural services—to which my correspondent suggests the possible answer that he can if he is in a small community where the demands are not large and he is satisfied to do a small amount of work per year.

**Tuesday, March 29.**—Personally I had never heard of the empirical practice of sweetening mortar. In a paper presented before the sugar division of the American Chemical Society in New Orleans, Drs. Gerald J. Cox and John Metzsch of the Mellon Institute show that not only does the addition of sugar in the amount of six per cent of the quick-lime content produce a tensile strength sixty per cent greater than sugarless mortar, but that the use of sweetening goes back to the time of the Roman builders. The sugar is mixed with the water, not with the lime, before setting.

**Wednesday, March 30.**—Dropped in to see Lee Lawrie and found him busy as usual on many stimulating things: Rockefeller Centre, the Chicago World's Fair, and the Cathedral of St. John the Divine, among others.

**Thursday, March 31.**—Lunched with Henry Pratt Fairchild, David Coyle, and Dean Dunham of the Harvard School of Business Administration, unburdening ourselves of our respective convictions as to what is wrong with the world.
THE SIXTY-SEVENTH IN A SERIES OF COLLECTIONS OF PHOTOGRAPHS ILLUSTRATING VARIOUS MINOR ARCHITECTURAL DETAILS

Architecture's Portfolio of Exterior Doors of Wood

Subjects of Previous Portfolios Are Listed at Left

Forthcoming Portfolios will be devoted to the following subjects: Metal Fences (June), Hanging Signs (July), Wood Ceilings (August), Marquises (September), Wall Sheathing (October), and French Stonework (November). Photographs showing interesting examples under any of these headings will be welcomed by the Editor, though it should be noted that these respective issues are made up about six weeks in advance of publication date.
Godley & Sedgewick

Frederick J. Sterner

George Washington Smith

From Stockholm
A carved door in France

Murphy & Olmstead

Walker & Eisen

Gordon B. Kaufmann
John D. Atchison

Frank Rashe

V. L. Pierson

Stiles O. Clements
Frank J. Forster

Lewis Bowman

Lewis Bowman

Andrew J. Thomas
Frank J. Forster

Frank J. Forster, R. A. Gallimore

Alfred Mausolff

Carl A. Ziegler; Hardware by The Iron-Craftsmen
Hobert A. Magoun
Office of John Russell Pope

Herman Brookman
Lavenham, England
Office of John Russell Pope

Lawrence Licht

Walter T. Karcher & Livingston Smith; Hardware by The Iron-Craftsmen
YOUR CLIENTS CAN CALL ACROSS THE HALL, OR ACROSS THE COUNTRY, OVER REGULAR BELL TELEPHONES

In planning larger homes and estates, it is often important to provide for communication between rooms and between buildings, as well as to the outside world. Then boudoir can talk to kitchen or library to garage, easily, quickly. Time and steps are saved for all the household.

Such convenience can be readily arranged by consulting the local telephone company. They'll help you choose the Bell inter-communicating system best adapted to your project. They'll show you how conduit can be built into walls and floors to carry and conceal all wiring . . . to provide telephone outlets wherever they're wanted . . . and to protect against most types of service interruptions. There is no charge for this advisory service. Just call the Business Office and ask for "Architects' and Builders' Service."

The residence of Mr. Frederick Wing Rockwell, Norfolk, Connecticut, is equipped for complete telephone convenience with two central office lines, a dial inter-communicating system, and twelve telephone outlets. There are additional outlets in the superintendent's and gardener's cottages. Taylor and Levi, Architects, New York City. Otto E. Goldschmidt, Consulting Engineer, New York City. For full efficiency, such arrangements should be carefully planned in advance.
NEO-CLASSIC
ornamentation has interested both the modernist and the antiquarian. The Common Brick Manufacturers Association has sensed this and has issued for your file a splendid portfolio of plates on "Contemporary Detail in Common Brick." It includes illustrations of outstanding European work with those of domestic design. Details of special interest have been drawn to approximate scale to add practical value to many of the plates.

FENCES
The Shevlin Pine Sales Co., of Minneapolis, Minn., uses for special illustration in its folder on Fence of Shevlin Pine, the fence of a house in Windsor, Vt., which catches the charm of the early American pine fences. This same fence was one of those shown in Architecture's recent Portfolio of Wood Fences. The folder contains photographs, architects' sketches and complete specifications for a variety of fences to be built with Shevlin Pine.

NEO-CLASSIC
Is the title of a brochure from the Standard Sanitary Manufacturing Co., of Pittsburgh. The title is used literally to describe the combination of the new and the classic as embodied in the latest Standard design. The brochure treats of the new bathroom ensemble, both as to individual features and accessories as well as the room ensemble.

"CONVECTOFIN"
Something new in built-in heater—announced by the Commodore Heaters Corp., of 11 West 42d Street, New York City. It operates on the convection principle, not by radiation. Numerous combinations are offered, such as: 1, Flush Type; 2, Offset Type; 3, Floor Type; 4, Wall Type; and 5, Concealed Type. Details sent on request.

KING PRACHATIPOK CHOOSES ADAM
The King of Siam not only found in the United States the cure for his own difficulties of vision, but also the answer to many questions of lighting effect which interested him. He was particularly interested in our achievements in theatre lighting and as a result chose for the Chalerm Krung Theatre at Bangkok, Siam, the Frank Adam Major System of Lighting Control. The system provides for complete description, details, specifications, and illustrations of both temporary and permanent protection made with a non-disintegrating asphalt centre, reinforced with unspun, unelastic sisal fibers. Use it under hardwood floors, under roofing, between walls, and in the making of concrete floors and terrazzo. It is manufactured by the Sisalkraft Co., of 42d Street, New York City. They will gladly send you sample on request and refer you to Sweet's Catalog, pages 2500-2501 for complete description.

THE CELLAR GOES MODERN
And becomes a basement, says an interesting booklet published by the Oil Heating Institute, of 342 Madison Avenue, N. Y. City. The institute has just mailed us three very readable booklets: "A Few Steps to Comfort or Modernizing the Cellar," "A New Standard of Living," and "Oil Heat and the Business of Living." The characteristics of oil heat that they stress are its flexibleness, dependability, uniformity, healthfulness, and quietness. A catalogue of oil heating equipment manufactured by members of the institute is available on request. And send for the booklets mentioned above; they're worth reading.

MOBILE STEEL PARTITIONS
"The Gold Book on Partitioning" is just off the press—distributed by the E. F. Hauserman Co., of Cleveland. The book contains complete description, details, specifications, and illustrations of both office-building and industrial partitions. The book contains a checking list of forty-seven points that should receive consideration before the purchase and erection of any partition.

HAND-WROUGHT LIGHTING FIXTURES
A light for the entrance. "Oh yes, a globe, a bulb, and an outlet." That would sometimes seem the extent of thought given to this detail. Detail, yes, but an important one whose artistic development can make or mar the entrance. The lanterns, lamps, and sconces illustrated in a new booklet from D. Kojan Co., 25 East 20th Street, New York City, are representative of true craftsmanship in metal. The company carries a very wide range of models and manufactures to your own designs and specifications.

FIRE
Miller & Yeager, of 819 Ohio Street, Terre Haute, Ind., ask us to announce the fact that they are desirous of re-establishing their catalogue files, inasmuch as their former ones have been wiped out by fire. They will be glad to receive manufacturers' catalogues and handbooks.

CHAIN-LINK FENCE
A broadside from the Continental Steel Corp., at Kokomo, Ind., states that a post card dropped in the mails to-day will bring you interesting facts on fences—uniformity of wire, no frozen joints, rust-proof bands, etc.—and should you desire their engineers will co-operate with you on any of your fence problems. Address them direct or we will forward your request.

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FOR ARCHITECTS
ARCHITECTS AND EVERY ONE INTERESTED WILL FIND HERE THE LATEST AND MOST UP-TO-DATE INFORMATION ON BUILDING EQUIPMENT AND ACTIVITIES IN THE INDUSTRY. THESE PUBLICATIONS MAY BE HAD BY ADDRESSING ARCHITECTURE'S SERVICE BUREAU FOR ARCHITECTS, 507 FIFTH AVENUE, NEW YORK. OUR SERVICE BUREAU WILL OBTAIN ANY OTHER CATALOGUES OR DATA YOU REQUIRE.

CONTEMPORARY DETAIL IN COMMON BRICK
The growing tendency toward the use of brick for ornamentation has interested both the modernist and the antiquarian. The Common Brick Manufacturers Association has sensed this and has issued for your file a splendid portfolio of plates on "Contemporary Detail in Common Brick." It includes illustrations of outstanding European work with those of domestic design. Details of special interest have been drawn to approximate scale to add practical value to many of the plates.

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(Continued on page 31)
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R. H. Hunt, Architect
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This Torchiere is one of two, each 5' 9" high, being furnished for the Main Entrance Vestibule of the Berks County Court House at Reading, Penn. Wm. H. Dechant & Sons are the architects.

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PeerVents should be used in schools, hospitals, libraries, churches, dormitories, club-rooms, theatres, hotels, banks, offices, auditoriums and all places of public or semi-public assembly; in short wherever people congregate, where ventilation without objectionable drafts is desired.

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Panelboards ARE the
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Now, more than ever, the job MUST be good

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There is an 8 man near you for service

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These four items are noted in new pamphlet from the Campbell Metal Window Corp., producers of the Maxim-Campbell Silencer and Air Filter:
1. Noise is eliminated to extent of closed windows.
2. The air brought into the room is filtered—97 per cent of dirt and foreign matter is removed.
3. 280 cubic feet of fresh air is circulated per minute.
4. Costs about the same as a 40-watt lamp to operate.
"Silence is Golden" is their slogan and it pays golden dividends in increased efficiency of workers and health protection.

FERROCLAD STRUCTURAL PANELS
A catalogue from the Truscon Steel Co., of Youngstown, Ohio, shows by valuable detail drawings the various applications of the new Truscon Ferroclad Structural Panels. They represent a distinct advance in the use of commercial semi-rigid and rigid structural and insulation materials in board form. The full heat, cold, and sound retarding properties are utilized, while the low structural strength is increased by the tough steel outer covering.

THE BARCOL OVERDOOR
The Barber-Colman Company, of Rockford, Ill., present a new "Model 50" Barcol Overdoor, an upward-acting, sectional overhead door, practical for both private and public and industrial purposes. It is said to combine perfect balancing, ease of operation, positive closing, and durability. The new file folder illustrates its many uses and provides a detail working drawing.

STEEL JOIST CONSTRUCTION
A handbook for architects and engineers on the uses and properties of steel joists, published by the Steel Joist Institute, Dime Bank Building, Detroit. Cross-sectional drawings, standard specifications, code of practice of the institute, and tables of properties, allowances, loads, etc., make this a usable handbook.

NO MORE BANGING!
A folder from the C. H. Newton Co., 247 Atlantic Avenue, Boston, makers of the Newton Invisible Door Closer, announces the latest addition to the Newton line—the Newton Pivot Check for single-swing lavatory stall doors. Details on request.

SWIMMING POOLS
Two interesting leaflets from the Portland Cement Association are entitled: "How Can We Get a Swimming Pool?" "These Towns Have Swimming Pools—So Can Yours." They describe the methods of organizing public interest in such a project and its financing. Perhaps your community needs a pool and your office can take an active part in securing it and supervising its erection.

GOOD PRACTICE IN ORNAMENTAL IRON
The J. G. Braun Co., of 537 West 35th Street, New York City, have issued a second supplement to their Catalogue No. 35 on Good Practice in Ornamental Iron Work. Did you get yours? Send for it or the whole if you have not a copy on file. It contains splendidly useful detail on store-front elevations.

(Continued on page 33)
THE CUTLER MAIL CHUTE

TO INSURE standard, dependable equipment installed promptly at moderate cost, the Cutler Mail Chute should be specified by name. If desired, approximate estimates will be furnished in advance.

If preferred, a stated sum may be allowed to cover this item.

Full information, details, specifications and estimates on request.

Cutler Mail Chute Co.

General Offices and Factory

Rochester, New York
REPUTATION

Each piece of slate bearing the "Pyramid" trade-mark represents a product of two companies, whose reputations have been built upon a constant ambition to render greater service.

Blackboards and structural slate of the finest stock, rigidly inspected and fabricated with care and precision bears the "Pyramid" mark.

It is the assurance to the architect that the slate going into his structure cannot be anything but the best, furnished by two companies whose reputation is constantly guarded.

It is a pleasure and an honor to be selected by the firm of Guilbert & Betelle, whose reputation for excellent work is likewise widely known.

THE STRUCTURAL SLATE CO.
NATURAL SLATE BLACKBOARD CO.
PEN ARGYLL, PA.

STAGE HARDWARE
By Peter Clark, Inc., 534 West 30th Street, New York City. Send for their new catalogue of "Stage Equipment with a Reputation."

BULLETIN BOARDS
The Newman Mfg. Co., of Cincinnati, Ohio (Norwood Station) will mail you on request its just published A. I. A. File Catalogue of Bulletin Boards and Changeable Letter Directories. Their stock size and popular style list is large, but they gladly service you on special designs at prices little in advance of stock equipment. Plain or ornamental metal frames are a matter of choice.

CONTROL VALVES
A folder from the Atlas Valve Co., of 282 South Street, Newark, N. J., describes the Atlas Lever Operated Control Valves with adjustable port opening. These valves can be used in combination with almost any standard control device. The folder contains a table of curves showing the relation between valve lift and port opening.

TELEKTOR
Being a book from the Stromberg-Carlson Telephone Mfg. Co., of Rochester, providing confidential installation and maintenance data on "Telektor," the heretofore missing element which now makes possible the general adoption of sound distributing systems in residences. Telektor is possible for the $20,000 home. The complete system need not be installed at once, but can start with a few instruments and grow at will. It is more convenient, of course, to install it while the house is under construction.

WROUGHT IRON LANTERN, ALLEGHENY COUNTY BUILDING
PITTSBURGH, PA.—STANLEY L. ROUSH, ARCHITECT

EXECUTED BY
FERRO STUDIO, INC.
228 E. 150th Street, New York City
"ONION STRUCTURE IN THE QUARRIES"

That doesn’t mean use Listerine after quarrying. It means—well we won’t bother to tell you,—or all about the freshness of microline, or about the syenites, diabases and porphyries that are sometimes bought and sold as granite because they look something like it.

And we do not know how many trolleys have passed over the Brooklyn Bridge.

We do know the Brooklyn Bridge—its great spandrel walls of granite—is still going strong.

That the Cathedral of St. John the Divine—its rich exterior of Mohegan Granite—will be a thing of beauty and inspiration forever.

That the approaches to the new Hudson River Bridge are of Mt. Waldo Granite.

That when you want facts and figures on granite, we have them.

GRENCI & ELLIS
INCORPORATED

Mohegan Quarries
PEEKSKILL, N. Y.

Cutting Sheds
PEEKSKILL

Mt. Waldo Quarries
FRANKFORT, MAINE

501 FIFTH AVENUE
NEW YORK CITY
### Advertisers’ Index

**WHAT TO SPECIFY**

If you are interested in obtaining the catalogues of any of the advertisers in this issue of Architecture (as listed below), let Architecture’s Service Bureau send them to you. Any additional data concerning the industry that the readers of Architecture require will gladly be compiled for them by our Service Bureau.

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**WHERE TO BUY**

Refer to page 22 for announcements of the most up-to-date publications of manufacturers.

### YOU WILL FIND MUCH OF VALUE IN THE JUNE ARCHITECTURE

- **Reginald D. Johnson**—analytical portrait—by H. H. Saylor
- **Problem of Ornament**—by Claude Bragdon
- **Rare Woods**—notes on characteristics—by Alfred Berman
- **Houses**—at
  - Palos Verdes, Calif.—medal winner in “Better Homes in America”
  - Santa Barbara, Calif.—honorable mention
  - Springfield, Mass.—first prize in annual contest award by Springfield Republican
  - Providence, R. I.—first prize in Ideal Home Competition
- **Photographic Studies on Demolition, Shoring, Sounding, and Seeking Rock Bottom**
- **News — Working Drawing**—The Observer—Portfolio

### Architecture

Published by Charles Scribner's Sons
597 FIFTH AVENUE  NEW YORK CITY

The only architectural publication that increased its professional circulation in 1931.
Even Basements Are Invitingly Attractive in AR-KE-TEX Tile

These pictures show the basement in the Model Home built for the Annual Home Show in Milwaukee this year. The social room, shown in the two larger pictures, is finished in Mottled Cream Brown AR-KE-TEX Tile with a black cove base. The band course at the ceiling is Inset Design No. 13. The stripes are brown on a field of cream buff.

The tile was laid in Random Ashlar VI coursing embellished with 10¾” x 12” and 5” x 3½” insets in colors. The fireplace is effectively trimmed with different sizes of standard units in glossy black.

The laundry, shown in the smaller picture, is finished in Cream Buff Stippled Tile with dark Insul-Glaz base, laid in standard coursing with 5” x 12” units.

Only standard units were used to build the permanently sanitary and inviting walls in these rooms.

THE AR-KE-TEX CORPORATION

Factories and General Office

BRAZIL, INDIANA

THE STANDARD OF TEXTURED TILE