ARCHITECTURE July 1929



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A Man's Study in a Country House RALPH T. WALKER, ARCHITECT

Aerial Perspectives Without Distortion BY A. W. K. BILLINGS, JR.

> A Suburban Apartment-House LE ROY P. WARD, ARCHITECT

> > Portfolio of Quoins

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JULY, 1929



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26

Tumbling Team—Davey Institute of Tree Surgery, 1928-29. Davey Tree Surgeons are athletic types. They are carefully selected with the idea of physical fitness. The nature of the work and their training make them more so. In addition to intelligence and character, they have physical energy; that is why they are diligent workers



LET us talk about your trees. They are living things, subject to disease, decay, starvation, insect attacks, mechanical injury and other ills. They are priceless to you—only time can replace them, long time at that.

Just for the moment, think of the most valuable tree on your place. Suppose it is starving. Wouldn't you, in self interest, insist upon scientifically trained experts who know what to feed it, and how, and when—without guessing or experimenting?

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You can trust Davey Tree Surgeons with a feeling of confidence and satisfaction. They are carefully selected and reliable men. They are thoroughly trained and have real demonstrated skill. They are educated scientifically in the Davey Institute of Tree Surgery, the only school of its kind in the world. They knowhow to diagnose the ailments of trees. Their knowledge and skill are based upon a half century of Davey experience. They are backed by a responsible business organization.



Scientific Training. A laboratory class at the Davey Institute of Tree Surgery—using high-powered microscopes and dissecting lenses to learn the sciences relating to their work. They must know the scientific reasons for all the things that they have been trained to do skilfully



Practical Training. This is a class learning the important art of saw filing at the Davey Institute. Every man is taught how to keep his tools sharp and in proper condition. Sharp tools mean good and rapid work. Practical training plus science means efficient service

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Surprisingly low cost

JULY, 1929

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Davey service is local

Davey Tree Surgeons live and work in your vicinity. They are almost as conveniently located as your dentist or doctor or surgeon. They are not sent from Ohio for your individual work — they are trained in Ohio, but they live in your vicinity and work regularly for other nearby people.

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Everyone who sees Davey Tree Surgeons at work in the trees says, "They climb like squirrels." They certainly are remarkable climbers—they are trained to it. They get around in the trees with surprising agility and speed. But they use ropes—never injurious climbing spurs—to facilitate climbing, to prevent accidents, and to protect trees, wires and other property. They have diligence, speed, accuracy and a trained knowledge of their work



The Student Body of the Davey Institute of Tree Surgery, 1928-29, numbers 446 splendid young men in the Freshman, Junior and Senior classes, all selected from the proven men who have already been thoroughly trained in a practical way. The purpose of this resident school is to provide scientific knowledge and accuracy to supplement the practical skill that

is given in the field training. This gives balanced education—Davey Tree Surgeons know both how and why. The Davey Institute of Tree Surgery has been in continuous operation for twenty years, the only school teaching the science of Tree Surgery. The Faculty of the Davey Institute of Tree Surgery includes 37 scientists and master Tree Surgeons.

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27

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EDWARD M. SCHIWETZ

OUR frontispiece this month, an impression of Manhattan towers, is reproduced from a lithographic crayon drawing by Edward M. Schiwetz, who was born and raised in Texas. Mr. Schiwetz left the cultivators and the Model T Ford to pursue a five-year course at Texas Architectural and Mechanical College. Following this training, he spent five years in the Southwest, working in architects' offices, handling renderings, and devoting a great part of his spare time to out-door sketching. Mr. Schiwetz came to New York from New Mexico last fall to broaden his architectural training, and particularly to study etching and lithography. At present, he is devoting all his time to making a series of lithographs showing New York, old and new.

A. I. A. ELECTIONS

FOLLOWING the Sixty-second Convention of the A. I. A., held in Washington in April, last, the following officers were re-elected for 1929-30: C. Herrick Hammond, president, Chicago; J. Monroe Hewlett, first vice-president, New York; William J. Sayward, second vicepresident, Atlanta; Frank C. Baldwin, secretary, Washington; Edwin Bergstrom, treasurer, Los Angeles.

The regional directors elected for the next three years are: Fred Fielding Willson, Bozeman, Mont., Western Mountain District; J. C. Bollenbacher, Chicago, and Fred W. Garber, Cincinnati, Great Lakes District; Charles T. Ingham, Pittsburgh, Middle Atlantic District.

PRIX DE ROME

THE William Rutherford Mead Fellowship in Architecture has been awarded to B. Kenneth Johnson of Chicago, who has just been graduated by Yale University. Johnson, who is twenty-two years old, has helped to put himself through college. He taught for one year at the University of Illinois, having been graduated from that institution a year ago. During his year at Yale he served as assistant in the Architectural Department. Johnson also studied during one summer at the Lake Forest Foundation for Architects and Landscape Architects.

Honorable Mention was awarded to Herschel G. A. Elarth, of Omaha, Neb. The finalists were William Brooks Cobb, of Yale; William Piers

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Crane, II, University of Illinois; Elmer I. Love, Carnegie Institute of Technology and University of Illinois; John E. Miller, Catholic University of America; and Earl C. Morris, of Columbia University.

The Jury of Awards consisted of William Mitchell Kendall, Charles A. Platt, John Russell Pope, William A. Delano, and Louis Ayres.

The Fellowship gives an annual stipend of \$1,500 for three years, with residence and studio at the Academy in Rome, and an allowance of \$500 for transportation to and from Rome.

Johnson received an Honorable Mention in last year's competition.

COMPETITION FOR AN AIR-PORT

WITH the approval of the New York Chapter, A. I. A., conditions of a competition have recently been issued, providing for the design of a modern airport. The Lehigh Portland Cement Company agrees to pay to the winners fourteen prizes, as follows: First prize, \$5,000; second prize, \$2,500; third prize, \$1,000; fourth prize, \$500; ten Honorable Mentions, each \$100. Copies of the programme may be had by addressing The Lehigh Airports Competition, Lehigh Portland Cement Company, Allentown, Pa. The competition closes November 18, 1929.

COMPETITION FOR A STEEL BRIDGE

THE American Institute of Steel Construction, being desirous of promoting the æsthetic quality of steel bridge construction, has generously offered a prize for the three best solutions presented in the competition on this subject. The drawing placed first will be awarded \$500 and the drawings placed second and third, \$250 and \$100 respectively.

The competition consists of a preliminary and a final exercise. The preliminary exercise was to take the form of an Esquisse-Esquisse executed in nine consecutive hours *en loge*. From the sketches presented, ten competitors are selected for the final *rendu*, in which the ten competitors selected will be required to adhere to the principle and *parti* of the presented sketch under penalty of being placed Hors Concours.

This competition has been conducted in accordance with the rules and regulations governing Class "A" competitions, Beaux Arts Institute of Design. Only students registered in Class "A" of the Department of Architecture of the B. A. I. D. were eligible to compete.

The preliminary exercises occurred May 18; the preliminary judgment, May 28; the *rendu* of final drawings, June 11; and the judgment for prizes, June 18. Announcement of awards will be made shortly.

SMALL HOUSE COMPETI-TION

A THIRD competition for small houses is announced by The House Beautiful Publishing Corporation. There will be two prizes: \$1,000 for the best small house of five to seven rooms, inclusive, and \$1,000 for the best small house of eight to twelve rooms, inclusive. The houses submitted may be of any style and of any material, and must have been built (not remodelled) recently in any part of the United Complete announcement, States. with rules for presentation of photographs and plans, may be had from The Small-House Competition Committee, 8 Arlington Street, Boston, Mass.

R. I. B. A. MEDAL

THE seventh annual award of the R. I. B. A. London Architecture Medal has been made, the honor going to J. Murray Easton and Howard Robertson, architects, for the Royal Horticultural Hall, London. Illustrations of this building appeared in ARCHITECTURE for December, 1928. Further details will be shown in an early issue.

CALIFORNIA SCULPTURE EXHIBITION OPENS

WITH the felicitations of the President of the United States, the long-awaited All-American Exhibition of Contemporary Sculpture, sponsored by the National Sculpture Society, was thrown open to the public in its beautiful setting at the California Palace of the Legion of Honor, in Lincoln Park, San Fran-(Continued on page 31)

JULY, 1929



Ornamental Bronze and Screw Heads

Long experience and expert shop practice have enabled most bronze fabricators to conceal or do away with screw heads on the visible surfaces of ornamental bronze *EXCEPT* in the glass retaining mouldings. It will be noticed in the assembly of the sash sections illustrated that the mouldings provide for outside glazing, yet the screw heads are concealed in the inside member. A patented feature, yet priced competitively with ordinary sash assemblies.

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THE BULLETIN-BOARD Continued

cisco, on the afternoon of Saturday, April 27. The President's message, telegraphed to the Board of Trustees of the museum, read:

"I congratulate you upon the successful inauguration of this great exhibition of American sculpture which will give pleasure to so many thousands, affording them an opportunity for cultural growth and inspiring them with enthusiasm for development of native creative talent. (Signed) Herbert Hoover."

That the public took advantage of the opportunity as suggested in Mr. Hoover's message is proved by the fact that, although the building was not opened until 3 P. M., following the ceremonies, about 12,000 visitors saw the show that day; on Sunday the number was estimated at 40,000; and on Monday, although a business day, almost 5,000 came.

The opening ceremonies were presided over by William F. Humphrey, of the Board of Trustees of the California Palace of the Legion of Honor. President Adolph A. Weinman, of the National Sculpture Society, spoke for his organization, which has so successfully accomplished the onerous task of assembling this, the greatest exhibition of its kind ever undertaken.

AN ENGLISH TRAVELLING SCHOLARSHIP

THE Society of Arts and Sciences has awarded a travelling scholarship to William Graham Holford, an architectural student in the University of Liverpool. The scholarship is awarded for the purpose of studying American architecture and adapting it to English needs. Mr. Holford has arrived in New York, and will remain in this city for six months, half of which time he will work in an architect's office.

STEWARDSON SCHOLARSHIP

THE John Stewardson Memorial Scholarship in Architecture, which provides \$1,000 to defray the expenses of study abroad, has been awarded for 1929-30 to Walter Gibbs Lewis, Jr., of Beverly, N. J. Mr. Lewis has just completed his senior year in the Department of Architecture at the University of Pennsylvania. The problem set for the contestants was a design for a Municipal Employment Bureau, the same problem in which Mr. Lewis's design won First Medal rating and the second prize of \$25 in the Beaux Arts Institute of Design.



THE CONNECTICUT ARCHI-TECTURAL LEAGUE

THE Connecticut Architectural League recently made known its awards for architects in the state, in the competition for the Leoni W. Robinson Memorial Medal. It was won by Malmfeldt, Adams & Prentice, of Hartford, for their general work. Additional prizes of \$50 each in gold were won by Lorenzo Hamilton, of Meriden, Raymond J. Percival, of Forestville, and Carena E. Mortimer, of New Haven.

SERVICE TO INDUSTRY BY A TRADE ASSOCIATION

THE American Trade Association Executives have just established an award for outstanding achievement and service by a trade association for its industry. This will be presented annually in May, being given for the first time next May for the calendar year of 1929. It is intended that this annual award, paralleling the annual Harvard Bok awards in advertising and editorial service, should do much to foster and promote service to American industry and commerce through the medium of the trade association.

All details for putting the award into operation are left to the discretion of a committee, to be known as the Committee of Award, consisting of the present and past presidents of the American Trade Association Executives. This committee shall have the power to select the jury of award, comprising nationally known industrialists, economists or publicists.

PERSONAL

Charles E. Choate, architect, formerly of Atlanta, Ga., more recently, since 1926, of Orlando, Fla., has now opened an office for the practice of his profession at 222 First National Bank Building, Montgomery, Ala.

Robert C. Edwards & Son, architects, have moved their offices to 1143 East Jersey Street, Elizabeth, N. J.

N. J. Edwin J. Kraus, architect, formerly with Harvey & Clarke, architects, West Palm Beach, Fla., and Hoffman-Henon, architects, Philadelphia, Pa., announces the opening of an office for the practice of architecture at 201 Arcade Building, Racine, Wis. Manufacturers' literature and samples are requested.

Sibley & Fetherston, architects, announce the removal of their offices to the Bartholomew Building, 205 East 42d Street, New York City.

R. E. Bostrom, architect, has removed his offices to the fifth floor of the Castle Building, 1410 Stanley Street, Montreal.

Stern & Peyser, architects, announce the removal of their offices to the tower of the Slote Building, 9 West Prospect Ave., Mount Vernon, N. Y.

Rolland C. Buckley, architect, Henrique G. Arango, engineer, and Emanuel Lyons, Jr., engineer, have formed a partnership under the firm name of Buckley, Arango & Lyons, architects and engineers, for the practice of their professions, with offices at 27 Avenida Central, Panama, Republic of Panama. Manufacturers' catalogues and samples are desired, which should be addressed to Apartment 851, Panama, Republic of Panama.

T. V. Nichols and W. N. Fritzsche announce the formation of a partnership for the practice of architecture under the firm name of Nichols & Fritzsche, with offices at 1720 Euclid Avenue, Cleveland, Ohio. Perry, Shaw & Hepburn, archi-

Perry, Shaw & Hepburn, architects, have moved their offices to 141 Milk Street, Boston, Mass.

Shreve & Lamb, architects, and Arthur Loomis Harmon, architect, have united their offices, and will continue their practice as Shreve, Lamb & Harmon, architects, with offices at 11 East 44th Street, New York City.

Frederick H. Meyer, architect, announces the removal of his office to Rooms 516 and 517 Underwood Building, 525 Market Street, San Francisco, Calif. Atlee B. Ayres and Robert M.

Atlee B. Ayres and Robert M. Ayres, architects, announce the removal of their offices to the Smith-Young Tower, San Antonio, Texas. They will be pleased to receive manufacturers' catalogues that are issued according to the American Institute of Architects' requirements.

Meanor & Handloser, architects, have established their Charleston, W. Va., office in the Payne Building, Hale and Lee Streets, and would like to receive catalogues for an A. I. A. file.

Hoit, Price & Barnes, architects, announce the removal of their offices to 2500 Telephone Building, Kansas City, Mo.

STRUCTURAL STEEL CREATED THE SKYSCRAPER



A reproduction of this rendering by Hugh Ferriss, suitable for framing, will be mailed free of cost to any architect

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one on practically every type of steel structure, and provides also in one volume, "The Standard Specification for Structural Steel for Buildings," "The Standard Specification for Fire-proofing Structural Steel Buildings," and "The Code of Standard Practice." Any or all of these may be had without charge, simply by addressing the Institute at any of its offices.

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VOLUME LX

000

NUMBER 1

July 1929

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JULY, 1929



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Slate


From the drawing in lithographic crayon by Edward M. Schiwetz

✤ VOLUME LX

JULY 1929

NUMBER I 🚸

Germany's Bauhaus Experiment By Milton D. Lowenstein

I

Y first sight of Germany was from the seat of a bombing plane, 10,000 feet above the earth. Through the fickle puffs of bursting "archie" shells could be seen the mosaic of brown and green fields sliced by white roads and black railways. Except for the occasional jolts against the joy-stick caused by archie, the setting was the same as that south of the Zone of the Advance. Suddenly bullet holes appeared in the fabric of the wings, a Very signal flashed below me. My hand sought the bomb-rack release and I awaited the appearance of a certain smoky smudge at the confluence of many white and black lines on the mosaic. The supplies and munitions of an army were concentrated in that spot—a spot controlling the destiny of a million souls!

Germany has to do more than catch up with a housing shortage. The stigma of defeat has undermined that proud sense of security and self-assurance which was the foundation of German workmanship. The problem of construction may be difficult in other countries but to the material side is added the sympathy of neighbors. Surrounded by hostile forces, the German people have learned through bitter experience that salvation must come from within the borders of the nation.

German architects and engineers are attempting methods similar to those employed by the nation for conducting the war. Strife intensifies national traits, peace sublimates faith in them. The German tendency is to centralize the control of resources. It enables each situation to receive the maximum attention consistent with a proper balance of the whole.

Bismarck extended the divine right of kings to the "bureau"; the war extended the principle to a still larger group. The tradition of German scholastic superiority survived the war and the schools are the nucleus about which modern movements revolve. Prosperity has become a function of internecine co-ordination. The geographical and political situation of Germany permits it to learn from the experience of others without being bound to follow to a conclusion any single tendency that would inhibit growth. German architects study not only the background of German construction but the social, economic and traditional peculiarities which characterize foreign modern architecture.

When Walter Gropius opened the buildingschool at Dessau in 1925 he had associated with him men who had not studied modern architecture apart from engineering; neither had they dissociated from architecture contemporary social and economic tendencies. The school offered no panacea; but it was a laboratory in which conditions could be studied and cures assayed.

On the outskirts of the city a huge airplane factory brought hundreds of workmen to Dessau. To provide adequate housing facilities for these men and their families was one of the first Bauhaus undertakings. It did not build all the houses. It devised a method of procedure and created a pattern in the form of a few typical buildings. German building industry, reassured by such an assertion of leadership, was able to produce the houses in quantities.

Only students who have had some experience in a building trade are admitted to the school. There is no "admission to advanced standing," every student being required to start in the lowest class. No history, archæology, language or abstract mathematics is taught. When I showed one of the students some measured drawings I had made of an old German church he regarded them a long time in silence. "Perhaps," he said wistfully, "some day we'll have time to do that sort of thing again!"

Students first learn to design and construct models according to the laws of the material used. One of the elementary projects is to make a paper chair. Almost every student starts by

Plot plan of a typical apartmenthouse which provides a maximum of garden space. Note the different "st e p p in g" on north and south ends of plot to take fullest advantage of sunlight. See detail plan below



2

Typical apartment-house floor plan, with circulation reduced to a minimum. All rooms are well lighted and the darkest parts are used for foyers



A complete suburban development—apartment-houses and public buildings

cutting out a paper replica of a *wooden* chair, whose frail thin legs will scarcely support their own weight and whose back will not remain upright. The student soon learns that a paper chair can be made to carry a load proportional to its size if account is taken of the *nature* of paper: planes used instead of legs, and angles inserted between the back and the seat. Complicated forms involving conic sections are studied in different materials, which, together with the analysis of color effects, occupy most of the first year.

Concrete, either poured or in blocks, is used almost exclusively in the design. It is particularly well suited for extensive small-house developments. No great variety of skilled labor is needed; the same man who helps with the walls can work on the floors. Monotony is avoided through variation with simple units. Neither forms nor blocks need be altered, but the units are combined in a different order for each house. This elasticity of treatment is an attractive feature for the middle-class German who cannot afford those embellishments with which the wealthy give individuality to their homes. The buildings are cool in summer and in winter are easily heated with the small stoves which fuel shortage makes prevalent in Europe. Compared to stucco and wood construction, the fire risk and upkeep are insignificant and, of course, concrete buildings are practically vermin-proof.

Plain wall areas inside, unrelieved by any breaks or trim, make painting a very important consideration in the design. The deadly monotony can be converted into a feeling of elementary roominess through the use of soft tones which are carefully studied in relation to lighting effects and the function of the room. Once the general decorative scheme is indicated, the question of accents can be left to the taste of

JULY, 1929

the householder, who is always eager to express himself in the more obvious features of his house.

Beginning with the second year, students specialize in one of the building trades, the most proficient being admitted to the architectureengineering course. Textiles, carpentry, forging, and painting are some of the important branches of study. There are no hypothetical problems but the students share in the commissions of the Bauhaus clients.

Though it was not specifically indicated to me, every design is dominated by two considerations: first, that the part harmonize with the whole. The students confer with each other constantly and keep altering the design as the general work progresses. The designer of locks is as interested in the rugs for the room as he is in the quality of metal for his own fixtures. The second consideration is adaptability for quantity production. The elements made by hand in the Bauhaus are intended to serve as models for machine production. This limitation induces the student to work with only the simplest forms.

The designing-room of the Bauhaus, the only part of the school where no stranger is admitted, is devoid of the frivolity usually associated with *ateliers*. There is no place here for the beautiful *rendu* mounted in a gilded frame. Its place is taken by terse plans covered with figures, and formidable charts. In small houses, where people come into frequent contact, the rooms must be planned so as to insure smooth working of the household without waste of time. Window location is studied in relation to climatic conditions and adjacent rooms. Shadows of furniture and position of built-in fixtures are also to be considered, with many other details which are never thought of by the layman. When the problem is an apartment-house its effect on other community projects is important. Traffic regulation, the transportation of supplies in bulk for community kitchens and laundries, garden areas, shadows of the building on the street, expansion of industry, recreational centres, and group child nursing, are some of the influences which affect the architecture of the apartment-house.

Every student who takes part in the execution of a commission is entitled to a portion of the architect's fee. Though it costs the owner more to employ the Bauhaus for the first plans and method of procedure, the buildings may be constructed much more cheaply through the use of modern standard production machinery. But the amount of money each student receives, whether it be for the furniture or the interior arrangement, is very small. The students who can afford to waive this stipend do so, in favor of their less fortunate classmates.

The dormitories, being limited, are also reserved for the poorer students. They resemble a typical modern Bauhaus apartment. Windows extend across the whole side of the room. Most of the furniture is metal (and retains its appearance of metal!); the double-decked beds are screened off by cloth curtains; ventilating,



The purely utilitarian reigns supreme in the Bauhaus at Dessau. At left, the department of textile design; at right, the materialassembly building

JULY, 1929



4

Study of furniture locations. Above, the usual portable forms; below, built-in types



Studies for circulation and room shapes, position of openings, influence of furniture



Studies of circulation bad above where they conflict, better and shorter below



Study of shadows cast on the floor by movable (above) furniture and by built-in furniture (below)



In the two sets of plans above the letters represent the following: a, public stair hall; b, kitchen; c, dining-living







room; d, master bedroom; e, child's room; f, parlor; g, dining-room; h, bath; j, breakfast alcove



closet; 11, gas range; 12, wash-tray;13, sink; 14, driptray with garbage receptacle under; 15, work table; 16, screened storage closet for victuals; 17, delivery entrance



Efficiency in a workman's kitchen: 1, broom closet; 2, folding table; 3, dumbwaiter; 4, washboiler; 5, folding table; 6, folding stool; 7, furnace; 8, buffet in diningroom; 9, serving counter; 10,

JULY, 1929







Above, plans and bird's-eye perspective of a small house of simple units, each of which has an æsthetic and a practical function. Service and circulation are both interestingly developed



A model for the study of shadows cast by modern apartmenthouses. No more than 40 per cent of the street is ever darkened. Note pedestrian bridges at street intersections

Below, a solution of the small house which, by a variation of the parts, could be repeated many times without approaching monotony of form. The plan has unusual economy of space







lighting, and sanitary fixtures are so inconspicuous that they have to be pointed out to the stranger. Textile mats were the only decoration which I saw, the concrete walls being relieved only by the structural columns, beams, and immense windows.

Every aspect of Bauhaus instruction being strictly utilitarian, the student can make none of those excursions into the realm of pure fancy where the plan is paper and the castle a dream! The compensation offered is athletic field activities, a typical modern German diversion. The city of Dessau offers as little attraction to the student as it does to the casual visitor. It lies on a flat, monotonous plain, on the left bank of the Mulde. The *schloss*, built in 1872, has an interesting west wing dating from 1530. The small art collection is scattered among three museums. Though the city was the capital of the former Duchy of Anhalt, there is little of that gaiety we associate with even the most insignificant European capital. The people seem concerned with the material complexities of the future rather than with the past.

The Bauhaus, like any institution, cannot look for results in any field other than that which it is equipped to investigate. It has broadened the study of architecture and engineering apart from æsthetics, so that every aspect of the economic life of modern Germany will feel the influence of the new type of leader. The response of the nation, as indicated by its encouragement and its acceptance of the solutions offered, will determine whether or not the price paid is excessive. Assuming that the Bauhaus most adequately solves Germany's building problem, the school's programme can be modified as it ameliorates the situation.

ture and windows. Many scattered windows and high furniture consume valuable wall space and injure the unity of the room At right, a re-study of the above. Windows have been united, furniture lowered.and door positions studied in their relation to the window openings A study of wall shadows. High furniture interferes with the distribution of light and detracts from the unity of the room



ing groups to get interest without monotony in repetition of units

Studies, in elevation, of the effect of furni-



Photographs by Kenneth Clark







FREDERICK G. FROST, ARCHITECT

JULY, 1929



An unusual feature is the third-story room over the portico, from which is had an excellent view



Portico on entrance front

> FREDERICK G. FROST, ARCHITECT

House of W. H. Aldridge, New Rochelle, N. Y.



Reception-hall



House of W. H. Aldridge, New Rochelle, N. Y.

FREDERICK G. FROST, ARCHITECT

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Hall, second story



House of W. H. Aldridge, New Rochelle, N. Y.

FREDERICK G. FROST, ARCHITECT

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JULY, 1929



House of W. H. Aldridge, New Rochelle, N. Y.

FREDERICK G. FROST, ARCHITECT



Chester House Clarendon Place, London, W. Home of Sir Giles Gilbert Scott, Architect

I will be interesting to the architects **I** that one of England's foremost practitioners has planned for his own home in London.

Sir Giles Gilbert Scott was knighted by King George at the consecration of the first portion of the Liverpool Cathedral four years ago, the building for which he is best known. Last July the London Architectural Medal was awarded to Sir Giles for this, his own town house near Hyde Park. It is interesting, furthermore, to note that the house has received an almost embarrassing amount of publicity, having been hailed by the daily press as "the perfect house." At any rate, it is the smallest and the only domestic building that has ever won the Architectural Medal.

Sir Giles was born in 1880, and is therefore not yet fifty years of age. Already, however, he has received every honor which can come to an architect in his country, save only the presidency of the Royal Institute of British Architects, which, it is said, will be his whenever he feels that he can give the necessary time. He has already been president of the junior body, The Architectural Association, and the American Institute of Architects has recognized his work by electing him an Honorary Corresponding Member. He was elected a member of the Royal Academy at an earlier age than any one since Turner.

Sir Giles, as is well known, comes from an architectural family. His grandfather, Sir Gilbert, designed St. Pancras Station, the Albert Memorial, the Foreign Office, and hundreds of what Professor Reilly in *Building* calls "hard mechanical churches up and down the country. He might be described as the destroyer of cathedrals, just as his grandson, I hope, will be the maker of more than one." It is from Sir Giles's father, however, that he obtains his sympathetic touch, his ability to get fine quality out of his materials, and a genuine interest in detail.



Scale in Feet



Ground-Floor Plan

CHESTER HOUSE, CLARENDON PLACE, LONDON, W. THE HOME OF SIR GILES GILBERT SCOTT, ARCHITECT

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Vault door as seen from the lobby, Guaranty Building (now called the Postal Life Building), New York; York & Sawyer, architects. The plan and details are shown overleaf



North corridor in the safe-deposit department, of which details appear overleaf

NOTES

BOOTH-ROOM DETAILS AND PLANS OF SAFE-DEPOSIT VAULTS, GUARANTY BUILDING, NEW YORK CITY, AND THE BROOKLYN TRUST CO., BROOKLYN

YORK & SAWYER, ARCHITECTS

General: In bank planning often the most difficult problems are met in the basement, because of the conflicting requirements of boilerroom and safe-deposit department, the former needing street access for coal and supplies, and therefore advantageous nearness to the front, while the safe-deposit department is also best placed there to afford easy entrance without requiring clients to walk the length of the banking-room above. In both examples shown here the property was on a corner, obviating this difficulty. In general it is considered an important asset to have the main door to the vault on the axis of the stairs, so that clients on entering the lobby are confronted with its impressive appearance. In the plans overleaf there are two schemes for arranging booth-rooms: surrounding (or partly so) the vault with rooms which open off both sides of the long corridors, as in the Guaranty Building, or providing a series of short corridors off which the booth-rooms open, as in the Brooklyn Trust Company. In both cases the corridors are barrel vaults with penetrations, with the vaults springing from a line just above the doors and producing the effect of a substantial crypt. Toilet-rooms should not be overlooked, these preferably opening off a small anteroom. The booth-rooms in greatest demand are the ones for single persons, although a certain number should be provided for two or three persons, and to accommodate committees.

The plans shown give an idea of the essentials and their arrangement: entrance-lobby, protecting grille, vault, corridors with boothrooms, observation space and passages surrounding the vault, toilet-rooms, etc. It is frequently good practice to build the vault several times larger than the bank officials deem necessary, because the greatest expense is not so much the reinforced concrete wall, but the door. The extra space can be used by the bank as its currency vault (which should be a part of the clients' safe-deposit vault but partitioned off from it), book storage for records, and silver storage. Space in the basement should be allotted for "storage," which at some future time may be devoted to silver or book storage in case the needs for safe-deposit boxes increase.

Observation Space: Along one of the sides of the vault it has sometimes been the practice to install glass floor sections with reflectors which revealed the under side of the vault floor. While this has not been incorporated in many recent vaults, its value as interesting prospective clients by illustrating how even the floor of the vault is under the watchman's observation cannot be denied. At the corners where one passage meets another at right angles, it is usual to place mirrors in order that the watchman can observe the entire perimeter of the vault from one point.

Ventilation: Not only all booth-rooms and committee-rooms must be provided with forced ventilation, but particularly the main vault, at one end of which is usually provided an emergency door and an air chamber. The system will require an engineer to lay it out, but if the architect will allow space for an air chamber, as in the plan of the Guaranty Building, it will facilitate ventilation details later.

Vault Wall: Opinion as to the best type of wall for a safe-deposit vault is constantly undergoing modification as regards the manner of reinforcing, but the generally accepted basis is a concrete wall two feet thick, reinforced, and lined in a special manner with electrical protection. Floor and ceiling construction are also matters for an expert to determine.

Lobby: This should be so planned that an attendant can control the vault supervision as well as confer with clients, and it should be large enough so that the card index (with signatures for identification) and other administration details can be provided for without being cramped.

Position of Vault: The safe-deposit department is sometimes an independent organization from that of the bank, or a branch of it, in which case the first floor will have to be so planned that access to the safe-deposit vault can be both from the lobby of the building and from the banking-room, so that if the banking-room is closed but the safe department open clients can still gain entrance. Usually on a lot hemmed in at the sides by party walls it works out so that the vault is either at the front or the rear.



EDITORIAL COMMENT

Vol. I.X, No. 1

ARCHITECTURE

JULY, 1929 🚸

A NEW RECORD AND A NEW ERA

THE breaking of previous records in volume of construction has come to be a story worn by much repetition. The constant increase in yearly totals since 1921 has brought, each year, the conviction among many excellent judges that the peak had at last been reached and that a set-back was inevitable. Meanwhile this consistent topping of previous totals brought the latest figures to a level just about twice as high as that recorded for the year 1914.

The year 1928 started out in a manner that lent considerable weight to the feeling that the top had been reached and that the curve must turn downward. January showed a loss over the corresponding month of 1927. February, March, and April showed no signs that any new records were to be set. Then June rounded up a total that exceeded all previous figures for a single month. July dropped back slightly but August jumped ahead again. Then came a sensational spurt, the result of orders and shipments in the first part of the year that were now beginning to be reflected in construction figures. From early fall until the end of the year the rush of work swamped all previous totals, with the final result that new records for individual months were set eight times during the year. The presidential year left a record which stands at the moment as the greatest volume of building ever accomplished by a nation during any single year in the history of mankind.

We spent for construction of all types the staggering sum of eight billions of dollars. Of this amount, D. A. Garber, general manager of the Associated General Contractors of America, estimates that general building took \$5,500,-000,000; engineering and construction, including public works, \$1,000,000,000; highway construction, \$1,000,000,000; and railway construction \$500,000,000.

An outstanding fact in an analysis of the figures is the success of the carefully waged campaign against the traditional damper of seasonal declines. As a nation of builders we are coming nearer and nearer to the conviction that we can keep on building through the winter months.

Unquestionably greater than any other factor in our building activities has been the con-

stantly rising standard of American life. Which, perhaps, is but to say that we build because we are prosperous; or, that we are prosperous because we are building. We might even sum it up in the old platitude that "nothing succeeds like success." The fact is, however, that we have begun to grasp an entirely new idea in human relationships, and that is that the consumer is not, as we used to think, a portion of the public parked somewhere by itself, with nothing to do but to buy and consume. The consumer is the producer, when, as, and if the said producer is well paid for his work and has enough leisure from his working hours to enjoy life and what goes with it in this day and generation. There are those who fear the five-day week to-day just as there were those who feared the eight-hour day, yet both are part of our inevitable march onward with the tide of increasing production coupled with increasing consumption.

A TAX ON ART

HE proposal to tax the incoming works of foreign painters so as to enable our own artists to live in the luxury to which they have become accustomed is an absurdity so gross as to be distasteful even to comment upon. A protective tariff has done great things for this country in enabling us to develop a high standard of living behind a wall that kept out the products of cheap labor. In the case of a steel knife or a piece of optical glass, a price-equalization deviceof this kind is a governing factor. Does any one believe that paintings are bought on a price basis? Can any one conceive of making the American buyer of paintings take what he does not like merely because it is a few dollars cheaper than that which he prefers? And, aside from these considerations, would we as a people knowingly make it any more difficult for us to see and possess what is good in the art of other countries? As Mr. Duncan Phillips said before the Ways and Means Committee: ". . . as a measure of repression against cultural growth, it is worthy of the Dark Ages at their darkest moment or of the interior of China and its dread of the 'Foreign Devils.'" The protection of manufacturing is one thing; the repression of art is another.



Model of the proposed Central Riverfront Development, St. Louis, Mo. Designed by the City Plan Commission: E. J. Russell, chairman; William D. Crowell, architect consultant; Harold Bartholomew, engineer



Architectural News in Photographs







The Telephone Building, Kansas City, doubled in height. Hoit, Price & Barnes, architects

The present status of the Arlington Memorial Bridge across the Potomac at Washington. In the foreground is a full-size section in plaster. McKim, Mead & White, architects



© Caufield & Shook, Louisville The Jefferson Davis Memorial, an obelisk 350 feet high, at Fairview, Ky. 20



The proposed Barbizon-Plaza, for artists, New York City. Frank Grad, architect





Above, the original building of the Hardware Mutual Insurance Company at Stevens Point, Wis.

The architects' model of the new 22-story building to be erected by the Pennsylvania Railroad on the new Pennsyl-



The enlarged Hardware Mutual Insurance Building, Stevens Point, Wis. Childs & Smith, architects

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vania Boulevard, Philadelphia. Graham, Anderson, Probst & White, architects



Nathaniel Hawthorne. Daniel Chester French, Sculptor

New Portrait Busts in the Hall of Fame



Henry Clay. Robert Aitken, N. A., Sculptor



James Madison. Charles Keck, Sculptor





Emma Willard. Frances Grimes,

Sculptor

William Cullen Bryant. Herbert Adams, Sculptor





A Pictorial Review of Modern Architecture in Europe



By F. R. YERBURY, Hon. A. R. I. B. A.



Universum Cinema, Berlin

Erich Mendelsohn, Architect

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Universum Cinema, Berlin

Erich Mendelsohn, Architect



Universum Cinema, Berlin

Erich Mendelsohn, Architect



Office-building, Berlin; Erich Mendelsohn, Architect



Additions to building of the Berliner Tageblat, Berlin; Erich Mendelsohn, Architect

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Apartment-house, Berlin Erich Mendelsohn, Architect





Schocken Stores, Stuttgart. Erich Mendelsohn, Architect The glass tower contains a spiral stair-case of concrete



Model, Factory of the Leningrad Textile Trust, Leningrad; Erich Mendelsohn, Architect



Industry, Ar Center, New York City

Shown at the Contempora Exhibition of Art and ARCHITECTURE'S medal, actual size. David K. Rubins, Sculptor

ARCHITECTURE'S Medal Awards—Second Series

T is with great pleasure that ARCHI-TECTURE awards for the second time its medals for excellence in design. In the first series of competitions, which were held monthly during the year March 1, 1927–March 1, 1928, the three medals were awarded to the three contestants rated highest among the sixty who won the monthly prizes. In the second series of competitions there were but four competitions in the year and twenty winners of prizes.

BEAVT

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The task of the Jury of Award this year, therefore, which consisted of Messrs. Raymond M. Hood, Ralph T. Walker, and the Editor of ARCHITECTURE, was somewhat easier than last year's task. The drawings represented four subjects rather than twelve, with a corresponding decrease in the difficulties of choosing the best among designs for widely varying subjects.

ALL NO.

The jury has unanimously agreed upon the awards as indicated below.

ARCHITECTURE takes this opportunity of thanking the many contestants for their interest in the problems set and Messrs. Hood and Walker for their conscientious labors in the jury's deliberations.



It is regretted that we cannot include here a photograph of ARCHITECTURE'S Gold Medallist, who is Angelo Zava, Hartford, Conn.

Alexis V. Lapteff, Ann Arbor, Mich. Awarded Architecture's Silver Medal

> T. R. Stephens, Morgantown, W. Va. Awarded Architecture's Bronze Medal







At left, the design for which Angelo Zava was awarded ARCHITECTURE'S Gold Medal—the façade of a village gift shop. Mr. Zava was born in Venice, 1899, came to this country at an early age and studied at Pratt Institute, Brooklyn. He has worked in the offices of Warren & Wetmore, H. T. Lindeberg, Pierpont Davis, Dwight James Baum, McKim, Mead & White, and is now with Smith & Bassette, Hartford



An entrance gateway to a country estate was the problem in which the above design was awarded First Prize, and its author, T. R. Stephens, is now awarded ARCHITECTURE'S Bronze Medal. Mr. Stephens found his early architectural training in Southern offices, and was with Carl Reger, Morgantown, when he won the first competition of this Second Series. He is now completing the architectural course at the Carnegie Institute of Technology, Pittsburgh

Alexis V. Lapteff won the fourth competition with this design for an office-building information booth, and is now awarded ARCHITEC-TURE'S Silver Medal. He began his architectural training in Russia, acquiring his early experience in offices of Russian, Hungarian, Spanish, and American architects. He is now a senior at the University of Michigan School of Architecture JULY, 1929



The basic utilitarian idea which prompted Mr. Walker's design is the need for adaptable shelf space. This has been secured in a manner made clear by the working drawings which follow. The walls consist of a series of rectangular panels of Chinese willow veneered on a pine base. When the need for space arises—for books, pottery, whatnot, which one would enjoy having in sight one pushes the lower edge of a panel and it thereupon becomes a shelf

A Man's Study in a Country House RALPH T. WALKER, ARCHITECT

A PART OF THE ELEVENTH EXHIBITION OF AMERICAN INDUSTRIAL ART IN THE METROPOLITAN MUSEUM OF ART, NEW YORK CITY



A man's study in a country house

Ralph T. Walker, Architect



Sigurd Fischer

The idealized drafting-table


From the full-size details, showing the adaptable shelf mechanism



Courtesy of The Metropolitan Museum of Art Fireplace, corner gun rack, and adjustable lighting fixtures

Collaborating with Ralph T. Walker were the following: Woodwork executed by Eli Berman Co.; plaster ceiling by Joseph A. Cuddihy; ceiling and frieze decoration, Ernest F. Tyler and Mack, Jenney & Tyler; floor by Hasbrouck Flooring Co.; fireplace stonework from models by Stifter & De Cesare, Inc., executed by Benedict Stone Corporation; rug, Frank A. Haas and M. J. Whittall Associates; furniture, W. and J. Sloane





Corner of the room with drafting-table removed and gun rack open; and part elevation of same end



Photographs by S. H. Gottscho

KENWOOD APARTMENTS, GREAT NECK, LONG ISLAND

LE ROY P. WARD, ARCHITECT





KENWOOD APARTMENTS, GREAT NECK, LONG ISLAND

LE ROY P. WARD, ARCHITECT



LE ROY P. WARD, ARCHITECT

KENWOOD APARTMENTS, GREAT NECK, LONG ISLAND

ARCHITECTURE



Aerial Perspectives without Distortion By A. W. K. Billings, Jr.

* ITH the usual methods of perspective construction an aerial perspective is made by selecting the station * The point (the point from which the object is viewed) high off the ground and then projecting the object onto a vertical plane as shown in Fig. 1. Then, if the perspective is to be viewed without distortion, the eye of the observer should be placed in the same position as the station point, as shown in Fig. 2. Normally, however, perspectives are never viewed in this way. It is natural for a person to view a drawing on a line perpendicular to the surface of the drawing, as shown in Fig. 3. The perspective drawing viewed in this way becomes distorted, for all vertical dimensions become extended. In instances where views are constructed of large areas, such as aviation fields, this distortion becomes so marked that it gives a decidedly wrong impression, which is directly contrary to the intent of a perspective.

It is the object of this article to develop a method of perspective construction which will be no more difficult than the customary methods and which can be used for the laying out of aerial perspectives without distortion.

This can be done by selecting the station point at any desired location and then passing a picture plane perpendicular to a line drawn from the station point to the centre of the object, as shown in Fig. 4. The object, projected onto this plane, then will give a picture which when viewed normally will not have any marked distortion.

The procedure for this method is as follows: Laying the plan of the object out, as in Fig. 5, and the elevation as in Fig. 6, select any desired station point, shown in Fig. 5 as SPh and in Fig. 6 as SPv. Then in the plane of the ground locate a line mn which will be perpendicular to the line SPh-A (a line drawn from the station point to about the centre of the object). Give this line definite terminals at m and n which will lie outside of the projection of the object on this line. Locate mn in the vertical projection, m^1n^1 . Then from m^1 and n^1 construct two lines parallel to the vertical plane, $m^1 o^1$ and $n^1 p^1$ which are perpendicular to SPv- A^1 (the vertical projection of SPh-A). o^1p^1 is a line parallel to m^1n^1 and located anywhere outside of the projection of the object upon this plane. We now project o^1p^1 to the horizontal plane, giving op. This plane, mnop, is a plane with definite boundaries, shown in the horizontal projection as mnop and in the vertical projection as $m^1 n^1 o^1 p^1$, and upon this picture plane we shall project the object.

The lines mn and op are shown in their true length, and the lines m^1o^1 and n^1p^1 are also shown in their true length; therefore we can construct the true size of this plane as in Fig. 7, being careful to note that OM is at the left, PNat the right, OP at the top, and MN at the bottom.

Now to find the point at which any line of vision drawn from the station point to the object passes through the picture plane we proceed as follows: Draw a line from the station point to any desired point in the object, say E. In the horizontal view this line crosses mn at 1 and op at 1 (denoted herein as mn1 and op1, etc.). We know that the point where this line of vision intersects the picture plane must be somewhere between mn1 and op1, which is, in



effect, the horizontal projection of the line of vision upon the picture plane. Lay off this line on the true picture plane MNOP (Fig. 7) by taking on OP the distance O1 equal to o1 and on MN the distance M1 equal to m1. Joining these two points we get a line somewhere along which the line of vision from SPh to E passes through the picture plane. Similarly in the vertical projection a line drawn from the station point to E^1 will cross m^1o^1 at 1 and n^1p^1 at 1, and the point of intersection of this same line of vision with the picture plane must be somewhere along $m^1 o^1 1 - n^1 p^1 1$. As before, laying off on OM the distance O1 equal to $o^{1}1$, and on PN the distance P1 equal to p^{11} , we get two points on the vertical sides of our true picture plane, and the point at which the line of vision in question passes through the picture plane will be somewhere along the line joining these two points. The point is naturally at E^{11} , the intersection of the two lines PN1-OM1 and OP1-MN1.

This is the whole theory of this system of perspective projection. It may appear at first glance to be unduly long, but in practice many points are laid out at once, and with tick strips they are rapidly transferred from the horizontal and vertical projections to the true picture plane. It is important to keep clearly in mind when the plane is first laid out in both projections and in its true dimensions, the relative location of the edges. For example, in Fig. 6 the vertical edge o^1m^1 is to the right of the edge p^1n^1 , yet on the true picture plane in Fig. 7 the case is reversed. Whether it is reversed or not will depend upon the location of the object in relation to the station point and picture plane. An easy method of avoiding confusion in this matter when ticking off is to draw colored lines beside the edges of the picture plane, keeping the same color for one edge throughout, that is om, o^1m^1 , and OM, and the om line of the tick strip, as shown.

It will be noted that no lines in the perspective are parallel, unless they happen to be projections from parallel lines in a plane of the object parallel to the picture plane. This general method will be found to lead to variations which will be extremely useful in exceptional problems of perspective. Problems are apt to present themselves which cannot be properly solved by the ordinary methods, and with a system which will permit us to tip our picture plane to any desired angle (always remembering that the station point should be along a line drawn perpendicularly from about the centre of the picture plane) a new field is opened which should go far toward increasing the value of perspectives to the architect.



It will be noted that when the picture plane is tilted to form a right angle with the line of vision, the verticals are no longer perpendicular to the base of the drawing

A perspective drawing made by the author in accordance with the principles outlined in this article

Thursday, April 25.-An inspection of the drawings and models of the proposed Government buildings to be erected in the triangle along Pennsylvania Avenue left at least some of us cold. It is evident that a great amount of painstaking, conscientious effort has been put in upon this work by men whose ability and judgment cannot be doubted. Nevertheless, though it be rank heresy to whisper it, I cannot help a slight shudder at the pros-pect of those ranks upon ranks of nearly identical classic limestone façades, those thousands of equally spaced windows, those miles of uniform cornice lines, those vast façades unbroken by a single vertical note other than column or pilaster. Is it absolutely necessary to sacri-fice upon the altar of classic uniformity every last vestige of individuality? Is it our conception of good architecture to build a group of our most important national buildings in such ironclad uniformity of mien that no citizen, entering one of these portals, can tell whether he will find himself in a court, a library, a bank, a chamber of commerce, or a museum ?

Friday, April 26.—Back again in New York where the Convention delegates are come to see the Architectural and Allied Arts Exposition and to gather at the banquet which closes the Sixtysecond Convention of the A. I. A.

Buckminster Fuller's Dymaxion House model continues to draw the interest of forward-looking architects at the Architectural League library, just as it did in an upper private room at the hotel in Washington during the convention. It stimulates the brain as setting-up exercises and a cold shower stimulate the body.

Saturday, April 27.—At dinner Harvey Corbett told me more in detail of the basic idea of traffic segregation which he outlined at the convention in Washingtion: rail traffic below grade, wheel traffic on the present street levels, foot traffic at a second-story level in shopping



The Editor's Diary

arcades, with bridges at the street intersections. Some such segregation is inevitable in the congested districts of the larger cities, and could easily be provided for in advance if we were foresighted enough to plan accordingly. Yet already we are raising our wheel traffic to the upper level in places, and long ago we raised our rail traffic to elevated structures—both of them awkward and costly makeshifts as compared with the logical division first mentioned.

Thursday, May 2.—Lunched with Howard Greenley, Harrie Lindeberg, Monroe Hewlett, Royal Cortissoz, Grant LaFarge, and others at the Coffee House, when Lindeberg propounded a question which for us has as yet no answer: Why is it that any new assembling of structural steel draws the etchers like flies to a pot of jam, while as soon as the architectural dress is put upon the framework, the interest and appeal vanish?

Friday, May 3.—Motored to Princeton with Dwight James Baum and L. W. C. Tuthill, on the first lap of a journey into Virginia to see the old brickwork of the Cavaliers. Stopped the night at the Princeton Inn, which Andrew J. Thomas designed and which is very pleasing, but which would be still more so if the brickwork were not skintled. After dinner we inspected the architectural department and found many at work on the final rendering of a *projet*. The chapel was closed, but we marvelled over the charm of Klauder's dormitory groups, done with such consummate skill as to mass and scale. It is the treatment of dormer or minor gable, the juxtaposition of widely different openings, the assymetry that, while refreshingly unexpected, seems nevertheless so surely right—it is all this, is it not? that gives Collegiate Gothic its greatest appeal.

Saturday, May 4 .- Over into Pennsylvania, passing through Allentown and Bethlehem, Reading, Ephrata, Lancas-ter, York, and to Gettysburg, where, after a painful inspection of late-nineteenth-century monuments marring the beauty of that historic battle-field, we put up for the night. All day long we have enjoyed the panorama of good stone houses of a hundred years ago, too frequently scarred by modern improvements, and the magnificent barns. The latter have always the overhang along the longer dimension to the south, under the protection of which are the stalls, while on the other side is the wide sloping approach, between stone retaining walls, to the second-floor level where hay, and often tobacco, is stored. And on the painted superstructure of wood, supported by the great stone end walls slit vertically for ventilation, are the circular "witches' signs," like elaborately plotted backgrounds of the mariner's compass.

Sunday, May 5.—Down through the lovely valley of the Shenandoah, through Harper's Ferry, Winchester, New Market, Harrisonburg to Staunton, near which we found at evening the lovely Folly Farm, designed by Thomas Jefferson for his friend Mr. Cochrane and still owned by one of his direct descendants, Mr. Joseph Smith Cochrane. The house gives a first impression not unlike Homewood, and has a garden enclosed by one of Jefferson's favorite features, the ser-



Model of the triangle as proposed for Washington, D. C. The view is looking east from 15th Street

pentine wall, though lower in height than the better-known one at the University of Virginia.

Crossed the Blue Ridge and motored down into Charlottesville in the late evening, where we were joined by Messrs. H. R. Garden and A. M. Tinsley, who know a lot about early Virginia brickwork and want to know more.

Monday, May 6.—All day wandering about the University, Jefferson's greatest architectural achievement, under the hospitable guidance of Edmund S. Campbell, who left his work as director of the Beaux Arts Institute of Design last fall to become head of the architectural department at Charlottesville. The growing needs of the University are bringing many new buildings upon the campus, but with it all the glorious atmosphere of the central library and its dependent colonnades and dormitory ranges, its many white columns, its white-soffitted arcades, its mellow old red brick, remains unspoiled.

Motored out to Monticello, now a National Monument and, as such, lacking much of the domestic quality which inevitably passes with the incoming public. More than ever did it seem to me an architectural *tour de force* rather than a gentleman's country home.

Tuesday, May 7.—Up early and motored out to Farmington, a country estate built in several successive stages, and now remodelled as a most attractive country club. Back to Charlottesville for breakfast, another lingering look at the University and James Monroe's office, then on south to Bremo, a littleknown mansion on the upper James, designed by Jefferson, and built soon after 1800 by his friend, General John Hartwell Cocke. It is now sadly fallen from its former glory. Its great stone barn, with columned portico and classic arches, is one of the r ost elaborate in all the South.



The famous West Range, University of Virginia, in which are the rooms once occupied by Poe, Woodrow Wilson, and other famous alumni

Continued south for a glimpse of Charlotte Court House, then back to Lynchburg, after a long day.

Wednesday, May 8 .- Westward to Poplar Forest, once Jefferson's summer home and now so used by the Hutters of Lynchburg. It too was designed by Jefferson—a particularly ingenious plan of one story and basement. It is a true octagon with a square centre room, originally top-lighted, surrounded by rooms having half-octagonal ends. These adjoin at the middle of the octagon's alternate sides with axial fireplaces back to back, served by four chimneys. There is a four-columned portico at front and rear. One particularly interesting feature is that the bricks are specially moulded for the octagon's corners, obviating a lot of rubbing.

Retracing our course through Lynch-

burg, we drove eastward nearly across the state, to Petersburg, and on down the James River to see Brandon. Here, surely, are two of the most beautiful places in America. Upper Brandon, an estate of 3,500 acres, is the home of Mr. Otway Byrd, who, like his distinguished ancestor, Colonel William Byrd, of Westover, spends his days in making his arable acres produce grains and tobacco. Lower Brandon too, is in good hands and its gardens and glorious boxwood are at their best. We visited both places in early evening, when the long shadows of the great trees were particularly lovely. Back to Petersburg for a late dinner, thinking to return to Brandon on the morrow and photograph it.

Thursday, May 9.—Awoke to a day of steady rain and reluctantly turned north instead of down the James. Through Richmond and up to Fredericksburg, when the rain ceased and gave us late afternoon sunlight on Chatham, built presumably in 1721 by a Fitzhugh and named in honor of his friend, William Pitt, Earl of Chatham. Mark Sullivan once owned this lovely place and I cannot imagine why he ever left it, though it must have been a bit far from Washington for his convenience. Colonel Devore now owns the place and is lavishing care and attention upon the magnificent gardens—again with some of the finest boxwood in America.

On to Washington and into a sleeper for New York.

Friday, May 10.—With Raymond Hood and Ralph Walker at lunch, judging ARCHITECTURE's Competition IV, the results of which were printed last month. At the same sitting we determined the winners of the gold, silver, and bronze medals, as announced elsewhere in these pages.



The stable of Bremo, built entirely of stone. It seems likely that it was intended to stucco the arched panels and the portico columns

Farmington, originally a country house in which Jefferson had a hand; recently restored and remodelled by Edmund S. Campbell for use as a country club

Wednesday, May 15.—Talked with Charles H. Higgins about the Schenectady Competition for a new City Hall, the winning design of which, by McKim, Mead & White, we published last month. Here was a really ideal competition as to its conduct and results. Incidentally, the style was prescribed in the programme with a penalty, since the competitors were each to be paid \$500, unless they departed from the programme.

Thursday, May 16.—F. Scott Williams told an interested assembly in The Architectural League something about Jay Hambidge's theories of "dynamic symmetry." Ralph Walker, chairman of the Entertainment Committee, being unable to find any one else to take the other side of the argument, undertook that task very ably himself. Mark Barr, however, a distinguished mathematician, furnished much of the entertainment when he attacked Hambidge's theories as being undemonstrable from a mathematical view-point. Some of the argument, pro and con, is to appear in an early issue.



Saturday, May 18 .- Lunched with Francis Scott Bradford and Frank Schwartz, the mural painters, and Lorimer Rich, who recently won the competition for the Unknown Soldier's Tomb at Arlington. Rich was awaiting with a natural impatience, the decision on the Bailey Memorial competition. Here is a competition which is unique, so far as we know, in that the contractor is directly involved. It was felt essential that the cost of the memorial should not exceed a definite amount. Cubage tests were valueless in such a distinctly sculptural memorial, so the competing architects were asked to nominate each a re-liable contractor. These names were then drawn by lot and assigned each to one of the competitors. With the sealed envelope containing the competitor's name was included an offer from his contractor, under bond, to build the me-morial for a stated sum within the maximum available. By the terms of the programme, the opening of the winner's envelope automatically engaged the architect and completed a contract with the builder. Just what might happen later between architect and contractor, when the details were more fully developed, doth not yet appear.

Monday, May 20.—Lunched with Mark Barr, continuing the discussion relative to the so-called Golden Section or Divina Proportione, which ratio, whether or not used by the Greeks as a controlling factor in design, had its origin in a law of Nature applied to plant and animal forms. Mr. Barr makes out a good case for its having been applied in



A curious habit of chimney building is found throughout Virginia—the upper portion offset to avoid cutting through the ridge and gable timbers

æsthetics solely as a fetish. Believed to have come from the gods, it must, the Egyptians felt, have in it the essence of rightness for all things. However, here is a fascinatingly dim trail that leads back 3,000 years B. C., and one which I hope Mr. Barr will cast some light upon through these pages in an early issue.

Tuesday, May 21.—A letter comes from Gerald K. Geerlings with many picturesque details of his experiences in cycling through England. Frost, cold rain, and even snow and hail seem to be productive of chilblains as a complement to the architectural vistas of the English countryside. Even though he is keeping off the main roads and away from the large towns, he reports that the traffic has almost reached the point where the traditional architectural cycling expedition is becoming too dangerous an occupation, all of which will be sad news to many an architectural draftsman who is building future plans upon the pleasant experiences of our elders.

Thursday, May 23.-William Arthur Payne, who has served as chairman of the Standards Committee, New York Building Congress, tells me of the Standard Specifications now being issued by the Congress. Here is a well-considered effort to go a step further than the A. I. A.'s compilation of General Conditions, and bring into conveniently obtainable form a part of the specifications which will describe quality of materials and workmanship, in accordance with accepted standards as worked out by the architects and all other elements of the building industry. Using these printed sheets, purchasable in whole or in part, the architect need only set forth, in a preliminary section, the extent of the work and any special exceptions to the standard. Standardization of these constantly duplicated specification paragraphs in this manner will not only save the architect much labor in specification writing, but will also greatly simplify the work of the estimator and make unnecessary the reading of much repetitive matter in the search for a hidden "joker" or some justifiable departure from current practice.

Monday, May 27.—A most enthusiastic gathering of some one hundred and twenty-five congenial souls came together to-night in honor of Kenneth Murchison, at The Architectural League. What Murchison has done, not only for the Beaux Art Society, but for the League, particularly in the acquisition of the present clubhouse, are facts that are already widely known. Under George Chappell's direction, and with the assistance of Arthur Ware and members of the staff, the gathering was permitted to see tableaux taken ostensibly from Murchison's early and more recent life, not only in Paris, but in New York.

Wednesday, May 29.-There is nothing particularly surprising in a news item to the effect that one of New York's important buildings is to be torn down, and a new one erected on the site. These items appear every day. It comes rather as a jolt, however, to find that the Century Theatre is to make way for a sixtyfive-story structure. Many of us will remember the great importance of the competition held for the New Theatre (now the Century) which was won by Carrère & Hastings. On the twentieth anniversary of its ambitious opening, next November, the wreckers will be tearing it apart. On the afternoon of November 6, 1909, Mr. Hastings handed the keys of the building to J. P. Morgan, the elder, who thereupon dedicated it "to the services of the drama and the citizens of New York."



Friday, May 31.—Eugene Savage, having won most of the available honors in mural painting, including the Gold Medal of The Architectural League, demonstrated his versatility by entering and winning the Bailey Memorial Fountain for Prospect Park Plaza, Brooklyn, in association with Egerton Swartwout. The problem was largely a sculptural one, and Mr. Savage entered the competition as a sculptor. This rather startling development is apparently less surprising to Mr. Swartwout than it will be to the profession. Mr. Swartwout says that Eugene Savage is fundamentally a designer of great power, not merely a painter, and that his ability in design will manifest itself whether he is working as a mural painter, with marble in the round, or in some other medium.

JULY, 1929



William M. Rittasse

Goodhart Hall, Bryn Mawr Mellor & Meigs, Architects

A Pictorial Review of the THIRD INTERNATIONAL EXPOSITION OF ARCHITECTURE AND ALLIED ARTS



PART TWO

GRAND CENTRAL PALACE

NEW YORK CITY

April 15-27, 1929

Browning Studios New York Life Insurance Building, New York City. Cass Gilbert, Architect

> The News Building, New York City. John M. Howells and Raymond M. Hood, Architects





John Wallace Gillies, Inc.

House of James H. Bailey, New Canaan, Conn. Frank J. Forster, Architect. Awarded Silver Medal for Domestic Architecture

Western Union Telegraph Building, New York City. Voorhees, Gmelin & Walker, Architects





Arthur Jordan Building, Butler University, Indianapolis, Ind. Robert Frost Daggett, Architect; Thomas Hibben, associate

Power House, Michigan City, Ind. Holabird & Root, Architects. Drawing by Gilbert Hall

ARCHITECTURE



New Jersey Bell Telephone Building, Newark, N. J. Voorhees, Gmelin & Walker, Architects





Samuel H. Gottscho House of Henry Heide, Jr., Fieldston, N. Y. Julius Gregory, Architect

JULY, 1929



The Crucifixion. Bronze and enamel plaque. Designed by Knud Laub; executed by Rambusch Decorating Co.

Paul J. Weber

Library of Boston College, Newton, Mass. Maginnis & Walsh, Architects



Main hotel of a Beach Club. Raymond Hood, Godley & Fouilhoux, Architects. Etching by J. Jouglass





P. A. Nyholm

House of A. W. Lawrence, garden side, Bronxville, N.Y. Penrose V. Stout, Architect

Wichita Art Institute, ultimate development, Wichita, Kan. Clarence S. Stein, Architect





Winning Design, lighting fixture for Beaux Arts Institute of Design. Frank B. Houlihan, Designer; Cox, Nostrand & Gunnison, Craftsmen



In the garden of Mrs. Howard Bonbright, GrossePointe, Mich. Ruth Dean, Landscape Architect. Awarded Gold Medal of Honor for Landscape Architecture

Tebbs & Knell

Enclosed Tennis Court for Harrison Williams, Bayville, Long Island. Delano & Aldrich, Architects



"Death and Youth." War Memo-rial, St. Paul's School Chapel. Daniel C. French, Sculptor



DeWitt Ward



Thomas Ellison Entrance detail, Maccabees Office Building, Detroit, Mich. Albert Kahn, Inc., Architects and Engineers



At right, "Foreign Trade," a mural painting for the Bank of New York and Trust Co., New York City. James Monroe Hewlett, Painter

Entrance detail, Pennsyl-vania Power and Light Co. Building, Allentown, Pa. Helmle, Corbett & Harrison, Architects

Below, Reflecting Pool, in the garden of M. K. Black-mer, Denver, Colo. S. R. De Boer, Landscape Architect







JULY, 1929

Tebbs & Knell



Architecture's Portfolio



Mar., 1928

Apr., 1928

of QUOINS

Door Hoods-

BAY WINDOWS-

* * * Subjects of Previous Portfolios

PANELLING OF THE ENGLISH TYPES—Jan., 1927 STAIRWAY DETAILS (GEORGIAN, EARLY

STARWAT DETAILS (OLOROTAN	, LARDI	DHI HINDONS	p., 19-0
American, etc.)—	Feb., 1927	Cupolas-	May, 1928
STONE MASONRY TEXTURES—	Mar., 1927	GARDEN GATES-	June, 1928
English Chimneys—	Apr., 1927	STAIR ENDS—	July, 1928
FANLIGHTS AND OTHER OVERDO	DOR	BALCONIES-	Aug., 1928
Treatments-	May, 1927	GARDEN WALLS-	Sept., 1928
Textures of Brickwork—	June, 1927	Arcades—	Oct., 1928
IRON RAILINGS-	July, 1927	DECORATIVE PLASTER CEILINGS-	Nov., 1928
Door Hardware—	Aug., 1927	Cornices and Entablatures of	
PALLADIAN MOTIVES-	Sept., 1927	Wood-	Dec., 1928
GABLE ENDS-	Oct., 1927	Doorway Lighting-	Jan., 1929
COLONIAL TOP-RAILINGS OF W	00D—Nov., 1927	FIREPLACES OF ENGLISH TYPES-	Feb., 1929
CIRCULAR AND OVAL WINDOWS	(CLASSIC	GATE-POST TOPS-	Mar., 1929
AND RENAISSANCE)-	Dec., 1927	Garden Steps—	Apr., 1929
BUILT-IN BOOKCASES-	Jan., 1928	RAIN LEADER HEADS-	May, 1929
CHIMNEY TOPS-	Feb., 1928	GARDEN POOLS	June, 1929

SUBJECTS IN PREPARATION FOR FUTURE ISSUES

Aids to Fenestration Balustrades Bank Screens Banking-room Furniture Belt Courses Brick, Moulded China Cupboards Circular Gothic Windows Clock Towers Corbels Driveways, Entrance Elevator Doors Entrance Porches Fences Finials Flêches Garden Shelters Gothic Doorways Interior Paving Niches Organ Cases Outside Stairways Over-Mantel Treatments Patios

Pulpits Second-story Porches Stucco Textures Treillage Urns Verandahs Weathervanes Window Grilles

Photographs showing interesting examples under any of these headings will be welcomed by the Editor



BURFORD, OXFORDSHIRE c. 1690 TRACY & SWARTWOUT

SAFFRON-WALDEN, ENGLAND

PERSHORE, WORCESTERSHIRE C. 1775



CHARLES A. PLATT JULY, 1929





ARCHITECTURE

SULGRAVE MANOR, ENGLAND





EUGENE J. LANG

JAMES GAMBLE ROGERS

GORDON KAUFMAN









FRANK A. ROOKE

FRANK J. FORSTER

BARBER & MCMURRY

MT. PLEASANT, PHILADELPHIA MARSTON, VAN: PELT & MAYBURY





GUILBERT & BETELLE





JULY, 1929



ARCHITECTURE



STONE AND STUCCO

WEBBER, STAUNTON & SPAULDING

C. C. MERRITT

GUILBERT & BETELLE











LEWIS BOWMAN JULY, 1929





FRANK J. FORSTER

FRANK J. FORSTER





60

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ARCHITECTURE

61



LIMESTONE AND ASHLAR



EDWARD PALMER, JR.

JAS. WM. O'CONNOR

EVERETT PHIPPS BABCOCK







JOHN RUSSELL POPE

MELLOR, MEIGS & HOWE



BERTRAM GROSVENOR GOODHUE





HUNT & CLINE

LEWIS BOWMAN



JOHN RUSSELL POPE



JULY, 1929





Lackawanna, N.Y., Schools

FIRST INST.	ALLAT	ION, Public Sch	100	ol No. 3	•		•	•	1923
SECOND	"	. "	"	No. 2	•	•	•	•	1924
THIRD	"	"	"	No. 5	•	•	•	•	1924

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JULY, 1929

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Telephone Convenience is an Important Feature in the Planning of Modern Residences







The new residence of Mr. Thomas B. Wanamaker, in the suburbs of Philadelphia, showing the telephone outlets and conduit layout which provide for modern telephone convenience.—MCILVAIN & ROBERTS, Architects.

I NCREASING attention is being given by architects, in the design of modern residences, to the location of telephones. It is becoming generally recognized that the time to plan for telephone arrangements is when a house is being built or remodeled. In co-operation with telephone company representatives, architects are including provision for telephones in the plans of the house by specifying that conduit be laid within the walls. The necessity of exposed wiring is thus easily avoided.

As each residence presents its own special opportunities for telephone convenience, no



Your local Bell Company will be glad to explain the additional features which constitute complete

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"THE STORY OF OAK FLOORS"

The architect must be in a position to select the grade of oak flooring and the finish most suitable to carry out the desired scheme. The Oak Flooring Bureau will gladly make suggestions or refer the architect to convenient sources of information. They have a new booklet and several small leaflets that cover specific points on oak floors.

HOT WATER FROM OIL

The Piatt is the pioneer of all automatic oil-burning water-heaters. It is guaranteed to deliver hot water to any building, anywhere, automatically, safely, positively, and at lowest cost. The Piatt is manufactured by the Motor Wheel Corporation, who have recently issued a catalogue with specifications.

SANITARY METAL TRIM

Knapp Brothers Manufacturing Co., of Chicago, sends an "Architect's Hand Book on Metal Trim." It has been compiled to give service to the architect, engineer, owner, and builder. The products of the company are classified according to their function and the method of presentation is to give the essential information concerning them and to follow this by detail drawings of the various products, with photographic illustrations. The company maintains a technical department to assist in adapting their products to practical conditions.

SEPTIC TANKS

Sewage disposal methods should be fully investigated. The great problem of humanity is sanitation, and where sanitary sewers are not available, the problem should be carefully considered. The septic tank provides a system that is practical and reasonable. The Concrete SepticTank Co. can help scientifically.

A GOOD LIST

Oak Flooring Manufacturers Association of the United States, 1240 Builders Building, Chicago, Ills., suggests that you send for what you want from the following list: "The Story of Oak Floors," "How and Where to Use Oak Floors," "Stylish Oak Floors Right Over Your Worn-out Old Floors," "Oak Flooring for Factories and Warehouses," "For School Buildings Lay Oak Floors," "For Hotels Lay Oak Floors."

THE VICTORY LINE

Modern fire resistive vault doors made by Diebold are explained and shown in color in a loose-leaf portfolio. General recommendations and instructions for vault construction, selection of Diebold style doors and explanation of special features will be found in this portfolio.

J. M. BOOKLETS

"Celite for Concrete." Celite is not a substitute for Portland cement. It acts as an ultra-fine aggregate, which serves to impart workability and to keep the cement and aggregates uniformly dispersed. The new booklet tells how Celite is used and its effect on finished concrete.

finished concrete. "The New Book of Roofs" gives "The Roof from an Architect's Viewpoint," as an introduction. This is followed by six interesting chapters illustrated in color and attractively presented. It will be well worth your while to consult the nearest Johns-Manville dealer for full details.

PRESERVATION AND BEAUTY OF WOOD

Ligni-Salvor is a penetrating stain that preserves the wood by destroying and preventing fungi. It is of beautiful natural brown tone which may be varied to darker tone or rubbed to a smooth-surface finish. Ligni-Salvor is not a new product. It has been extensively used in this country for a quarter of a century. An architect who does not already know this "Best Wood Preserver" will be pleased to discover its worthy qualities.

NAMEPLATES OF DISTINCTION

A combination of metals and vitreous enamels enables the Birmingham Guild, Ltd., to produce nameplates for ornamentation of buildings that are not affected by temperature or climate. They are permanently practical and beautiful.

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May be found in the Tie-To Insert for metal lath hanger No. 1. Tie-To eliminates the use of hanger wires, channels, pencil-rods, clinch nails, etc. The saving in material and labor is considerable. No. 2 Inserts are a modified type to be used for frame construction; for exterior stucco application and masonry veneer anchor. Information regarding various uses and specifications may be had from The Tie-To Insert Co., of Milwaukee.

GOING INTO COLOR

Modern decoration demands color. It must be recognized by manufacturers who seek to add the persuasive effect of color harmony to the excellences of their wares. And so we have builders' hardware, as you like it, in color combined with natural metal hues. Many charming variations have been created and produced in modern or period designs by P. & F. Corbin. There is a new catalogue on the subject.

HANDLING ASHES

There is never a shortage of ashes. The smallest possible volume of unburned fuel calls for some means of disposal. In the case of large city structures, it means that ashes must be raised or lifted to the street level, quickly, noiselessly, and dustlessly. Ashes handling equipments made by the Capitol Lift & Manufacturing Co. are dependable. Catalogue No. 280 will help the architect to select what he needs.

DRIWOOD MOULDINGS

These period mouldings are authentic in design, architecturally correct. They are suitable for use for any interior trim. In the new booklet there are cuts of 119 separate moulding designs which may be had in poplar, red gum or maple, or hard woods. The wood used, in every case, is scientifically air-dried and kiln-dried, assuring the production of perfect mouldings. Henry Klein & Co., Inc., will send you a booklet about Driwood.

BULLETIN NO. 502

This Bulletin has a wider and more complete range of information regarding Acid-Proof Piping and Laboratory Sinks than anything else previously issued. Every effort has been made to secure the most comprehensive treatment of the subject to be found anywhere. The U. S. Stoneware Co., of Akron, O., is America's oldest and strongest manufacturer of guaranteed acid-proof chemical stoneware.

MORE ABOUT SLATE

The many inquiries and questions concerning the finishing of slate and its application have prompted an article, dealing with its production, its history and interesting development, published in the latest issue of *Struco Slate Review*. The soft beautiful texture of natural slate makes it adaptable to many architectural and structural uses. Struco slate has a colorful, highly polished, everlasting surface. The illustrations follow the various processes as shown through the text. A complete set of chapters with explanatory data and drawings for your reference file may be had on request to the Structural Slate Co. An attractive and practical paper-weight is being sent to architects.

UP-TO-DATE

"Armstrong's Floors" appears in its sixth edition, completely revised. It contains practical and technical information needed by the architect and builder to specify permanent linoleum floors. Other Armstrong products— Linotile and Cork Tile—are also presented. The color reproductions are especially good in this specification folder.

MINNEAPOLIS-HONEYWELL CONTROLS

Patents recently acquired by the Minneapolis-Honeywell Regulator Company will tend to clarify a situation which has been embarrassing the furnace and heating industry for some years. In the acquisition of the Edgecombe patent the Minneapolis-Honeywell Regulator Company has done a very distinct service to the warm-air heating industry in general, as the former ownership of the patent caused a confusing status, not only to the manufacturer of furnace fans but likewise to the manufacturer of warm-air furnaces and the dealer. The patent covers the hook-ups for gas and oil-burning units as well as coal burning. It will materially hasten the general acceptance of forced warm-air heating.

A NEW "REINFORCING" PLASTER BASE

Ribbed Steeltex for Plaster, the latest development of the National Steel Fabric Company of Pittsburgh, Pa., solves the last of the practical application problems of plaster reinforcement. The improved Steeltex for Plaster is finding a ready and enthusiastic market, as it retains all of the recognized superiorities of the original Steeltex, and simplifies its handling and application for the common benefit of the lather, the plasterer, and the owner.

"RIGIDECK"

Entrance of the Genfire Steel Company of Youngstown, Ohio, into the steeldeck roofing field has been announced by officers of the company. G. L. Rees has been named as manager of the new department, and a catalogue showing the company's products in this field is being issued. Addition of the steeldeck roof to the Genfire line of permanent and firesafe building products is in keeping with the long-established policy of the company to meet new demands for modern building materials by extending its manufacturing facilities to include new items. The first roof design offered by Genfire is known as Rigideck. It is made in six-inch widths of Armco Ingot Iron, each of which locks rigidly to those adjacent to it.

STANDARD SCHOOL EQUIPMENT

Schools of KNAPPE and MORRIS, Architects, Equipped With AUSTRAL WINDOWS.



JULY, 1929

THE SATURDAY EVENING POST Steel again shows its importance to progress

The second second and the second s

O LONGER do we have time to hew our logs, and whittle pegs to fasten them together. We are too busy to indulge even in the slow process of making nails by hand. Times have changed. Materials and methods have been improved in keeping with new conditions. Today we live in a new

age, the Age of Steel. This new age has marked more changes, more progress than can be traced to any thousand years of our history, and yet bears

promise of amazing new things in store. When the production of steel by modern processes was begun the pace of progress quickened. Greatest impetus to achievement, however, followed when the alloying of other metals with steel approached per-

COP-R-LOY, the Copper Alloyed Steel, fection. has furnished such an impetus, affecting building, manufacture, transportation and the service of metal products in millions of homes. Although new in name it has twenty years of practical service behind it. Applied to many purposes, it has demonstrated unusual strength, durability and a genuine indifference to the elements of deterioration ... all without sacrifice of strength and

malleability, priceless qualities of steel. COP-R-LOY is a refined copper alloyed

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and fitting it to our pra So well suited is COP-R modern requirements that its their faith in its durability and using it for the manufacture of a widely used products. It is also a semi-finished forms for fabricat countless finished products esse present day needs.

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before



CLUMSY fingers—wandering minds—everyday little accidents — now comes an invention which enables us to say "What of it;" an invention which forces us to revise all our old ideas about floors.

In the past, comfortable and quiet floors were hard to clean. Vice versa, easy-to-clean floors were noisy, cold and fatiguing to walk on.

Then came linoleum—a sound and shockabsorbing floor—a really restful floor. And *relatively* easy to clean.

For years, the manufacturers have been working and experimenting to turn that *relatively* into *absolutely*. In 1927, after many failures, and partial successes, came the *Sealex Process*.

Floors of *Sealex* Linoleums and *Sealex* Treadlite Tiles are practically as easy to clean as glazed tile. Every microscopic pore in the material has been *penetrated and sealed*. Dirt cannot be ground in. Spilled liquids, even ink and ammonia, won't soak in or leave disfiguring marks. A light mopping renders the floor immaculately clean.

This Sealex Process comes opportunely—at a time when we are just beginning to recognize the full decorative possibilities of linoleum and other cork-composition materials. Sheets may be cut into separate tiles, long strips for bordering, circles, stars—any shape imaginable. The children's playroom or kindergarten room and the bordered tile pattern (both illustrated on the next page) are examples of what the Bonded Floors designing staff has done and can do.

Bonded Floors have been used to advantage in schools—old and new—all over the country. Entrance hall, corridor, office, classroom, library, gymnasium—there's a Bonded Floor perfectly (Continued on next page)


Kindergarten floors of Sealex Linoleums and Sealex Tiles, designed-to-order, will aid in game formations as well as give quietness and durability.

HEER and COLOR — in the children's rooms

(Continued from preceding page)

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pendable than human messengers. Catalog in Sweet's Archt. Cat., 23rd Ed., pp. C 3740-41 Catalog in Specification Data, 1929 Ed., pp. 228-229

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JULY, 1929

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ARCHITECTURE

JULY, 1929



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GENFIRE STEEL COMPANY

pounds per sq. ft. Fireproof and economical.

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Lutton Solar V-Bar Greenhouse built for R. K. Leblond of Cincinnati, Obio

EVERY COUNTRY ESTATE Needs a Greenhouse

A GREENHOUSE nowadays is considered an essential part of every well planned country estate ... Lutton Solar V-Bar Greenhouses have been especially developed for private estates and are superior to all other types of construction in beauty and permanence ... If you are not familiar with the Solar V-Bar construction, which is exclusive with us, let us send you a set of sheets which have been prepared for your convenience.

WM. H. LUTTON COMPANY, INC. E. A. WARD, President 222 KEARNEY AVENUE JERSEY CITY, N. J.

JULY, 1929

ARCHITECTURE





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JULY, 1929



Mezzanine in Liggetts Drug Store, Broadway and 42nd St., New York, under construction.

Completed mezzanine.



A MEZZANINE CONSTRUCTION

That Does Not Interrupt Sales

NOT infrequently you will be asked to design a mezzanine to be built under the following conditions:

Use of floor space below mezzanine must not be interrupted during the construction. (This means no forms or scaffolding can be used.)

Quick completion of the job essential. (No wait permitted for poured material to harden.)

Must pass underwriters. (Fire-proofing material essential, eliminating timber construction.)

Must be economical. (A light weight construction to cut cost of steel and supporting members.)

Where all these conditions must be met the

Showing method of hanging Gypsteel ceiling slabs and laying floor slabs.

Gypsteel System with its pre-cast gypsum floor and ceiling slabs, alone fills the requirements. Nothing else will do. The pre-cast ceiling slabs can be hung without forms or scaffolds as soon as the steel work is in place. Floor slabs can be laid and their steel reinforcements tied together immediately afterward. The work can easily be completed within a few hours time after the steel is in place. Usually these mezzanines are completed over a holiday or week-end.

This Gypsteel construction is the lightest type of floor construction, absolutely fireproofing the steel. It is put up without forms or the mess of dripping materials. The strength and light weight of the pre-cast gypsum slabs cuts down steel requirements and keeps the cost down.



A LIST OF NEW YORK MEZZANINE INSTALLATIONS

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General Offices: Linden, N. J. STRUCTURAL GYPSUM CORPORATION Sal

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JULY, 1929

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These general-purpose motors are built liberally and with large ventilation passages to insure continuous operation at high speeds and also in slower speeds—under the adverse conditions frequently encountered in the broad range of general-purpose open-rated motor applications.

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ORN-SOLVES-FLOOR-PROBLEMS



How Kicked Up Dust Led to the Solution of R. H. Macy's Warehouse Floor Problem

It showed the way to keep down flicked up dust. It made possible discarding of many floor trucks. Merchandise was protected. Handling costs greatly reduced.

THE problem wasn't one of keeping the concrete from dusting off. That is easily overcome by Dust Proofing. But Dust Proofing cannot prevent surface dust from kicking or flicking up.

Dust flicking is caused by the bristles of the cleaning broom, catching on the rough points in the concrete, and then when released, snaps or flicks up the dust, which settles on the merchandise.

A floor of glass would neither dust up, nor flick up. So we gave Macy's warehouse floors an enduring glass-like surface, over which the brooms slide. The dirt is pushed along, but not flicked up.

For exactly the same reasons, the use of trucks in the furniture division was prac-

General Sales Offices : 101 Park Avenue, New York City. tically discarded, and the stored furniture slid about.

Dust was KEPT down. Labor costs CUT down.

Refinishing high gloss furniture made unnecessary.

Just what the materials were, or how used in accomplishing all this, doesn't particularly interest you right now.

The thing of importance is: that at last there is a company who have proven themselves, not only experts on Waterproofings, but Floor Finishing, as well.

Next month, we'll offer a solution for one of the most difficult floor finishing problems that you architects have to wrestle with.

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A. C. Horn Company

Works: Long Island City N. Y.

JULY, 1929

JULY, 1929



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Contractors: The John W. Cowper Co., Inc. Buffalo, N. Y.

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G HE bronze elevator doors in the main floor of the new Rand Building, Buffalo, N. Y., by reason of a new and unique method of construction, have the appearance of cast bronze.... although only the rosettes and panels were cast whereas the stiles and rails were pressed.

These distinctive doors were developed and made in our factories and illustrate again the versatility and ingenuity of our engineering department as well as the exceedingly careful workmanship typical of all JoneSteel construction.

In addition to bronze elevator doors, all hollow metal swing door units and elevator enclosures were furnished by this company.

Your files should contain our illustrated 32-page catalog. It is valuable for reference. Mailed on request.

Jamestown Metal Desk Co., Inc. Jamestown, N.Y.

JULY, 1929



Massillon Bar Joists Specified on Advice of the Engineer

THE Memorial Building and City Hall at Cedar Rapids, Iowa, built on an island, is carried on piles driven well below the river bed. O. L. Leefers, structural engineer, advised steel frame Massillon Bar Joist design for two reasons—

To decrease dead load: His engineers found that Massillon Bar Joists saved 3,350,000 pounds in floor dead load as contrasted with concrete slab construction.

To save time in erection: The O. F. Paulson Construction Company, general contractors, poured the last floor slab four and one-half months after steel work was started.

The quality of the construction is selfevident on this as well as many other structures of the monumental type—built for permanence. Ask your structural engineer what Massillon Bar Joists will do for your building. He can tell you of many details that take the Massillon Bar Joist out of the "or equal" class.

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Massillon products are manufactured and distributed in Canada by the Sarnia Bridge Co., Ltd., Sarnia, Ont.

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JULY, 1929

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