ARCHITECTURE JANUARY, 1935



BY ALBERT MAYER

OBSOLESCENCE INSURANCE-BY J. C. KNAPP

ULPTURE BY OUVEGNES

Housing in the Virgin Islands I W. POPE BARNEY; ROY W. BANWELL, ARCHITECTS

DRAWINGS BY GIDDENS

HOUSE OF LOUIS C. ROSENBERG, ARCHITECT AND ETCHER

Portfolio: Circular Windows, Gothic and Romanesque

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ARCHITECTURE

THE PROFESSIONAL ARCHITECTURAL MONTHLY

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PAGE



\$21,000 IN PRIZES

The purpose of this competition is to stimulate interest in home building and to encourage better designed homes from the standpoint of health, convenience, comfort and entertainment, utilizing the latest mechanical and electrical advances.

THE General Electric Company is naturally interested in making the American home more livable, through better planning and improved design.

In offering prizes of \$21,000 for more livable home designs, it is General Electric's hope to stimulate the skill and ingenuity of designers to bring about better health, increased comfort, greater convenience and improved facilities for the home entertainment of the entire family.

There have been many architectural competitions that emphasized exterior design. But so far as is known, this Competition is the first that places major emphasis on the utilization of modern interior equipment. Exterior design will of course be a factor in awarding prizes, but the judges will give greater weight to the skill and ingenuity with which the architect has provided for the maximum health, comfort, convenience and entertainment of the family for which the house is planned. This family is described in detail in the Competition program.

The G-E Architectural Competition is divided into four classifications, as follows:

- Class A-Small home-Northern climate
- Class B-Small home-Southern climate
- Class C-Medium Size home-Northern climate
- Class D-Medium Size home-Southern climate

Equal prizes are offered in each class, as noted elsewhere. Each competitor may submit as many designs as he wishes—in any or all classes; and each design is eligible for a prize. In addition to winning one or more of the \$1500 prizes, a competitor may also win one or both of the two \$1000 grand prizes.

Any architect, engineer, draftsman or designer, ex-

COMPETITION

54 PRIZES IN ALL

ANNOUNCES A

GRAND PRIZE for Best Small Home . . \$2500. (Best Home in Classes A and B) GRAND PRIZE for Best Medium Size Home 2500. (Best Home in Classes C and D) FIRST PRIZE for Best Small Home in Class not receiving Grand Prize 1500. FIRST PRIZE for Best Medium Size Home in Class not receiving Grand Prize . . 1500. SECOND PRIZE, in each of the four classifications \$1250. 5000. THIRD PRIZE, in each of the four classifications 1000. 4000. HONORABLE MENTION, ten in each of the four classifications · · · · . 100. 4000. Total \$21,000

cept G-E employees, is eligible to compete. The Competition will begin on January 2, 1935, and close at midnight, March 12, 1935. The judging by the Jury of Award will take place on March 19, 20, 21, 22 and 23; and announcement of prize winners will be made on March 23. The Jury of Award will consist of eleven members—seven architects representing different sections of the United States, one expert in child training, one home economics expert, one general contractor and one realtor. Names of jurors will be announced on March 19, the first day of the judging.

All entries will be judged anonymously—with only a nom de plume or other identifying device appearing on the drawings.

Prize-winning designs will be published together with the report of the Jury of Award.

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For the convenience and assistance of competitors, we have prepared a handy reference file containing architectural data on all General Electric products used in home construction or equipment.

This file will be sent free to each competitor, along with complete information regarding the rules of the competition and requirements governing plans and drawings.



LE BRUN TRAVELLING SCHOLARSHIP COMPETITION

THE Executive Committee of the New York Chapter of the American Institute of Architects, as Trustees of the Travelling Scholarship, founded by Pierre L. Le Brun, announces a competition for the selection of a beneficiary. The program will be issued about January 21, 1935, calling for drawings to be delivered about March 25, 1935.

Unfortunately the nominations, which must be made by a member of the A. I. A., were called for by January 3, 1935, and this information was sent out too late to be of much use to the profession through publication in the architectural journals.

JAMES HARRISON STEED-MAN FELLOWSHIP COMPETITION

THE Governing Committee of the James Harrison Steedman Memorial Fellowship in Architecture announces the ninth competition for this Fellowship, to be held in the spring of the year 1935.

The purpose of this Fellowship is to assist well-qualified architectural graduates to benefit by a year in travel and the study of architecture in foreign countries, subject to the approval of the committee and under the guidance and control of the School of Architecture of Washington University. To this end an annual award of fifteen hundred dollars is offered to the winner.

This Fellowship is open on equal terms to all graduates in architecture of recognized architectural schools of the United States. Such candidates must be American citizens of good moral character, and shall have had at least one year of practical work in the office of an architect, including one year's residence in the City of St. Louis, Mo., before being entitled to assume the benefits of the Fellowship. All candidates shall be between twenty-one and thirty-one years of age at the time of appointment to this Fellowship.

Application blanks for registration can be obtained at any time upon written request addressed to the acting head of the School of Architecture of Washington University, St. Louis, Mo., to whom application blanks properly filled out must be returned not later than January 18, 1935. Any requests for supplementary information relative to the rules and regulations governing the competition shall be made at the same time.

NATIONAL HOUSING ACT, TITLE I

PERMITS for additions, alterations and repairs showed a gain of 42 per cent in dollar volume during October as compared with the same month last year. In these cities the total of permits for all types of modernization and repair work issued in October this year amounted to \$10,522,620 compared with \$7,439,710 last October.

with \$7,439,710 last October. New York City led in the volume of modernization work, the total being \$6,161,236 compared with \$3,014,412, a gain of 104 per cent. Los Angeles' modernization activities jumped from \$377,775 in October, 1933, to \$879,579 for the same month this year, an increase of 132 per cent.

One of the most interesting features of the report was the volume of installations, which also are financed by modernization loans, in cities which report this activity. Cincinnati, Ohio, for example, reported only \$116,020 in alterations and repairs, and \$201,010 in installations. Columbus, Ohio, showed \$24,400 in alterations and repairs and \$93,090 in installations. In Stamford, Conn., alterations and repairs amounted to \$18,105 while installations were made at the rate of \$18,205.

Some of last month's most striking gains in additions, alterations and repairs were made by the following cities:

	October	October	
City	1934	1933	
Cleveland, Ohio	\$330,200	\$84,635	
Jacksonville, Fla	102,708	45,000	
Battle Creek, Mich	176,712	2,200	
Fucson, Ariz	37,966	17,242	
Salem, Ore	23,028	10,164	
Evansville, Ind	110,010	20,598	
Cedar Rapids, Ia	74,523	20,188	
New Haven, Conn	34,430	9,230	
Savannah, Ga	39,633	3,586	
Portland, Me	27,260	6,930	
Wichita, Kan	20,051	11,415	
St. Louis, Mo	138,693	66,318	
Houston, Tex	123,780	19,480	
Lackson Miss	120 216	12 245	

Although the Better Housing Program encourages borrowing, it is not primarily a borrowing program. Reports show that an average of five times as much cash work is being stimulated by the drive as work financed by the Modernization Credit Plan.

At the end of the canvass in five

sections of Baltimore, it was found that of every four persons pledging repairs and modernization, only one said he would have to borrow money to do the work.

G. E. COMPETITION FOR SMALL HOUSES

CO-OPERATING with the Federal Housing Administration, and to stimulate interest in small home building, Gerard Swope, President of the General Electric Company, has announced that his company will sponsor a national competition beginning January 1, 1931 among architects for designs of small homes that will provide the utmost in modern convenience and livability. Twenty-one thousand dollars in prizes will be offered to architects and designers-a total of 54 prizes, and it will be possible for one architect to win awards amounting to \$5,000. Demonstration homes will later be constructed in various parts of the country.

"This competition will enable the public to get a new vision of what an inexpensive home can be like in this new era of our national development," Mr. Swope said.

The project has been approved by the FHA. The Bureau of Home Economics of the U. S. Department of Agriculture, the American Institute of Architects, and the National Association of Real Estate Boards will co-operate in its conduct. J. F. Quinlan, General Electric Company, New York, has been named as director of the competition, with Kenneth K. Stowell, A. I. A., former editor of *The Architectural Forum*, as professional adviser.

FHA LOANS ON LOW-COST HOUSING

FEDERAL HOUSING ADMIN-ISTRATION has issued a circular telling the requirements and procedure under which mortgage loans may be insured under Section 207 of the National Housing Act.

Capitalization of low-cost projects is limited to the actual investment by the stockholders. On this they may receive regular annual dividends not to exceed 6 per cent, and special disbursements not to exceed 2½ per cent a year, provided an amount equal to that paid in such special disbursements is returned to the tenants in the form of rebates or rent.

Earnings in excess of regular 6 per (Continued on page 12)

Youngstown

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A SELECTION of articles commonly found in an architect's office was strewn about on a tabletop; a large piece of L.O.F Quality Window Glass, securely clamped in a wooden frame, was suspended over them; a photograph was taken AT AN ANGLE, looking down THROUGH the glass at the tabletop. The frame holding the glass was then removed and a second photograph was taken with NOTH-ING between the lense and the articles on the table. The two photographs are herewith reproduced. Despite the acute angle at which they were taken, the many straight lines are so faithfully reproduced through the glass, that it is practically impossible to tell which picture is which.

Hardly a technical or scientific test, it is true, but sufficiently convincing to explain, in some measure, why so many architects write a closed specification for this fine window glass. For your protection, instruct contractors and builders to leave the labels on until final inspection has been made. Libbey-Owens-Ford Glass Company, Toledo, Ohio.

The authenticity of these photographs is attested by Underwood & Underwood.

LIBBEY · OWENS · FORD QUALITY GLASS









The Washington Monument — Robert Mills, architect—in process of having its stonework repointed

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ARCHITECTURE

✤ VOLUME LXXI

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Housing in the Virgin Islands

W. POPE BARNEY, ARCHITECT; ROY W. BANWELL, ASSOCIATE

By Harold Donaldson Eberlein

N the Virgin Islands a government scheme of subsistence housing has just been launched, to be followed interval a programme of slum clearance. For both housing developments, the plans are those of W. Pope Barney, made after a careful study of conditions now existing and an estimate of the desiderata eventually to be realized.

The scheme of betterment aimed at is characterized by plain common sense; there is no place for Utopian aspirations foredoomed to failure, prompted perhaps by benevolent motives but incapable of standing the test of actuality. It is based, first, on a thoroughly realistic perception of the present state of housing, in all its aspects, and the habits of the occupants; second, on a conservative and sane estimate, the fulfillment of which it is reasonable to expect under the stimulus of improved surroundings and opportunities, planned with reference to the social and economic facts of the situation. There is no attempt to "provide pocket handkerchiefs for the Zulus," so to speak, and to force conditions and accessories of living upon those unable to use or profit by them; the provisions are gauged by the extremely simple habits and requirements of an unskilled laboring class in a kindly climate, and by the outlay economically justifiable in view of the prospects to be considered. Baldly stated, the problem was how and where to provide physically and socially adequate shelter for the lowest-income group at rentals-or instalment-purchase sums-they can afford to pay. So far as the subsistence housing is concerned, the project originated in the governor's wise desire to encourage among the people a wholesome spirit of self-help and selfsupport, with a view to reducing or eliminating the present annual deficit of the Islands.

The subsistence-housing programme is now being carried out in the islands of St. Thomas, St. John, and St. Croix; the slum clearance programme will be put into effect first in the town of St. Thomas, where the dwellings of the lowestincome group are congested and where there is urgent need of remedial action.

Whatever objections may be urged against subsistence housing or subsistence homesteading in general theory or practice, there is unquestionably sufficient justification for at least some degree of it in the Virgin Islands. It does offer a solution-at any rate, a partial solution-for the problem of dealing with one hitherto improvident, irresponsible, and none too industrious element of the colored population. Without permanent possessions and without incentive, many of them have been accustomed to exert themselves only to the extent necessary for a mere "hand-to-mouth" existence in respect of food and shelter. The plan now in operation puts them in houses suited to their needs and furnishes a plot of ground whereon to grow all their own food, and likewise raise a cash crop (ordinarily sugar-cane) sufficient to enable them to pay off the purchase price in about eleven years. The plots range in size from one to ten acres; the average is about five acres.

As a matter of fact, experiments have already been made in this direction for the past two years, with encouraging results. The reports show that more than 75 per cent of the holders so placed have paid this year's instalments before they were due and have creditable cash balances still on hand for clothing and incidentals. It is the policy first to find the man or family desirous of taking one of these subsistence holdings, and then to give the holders every inducement to become more intelligently productive than in the past. Thanks to local conditions, the operation of the system in the Virgin Islands has none of the weakness usually betrayed by subsistence-homesteading projects

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elsewhere, in which families are transplanted from an urban to a rural environment of which they have had no experience and the economics of which they utterly fail to understand, and hence court disaster.

The subsistence-housing units, as indicated by the plans, can be built with two, three, or four rooms as desired. The two-room houses can be enlarged to either three-room or four-room dwellings whenever there is occasion, without causing inconvenience or demolition. The budget allowance for the two-room house is \$550; for the three-room and four-room house, \$800 and \$1000 respectively. The cost is pared to the minimum compatible with sound structure, but the houses are adequate for the requirements and comfort of the occupants, and ultimate ownership is not beyond the reach of the lowest-income class. Costlier houses would be beyond their reach, would serve their needs no better and would only involve a discouraging burden of debt. In every case the budget allowance includes a furnishing equipment of bench, table, cook's table and cupboard; it also includes the architectural and engineering commission. The skeleton specifications are as follows:

MAIN ROOF, constructed of $2'' \ge 6''$ rafters, surfaced four sides, 24'' on centre, sheathed with common pine, surfaced four sides, over which will be corrugated galvanized iron, 24 gauge, in sheets attached by screws.

PORCH ROOF, corrugated iron lashed to $1\frac{1}{2}$ " iron pipe framing, lashing by means of woven galvanized iron wire.

EXTERIOR WALLS, concrete block 8" x 8" x 16", laid up in mortar, 1 part Portland cement, 1 part lime and 6 parts sand.

INTERIOR PARTITIONS, $2'' \ge 4''$ studding, 24'' on centre, surfaced four sides, sheathed on one side with white pine, t-&-g, surfaced both sides.

FLOOR, No. 1 common pine flooring over 2" x 8" joists, 24" on centre.

WINDOW FRAMES, built at the job from 1¹/₂" x 6" material trimmed with 4" x 7%" white pine or cypress.

WINDOW and DOOR SHUTTERS, built at the job, 11/8" batten, white pine or cypress, with three battens.

DOOR FRAMES, built at the job, 11/2" x 4", trim 7/8" x 3", white pine or cypress.

INTERIOR DOORS, 7/8" batten type, same material as partitions, 3 battens.

KITCHEN CABINET, stock wood drawers and cupboard below, cupboard above.

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JANUARY, 1935 2 HARDWARE, allowance of \$20 for hardware, nails, and flashing.

PAINTING, no paint on interior woodwork. Concrete block walls inside, and roof sheathing and rafters, to be whitewashed before interior trim, partitions, or floor are started. Exterior woodwork and metal (but not the corrugated galvanized iron roofing) to have three coats of lead and oil paint. Exterior concrete block to have one coat of plastic oil paint. CISTERN, walls, top, and bottom, to be 300-lb. reinforced concrete, water-proofed.

GUTTERS, 4" galvanized iron stock half-round, hung in galvanized iron hangers.

J

There is no provision for glazing; the climate renders it unnecessary. The shutters furnish shade, when needed, and protection in case of tempests. The natives prefer to cook in the open air, hence the cooking arrangements at the end of the living-porch, which latter has a dirt floor. The rooms have wooden floors, as many of the natives habitually sleep thereon; the flooring is treated with creosote to discourage termites. Interior partitions extend only to tops of doors, to insure free circulation of air. Closets in the rooms have no doors but only cotton hangings, to insure ventilation. The corrugated roofing facilitates the catching and conveyance of rain water to the cisterns, which afford the usual water supply. Corrugated iron is the universal roofing material of the Islands, even for the best houses. The budget includes the building of a tool shed and outhouse, at proper distance from the dwelling. These houses are not necessarily built in related groups; they may

quite as well be built singly whenever and wherever required.

For slum clearance in the town of St. Thomas, the survey of existing conditions shows that the lowest-income group, "predominantly harbor and commercially minded," swarm in dwellings manifestly unfit for human occupancy. One thousand three hundred of these are "oneroom units, approximately 8' x 10', built of inflammable materials, in most cases in continuous rows, two rooms deep." Not a few of these shacks are of the flimsiest tinder-box construction, covered with pieces of tin salvaged from discarded vegetable cans. "In 1137 of these units now live 2521 persons. Five hundred and twenty-eight units are in bad, or very bad, repair and the overcrowding of the extremely meager quarters is appalling. Some of the units house as many as 11 persons. Five hundred of



The plan provides for three stages of building these subsistence houses : a two-room unit ; a third room added ; and a fourth room added. Front elevation of the completed house is shown below



3



Living-porch side of the four-room unit. Walls are of concrete block, painted; roofs of corrugated iron; porch roof lashed to pipe supports. There are no sash, the shutters providing shade and protection from high winds. Cost per unit, \$1000

them house more than two people to the room. Cooking, washing, living, and sleeping are all done in the one room, and the partitions between family units in many cases do not go to the roof or ceiling, so that family privacy, even within the area of 8' x 10', cannot be secured. The water supply, which must be caught on the roof and preserved in cisterns, is inadequately provided for and protected. Sanitary conveniences available average one community outhouse to ten families. Surface drainage is the only disposal for refuse water from cooking and washing." Such conditions constitute slums of the worst sort, by whatever standard they be judged, and entail a heavy social cost.

The people inhabiting these shanties and tincan huts, many of whom find their chief employment in the manual coaling of ships in the harbor, cannot afford to pay more than \$1.50 a room per month. "This obviously makes it impossible for them to build and own houses, and unprofitable for private capital to supply, at this low rental, anything but dilapidated shacks and sub-standard sanitary arrangements.

The worst slum areas, it happens, are in the most central and convenient spot for the employment of those who dwell there; these contiguous districts, lying as they do along the waterfront, "offer unique possibilities in the way of inexpensive sewage connection, open recreation spaces for children and adults, space for subsistence plots, and their frontages along the Main Street and the harbor yield an element conducive to maintaining the morale of community effort toward social betterment," once some degree of radical reformation can be effected. The task is, therefore, one of reconstruction and not a matter of fresh development on a new site.

Removal of some of the population from these slum districts against their will and establishing them on homesteads is not feasible, because there is a distinct sentiment among the natives that the agricultural worker belongs to a lower caste than the town dweller. The most promising method of remedy, therefore, indicates the demolition of the existing haphazard shanty growth and the building, in this same area, of continuous rows or blocks of dwellings, with small subsistence plots at the rear. There is fortunately enough available area in these now random-built districts to admit of such rehabilitation without transplanting the population from the zone in which they find their livelihood and where they wish to be.

The cost of these three-room houses in rows, together with the land value, is \$1000 per unit. At a rental of \$4.50 per month (\$1.50 a month per room) these dwellings will yield a return of 5.4 per cent on the sum invested, against which must be charged the necessary upkeep. They are intended for rental only. They are built of concrete blocks, with corrugated iron roofing, and the specifications are in every way similar to those of the detached subsistence houses already described.

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A Critique of Knickerbocker Village By Albert Mayer

Knickerbocker Village is a large-scale housing project carried out by the Fred F. French organization in lower Manhattan. Started as a private commercial venture in 1927, the depression brought about a limited-dividend corporation under the supervision of the State Housing Board, with tax exemption, a maximum rental rate, and a loan from the Reconstruction Finance Corporation



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Photographs by Richard Averill Smith

Knickerbocker Village in New York Knickerbocker Village in New York City? It deserves especially careful consideration because it is the first large-scale housing project financed by the Federal Government since the war-time work, and because every project erected in the present early stages of the housing movement is bound to exercise great influence on its course, to advance it or to retard it. Before any detailed discussion, a list of characteristics is given, so that the reader will have a concrete picture of the project in mind.

Location and Area: New York City, on Manhattan Island. An area of 219,700 sq. ft. (about five acres), bounded by Cherry, Catherine, Monroe, and Market Streets, in the heart of the Lower East Side slum. Size of Project: Number of apartments, 1593; Cubage, 13,275,000 cu. ft. at 48 cents per cu. ft.; Total estimated cost, \$9,500,000;* Land cost, \$3,116,961—\$14.20 per sq. ft.; Construction cost, \$6,383, 039; Coverage, 46 per cent.

Total Number of Rooms: 5233 (ordinary room count[†]), $6029\frac{1}{2}$ (counting dining-alcoves or baths as half rooms; the figures on the next four items are paralleled in the same order).

Average Number of Rooms per Apartment: 3.28, 3.78.

* Of this \$8,075,000 is a loan by the R. F. C.

[†] "Ordinary room count" means that living-rooms, bedrooms, and kitchens are called rooms, as is generally the custom. The New York State Housing Board permits a count of half room for the bathroom or dining-alcove in an apartment. All rentals, number of rooms, etc., in Knickerbocker Village, in its publicity, are based on including these extra half rooms. However, as this seems artificial, a parallel series of figures based on customary count has been calculated and included. Rent per Room per Month (Including Heat and Hot Water) : \$14.40, \$12.50.

Construction Cost per Room: \$1220, \$1059. Land Cost per Room: \$596, \$517.

Average Net Room Sizes: Living-room, 210 sq. ft.; Bedroom 133 sq. ft.; Kitchen, 74 sq. ft.; Average of all, 138 sq. ft.

* * *

In appraising Knickerbocker Village, its qualities should be weighed from the socialeconomic viewpoint and from the architectural viewpoint—that of site planning, floor plan, space-quality, façade. This is a convenient distinction, though actually the social-economic



The location is on the lower East Side of Manhattan between the two bridges



Location and plot plan

and the architectural are not separable, for it will appear in this project especially that the two aspects are interacting at almost every point, and that the broader architectural aspects are largely determined by the social-economic.

The basic theory behind Knickerbocker Village is sound. Here is an ancient, now derelict, slum area where immigrants found a convenient stopping-place near their point of arrival from Europe, and where low-wage workers found employment either at home or in nearby factories. These conditions have changed radically. There is no longer any immigration. The garment and clothing factories have moved away. The neighborhood is no longer convenient to these industries, and indeed transit in the locality is not particularly good. However, it is convenient for white-collar workers and others who work in Wall Street and other business centres in Manhattan and Brooklyn. This can be seen from the location map shown herewith. The district has an attractive water-front, and its location is a sort of backwater through which none of the main traffic arteries flows, making it particularly suitable for residential development. This kind of development is paralleled by that of Greenwich Village in Manhattan, where the Lower West Side slum was eaten into by a series of speculative operations which intelligently seized on the fact that the neighborhood's character had changed, and which provided walk-to-work living quarters for those of moderate means. Many have mistakenly attacked Knickerbocker Village because they sentimentally expected lowest-rental housing to continue there, after the neighborhood was no longer suitable for it except in incidental amounts.

Another sound basic factor in Knickerbocker Village is that it provides housing for those of medium income at a rental they can afford. The housing problem in our large cities is not only a problem of low-rental housing. The whitecollar and professional groups in our large cities simply cannot find decent quarters conveniently located—either they must choose hall bedrooms and boarding-houses or they must pay an exorbitant portion of their income for good accommodations. Knickerbocker Village's location near to places of work is another excellent point. It both eases people's daily lives to keep them out of the transit scramble, and it tends to decrease the strain on the city's transit facilities.

But having said this in its praise, you have said nearly all. The two basic ideas are sound, but the specific result—Knickerbocker Village is disappointing and fundamentally depressing.

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When I noticed its individual defects, I searched my mind for some general underlying reason, because the men responsible for it are capable men. The underlying reason, in my opinion, is this: They faced an impossible problem, a set of inherently contradictory premises that were rigidly fixed. With high land value and fixed costs of financing, they had to meet a fixed rental set by the Housing Board in order to gain certain advantages, including partial tax exemption. In order to meet this rigid complex of conditions, they took it out on the planning. They had to go twelve stories in height, and they had to torture out a plan full of difficulties. I will show in a moment what this meant to the project itself. But I first want to trace its effect

on the city generally, due to the high population density involved. I am not against twelvestory buildings, if some one chooses to construct them, provided they are spaced properly so as not to incur excessive population densities. But Knickerbocker Village places 5233 people (using the customary figure of one person per room) on 5 acres, or a density of 1047 per acre—or a residential density over four times that of Manhattan Island now! Of course, this is absurd. The answer to any such density is that Manhattan has for many years been losing population, even at its much lower density-you can build more densely, but people move away. It means that a few Knickerbocker Villages can be built, and that the rest of the land can simply never be used. Its value will eventually be zero. In short, land generally will subsidize the few landowners who manage to build first. The alternative would be such a colossal overbuilding as would make any previous excess in this country look like a famine. This is the vicious kind of absurdity we get to when we build up a single piece of property without regard to the larger picture.

Now let us look at the effect of this rigid complex of land cost, financial cost, and fixed rental on the development itself. In order to reach the coverage of 46 per cent, the double perimeter plan or continuous series of dumbbells has to be used, with its numerous small courts on both sides. These dumbbells have a central corridor, in order to have a sufficiently large number of rooms off each pair of elevators



The group as it appears from the corner of Market and Cherry Streets

so as not to make the elevator cost per room excessive. Some of the results are:

I. Bedrooms placed at the back of the small courts with the window at one side.

2. The desirable corner exposure is occupied by the kitchen. As the kitchen is narrow and not as deep as the living-room, part of the bedroom is tucked behind it. In one case, where this is not so, the bedrooms of two apartments face each other across a narrow court, with consequent loss of privacy. In several other cases, the living-room of one apartment faces the bedroom of another across a narrow court.

3. Typically, there are twelve apartments off one corridor, with one apartment at each end of the corridor having through ventilation. Thus about one-sixth of the apartments have through ventilation. Most of the other apartments have only one exposure. They cannot have through exposure because of the corridor running down the centre. Most of these could have had a sort of secondary exposure at 90 degrees by placing windows in the kitchen wall. This was not done, probably, because the windows of two apartments would have faced each other across a narrow court with consequent loss of privacy. I myself think they did choose the lesser of two evils.

4. The width of central corridors has been pinched. They average about 120 ft. long and are only 4 ft. wide. As, in addition, they are without windows and are painted a drab buff, the effect is dreary. The length of the corridor is necessitated by the plan, but its narrowness

≪ ARCHITECTURE → JANUARY, 1935 7 and dull appearance are unnecessary and indicate lack of imagination. In fact, the treatment of this corridor is symbolic. The extra cost of adding a couple of feet to the width of the corridor would have been negligible. But when you acquire the habit of pinching and cramming, you instinctively pinch and cram even when there is little or nothing to be gained.

I want to quote at this point from a speech of Mr. Fred F. French, whose organization promoted, designed, and erected the project.*

"Does the high cost of land in lower Manhattan render slum clearance impracticable at this time? No, it does not. The cost of the entire 219,000 square feet contained in Knickerbocker Village averages \$14. If this property had been obtained for \$1 per square foot, that would mean \$219,000 for the total cost of the land. Interest at 5 per cent on this amount, together with amortization at 2 per cent, would come to approximately \$15,000 annually; \$2.50 per room per year; 21 cents per room per month. Inasmuch as the land cost \$14 per square foot instead of \$1, the monthly cost of the land per room to the tenant comes to \$2.94."

He misses the point here as it is missed in the development of the project. If in selecting land he felt it was worth \$14 per sq. ft., he probably knows. † But then he is so impressed by the high land cost and other fixed costs that he cramps his plan and develops absurdly high densities to get his land cost per room down to \$2.94 in rental. Let him, if he will, pay these prices for his land-as he makes no claim at reaching very low rentals in any case-let him follow this through courageously with open, sensible planning, let his monthly rental be somewhat higher as a result. He will then be developing a consistent project, one that will reach a somewhat higher stratum of the same group he is reaching now, but one that is planned for the future, not one that is just a trifle better than the past speculative operations. He would not be jeopardizing his or the government's investment, but enhancing the chances of permanent success. For Knickerbocker Village could have been planned a good deal more liberally and could still have been sufficiently cheap to have attracted the same groups; for, as I have

* Delivered November 21, 1933, to the Management Division of the Real Estate Board of New York, entitled "Slum Clearance and Knickerbocker Village." said, there is practically no accommodation for these groups in New York at prices they can properly pay. Of course, the promoters of Knickerbocker Village did not set the complex of rigid conditions which they tried to meet. It may be that the R. F. C. conditioned its loan on reaching a certain arbitrary rental. However, it is the finished project as it stands that is being judged, not the degree of responsibility of various people for its various characteristics.

What of site-planning, façade, general livability? In general, these too have been impaled on the inexorable complex of fixed land cost, fixed finance and building cost, and rental fixed without regard to them. In the first place, the plan of each of the two units is a hollow rectangle, with only narrow entries to the larger inner courtyard or garden. This creates a menacing impression to any one passing on the street-great lengths of red brick wall extending high above the eye's normal angle of vision. From the point of view of the passer-by, separate speculative buildings would have been more interesting than these relentless barracks of brickwork. The promoters claim to have done an enlightened job, but I simply shudder to visualize the impression if surrounding owners were to build so that there would be similarly enlightened jobs on both sides of the narrow streets. The projects would gravely damage or ruin each other. Either that, or Knickerbocker Village expects property under other ownerships to act permanently as its lightshafts because it was built first. Let property owners generally absorb the implications of this alternative before they glibly applaud and back such operations.

From the point of view of the inner court, it would have been preferable too to have had a generous opening left at one end of the rectangle at least. Though these courts each measure two-thirds of an acre, the scale is wrong. The uninterrupted high surrounding walls produce an impression of confinement. But again, the planning is too tight to permit the loss of possible rooms. If it is argued that openings were not made in order to retain privacy as against the surrounding slums, there are two answers to refute this: First, that the whole development is predicated on the ultimate eradication of the slums; and, second, that the openings could have been made to face the playground between the two units.

I cannot describe the façades as other than depressing. The length seems interminable. This is due in great measure to the plan, whose frequent narrow courts make any rhythmical

[†] I will not here discuss the question of whether the government should lend its funds on land at such a price. My views on this are definite, but such a discussion would lead too far afield from the purpose of this article.



Detail plan of the northeast corner of the east building on a typical floor. The project was designed by John S. Van Wart, architect, with Kenneth Franzheim acting as supervising architect for the R. F. C.

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Living-room of a Knickerbocker Village apartment

composition difficult if not impossible to attain. If their spacing and proportions were different, they might be effective in creating a plastic sense of masses. But as it is they are simply unpleasant, badly scaled interruptions which do not architecturally relieve the impression of relentless expanse. Nor do the windows serve to relieve this impression. They are irregular in size and spacing and heavy in scale. If doublehung wood windows had to be used, at least the centre mullion could have been considerably narrower, which would also give more light in the rooms. One would have preferred steel casements, both from the point of view of the façade and of the light within the rooms. I suggest that when these windows are repainted, they be painted in the red of the brickwork instead of light buff as now. They will be less disturbing.

No portion of the roof is made available for the tenants generally—there are some private terraces. This is too bad, because one justification for the tall building is the sense of freedom one gets in the magnificent panorama. The views from the roof at Knickerbocker Village are very fine, and I am particularly sad that they haven't been made available.

As to community facilities, the requirements in a development such as Knickerbocker Village are by no means clear. The people who will live there are largely from the white-collared and professional groups, whose main reasons for moving there are convenient access to work and lower-priced accommodations than they can get elsewhere. They are independent people whose circle of friends extends to many sections of New York. Whether they will develop community life in the ordinary sense is highly problematical, and I should think unlikely. For this reason, I don't consider the question of the adequacy of these facilities can be profitably discussed as yet. The playground I would judge to be adequate in size, for the present at least.

On the whole, then, Knickerbocker Village does a disservice to the theory of large-scale housing. No doubt it marks an improvement over typical speculative apartment-house construction in New York City. But it has not begun to shake itself loose with any completeness from the old general theory of speculative building, from

the cramped planning, from the unimaginative, almost instinctive economies. The result is that it has done just a little better than speculative housing, but it has failed to assimilate the enormous strides in housing theory that the last five years have developed in this country. I am aware that the development is stated to be 98 per cent rented. But this doesn't mean much. Most new buildings are fairly well rented to start with. In addition, there has been a practically complete cessation of apartment building in New York for four years at least. But when building does open up again on any large scale, when the accumulated knowledge of good planning is utilized, Knickerbocker Village will not stand the test. The life of a building is many times longer than its first two or three years. Large-scale housing must not be judged by this example. Large-scale planning demands large-scale imagination. Freed from the irrelevant limitations of small, badly shaped sites, given both physical and social control of significantly large areas, it must also discard small ideas. It is capable of finer planning because of its liberation from hampering limitations, because of inherent economies as distinguished from the speculatively employed economies which are not economies in the long run. Its scale makes possible a human and architectural synthesis that gives new freedom to the spirit. Not the old freedom, which belonged to the speculator who got there first, but freedom within the framework of that larger and more important unit, the city of the future.

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Sculpture in Concrete-Cast and Tooled

Sainte Vierge, from the Calvaire of the Eglise de Roye



Saint Jean, from the Calvaire of the Eglise de Roye



The Christ, from the Calvaire of the Eglise de Roye

Photographs by Regis Lebrun

RAYMOND COUVEGNES, SCULPTOR & ARCHITECTURE >> JANUARY, 1935

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Christ and His Mother —one of the Stations of the Cross in the Eglise de Roye, as are the other examples on these two pages



Christ Comforts Women of Jerusalem



Photographs by Regis Lebrun

One of the Falls

Simon Helps Christ to Carry the Cross



Christ Is Laid in the Sepulchre



Photographs by Regis Lebrun

Christ Is Anointed with Oils

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Calvaire, Eglise de Beuvraignes Photographs by M. Dauphin Saint Martin, Eglise de Beuvraignes





A detail of the Christ in the Calvaire of the Eglise de Roye, showing the texture of the concrete as tooled after being cast

Two inserts in the brick wall of the Hotel de Ville of Montdidier M. Dauphin





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Obsolescence Insurance

THERE SEEMS TO BE NO GOOD REASON FOR OUR CUSTOMARY ASSUMPTION THAT A NEW BUILDING MUST NECESSARILY DETERIORATE FROM THE DAY IT IS OPENED

THERE seems to be, here in America, a theory that buildings are, in their nature, a deteriorating investment. I believe this theory to be basically false.

A building consists of two kinds of investment: one which does deteriorate and finally disappear; and the other which does not. In a building that is normally sound, a large proportion of the investment is of a nondeteriorating character. The deteriorating part consists, as you know, of the superficialities, the accessories, and the various services. The thing that causes our buildings to be thrown on the scrap heap is the failure to distinguish between those two classes of investment. Today, a building becomes unprofitable, and is torn down, merely because the deteriorating factors are not segregated and then given scientific, periodical attention.



There is a quite different attitude toward building investment in Europe-in fact, almost everywhere, outside of America. Such investments (and their earning power) are constantly maintained through a regular, thought-out plan, whereby the deteriorating factors are never given a chance to ruin the building.

As an illustration, the San Juan Hospital at Manila has recently come to my attention. Incidentally, this is the oldest hospital under the American flag. It was built in 1575, and is today a thoroughly modern hospital in every respect, with modern operating-rooms and modern service throughout. The point is, this hospital has progressively kept itself modernized.

I suppose that one of the reasons why most American buildings do not follow this process of step-by-step modernization is our particular practice of bookkeeping, as it relates to amortization reserves. The theory on which these reserves are set up is to write off each year a small percentage of loss on the investment. In very few cases is such an entry

By J. C. Knapp Vice-President, Otis Elevator Company



reflected in actual cash in hand. It is merely bookkeeping. Now this theory contemplates that at the end of twenty-five or fifty years the building will be useless; and, therefore, the investment must be written off. Such a practice has always seemed to me basically wasteful and unsound.

A far more justifiable basis is to be found in the principles of obsolescence insurance. Briefly stated, obsolescence insurance does not recognize that ultimate loss in the basic structure is either necessary or inevitable—that is, provided the su-perficial parts, together with the building's services, are properly cared for and renewed on a systematic basis.

Obsolescence insurance virtually says to the building owner: You have already provided a bookkeeping fund to compensate you for the total loss of your building in years to come. This you call amortization reserve. Instead of a mere bookkeeping entry, you should spend a part of this fund for the renewal of what really deteriorates-and thereby save the building. Spend this part regularly, as conditions de-velop. Use it for the purpose of maintaining your property at its full earning value. With such a regular and continuous programme, the outlay each year will be found to be moderate. You can pay for this modernization programme as an integral part of the building's operation; and it will prove a scientific protection against time, wear, and tear. In fact, it will prove just as practical as your insurance against the fire hazard-and just as necessary. It will keep the value of your investment intact, and it will maintain, and even increase, the building's earning power. Do this, and you will roll up a growing good-will and a growing property value, which

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now are so often denied you through your old method of letting minor things become out-moded.

Naturally, for building owners to follow this advice there must first be set up an adequate routine. This should consist of a periodical survey and examination of the building, say, once a year. Then a decision should be reached as to what must be done. This settled, the money set aside for obsolescence insurance in that year is appropriated to pay for the improvements determined upon. Once started on this path, common sense will dictate the course for future years. Visible things will usually get the first attention, because such defects quickly prejudice both tenants and visitors against the building. When these first eye-sores have been cured, the functional apparatus will have attention. These are such items as water service, electric service, and things similar. By this method the building will always hold its strong place against its newer competitors. And it will also have what they have not -all the added advantages that time, reputation, and location bring.



With proper education in this country, obsolescence insurance and all that it implies will eventually be understood. For the building owner it will mean the adoption of a method whereby, say, once a year, a really scientific survey of his build-ing is made. This survey will determine just what changes and improvements are necessary to keep his building in the front rank.

Now, to do this will undoubtedly require the services of an architect. Once this practice is established, why should there not be an arrangement made between the architect and the owner whereby the architect continues to have an official connection with the building after the building is completed? For a small retainer, the architect would agree to examine the building once a year and formulate for the owner the changes and improvements to be made that year. After these have been agreed upon, the architect would handle the contracts and supervise the work, charging therefor a percentage based on the actual cost. In this way the architect would retain a vital interest in the building indefinitely. First, he would build it. Then, as the years went along, he would see it grow into a constantly more modern structure. He could incorporate new materials and practices. It would be *his* building, not for a short time, but always.



The building manager is also interested in true obsolescence insurance. Today, the great majority of buildings are handled by very able managers or superintendents. They are generally familiar with the ordinary problems of operation and maintenance. They may even suggest improvements or changes, but I think this is rarely done under a scientifically formulated plan. There is, for instance, no professional person whose business it is to see that the building is kept scientifically in a healthy economic state, attrac-tive and modern, inside and outside, -comparable to the newer buildings in the vicinity.

In that capacity the architect (and preferably the *original* architect of the building) is certainly the best suited to advise. His rôle should be, perhaps, somewhat similar to the one played by the family physician. He not only brings the child into the world, but looks after the child's health through youth, manhood, and thereafter. The architect certainly knows more about his own building than anybody else. Why should he not capitalize on it, to his own advantage and to the advantage of the building?

Before broaching this subject, I took the precaution of obtaining the opinions of several architects and building managers. The opinions were encouraging. One vice-president of a large real-estate firm said:

"In a few cases owners with whom we deal *do* retain architects as permanent consultants on their buildings. They are paid on a yearly basis and make periodic inspections of the building—and we find that such buildings are given better care than those which do not take advantage of such services."

From this, it would appear that if the architects become seriously interested in modernization work, and will formulate a practical method of approach, the much harassed building owner will welcome the move.

But there are other people, also, who are interested in this question. There is, for instance, the contractor. He, too, has a modernization technique to develop. Contractors today are far better equipped, technically, to execute *new* work than they are to modernize old buildings. This condition is already being remedied.

Also, the building manufacturer is changing his concept of what his basic business consists of. In the past he has had an organization based on the sale and financing of work for new buildings. This old set-up seems now to be changing rapidly. Some of the larger corporations are now putting the emphasis on modernization—and they are going ahead. I believe that if the building supply men will get behind the educational features of obsolescence insurance, a foundation will be laid for a large continuing business in modernization, even after the depression is over.



Then there is that very important individual, the mortgagee. Let us see what he does at the present time: Before loaning money on real estate, he tries to be very careful. He searches the title; he makes a very painstaking appraisal; he insists that the fire insurance on the building be kept up; he watches to see that the taxes are paid; and then, he leaves out, perhaps, the most important of all protective provisions-obsolescence insurance. He makes little or no provision against the melting away of his equity through obsolescence. At present, he permits the owner a free hand to determine whether or not the value of the building shall be destroyed through needless depreciation. During the time that the building is supposed to be the security for the money lent, its value and earning power are disappearing; and he is helpless to protect his equity. When the mortgagee wakes up to this, he is going to insist that the principles of obsolescence insurance be just as carefully followed as the other protective measures which he now watches so anxiously.

I think we need a revision of our practices in operating real estate. Up to now, the development of the country has tended to obscure the mistakes and wastefulness of present methods. These are now becoming more apparent, so that it is not hard to visualize a more scientific method of operating our properties.



The south side of Washington's new Triangle, Constitution Avenue from under the shadow of the Washington Monument

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FAVORITE FEATURES



Many of the architect's creations fail to measure up to his expectations. Here is one of a series, however, that satisfy in a measure the designers themselves (Scale details overleaf)

A California Ranch House PALMER SABIN, ARCHITECT « ARCHITECTURE » JANUARY, 1935 17





The Mediæval Gallery, looking south. The columns and doorway are from Commanderie de Norroi, twelfth century. Walls are of shot-sawn Indiana limestone

St. Louis Art Museum Installations

Mr. Louis La Beaume has been devoting much of his time in the last five years to the work of revamping the installations at the City Art Museum, St. Louis. The photographic illustrations herewith show some of the results



Morlaix Gothic Court — the southeast section. Stone doorways are examples of transitional Gothic Renaissance. Throughout the Museum court of the

Throughout the Museum some of the backgrounds are authentic entities, others are compositions of authentic fragments, and some backgrounds are merely suggestive

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LeRoy S. Robbins A room from Charlton House (circa 1723)



Alexander Piaget

Morlaix Court. A carved oak staircase from 14 rue Grande, Morlaix, France (circa 1510– 20)



A room from Georgetown, Va. (circa 1780) Pholographs by Alexander E. Piages A room from Charleston, S. C. (circa 1750)





A room from Newburyport, Mass. (circa 1810) Photographs by Alexander E. Piaget A room from Salem, Mass., by the architect and wood carver, Samuel McIntire (circa 1800)





1-SHINGLES

SOME one has said that after the foundations of a building the most important thing is the roof. To combine beauty with weatherworthiness and reasonable freedom from repair, is a large order for any architect.

Tongue-and-groove sheathing is generally the base on which wood shingles are applied. Some think that strips are better in that they prevent rotting because of ventilation on the underside of the shingles. However, sheathing does add to the insulating properties of the roof. If the roof is too flat for a satisfactory application of shingles (generally a one-to-two slope is considered the minimum), then no matter by which method they are put on there will be trouble later.

If shingles are dipped in creosote they will undoubtedly last considerably longer than otherwise. Red cedar shingles and those of cypress have established enviable reputations for longevity. It is foolish to spoil good shingles with poor nails. The nails should be zinc-coated or of copper.

copper. Shingles are generally sawed or split. Hand-split shingles will naturally vary somewhat in thickness, which may be desirable in giving a roof texture. This effect is sometimes achieved by doubling shingles at random, or better still, doubling them every so many rows.

Some cities have passed ordinances which prohibit the use of inflammable materials for roofing purposes. To be used instead there are many clay products on the market which give very satisfactory service (Fig. 1A). For example there are shingle-tiles, as they might be called, which are laid in substantially the same way as a wooden shingle, but somewhat more care must be taken in their handling. Their nailing also must be done with care so that they will not be broken or cracked. The nails, of course, should be of non-corroding material, and the tiles should be laid on a saturated felt to give a cushioning effect, as well as to render some assistance in keeping the water out. The end of the tiles should be held in place by non-rusting clips.

Asbestos shingles are deservedly popular, and are laid in the manner described above for those of clay. These shingles are obtained in a sufficient variety of shapes and colors to satisfy almost any taste. Besides this they weather very well.

Better Practice By W. F. Bartels

ROOFING

A less expensive substitute for the wood shingle, but one which is also fire-retarding, is one of asphalt. This too comes in many colors and weights. There are as a rule three weights, the heaviest being the best. These shingles are preferably laid over a sheet of saturated felt.

2-SLATE AND TILE

In choosing slate for the roof the architect is selecting a material which will last for many years when properly laid. Therefore, after he gets through choosing the various colors and wondering which ones will fade and which will not, and if the sum total will give the blend he desires—he must make one important decision, namely, to employ a good roofer.

There are other details to which the architect must give consideration. Machine-punched holes in tile are generally accepted as being the best and should therefore be called for. There are generally two for the average-size slate, and four for the large ones. The holes are kept at least one and a quarter inches from the edges. The nails holding the slates must be carefully driven, as otherwise they will cause untold harm. If driven in too far they will crack the slate itself. If left protruding they will probably cause the slate on top to be cracked when it is walked on. It is well to specify a cant strip so that the slates may all be laid evenly at start (Fig. 2A). Customary practice projects the slates two inches at the eaves and one inch at the gables. Where slates are laid over concrete, or in places where there is danger that they might become loose, there are special clips on the market for fastening them and insuring that they will stay where placed. The courses next to the ridges of the roof should be laid in elastic cement, and all exposed nailholes covered with the same material. The ridge itself may be of metal or of slate (Fig. 2B). When of slate it is generally of the saddle or comb type. The former is not unlike the ordinary tile used on parapets, in that each successive one laps the one

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in front of it. The comb ridge generally gives a little overhang, which helps the weathering somewhat. If the metal ridge is used it must of necessity be non-rusting, and is better when attached to the ridge piece.

Slate may also be used on flat roofs, and when thus used it is generally laid in tar on a built-up roof.

Tiles are widely employed where a roof is subjected to considerable wear, and where there is not too much limitation on the weight involved, either on the roof or on the owner's pocket-book. The under portion of the roof is what is known as a built-up roof. The tile is selected for quality, color, absence of chipped edges, and the ability to withstand severe weather without chipping. Enough expansion joints must be specified so that there is no danger from expansion or contraction. These joints should run through the cement work on which the tile is laid, and go right down to the felt on which the tar or pitch has been poured (Fig. 2C).

3-METAL ROOFING

Roofing paper under all metal materials adds to the insulating qualities of the roof. But the paper must be free from acids and other substances which are deleterious to the metal placed next to it. Particularly is this true of tin, so that all saturated felt papers must be kept from coming into contact with it. When tin is to be used for the roofing the gauge of the plate, as well as the amount of the coating, should be specified. One should call for the under side of the tin to be protected by a coat of iron oxide mixed with linseed oil. The seams will be ribbed (standing or flat) as the architect sees fit (Fig. 3A).

When copper is used there is something besides the expansion that must be taken into consideration. It should not come into contact with other metal, in order to prevent electrolytic action. Then too, it should be laid over sheathing only, that has been carefully nailed so that projecting nail heads will not puncture or dent it. The flux to be used should be specified as being rosin, or else great care used to see that if acid is used it is "killed," *i. e.*, its strength reduced by the admixture of zinc with it.

Zinc is not as widely used as copper or tin for roofs. It is likely to be very brittle in cold weather and care must be exercised to prevent cracking it; it should not be walked upon.

Galvanized iron is generally stamped by the manufacturer as to its weight, gauge and maker. Should it be desired to protect it further by painting, the galvanizing should first be washed with a solution which any first-class painter's supply house can furnish, otherwise the paint will not stick.

Aluminum is another material that can be used for roofing to advantage, providing there are no gases present that would injure it.

4-COMPOSITION; BUILT-UP ROOFS

The tar-and-gravel roof, or the tar-and-slag roof, is probably the oldest form of what might be termed a built-up roof. These roofs were generally subjected to but little wear. The architect was bothered but little by this type of roofing, beyond seeing to it that there was the proper pitch and percentage of gravel used.

Built-up roofs are being used on many apartment-houses which cannot afford any other kind. High

heels play havoc with this type of roof on a hot day. Now that the NRA code prohibits a roofer giving more than a two-year guarantee on any roof, it behooves the architect more than ever to see that the roof is properly described in his specification. First to be considered is the weight and quality of the paper. Seldom is it advisable to use a paper lighter than fifteen pounds to the square. On wooden roofs there should be a layer of building paper laid down first. This is called the "dry sheet," because it prevents the tar from going through to the sheathing. On top of this is nailed a sheet of saturated felt, or one that is impregnated with asphalt or tar. Then on top of this the successive layers are mopped down. The lap must be specified. It generally is such that two layers of the felt cover the nailing of the first layer of the saturated sheets. Then the end lap must be specified. It is generally twelve inches. The top sheet should be one which the architect has selected for wearing qualities, and in all likelihood it will be mineral-surfaced. It must be laid so that upon drying out the sheets will not have been so poorly lapped that the edges will pull apart (Fig. 4A).

Pitch or tar plays an important part in a good roof, and should be given careful consideration by the architect. First, the pitch should not be allowed to be heated to over four hundred degrees. Its melting point should be such that it will stand up under the summer sun without running. And finally, felt should not touch felt, if the best job is to be obtained. By so doing ugly blisters and air pockets will be prevented.

Insulation is an important matter in any roof. With a built-up roof insulation can be had by laying cork or other insulating material over the foundation before the built-up roofing is applied.

One owner with an ingenious turn of mind tried the following experiment on his built-up roof. He painted the entire surface with aluminum paint. He found that the tempera-



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ture in the air space between the roof and the ceiling was eighteen degrees cooler than the similar space in his neighbor's house, which was identically constructed but not painted.

Very often, to save wear on a composition roof, wooden platforms or runways are erected to take concentrated wear such as is caused in hanging up clothes. While this item does not come under roofing, but rather under carpentry or iron work, it is well to insert it while the roofing specification is being written. Should the screws or bolts for any support penetrate the roofing, a pocket should be formed and this space filled with pitch or mastic (Fig. 4B).

Canvas is often used for roofs where it is desirable to deaden noise, and where the traffic is moderate, such as on sleeping-porches. Here canvas is very desirable. After the weight and quality has been decided upon, the chief item to be considered is the manner in which it is laid. The best way undoubtedly is that it be laid in a paste of white lead and linseed oil, and that the edges be nailed down with tacks long enough to penetrate the boards. After the canvas is laid it should be given at least two coats of lead and oil, being sure that each coat is allowed to dry thoroughly before the next is applied.

5-FLASHING

It has well been said that a roof is no better than its flashing, and when the architect takes a guarantee on a roof he will be wise to have it include the flashing.

Examination of an ordinary speculative-builder type of flat roof shows that the only flashing done is to turn up the roofing material along the wall and stick it in place as well as possible with mastic (Figs. 5A and 5B). A slightly improved type is where a cap flashing is added to the job (Fig. 5C). This generally is of any available metal, giving little or no attention to its durability. These two types should be strictly avoided, but the contractor will often attempt to use them unless the architect is very specific in his demands.

The flashing to be used is, of course, one that will not corrode. The base should be set in the layers of the built-up roofing (Fig. 5D), and if it is over a wood deck then it is well to nail the flashing when it is set. The cap flashing should extend through the wall, if this is possible. The objection one might have to flashing extending through the wall, in that it breaks the bond, is overcome by a flashing which will bond in the wall by a series of keys or dovetails. On the wall side the base flashing should extend up at least eight inches, and the cap flashing should come down over the top of this at least three inches. Where flashing is desired and it is impracticable to use a cap flashing, there are on the market blocks which are built in the walls and have a groove to re-

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ceive the flashing (Fig. 5E). Whether this type of block is used, or whether a joint is raked out for the flashing, the edge of the flashing should be turned and not inserted straight. Then when the joint is caulked the lead has something to hold against (Fig. 5F).

Projecting belt courses, and other projecting features such as pediments, should be flashed (Fig. 5G). On jobs such as brick veneer over wood frames, it is essential to have good flashing. Four inches of brick work, as any honest bricklayer will agree, is but poor protection against a continued driving rain. Hence over all windows, doors, and other openings it is desirable to have good flashing, properly applied.

Flashing itself may be of galvanized iron, copper, zinc, or lead. These must be judged by their weight and gauge. Then there is the aristocrat of flashing—the leadcoated copper sheet. This is specified both by the weight of the lead applied per square foot, as well as the weight of the copper sheet itself.

6-GUTTERS, LEADERS, ETC.

Gutters and leaders when of galvanized iron are generally 24 gauge. If it is desired to have them of a different weight it should be so specified. Copper usually comes in several weights, for the same use, and hence should also be called for by weight or gauge. The copper used for gutters and leaders differs from that used for flashing in that it is "hard" copper as compared to the soft material used for flashing. The soft copper is much more suitable for flashing, because it does not "fatigue" as quickly as the harder metal.

Leaders should always be protected by baskets or strainers. Where the guard is on a flat roof it is better to have it of the bee-hive or dome type than to have it flat or sunken (Fig. 6A). Papers or rubbish gathering against it will not be so likely to cause a stoppage as is the case with the sunken type.

Should it be necessary to discharge a leader upon a roof, a practice that is not at all desirable, the water should be diffused by means of a metal spreader.

Serious consideration should be given to scuppers in any building having a flat roof. Conditions may easily arise where it may well be worth while to have them. They are also desirable in buildings which are sprinkler-protected, to allow for the discharge of the water when the sprinklers operate.

On sloping roofs, crickets or saddles, in such places as back of chimneys, must be provided (Fig. 6B). Heavy snow lodging in such a place can do untold damage if not guarded against. Apropos of snow, it may not be amiss to remember that snow guards are also important, and should, of course, be of non-rusting metal if they are to survive many winters (Fig. 6C).

Scuttles should be covered with metal, and the edges also, so that there is less tendency to stick if the roof is of tar (Fig. 6D).

7-BULKHEADS AND PARAPETS

Bulkheads are often left unfurred, and plaster is applied directly upon the inner surface of the wall. Bulkheads on the roof are generally in the most exposed places possible. The result is that the weather beats into the walls, and unless properly protected the paint and the plaster soon start to crack and come off. It is essential to see that such places are properly protected, either by furring or dampproofing. Another way is to cover them entirely with the roofing material.

8-SKYLIGHTS

There can be no doubt that the successful skylight consists of two parts. The first is the structural part, providing the support for the second part; the latter taking care of the glass and general weather-tightness of this glass cover. Particular care must be taken in the case of a skylight covering a large span. Ob-

viously there is considerable strain. There must be room for the metal as well as the glass to expand and contract, while the skylight must continue watertight. Skylights are generally made so that any condensation runs down the ledges and thence out through weep-holes. The more simple the construction is, the less chance there is for it to rust because of lack of paint, and the more likely it is to be satis-factory (Fig. 7A). The glass in skylights will vary, from ordinary glass in very small skylights to heavy wire-glass in the larger ones. There is on the market corrugated glass that is not only strengthened because of its corrugations, but the latter also serves the commendable purpose of diffusing light.

The element of protection, also, is one to be given consideration in skylights. Many cities require that all skylights have heavy iron screens over them, and as these screens are fairly expensive it is well for the architect, before finally awarding the roofing contract, to see that these are included.

Many architects call for a practical test of the roof's watertightness before accepting it. This can be done by flooding, if it is a flat roof, or by a sufficient stream of water played upon it if the roof is of the sloping variety.



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CUENCA, SPAIN

A SERIES OF DRAWINGS IN SEPIA PEN-AND-INK AND WASH — BY PHILIP H. GIDDENS

Drawings from Spain

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From the drawing by Philip H. Giddens

Gerona, Spain



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From the drawing by Philip H. Giddens



From the drawing by Philip H. Giddens

GERONA, SPAIN



Exterior walls are of Chestnut Hill stone, supplemented, as will be seen in other photographs, with stucco. In designing the stonework Mr. Sternfeld was influenced by the masonry along the Normandy Coast and in the vicinity of Mont St. Michel



House of S. Lloyd Moore Frankford, Pa.

HARRY STERNFELD, ARCHITECT



FIRST FLOOR PLAN

The plan is unique in that the owner's requirements as to room dimensions were difficult of accomplishment upon a lot only fifty feet wide. The length of the house, taken on a longitudinal axis of the living-room and dining-room out to the porch, is practically fifty feet in itself, yet there is a passageway reserved at the side to enter the garage

Photographs by J. Frank Copeland



The staircase tower as seen from the east. On the miniature balcony under the stair window potted plants are put out to sun

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Looking across the entrance hall from the doors to the living-room. Ceiling is of cypress boards and mouldings. Stairs of white oak, radiator grille of wrought iron. Interior woodwork has been painted a dark rich blue, the oak floor also darkly stained

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North end of the living-room, with a door to the triangular porch. This room, like every other room on the first floor and every bedroom, has cross draft

The house as seen from the end of the entrance driveway, with the garage doors visible at the right rear. Roof is of black slate

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Thursday, November 1 .- Dropped in at The Museum of Modern Art to see a vigorous piece of propaganda for better housing. One of the most striking features is a faithful reproduction of a three-room apartment in one of New York's famous dumb-bells. One has but to walk through those three dark, crowded, and dirty rooms to share in the growing realization that this sort of thing is a disgrace to civilization. It would be a great thing if this exhibition could be moved about the country to extend its leavening influence. Incidentally, the Museum has published a book-let, "America Can't Have Housing," edited by Carol Aronovici, and containing short and succinct expressions of opinions from Sir Raymond Unwin, Robert D. Kohn, Lewis Mumford, Catherine Bauer, Edith Elmer Wood, Henry Wright, and others who, both here and in foreign countries, have been putting their shoulders to the wheel of modern housing.

Friday, November 2.- Better Homes in America formally opened its "Little House" on Park Avenue for a press preview today. It seemed something like an Architectural League Show opening, in that one was continually falling over carpenters and painters in the last throes of finishing the job. The furnishings, all bought within a budget of the thousand dollars, are skillfully chosen and disposed. Mrs. Annette Hoyt Flanders has designed a very lovely carden in the restricted plot. One is ings, all bought within a budget of two somewhat startled to find fairly wellgrown espaliers against the house, but the theory is that the garden costs one hundred dollars per year for five years, after which two more years are supposed to have matured it. The effect now, therefore, as it opens, is that of a sevenyears' development. In my search after all the latest developments of building ingenuity I was eager to find what kind of screens had been used, only to be told by Mr. Wendehack that they had not thought about these as yet.

Saturday, November 3.—The number of subjects and the variety of these that come to an editor's desk is at times staggering. For instance, we are asked this morning to get behind ex-Governor Walter J. Kohler, of Wisconsin, in making the State more cheese conscious.

Monday, November 5.—In the speech recently made by Colonel Horatio B. Hackett, Director of the Housing Division, PWA., before the American Institute of Steel Construction in Chicago, there are one or two official revelations of our failure to get any low-cost housing or slum clearance done. Out of some five hundred thirty-three applications from limited-dividend corporations, only eighteen ever received tentative allotments. Out of the eighteen, only seven eventually survived, re-



The Editor's Diary

ceived their loans and began to build. Then came the change of front with the government itself doing the building. Thirty-nine projects have been budgeted, on some of which demolition is under way, upon others the process of acquiring land is slowly proceeding, while on others the preliminary investigations are still under way.

Wednesday, November 7.—The expressions of opinion drawn from various sources by our Guest Editor in the October issue are producing a few reverberations. This matter of architectural education, for instance: Are the schools dumping upon the country a yearly flood of new architects who have now, and may have for some time, little or nothing to do? Goldwin Goldsmith, who is chairman of the Department of Architecture at the University of Texas, points out the fact that this picture is not quite so had as that the save:

not quite so bad as that. He says: "While architectural schools may have from fifty to several hundred students each year, I imagine they do not graduate very many. We, for example, graduate quite a bit less than 10 per cent of the students, and we are cutting down this proportion by stiffening the work. We do not expect many of these students to become practicing architects but feel that they are well equipped by their education to enter other fields. If this were not so we might feel that the schools were flooding the country with architects who, even under former conditions, would be unable to make a living in the profession. I am seriously concerned over the present situation; and if it were not for the quite satisfactory general education which the students get in a five-year course, I should almost feel that it was time many of the schools were laid away in camphor for a decade and possibly permanently.

Thursday, November 8.—Continuing the series of luncheons at the League, in which the plight of the building industry is discussed, we had today Lawrence Cummings, vice-president of the Real Estate Board of New York. We have heard a lot about the attitude of the real-estate men toward housing and the injection of government capital into building, and here was a true representa-

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tive of that interest. R. H. Shreve and Kenneth Murchison told us what a good fellow he is, so we'll take their word for it, but the gentleman's ideas had to come unsponsored and they were not so good. He believes, for instance, that since we have too many building vacancies now, it is absurd to build any more space—a perfectly rational idea except as applied to low-cost housing. The real-estate interests never have met the needs of the low-income group, and probably never will. Why they should object, therefore, to these needs being met in a measure as a public duty is not clear. The only sort of housing with which the new low-cost housing competes is a form of shelter that has always been, by law, unfit for human habitation.

Saturday, November 10.—The officials of the New York Chapter, A. I. A., are becoming very much excited over what they consider to be the Treasury Department's threat to eliminate the private architectural office. I must confess that I have not been able to share their excitement and fervor in the counter attack. Most of the dissatisfaction with the present arrangement for designing public works seems to come from the large offices which, of course, can have no part in this program. The have no part in this program. smaller man, however, has an increasingly important part, and seems to like it. Possibly it is his turn to render this public service and be paid for it. I am inclined to think that it is no more than a temporary opportunity for getting some post-offices designed efficiently and promptly. Incidentally, the supply of post-offices must be approaching rather closely the need for such buildings. We can't go on building new ones for ever. The government's housing program, which seems likely to be the larger part of the public-works drive, is to be handled in the respective localities.

Tuesday, November 13 .- Speaking of architectural education, as we have been recently, S. W. Mosher, examiner for the Municipal Civil Service Commission, City of New York, tells me that a rather surprising fact was manifested in a recent examination. An architectural renderer was being sought, and there were fifty-three candidates for the job, of which number only seven passed. The disturbing fact, however, is that five of these seven were educated either en-tirely or in part abroad. The candidate with the highest rating was born in Budapest, and educated there and in the Royal University of Hungary. The second highest rating was given a man born in St. Petersburg, educated in the St. Petersburg High School and the Insti-tute of Civil Engineering in the same city. The third highest rating was that of a man who was born in Scotland, educated at the University of St. Andrews and the Glasgow School of Architecture. Fourth was a man who obtained his elementary and technical training in Austria and who later obtained his master's degree from the Massachusetts Institute of Technology.

Wednesday, November 14.—At a meeting of the Chapter today, the certificates of fellowships as announced at the last convention of the A. I. A. were distributed to the New York Chapter's new Fellows. Mrs. Raymond M. Hood was the guest of honor, to receive the certificate of her late husband. Other recipients were Walter D. Blair, Thomas H. Ellett, Leon N. Gillette, Ely Jacques Kahn, William F. Lamb, James Gamble Rogers, Clarence S. Stein, and Henry Wright.

The president, Ralph Walker, read a number of replies received in answer to a questionnaire recently sent out by the officers, asking where the profession is going and why. These answers blamed practically every known enemy of mankind and civilization as the cause of our troubles, save only the sabre-tooth tiger, which for some reason was overlooked. It would seem that the only way in which such a mass of troubles could be discussed intelligently would be to appoint hard-working small committees for the various subdivisions-publicity, public-works relations, fees, local civic activity, and the like, and then devote one general meeting to the discussion of each of these committee reports. An open meeting can reach a conclusion on one item discussed, but certainly not on the general subject of what is wrong with the world.

Friday, November 16.—There was talk a year or so ago of converting the site of the Century of Progress into an airport after the fair had closed. And now the Mayor of New York proposes to enlarge Governors Island, and convert it into a municipal airline terminal, reached from Manhattan by a subway. Airports having been crowded out of our city plans by their late arrival, are edging in where they belong.

Wednesday, November 21.—Clarence E. Farrier, who had much to do with the success of the Century of Progress Exposition, having had charge of planning, designing, construction, and operation, is off to a new job at Knoxville, Tenn., where he will be co-ordinator of the Development Organizations, Tennessee Valley Authority.

Thursday, November 22.—The editors of journals of various branches of industry have gathered here in Washington to interview those who are responsible for policies, in order to find out as much as we can of the background of today's industrial development. Beginning with a breakfast session at which George D. Buckley, assistant administration, spoke, we had the opportunity of hearing James A. Moffett, administrator, FHA; a message from the Secretary of Commerce, Daniel C. Roper, through one of his deputies; Sidney Hillman, authority on labor; Eugene Meyer, former governor of the Federal Reserve Bank; Willard M. Kiplinger, one of the keenest and most impartial observers stationed in Washington; and A. D. Whiteside of the NRA.

This evening while the other editors listened to British, Belgian, German, and Russian representatives on the subject of international recovery, I fell in with a congenial group of the architects who have been called to Washington to design public works. They met at a weekly dinner-the Dutch Treat Clubwhere, under the general toastmastership of Wesley Bessell, we talked of architecture, government, the mysteries of red tape, the joys of having something to do, and many other things. There were many familiar names and faces there: Victor Abel, LeRoy Barton, David Cushman Coyle, Max Dunning, Alfred Fellheimer, William Dewey Foster, Eric Kebbon, Horace Peaslee, Kenneth Reid, Lorimer Rich, and Louis Rosenberg-perhaps thirty men, most of them architects from New England, the South, and as far west as California.



Friday, November 23 .- I skipped what seemed to be some very promising programs set out for the editors' benefit today to prowl through the Supervising Architect's offices and those of the Federal Housing Administration, to learn more of what is going on therein, coming back for luncheon so as not to miss hearing the Secretary of Agriculture, Henry Wallace, tell very simply and convincingly the steps being taken to lift, as far as possible, the economic burden caused through our becoming a creditor nation instead of a debtor, and being no longer able to sell abroad the products of our expanded agricultural plant.

The Supervising Architect's office dwells in two places now; the permanent organization in the Government Warehouse down in the southwest part of the city, and the temporary organization consisting of architects brought to Washington to design a certain building or group of buildings, in one of the old war buildings, known as Building F, in the same section of the city. The latter establishment has many of the characteristics of the ateliers of our student davs. Here are enthusiastic little groups of men working under an architect from Georgia, Illinois, or California, designing and producing the working drawings for a new post-office or court-house. The design is being produced in an atmosphere of keen and good-humored rivalry, where one group has no hesitation in telling another group what it thinks of its design and why. The work is being turned out with amazing rapidity and efficiency, due to several contributing factors. One is that the technical knowledge required is available on the spot. A second is that the criticism or approval of the client is had within an hour, through a laison officer, and third, because the work is carried through with considerable pressure as to the time element in order to make these public works effective as an aid to national recovery. This new method, by which designing architects are brought to Washington for a few months is in strong contrast with the former procedure of allotting specific buildings to local architects in their own communities. With the best intentions in the world, it seems impossible with the long-distance method to turn out a set of working drawings in, say, six months. The men who have come to Washington to speed the public works program can turn out a similar set in a month.

There has been, of course, much criticism on the part of the architectural profession and its leaders, of the procedure by which a number of architects have been brought to Washington to do a specific job of design. Whatever may be the opinion of those who are not in active touch with the working out of this plan, the men who are down there are enthusiastic about it, and an unprejudiced observer cannot fail to be impressed by the results. Unquestionably it is a temporary expedient, without which the program of public works would have been, and would continue to be, stalled. No one, I think—least of all the Treasury Department-desires or expects the establishment of a permanent bureaucracy to produce government architecture.

Diametrically opposite in method is that followed by the Federal Housing Administration under Colonel Hackett. He is building up in his department, under Alfred Fellheimer of Fellheimer & Wagner, New York, who spends three weeks out of every month down there, a source of housing standards. The housing projects, thus far mostly limiteddividend corporation efforts, are perhaps necessarily designed in the localities in which they are to be built. The Housing Administration, however, attempts to supply these far-flung designers with the best technical knowledge available to date. The independent designer may quite possibly improve upon these standards, which are in the shape of unit plans for various needs, but he will not be allowed to fall below them in governmentfinanced work. In the working out of this scheme the local architect comes to Washington, works out his plot plan with the aid of the Housing Division technicians, secures a tentative approval, and goes back home to make his working drawings. The plan has not yet been in practice long enough to prove whether or not it is the most workable that can be devised.

« ARCHITECTURE »



Looking across the entrance court from the south. Walls of the lower story are of common brick painted flat white; the second story, of vertical boarding with moulded battens, also painted flat white

House of Louis C. Rosenberg Fairfield, Conn.

LOUIS CONRAD ROSENBERG, Architect



From the lawn at the north of the house, looking down the long grass panel toward the shaded terrace in the distance. Mr. Rosenberg is starting a promising piece of topiary work in thetraditionalboxwood as seen in the left foreground



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The garden front as seen from the long panel of lawn between its perennial borders. The roof is of shingles stained dark green

The front entrance, deeply recessed in the brick walls

A composition of battened gables









The house as seen from the hay field to the west. Mr. Rosenberg is expecting much from the two plane trees through which one sees the entrance doorway

Looking across the front of the house toward the secluded garage, with an amusing weather vane showing the artist at his easel

> Looking north along the east perennial border, backed by its typical Connecticut stone wall





In the living-room, walls and ceiling are painted a flat white, the floor a dark oak. The furniture consists of antiques in walnut and mahogany

In the hall the sheathed wood walls are also painted flat white. The needed touch of color is given by window draperies

The bay-window end of the livingroom. Here again color counts strongly against the white walls in the heavy curtains of deep blue, with sash curtains in heavy linen of a light bottle green







The terrace on the north side of the living-room. The balconies above open from the master's bedroom The dining-terrace to the east of the dining-room, and also facing the garden



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THE NINETY–NINTH IN A SERIES OF COLLECTIONS OF PHOTOGRAPHS ILLUSTRATING VARIOUS MINOR ARCHITECTURAL DETAILS

ARCHITECTURE'S PORTFOLIO OF CIRCULAR WINDOWS, GOTHIC AND ROMANESQUE

Subjects of previous portfolios are listed below at left and right of page

41926 DORMER WINDOWS SHUTTERS AND BLINDS

1927 ENGLISH PANELLING GEORGIAN STAIRWAYS STONE MASONRY TEXTURES ENGLISH CHIMNEYS FANLIGHTS AND OVERDOORS TEXTURES OF BRICKWORK IRON RAILINGS DOOR HARDWARE PALLADIAN MOTIVES GABLE ENDS COLONIAL TOP-RAILINGS CIRCULAR AND OVAL WINDOWS

* 1928 BUILT-IN BOOKCASES CHIMNEY TOPS DOOR HOODS BAY WINDOWS CUPOLAS GARDEN GATES STAIR ENDS BALCONIES GARDEN WALLS ARCADES PLASTER CEILINGS CORNICES OF WOOD

1929 DOORWAY LIGHTING ENGLISH FIREPLACES GATE-POST TOPS GARDEN STEPS RAIN LEADER HEADS GARDEN POOLS QUOINS INTERIOR PAVING BELT COURSES KEYSTONES AIDS TO FENESTRATION BALUSTRADES



Below are the subjects of forthcoming Portfolios

> Tile Roofs FEBRUARY

Molded Brick MARCH

Dormer Windows

Entrance Seats MAY

Overdoors, Interior

Brick Cornices

Photographs showing interesting examples under any of these headings will be welcomed by the Editor, though it should be noted that these respective issues are made up about six weeks in advance of publication date.

1930 CASEMENT WINDOWS FENCES OF WOOD GOTHIC DOORWAYS 1931 BANKING-ROOM CHECK DESKS SECOND-STORY PORCHES TOWER CLOCKS ALTARS GARAGE DOORS MAIL-CHUTE BOXES WEATHER-VANES BANK ENTRANCES URNS WINDOW GRILLES CHINA CUPBOARDS PARAPETS 1932 RADIATOR ENCLOSURES INTERIOR CLOCKS OUTSIDE STAIRWAYS LEADED GLASS MEDALLIONS EXTERIOR DOORS OF WOOD METAL FENCES HANGING SIGNS WOOD CEILINGS MARQUISES WALL SHEATHING FRENCH STONEWORK OVER-MANTEL TREATMENTS 1933 BANK SCREENS INTERIOR DOORS METAL STAIR RAILINGS VERANDAS THE EAGLE IN SCULPTURE EAVES RETURNS ON MASONRY GABLES EXTERIOR LETTERING ENTRANCE DRIVEWAYS CORBELS PEW ENDS GOTHIC NICHES CURTAIN TREATMENT AT WINDOWS 1934 EXTERIOR PLASTERWORK CHURCH DOORS FOUNTAINS MODERN ORNAMENT RUSTICATION ORGAN CASES GARDEN FURNITURE WINDOW HEADS, EXTERIOR SPIRES BUSINESS BUILDING LOBBIES **ROOF TRUSSES** MODERN LIGHTING FIXTURES

JANUARY, 1935





Monastery of the Poor Clares, Bronx, N. Y. Robert J. Reiley Washington Cathedral, north transept interior Frohman, Robb & Little

Exterior of the above







JANUARY, 1935



St. Michael's Church, Litchfield, Conn. Rossiter & Müller

Interior, Grace Church, New York City Heins & LaFarge

Exterior of the above

First Baptist Church, Cleveland, Ohio Walker & Weeks







JANUARY, 1935



Unity Church, North Easton, Mass. Charles J. Connick; John Ames Mitchell

St. Thomas's Church, New York City (destroyed by fire) Richard Upjohn



First Presbyterian Church, New York City Grosvernor Atterbury











Queen of All Saints Building, Brooklyn, N. Y. Reiley & Steinback



Grace Cathedral, San Francisco, Calif. Charles J. Connick; Lewis P. Hobart; Cram & Ferguson

Lady Chapel, St. Patrick's Cathedral, New York City Charles T. Mathews







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JANUARY, 1935



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Washington Cathedral, Washington, D. C. Frohman, Robb & Little

St. Thomas's Church, New York City Cram, Goodhue & Ferguson

Interior of the above











Howell Funeral Church, New York City Harry C. Ingalls

St. Patrick's Cathedral, New York City James Renwick

> Epworth Euclid M. E. Church, Cleveland, Ohio B. G. Goodhue Associates; Walker & Weeks

Another window in the Baptistry, Cathedral of St. John the Divine











Church of Sta. Maria della Pieve (thirteenth century), Arezzo

Church of S. Agostino (fourteenth century), Palermo

The Riverside Church, New York City Henry C. Pelton; Allen & Collens







Church of San Francesco (twelfth century), Corneto Tarquinia

The Duomo (fifteenth century), Todi

Church of the Guardian Angels, New York City John V. Van Pelt

San Quirico in Val D'Orcia



ARCHITECTURE





JANUARY, 1935



Italian Baptist Church, Newark, N. J. Electus D. Litchfield; Pliny Rogers Church and School of Our Lady of Victory, New York City John V. Van Pelt





The Riverside Church, New York City Henry C. Pelton; Allen & Collens

First Baptist Church, Cleveland, Ohio Walker & Weeks



JANUARY, 1935



St. Mary's of the Immaculate Conception, Jamaica, N. Y. Gustave E. Steinback



St. Mary's R. C. Church, Jersey City, N. J. Robert J. Reiley

Wilshire Boulevard Congregational Church, Los Angeles, Calif. Allison & Allison



Kent School Chapel, Kent, Conn. Roger H. Bullard ; Arthur Loomis Harmon







Church of the Blessed Sacrament, New York City Gustave E. Steinback Church of St. Vincent Ferrer, New York City Bertram G. Goodhue

Church of the Heavenly Rest, New York City Mayers, Murray & Phillip





St. James's P. E. Church, New York City Robertson & Potter Church of St. Peter and St. Paul, Bronx, N. Y. Robert J. Reiley

Grace Church, New York City James Renwick

Holy Cross Church, Germantown, Pa. Henry D. Dagit & Sons







JANUARY, 1935







St. Michael's Church, Litchfield, Conn. Rossiter & Müller

Chapel at Mercersburg Academy, Mercersburg, Pa. Charles J. Connick; Cram & Ferguson

Cathedral of St. John the Divine, New York City Charles J. Connick ; Cram & Ferguson Park Avenue Baptist Church, New York City Henry C. Pelton; Allen & Collens



ARCHITECTURE



Holy Rosary Church, Pittsburgh, Pa. Cram & Ferguson Second Presbyterian Church, St. Louis, Mo. Charles J. Connick; La Beaume & Klein

St. Joseph's Church, Seattle, Wash. Charles J. Connick; A. H. Albertson; Joseph W. Wilson & Paul Richardson

Interior of the above









Chicago University Chapel, Chicago, Ill. Bertram G. Goodhue ; B. G. Goodhue Associates

Sacred Heart Church, Jersey City, N. J. Cram & Ferguson





The Cathedral, Milan

Church of Notre Dame (thirteenth century), Grand-Andeley, Normandy



HERE ARE THE NEWEST PRODUCTS YOU WILL BE GLAD TO KNOW ALL ABOUT

Members of the architectural profession may secure any or all of the literature reviewed on this and the following page. ARCHITECTURE will see that the latest information on the newest materials and services is sent you. Fill in the file numbers of items desired on the prepaid mailing card below and mail.

HEATING WITH COLD WATER

<text>

LAYTEX

* * *

LAYTEX F. 399. This is a revolutionary new insula-tion made by the Wire Division of the United States Rubber Company and is derived directly from latex, with all proteins, sugars, and water solubles removed. The makers say that Laytex is not only the most flexible insulation known but it has the highest dielectric strength and in-sulation resistance and permits thinner but sup-perior walls which make possible finished con-ductors, lighter in weight and smaller in bulk.

* * *

AIRCO-WILSON ARC WELDERS

ARCO-WILSON ARC WELDERS F. 400. We have received a folder from the Air Reduction Sales Company which outlines the features and advantages of their Airco-Wilson Arc Welding machines. A number of clear-cut illustrations and a chart containing everything from "current range" and "revolu-tions per minute" to "maximum electrode sizes" and "approximate shipping weights" combine to make this an extremely interesting and informa-tive booklet. One will be sent you on request.

G-E WATER HEATER

G-E WATER HEATER F. 401. From the Cleveland office of the General Electric Company comes the news of a new automatic electric water-heater which is styled to harmonize with the new G-E Electric Companion range and the Liftop refrigerator. It is only 21 inches wide and 22½ inches deep but it has a capacity of 30 gallons, and, with its white porcelain finish and flat top, makes one of the most beautiful as well as space-saving water heaters on the market. Last but not least, it is most inexpensive.

* * *

"HANDY FLUX"

F. 402. This new flux, patented and manu-factured by Handy & Harmon, 82 Fulton Street, New York City, has been developed to speed up and improve brazing operations on either fer-rous or non-ferrous metals. It has a lower melt-ing point and greater solvent action on a wide

variety of oxides than other fluxes used for the same purpose. It is made up in paste form ready for use and Handy Flux is recommended for brazing stainless steel, steel, monel metal, nickel, copper, bronze, etc.

444

SIMPLEX CONVECTOFIN

SIMPLEX CONVECTOFIN F. 403. This installation has all the advan-tages that ordinarily go with a two-pipe steam system but at a cost that goes only with the use of a single-pipe connection. This heater operates on the uniflow principle, with series-parallel cir-culation, easy venting, and like the pipe plan, compensates for pressure loss. It actually meets the claims of the orthodox one-pipe steam instal-lation with none of the disadvantages. We will be glad to have the Commodore Heater Corpora-tion of New York, manufacturers of the Simplex Convectofin heaters, send you detailed informa-tion on their new product.

444

STAINLESS STEEL WALL TRIM

STAINLESS STEEL WALL TRIM F. 404. A new type of stainless steel wall trim has been perfected by Wooster Products, Incor-ported, of Wooster, Ohio. This is of a two-piece, or clip base type and consists of a spring clip base and a tongued molding section and is designed for use with modern wall covering ma-terials, such as Bakelite Laminated panels, Linoleum, Rubber, Asbestos Tile, Glass, Hard-boy and the state of the state of the state of the clip base on the wall in a pre-determined position according to sizes of material, or the design to be worked out; wall covering is then applied, and the tongued molding snapped in place in the clip base, thus covering the joint and protecting the molding forms a part of the decorative design when installation is completed.

HANDBOOK OF GAS-FIRED HEATING

HANDBOOK OF GAS-FIRED HEATING F. 405. The Crane Company, of LaPorte, Ind., has sent us their new Architects' and En-gineers' Handbook which covers Basmor Gas-Fired Boilers, giving the complete story on these boilers, their controls, roughing-in dimensions, capacities, horsepower ratings, and much other information that will be valuable to architects in their specification rooms, including methods of estimating gas consumption, calculating heat loss, etc. loss, etc.

* * *

WHAT ABOUT YOUR ROOFS?

WHAT ABOUT YOUR ROOFS? F. 406. From a standpoint of protection to industrial and business buildings, the roof is the most vital part of the structure, and the new Johns-Manville booklet deals extensively with the important problems of construction and maintenance. Among the subjects discussed are included the importance of the "stitch-in-time" on roof repairs; the physical properties and char-acteristics of various types of built-up roofing materials; and the importance of expert applica-tion and inspection during any roof construction job. A new complete roof unit, the Insulated Roof and Holorib Steel Deck, is also described.



For your convenience ARCHITEC-TURE will see that at your request any data or literature pertaining to any advertised product presented in this issue is sent you. Use request card below.

AIR CONDITIONING THE YEAR ROUND

AIR CONDITIONING THE YEAR ROUND F. 407. The New York office of the York Ice Machine Company has a supply of illustrated booklets showing air-conditioning installations in business and professional offices and in stores. They will be glad to send you a supply so that you may give them to your clients. The manifold advantages of air-conditioned buildings at such low cost are gone into in some detail and in lan-guage for the layman.



SILENTITE WINDOW WITH MITERTITE TRIM

MITERTITE TRIM F. 408. The Silentite Pre-Fit Window Unit consists of a frame, available for every type of wall construction, a window, pre-fit to that frame, in many accepted designs and sizes; the spring balancing and double-contact metal weather-stripping devices; Mitertite Trim, with the pat-ented joints; screen pre-fit; Protectoreent storm sash likewise pre-fit to the frame opening; to-gether with attaching hardware, simplified and improved. The Curtis Companies Service Bu-reau, Clinton, Iowa, will be glad to furnish you with their booklet describing this modern window unit, diagrams, specifications, and illustrations included, if you will check this number on the return card. return card. ***

SUNSHINE ROOMS

F. 409. There is a world of difference between a sun porch and a Sunshine Room, as Lord & Burnham Company prove in their book on glass enclosures. They show small all-glass sun rooms with special glass to permit the penetration of the ultra violet rays and large combined swim-ming pools and sun rooms. We will be glad to



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NEWS OF THE NEWEST PRODUCTS

send you this special book, and we know you will find it an invaluable aid in designing conserva-tories, sun rooms, or glassed-in pools.

to to its

ELECTRIC ROTO-WAITER

ELECTRIC ROTO-WAITER In A 10. Sedgwick's latest invention, the cul-mination of more than forty years' experience, is now available to solve your vertical transporta-tion problems. For the carrying of loads of every nature, ranging from a few pounds to five any size or arrangement to connect various floors and to reduce effort and confusion in buildings of every type. In a new pamphlet, the manufac-turer goes into details of price, installations, maintenance, operation, compactness, durabil-ty, range of sizes and capacities, flexibility, and safety.

* * *

NATIONAL BONDED OIL-BURNER BOILER

F. 411. The National Radiator Company, of Johnstown, Pa., have issued a new booklet de-scribing the features of their National Bonded Oil-Burner Boiler which is designed for both gun and rotary type burner operation. Dimension, assembly, and performance data make this a tremendously useful pamphlet.

20 20 20

"BLUBAG" FINISHES

F. 412. The Woodville Lime Products Com-pany, of Toledo, Ohio, presented us with two folders, one on their Doloroc Water Tight Stucco Finish, the other on their Sand Finishes. The Sand Finishes are ideal for use on school, church, or theatre walls, where an efficient acoustic finish is needed. Blubag Doloroc Stucco Finishes are for exterior magnety walls for exterior masonry walls.

* * *

MEANING OF INTEGRITY IN PAINT PRODUCTS

F. 413. The Bakelite Corporation have a new booklet, "Integrity of Finishes," emphasiz-ing the qualities and characteristics of Bakelite Synthetic Resins which impart integrity to a paint product—resistance to sunlight and weath-ering, moisture resistance, chemical resistance, elasticity, and its retention and toughness. The booklet attempts to apply these factors of in-tegrity to house paints, marine finishes, railway

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coatings, floor varnishes, furniture varnishes, anti-corrosive primers, and finishing coats, and industrial baking finishes. This will be valuable to all persons interested in solving troublesome finishing and maintenance problems.

OUIETILE

F. 414. For offices, churches, restaurants, and other interiors needing greater quiet, the United States Gypsum Products Company, of Chicago, has perfected Quietile, a decorative in-terior tile finish used to absorb sound, correct noisy conditions, and to improve hearing in large structures. The company has issued a folder containing pictures of installations, tables of absorption coefficients, costs, and sizes. A sam-ple color chart is also included.

4 4 4

HEAVY-DUTY FLOORS

HEAVY-DUTY FLOORS F, 415. The International Cement Corpora-tion's booklet on heavy-duty floors with "In-cor"24-Hour Cement tells why a heavy-duty floor must be dense and watertight and must withstand terrific usage. To be dense, water-tight, and wear-resisting, concrete made with ordinary Portland cement has to be kept wet ten days. Through a basic improvement, "In-cor" has five times the curing efficiency of ordin-ary cement—that is, combining with water five times as fast, so it only has to be kept wet one-fifth as long.

A BETTER LUBRICATOR

A BETTER LUBRICATOR F. 416. The Shepard Ball Bearing guide rail lubricator meets the demand for an effective and clean method of lubricating guide rails on all types of elevators. It is a positive cure for the evils attending conventional lubricating meth-ods and is particularly attractive because of its simple construction and reliability. The Shepard Elevator Company of Cincinnati are the manu-facturers of the elevator guide lubricator and have a little illustrated folder telling about its principle features.

1 10 10

MOTOR PRICE WHEEL

F. 417. The Louis Allis Company of St. Louis has prepared a very unusual motor price wheel. It consists of two fibre discs about eight inches in diameter, printed in attractive colors, which quickly and accurately tells the frame sizes and list prices of 448 popular sizes and types of electric motors. electric motors.

STAGE LIGHTING EQUIPMENT

STAGE LIGHTING EQUIPMENT F. 418. A sixteen-page illustrated booklet, "Bulletin No. 106," featuring all types of photo-graphic studio lighting equipment—including the new ultra-high efficiency Klieglights and several other entirely new units lately placed on the market—has recently been published by the Kliegl Brothers. It gives a complete description of the various units, their light control features, their applications, prices, and other interesting details; also a showing of various optional wiring devices and accessories that are used in conjunc-tion with these lighting units. A number of the units are suitable not only for photographic pur-poses, but for other lighting applications as well.

COPPER COVERED RPM

F. 419. The H. H. Robertson Company of Pittsburgh describes, in an illustrated booklet, its new product, an addition to its standard Robertson Protected Metal line. This consists of the standard RPM with a surface of durable and beautiful Anaconda "Electro-Sheet" cop-per. The maker feels that the beauty of this new

product, combined with the wonderful record of maintenance-free performance that has been built up over a period of thirty years, should de-finitely establish it in the architectural field; and make it of interest to architects for most types of construction that they are likely to be called on to design, within certain limitations, of course.

ARCHITECTURE

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LAP-LOK VITRIFIED WALL COPING

LAP-LOK VITRIFIED WALL COPING F. 420. The Robinson Clay Product Com-pany of New York is offering a new and im-proved style covering for parapet walls at a cost lower than stone or metal coping. It is made from carefully selected clays and burned to com-plete vitrification with the added protection of a salt glaze. Lap-Lok coping is made to lock se-curely over the wall, with snug-fitting, concealed ioints. Copies of the folder are available.

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THE BULLETIN - BOARD Continued

(Continued from page 6)

cent dividends and 21/2 per cent special disbursements to stockholders and tenants must, under the rules governing insured mortgages, be allowed to accumulate for distribution to the tenants at such times and in such amounts as the administrator, in his discretion, shall determine.

It further stipulated that no capital stock of low-cost housing corporations be retired during the lifetime of the mortgage.

Regarding the employment of representatives the circular states:

"No applicant or proposed applicant need be represented by professional advisors or by any Washington representative, and any statements to the contrary should be ignored. The payment by any applicant to any such advisor or representative of any fee or commission upon a contingent basis for services in connection with the submission of its application is disapproved.

Persons or groups contemplating the development of low-cost projects will deal directly with the Washington offices of the administration, which invites informal as well as formal applications.

SOCIETY OF BEAUX-ARTS ARCHITECTS

A^T a recent meeting the Society of Beaux-Arts Architects elected the following officers for the coming year: Julian Clarence Levi, presi-dent; Frederic C. Hirons, vice-president; Frederick G. Frost, treasurer; William E. Shepherd, secretary; Henry R. Sedgwick, corresponding secretary, and Arthur Ware, member of the executive committee.

ENGINEERING FEES

THE Southern California Chapter, A. I. A., has been working through a committee on the task of clarifying the contractual relationships between the architects and the engineers. The report of this committee, which was accepted by the Executive Committee of the Chapter, consists of eight recommendations which are briefed as follows:

A. Publicity:

That the efforts of the entire professional group be co-ordinated in an activity aimed at promoting the idea of professional rather than commercial service on all building operations.

- B. Legislation:
- Omitted.

C. Recognition of Engineers:

That the structural and mechani-



cal engineers be identified with the work and that their names appear as such on all drawings, signs, and be mentioned in publicity in connection with the work. When the engineer is an integral part of the architect's organization, it is recommended that proper credit be given him for his phase of the work.

D. Fees-Structural Engineers:

1. The joint committee has spent a great deal of time in studying schedules of fees for various classes of work. It recognizes the well established fact that it is only in a position to recommend a schedule of fees which comply, in its opinion, with good practice and custom, but constantly aware of the fact that such a schedule cannot be made mandatory:

Structure	Percentage of Total	Percentage of Structure		
Schools (masonry)	21/2	_		
Schools (wood)	2			
Office buildings	I 1/4	4		
Banks	2	6		
Theatres	2	6		
Auditoriums	I 1/2	5		
Apartments (multi-		-		
story)	11/2	5		
Hotels	I 1/2	5		
Churches	2	6		
Hospitals	11/2	5		
Post-office buildings	2	5		
Libraries	2	6		
Federal buildings	11/2	41/2		

2. When a fee is based on the total cost of the structure the following items are to be excluded from the cost:

- (1) Mechanical equipment.
- (2) Electrical equipment (including fixtures). (3) Plain and decorative painting.
- (4) Sculpture.
- (5) Decorative glass and mosaic work.
- (6) Furniture and special equipment.
- (7) Floor covering.
- (8) Landscaping.

3. The fees stipulated above do not include continuous inspection of the work by the structural engineer but do include engineering supervision.

E. Scope of Structural Engineer-

ing Service : The approval by the Southern California Chapter of the American Institute of Architects of the Code of Standard Practice of the Structural Engineers Association of Southern California (dated 2-3-32), as representing the elements of a proper engineering design, and that this document be used as a guide in determining the scope of the engineer's services for the various classes of work.

F. Responsibility for Work:

Adoption by the structural engineers and the architects of the principle that the responsibility for building operations shall be fixed in one head and that head, either architect or engineer, shall be determined and established before commencing the operation. Your committee realizes that the client may be the determining factor in the solution of this phase of the problem.

G. Boards of Arbitration :

Omitted.

H. Fees-Mechanical Engineers: Your committee recommends the adoption of the following schedule of fees for mechanical engineering services, subject to the proviso in Section D, paragraph I above:

Ist \$50,000	4 per cent
2nd \$50,000	33/4 per cent
All over \$100,000	31/2 per cent
On all work where the aggregate	
cost of the heating, plumbing	
and electrical work shall total	
a sum less than \$10,000	41/2 per cent

All the above fees contained in this section are predicated on the cost of the equipment designed by the mechanical engineer.

BUILDING PERMITS DUN & BRADSTREET report a rather sharp decline in the value of building permits issued during November, as compared with October. The figures are also slightly be-low November, 1933. The drop from October was 26.9 per cent, whereas the normal seasonal decline is about 12 per cent. The decline from a year ago amounted to 2.2 per cent. The decline was general, only one section, the Mountain States, showing improvement. Contrasted with November a year ago, however, it shows increases in five groups and declines in only three, the heaviest loss being in the Middle Atlantic States, with New York City furnishing the bulk of the decline.

PERSONAL

W. Archibald Welden, recently vice-president of Kantack, Inc., and director of design in association with Mr. Walter W. Kantack, has established a design and manufacturing service in illumination, decorative metal, and decorative glass under his own name at 22 East 40th Street, New York City.

(See also page 16)

ARCHITECTURE

JANUARY, 1935



IT'S NEW-Key Control Equipment

IT PROVIDES COMPLETE TELEPHONE CONVENIENCE FOR YOUR RESIDENCE CLIENTS

HERE'S a notable new telephone service for larger homes and apartments. It will handle up to eleven telephones and one or two central office lines, without a switchboard or attendant.

Key buttons built into the base of modern, compact hand telephones control outgoing, incoming, intercommunicating calls, and interior buzzer signals. All types of calls may be made from all telephones. (Or certain telephones can be restricted to intercommunicating calls, if desired.) Incoming calls may be answered at any telephone and transferred to any other. One or two outside conversations and one inside conversation can take place simultaneously.

Dependable, inexpensive, easy-to-operate,

KEY-CONTROL EQUIPMENT saves countless steps and minutes, makes homes more livable and households more efficient. It gives the greatest measure of convenience, of course, if telephone arrangements have been carefully pre-planned, and conduit included in walls and floors during construction. Then telephone outlets are available at strategic locations, wiring is concealed, and full protection afforded against certain types of service interruptions.

If you'd like to know more about KEY-CONTROL OF other telephone equipment—if you're planning conduit

> layouts for new or remodeled residences—call the Business Office of your local telephone company. Their engineers will help you, without charge.

For further information on Bell System telephone services and equipment, see Sweet's Catalogue

JANUARY, 1935



I4

MODERN DUTCH BUILDINGS

BY F. R. YERBURY

A typical illustration reduced in size : Office premises of the Netherlands Trading Company, Amsterdam. The late K. P. C. de Bazel, architect.

The Modern Movement started in Holland by Berlage at the beginning of the century and developed with such success by the late de Klerk, has produced a school of architects who, working on consistent lines, have created a really national Modern Architecture. This volume will give full evidence of this. Although much of this work, which has been carried out in Holland, has been in connection with the great housing blocks, themselves deeply fascinating, there has been great activity in all kinds of buildings for schools —particularly interesting are those at Hilversum by Dudok—churches, libraries, office buildings, institutions, shops, etc.

100 plates of illustrations, including plans and many photographs taken by Mr. Yerbury for this volume.

8½ by 11 inches. Bound in linen board's. Price, \$10.

Here and there are fine examples of commercial and industrial buildings in concrete, but in the main brick is the medium—brick used in such a way as to be the admiration of the whole architectural world.

CHARLES SCRIBNER'S SONS, NEW YORK

JANUARY, 1935

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WERS

Group and Gang Showers—Powers mixing valves are also used for the control of water temperatures of showers in groups of from 2 to 20 showers. They may be used to establish a maximum temperature in the hot water supply so as to protect the entire group from danger of scalding or to place the entire group of showers under the control of an attendant.

Zone Showers—Where compulsory bathing is required before entering swimming pools, lane showers are divided into four zones, each controlled by a Powers valve. First zone is maintained at 105° F; second at 90° F; third at 75° F; and fourth at 60° F. Because of its efficiency and its hygienic and sanitary advantages, this type of shower is rapidly increasing in popularity.

Hospital Hydrotherapy—In infant baths, continuous flowing baths, control tables, douche baths, arm and leg baths, colonic irrigation apparatus, photographic baths, and hot water line control, Powers mixing valves are indispensible because of their safety features.

> Write for bulletins: The Powers Regulator Co., 2720 Greenview Ave., Chicago or 231 E. 46th St., New York. Offices in 43 Cities—See your phone directory.



Pittsburgh, Pa.

EDITOR OF ARCHITECTURE Dear Sir: Your journal asserts itself to be "The Professional Architectural Monthly"—and the statement is made that architects make up 77 per cent of Architecture's entire circulation.

I have read in your November issue, the article reproducing a speech by Mr. B. Charney Vladeck, made at a recent meeting of architects in New York City; written, as stated, at your own solicitation, for a wider audience in the profession.

This extraordinary article I believe to be at once the most ill-considered and wholly unjustifiable series of misleading statements, as well as the most completely gratuitous insult to an able, responsible and reputable profession that I have encountered in any public print, professional or otherwise.

I feel that you, as editor of the journal, are deserving of the severest censure, not only by your professional subscribers, but as well by all fair-minded people, for having solicited for publication in this manner, such an uncalled-for blanket arraignment of those on whom you depend for the existence of your journal. It is moreover totally unaccompanied by any statement designed to inform your non-professional readers as to its absolute untruthfulness and Mr. Vladeck's apparent total ignorance of what architects, as earnest and responsible professional men, do and stand for.

Mr. Vladeck's opening statement as given, that "behind each building monstrosity, behind each tenement, behind each get-rich-quick building project, there are the brains of an architect," is completely incapable of substantiation; and it is most illogically followed by his frank admission that he sees certain things only in his imagination, the which however he proceeds to state as facts.

His further statement quoted, that "no modern profession has become as completely a tool of greed, selfishness and speculation as the profession of architecture," is utterly vicious and untrue in its implication.

It is most unfortunate if Mr. Vladeck happens to be placed in any position of responsibility involving contacts with the architectural profession, since he has so ably demonstrated his inability to recognize or appreciate reputable and responsible professional assistance.

I await with much interest what measure of explanation or apology you expect to be able to afford the profession for this notable contribution to its bibliography, or to an understanding public for such an affront to its intelligence.

Yours very truly, Louis Stevens.

New York City.

EDITOR OF ARCHITECTURE

Dear Sir: Having read an article in your November issue by B. Charney Vladeck captioned "The Architect in the Body Social," may I, as a practicing architect in New York City and constant reader of your magazine, reply through its columns ? As one long interested in low-cost housing, having made a specialized study of the subject over a period of years, I should like to have the privilege of replying to the remarks concerning architects in general, and to that part of his article dealing with the park area in the recent New York City Housing Authority competition.

With all due respect for the idealism for which Mr. Vladeck stands, and for principles which he would like to visualize and to put into practice, I would say at the outset that the gentleman is wrong when he states that architects have become the tools of greed, selfishness and speculation, and that the profession is used in the furtherance of such. Mr. Vladeck's opinion, of course, is that of an outside observer who does not seem to realize that what the architect has done, the sins he has committed, are not of his own making

In the third paragraph of his article, Mr. Vladeck comments on the recent housing competition held under the auspices of the New York City Housing Authority, in which 278 designs were submitted by registered architects. All designs were based on densities of 100-150-250. According to his assumption the architects saw nothing but lots to be covered by structures. I am certain that most of the architects were social minded about that problem but they had to face realities as they stand under present systems of land values, income, etc. Naturally it would be only a dream or a fantastic conception of a problem such as one meets in an academic school of architecture of higher learning, were the economic value to be lost sight of as far as it pertains to cost.

Now naturally the practical architect tackles the problem from the present value relation to cost and in-

come in our present economic system as society is now organized. So, particularly the 150-250 densities were chosen as being conditions under which human beings could safely live under sanitary conditions. Most architects consider such factors most important, next in importance only to the price per room, and also as being consistent with the factor of privacy. In one case in particular, Mr. Vladeck stated that the architect was puzzled over the requirement of a two-block park which, according to Program of Competition, amounted to 260,000 square area for the park. He states further that since he, the architect, could not understand what a park is needed for in a low-cost housing project, he stuck it in a corner. Mr. Vladeck has miscalculated the architect's intelligence on the matter of what use there may be for a park. A quotation from a letter sent to Mr. F. L. Ackerman requesting a reconsideration of this particular architect follows:

Item 12 of the Program stated that "the submission will be considered in the light of resulting effect were the site extended with variations over a large area." This led to the conjecture that the site might be duplicated, a logical manner being, to the east, having as culmination another subway station, or to the north or west. It was assumed that a business area lay to the south.

This circumstance led to the belief that in spite of the temptation to make it a central feature the park and community site, having to serve also adjacent area, as stated in item 13 of the program might best be located in a corner, probably the North East block where it could serve adjacent areas on two sides and if the site were duplicated to the North and East, a large central park area would be formed. Note: Housing units could depend on their large court areas for their own play and garden facilities.

An attempt to keep disturbances of exterior visitors to the park and the noise of a school yard at a minimum led also to the preference of this "outside" park site. Mr. Henry Wright in an article in Archi-

Mr. Henry Wright in an article in ArcHI-TECTURE, August, 1933, advocates this outside type of recreation and community area.

Also this area seemed furthest distant for people having to walk daily to the subway and therefore least desirable for housing.

Furthermore, if it were assumed that adjacent areas were to share in the assessments for the development and maintenance of a park site, it seemed proper that the park area should at least be directly accessible to these adjacent parts.

In conclusion, on behalf of my associate and myself, I trust I have answered Mr. Vladeck's criticism as to why the park area was stuck in a corner and that the particular architect did know what parks are needed for and used for, and I sincerely hope that you will publish this article in reply to Mr. Vladeck's criticism.

Very truly yours, Anthony F. Inserro. JANUARY, 1935



56 Story City Bank Farmers' Building, New York City Cross & Cross, Archts. Geo. A. Fuller Co., Contractors

All Joints in Stone Copings and Projecting Courses

MADE PERMANENTLY WEATHER TIGHT WITH PECORA CALKING COMPOUND

Recently, the John J. Moran Co., New York, was awarded the contract to cut out existing mortar and calk all joints in stone copings and projecting courses in every set-back in this monumental building, the home of America's oldest trust company. It was provided that Pecora Calking Compound be used for *permanency*, the same material that was used for calking all window frames when the building was under construction. . . . Pecora Calking Compound is the most dependable material that can be used for making a building weathertight. Properly applied, Pecora Calking Compound will not dry out, crack or chip, and is applicable to wood, glass, metal or stone.

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to Younger Craftsmen who expect to "arrive" in the next 10 years

YOU have brain power and native ability. You know success lies within your reach. Here is sound advice: Do not practice your profession with mediocre tools. Do not hamper your work by using inferior drawing pencils.

At most it costs but a few pennies more to get the famous A. W. Faber "Castell" Drawing Pencil—the world's standard of quality. "Castell" gives full expression to your skill. It "flatters" your craftsmanship, improving every sketch, drawing or rendering. 18 degrees of hardness give you every tonal effect you desire.

Remember—Masters Need Perfect Tools—and if you expect to be a Master do as the Masters do. It is no secret that "Castell" is the overwhelming favorite of the men who have already arrived. "Castell" has accompanied them on the road to success. Let "Castell" help you, too.

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