1¢ per C.F.M.

-the first cost of

Dustop Air Filters

complete with all frame members, bolts and nuts ready for installation

MAINTENANCE COST only .3¢ to .4¢ per C.F.M. per year

ADDITIONAL CLEAN AIR FACTS WORTH KNOWING: Dustop removes 96% to 98% of all dust, dirt, pollen, and other impurities from circulated air. Dustop high efficiency is constant over a considerable range of velocities. Dustop glass wool is progressively packed to afford greater dust holding capacity with low resistance to air flow. No cleaning. Dirty filters are easily replaced with new ones. Let us send you information. Owens-Illinois Glass Company, Industrial Materials Division, Toledo, Ohio. (Dustop is assembled and installed in Canada by General Steel Wares, Ltd., Toronto, Ontario.)

Dustop is sold by all leading fan and blower manufacturers.

OWENS-ILLINOIS

DUSTOP AIR FILTERS
NOW...DELCO ANNOUNCES THE LATEST ACHIEVEMENT IN AUTOMATIC HOME HEAT

The new harmonized Delco Heat Boiler

Engineered as one unit from the ground up. Automatic burner, boiler, domestic hot water heater...harmonized into one beautiful, compact cabinet

Here is the newest contribution to greater home comfort from the makers of the famous Delco Heat Oil Burner...a complete, harmonized heating unit that is a modern marvel in heating efficiency and fuel economy.

The unlimited facilities of Delco Research Laboratories...the influence of General Motors' 25 years' experience with the combustion of liquid fuels are clearly reflected in this great new product. Every point of construction has been proved by hundreds of painstaking tests in scores of homes. And the results show up in a brilliance of performance that is entirely new.

Remarkable Heating Efficiency

This new Delco Heat Boiler combines the super-heat-producing qualities of the Delco Oil Burner with the amazing heat-absorbing efficiency of a remarkably designed boiler. A new degree of heating efficiency and economy has been attained through pre-heating the air before combustion, entirely surrounding the combustion chamber with water, employing a larger heating surface; and multiple fins which scientifically control the heat travel upwards...delivering all possible heat into the home.

Easy to Install

You can specify the new Delco Heat Boiler with complete confidence of satisfactory installation, for basically it follows the accepted updraft design...thoroughly understood by the heating trade for 40 years. It will go into any basement without alterations in doors or partitions. Being only 55 3/4 inches in height, it will fit perfectly into any low ceiling basement. And the actual installation is so simple that nothing can go wrong.

Complete Range of Size

There's a correct size of Delco Heat Boiler for every requirement...from 600 to 1,700 cubic feet of steam radiation; and from 1,000 to 2,750 cubic feet of hot water radiation. We invite you to send the coupon today for complete details and specifications.

DELCO APPLIANCE CORPORATION, Subsidiary of General Motors, Dept. 11-L, Rochester, N. Y.

Please send complete details and architect's file on the new Delco Heat Boiler.

Name.................................................................

Firm Name...........................................................

Street Address......................................................

City.................................................................State.

For new or old homes nothing can contribute more to the beauty of a modern recreation room than this unusually compact Delco Heat Boiler. It's Killarney and jade green finish, with chrominum trim, that will harmonize perfectly with all types of recreation room furniture.

THE ARCHITECTURAL FORUM

Published Monthly by Rogers and Mannon Corporation, Howard Myers, President. Publication Office: 10 Ferry Street, S. Second, N. Y. Copyright 1934, Rogers and Mannon Corporation. Entered as Second Class Matter at the Post Office at Concord, N. H., under the Act of March 3, 1879.
Architects who work with Armstrong's Linoleum have complete creative freedom

Any design you desire may be rendered faithfully in this most versatile of floor materials

This distinctive, custom-built Armstrong Floor adds greatly to the beauty of the Long Island headquarters of the New York Telephone Company. Voorhees, Gmelin & Walker, architects.

The floor shown here was especially designed to be an integral part of a complete decorative plan. And floors of even greater complexity can be just as readily achieved with Armstrong's Linoleum.

You can work with a palette of 37 colors in plain, jaspe, and marbelle linoleum. Or you can choose from the scores of inlaid designs that Armstrong offers. Armstrong's Linoleum will help create any design effect you seek, harmonize with any color scheme.

And versatility of design is only one of the important advantages of Armstrong's Linoleum Floors.

These floors are durable—resist wear even under the heaviest traffic. The Armstrong Floor in the Illinois Host Building at the "Century of Progress" underwent terrific punishment from millions of feet. Yet, after months of service, this floor showed only the slightest wear, undiscernible to most eyes.

Armstrong's Linoleum Floors are easy to clean, too. They save maintenance cost. And they are quiet and comfortable to walk on.

We'll gladly tell you more about Armstrong's Floors, and send you the names of qualified floor contractors in your community. In addition, we offer the free cooperation of our Bureau of Interior Decoration in the planning of floors. Just address Armstrong Cork Co., Floor Division, 1203 State Street, Lancaster, Penna.

Complete specifications and design information in 1934 Sweet's Architectural Catalogues.

Armstrong's LINOLEUM FLOORS

LINOTILE - CORK TILE - ACCOTILE - RUBBER TILE - LINOWALL

THE ARCHITECTURAL FORUM MARCH 1934

Architects who value their reputations for leadership appreciate the high-standing Barrett has enjoyed in the roofing field for eighty years.

Barrett standards of protection and long-life economy—in materials and application technique—have established Barrett as "the greatest name in roofing," and Barrett Roofs as the first choice for America's finest buildings, new or old. Barrett Specification Roofs are built with every consideration toward owner and architect protection. They are the kind of roofs architects can specify and forget.

There is a Barrett Approved Roofer in or near your city who is qualified to apply Barrett Specification Roofs. Consult with him or with us on any roofing or waterproofing problem.

Canada: The Barrett Company, Ltd., 5551 St. Hubert St., Montreal, P. Q.

STANDARD for sound roofing practice since 1854 . . .

RECOVER RIGHT with Barrett ROOFS

Eighty years of progress in roofing materials and roofing construction—eighty years of time-tested roof performance and economy—make Barrett Roofs a sound investment in proved value. Roofing, reroofing and repairs, the Barrett way, eliminate roof problems from any recovery program.

THE GREATEST NAME IN ROOFING

A MESSAGE
to the Lighting Fixture Industry which
ARCHITECTS are asked to read

NOTE: Chase is not a newcomer to the Lighting Fixture business. Since the days of Bunsen burners and gas fixtures, Chase has been active and closely interested in the Lighting Fixture industry. For the past five years Chase has been making periodical surveys of the Lighting Fixture business—interviewing thousands of wholesalers, dealers, contractors, architects and home owners—learning what is wrong, needed, wanted. The following message is based on facts for which Chase is indebted to you and others in the industry who have contributed to our studies.

The Lighting Fixture business has been sick.

It has been sicker than most businesses and sick longer.

What's wrong? Why should this important and fundamental industry be a "headache" to so many leading factors in the trade—a "problem" to otherwise successful business men?

Is "hard times" the answer? No, we do not believe it is the real answer. As every sound thinking man in the Lighting Fixture business knows, the real trouble lies deeper than the passing pains of depression.

True, there has been little or no new building for four long years. True, also, that new construction is the very life blood of sales volume in the fixture business.

But if the thousands of straight-thinking men in the business with whom we have talked are not mistaken, the Lighting Fixture business has long suffered from internal conditions which hard times have only aggravated. In plain language, the Lighting Fixture business suffers from destructive price cutting, overlapping competition, design piracy, etc.—all preventing profitable growth of the industry. These things cannot be cured by easily given, easily broken promises and the continuation of unsound policies and unfair practices.
What then about the future of the Lighting Fixture business?

Chase believes in it!

Chase believes that, given a new viewpoint and a new lease on life, there is a real future and great opportunity in the Lighting Fixture business.

Chase believes in the future of the Lighting Fixture business provided those policies which are essential to the building of a sound, profitable and lasting business become the foundation on which a new Lighting Fixture industry is raised.

 ★ ★ ★ ★

Chase believes that the Lighting Fixture trade needs and will welcome a policy of distribution that is a policy of protection—not exploitation.

Chase believes in fair prices and full profits, and in the strict maintenance of both, for the benefit and protection of the Lighting Fixture trade, the public, the manufacturer.

Chase believes in the inherent good taste of the American public—believes it prefers and will enthusiastically purchase Lighting Fixtures of pure design, authentically styled and at reasonable consumer prices.

Chase believes in and respects creative designing as well as the trade rights which emanate from such designs.

Chase believes in the sound judgment of the worthwhile home owner—believes he prefers money's-worth quality in lighting fixtures to dubious discount "bargains".

Chase believes the manufacturer should support and not compete with his customers—and therefore in a trade merchandising policy of constructive, helpful cooperation as opposed to destructive competition.

Chase believes in the value of educational national advertising of Lighting Fixtures to the American public to the end that home owners will have increased faith in the industry, its policies, prices and products.

Chase believes there is a need in the Lighting Fixture industry for a new viewpoint—for a new and better way of doing business; new merchandise, new policies, new methods, new ideas—and ideals.

Chase believes that where there is a real need there is a great opportunity—that usually when the need for anything is great enough, that need is met.

CHASE BRASS & COPPER CO.
WATERBURY
CONNECTICUT
CORRESPONDENCE

Code War
Forum:
Can you give me any data pertaining to the Architects' Code? Is there a code O.K.'d at Washington?

Can you tell me what the code is in regard to the architect's fee (if he ever gets the chance to charge a fee)?

Since moving out of New York City I try to practice here in the northern part of New Hampshire I have not been able to get much information on this code stuff. I have followed The Architectural Forum quite closely but you have dropped no information in detail about the Architects' Code, if there is one to be found.

I would greatly appreciate any information pertaining to what the war is about on the Architects' Code.

ROBERT J. YOUNG
Berlin, N. H.

"...the architects' code, delayed because of the NRA's insistence that to write a 6 per cent minimum fee into the code would be illegal price-fixing." (From The Construction Code Supplement to the February, 1934, issue of The Architectural Forum.) The proposed architects' code appeared in full in the December, 1933, issue of The Architectural Forum, pages 475-478. — Ed.

None Escaped
Forum:
We are, of course, very interested readers of your Architectural Forum, and although we have not congratulated you on the quality of the information contained therein, we wish to most emphatically do so at this time.

We are particularly interested in your supplement entitled "The Construction Code" in the issue which arrived today. With the evident entry of the Government into the regulation of affairs we are attempting to keep in as close contact as possible with these various changes, but are continually worried that we are liable to miss some phases through oversight on our part. We notice that you recommend following these various developments through the reading of your magazine. Do you completely cover all these phases, or are you in a somewhat similar position to ourselves, that some bureaus are set up which might escape your notice?

I notice you say on the back page of the above mentioned supplement that you follow Washington very closely. I have noticed that you have done an excellent job along these lines, and am asking now if we may be assured that you will keep us in touch with all developments, or whether you have suggestions to make for other services.

ices. We, of course, are very careful readers of Time and Fortune. . . .

P. M. TIDMARSH
Tidmarsh Engineering Company
Tucson, Ariz.

The Forum will continue to keep readers in touch with significant developments in Washington which affect the building industry. — Ed.

Rivera, Best Ever
Forum:
Please send me your long term subscription rates.

Your article by Ernest Born on "Rivera" is in my opinion the best thing ever!

JULES L. HAUT
New York City

Cartoonist?
Forum:
I want to take this opportunity to chide you for wasting so much paper in your last issue on a most unworthy subject — Diego Rivera. To me he is just a Communist Cartoonist who draws rather poorly and has a sickening sense of color. . . . I still believe The Forum stresses too much the Modern side of the great current architectural war. For after all, you well know that John Russell Pope is slightly keener than Frank Lloyd Wright, and that when the shouting dies down you will find the McKims and Popes and Bacons steering the old ship downstream, and the Wrights and Corbusiers and Lescazes back at the circus side shows where they belong.

RAYMOND GLEESON

Forum:
Your magazine is beautifully gotten up but the exceedingly large space given to the Rivera Murals took away all of its attractiveness. I do not pretend to be an artist and if an education in art is necessary to enjoy and appreciate such murals, I never will be one.

To me the hideous, grotesque and unnatural figures in those murals are an insult to the natural eye and I am not at all interested in any periodical which seems to feature as an architectural classic such abominations.

CHARLES F. BROWN, Secretary
Thompson Brown Co.
Detroit, Michigan
(General Brokerage Subdivisions)

No Cheerful Dawn
Forum:
I was looking through your January magazine this morning and I note the charts that you showed on pages 83 to 86 about the building situation. The rents for wage earners are lower than they have been for many years. The amount of money being loaned is very low and the prices have gone up from 25 to 50 per cent on materials. In light of these facts you have the cheerful optimism to write an editorial called "Slow-Breaking Dawn." Please do not construe that I am criticizing your editorial because many editors feel that they are on the spot. However there can be no revival of business with rent trends going downward and costs of building going upward. It is so ridiculous that I sometimes think that the whole country has gone goofy and particularly that part of it located in the District of Columbia.

I want, if you will be kind enough to send me, duplicate clippings of these charts from some of your magazines. I'd like to have a complete set of them if you care to send them along as I intend to use them the next time I make a speech on this building situation.

CLOYD W. MILLER
Cleveland, Ohio

Rents and Building
Forum:
I have just read your editorial, "Slow-Breaking Dawn." Did you ever consider that the relation between rents and construction cost determines the volume of building? It now takes 20 to 30 years for rents to equal building costs under the NRA monopolies. If and when, rents equal building cost in 10 to 15 years, then money will be available for construction.

Government loans for slum clearance must be "self-liquidating." Of course if they are not self-liquidating, they would not be loans, but gifts.

Now, can a residential unit be built that can be "liquidated" by $15 per week laborers? I think under the codes, the cheapest unit that can be built costs around $3,000.

I have just been interrupted by a colored lady wanting to rent a house — we have about 50 company-owned houses, each house has one acre of land. These houses

(Continued on page 8)
PAINT FAILURES LIKE THIS!

— you would welcome this information about a whole community that made a remarkable paint test.

If you faced paint failures as bad as this one you would take some time to study the results shown by test fences and laboratory tests of various paint failures.

You would be particularly interested in a test conducted in a whole community—a test made on 100 houses in actual use in a territory completely surrounded by steel, cement and chemical plants—

EAGLE pure WHITE LEAD

one of the most cruel, most convincing tests ever made in determining paint durability and economy.

The results of this remarkable test made in an Indiana mill community are presented in a folder which is yours upon request. Evidence is shown in unretouched photographs, taken two years after the three different kinds of paints were applied. One paint was remarkably successful. It was 100% white lead in oil—Eagle pure White Lead. To every man who has ever had to face the fact or the possibility of bad paint failures, a study of this folder is particularly timely and interesting.

White lead lasts!

USE THIS COUPON, POSTCARD OR LETTER

The Eagle-Picher Lead Company, Dept. AF3, Cincinnati, Ohio.

Please send me a file copy of the folder describing the Indiana steel community paint test.

Name ____________________________
Address __________________________
City ____________________________ State __________
CORRESPONDENCE

(Continued from page 6)

were built in the 20's for about $2,000 each and sold to employees on land contract at $17 per month. All of the contracts have defaulted and the title returned to us. We have permitted former employees to occupy them rent free and now charge employed tenants $4 per month. Now, how much rent can this colored family pay for this $2,000 house and one acre of land? She says she can't pay $5 per week out of her rent can this colored family pay for this

have permitted former employes to occup>' $17 per month. All of the contracts have were built in the 20's for about $2,000 each

To sum it up, the sponsors of the competition should come in for more favorable comment than they have received. They have supported a branch or avenue through which the progress of architecture might manifest itself; have maintained a way open for contestants to come before the public in a manner they could not have otherwise, especially in times like the present.

HYMAN N. WEINBERG
Great Neck, N. Y.

Forum:
The Architectural Forum is a unique magazine in its field, full of ideas and invaluable to persons interested in home construction and the possession of a home.

George H. Woods, President
Bridgeport-People's Savings Bank

Good Competition

Forum:
Having read Cornelius V. R. Bogert's letter which appeared in the January number of THE ARCHITECTURAL FORUM, on the matter of the program sponsored by the agents interested in the property located on Broadway between 44th and 45th Street, I take the opportunity herewith to offer my opinion regarding the issue.

I believe there are times when a competition of the kind held to obtain ideas for a particular site to be thoroughly justifiable. It ought to, under the conditions it was held in, in lieu of adverse criticism draw commendation instead. I do not lose sight of the fact that if a practice were made by all property owners, to award jobs only on the strength of a contest similar to the one under discussion, that it would bring hardships to architects in general. But the editor of THE FORUM has explained the facts about the matter which are more than extenuating. He has made it plain that the competition falls into the same category as recognized for small homes and airports.

The competition, in the way it was conducted, was most commendable. It offered an opportunity to be heard with an incentive to the competitor, particularly under prevailing conditions, that was judging it considerable. To criticize would only tend to show a definite need for competitions of this kind to completely reverse the conclusions Mr. Bogert arrives at. It would illustrate how necessary they are and that they be held periodically instead of to discourage them as he would...

To sum it up, the sponsors of the competition should come in for more favorable comment than they have received. They have supported a branch or avenue through which the progress of architecture might manifest itself; have maintained a way open for contestants to come before the public in a manner they could not have otherwise, especially in times like the present.

E. WILLIAM MARTIN
Wilmington, Delaware

Remodeling

Forum:
Thanks for your prompt reply about the location of the building shown in THE ARCHITECTURAL FORUM advertisement in the January Fortune.

My inquisition into the matter was in behalf of my uncle. He has a building very much the same as the one in the picture, and it is idle. He was thinking about renovating it and was quite taken with the improvement, and mentioned the fact that he would like to see the place.

Thank you again for your prompt reply and interest.

CLIFFORD T. GRAHAM

Not Ridicule

Forum:
In your February issue you carried a page of pictures taken by Walker Evans of nineteenth century houses which were on display at the Museum of Modern Art last month. May I correct the impression which your readers have of the purpose of the show. The photographs were not put on exhibition to ridicule the architecture of the “General Grant Era.” Quite the contrary, the exhibition was to show the freshness, ingenuity and freedom from revivalism which was characteristic of nineteenth century American architecture: to show indeed how much more independent of tradition these unknown architects were than many of our famous masters of fake Georgian and fake Gothic of the day.

PHILIP JOHNSON
The Museum of Modern Art
New York, N. Y.

Distillery Help

Forum:
As I am a certificated architect and am specializing in the design and planning of distilleries and wineries, I was very much interested in your article entitled “Designing the Distillery” by John Hancock Callender on page 315 of your October 1933 issue.

I have loaned my regular copy to quite a number of clients and prospective clients, and as a result it is badly dog-eared.

I would greatly appreciate the receipt of two copies of pages 315 to 323 for the complete numbers. Please mail them C. O. D.

ARLIS R. SENGELLEY
Los Angeles, Calif.

Want Modern

Forum:
I see where some of your conservative readers don’t like the publication of modern architecture. Mr. Scopes in the current issue threatening to discontinue his subscription if you continue too great a preponderance of ‘modernistic design.’ Who said ‘modernistic!’ The thinking architects of the country, especially the cynical architectural students, want real modern not ‘modernistic’, and we subscribe, or fail to renew subscriptions, on that basis. Don’t get cold feet.

ROBERT B. TAGUE
Chicago, III.

Waynesburg, O.

D. D. WITACRE

Not in sympathy with a “closed economy” such as we have under the NRA. I believe that a “laissez faire” economy will provide more goods and services for more people than any economic system yet devised.

I do believe that a “laissez faire” economy must be corrected to provide for the “immobility of labor” and for “productive ability greater than the human desire to consume.”

It is a sorry economic scheme that makes it impossible for 30 per cent of the people to be housed — and this “limiting of the market” will result to all industries under the NRA monopolies. It is fundamental to the operation of a monopoly to make the price yield a maximum profit in view of the elasticity of demand, which of course means limiting the market.

THE • ARCHITECTURAL • FORUM • MARCH • 1934

Indeed how much more independent of tradition these unknown architects were than many of our famous masters of fake Georgian and fake Gothic of the day.
A typical example of the smart, modern trend in bar design is the Manhattan Room of the Hotel New Yorker in New York City. Life... color... personality have been woven into this charming setting—and Westinghouse Micarta, in which the bar and table tops are brilliantly finished, has contributed much to the striking decorative effects.

A durable finishing material of exquisite quality, Micarta is available in many colors, including pastel shades, and in a wide variety of patterns. It can also be inlaid with other colors or metals to produce almost any desired effect. The designer thus can give full rein to his imagination and skill in creating a motif that is distinctive, appealing and original.

A most important characteristic of Micarta is that it combines distinctive beauty with the ability to resist wear and hard usage. Its high polish or lovely dull satiny finish is not marred by smoldering cigarettes or alcoholic liquors. It will not crack or chip... is practically dent-proof... and, without damage, can be easily cleaned with white soap and water.

Westinghouse Electric & Manufacturing Co.
Room 2-N
East Pittsburgh, Pa.

Gentlemen: Please send Folder 5565, Micarta the Modern Material for the Bar of Today.

Name
Position
Firm
Address

MAIL TODAY

WESTINGHOUSE
Concrete has been used for all floors. Ceilings are painted. Joists of pre-cast concrete have been left exposed. In this room, the ceilings were painted a flat black, the joists were silvered with a stenciled design on the lower face.

Features of This House
1—Pre-cast joists for floors and roof
2—Concrete floors throughout
3—Concrete masonry walls and partitions
4—Portland Cement stucco—tinted
5—Flat Concrete Roof, with terrace

Complete Information IN THIS NEW BOOKLET

Complete information—structural and descriptive—available in this booklet "Home At Last." Send for your copy—free.

PORTLAND CEMENT ASSOCIATION
Room 273—33 West Grand Avenue • • Chicago, Illinois
Modern telephone convenience where Washington's couriers rode

With white-painted bricks and wide-paneled casements, this residence near Morristown, New Jersey, is keyed to the character of the fine old American homes around it. Where once Washington camped, with only hard-riding horsemen to carry his messages, this household can telephone to the ends of the earth, from nine convenient outlets.

The arrangements were worked out with the help of the telephone company. One outlet in the basement game room, three on the first floor, four on the second, and one in the third-floor hall. There are four permanently located telephones and two portable handsets which can be plugged into any of the five jack locations as needed. Buttons and buzzers provide intercommunication between the pantry and the master bedroom.

Built-in telephone conduit costs so little and returns so much — in genuine comfort — in steps, time and energy saved. Outlets can be located to meet both present and future needs. Your local telephone company will be glad to help you plan the telephone facilities for any of your residence projects. There is no charge, of course. Just call the Business Office and ask for "Architects' and Builders' Service."

ARCHITECTURAL FORUM MARCH 1934 11
"I'm tired of planning houses for other people to live in. I'm going to be my own client for a change, and design a home for myself. And I'm going to make use of every sound modern development in equipment and materials.

"That means using Steel Joists.

"I like steel-joist floors because they provide a fire-safe barrier between the basement and the living and sleeping quarters. Because they can't shrink away from the walls, leaving those dirt-collecting cracks that are such eyesores. Because they never sag or creak, and are practically sound- and vibration-proof.

"Even if steel-joist floor construction cost appreciably more, I'd be for it. But since the additional cost is only a few cents a square foot, I don't see how any other type can be justified."

* * *

A modern, fire-resistant floor structure with Kalman Steel Joists and concrete and plaster adds so little to building costs because the joists reach the job in the exact lengths required, making the floor system very simple and quick to erect, and saving the builder considerable work. And there's another saving, because piping and conduit are run right through the open webs.

These joists are manufactured in two types: Kalman Steel Joists, one-piece steel trusses; and MacMar Steel Joists, steel trusses assembled by pressure welding. Both types of joist have been widely adopted, not only for residence construction, but for hotels, apartments, schools, office buildings, public buildings—in fact, all types of light-occupancy structures.


Kalman Steel Joists
30 New Kitchens...

DEMONSTRATE WAY TO LAND QUICK LEASES
AT HIGH RENTS FOR 480 OLD HOMES

OWNERS of an old real estate development discovered how to give it new life. They had on their hands 480 old houses, restricted to leasing. In spite of low rentals, they also had a flock of "To Let" signs staring them in the face.

Bigger value, higher rent
Since bargain rents did not seem to get rid of these signs, they said to themselves, "Let's give more value, even though at higher rents."

They swung into action in 30 of their empty houses, concentrating especially on the kitchens. There they tore out old sinks and ranges. Installed modern equipment of Monel Metal.

The pictures on this page show what a change they made.

Curious prospects, attracted by advertising, came in to look around. Stayed to sign leases.

Renters at last found what they wanted. And were willing (this was in the worst "slump months" of 1933) to pay the extra price.

Give women what they want
Why do women want Monel Metal kitchens? Credit the advertising that runs in "million reader" magazines. Credit the illustrations and articles run by editors. Credit such projects as Macy's "Forward House", W. & J. Sloane's "House of Years" and the much talked of kitchens at A Century of Progress.

Credit Monel Metal itself...strong as steel yet rust-proof, easy to clean, eternally resistant to corrosion. Unmarked by pots and pans. Unmarred by ordinary blows. Unharmed by even the harshest cleansers. And absolutely timeless in its brilliant gleaming beauty.

57 standardized Monel Metal sinks and cabinet tops offer a range of sizes from stock. Prices are within the scope of quite modest building or remodeling budgets.

Complete details and dimensions are contained in our new catalog (AIA File No. 20 H6). This valuable reference is fully illustrated and gives plan and sectional drawings of all models. We shall be happy to send you a copy. Write for one today.

THE INTERNATIONAL NICKEL CO., INC.
67 WALL STREET, NEW YORK, N. Y.

Monel Metal

Monel Metal is a registered trade-mark applied to an alloy containing approximately two-thirds Nickel and one-third Copper. Monel Metal is mined, smelted, refined and marketed solely by International Nickel.
B & B ILLUMINATING PLATES
CRYSTAL GLASS (PLAIN OR SATIN FINISH)
& L.D.G. (TRANSLUCENT) GLASS

FLUSH WALL LIGHT

WALL PANEL EFFECTS

COVE LIGHTING

ILLUMINATED COFFER EFFECTS

CEILING PANEL
WITH MODERN BOWL

SOFFIT EFFECTS

MOULD SIDE THICKNESS
12109 6½" ¼"
12117 8" ¼"
12126 12" ¼"

COMPLETE DESIGNER'S HANDBOOK ON REQUEST

Macbeth-Evans Glass Company.
Charleroi, Pa.

THE ARCHITECTURAL FORUM MARCH 1934
THE ARCHITECTURAL FORUM

CONTENTS FOR MARCH 1934

Frontispiece: Cottage on Estate of S. A. Salvage

ARTICLES

Better Homes in America Small House Competition
Cottage on Salvage Estate
Residence in Piedmont Pines
Residence of Everett Meade
Residence of Fred G. Wale
Residence of Misses Arenstein and Silverberg
Residence of Byron C. Scott
Residence of Paul Wener
Residence at Newton Center
Residence in Princeton
Residence in New Haven
Residence at Lawrence Farms
Residence of George T. Creech
Residence of Richard Mandel
Repeal Remodeling
Yardley Shop, Rockefeller Center
Studen Shop
“Hors de Concours”

INTERNATIONAL SECTION: CZECHOSLOVAKIA

Masaryk Institute
Sanitarium in Tatra Mountains
Industrial Plant
Savings Bank, Trebišť
School, Brno
Villa near Prague
Interior of Villa, Brno
Crematorium, Brno

MASTER DETAIL SERIES

California Spanish House
Residence of Capt. M. Paul
Residence of William C. McDuffie
Residence of Harold H. Braly
Residence of Mr. & Mrs. Cyril Chappallett

BUILDING MONEY

Correspondence
The Editor’s Forum
Forum of Events

VOLUME IX NUMBER THREE
Adequate control, automatic and dependable, is necessary where satisfactory results are expected from unit type heating and ventilating cabinets. Johnson is in constant touch with developments in the unit ventilator field. As changes and improvements are made, the Johnson organization conducts careful tests in order to determine the precise arrangement of temperature control apparatus necessary for the best results with the unit in question.

To this problem, ever changing, Johnson brings half a century of experience in the design, manufacture, and installation of automatic temperature control systems. A single, nation-wide organization with but one thought—the best in automatic temperature regulation.

Whether the control of the unit ventilator is accomplished by the operation of mixing dampers, one or more valves on the steam supply, fresh and return air dampers, or a combination of all of them, there are Johnson gradual acting thermostats, diaphragm valves, damper motors, and air-stream thermostats of proper characteristics to secure the desired sequence of operation.
THE EDITOR'S FORUM

CWA AND PRIVATE PRACTICE

Many an architectural draftsman is grateful to the government for the opportunity of exercising his talents on CWA projects. The dispatch with which Administrator Hopkins has put into effect his plan to give men work with which they are familiar, deserves the highest commendation. There are many types of work for which architecturally trained men have a special aptitude. One of the most important is the gathering of statistics on present structures, in the surveys that are necessary to all future planning of our cities and of the buildings to be erected. Such work is naturally public work for the public good, and the results of the studies are common property available to anyone competent to make use of them. In this there is no competition of CWA with private architectural practice, for short, P.A.P.

In some cities, however, the CWA activity threatens to supersede P.A.P. in public work entirely, usurping all its prerogatives. Housing projects, public buildings, recreational facilities are being planned and designed by CWA workers who would be employed in P.A.P. if the commissions were assigned as in normal procedure. The cities are in effect setting up temporary bureaus for architectural practice, with the federal government paying for the services. Such competition not only under-mines the whole profession but must be stopped in the public interest. These bureaus are in their very nature legally irresponsible. Building design involves the public safety and should be undertaken only by responsible firms.

No time need be lost, no fewer men need be employed, for established firms of architects can be given cost-plus contracts for limited services, containing clauses requiring a certain reasonable number of men at certain stipulated wages. Thus P.A.P. can accomplish the same employment result as CWA. The public will be safeguarded, competent design will be assured, and efficient management through experienced control and direction will result.

Even though CWA is scheduled to cease this spring, the question is not merely academic. It is conceded that the CWA work must be continued, if under other initials. We believe that the ends of employment relief, of the public good and of the architectural profession will all be served by eliminating the type of competition that has sprung up between CWA and private architectural practice.

PLANNING RECOGNITION

One great good that the government housing program has done for architects (without spending a dollar for housing) is to show, by focusing attention on one physical phase of cities, how necessary for community development is the planning service of trained architects. The sphere of the architect's practice is constantly broadening and public recognition of the value of architectural service is growing. Public officials, housing authorities, welfare organizations and civic bodies are looking to the architect for solutions to future building problems.

The architect today is called upon, because of his professional standing, to act as arbiter of the many special interests involved in the future of real estate and building. In housing, for instance, in relation to the prospective growth of cities, the architects are analyzing the effects of planning on these interests, as well as dealing with the physical facts and the controlling factors.*


Editor

MARCH • 1934 • THE • ARCHITECTURAL • FORUM
COTTAGE ON ESTATE OF S. A. SALVAGE, GLEN HEAD, NEW YORK
ROGER H. BULLARD, ARCHITECT

Awarded Gold Medal
Better Homes in America Competition
THE ARCHITECTURAL FORUM

VOLUME LX MARCH 1934 NUMBER THREE

BETTER HOMES IN AMERICA SMALL HOUSE COMPETITION

THE Better Homes in America Small House Architectural Competition was undertaken for three major purposes: (1) to discover the best examples of small house architecture in homes recently built, (2) to interest leading architects in small house design, and (3) to call the attention of the American public — the prospective builders or purchasers of homes — to the better examples of small house architecture and to interest them in high standards of design and efficient planning. It is also hoped through this competition to create a more extensive and intelligent demand for architectural services and to improve the general quality and appearance of residential districts and thus contribute to the progressive raising of standards of single-family housing.

The sponsoring organization, Better Homes in America, 101 Park Avenue, New York City, was founded by Mrs. William Brown Meloney with the help of Herbert Hoover, who was then Secretary of Commerce, more than a decade ago. Its major program has been the organization of local committees in each State of the Union to conduct campaigns for home improvement, house demonstrations, contests, and lecture programs. The results of the Small House Architectural Competitions are each year brought to their attention and are helping to develop an intelligent and informed "consumer" interest in architectural design.

This is the fourth architectural competition conducted by Better Homes in America. The winners of gold medals in preceding years have been Reginald D. Johnson of Los Angeles in 1930, Dwight James Baum of New York and Winchton L. Risley of Los Angeles in 1931, and Royal Barry Wills of Boston in 1932. Bronze medals have been distributed also each year to the winners of Honorable Mentions.

JURY REPORT

The Jury met at the Beaux Arts Institute of Design, New York City, on January 31, and reports as follows:

A Gold Medal was awarded in Class B, Story and a Half House, to Roger H. Bullard, of New York, for an accessory building on the Salvage Estate at Glen Head, Long Island. Other awards were:

Class A, One-story House:

Class B, Story and a Half House (in addition to Medal):
First Honorable Mention: Miller & Warnecke, Architects, Oakland, Calif.; Honorable Mention: Reinhard M. Bischoff, Architect, West Hempstead, Long Island, Randolph Evans, Architect, New York, N. Y.
Of Mr. Bullard's design it is felt that the plan was admirable, compact, convenient, well lighted and well aired. This excellent arrangement is considered perfectly adaptable to a house of material other than the cut stone employed. It gave expression to the feeling that the family living there was compactly knit together, snug under the roof. In addition, the entire presentation was outstanding, and the landscapework of Ellen Shipman was of a notable quality.

In Class A, there were but three distinctive designs that met with favor. Mr. Grigg's exhibit was satisfying because of the extreme simplicity of treatment for a house of this sort. Crudity and bareness of the fuel house, and the heater room, prevented it from receiving further consideration. Of the other two awards, the character of the living room in Mr. Garren's design was favorably commented on, and it was regretted that the work submitted by Mr. Goodell was not more advantageously shown in photograph. The plan met with universal approbation, and the house was considered excellent in the woodland setting.

In Class B, other than the highest award already referred to, the house of Miller & Warnecke was splendidly presented. The irregularity of the site was well taken care of, and the plan not diffuse. No particular comment is made of the other two designs, other than in the house of Mr. Evans, where the treatment of the garage was well handled as a unit with the porch off the living room.

In Class C, there was by far a wider divergence of design by the competitors, and broader consideration of award by the jury. Of the five houses favorably received, there were, in the order previously mentioned, a well-studied and restrained Greek Revival house, what one juror termed " civilized design"; one with an unusual treatment of a two-story living room, the central feature of a design handled in a straightforward and ingenious manner, described by another juror as "not the best, but the most interesting entry"; a charming house of foreign romantic character, well presented for consideration and with many admirable qualities, an excellent plan, with possibly too great striving in the exterior for the picturesque; a modern house with metal exterior, a simple plan, and with no historic precedent for design either within or without. This exhibit was viewed principally as being of a distinct character, and considered as a forerunner of what the future may develop, an illustration of both material and style now beginning to make itself evident. And, finally, in complete contrast, a gruff example of period architecture as applied to New England, executed in such manner as to deserve commendation. In four of these five designs, not considered in the above order, it is regretted that there were reasons why one or more of them were denied higher recognition, the other having been placed as high as its quality deserved.

It is the hope of this jury, as in the past of previous bodies, that this worthy and beneficial undertaking will appeal increasingly to practicing architects as being of value to both the profession and the layman. Better Homes in America is deserving of appreciation for its interest, and initiative.

Respectfully submitted,
Chester H. Aldrich
Archibald M. Brown
Ralph T. Walker
Seymour Williams
F. Ellis Jackson, Chairman
GOLD MEDAL AWARD

ROGER H. BULLARD, ARCHITECT

TWO-STORY CLASS

Stone, not as commonly used in small houses as other building materials, has been effectively employed in this cottage by Roger Bullard. Although built of limestone, since good local stone was not available, it could be constructed of the latter for $10,200. In brick veneer, the cost would be $9,600, in stucco, $9,130, and in wood $8,650. Gray slate varying from dark to medium for the roof was laid in graduated courses in random weathering. The windows are of stock design leaded casement, and the entrance doorway is of oak planks studded with nails.
Miller & Warnecke's house was a competition winner at birth. Built as an outgrowth of a better homes campaign sponsored by the Oakland Society of the State Association of California Architects, it cost $6,500, including architects' fee of 10 per cent. It is of frame construction with exterior of plaster and redwood boards, with battens set behind the boards, reversing the usual manner of applying boards and battens. Both plaster and boards are painted white. The exterior brick walls and brick veneer were given one coat of white cement wash. The roof is of hand-split cedar shakes, left natural to weather. Shutters are painted dark olive green.
Set in a pine forest, the house slopes to the rear overlooking the sea. Interior woodwork is painted oyster white and the walls are textured to give an uneven finish. The rumpus room, on the opposite page, is on the ground floor level at rear. It has a maple dance floor, an open fireplace, and the joists, supporting the living room above, are left exposed.

**Residence in Piedmont Pines, Oakland, Calif.**
**Miller & Warnecke, Architects**
Built in the fall of last year, this minimum accommodation cottage cost 15.7 cents per cu. ft., a total of $1,742, including landscaping, fees, etc. It is of frame construction with exterior walls of random shiplap pine, painted oyster shell gray. Sawdust treated as loose fill is used as the insulation. All specially designed trim is painted white, and the shutters are bottle green. The roofing is of composition shingles. Walls of the living room are of random width shiplap pine set vertically, with a full cornice concealing heating pipes and lighting. All trim is stained natural and the floor is of random width pine. Bedroom walls are plastered and painted white; and bathroom has wainscot of Keene's cement plaster and the flooring is linoleum.
BETTER HOMES IN AMERICA SMALL HOUSE COMPETITION, 1933

HONORABLE MENTION, ONE-STORY CLASS

RESIDENCE OF FRED G. WALE, WESTON, MASS.  
EDWIN B. GOODELL, ARCHITECT

The house was designed to meet particular needs on a particular site for the least expenditure. It is constructed of 2 x 3 in. studs, matched roofer, two layers of asphalt-filled building paper, vertical boards with battens to cover the joints, and interior wall finish of composition board with no battens. A brilliant red casein paint is used for the exterior; trim is wine color, sash and doors are a dark Italian blue.
Planned for two single women, one of whom is a landscape architect, the house is located in the center of a district peopled with Stanford University professors and teachers. The house itself is frequently used for classes in flower arrangement. It is of wood frame construction, with exterior walls of redwood boards, roof of tile, and metal sash. The exterior woodwork is a weather-bleached warm gray; and the roof tile is handmade, mossy red in color, and laid without the usual ridge. The window frames are painted a deep cobalt blue. Interior walls are plastered and the living room floor is cement. Total cost, including fee, was $4,600.
Low cost and simple good taste mark this house by Randolph Evans, which is one of many he has designed for the Harmon National Real Estate Company. It is of frame construction, insulated with a pulpwod material, and has exterior walls of redwood siding, painted white, and weather-stained wood shingle roof. Oak flooring is used throughout the house, except in the service areas which have linoleum floors. The plan is an economical variation of the usual central stair and fireplace plan. On the second floor, a corridor running across the house was introduced to give each bedroom, including the one over the garage, complete privacy.
RESIDENCE OF PAUL WERNER
GARDEN CITY, LONG ISLAND, N. Y.

Typical of the improved architectural standards that are asserting themselves in houses built by development companies, this house on Long Island was one of several erected by the Wilmar Realty Corporation in the heart of old Garden City. It is of semireproof construction, with solid masonry walls of cinder block and brick facing, and steel beams and floor joists. Exterior walls have been whitewashed and the shutters painted dark green. Asbestos
HONORABLE MENTION, STORY-AND-A-HALF CLASS
REINHARD M. BISCHOFF, ARCHITECT

shingles are used for the roofing, and copper is used for leaders and the hood over the entrance. In the cellar, which has a large window facing west, is a large pine-paneled play and living room. The plan is typically Colonial, with living room on one side and dining room and kitchen on the other, separated by a small center hall. A wing at the rear contains a maid's room and bath and an attached garage connected to the back hall by a small covered porch.
A faithful adaptation of the familiar Massachusetts Colonial house by Royal Barry Wills is of frame construction with exterior walls of clapboard stained gray, and insulated with rock wool. Its plank entrance door is painted red and studded, and the windows are double hung with heavy muntins and frames. The roof is of second-hand slate, the chimney of brick. Study, living room, and hall have second-hand pine boarding and plaster walls, floors of pegged plank oak. Dining room and bedroom walls are papered, their floors painted and spattered. Tiled dadoes and floors are used in the bathrooms.

RESIDENCE AT
NEWTON CENTER, MASS.
ROYAL BARRY WILLS, ARCHITECT
The subject of much debate among the jury, this house for a professor of music at Princeton was remodeled from an older structure. It was highly commended for its plan, as being a straightforward solution of its special requirements. Of frame construction, the exterior walls are of clapboard, 6 in. to the weather. The roof is of slate. The living room is finished in knotty pine, the vertical boarding running from the floor to the roof. A cross-over from one portion of the house to the other is provided by a balcony.

RESIDENCE AT PRINCETON, N. J.
MARTIN L. BECK, ARCHITECT
RESIDENCE AT NEW HAVEN, CONN.
FRANK J. FORSTER, ARCHITECT

This house, designed for a professor at Yale, is another of Frank Forster's successful adaptations of the French Provincial style. It is of solid brick construction, with simple but effective oak half-timbering, filled in with brick nogging. The windows are of the leaded casement type, and the roof is of quarry slate weathering green. Two coats of whitewash were applied to the exterior. All terraces and walks are of stone flagging. Of the interiors, the story-and-a-half living room is of most interest, with its solid oak trusses, oak plank flooring, oak trim, and sand finished plaster. Including garage, the house has a total cubage of 26,000 cu. ft.

HONORABLE MENTION TWO-STORY CLASS
RESIDENCE AT LAWRENCE FARMS, N. Y.
DWIGHT JAMES BAUM, ARCHITECT

One of six houses designed by nationally known architects for Lawrence Farms, a Westchester development, Dwight James Baum’s house is a good example of the possibilities that lie in adapting Greek revival to houses of small cubage. Of frame construction, the exterior walls are of shiplap siding for the front elevation and clapboard for the other three sides. The roof is of stained shingles, and the exterior door and shutters are painted green. The same simple formality, studied proportions and thoughtful detail which mark the exterior are followed throughout the house. It has a simple square plan with a garage wing. Total cost of the house, including fees, $9,000

HONORABLE MENTION TWO-STORY CLASS
HONORABLE MENTION, TWO-STORY CLASS

RESIDENCE OF GEORGE T. CREECH, MIDDLETOWN, OHIO

O. KLINE FULMER, ARCHITECT

Wall and floor units of 20-gauge rolled steel are factory fabricated in sections and field assembled. The exterior is of porcelain enamel sheets with horizontal stainless steel clip joints. Economy results from the rectangular plan, no basement, forced circulation heater in garage, minimum hall space, kitchen and bath piping directly in line.
An unusual unity of purpose with its expression in design is attained in this country house because of the complete accord of the creative minds of the designers and the owner. The interiors and the furnishings are being designed by Donald Deskey and Mr. Mandel in harmony with the architecture and with the functional requirements.

The house, now under construction, has as its setting a 90-acre site overlooking the Croton Reservoir. Advantage has been taken of the hillside contours to eliminate the basement and to provide adequate light and air in the service portions. The construction system was dictated by the owner's desire for large room areas unobstructed by columns. Floor construction consists of light steel joists and 2 in. reenforced concrete floor slabs. Walls are of cinder concrete block with white stucco surface. The wall construction is modified, to provide for the continuous plate glass areas, by the use of steel lintels supported on lally columns. Interior partitions are of gypsum block. Quarry tile is used for inhabited roof decks, tar and gravel for the unused decks. The dining room has a semicircular outside wall constructed of glass brick, combining maximum sunlight and insulating efficiency. Cost will be approximately $60,000.
RESIDENCE OF RICHARD MANDEL, MOUNT KISCO, N. Y.
DESIGNED BY EDWARD D. STONE
REPEAL REMODELING

Putting up the bars has been the order of the recent day, and the process is still going on. It means — in addition to the new designs of the bars themselves — new murals, new floors, new furniture and furnishings, even new plumbing, lighting and air conditioning. Above all, it is giving stimulus to new ideas of design and providing a new spirit of gaiety and life to decoration. Frequently the revising extends beyond the grill room or restaurant itself to lobbies and street fronts, and the whole building. Working details of bars were presented on pages 413-428, The Architectural Forum May, 1933.
The bar of Hotel Weylin's grill in New York is shown at the left and on the preceding page. Walls are dark blue; painted drapes, white; columns and rafters, oyster white. Indirect lighting is through the ceiling between the rafters. Painted nubian figures on the bar front are illuminated from above. The mirror behind the bar has painted columns but a molded pediment. Floor is yellow zephirum; metal chairs have dark red upholstery. A. Kimbel & Son, Inc., interior decorators.

The bright bar of the Park Central Hotel, New York, features glass and light. Overhead illumination is supplied through frosted glass, and the intaglio of the glass bar front is illuminated from the underside of the formica bar top. Walls of pastel shades of green; ceiling white; carpet in browns. The chair backs are of Venetian red leather and the seats are natural pigskin. The metal work is chromium.

A bar-tender's view of the dining room of the Ogden Grill, Chicago, showing among other things the lights under the ebonized wood to facilitate action on the stainless steel work board. The room has a black leather dado capped with a bronze strip, ivory walls above. Circular wall-units provide light below and ventilation through grilles above. Ceiling is very light green; floor, darker green carpet. Sobel & Deielsma, architects; Gordon S. Gundling, associated.
The exotic murals of the Palmer House Bar, Chicago, are in flat tones of green, lavender, blue and brown. The bar front is of light mahogany and the top is Monel metal. The floor is brown and tan rubber tile; the ceiling acoustical absorbex painted silver. Table tops are blue formica and the chairs are upholstered in blue fabrikoid. Holabird & Root, architects

Air brush technique is particularly adapted to the modern types of bar murals, as shown in the Budweiser Grill, Chicago. The woodwork is walnut and lace wood, trimmed with stainless steel. The stools are also stainless steel, with red leather seats. Floor is green terrazzo, the walls two tones of green and the ceiling white. The columns are eggplant with gold caps.
Gordon Gundling, architect

A smart circular bar has an existing column for its center in Ogden Grill, Chicago. The bar top and front are of ebonized wood and the step rail and toe plates are of polished bronze. The semicircular wall is of gold mirrors, surmounted by core for the amber lights which flood the mirrors. Settee is in shades of rust and green; the floor, inlaid yellow and black linoleum. Sobel & Drielsma, architects; Gordon S. Gundling, associated architect
Just a corner of "Chez Paree," Chicago, gives a hint of the motion and life of this dining and dancing center. The main walls and the columns are covered with pleated deep red fabric. The ceiling in this portion is painted, as are the walls. The amusing murals are subtly appropriate to the doors they adjoin. Air brush painting gives them distinctive technique. Sobel & Drielsma, architects; Gordon S. Gundling, associated.

The Chestnut Room of the remodeled Collingwood Hotel, New York, is actually done in chestnut, finished natural. The bar, with its simple wood grill, recalls its Colonial prototype at the old Wayside Inn, Sudbury, Mass. The spirit of old tavern days pervades the simple straightforward design. The exterior has been effectively and economically remodeled also. The lettering is of wrought iron, set out from the stucco wall surface. Francis Keally, architect.
DELICATE restraint appropriate to the merchandise, coupled with fine materials perfectly executed, characterizes the new Yardley Shop in the British Empire Building at Rockefeller Center. Entrance doors are bronze-framed with nickel alloy rods passing through bronze diagonals to form a plaid pattern against the wheel-cut glass. Show windows have bronze frames, with Botticino marble floors, mirror walls and recessed panel lighting. The frieze over the entrance door, a conventionalized spray of lavender flowers, is executed in cast nickel. The shop floor is of pink Tennessee marble, with cast brass inserts of floral form. The circular carpet, designed and executed by Loja Saarinen, is recessed into the marble in coral and gray. Walls are of ivory Botticino marble with buff painted plaster frieze above. The ceiling is also painted light buff with ornamental motifs around sprinkler outlets. Illumination is supplied from a white metal light trough placed above marble at base of plaster frieze around three sides of the room. At one end is a broad recessed panel of lacewood, flanked on either side by doors of Brazilian rosewood. Rosewood is used for all cabinets, display tables and chairs, which are upholstered in a gray and brown plaid. Stairs leading to the mezzanine are of cement, covered with carpet in rose tones. The balustrade wall is of Botticino marble, and the handrail is of white metal. On the second floor, the walls and ceiling are plaster painted rose beige. The flooring is carpet in a rose tone the same as the stair carpet. Lighting is supplied from recessed panels around the room, and from a carved glass drop panel lighting fixture in the center of the room. Furniture is of walnut, as are the display tables.
The floor plan, opposite, is shown at one-third the scale of the first floor plan.

Above, view from mezzanine toward entrance, showing circular rug with circular brass frame, and the inserts in marble floor. Left, detail of floor.
Above, view toward entrance, showing plaid pattern of entrance door repeated in upholstery. Right, detail of balustrade and display table.
Above, display room on second floor, and left, detail of building lobby window

YARDLEY SHOP, ROCKEFELLER CENTER, NEW YORK
ELY JACQUES KAHN, ARCHITECT
A glass company setting up exhibition space for the display of its products could easily have fallen into the error of exploiting the material beyond the limits of good taste and good merchandising. Fortunately in the new Steuben Glass salon, that error was not only avoided, but the designer indulged in subtle under-statement, giving to each piece of glass displayed or used an added attention value. Simple decorative motifs and sparing use of color combine to effect the distinctive character of the shop.

The company's merchandising plan is built upon elimination of salesmen as such. There are no counters. It is principally a room in which to create desire rather than to accomplish the definite sale. An architect whose counsel is always available, John M. Gates, is the director of the salon.

A large window, opening on Fifth Avenue and framed in a proscenium of illuminated fluted glass columns, provides a view of the full length of the shop, centering on a sculptured glass fountain at the rear. The exhibition spaces are confined to the main floor and mezzanine. The walls are painted silver gray, enlivened occasionally by color patches in modulated green and cerise produced by display lighting. On both sides of the room are display terraces, treated as part of the architectural scheme. The flooring is of black rubber polished to the brilliancy of jet. Lighting, with the exception of a circular panel suspended from the ceiling over the central table, is from chromium-framed panels with controlled illumination lenses.

The mezzanine is bordered with a chromium and glass balustrade. On one side is an exhibition of architectural glass illuminated with neon tubes and on the opposite side indirect lighting is thrown on the glass display on recessed glass shelves.
Main floor of the shop, looking from the entrance toward the rear, illustrating the architectural character of the terraced display counters, which are of white wood, with metal trim. The opening at the left leads to a display room (see plan) in which it is intended that customers may make their selections in ease and comfort, thereby eliminating the usual purchases from the floor. The opening at right leads to the mezzanine.
Above, a view looking down the main floor from the mezzanine. The chromium and glass balustrade is particularly interesting because of the hidden source light which shines in through the hollow glass spindles. The cabinets are arranged along the side walls in crisp undulations, providing space and background for the many individual glass objects and various groupings. All the cabinets, incidentally, are glass topped. Directly under the end of the balcony is seen the illuminated shelf which enhances the modeling of etched and molded glass.
Illuminated recessed glass shelves along one wall of the mezzanine

Detail of architectural glass display

Table set against mirror in display room
Architects are getting nosey — yes, nosey. They are trying to find out more about their clients than the clients know about themselves!

The Vignola of Lescaze. It was that daring young Swiss, William Lescaze, now of New York and Philadelphia, who started this business. He maintains that anyone contemplating building a house should be analyzed and insists that the client should answer a questionnaire before he, Lescaze, puts a 6B pencil on paper.

That is a swell idea, for it may possibly result in the architect getting something on the client which might come in handy towards the end of the job. You know — something to suggest if the going gets rough!

Far be it from a feuilletonist like this to suggest anything bearing even a taint, a sniff, a faint aroma of a stick-up game, but there it is, and Architect Lescaze should receive the thanks of the profession at large for the idea alone. According to a newspaper, he asks every new client the following questions before starting the design:

1. Are you lazy?
2. How tall are you?
3. Do you like family privacy?
4. What are your pastimes?
5. Have you got enough money to do this job right?
6. Are you a female with a domineering personality?
7. Do you know the difference between a kitchen sink and the back stairs when you see them on a blue print?
8. Do you hate architects as a general rule or just at the end of a job?

Details. We are dwelling upon these questions to a perhaps unreasonable length because this is a professional magazine and we feel in duty bound to make the pathway of every architect's life less rugged. Let us make a few full-size details:

1. Laziness. Mr. Lescaze thinks that if the client is lazy, then the architect should eliminate extra gadgets, hard-to-clean spaces, and waste space in the kitchen. I would also add: provide a passenger elevator; Murphy beds in the parlor (in case of complete disability), and spring hinges on all the doors.
2. Height. Whether or not you or the cook be tall or short, the plumbing supply houses will still furnish you with back-breaking lavatories and kitchen sinks; the plumbers will set the medicine cabinets so that when you open the door you will always knock the glass of water off the glass shelf; and finally, no five-foot-six bathtub is five-foot-six.
3. Privacy. There is no such thing so you might as well stop kidding yourself about it.
4. Pastimes. Let's be decent about this one and let it go at that. All that Mr. Lescaze wanted to know was: Is most of the back seat driving done at home or in the car? Should the architect specify hard wood or something softer?

Questions 5, 6, 7 and 8 are really not so important, because an answer of “yes” would automatically disbar any client unless said client would pay the architect 15 per cent commission, out of which the architect could afford to pay for a sizable accident insurance policy.

Fascinating Subject. May we go on further? 9. “Are the members of the family bored in each other's presence? “Many a divorce could have been prevented if husband and wife didn't have to look at each other all the time; or, if mother could have gotten out of reach of the children's noise, she could have been a pleasant wife in the evening.”

In other words, a nice padded cell for mother! Again may we quote?

“The list of questions runs into great length, including such things as the likelihood of having more children, the frequency of relatives' visits, smoking and drinking habits of the family, ambitions of the children, interest in sun bathing, appreciation of sunsets. . . .”

A Suggestion. We really can't go on. We are overcome at the vista which is opened up. A very complete comedy might be written about the building of a house on the Lescaze-clean-breast system, the first act being in the architect's office, the second act being in the architect's office, and the third act being the same as acts one and two. In other words, the house would never get outside of the architect's office and both the architect and the client would be
so exhausted by questions and answers that they would finally give it up as a bad job and would live happily ever afterwards 3,000 miles apart.

The paper went on to state that "the use of stilts was a perfectly rational one. . . ." Did they mean for the house or for the architect? We're up a tree.

Hood and Cram. The biggest news from foreign parts is that Dr. Ralph Adams Cram and Professor Raymond Hood had a verbal set-to in Bermuda. Two great minds! Their first meeting! One of the great events in the history of architecture!

So The Forum sent special emissaries to record the event for all time. On the left you see the only pictures of the meeting. But what they talked about was unprintable.

Our eavesdropper reports that they opened the engagement with a few stories. Dr. Cram started off with the story of the farmer's daughter that he tells to archdeacons, and he got such a good response from Hood (see illustration) that he went right through his repertoire, including stories for Low Church and High Church rectors, building committees, ladies' auxiliaries, bishops, archbishops, and winding up with the story of the traveling salesman which knocked the Bishop of ——— right off his chair.

It almost did the same to Hood. (See illustration.)

Armed with these secrets of Cram's success, Hood declared that he was going into church architecture.

Hood then volunteered to tell Cram anything he wanted to know about Rockefeller Center or the Century of Progress.

"Nothing doing," replied Cram, "I came down here for a vacation!"

More News. Arthur Brown came from San Francisco to New York to renew his subscription and to brush up his private life a little. Some of us met him at lunch one day in that great architectural forum, the Architectural League, and asked him what he was going to do. "Well," said Arthur, with a perfectly straight face, "I am going out with Harvey Corbett to see Rockefeller Cen- . . ."

Immediately there was a rush to the telephone — "Say, Harvey, don't do a thing like that to Arthur Brown!"

"Hey, Harvey, give the poor guy an even break, won't you?"

"Remember, Harvey, this is his first visit to New York in years! We want him to carry back a ———"

The next day at lunch, Arthur Brown swallowed several Ri-pans tablets, two packages of Ex-Lax and a bottle of sparkling Magnesia and came back to the League. Julian Levi asked:

"Arthur, how did you like the (name deleted by underpaid editor).

"Julian, I'll tell you. I had a swell time at the Beaux Arts Ball Friday night!"
The Czechs are a vital people. In its post-war transformations as in its abiding basic concepts their architecture has been characterized by youthful vigor. During fifteen years of independence they have developed a national style through two phases of shifting emphasis.

Just after the war, the plastic body of the building became the central problem confronting Czech architects. Colour was used to emphasize contour. Reinforced concrete gave free scope to the creative imagination by performing prodigies in interpretative structure.
With Jan Kotéra a new orientation became evident. Kotéra professed but one master, Otto Wagner. His blue print interprets the completed work and its full purpose as eloquently as his nerve chart betrays the function and habitat of a vertebrate. Under Kotéra's influence the walls of modern Czech structures tend to shrink, yielding place to an ever larger, ever braver expanse of glass.
Through these glass partitions one glance suffices to assure the doctor that all his patients are in order.

For the architect the Masaryk Institute is a model solution of those technical problems which rise from the hygienic and social preoccupations of our era. Devoted to education and to health, this building demonstrates that the modern and the efficient do not necessarily reject the homely and the familiar.

Special units seem to change their roles in the new architecture. Community kitchens come to resemble turbine rooms, hospital wards, sun parlors.
Where peasant children leave the fields to go to school, they should not be uprooted by too sudden a change in their environment. They have grown up under the open sky, and here within four walls they must have the same sun and the same light and the same air to which they have been accustomed.

At last a schoolroom which does not terrify. These draw curtains are taken from native Czeck designs with which every boy and girl in the class is familiar, while these little low tables and chairs may be arranged in comfortable groups quite as cosily as at home.
In the Tatra, Bohuslav Fuchs has built a convalescence hotel Babylonian in profile, Gallic in detail, and Czech in the balance of its concept. Dwarfed only by the mountains, the building is one huge centralized hospital block. In any resort where hitherto the benefits of a cure have been undone by the cost of the treatment, there is great practical utility in having, instead of a myriad cottages, a single giant institute, heated from a single boiler, fed from a single kitchen, valeted from a single laundry, and doctored by a single staff.
In the division of his floor space into well exposed sleeping rooms and open recreation porches the architect has given the Tatra sunlight its full due.

Straightforward and unadorned, his structure has been stripped to its bare essentials.
Industrial Plant:
Kiha, Architect,
That frankness which modern banking now attempts to re-capture is finely illustrated in Bohuslav Fuchs's essentially realistic and unassuming Savings Bank in Trebitsch. This architecture makes no attempt to impress or to subdue the depositor. Its bare counters, uncloseted telephones and naked radiators bespeak a homely utility. Its facade is simple, breaking with the tradition that weight, strength, and imposing grandeur must never fail to advertise the strangeness within.
School in Brno:
Mojmir Kyselka, Architect.

Every unit in the educational system of a country as new and as charged with creative energy as is Czechoslovakia must be regarded as a factory. Here the raw stuff of future generations is poured in. Here boys and girls, combed, dressed and ordered for the new life of the country, are turned out. This, Studentenwohnheim in Brno will make of the maiden with her flaxen tresses of hair and her rough spun blouse, the discriminating housewife of tomorrow.
Villa near Prague:
Richard Podzemny, Architect,

Richard Podzemny has met in this villa of his near Prague, the modern architects problem of today, with its realism and its unadorned simplicity, in a rustic setting.

One of his happiest discoveries has been the effect of rich green grass pushing up between his creekish marble dailles.
Interior of a villa built by Ernst Wiesner, Architect, Brno.

In a good room all styles accord.
Crematoria are à la mode in Europe. Ernst Wiesner's crematorium, built for the city of Brno, is a fortress of the soul which rises above its earthworks like a citadel. Stone obelisks leap up like guardian flames along its walls. The urn galleries afford through open courts a glimpse of pinnacles and sloping roofs, which almost might be those of a cathedral.
Hiesner conceived his interior as a spacious room of oriental grace and harsh severity.
Public bath in Brno:
Březslav Fuchs, Architect

Built to accommodate two thousand persons
this public bath at Brno typifies the emor
ous Central European cult for nature
fresh water and the sun. Seen through
writhing coils of a children’s shoot, its
spaciousness is emphasized, and the full
variety of its “straud” and associated enter-
tainment features, each with its architec-
tural place, appreciated.

1 Main entrance.
2 Autopark.
3 Ditch.
4 Main entrance.
5 Winter baths (steam-bath, hot air bath, tubes, shower-bath)
6 Dressing-rooms, summer bath.
7 Sand-pile.
8 play-ground.
9 hygienic shower-bath and wardrobe for children
10 Ersgola
11 Restaurant.
12 dining tower.
13 Filling-tank.
14 Stand.
15 Swimming-pool.
16 Pool for non-swimmers.
17 Children’s pool.
18 Gardeng.
Sunny California can boast of its architecture as well as its atmosphere for much of its recent domestic work has been both distinctive and distinguished. Its architects have developed an architecture in harmony with California’s terrain, its climate, its tradition and its psychology.

It is unfortunate that the word “eclectic” has lost its real meaning architecturally and has become a derogatory epithet in the vocabulary of the modern critic. For California’s architecture is eclectic in the best sense, displaying a wisdom of choice of sources of design.

Quite naturally the chief source is Spain of the renaissance. The early Spanish padres established in their missions in the new land a tradition to which secular designers have adhered, and added. While the basis is pre-eminently Spanish, it has been adapted to American needs. The simplicity of exterior facades, the broad expanses of gleaming stucco walls, the characteristic low-pitched tile roof are retained, as is the cool and comfortable patio, that element of gracious outdoor living that is the envy of all who must dwell in less considerate climates.

But the architects have carried their eclecticism beyond the archaeological choice of one style, and by amalgamating various features of many Mediterranean styles with their own creative interpretations, have evolved a distinctive quality. To do this, two notions had to be discarded: one, that only architectural style-purism could produce acceptable results; and two, that piling-on-the-picturesque spelled good design — an all too common lay error.

Of the first, we find motifs which blend major features of Spanish plan or mass with renaissance detail that might almost be termed Colonial of the New England type. It is a skillful and successful amalgam, and therein lies the art. In the domestic work, the motifs have been freely drawn from Spain, Italy, southern France and the north African coast, for there are kindred features in them all since they evolved in response to similar needs. The national characteristics of each are subordinated and the design of California houses rests on considerations of appropriate form, color and material rather than archaeological copying of entities. The minor palaces, naive peasant farmhouses, even churches and public buildings of all the old Mediterranean countries have served as inspiration and contributed a fund of motifs. Adapted, simplified and assimilated, they play their part in California’s informal and charming domestic work.

The danger, of course, in deriving inspiration from so rich a field is that in unskilful hands it can, and did, become a temptation to over-do, to plaster the picturesque and plateresque all over the smallest house. Wild, colorful, ill-composed hodge-podges of copied detail sprang up as suburban “villas” (witness the Florida boomtown “Spanish” architecture). Happily, however, this indiscriminate eclectism which produced such stage-sets is waning, and recent architecture evidences the throwing over of this exuberance and the evolution of a free, imaginative and fitting style of which we show in detail a few examples of work by recognized leaders in California architecture.

HOUSE OF
Capt. M. Paul
William C. McDuffie
Mrs. Harold H. Braly
Mr. & Mrs. Cyril Chappallett

LOCATION
San Marino
San Marino
Holmby Hills
Bel-Air

ARCHITECT
Wallace Neff
Reginald D. Johnson
Gordon B. Kaufmann
H. Roy Kelley

PAGES
218-221
222-224
225-229
230-232
Once the residence of its architect, Wallace Neff, the house shown on pages 218-221, located in San Marino, Calif., is now owned by Captain M. Paul. In both design and construction it is thoroughly Californian, receptive to sunshine yet mindful of earthquakes. Of reenforced concrete and "gunnite" construction, the first floor is a reenforced concrete mat slab laid directly on the ground, and the rest of the house is of gunnite construction. Exterior and interior plaster is painted oyster white, doors and windows, and exterior wood cornice boards are painted turquoise blue. The tile roof is a dark old rose color.
Library Fireplace

Section A-A

Plan (Showing Concrete Band)

Details:
- Flue
- Plaster
- Chimney Corbel
- Top and sides of core bond into wall 4''
- Concrete band
- Artesian Plaster
- Tile hearth
- Scale in Feet

Scale: 1' = 1/8''
**Main Cornice Section**

- 2' x 10' planking each plank cut as shown
- Concealed copper
- Cast stone columns & pedestals
- Edge of outer fold cut to receive millings on column and pedestal
- Patio floor

**Rake Section**

- Scale 1/2" = 1'-0"

**Roof Details**

**Details of Patio Doorway**

- Joint between living room and patio
- 2' x 6'
- 2' x 10'
- Cast stone
- Pocket lining
- Spring clip

**Section A-A**

- Scale 1/2" = 1'-0"

**Section B-B**

- Scale 1/2" = 1'-0"

**Section**

**Elevations**

- Scale 3/8" = 1'-0"
Residence of William C. McDuffie, Pasadena, Calif., Reginald D. Johnson, architect, shown on pages 222-224. House has concrete foundations, and exterior of stucco over wood framing.
As illustrated in this house, pages 225-229, which was designed for Harold H. Braley, Holmby Hills, Calif., by Gordon B. Kaufmann, orientation on the Pacific Coast takes precedence over the compactness towards which Eastern architects often point their efforts. Built on a concrete foundation unfriendly to earthquakes, the house is constructed of stone tile, with brick surrounds for the doorway, and a composition shingle roof.
The successful adaptation of typical Spanish motifs is nowhere better illustrated than in the detail of this entrance doorway, shown in photograph above and in drawing on the opposite page. At left, a typical doorway, which is shown in detail on the opposite page also...
Details of Main Entrance

Exterior Details

Typical Doorway

Scale 3/8" = 1'-0"
Exterior Detail

WALL SECTIONS

Scale in Inches

---

HEAD
(Jamb similar)

Shake Roof

Stone Roof

Waterproof Slab

Folding Iron Gates

Sill

Weep Holes

Shutter Adjutant

Shutter Screen

Metal Liner

Plaster

Dotted lines show pocket at Jamb (1 side only)

TYPICAL WINDOW

Stone Wall

Plaster

Pocket for Venetian Blind

4 x 4" L

Metal Liner

4 x 4" L

1 1/4" Door

TYPICAL WINDOW

Wood Wall

Plaster

Hinged Unit

---

WOOD WALL

1/4 x 3 Batten

---

SECTION

LIVING ROOM BAY WIND
The house shown on pages 230-232 was designed by H. Roy Kelley. It is the residence of Mr. & Mrs. Cyril Chappallett. Exterior walls are of white stucco, tile roof graduated from gunmetal to russet, exterior doors and windows painted mustard yellow, shutters, low dado, and wrought iron grilles painted medium green. Interiors are finished in textured oyster white plaster, floors are tile and oak plank.
Exterior Details

SECTION A
Scale 3/4"=1'-0"

ELEVATION
Scale 3/4"=1'-0"

OUTSIDE STAIRS

PLAN
Scale 1/4"=1'-0"

DETAIL
SECTION
Scale 3/4"=1'-0"

PLAN, ELEVATION
and SECTION
Scale 1/4"=1'-0"

TYPICAL BALCONY

ROOF DETAILS
Scale 3/4"=1'-0"

RAKE

MAIN CORNICE

RIDGE

Exterior Details
ELEVATION TOWARD BUNK
Scale 1/4" = 1'-0"

DETAILS OF STUDIO

FIREPLACE ELEVATION
Scale 1/4" = 1'-0"
THE ARCHITECTURAL FORUM

BUILDING MONEY

A monthly section devoted to reporting

the news and activities of building finance,
real estate, management and construction

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WASHINGTON DODGE, II

Editor
MONEY FOR HOME CONSTRUCTION
is demanded from the Government. It will be forthcoming, but not in direct loans.

On many fronts last month demands were being made for the Federal Government to make more money for home construction and repairs. It became known that the PWA, the Home Loan Bank Board and the RFC had been requested by the President to make a survey of possible needs and sources of this type of mortgage money. Many a plan was advocated and most plan advocates talked loudly and confidently. Official sources maintained a discreet silence. In most quarters it was felt that the delay in the Administration's asking Congress to guaranty the principal as well as the interest on the Home Owners Loan Corp. bonds would bring a howl from home-money seeking Congressmen who want the H.O.L.C.'s lending power broadened as well as its finances buoyed.

While some sort of aid will be forthcoming according to the best opinion, its form and channels had not been decided upon by the middle of last month. Best guess: The H.O.L.C. will be permitted to loan more freely for repairs on homes on which they have loans; the capital structure of the Federal Home Loan Banks will be increased; greater efforts will be made to popularize Federal Savings and Loan Associations.

Fahey. A practical businessman is John H. Fahey, chairman of the H.O.L.C. and the Home Loan Bank Board. His opinions will probably greatly influence the money-for-homes situation and in recent weeks he has been making it clear that he favors no construction cornucopia. He is especially fond of the new Federal Savings and Loan Associations by which, in communities lacking adequate financing facilities, the Government will just about match dollar for dollar with local interests to supply home money.* Speaking recently to the Northeastern Retail Lumbermen's Association, a group which would of course like direct Government loans for construction, Mr. Fahey said: "The way has already been paved to restore the confidence of investors in home loan finance. What is needed now is not a Federal grant of vast billions of dollars for private home building, but merely to make available to the millions of thrifty people in this country a form of local savings institutions which can handle long-term home mortgage loans with safety to the investor and with business-like economy to the borrower. . . . As I construe it, the New Deal is not a New Dole for any industry or individual. It is not a process by which one industry is helped at the expense of others."

At a press conference, Mr. Fahey said: "The Board is strongly opposed to artificial stimulation of home construction. Nothing would cause greater injury. . . ."

From this attitude on the part of its capable, respected Chairman, it would seem that they and other mortgage holders have been forced to foreclose and take over many homes. They said that this property is on sale at easy terms, and that funds are obtainable for reconditioning and modernization in addition to reasonable loans to would-be purchasers. The problem, they said, is to find second mortgage money. They pointed out that the RFC is allowed to lend to mortgage companies and building and loan associations on first and second mortgages when well secured and that the Home Loan Banks can lend to building and loan associations. They suggested that direct institutions can better meet demands for new construction credit and after the meeting a joint statement from Jesse Jones and Mr. Fahey observed that: "It should be borne in mind that the whole mortgage situation is being greatly embarrased and retarded by laws . . . giving unusual mortgation privilege to mortgages on existing homes that do not want them, by attempting to block new construction." The Association stated that 300,000 families are waiting to "erect new domiciles" and that the present home shortage is more than 500,000, so that a loan for 300,000 homes would leave 200,000 families that can be domiciled in the repossessed homes the building and loan associations and insurance companies are worrying about.

*Federal Savings & Loan Associations were described in THE ARCHITECTURAL FORUM, December. Early last month a RFC committee was out looking for such Associations in 21 States, had been given charters. One hundred and fifty-three applications were being considered.

The President recently requested the RFC to look into the question of home construction loans. A meeting was called, to which came representatives of many important life insurance companies and savings banks, and to which also came Chairman Fahey and Director Webb of the H.O.L.C. At the meeting the institutions represented stressed

Don A. Loftus. Loudest champion of direct Government loans to builders is Don A. Loftus, organizer and head of the Home and Community Builders National Association (THE ARCHITECTURAL FORUM, January). Last month Mr. Loftus was in Washington, hotly pressing his cause. Hardly had news of the RFC conference (above) leaked out than his association "scored the interests that seek to dispose of existing homes to people who don't want them, by attempting to block new construction." The Association stated that 300,000 families are waiting to "erect new domiciles" and that the present home shortage is more than 500,000, so that a loan for 300,000 homes would leave 200,000 families that can be domiciled in the repossessed homes the building and loan associations and insurance companies are worrying about.

The Home and Community Builders Association stated further that "A uniform plan under which 25-year loans would be made to private building companies at 4 per cent interest from the PWA . . . was approved by Robert D. Kohn." Queried by THE ARCHITECTURAL FORUM, Director of Housing Kohn wired: "NO CHANGE WHATSOEVER MADE IN THE POLICY"
H. R. 6460. Before the Committee on Banking and Currency last month were 27 bills offering amendments to the Home Owners Loan Act. Considered the best example of what will be passed if no new construction loans are provided for was Representative Steagall's H. R. 7602 which provided for Government guaranty of H.O.L.C. bonds in principal as well as interest, but continued to confine loans to distressed home owners. It also cancelled the three-year moratorium on amortization of principal which is extended to home owners who need it at present. Important in it was the provision that the H.O.L.C. and the RFC can buy Federal Home Loan Bank obligations. This Bill, favored by the Administration, indicated clearly that loans for new construction through building and loan societies and other members of the Home Loan Bank rather than through the H.O.L.C. were favored.

Best example of the type of H.O.L.C. amendment popular with Congressmen however was H. R. 6460. This bill provides that the H.O.L.C. can make first mortgage loans up to 75 per cent of the cost of land and building up to $20,000 for new construction. The loans would bear interest up to 5 per cent and would be amortized in 18 years. The bill further provided for cash loans on first mortgages up to 60 per cent and up to $3,000 for modernization. These improvement loans would also be at 5 per cent but would be amortized within ten years. The Bill would also have the H.O.L.C. authorized to buy from institutions any mortgages made after June 13, 1933, and eligible under the above conditions. Total lending under these clauses would be $500,000. Important theory behind this bill is that the H.O.L.C., formed to aid distressed home owners, would wholeheartedly enter the mortgage business for one and all who could come under the rules.

H. R. 6460 was drafted by James G. Caffrey, Cleveland realtor, at the request of the Ohio Association of Real Estate Boards. Mr. Caffrey, who is sales director of the Van Sweringen Co., feels that loans for new construction will not hurt the sale of foreclosed homes but aid it because "No old houses will be sold in great volume until new construction is started, because a large number who will buy repossessed homes will get their money out of new building."

With its bonds selling last month in the high 90's rather than the low 80's, the H.O.L.C. was operating on a speedier basis. Transactions closed through February 9: 76,558, involving $218,781,036 contrasted to 9,199 involving $26,032,000 through last November 17. Balm to those who feared that the H.O.L.C. as a Government body could never foreclose on John Citizen was the report that several mortgages held by the H.O.L.C. had gone into default and had been promptly and efficiently foreclosed.

A major management change in the H.O.L.C. last month was the retirement of A. E. Hutchinson as general manager. Mr. Hutchinson was personal secretary to former Chairman William Francis Steen­ son and earned the nickname "Two-job Hutch" in Washington because of a past record of doubling up political posts. While Mr. Hutchinson continues as Secretary, the general managership will be filled by William H. McNeal. A native of Kansas, Mr. McNeal is a lawyer and has engaged in the mortgage loan business in Oklahoma City and has represented the Commerce Trust Co. of Kansas City and the U. S. Bond and Mortgage Co. of Dallas. He has served as title examiner of Oklahoma City's American Investment Co. and of the Waddel Investment Co. of Kansas City, of which he was made vice president. Until joining the H.O.L.C. staff as special rep­resentative of the board, Mr. McNeal was with the New York Title and Mortgage Co. Experienced in title examination, appraisal and the organization of branch agencies, Mr. McNeal was given the difficult assignment of reorganizing the H.O.L.C.'s work in Illinois, where many a cry of "politics!" and "graft!" has been heard. Observers felt that his appointment is another example of how Chairman Fahey is putting the H.O.L.C. on a straight business basis.

Three new assistant general managers were appointed last month. To District No. 4 went Charles S. Robb. All three of these went Charles S. Robb. All three of these men once held the rank of reorganizing the H.O.L.C. on a straight business basis.

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**1933 EARNINGS WERE GOOD**

for most companies in the building industry. An opinion on what a "normal year" might bring.

Recently the New York Stock Exchange firm of Goodbody & Co. published a study of the building industry. Interesting in it was an estimate of what a half dozen large companies in the business could earn in a "normal year." To estimate sales for such a year, Goodbody & Co. assumed residential construction at $4,600,000,000 and all other types of building at the 1931 rate of activity. Profit margins for the different companies were estimated at the same rate as in years of comparable volume, little or no allowance being made for increased efficiency and savings instituted during recent years. Their percentage of sales to their field's totals were calculated at the 1929 ratio. Said Goodbody & Co.: "Because of the low level of building at which 1934 is starting, we do not believe the normal sales volume indicated can be achieved this year. It is very possible, however, that this rate of activity will be attained in the not distant future." The following table shows the earnings which Goodbody & Co. believe might be attained, together with their estimate of 1933 results:

<table>
<thead>
<tr>
<th>Earnings Per Share</th>
<th>Net Income Net</th>
<th>Per Share</th>
</tr>
</thead>
<tbody>
<tr>
<td>American Radiator &amp; Standard Sanitary</td>
<td>$15,100</td>
<td>$1.45</td>
</tr>
<tr>
<td>Devco &amp; Raynolds</td>
<td>1,053</td>
<td>6.40</td>
</tr>
<tr>
<td>Johns-Manville</td>
<td>6,400</td>
<td>7.85</td>
</tr>
<tr>
<td>Minneapolis Honeywell</td>
<td>1,900</td>
<td>9.00</td>
</tr>
<tr>
<td>Sherwin-Williams</td>
<td>6,328</td>
<td>8.50</td>
</tr>
<tr>
<td>U. S. Gypsum</td>
<td>11,709</td>
<td>9.15</td>
</tr>
</tbody>
</table>
| * Net expressed in thousands of dollars.

Goodbody's method of reasoning that $4,600,000,000 is the present normal residential construction year was as follows (with 1930 being considered):

- Census value of all homes: $142,886,000,000
- Estimated value of land: 23,306,000,000
- Estimated value of residential buildings ($4,000 each): $119,620,000,000
- Number of units: 29,905,000
- Annual depreciation at 2% (Units): 508,000
- Annual increase, Number of families (Census): 555,000
- Total units required annually: 1,153,000
- Value of units, at $4,000 each: $4,612,000,000

Assuming that the housing shortage caused by the war was eliminated by the end of 1924, Goodbody & Co. estimates that by 1929 there was an overinvestment in homes of $2,200,000,000. The decline in construction the following year just eliminated this surplus. By the end of 1933 however an $11,300,000,000 shortage had piled up.

+ Interesting as were Goodbody & Co.'s forecasts, more tangible evidence of corporate recovery in the construction industry came in the earnings reports for 1933, many of which were announced last month. The following is a cross-section of results attained by companies with a very substantial stake in the construction and building equipment industry. Purposely omitted are those corporations which serve the construction industry but whose earnings are largely dependent upon other industries as well, such as the steel companies.

...Until 1930 A.P.W. Paper Co. was Albany Perforating Wrapping Paper Co. That year it entered into a management contract with the American Public Welfare Trust, organized by Prognosticator Roger W. Balson. For the six months ended with December, A.P.W. made $84,521, a 215 per cent increase from the $26,765 made in 1932's last half. Net sales during the two periods were $1,527,000 against $1,309,000.

In 1932 the Alpha Portland Cement Co., which has a 13,000,000 bbl. capacity, lost $1,763,617. Last year it lost $604,961.

In 1932 Armstrong Cork lost $2,259,000. Last year it netted $3,204,000.

Congoleum-Nairn's earnings of $2,062,881 in 1933 against $674,402 in 1932 recently caused the directors to boost the $1 dividend rate to $1.30. The company has called its preferred stock and bonds, a $2,087,000 operation which puts the common stock in a position to receive the entire future earnings. In the Congoleum-Nairn treasury are 426,821 shares of its own stock, bought at an average of $10.07 a share, or a good deal less than half recent prices.

"The thing to watch for," said Pennsylvania Railroad's General Wallace W. Atterbury recently, "is paint. . . . Everybody stops painting when profits stop." Famed big paint company with lines including dry colors, insecticides, and artists' supplies is Devco & Raynolds, Inc., continuing a business founded in 1754. The company's January business was reported to be running 100 per cent ahead of 1932, with special improvement in the South and Southeast. For the year ending November 30, D & R made $656,336 against $217,765 in its previous fiscal year.

...General Fireproofing Co. specializes in steel office furniture and equipment. A large order on its books is for $500,000 worth of furniture to be supplied to the Government during the current fiscal year. Another General Fireproofing activity at the present time is the manufacturing of steel barrels. Last year General Fireproofing made $8,919. Small as this was, it looked good against 1932's $466,725 loss.

...General Paint Corp., with the Far West as its chief territory, made $51,062 in the year ended November 30, 1933, against a loss of $291,129 in the previous fiscal year.

...Largest maker and seller of warm-air furnaces is Holland Furnace Co. Last August the company went through a major change of management. The new management was pleased to report for the nine months ending December 31 a profit of $159,105 against a $1,434,170 loss in the same period of 1932.

...Indiana Limestone Corp., successor to receivershiped Indiana Limestone Co., lost $382,617 in the first 11 months of last year, which were its first 11 months of corporate existence. On November 30 its unfiled orders were the lowest in its short and its predecessor's longer histories.

...The Iron Fireman Manufacturing Co., one of the largest makers of small automatic stokers (main office: Portland, Ore.), made $380,784 against $78,679 in 1932.

...Aided by the boom in the automobile industry as well as rising building volume, Linley-Owens-Ford Glass made $4,200,000 against a loss of $295,000 in 1932.

...The McCord Radiator Manufacturing Co., which in addition to automobile radiators makes radiation surfaces for heating, ice trays for refrigerators and the "Electric Towel," earned $24,757 last year. The year before it lost $649,110.

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**STANDARD STATISTICS STOCK PRICE INDICES**

<table>
<thead>
<tr>
<th>Year</th>
<th>1929</th>
<th>1931</th>
<th>1933</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Buildings Residential</td>
<td>130</td>
<td>120</td>
<td>110</td>
</tr>
<tr>
<td>Nonresidential</td>
<td>150</td>
<td>140</td>
<td>130</td>
</tr>
<tr>
<td>Total</td>
<td>140</td>
<td>130</td>
<td>120</td>
</tr>
</tbody>
</table>

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236 THE ARCHITECTURAL FORUM MARCH 1934
Last year, the chairman and president of Metropolitan-Honeymoon & Co., recently told stockholders, there was a marked increase in the use of gas for house heating which resulted in an increase in sales of gas equipment controls. They also stated the company expects a growing business with building activity and has developed a more complete line of controls for air conditioning and space heat. Last year M-H's earnings of $831,240 were sufficient to put the stock back on a $1 dividend basis. They compared to 1932's $190,323.

The Medine Manufacturing Co., products of which include various types of radiation surfaces, made $60,959. In 1932 it lost $165,652.

There is nothing in the company's present business that would justify pessimistic forebodings for 1934," said Edward Cornish, president of National Lead Co., in reporting earnings of $3,828,329 against 1932's $3,301,612.

Its eight plants and 12,000,000 bbl. capacity make Pennsylvania-Dixie Cement Co. one of the big members of that harassed industry. Last year its loss was $1,674,739, a shade or two better than 1932's $1,866,231 loss.

Sir Axel Wenner-Gren, wealthy Swede who controls the Electrolux Co. of Europe and the Electrolux Vacuum Cleaner business in this country, was recently made chairman of Servel, Inc., "for a time." There is a rumor that under him the company may make an Electrolux usable either with gas or electricity. A development officially announced recently was a kerosene-operated refrigerator for farm districts. For its fiscal year ending October 31, Servel sold 56,003 units after special deductions of $538,746. This compared to a $777,423 loss in the preceding fiscal year.

From 1905-21 the Ruberoid Co. was the Standard Paint Co. In recent years it has continued to round out its lines of roofing felts, pipe coverings and allied products. In 1932 it lost $220,069. Last year it was $149,968 in the black.

A BROKERAGE SERVICE is enlarged to include construction work.

Chicago real estate men know of the R. B. Whitaker Co. as a concern specializing in the sale of higher grade homes in Kenosha and Winnetka. In 1932 the Whitaker Co. introduced its "Whitaker Plan" for selling homes which worked with considerable success through the lean years. Last month the company inaugurated a new home building and modernization plan.

The Whitaker Plan consists of three divisions: service for buyers, ordinary service for sellers and special service for sellers. Part of the service for buyers is the so-called "Photo-Tour of Homes," which consists of throwing enlarged photographs of listed homes for sale on a screen in the company's office for the prospective purchaser's benefit. The ordinary service for sellers classification is essentially the same as the services rendered by any brokerage firm. Chief among the features of the special service for sellers is an appraisal made by the American Appraisal Co., for which a small advance charge is made and later deducted from the broker's commission at sale time. Users of this service are asked to give the Whitaker Co. a six-month exclusive agency on the property, with the assurance that the company will make special efforts to sell it.

Another Whitaker department has been the Home Property Advisory Service, which the company has described as "a New Service in Real Estate to provide property owners—individuals or groups, and especially absentee owners—with an organized, responsible, low-cost means of servicing their property so as to enable them to carry out, at long range, their wishes or desires." During the vacancy stage the company will: 1) Advise as to work to be performed for the care of grounds and appearance of same; 2) Advise as to proper care of heating and plumbing equipment; 3) Make such reports as it deems proper to the police and fire departments and superintend snow removal; 4) Report to the owner any internal or external adverse conditions, with advice on the remedy. During the occupancy stage this service consists of: 1) Forwarding any complaints or requests of the tenants, with recommendations; 2) Rent servicing or advice where desired; 3) Cooperation for repossessing of property where necessary; 4) Following owner's written instructions on any minor emergencies. Costs for the service range from $4.50 to $10 a month and are based on the total assessed valuation.

The Whitaker booklet on this advisory service said: "Reconditioning, rehabilitation and remodeling require the broader specialized attention of a construction company, and obviously cannot be included in our Home Advisory Service beyond reporting the need thereof."

Last month's Whitaker move was the inauguration of a full construction service. It was essentially a perfection of its brokerage service, but architects were interested in the move because it involved both new building and modernization of existing properties. The company will fix prices and tell customers "At no time during any stage of the planning or construction will you have to bother with architect, contractor or material men." Prospective home builders are to be shown designs for the new or remodeled residences in the Whitaker Co.'s projection room, as listings have always been exhibited under the Whitaker Plan.

As builder-brokers, the company will act as general contractors, letting out all work and employing private architects. Such Chicago architects as Melville Clarke Chatten, Chester H. Walcott and Mayo & Mayo, Inc. have agreed to work with the Whitaker Co., submitting plans which, when sold, will net them fees.

WITHOUT COMMENT

"If the churches were taxed, they would derive the following benefits: 1) Only those churches whose work has distinct social and religious value and are increasingly useful would survive. . . 2) There would be a greater tendency toward the union of churches. . . . 3) The churches would become more efficient because they would feel compelled to justify themselves through greater energy to avoid the conviction that the present form of tax exemption for the benefit of the churches is without representation on the part of 'outsiders'. . . . 5) Churches would take better care of their property and the community would be relieved of seedy, dismal-looking church buildings. . . . 6) The spirit of sacrifice which might be developed among church members would create a deeper spiritual life."

Fred F. French, addressing the Associated General Contractors, convened in Washington.

"Last week our company applied to the Secretary of State in New York for the privilege of using the corporate name, 'Free and Clear Real Estate, Inc.' This name indicates . . . what I believe ought to be the ideal in future real estate policy."

"We will not have a wholesome real estate condition until we get together and share our knowledge to prevent over-development . . . The unbridled growth of cities in America is going to experience a protracted slowing down." Henry Brueu, president of the Bowery ('world's biggest') Savings Bank, before an American Bankers Association meeting last month in Washington.
A MORTGAGE CONFERENCE

is called in Manhattan. How 300 mortgage men plan to mend their ways.


The voice was that of Robert E. Simon, keynoter for what astute U. S. building money men have already come to call the most important code ever held: the First Annual Convention of the Mortgage Conference of New York. There, in all-day session, sat important representatives of nearly every one of Greater New York's 300 savings banks, trust companies and title companies, in addition to some half a hundred life insurance men whose portfolios include urban mortgages scattered throughout the United States.

Speeches were frank and largely free from oratorical verbiage. All at the Conference not only knew but were willing to admit that real estate is still in a critical period and that mortgage men must unite in an effort toward self-preservation.

Rental Stabilization. No gathering of any industry is complete these days without a discussion about its code of fair competition. Conference speaker on the subject was Lawrence B. Cummings, vice president of Douglas L. Elliman & Co. and a member of the national code committee. He appeared neither as an opponent nor proponent of the suggested code; in fact the code was not in the official title of his talk: "Can Real Estate Interests Unite on Sound and Practical Renting Policies for the Elimination of destructive competitive practices?" But he pointed out that rental stabilization and the code are inextricably connected at the present time, must be discussed and considered together.

"Some of us feel a little like Prometheus . . ." said Code Committee man Cummings early in his address, "He was chained to a rock and torn at repeatedly by a vulture. We feel a little in the same position, but this time the vulture has assumed the proportions of a Blue Eagle. We go to Washington and come back with the feeling that we have done nothing but contribute our heart's blood to the efforts and find we have a new administrator." Mr. Cummings outlined briefly the extent of real estate's difficulties and their connection with lending institutions. Two statistics he quoted are news-worthy: "The real estate levy for New York in 1933 was $455,000,000, of which $1,190,000,000 was delinquent on December 31;" Thirty-seven of the lending institutions in New York City are housed. In response to a questionnaire stated that they had apartment house mortgages alone in New York, those which had been foreclosed and those still outstanding, and this is merely the amount of the mortgages and not the value of the property, in the amount of $1,435,000,000."

He traced the landlords' position as being not only because of the laws of supply and demand but also because of various forms of "chiseling" which any stabilization agreement would eliminate. Salient among these:

1) "We had professional rent reducers who were taken on just as tax experts would be, to save rent on a contingency. The brokers, God help us, were perfectly willing to come in and jockey landlords against each other, getting phony offers, submitting them constantly, bearing the market down."

2) "The commercial bankers were largely responsible for some of these situations. They would refuse customers their regular seasonal loans unless the customers obtained rent reductions. "In other words," said Mr. Cummings, "they want the landlord to do a little banking business."

3) "Many of the lending institutions took the wistful course when a property was foreclosed of doing what we call throwing it to the dogs — that is, slash the rent roll so it will cover operating expenses and taxes, and never mind anything else."

As the practice has come up of assuming leases in enormous quantities and in turn throwing those on the market for anything you can get for them.

Mr. Cummings said that when the committee first mentioned rent stabilization the NRA consumer representative protested that it would be price-fixing, that open schedules were the nearest approach possible. Such a provision, Mr. Cummings commented, "Would remedy this situation as much as trying to throw an open newspaper against a gale of wind. . . . Since there was no tie up with actual cost of production, it could not be tried in the midst of these discussions with the NRA, up came the famed Heckscher v. Rockefeller Center Suit (The Architectural Forum, February, 1934). Mr. Cummings said that many of the Heckscher charges were against the exact type of practices a code of fair competition would eliminate and that such a code is not in any way at variance with the Administration's guaranty that it will look on most of the provisions favorably. Mr. Cummings asserted that real stabilization can be achieved only through an NRA code with its rigid enforcement devices and that it is now up to real estate to tide whether or not it wants such a code.

Later in the meeting Mr. Cummings was asked regarding the much talked of code provision which would prohibit all expenditures on buildings unless a certificate of convenience and necessity be obtained from the Code Authority. Said Mr. Cummings: "It has not yet received even an indication of approval from the Administration, and furthermore the serried ranks of labor are all arrayed against it. The construction people and material manufacturers are all against it, and a considerable portion of the bankers are against it. They say they don't want any limitation on normal output. . . . I question very much if it will ultimately appear in the Code, if there is a Code."

Modernization was ably championed by First Vice President Robert L. Hoguet of the Emigrant Industrial Savings Bank who said: "Our present day real estate owners are, I think, too prone to feel that they have discharged their entire duty towards their property if they have kept it in decent repair."

Of the economic justification of modernizing, he said: "It is fascinating to play around with blueprints and architectural, and picture to your mind what a nice job you can make of this dilapidated old house, but then you are brought back to the stern realization that after all you are operating with other people's money, and you can't afford to do it unless the thing is going to pay. A word of two as to what seems to me to be the applicable standards of payment: "I think that where you make up your expecptive rent schedule and your expecptive rent schedule shows a return on the original
investment, that is, your cost of building plus a return on the new money of 5 per cent or more with a reasonable amortization, it seems to me that you have a perfectly clear case of modernization and ought to go ahead and do it. Bearing in mind that institutional money today can't be put out with safety at much above 3½ per cent, I should say, going further, that modernization is indicated if the expected return will show even 4 per cent on the original investment and on new money. And, personally, I am inclined to go even further. It seems to me that you should modernize even if you can only get a reasonable rate of return on the new money. Modernize even in cases where the property which you own or control is not producing as much as 4 per cent."

New Construction Controlled. "The joys of jail would have been facing us a few years ago in such meetings," said Robert E. Simon when he arose to discuss the possibilities of controlling new construction.

One of the great obstacles to such control, he admitted, would be institutions anxious to make loans. "But," he continued, "that doesn't loom up so troublesome to me if a group such as this here today means business and are seriously going to get together and realize that they can no longer go it alone, that they are competing against the individual investing his own money and in a position to take the consequence; that they are part . . . of one organization, the real estate field in New York City . . . and that probably the same depositor in the savings bank whom one group is representing is also a policyholder in another institution where another group is trying to get the same loan, and that you are competing against yourselves for the stockholders . . . ?"

"Before we set up a garment center or some other kind of center," urged Mr. Simon, "let us survey and see why these people can't be housed where they are by modernizing and improving the buildings. Homing Hedded, "I think," suddenly said . . . .

"They announced last week in the Bronx a loan of $5,000,000 [Hillside Housing]. . . .

Frank Fox

thousand dollars or twelve. He has put his last dollar in it, in his life savings, into that purchase which is the largest purchase he ever makes, and he hopes to make that a permanent house . . . . I think we could do a very fine service, if we saw to it that the loans which we make are only on standard houses built of standard materials.

Architect Wanted. After several men had arisen to praise Mr. Simon's suggestion, Mr. Edward H. Hufnagel of the Westminster Bond & Mortgage Corp. had something to say about construction. He remarked that "Only yesterday we had a case where there was a freeze-up in one portion of the house in which there was no cellar, and where that portion had been walled out and closed so that the cold would be in there and there couldn't be any heat. I think in the construction of houses we should be very much more particular to see that competent architects are used, or engineers, to provide against such unfortunate things which cost a great deal of money. The man with small means buys a house, say, of eight or ten

Great applause greeted Mr. Fox's comments. Up spoke Sherlock Davis to say that if such a statistical organization as Mr. Simon suggested were functioning, it could aid the Government to spend wisely.

Doctor. "I feel very much encouraged by this gathering. There is no business of any like magnitude — and this is the greatest business, the real estate business — that hasn't been carried on with so little intelligence, and, I may say, on the whole with so little integrity. This gathering shows that you are inclined to get away from that antiquated individualism which has led you to ruin in many cases and which, if it persists, will lead you to further ruin." So spoke Dr. Richard T. Ely, president of the Institute for Economic Research, potently backed real estate study organization.

Life Insurance. An insurance man's opinions on mortgages were represented at the Conference by Alfred Hurrell, vice president and general counsel of Prudential Life. He was especially bitter regarding mortgage supervision, under which he was called "the political hazard" in loaning, and said "You have got to make your loans with a real knowledge that you are in a democracy where the people are king . . . . With that sort of an atmosphere which is here and which we have seen, and with losses that may come from the piling up of taxes and deferred charges, I say . . . . that we must make loans more carefully, and the nearer we get to the old 50 per cent the nearer we will come to putting the mortgage loan back. "I have been somewhat lugubrious perhaps . . . . but I am really not so completely discouraged . . . . because I am told, taking it by and large, averaging up the mortgage loaning institutions, that about 80 per cent to be conservative, of their mortgage loan account is good . . . . That leads me to say . . . . that the first mortgage is still one of the first securities on earth."

Guaranteed Mortgages, Real Estate Bonds. Commentary on the vast disorder still ruling the field of finance for that month of default have failed to result in satisfactory solutions. Speaker on this subject was George Eichen Roosevelt, private banker who has worked out especially difficult real estate reorganizations and has taken an active interest in aiding New York's guaranteed mortgage troubles. At the end of his talk Mr. Roosevelt said: "I have not painted a very romantic picture . . . . but I do think I have been very realistic."

The outlook for these types of securities, said Mr. Roosevelt "is precisely the same outlook that a blind man has in a pitch black entirely strange room with unsupervised body jabbing him with a pitchfork." He said that all financing is being retarded by the Securities Act, uncertainty regarding money's purchasing power, taxes, and knowledge of past irregularities. Speaking of real estate securities he said, "I think the greatest miracle has been done by the practice of distributing the interest with unpaid taxes. In that case an investor may find an
enormous burden placed ahead of him that he knew nothing about." Recommended for future real estate financing changes along these lines, eliminating the now well-known abuses of the past. Mr. Roosevelt also felt that if any mortgages are guaranteed in the future, the liability of the guarantees should be limited to the total capital of the guarantor so that his liability would mean something. He said that most reorganizations are difficult unless cash sales can be made and that the best present reorganization committees can do in many cases is to provide the best possible management for properties in their custody.

On a cure for these troubles Mr. Roosevelt was not very specific. Said he: "The whole thing could be easily solved if there was some body — I don't care what kind it is — of unimpeachable integrity and transcendent ability, that immediately jumped in whenever anything got into trouble."

Construction Impeded as Costs Rise in St. Louis.
Two specific indications of how rising building costs are halting construction otherwise ready to go ahead were revealed in St. Louis last month. Bigger of the blocked projects was Neighborhood Gardens, proposed low-cost housing scheme (The Architectural Forum, October). The estimated cost was around $450,000 while actual bids ran over $600,000, a discrepancy large enough to bring a PWA representative to the scene. He ordered drastic revisions in the plans and the housing is now delayed until Washington approves the new plans.

Second blocked project was to be a three- and six-story office addition to the prosperous Monsanto Chemical Works plant. The company had estimated that the additions, to be completely air conditioned, would cost $200,000. The low bid was in the neighborhood of $360,000. The 80 per cent discrepancy was sufficient to cause the company to delay a decision and consider major revisions in the plan.

Commented Real Estate Editor Edward C. Schneider of the St. Louis Globe-Democrat: "Labor figures in the higher bids, not because the scale will be raised, but because it seems the full rate will be paid in the future."

PUBLIC WORKS

THE PWA'S FUND
is all spoken for. Non-Federal buildings get $123,232,450.

With 6,400 non-Federal applications for loans and grants still pending before his Public Works Administration, Secretary Harold L. Ickes announced on last month's first Sunday that his $3,300,000,000 had run out. Talk that Congress would refuse the PWA by at least a billion dollars was less widespread in face of the immediate need of more funds to keep the Civil Works Administration going.

While the building industry had a direct interest in the Federal allotments, such as the $65,838,103 allotment for post offices, the $1,000,000 earmarked for air conditioning of public buildings, allotments for a few government schools and hospitals and for some prison repairs, as well as an indirect and still uncertain interest in the building which the Public Works Emergency Housing Corp., the Federal Subsistence Home- stead Corp. and the Tennessee Valley Authority may bring about, interest last month centered in Secretary Ickes' final accounting of funds for non-Federal projects involving actual building construction.

Of $123,851,058 in approved loans and grants for non-Federal buildings, by far the greater part provide for public schools, housing and hospitals. The list includes: 317 schools, $48,102,640; 76 hospitals, $22,995,544; 19 housing projects, $36,726,958; 19 courthouses, $2,460,945; 18 penal buildings, $2,371,200; 13 dormitories, $4,826,500; 10 fire stations, $110,271; 10 auditoriums, $1,942,800; 8 city halls, $1,628,600; 5 warehouses, $652,000; 4 airports, $391,400; 4 libraries, $280,700; 3 armories, $125,000; 3 poor farms, $539,500; 3 stadia, $47,500; 2 garages, $12,000; 1 market, $250,900; and 1 museum, $66,000.

Cities, school districts, counties and other public bodies which receive their loans from the PWEHC's Hackett Purple Heart medal, the Silver Star with two oak leaf clusters and the D.S.M. Col. Hackett is a member of the Chicago Board of Local Improvements.

In Holabird & Root he was in charge of all construction work. The decision was taken in many quarters as meaning that the PWEHC's snarl with Comptroller McCarl has been settled and that when spring comes housing won't be far behind.

George Emlen Roosevelt

McCarl has been settled and that when last month they had a surprise. Secretary Ickes officially announced that some of these bonds would be sold by the PWA. They will probably be bought by banking houses for resale to private investors or institutions, in which case interest and principal payments must be met promptly to avoid credit stigmas. It is expected that the PWA will eventually hold $500,000,000 worth of such bonds, of which only certain issues will be sold from time to time when bond market conditions look right. Of course the PWA will in no way guarantee or recommend the bonds; they will have to stand on their own merit. Funds received from these sales will of course be available for new PWA projects.
THE HOMESTEAD DIVISION

has approved $8,000,000 worth of projects.

Two subsistence homestead projects have received much publicity. One, at Dayton, Ohio (The Architectural Forum, July), was conceived even before there was a Subsistence Homestead Division of the Department of the Interior with a $25,000,000 PWA appropriation and Mrs. Roosevelt's best wishes behind it. Some homes in this development have been completed and into one of them recently moved a family, the first actually to be domiciled by the PWA. The other project will be near Reedssville, West Va. (The Architectural Forum, December). This project caused considerable comment at the time because of Mrs. Roosevelt's personal interest in it and because it contemplated a Government-owned factory to make Post Office equipment. Congress recently halted the factory plans after receiving protests from private manufacturers, an action considered extremely significant by all industrialists who fear Government competition. Business.

Except for these two projects, the Homestead Division has received little mention except here and there in the local press when a project has been approved. Surprising to most people is the fact that by the middle of last month the Division had approved 25 projects involving $8,157,000 and have accepted applications totaling $4,500,000,000.

Head of the Homestead Division is Dr. M. L. Wilson, a practical dry farmer who does not like to be called "doctor" (The Architectural Forum, September). The offices of the Division occupy the old quarters of the National Railroad Administration in Washington's Hurley-Wright Building. About 40 employees form the home staff at present. Assistant Director and a member of the three-man public relations division is Roy F. Hendrickson. Working for the Division are some ten field organizers who investigate all applications and report their findings to a staff of five in the home office. Final decisions on all applications rest with Secretary Ickes. A small staff headed by L. Brandt and including an architect checks the physical details of all projects including construction operations. A special survey unit of the Division is the "Stranded Industrial Group Section," headed by Clarence E. Pickett. Working at present chiefly in the coal districts, its purpose is to locate stranded industrial groups which might be profitably homesteaded. In the Division, emphasis is placed on the fact that the present form of organization may be changed with future developments.

Where a project is initiated locally, and that is the usual procedure, the local county agricultural agent or some similar officer is usually among the directors. One or two representatives of the Division are also always on the Board. Local corporations are entirely owned by the Division and are operated on a non-profit basis. Unlike limited dividend corporations, no private funds are called for. The local corporation handles the construction, which includes selection of an architect, usually after the application has been approved.

Since the Division is a large-scale experiment, loans have been made to as wide a variety of projects as possible. Approvals to date have been:

- Birmingham, Ala. $750,000
- Pender County, N. C. 1,000,000
- Jasper & Putnam Counties, Ga. 1,000,000
- Decatur, Ind. 125,000
- Westminster County, Pa. 276,000
- Tygart Valley, West Va. 465,000
- Monmouth County, N. J. 500,000
- Youngstown, O. 500,000
- Dayton, O. 50,000
- Reedsville, West Va. 600,000
- Wilmington, Del. 210,000
- Crossville, Tenn. 431,500
- Enid, Okla. 250,000
- Ft. Worth-Dallas, Texas 250,000
- Wichita Falls, Texas 125,000
- Decatur, Ind. 125,000
- Beaumont, Texas 125,000
- Monumental Factory, Pa. 276,000
- McComb, Miss. 75,000
- Laurel, Miss. 75,000
- Tupelo, Miss. 75,000
- Hattiesburg, Miss. 100,000
- Meridian, Miss. 75,000
- Rochester, N. Y. 100,000

Total approved $8,157,500

COLLEGE CONSTRUCTION

needs are set at $900,000,000 by Hegeman-Harris Co.

Completed last month was a survey, believed to be the first of its kind, of the building problems faced by U. S. universities and colleges. The surveyor was Hegeman-Harris Co., famed building firm which would of course benefit if this type of construction were revived.

Hegeman-Harris' questionnaire brought in 221 replies, furnishing a cross-section of 15 per cent of the total American institutions of higher learning. Eleven per cent of the replying institutions reported that their plants are adequate; 24 per cent made no statements on adequacy; 65 listed definite needs.

Needed construction on which the universities made actual cost estimates came to $939,000,000. Hegeman-Harris' staff drew up approximate costs where no estimates were given, bringing the total to $135,000,000. Observing that the 15 per cent cross-section might or might not be representative of the nation as a whole, Hegeman-Harris pointed out that if it were, the total needs in this market come close to $900,000,000 and call for 2,200 jobs, with an average need per school of $60,100.

The replies indicated the following definite needs in the institutions responding:

<table>
<thead>
<tr>
<th>TYPE OF STRUCTURE</th>
<th>NUMBER NEEDED</th>
<th>COSTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student housing</td>
<td>34</td>
<td>$27,267,000</td>
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<tr>
<td>Libraries</td>
<td>43</td>
<td>15,433,000</td>
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<tr>
<td>Fine arts buildings</td>
<td>31</td>
<td>9,128,000</td>
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<tr>
<td>Gymnasiums</td>
<td>25</td>
<td>4,150,000</td>
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<td>Science buildings</td>
<td>24</td>
<td>7,160,000</td>
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<tr>
<td>Class and schoolroom buildings</td>
<td>19</td>
<td>3,176,000</td>
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<td>Extensive re-building and combined estimates</td>
<td>15</td>
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<td>Chemistry</td>
<td>15</td>
<td>3,080,000</td>
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<td>Laboratories</td>
<td>15</td>
<td>2,888,000</td>
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<tr>
<td>Remodeling</td>
<td>13</td>
<td>7,380,000</td>
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<tr>
<td>Administration buildings</td>
<td>12</td>
<td>2,400,000</td>
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<tr>
<td>Utilities</td>
<td>9</td>
<td>3,600,000</td>
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<tr>
<td>Engineering buildings</td>
<td>6</td>
<td>2,316,000</td>
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<tr>
<td>Medical buildings</td>
<td>5</td>
<td>1,450,000</td>
</tr>
<tr>
<td>Auditoria</td>
<td>5</td>
<td>1,125,000</td>
</tr>
<tr>
<td>Removals to new site</td>
<td>2</td>
<td>2,000,000</td>
</tr>
<tr>
<td>** Miscellaneous **</td>
<td>22</td>
<td>4,490,000</td>
</tr>
</tbody>
</table>

$134,681,000

** Includes infirmaries, home economics buildings, agricultural structures, business schools, museums, faculty housing, law schools, physical education schools and others.

Concluded Hegeman-Harris: "In summarizing the results of this effort to approach the building problem of American universities, schools and colleges, it appears that the number of overbuilt institutions is inconsiderable in comparison with the very great number handicapped by inadequate facilities. The economic situation has greatly aggravated conditions. . . . The present attitude of American colleges is judicious and careful, and is coupled with an increasingly practical grasp of sound building principles."
THE WENDEL ESTATE DECIDES
not to sell. Mr. Mather gives his lean tower away. An
investment trust buys realty. The Mills subdivide.

When Miss Ella Virginia Von Echtzel Wendel died in 1931 a dozen or so charitable institutions were pleased to learn that they would share in various degrees the proceeds of some $30,000,000 worth of New York City real estate. Lately the trustees of those institutions were less pleased to hear that City real estate. Lately the trustees of those institutions were pleased to learn that they...
Lewis. According to the Miami Herald: "The modern Bermuda architecture featuring shadows, light walls and dark colored trimmings will prevail."

The subdivision is owned by the Mills Development Co. Its sponsors are the same four Mills Brothers (Fred, Ralph, Herbert, Hayden) who run Chicago's $10,000,000 Mills Novelty Co. This concern makes about four out of five slot machines; also game tables, scales, automatic ice cream freezers, etc. Some years ago it was the proud exploiter of the Automatic Violana Virtuoso—an automatic piano and violin in a glass case intended for restaurant use. This device, hailed by the patent office as one of the eight greatest inventions of the 1910-20 decade, was of course killed by the radio. The company was formed by H. S. Mills, father of the present Mills. He invented the slot machine, made a great fortune, is said to have cornered the peanut market in 1901.

The Mills Brothers, always anxious to try new things, bought their subdivision tract some time last summer, are said to own much other property in Miami Beach.

Self-Liquidating PWA Loan for Funeral Chapel Urged.

"For many years New York City has buried its pauper dead at a cost of $12 a funeral. For a plain pine box the city pays $1.06; for a shroud, 17 cents. The $12 price includes even the cost of refrigeration and transportation. . . ."

The above quotation is from a report made public last month by the City Affairs Committee in New York City. The report condemned the "foolish pride and established traditions of extravagance" associated with U. S. funerals and called burial of the dead a public service. Recommended was a $910,000 funeral home, to be built and operated by a "Funeral Authority" financed from the PWA as a self-liquidating project. The Committee said that such a funeral parlor would lower the cost of a "dignified" funeral from $375 to $65 "without grave charges." Plans for the home have been submitted to the Committee by Architect Paul Braude.

General Houses Awards Four Home Contracts.

Whatever else Spring may bring to building, it is sure to see the first major efforts of the prefabricators to find and catch their market. Last month pioneer General Houses granted dealer franchises to firms in Long Island, Wilmington and Denver. Contracts were awarded for the construction of a house in each of these cities, in addition to one in Riverside, Ill. Three General Houses are now under construction at Lake Forest, West Winnetka, New London. A model house in Elmhurst, Ill., was completed last summer.

Public Financing and Its Relation to Building.

It has been said that a tremendous amount of industrial building will commence when the capital securities markets loosen. There have of course been many companies able to carry on building with surplus funds, such as Libbey-Owens-Ford Glass which is erecting a $250,000 warehouse. And the first offering of stock to stockholders for major expansion was the recent stock sale of the Mathieson Alkali Works, Inc. Last month the Federal Trade Commission issued a summary of the October to December securities sales showing the estimated disbursements of the proceeds. New company plant construction, machinery and equipment accounted for $7,474,673, or 5 per cent of the total. Old company plant and equipment, additions, betterments, developments and construction totaled $9,048,716, or 6.1 per cent. The combined totals indicate that under present conditions 11 cents of the new securities dollar is going into physical plant expansion and improvement. Although no figures are available, it is reasonable to presume that a great part of such expenditures is on equipment as opposed to structures.

THE CUSTOMER IS NOT ALWAYS RIGHT

No company whose history has been linked with industrial progress over a period of years would presume to lay claim to a record of 100 per cent freedom from trouble with every installation, despite the thousands of successful ones it may have to its credit. But there are those who can point to an enviable record of customer satisfaction based on 100 per cent correction of such troubles. The mistakes one makes are not in themselves a foundation for success. Rectifying them at no cost to anyone else, is.

YORK ICE MACHINERY CORPORATION • YORK • PENNSYLVANIA

REFRIGERATION • AIR CONDITIONING MILK & ICE CREAM PLANT EQUIPMENT
Right in line with the times

Right now with the pickup in building and the continued adherence to close buying, you will want to specify the sanitary Onliwon Cabinets and A.P.W. Onliwon Towels and Toilet Tissue. It's one specification that is right in line with the times. It's one specification that satisfies both client and architect. The layman prefers Onliwon Cabinets because he prefers using the sanitary A.P.W. Onliwon Towels and Toilet Tissue. The architect selects Onliwon Cabinets because they are attractive, serviceable, and economical. Besides, he is sure to find in the large and intelligent variety of Onliwon Cabinets exactly the right cabinet to meet his immediate and specific needs. Onliwon Cabinets are always available in the right sizes and materials. Paste the coupon below on a postcard today and mail for our catalogue giving all the details on our complete assortment of Onliwon Cabinets.

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Please send me the latest and complete catalogue of A.P.W. Cabinets and Fixtures.

Name
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"STEADILY ASCENDING"

is the last report on building costs; deeds recorded maintain gain; mortgage buying low.

LIFE CO. INVESTMENTS IN MORTGAGES

The mortgage investment policies of 28 leading life insurance companies are represented in the above chart, based on 4-week totals from figures compiled by the Wall Street Journal.

REAL ESTATE ACTIVITY

RENTS FOR WAGE-EARNERS

FROM N.Y.C. FIGURES ON COST OF LIVING
WHY UTICA'S BANKERS help finance its thirteen-year-old housing survey. One approach to an integrated industry.

A cooperative fact-finding survey... a central statistical bureau, to which every mortgage man might repair for facts... equals a building industry under control; governed, guided...

Such mental figuring, uniquely subtotaled thirteen years ago in the city of Utica, N.Y., may yet supply a "way out" for the U.S. building industry. For clear it is that the future flow of building money must be more wisely directed if the industry is to be restored and put on a lastingly smooth-running basis. But are New Orleans' homestead associations, Cincinnati's Bauvereins and Detroit's banks capable of concerted action? The answer is that there is concertedness among all the lending institutions, as last month's Mortgage Conference of New York, which brought together more than one type of building money man for probably the first time in history, gave evidence. (See page 283.) And such common distress may breed

Integrator Miller

common action, locally if not nationally.

Typical gag at last month's conference: "Everybody's ox is gored."

The pasture was many-acred in long ago 1921, and young John D. White and other real estate men in the textile mill town of Utica, N.Y., had to steel themselves for great arguments whenever men like the old First National Bank's goateed President Charles B. Rogers were to be approached for a loan. Banker Rogers had money to lend, but there was also plenty of opportunity for him to lend it; and he led the other bankers in advancing the notion that Utica was overbuilt. On better terms with Utica's real estate men was the president of the Savings Bank of Utica, who got the jitters, if Utica's Distinguished Citizen Charles A. Miller ever had the jitters, listening to such talk. The Savings Bank had a vital interest in Utica real estate in homes, mostly. But probably simply because Banker Miller wanted to know, he called in John D. White and the others and suggested that they go out and make a house-to-house count to see whether or not Utica actually was overbuilt.

Utica's first housing survey, "prepared by a special committee of the Utica Real Estate Board and the Dealers in Building Materials," was dated December 1, 1921. It showed a vacancy percentage of 1.5, which included houses under construction. Committee Chairman White and his fellow investigators wanted loans for small homes, and a flourish which attested to their glee at the findings was the survey's summary:

"The Committee desires simply to state that this quick approximate survey of the city shows the following: That the building of new homes is not being overdone. That all new homes selling at an asking price of less than $10,000 are apparently being sold. That all new one-family homes at a price of $10,000 or more are difficult to sell. That high rents and high asking prices for homes cannot be reduced until the supply of houses is at least equal to or greater than the demand. The Committee now asks that all corporations loaning money on real estate do everything in their power to encourage home ownership and make as many loans as possible on new buildings, in order to give the relief to the citizens of Utica such as they have been looking for for the past five years."

Said Banker Rogers: "Gentlemen, I've been all wrong." And Utica's other bankers were equally impressed and quick to note the value of the facts which Chairman White and his committee had gathered and tabulated. That year, and each year thereafter, the city's banks and building and loan associations stood most of the survey's cost, which is small, since the canvassers, one of whom is Roy C. Van Denbergh, now the Savings Bank's president, willingly donate their services. Typical of the way in which the survey's cost is divided is this apportionment of the 1931 survey's expenses:

Savings Bank of Utica............ $100.00
Citizens Trust Co. ............... 55.00
First Bank & Trust Co. ....... 55.00

"Similar surveys have been made from time to time in various communities," said the National Housing Association's quarterly, "Housing Betterment," in May, 1923; "but this particular survey is unique, for it related its inquiry to the financing of house building operations." So supported, Utica's housing survey was and is a rarity.

In Utica building circles there is no question about the value of the thirteen-year-old survey. Says Frederick S. Kellogg, of the Charles Kellogg & Sons Co., big Utica lumber company: "From it much can be forecast concerning the probable demand for new homes as well as the type of house which is most desirable. Builders can be guided as to the locations in which new homes can be most readily sold. In my opinion it has demonstrated its greatest value in recent years by the fact that Utica is not now overdeveloped due to limitations placed on home building in the past on the basis of results shown in the survey." That Utica's bankers, survey-posted, know when and how much to lend his and other lumber companies which wish to expand their stocks is one thing; Lumberman Kellogg fails to mention.

The survey has many friends in Utica, including the gas and telephone companies and the subscribing water company, all three of which put it to use. Architect Egbert Bagge, who is a trustee of the Savings Bank, declares he finds study of the housing survey necessary in advising individual clients as to where they should locate either private residences or apartments. "The survey shows the trend of vacancies from year to year," he says, "thus warning of over-building of certain types of housing. It is used by our business clients, such as real estate operators, to determine the call for and locatability of business buildings as well as residential buildings." Architect Bagge likes to argue that the survey should serve as a guide to the transportation companies and the city administration in locating and extending bus lines, which he calls "a necessary consideration in all housing developments."

But while the survey has meaning in many hands, the banks value it most highly. "For instance, if we hadn't been awake to the facts as presented in our survey," says the Savings Bank's ex-President Miller, "we wouldn't have known half as soon as we did just when to stop lending for the construction of a two-family house." It is Mr. Miller's theory that the radio doomed that type of dwelling.

Utica's housing survey is but a sub-tota to any thinking which might include
Housing Surveyor White

National Press

Perhaps his survey work's most satisfying accomplishment was the promise the 1922 report elicited from the bankers: that they would call in, as soon as possible, loans on property outside of Utica, in order to accommodate home builders in the city. He is glad of what the 1932 housing survey did to allay fear in Utica. The survey that year recorded a loss in population of 356 persons. "A most encouraging sign," the summary declared, "for it has been too carelessly and frequently said that thousands have left the city." Now, like all Uticans, he knows the textile code will stop the mill workers' migrations southward, and once more in Utica the ups may come to equal the downs.

The Savings Bank. The policeman will tell you: "See that gold dome up there? Well, that's it." All Uticans are proud of the exaggerated springhouse which shelters the Savings Bank. It is a strange place, from "the bank dog," which brings the president's paper to him every morning, to its model kitchen, where housewives learn good budget-making.

Charles A. Miller became president of the Savings Bank of Utica in 1908. His father had been a trustee and so had he. With a knowledge of the living habits of the Italian people gained from his trips abroad, Banker Miller was well equipped to appreciate the problems of the immigrant in America. Utica's many Italians were delighted to find an American who could speak their native tongue, and thus Banker Miller dealt well with those who in many instances became charges of the Savings Bank. In 1918 Roy C. Van Denburgh, formerly principal of a Utica high school attended chiefly by children of foreign-born parentage, came into the mortgage department at the bank. 1920 marked the bank's adoption of an amortization plan, simply devised and explained.

In 1921, when its president suggested that there should be a housing survey, the Savings Bank was already the unofficial hub of the building industry in Utica. Whenever problems came up, the building materials men and the real estate men were asked into the bank for a chat. So were they often in the spring of 1922, when in view of the fact that many of the new houses in Utica were being poorly constructed and built of cheap materials, the Savings Bank decided to pass a rule that new construction must be subject to specifications furnished or approved by the bank. In they came, again, when in 1928 loans for speculative building were curtailed to provide for but three houses at a time, a figure which was reduced to two in 1929, and later to one house at a time. In
everything the bank did it took pains to demonstrate the point of so doing to the builders, and such well-advised cooperation has undoubtedly been important in Utica's development.

In 1932 Mr. Miller left Utica to become president of the Reconstruction Finance Corporation, a position in which he distinguished himself as an untiring worker and as the man to defend the RFC's $900,000 loan to the Dawes bank of Chicago as "one of the bravest and most necessary things ever done in this country." Today he is president of the Savings Banks' Trust Co., RFC-endowed discount agency for aiding New York's savings banks (THE ARCHITECTURAL FORUM, September).

Roy Van Denbergh succeeded Mr. Miller as president of the Savings Bank, and, just as in 1921, the bank has led all other Utica lending institutions in making home loans during the past few years. At present about $17,000,000 or fifty-three per cent of its assets are invested in mortgages, which is short of the 70 per cent limit provided by State law. On much of this paper, of course, the bank has lately been compelled to grant concessions. It has been made a point, however, to maintain some kind of an agreement in writing with every distressed borrower, and the bank's representatives often assist a family to arrange a budget which will include a payment on its mortgage. Close cooperation with the city welfare department has been deemed essential.

Said Integrator Miller at last month's Mortgage Conference:

"If the bank that I used to be connected with is still fairly happy in the real estate situation—and I can only claim fair happiness— it is due more than any other one thing to that [housing] survey. . . . We would have been lost without it.

"... There is [is] no use talking about really reviving and putting our real estate situation on its feet until we know the facts."

Successor Van Denbergh

MODERNIZATION

$5,800 WAS SPENT and now a Detroit bank's $15,000 apartments are worth $35,000.

The twelve-family apartment house pictured herewith has been modernized at a cost of $5,800 by the Detroit Trust Co., which during the past year has "handled a great many jobs," according to Wallace E. Reid of that bank's real estate department, who describes the alterations in this case, and tells why he thinks they were worth making, as follows:

"The exterior of the building was thoroughly reconditioned, all masonry pointed up as necessary, the exterior walls cleaned and the stone work brightened with a wire brush. The problem of a very dangerous and unattractive entrance way was solved very inexpensively by removing the existing steps and wing walls and changing the tread from a bare nine inches to nearly twelve inches running three steps from the porch floor down to the platform and then running steps from there at right angle to the grade level. This change made a very marked improvement in the entrance to the building. The rear entrance, formerly open to weather, was entirely closed in with glass to retain the necessary light and keep out the weather. An iron pipe railing was run around the property and considerable landscaping worked out, including complete re-sodding of the entire lot.

"Indoors, each apartment was treated in very much the same manner. All the old-fashioned bathtubs were removed and replaced with modern built-in tubs with the necessary partitions and archways above and with tub showers. All floors throughout were resanded and completely refinished. The old-fashioned plate rail and panel strips were removed in the dining rooms, and the dark, dingy, oak woodwork was thoroughly cleaned and enameled throughout. In each apartment there existed a very dark hall with a dark oak cabinet. All of this being enameled and papered with a light colored paper very materially improved the lightness in appearance. The kitchens received new linoleums, both on the floor and on counter tops, new modern-type chromium swing faucets on the sinks, new electric refrigerators, and new modern console-type gas ranges. Some of the apartments had two very small bedrooms. The partitions between these two rooms were removed and both rooms thrown into one extra size bedroom.

"Most of the apartments contained a very small room opening off the kitchen, which had apparently been used more or less as a catch-all. New electric fixtures, enamel tile work and paneled wall decorations made these rooms very attractive breakfast nooks. All the antiquated electric fixtures, electric plugs and switches were removed and new ones installed. The effect of all this was truly remarkable in changing a dark unattractive apartment into a light, airy, pleasing, livable home and the results so far have been very satisfactory from an income standpoint.

"At the time work was started, there were four apartments producing income at approximately $20 to $22 per month, and repeated and very definite efforts over a comparatively long period of time had failed utterly to increase the occupancy of the building. Within two weeks after the completion of this work, the building was one hundred per cent occupied at rentals ranging from $35 to $42.50 per month and with a very desirable class of tenants.

"The mechanical apparatus of the building having been thoroughly checked and renovated as well as the work outlined above, the building was changed from a source of continual outlay for maintenance to a condition where practically no maintenance will be required for some indefinite period. As things stood before modernization, utterly to increase the occupancy of the property would have been very optimistic and would have meant, if accepted, a capital loss. Today, after an expenditure of $5,800 for modernization, the property has a sales value based on its income-producing ability of approximately $35,000. The income, after paying all operating expenses and taxes, shows a return of 6 per cent on this value, and this means a profit."
Outstandingly beautiful yet eminently practical...

Bathrooms designed with CARRARA

In Carrara Structural Glass, architects find a wall material unusually well suited for use in modern bathrooms. Carrara Glass creates walls that are lustrous, reflective, bright surfaced, softly striking in color. It opens up to the architect fascinating possibilities for new treatments, for arresting effects.

Yet in using Carrara, the architect is certain that he is specifying a thoroughly practical material. For Carrara does not deteriorate with age. It does not check, craze, stain or change color. It does not absorb odors. It can be easily kept clean by wiping it occasionally with a damp cloth. It is surprisingly inexpensive, costing little, if any, more than ordinary wall materials. And it is easily installed... handling just like marble.

We will gladly send you, upon request, a new folder containing illustrations in full color of typical Carrara bathroom and kitchen installations. Address Pittsburgh Plate Glass Company, Grant Building, Pittsburgh, Pa.

CARRARA

The modern structural glass

A PRODUCT OF THE PITTSBURGH PLATE GLASS COMPANY
For KITCHEN WALLS IN MODERN HOMES

Specify the new RESIDENTIAL CARRARA

CARRARA STRUCTURAL GLASS, once confined largely to use in public buildings and imposing residences because of its price, is now available in new residential thicknesses and new attractive color-tones... and at a cost which is little, if any, higher than that of ordinary wall materials. The modest, average home need no longer be deprived of Carrara's beauty.

In kitchen design particularly, you will welcome the new Carrara as a wonderful assistance in obtaining the effects you desire. It is so readily adaptable to so many different treatments, it presents such a wide range of possibilities for distinctive designs, that the kitchen in which it is used becomes not only a useful room but a truly beautiful one.

Polished and reflective of surface, possessed of a unique depth and uniformity of color-tone, easy to clean, absolutely permanent, easy to install and gratifyingly inexpensive... this is Carrara, the modern structural glass. Specify walls of Carrara in the next kitchen you design.

CARRARA
The modern structural glass

A PRODUCT OF THE PITTSBURGH PLATE GLASS COMPANY
COSTS WERE HELD DOWN

in modernizing the Brady Building, and without sweeping tearing-downs a reputation is upheld.

So widely used in recent years has been the word "modernization" that many a building owner and manager conceives of it as a vast remodeling operation—a new exterior, a new lobby in modern design, many a square foot of shining metal, new elevator fronts and even structural changes. In many buildings modernization of this sort is essential and the money spent will soon be earning its pay. In other cases an architect will sometimes find that a structure can be put back into competition without wide changes. The problem becomes one of sensible rehabilitation rather than modernization, one of countless small changes rather than sweeping tearing-downs and putting-backs.

Just such a job of rehabilitation was started some months ago on the Brady Building which faces the Hudson River on the west shore of Manhattan Island. This structure was designed by famed Architect Cass Gilbert just before F. W. Woolworth commissioned him to build the tallest office tower in the whole world. Its reported cost when it was built 27 years ago was $2,000,000. In 1923 it was bought by the late James Cox Brady and at present it is owned by the Brady Security and Realty Corp. Its gross rental has rarely fallen below $500,000 except in the past few years. Year before last, when tenants everywhere were cutting down on space, the figure fell to $450,000. Last year the rent roll slipped to $365,000 and that was a drop sharp enough to convince the owners that strenuous efforts must be made to lift the aging building back to a competing basis with other downtown buildings.

Consequently, early last year the real estate firm of Albert B. Ashforth Inc. began extended studies to determine a plan for a "budgeted modernization" of the building which would include thoroughgoing rehabilitation of its office and public space as well as complete restoration of the building's mechanical efficiency. The management's finished cost estimates included: $23,795 for reconditioning vacant office space; $6,829 for ground floor and lobby changes; $26,508 for changes to corridors above with $151,140 for changes in elevator equipment; $9,688 for modernizing toilets; $33,445 for plumbing system changes; $22,025 for changes in plant equipment. Additional items included: repairing stairways, changing electrical and heating systems, repairing copper roof, weather-stripping windows, painting metal work, and sash up to and including the second floor, replacing defective and missing hardware, replacing defective fire-hose, relocating and refurbishing extinguishers and similar items.

These recommendations were acted upon soon enough last year so that by the May renting season prospective tenants could be shown modernized space, and in 23 instances new space was rented. This is a striking contrast to a record of six new tenants in 1931 and four in 1932. All in all, slightly less than $300,000 is being spent, a great part of which is already being reflected in reduced operating costs. For example, the new elevators and the plant changes finally decided upon cost a good $60,000 more than merely reconditioning the old equipment. However the savings in operating expenses which they will effect will amortize their total cost in four years. Similarly, regular electric light bills have been cut for tenant and building alike by installing new fixtures and by lighting rooms with paint, reducing both the number of lights and wattage needed.

The building's three low, three intermediate and three high riser plunger type elevators are being replaced by a system of five express elevators and four locals to the 13th floor. The machinery for the local elevators was placed on the 14th and 15th floors allowing space above to be utilized. Thus from the 16th floor up a total of 2,300 sq. ft. has been replaced, affording new office space. When rented, this space will increase the gross by some $5,000.

Typical of the type of work rehabilitation of this sort involved are the following:

Lobby. While the Brady Building's out-dated lobby, crusted with ornamental ironwork, remains structurally unchanged, its appearance has been greatly improved by a redecorating job which 74-year-old Architect Gilbert was summoned to supervise. The lobby's original marble floor could not be refinished because it had been laid on a sand bed, and on such 4 foundation the marble would have broken up under the sanding machine. Hence, a new terrazzo floor was decided upon, and Mr. Gilbert's office designed the pattern for the new floor. New "counter balance" pivot doors were provided the drug-store which adjoins the lobby, and at the main entrances storm doors were built and the old revolving doors polished and lacquered, given new felt stripping and new pivots.

Items in this part of the job:

<table>
<thead>
<tr>
<th>Description</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Repairing and refinishing entrance doors</td>
<td>$394</td>
</tr>
<tr>
<td>Decorating lobby, elevator and store fronts</td>
<td>2,400</td>
</tr>
<tr>
<td>Cleaning, retouching, varnishing canvas paintings on vaulted ceiling</td>
<td>1,200</td>
</tr>
<tr>
<td>New hollow metal elevator doors, and replacing glass panels in and above elevator doors with insulated sheet steel</td>
<td>1,550</td>
</tr>
<tr>
<td>New terrazzo floor</td>
<td>1,285</td>
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</table>

Musced Supervisor Gilbert of the refurbishing of his one-time tourist-attracting lobby, "I found much professional pleasure in designing it."

Office Space. The "before picture" with this article shows how unattractive to the modern eye was the Brady Building's office space. Every office was heavily trimmed with heavy mahoganized woodwork, with old-fashioned wood and glass partitioning throughout. Ornate bracket lighting fixtures cluttered the walls. It took a janitor minutes to unscrew and screw back in place the globes of the old main lighting fixtures. Said the Ashforth report: "Modern lighting fixtures will provide a better quality of light in proportion to the current used. Further, their improved design will add attractiveness." Fixtures were found which could be quickly opened and shut for cleaning. Light paint and modern steel partitions greatly improved the appearance of the offices. Their worn floors have been simply refinished, and the expense of installing new baseboards was largely avoided by the device of painting the top half of the old ones the same shade as the walls. Chief items: $4,465 for painting, $1,850 for new lighting fixtures, new steel partitions as required as space is leased.

Corridors. Biggest improvement to the upper corridors was the removal of "bowed lights." Sheet metal panels were applied in the place of the glass ones in the ceilings. New metal and glass signal lights were installed. Meters and fire-hoses were put in cabinets flush with the walls. Items in this operation:

<table>
<thead>
<tr>
<th>Description</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Removing &quot;bowed lights&quot;</td>
<td>$4,575</td>
</tr>
<tr>
<td>Painting walls and ceilings, including only corridors leading to occupied offices</td>
<td>6,150</td>
</tr>
</tbody>
</table>
Fresh paint, new lighting fixtures, banishment of all shaky old wooden partitioning, and removal of exposed meters and fuse boxes like those shown above went far to eliminate an air of junkiness from office space in the 27-year-old Brady Building. Item in a "budgeted modernization": an ingenious paint job brings old base-boards to modern proportions, saving their complete replacement.

Elevators. Exhaustive studies were made on every means of solving the elevator problem. Repairing the old elevators seemed extremely costly and it was finally decided to install nine new gearless traction elevators costing $104,480, including new cars, new signal system, new pumps and motors for sidewalk lifts, new ropes and cables. Other items: installing door closers and inter-locks for safety, $8,310; new lantern fixtures, $2,190; building changes to make the elevator installation conform with the law, $36,160. The present cars conform to the former shape of the shaftways, being narrow and deep. The passenger waiting interval has been reduced from 55 to 35 seconds. While the elevators run at 700 ft. per minute, it was not thought necessary to include solid inner doors.

Plumbing. Many were the changes needed in the toilet and plumbing system. Said the Ashforth report: "It was found that insufficient water was obtained in the toilets on the 13th, 16th, 17th, 18th, 19th and 20th floors. . . . In several instances we find that the vent lines have been drilled, evidently under the impression that they were drain lines. They were then plugged with wood or iron plugs or left unplugged. . . ." The toilet rooms, in some cases, had been repainted a dozen times. An economical and satisfactory result was obtained by scraping off all loose paint and sandpapering the surfaces for repainting. The rehabilitation of the lavatories included these items:

- Painting ................................ $600
- Chromium plating old brass fixtures ... 670
- New mirrors ................................ 235
- New flush panel doors .................... 1,090
- Hardware for doors ...................... 175
- New lighting fixtures .................... 125

Power Plant. Electricity for lighting purposes, originally generated by the building plant, and that for operating the elevators, formerly powered by high pressure steam, is now being purchased from the United Electric Light and Power Co. The old generating equipment, found inadequate for supplying both light and power requirements, has been removed. Steam for heating, once tapped off the exhaust from the generating equipment, is now being furnished by the New York Steam Corp. A set of old boilers has been reconditioned and rented to the New York Steam Corp. as auxiliary equipment.

Cost. The above figures have been taken in most instances from the Ashforth report. In other cases they signify actual expenditures. Some of the recommended improvements are being made slowly or have been postponed. In some cases the work is being done at much less than the actual estimated cost. Old tenants are pleased with the changes and the Brady Building is back on a full competitive standing in the district. At a later date perhaps further modernization of appearance will be decided upon. Meanwhile the building does more than carry itself, maintains its reputation, and its tenants.

Simplicity is what the Brady Building's economizing managers strove for when they remodeled these elevator doors. Modern eyes no longer care to "see it work," and hence Strategy No. 1 was the installation of sheet metal in place of glass paneling, throughout the building. New and far less ornate lantern fixtures and a light bronze decorating job quickly put the remade doors in trim condition.
THOUSANDS OF OWNERS AND MANAGERS FEEL EXACTLY AS YOU DO, MR. FORD!

They are "sold" on the unmatched advantages of ELECTROLUX—for themselves and for their tenants!

Mr. FORD'S letter speaks for itself!

It speaks, too, for the thousands of owners and managers of fine apartments everywhere who are daily proving the superiority of Electrolux refrigeration.

In New York City alone, more than 4500 modern apartment buildings are standardizing on this simplest, most dependable refrigerator ever developed.

And with good reason! Electrolux has no moving parts to wear and cause costly refrigeration trouble and complaints. It's silent, too! Naturally and permanently silent! Absence of moving parts means there's nothing about Electrolux to cause noise or grow noisy.

But that's not all! Electrolux has other important tenant appeals. This modern gas refrigerator costs little to operate... offers all those modern worthwhile advantages every woman wants.

Investigate Electrolux for yourself. You'll find—as owners and operators the country over have found—that Electrolux gives you more... gives your tenants more! See your local gas company, or write to Electrolux Refrigerator Sales, Inc., Evansville, Ind.
MODERNIZATION that PAYS

MODERNIZATION of the heating equipment with the Modutrol System often pays for itself time and again in fuel economy, not to mention the benefits of correct temperatures. Fuel savings as high as 30% have been accomplished by the Modutrol System, which is tailor-made for every installation and which is available for any building, old or new, large or small, at moderate cost considering its advantages...

The Minneapolis-Honeywell engineer in your city can quickly show you why the Modutrol System is receiving endorsements every day.

Minneapolis-Honeywell Regulator Company, 2740 Fourth Avenue So., Minneapolis, Minnesota... Branch or distributing offices in all principal cities.
THE FORUM OF EVENTS

CLINIC AND SHOW
To the list of cities which have attempted to stimulate building modernization, the name of Cleveland is added. From March 5 to 12 the local chapter of the A.I.A. is conducting a Renovize Exposition and Conference, embodying ideas unused by other cities before.

Three floors of the Building Arts Building will be given over to exhibits of every phase of residence modernization, including a completely furnished “Home of the Future,” photographs of remodeled houses from all sections of the country. Modernization problems of apartment, office, hotel, restaurant and industrial building owners will be thrashed out at daily conference sessions, with nationally recognized authorities as daily speakers.

But of more significance to the profession at large is the establishment of an architectural clinic where laymen may go for consultation without cost. Nominal fees will be charged only where surveys and specific reports are required. At the clinic, also, architects’ services may be engaged for actual jobs at regular fees. The clinic will continue throughout the year — and, if successful, will become a permanent adjunct of the Cleveland Chapter of the Institute.

EAST VS. WEST
Always eager to match wits, brawn or skill against the East, the Pacific Coast is now enjoying an opportunity to compare Eastern and Western small house architecture. In the City of Paris, a San Francisco department store, the eight models designed by New York’s skyscraper architects for R. H. Macy’s “Forward House” show (The Architectural Forum, October, 1933, pages 279-288) are on display along with eight model houses designed by California architects.

The California houses were selected in an open competition, the eight winners of which received $100 each. They were Warren Charles Perry, Miller & Warnecke, Vladimir Ogou, James T. Nabert, Confer & Anderson, Raymond W. Jeans, Edward W. Kress, Ralph E. Wastell & John M. Evans, Associates.

The Eastern houses were designed by Ralph Walker, Raymond Hood, Harvey Corbett, William Van Alen, Ely Kahn, Arthur Loomis Harmon, Lawrence G. White, and Leonard Schultze.

San Franciscans will record their preference by voting. The Forum will publish the count next month.

COMPETITIONS
Established to promote cooperation between the architect and his fellow artists, the annual collaborative (architect-sculptor-painter) competition of the American Academy in Rome alumni this year turned up no first medal winners. Instead second medals were awarded to three different teams: (1) E. S. Williams, architect, J. C. Morning Star, painter, T. H. Gibbs, sculptor, of the University of Pennsylvania and the Pennsylvania Academy of Fine Arts; (2) L. Check, Jr., architect, L. V. Haber, painter, R. G. Barker, sculptor, of Yale University; (3) J. T. Howard, architect, G. Benever, painter, G. M. Proctor, sculptor, of Yale University.

In outlining the program, which called for the “treatment of a public square in the center of a theater district in a large city,” the competition committee advised contestants, “The conditions of the problem are very modern, but it should be possible to find a solution by following the spirit and principles of classic design.”

Those who have practiced or studied architecture for at least one year immediately preceding March 28, 1934, are eligible to compete for the $1,000 John Stewardson Memorial Scholarship. Applications must be filed before March 15. Full information is available from Edmund R. Purves, Architects Building, 17th and Sansom Streets, Philadelphia.

Collaborative design of Messrs. Check, Haber, and Barker

Above, scheme submitted in Rome alumni competition by Williams, Morning Star, and Gibbs; right, by Howard, Benever, and Proctor

MARCH • 1934 • THE • ARCHITECTURAL • FORUM
THE FORUM OF EVENTS

(Continued)

LIFE OF HASTINGS

Back in 1879, in the rooms of C. Howard (Howdy) Walker and Willson Bates, on one of New York's side streets, an informal sketch club used to meet twice a week. Besides the hospitable room-mates, regular attendants included Cass Gilbert, Clarence Johnston, Francis Bacon, and among others, Thomas Hastings. The sketch club was the ancestor of The Architectural League of New York.

David Gray tells the story, and many other stories of the last half century of New York architecture in a new authorized biography of Thomas Hastings. (Houghton Mifflin Co., $3.50.) Coupled with the life of Hastings is a collection of his writings, which though not extensive, are indicative of his thinking.

The span of Hastings' professional life coincided rather closely with the grand day of American architecture, beginning just before the Fair of '93, and ending suddenly two weeks before the market crash of 1929. His first job, under the direction of the Herter Brothers, was the redecorating of a company room in the 7th Regiment Armory. After four years in Paris he returned to New York in 1884 to work for McKim, Mead & White, where he met John M. Carrere with whom the following year he formed a partnership that lasted until Carrere's death in 1911, and which continued in name until Hastings' death.

A parishioner in Hastings' father's church, Henry M. Flagler, gave the firm its first important commissions, the Ponce de Leon and Alcazar Hotels in St. Augustine, Florida. And in 1897, the firm won in open competition the commission that was to be their principal monument, the New York Public Library. Progress of the firm was so rapid and so steady that with the passing of McKim and White, Hastings was generally conceded to be the dean of the profession in New York.

From Mr. Gray's account, the man's life was as untroubled by major problems as his career was uninterrupted by disappointments. His home was a center of social and artistic gaiety, presided over by his talented wife. He participated in dozens of worthwhile civic and professional activities that were their own reward.

Aftogether, the book is a useful contribution to the genealogical literature of American architecture. There is far too little written about the men who have built America. With the exception of volumes on Burnham, McKim, White, Hunt, Sullivan, Wright, and a few others, there are no biographies of importance on the great professional figures in this country.

ST. LOUIS COMPETITION

Partly through their own dull wittiness and partly through the "free architectural service" deception, architects have been almost completely frozen out of small house business. They are too busy in good times to bother with small-profit or no-profit work, but in slow times, they rise in indignation over the architectural crimes committed by contractor-builders who pick plans out of a book.

Periodic efforts are made to re-educate the small house public to the essential economies derivable from employing bona fide architectural service. In St. Louis, where small house construction has been dominated by the contractor-builder with particularly sad results, the Institute chapter is making a strenuous effort to drive an entering wedge into the field, with the cooperation of one of the town's most forward-looking developers, Cyrus Crane Willmore, and one of its largest department stores, Scruggs-Vandervoort-Barney. The means they have chosen is a committee composed of three St. Louis Institute members and two laymen, local architects will submit rough sketches for houses costing less than $6,000 in the one-story and story-and-a-half class, with only one other restriction — no flat roofs.

(Continued on page 28)
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THE FORUM OF EVENTS

(Continued)

The jury will select six designs, and their creators will be required to build cardboard models, receiving $50 each for expenses. In the Scruggs-Vandervoort-Barney store the models will be exhibited, and the public will vote on them.

The architect of the winning model will be commissioned to build the house at a full fee by the Cyrus Crane Willmore Organization, which has heretofore built houses with and without benefit of architects. The second place winner will receive $100, third place $75, and the remaining three $50 each. All prizes and expenses will be paid for by the Willmore organization.

To St. Louis architects the contest is particularly cheering, because Willmore is developing a subdivision in South St. Louis, which is the city's most blighted small house area.

The St. Louis Chapter expressed its official attitude toward the competition in a member communication: "We architects have spent a great deal of time in the past in criticizing the design of the small house, and damning the public for not having reputable architects design their homes. It seems to this committee that the Willmore Organization and Scruggs-Vandervoort-Barney are providing an opening wedge whereby we architects may be able to obtain a foothold which will not only provide work for those of us who are interested in residential commissions, but will tend to raise the standard of design in small house construction, and thereby beautify our city."

When the winner has been decided, the house will be published in THE FORUM.

PLANE T ARIA

Many a Century of Progress visitor returned home last Summer thinking that Ernest Grunsfeld's Adler Planetarium, no part of the Fair, was the most interesting of all Chicago's divertissements. And for the last few years a feeling has become widespread that the U. S. was missing out on an important educational accessory in not having a planetarium in each important city. Perhaps soon each city will have one.

John T. Windrim's Fels Planetarium in Philadelphia has already opened; and New York and Los Angeles planetaria (see below) are already under way. There is even talk of organizing a company to sponsor a chain across the country.

One result of the agitation has been careful research on the part of many architects on their design, construction, and equipment. The necessity of providing a large, unobstructed dome means unusual construction, and opinion is sharply divided on the methods employed. Savers of old issues of THE FORUM will find an illuminating article on the Adler Planetarium by the late Arthur T. North in the February, 1931, issue. Other data are obtainable from the Zeiss Company, which manufactures the equipment used in projecting the stars against the interior of the dome.

Above, perspective and plan of observatory and planetarium for Griffith Park, Los Angeles, John C. Austin and Frederic M. Ashley, architects. Left and above, perspective and plans of the Hayden Planetarium, New York, by Troubridge & Livingston.
G-E AIR CONDITIONING

costs no more than a
good conventional heating system

NOW, with the start of
spring building, comes
the question of which to speci-
ify for new dwellings—heating
or air conditioning. When the
factor of obsolescence alone is
considered, there is no doubt
about which should be chosen.
But up to now high first cost
has kept many architects from
specifying air conditioning.

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mates, however, shows that
now the installed price of the
G-E Winter Air Conditioning
System in a new house is
usually no higher than that
of a good conventional system
with concealed radiation. Nor is the
operating cost higher—it is usually lower.
Steam for the heat exchanger in this sys-
tem is supplied by the G-E Oil Furnace
—which has been saving owners from
20% to 50% on their fuel bills.

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The G-E Air Conditioning System is the
first to be completely coordinated. It is
not made up of a collection of independ-
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digned to work together, are made by
General Electric.

Flexibility
There is usually no need for major alter-
ations in plans to include this system.
It is made so it can be installed to fit
the house, instead of designing the house
to fit the system. The G-E Oil Furnace,
which supplies the steam for the heat
exchanger coils and also hot water the
year round, and the G-E Air Condition-
er, each may be located independ-
ently if desired, at the most convenient
points in the basement.
Radiators may be used in kitchen,
bathrooms and servants' quarters, as
well as in the garage. In larger resi-
dences, the system can be zoned for
greater efficiency—may even be arranged
so that if part of the house is unoccupied
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kept at comfortable living
temperature during that time.

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being tested under actual liv-
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house is equipped with a
complete radiator system, as
well as year-round air condi-
tioning, so that accurate com-
parisons can be made between
the two.

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anteed by General Electric, but installa-
tions are made only by authorized G-E
Air Conditioning dealers who are es-
specially qualified to make sure that
every application is properly engineered.

For winter and year round
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dealer in your town or directly to Air
Conditioning Dept., General Electric
Co., at 570 Lexington Ave., New York.
Previous recipients of the Society's award include Thomas Edison, Robert A. Millikan, Cass Gilbert, Eva Le Gallienne, John Philip Sousa and ten others.

The presentation was made by the society's past president, Thomas J. Watson. Excerpts from the citation:

"You have demonstrated that there is no necessity for slum environment for workers. You have contributed to the evolution of civilization. You have set your factories in gardens of beauty, taught men how to build homes. You have set up a non-profit building organization under the direction of an art commission for the erection of homes, and liberally financed those of your employees who wish to avail themselves of it. You have eradicated fear from the minds of those who have built such homes by providing them with work. You have provided clubs and dormitories for the bachelor, playgrounds for the children, amusements and cultural pursuits for all. Such a work as yours raises the ethical standards of our difficultly evolving civilization."

Governor Herbert Lehman of New York, architect Ralph Walker and realtor Peter Grimm joined with the Society in honoring the Fellowship's recipient.

Walter J. Russell, president of the Society of Arts and Sciences, clasping the decoration on former Governor Kohler as the society's ex-president, Thomas J. Watson, looks on.
The ball bounces against the backboard and right into the basket. This popular sport could never be played if the ball passed as easily through ordinary walls and floors as radiated heat does. If that were the case, every basketball court would have to be insulated, preferably with Reynolds Metallation.* This is a new and unique insulation, which operates on the new principle of reflection. It reflects radiated heat—makes it bounce back. Metallation consists of thin, solid sheets of a special metal, cemented to one or both sides of heavy kraft paper, for ease in handling. Forms an impenetrable barrier to 95% of the radiated heat that strikes it, thus stopping the greatest portion of heat transmission through walls and ceilings. An additional insulating effect is due to the fact that it is wind-proof. It is also moisture-proof and vermin-proof.

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MARCH • 1934 • THE ARCHITECTURAL FORUM
THE FORUM OF EVENTS (Continued)

LEAGUE SHOW

The late Joseph Urban taught the country something about staging exhibitions last year by the setting he created for the annual show of The Architectural League of New York. This year's committee, headed by Ralph Walker, is working hard to repeat the Urban success.

Later than usual by more than a month, the exhibition will run at the American Fine Arts Building, 215 West 57th Street, from May 15 to June 2. Monday, April 16, is the last day for submission of entry slips. For full information, address The Exhibition Committee, The Architectural League, 115 East 40th Street.

DREAM REALIZING

Spading up the first shovelful of earth for a building usually means that a few days later steam shovels will be biting away at the ground. It did not mean that one day last month, however, when sculptor Lorado Taft drove a stake and turned a shovel atop a hill in Griffith Park outside Los Angeles. His building was many days and a million dollars away from the steam shovel stage.

Nevertheless, the ceremony marked the beginning of a museum of sculpture and architecture that has long been a cherished dream of the aged artist. There were no great crowds to witness the event, only two friends, author Hamlin Garland, and Clarence B. Mitchell, directing head of the Los Angeles Museum of Art.

To them he said, "This is the beginning of the realization of my life-long dream. What site could be better suited for such a museum than this lofty summit, situated similarly to that of the Parthenon on the Acropolis in ancient Athens?"

The museum would consist of a number of small structures, intertwined by porticoes and arranged to illustrate chronologically various periods of development in American architecture. The buildings would house replicas of all the world's famous pieces of architecture and sculpture.

Numerous social and civic organizations have indorsed the project.

AWARDS

To Charles R. Neeson, Harry L. Galson, Hans K. Steinfeld, and Henry C. Heller of the Baldwin-Southwark Corporation the John Scott Medals for "outstanding scientific achievement" during the year 1933. Their achievement was the development of the De La Vergne air conditioner, an independent self-contained unit, requiring no connections to water main or drain for cooling or condensate disposal. It is said to be the first successful application in air conditioning of the reversed refrigeration cycle and also the first air-cooled unit air conditioner mechanism to dispose of its own condensate.

To each of the four engineers went $500 as well, from money willed to Philadelphia by John Scott, an Edinburgh chemist, in 1816. Other engineering pioneers who have received Scott medals and money are Thomas A. Edison, Lee de Forest, Guglielmo Marconi, Juan de la Cierva and Samuel Vaucelin.

To Frederick Carder, art director of the Corning Glass Company, the Charles Fergus Binnis Gold Medal for "eminence in artistic achievement during the year" at the annual meeting of the American Ceramic Society.

Said Medalist Carder in his acceptance speech, "There is in this so-called modernistic art a worrier appearance which entirely lacks artistic feeling. Many look as if they had come out of a lunatic asylum."

BACK NUMBERS

The Architectural Forum, will pay $1 each for the first ten copies of the September, 1932, issue (Theater Reference Number) received in good condition at the office, 220 East 42nd Street, New York City.

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some examples of diverse building problems solved with Armstrong's Cork and related products . . .

CORKBOARD—reducing expansion and contraction of steel members in the roof of the new City Hall and Court House, Denver, Colo., shown in the illustration above.

CORKOUSTIC—correcting acoustics in the Forest Lawn Chapel, Buffalo, N. Y.

INSULATING BRICK—used to insulate boilers in the power plant of the American Museum of Natural History, New York City, saves fuel costs. See above.

VIBRACORK—muffling the vibration and noise of the ice machines in the Charlotte Hungerford Hospital, Torrington, Conn. See photo at right.

CORK COVERING—preventing cold blasts in the boiler room of Washington University, St. Louis, Mo.

THERE'S hardly a building in which one or more of Armstrong's Products cannot be used to advantage by architects and builders: in office and public buildings, schools, churches, institutions, residences, hotels, stores, and in many kinds of industrial buildings.

Armstrong's Corkboard and Cork Covering are of special importance today in air-conditioning installations, as well as in the maintenance of proper refrigerating temperatures in new and remodeled breweries. Armstrong's Acoustical Products (Corkoustic and Ceramacoustic) and Armstrong's Vibracork are valuable aids in maintaining quiet. Armstrong's Temlok—a low-cost fibreboard—provides efficient insulation for walls and ceilings. And for high temperature insulation in stacks and furnaces, or for municipal incinerators, there's Armstrong's Insulating Brick.

Complete Service for Architects

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For specifications, booklets, and samples of Armstrong's Products, write Armstrong Cork & Insulation Company, 900 Concord Street, Lancaster, Pennsylvania.
To succeed Henry Klaber, whose activities have largely shifted from Chicago to Washington, the Chicago Chapter of the A. I. A. advanced Earl H. Reed Jr. from 1st vice president to president, Pierre M. Blouke moved up from 2nd vice president to first, Charles A. Beersman, a director, was elected 2nd vice president, and Miles Colea was named a director to succeed Mr. Beersman.

Other officers and directors elected were John O. Merrill, treasurer, Carl E. Heimbrodt, secretary, and Clarence W. Farrier, Elmer C. Jensen and Denison B. Hull, directors.

The Southern California Chapter of the A. I. A. elected the following officers for the year: Sumner Spaulding, president, Ralph C. Flewellings, vice president, Eugene Weston Jr., secretary, and Leland F. Fuller, treasurer. Reginald D. Johnson was named director to serve with Roland E. Coate and Carleton M. Winslow.

Robert Jahelka was elected president of the Architects League of Northern New Jersey. Other officers chosen were George Harvey and Harold Anderson, vice presidents, Bernard F. McGurie, corresponding secretary, J. Norman Hunter, recording secretary, and Theodore S. Holmes, treasurer. Harry Licht and Clarence Tabor were elected to the executive committee.

MURDER OF ART?

Late one night last month, workmen chipped from the wall of the RCA Building lobby in Rockefeller Center the plaster-covered fresco of Diego Rivera which caused almost a year ago the most bitter art controversy New York had ever experienced. Todd, Robertson & Todd, general managers of the Center, had chosen a late hour so as not to disturb tenants—but perhaps they also hoped that news of the destruction would not reach the sensitive ears of the press.

But the press was only two days late in finding it out—and when it did, they launched an even louder wail than had accompanied the act of covering it up. Artists were even more voluble than Communists in denouncing the Rockefellers for their "vandalism," but there were many who doubted whether the Rockefellers personally had even known of the destruction.

Artist Leon Kroll voiced the sentiments of the city's liberals thus: "Regardless of whether it was a great work of art, I don't feel that the Rockefeller family had a moral right to take such action. It was particularly unfortunate to do so at this time since the purpose of the forthcoming Municipal Art Show (to be held at Rockefeller Center) is to get all the best artists of New York together in a 'harmony party.' Everything was going along beautifully until this uncalled for destruction took place."

So many artists sided against the Rockefellers that for a time it looked as if the Municipal Art Show would be moved to some other place as a protest. But for the good of all artists in the city, the secessionists decided to permit their work to be shown in the halls of the Philistines.

Everyone agreed that a more sensible disposition of the unwanted fresco would have been to remove it piece by piece without destroying it, as could have been done by experts skilled in archaeology.

PERSONAL

Robert S. Arnold and L. Morgan Yost, architects, have opened an office in the First National Bank Building, Wilmette, Ill.
Chicago Architect Specifies
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SEE 1934 SWEETS ARCHITECTURAL CATALOGUES

MARCH • 1934 • THE • ARCHITECTURAL • FORUM
The General Electric Company has announced a line of gas burning furnaces, supplementing its oil furnace placed on the market a year ago. The gas furnace will be a coordinated unit with burner, boiler, control and all parts enclosed in a single jacket of distinctive appearance, and G. E. air conditioning dealers throughout the country will be ready to make installations early in March. In addition to the dealers now handling G. E. oil furnaces and air conditioning equipment, new dealers are now being appointed in territories not covered and where natural gas is easily available.

To provide a central location for shipping and to be near the natural gas territory, the new furnaces will be manufactured in Cleveland.

Various sizes of gas furnaces will be available for residential, commercial and small industrial applications, and also for large quantities of hot water. The G. E. gas furnace will also be interchangeable with the G. E. oil furnace as part of the G. E. air conditioning system.

**REINFORCED METAL LATH**

A greatly improved 2 in. solid metal lath and plaster partition has been developed by the Penn Metal Company, which is particularly well adapted to low cost housing. The units are made of expanded metal lath with steel reinforcing members welded lengthwise and crosswise to the sheet, with top and bottom runners of steel, and special steel members for fitting around openings.

In listing the advantages of this new partition system, the company points out: (1) a saving as high as 25 per cent in cost, (2) a saving in space of as much as 3/4 sq. ft. of floor space per linear foot, (3) lower weight of 20 lbs. per sq. ft., (4) increased strength, (5) compliance with regulations on fireproof non-load-bearing partitions, (6) elimination of worn! grounds, (7) reduction in cost of installing electrical, plumbing equipment.

Full information on the Pennmetal Partition is available from the company at 60 East 42nd Street, New York.
This is one of a series of pages devoted to the modern treatment of certain interesting details in construction.

**Picture Windows**

Picture Windows are one of the most interesting and attractive innovations in design that have come to light in many years. They really DO SOMETHING to a home... giving it a distinctive charm that could not be duplicated through any other architectural device... an individuality that is at once a constant pleasure to the owner and a decided credit to the architect. There is something distinctly modern about them... yet something equally mellow and pleasantly old as the ages. Whatever type of home may come to your board, there is a place in it for a Picture Window... but, however you incorporate this important detail of design into your plans, be sure you specify L-O-F Polished Plate Glass. It assures your client's complete satisfaction, as well as your own.

Illustrated on this page are three unusual examples of the adaptation of the Picture Window idea. You can readily see its infinite possibilities. Do not fail to suggest one of these large glass areas. It will please your client and will be a fascinating challenge to your own creative skill. Mills, Rhines, Rellman and Nordhoff are the architects of the home pictured at the top of the page; Blege N. Clark of the one pictured directly above; and Irvine and Ebbele of the lower one.

LIBBEY-OWENS-FORD GLASS COMPANY, TOLEDO, OHIO, manufacturers of Highest Quality Flat Drawn Window Glass, Polished Plate Glass and Safety Glass; also distributors of Figured and Wired Glass manufactured by the Blue Ridge Glass Corporation of Kingsport, Tennessee.

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**MARCH • 1934 • THE • ARCHITECTURAL • FORUM**
CUSTOM-MADE SINKS

From the John Van Range Company custom-built stainless metal sinks are now available, to meet any dimensional or appearance demands. The sinks are fabricated of 14-gauge metal, with all welded construction, and all joints ground and polished to give them a one-piece appearance. Horizontal and vertical corners are coved to a 3/4 in. radius, leaving no crevices to accumulate grease or dirt.

The sink shown in an accompanying illustration is one for center installation, with high splash back returned at the ends. This is turned back into the wall to allow proper space for concealing water pipes. The drain boards are ribbed and pitched to the sink basin to insure proper draining.

Full data on the types of sinks best suited for different requirements are available from the company, Eggleston Avenue, Cincinnati.

HUMIDITY CONTROL

A new line of room type relative humidity controllers has recently been designed by the Minneapolis-Honeywell Regulator Company, Minneapolis, Minn. In the units, a simple lever mechanism, actuated by a hygroscopic element composed of multiple groups of human hair, transmits the motion of the expanding and contracting element to a mercury switch, which in turn, operates the humidifying or dehumidifying equipment. Ample electrical capacity is available for the direct control of line voltage solenoid water valves or small motors. Models are available with indicators built in their covers to show at a glance the relative humidity in the room.
OF IMPORTANCE TO ARCHITECTS

Once more the American people take up the work of providing adequate housing for the school children of the nation. This is made possible by grants and loans under the P.W.A. as well as the general improvement of the business outlook throughout the nation. Once again architects, school authorities and members of the trade are concerned with the many problems of air conditioning these new schools.

Not only has the Herman Nelson Corporation pioneered in this field, but they have, in addition, maintained an adequate force of representatives to assist in finding the correct solution to each individual heating and ventilating problem. Fortunately enough at this time this large organization is intact and eager to be of service. Not only has this travelling field force been maintained during the past few trying years, but in some cases it has been augmented and strengthened as well in order to better care for the new problems which are presenting themselves.

The Herman Nelson Corporation feels that the above will be welcome information to those faced with the responsibility of selecting the proper heating and ventilating equipment for schools. The present increase in school construction justifies our confidence that the American people will continue their efforts toward supplying adequate housing facilities for the school children of the nation; a large number of whom are now working under conditions which, according to some authorities, do not meet even the minimum standards of lighting, ventilation, sanitation and safety.

THE HERMAN NELSON CORPORATION

Heating, Ventilating, and Air Conditioning Equipment for Schools

Moline, Illinois
For Enduring Protection—

Genasco Built-up Roofing

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Long life and low maintenance cost are two cardinal points of a Genasco Standard Trinidad Built-up Roof which have won for it such widespread use on important buildings.

For this roof is waterproofed and weathersealed with Nature’s own product — Trinidad Native Lake Asphalt — which cannot be equaled for resistance to water, wear, and weather by any manufactured compounds.

It will pay to find out why leading architects specify Genasco Standard Trinidad Built-up Roofs, and to look into their records of enduring service.

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Built-up Roofing

PRODUCTS & PRACTICE

(Continued)

STYLED OIL BURNER

AUTOMOBILES, radios, refrigerators and heating equipment have provided the four most fertile fields for industrial designers, a comparatively new species of human being whose operations until recently have been clothed more or less in mystery. To the architect particularly, the field of industrial design is a puzzling one. Hearing rumors of fabulous fees, he has been loath to believe that thousands of dollars are paid for services which often he renders in the course of designing a building.

On a bank building, for instance, the architect would not feel justified in adding another ten per cent to his fee if he were called upon to design special hardware, lighting fixtures, furniture, clocks, elevator cabs, and a dozen other incidental items to maintain the general feeling established by the design of the building itself. And yet, for the design of such incidentals, the industrial designer is handsomely paid.

It sometimes happens, however, that the able industrial artist is required to do much more than simply provide a beautiful cloak for a product, as in the new Quiet May oil burner, designed by Lurelle Guild. Here the mechanical equipment itself has been improved and the operation of the unit made more efficient.

The burner mechanism has been designed with an eye to compactness without impairing the accessibility of the parts. The motor used is a one-eighth horsepower split phase type, manufactured by Century, driving a Gerotor pump through a shaft at three separate points. In this way the pump is driven quietly without unequal thrust in any direction.

Another improvement of the Guild unit is the jeweled atomizer, with orifice fashioned from a sapphire, resistant to wear and corrosion.

Complete information on the new burner is available from the May Oil Burner Corporation, Baltimore, Md.

WOOD FIBER BOARD

An all-wood fiber board, dense, strong and tough is now being marketed by Johns-Manville. Known as J-M Hard Board, it can be used for paneling walls, partitions and folding screens, radiator enclosures, display windows, counters, etc. It has a smooth surface, and in its natural state provides a mottled or burl effect. It is treated in the same manner as wood, painted, stained, varnished or waxed.

Available in 3/4, 3/16, 5/16 and 5/32 in. thicknesses, and in lengths 6, 8, 9, 10 and 12 ft., its standard width is 4 ft. For complete information, address Johns-Manville, 22 East 40th St., New York.
American architecture, through its leaders everywhere, and for all types of buildings, registers one dominant choice in its consideration of pipe. Long accumulated experience in designing and in the scrutiny of materials, careful observation of results in use, a developed sense of responsibility to clients—all these have entered into the collective judgment of the architect. It is by preeminence in service that National Pipe has become preeminent in favor. On merit alone it has won its place in the most noteworthy buildings of recent years. Pipe adapted to the routine uses of plumbing and heating—tubes of costly and marvelous alloys for highly exacting demands, whether ornamental or structural—pipe and tubes of shapes, dimensions, and properties to cover the whole range of specification are offered under the name NATIONAL by the largest manufacturer of tubular products in the world.

NATIONAL TUBE COMPANY, Pittsburgh, Pa.
Subsidiary of United States Steel Corporation

NATIONAL PIPE

AMERICA'S STANDARD WROUGHT PIPE
A thorough job of Sound-Absorption with

The Shushan Airport, New Orleans, La., is a typical example of the use and application of Acousti-Celotex as a sound-absorbent for walls and ceilings.

Selected by the architects, Weiss, Dreyfous & Seiferth, of New Orleans, this installation of Acousti-Celotex illustrates both practical advantages and decorative possibilities. The job is a thorough one, the material being used on main lobby ceiling and balcony soffits, in lunch room, kitchen, dining room, stair wells, all offices, telephone rooms, bed rooms, radio room and machinery rooms.

**Paintability—Permanence**

Painting some acoustical materials reduces them to a mere wall covering. Not so with Acousti-Celotex. Because of a patented method it may be painted repeatedly without the slightest loss in efficiency. Acousti-Celotex Modern Units provide complete freedom in decoration. They are sold and installed by Acousti-Celotex contracting engineers. See your local Acousti-Contractor or write direct for technical data, plans and decorative suggestions.

**The Shushan Airport, New Orleans, La., is a typical example of the use and application of Acousti-Celotex as a sound-absorbent for walls and ceilings.**

**Main Lobby, Shushan Airport, New Orleans, La., showing construction details, Type Triple B employed on center panels, balcony soffits, etc. No bevels.**

**Type Double B on lunch room ceiling.**

**Detail of lobby ceiling.**

THE CELOTEX COMPANY
919 N. Michigan Ave., Chicago, Ill.

Please send me general literature on Acousti-Celotex.

Name:
Address:
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TRIBLE TOWER AIR CONDITIONED

No building in modern times ever had a more auspicious birth than the Chicago Tribune Tower. No competition created more interest, none has had a more lasting effect upon architectural design.

Now, once again, the building is probably destined to influence building—not design this time, but equipment. For its progressive publisher, Col. Robert R. McCormick, is air conditioning it from cellar to tower top. True, buildings have been air conditioned before, notably the Philadelphia Saving Fund Society Building, and the new Metropolitan Life Building in New York, but this is the first instance wherein an owner of a large building has decided that air conditioning is sufficiently worth while to scrap a heating system only a decade old.

The problem involved was to design a system that would satisfactorily perform its function without utilizing any usable or rentable office space. Some air duct work could be applied in the lower floors of the building, where the work of producing the Tribune is done. In fact, some such ducts already exist.

It was consequently considered inadvisable to use ducts through the main portion of the tower. The system finally adopted, designed by the Kroeschell Engineering Company of Chicago, calls for a combination unit and central system. It will utilize approximately 400 Westinghouse unit air conditioners, and also five centralized duct distributing systems. The duct systems are scientifically designed to convey air from large conditioners. More unique, however, is the use of the large number of small complete units, which will be floor mounted under window sills, replacing the radiators which heat the building at the present time.

Within the cabinet, the functions of complete all-year-round air conditioning are performed. The inner casing is entirely separate from the outer decorative cabinet, to prevent moisture from forming on the outside. Air is brought in through a grilled opening at each end of the cabinet near the floor. Two propeller type fans handle the total volume of air which passes through a copper mesh filter.

A finned tube type coil in the path of the air furnishes the cooling effect under typical summer conditions. The cooling medium, cold water in this installation, will be pumped from the refrigeration plant in the basement. Humidity is reduced by condensation of air-borne moisture on this coil, the condensate falling into the drip-pan and drain. Obviously, this function is automatic in nature, the rate of condensation being greater when the relative humidity of the air is high.

A smaller finned coil takes care of the heating in winter, and can be used with any standard steam or hot water circulating system. With 227° Fahrenheit steam, this Westinghouse unit (Continued on page 44)

**PRODUCTS & PRACTICE**

(Continued)

**The Westinghouse air conditioning unit that is to be used in the Chicago Tribune**

**The Westinghouse air conditioning unit that is to be used in the Chicago Tribune**
Before and After

Ugly Duckling to Snowy Swan

When you modernize, says architect Cameron Clark, give your surfaces charm that lasts.

Never before has there been such widespread interest in modernization. Repeal of the 18th Amendment starts thousands of renovations in hotels, restaurants, clubs and retail stores.

Slum clearance projects in our big cities convert eyesores and public health menace into habitations that are lighted and sanitary.

Mortgagees put foreclosed properties into rentable and salable condition.

And thanks to the architect, these activities steadily raise the nation's architecture to a broader and higher plane of excellence.

Striking transformation at Southport, Conn.

Pictured above is a particularly interesting type of modernization project completed a short while ago at Southport, Conn. Pictured also is Cameron Clark, the architect who planned and supervised this excellent remodeling job.

The "Before" and "After" photographs quickly reveal that the architect was ably supported in this transformation by the immaculate, white surfaces of the paint job.

Dutch Boy... the Architect's Standard for years

The panels at the left show why architects prefer paint made with Dutch Boy White-Lead. Paint made with Dutch Boy doesn't crack and scale—therefore does not require costly burning and scraping at repaint time. Instead, it wears down stubbornly by gradual chalking, leaving an excellent foundation for new coats.

Dutch Boy White-Lead now comes as a quick-mixing paste that can be used for both outside gloss paint and inside flat work. For outside work you mix it with Dutch Boy Linseed Oil. For inside work, with Dutch Boy Flattening Oil.

This ALL-PURPOSE Soft Paste is Dutch Boy White-Lead of the same high quality you have always specified, changed only in form for greater convenience.

National Lead Company

111 Broadway, New York; 116 Oak Street, Buffalo; 900 W. 13th Street, Chicago; 605 Freeman Avenue, Cincinnati; 820 West Superior Avenue, Cleveland; 722 Chestnut Street, St. Louis; 2740 24th Street, San Francisco; National-Boston Lead Co., 600 Albany St., Boston; National Lead & Oil Co., 316 4th Ave., Pittsburgh; John T. Lewis & Bros., Co., Widener Bldg., Philadelphia.

Dutch Boy... the Architect's Standard for years

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This ALL-PURPOSE Soft Paste is Dutch Boy White-Lead of the same high quality you have always specified, changed only in form for greater convenience.
will deliver 24,000 Btu's per hour from the unit, with 70° inlet air.

For increasing relative humidity in winter, two needle-like streams of water are impinged on carbon-block blocks, called targets, where they are atomized, exposing a large surface of water to the air for evaporation. Here again the action is automatic, the air having a much greater "thirst" when its relative humidity is too low. Under typical conditions, 315 pounds of moisture per hour will be introduced into the air, out of some 30 pounds of water used. An electric switch with solenoid valve controls the humidifier, which operates only when the fans are running.

The water for the individual air conditioning units, as well as the centralized conditioning systems, will be chilled in the basement by a Westinghouse Steam Jet Refrigerating Plant, having a capacity of 600 tons of refrigeration. This chilled water will be circulated through the entire building by means of insulated pipes. A balanced water piping system has been designed, to insure that there will always be an ample supply of cold water at all points.

Connected to the condenser in the Tribune plant will be six thermo-compressors, commonly referred to as booster ejectors, which use steam jets to eject air and steam from two chilled water tanks, into the condenser. In the cold tanks the vacuum causes the water to boil, thus taking up its latent heat of evaporation from the remaining water. This heat will be carried away by the condenser cooling water.

It is interesting to note that at the cold tank vacuum, one pound of steam occupies a space of 2,200 cubic feet — nevertheless, the equipment is small and very compact, and can be fitted into a square, or long and narrow space. The only moving parts are the water pumps. In pumping the chilled water to the air conditioning units in Tribune Tower, it will not be necessary to pump from the extreme vacuum as the water for these units will circulate in tubes located in the cold tanks. Variable refrigerating capacity may be obtained by opening or closing of booster ejectors.

Not only will the Tribune's heating system be shelved for an air conditioning system, but its elevators will be modernized.

Said Holmes Onderdonk of the Tribune's power management, "It may seem strange that this building should be undergoing modernization so soon, but no longer does the alert building owner wait for obsolescence to become acute."

---

**No Weather Can Enter—No Heat Can Escape**

In hotel structures, where the comfort of the guest is paramount, it is essential that all exposed door and window frames and all masonry jointing be SEALED.

Pecora Calking Compound is the most dependable material that can be used for making a building weathertight. It also prevents the loss of radiation on cold days, thus helping to maintain more uniform room temperatures.

It is significant that Pecora Calking Compound is preferred by leading architects and used by the largest contractors. Experience has proved the absolute reliability of this product. Properly applied, Pecora the permanent Calking Compound will not dry out, crack or chip and it is applicable to wood, glass, metal or stone.

Include the name "Pecora" in your next calking specification and avoid substitution.

For further details see Street's Catalog or write direct to us.

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Inc.

Fourth and Venango Streets


Established 1862 by Smith Bowen

**also makers of Pecora Mortar Stains**

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**PRODUCTS & PRACTICE**

(Continued)
Whether you remodel a home or build a skyscraper we can help you...

The type of work architects will do this year will be varied in scope. It may be the remodelling of a house. Or it may be the building of a large public building. Or a skyscraper... But no matter what the job, Graybar can help on any electrical problem. Graybar's service of supply, operating through 73 conveniently located warehouses, can help you maintain time schedules by bringing any or all electrical items to your job quickly and economically.

And Graybar's 65 year old reputation is your guarantee both of experienced service and of quality materials.

Graybar Electric Company

Offices in 73 principal cities: Executive offices, Graybar Bldg., New York, N.Y.

March 1934 - The Architectural Forum
In its new catalogue the Eldwin F. Guth Company presents several new designs of the Guthfan Conditionaire, a ceiling suspended lighting unit and motor-driven fan. The company also manufactures a unit which includes an Ozonator for the purification of air. The range of designs and prices as recorded in the catalogue is wide enough to include suitable types for all styles and types of buildings.

The Armored Concrete Corporation's catalogue for this year is, as usual, a series of helpful, informative construction details, including curbs, steps, wainscots, coping, sur-bases, guards of various types, and other common uses of armored concrete. The material is strictly limited to usable data, 22 pages of it.

In a new brochure the Colonial Stove Company announces its policy of accepting full manufacturing responsibility for all kitchen units, including sink, drainboard, working surfaces, splashers, range, refrigerator cabinet, wall and floor cabinets. Due to the porcelain enamel construction, the ensemble does not become a part of the real estate, which permits its being financed as other household appliances are. The brochure contains complete information on design and construction, as well as all necessary data on distributing and financing.

A new catalogue of the Kohler Company illustrates and describes its recently developed cast iron convctor for concealed heating. It presents in clear, compact form ratings, specifications, recess and stack heights, and convctor dimensions. The unit consists of a large cast iron heating chamber with multiple smooth rolled iron fins projecting from it.

Interest in plastic products has grown with the development of new uses. The Bakelite Corporation issues a monthly publication, "Bakelite Review," in which are recorded all the interesting new uses of the material in building and other occupational fields. Those who wish to receive the publication regularly may do so by addressing a request to The Architectural Forum.

The Otis Elevator Company issues an interesting series of case histories on building modernization in which it has played a part. With photographs to illustrate each building, the bulletins tell the story of each job, the condition of the building, why the owners decided to remodel, what the operation included, and whenever possible, the results obtained. Architects or owners who wish to receive these case histories as they are published may do so by addressing a request to The Architectural Forum, or to the company, 11th Ave. & 26th Street, New York.
THERE'S ONE FUEL
and only one
EXACTLY RIGHT
for

AIR CONDITIONING

TWO FACTORS determine the selection of the proper fuel for an air conditioning system.
The first is accurate and immediate response to automatic control.
The second is cleanliness.
Without absolute fuel-control the system cannot be operated except by constant personal attention.
Without cleanliness one of the basic benefits of air conditioning is thrown away.

"LET THE PUP BE YOUR FURNACE MAN AND WEATHERMAN, TOO"

THE BRYANT HEATER COMPANY

GAS is the one logical fuel for air conditioning systems because it is admittedly the cleanest of all fuels and is both instantly and accurately responsive to automatic control.
Furthermore, it is the one fuel that needs no storage space; is automatically delivered only as needed and in exactly the right amount; and is paid for after being used.
When you think of air conditioning make no mistake... think of gas.

THE BRYANT HEATER COMPANY

MARCH • 1934 • THE • ARCHITECTURAL • FORUM
A common-sense discussion of sound insulation, technically accurate and yet in clear, intelligible form, has been prepared by the Celotex Company. It is a brief but complete discussion of the conditions which govern successful sound insulation, with adequate tables, details of construction, and other pertinent engineering information that lifts it out of the class of the usual manufacturer's discussion of his product.

No. 309
LIGHTING
Although manufacturers of lighting equipment habitually present catalogues that are in themselves beautiful, the Lightoliier Company's new style look for architects, decorators and builders is even more interesting than usual. In its hundred or so pages, the different units are shown in good scale, some of them in color, some in black and white photographs and some in drawings. The units themselves range from the simplest of modern fixtures to period designs of all kinds.

No. 310
WELDED PIPING
A lecture given by an engineer of the Taylor Forge and Pipe Works, "Design Your Welded Piping," has been issued by the company in pamphlet form. Limited to information without sales talk, the paper presents recent flow test data and strength analysis.

No. 311
VAULT SPECIFICATIONS
There is apparently a wide difference of opinion on the best methods of vault construction. In a recent booklet the York Safe and Lock Company has outlined a number of specifications for construction of different degrees of security. The details are clearly drawn, and the information given is well worth while.

No. 312
AIR CONDITIONING
The Fox Furnace Company, which incidentally is celebrating its fiftieth anniversary this year, has just issued a new booklet on its central air conditioning unit. Fully illustrated, it lists the advantages of its products, and gives helpful information on the choice of units.

No. 313
COMPRESSORS
A valuable publication on feather valve compressors for industrial use has recently been issued by the Worthington Pump and Machinery Corporation.

REQUEST FOR DATA
To obtain any of the publications reviewed on these pages, indicate the number and send coupon to The Architectural Forum, 220 East 42nd St., New York.

Name ..................................................
Street Address ....................................
City and State ....................................

Please check here if engaged in Architectural Practice □
WHEN you are considering swimming pools or fountains as means of adding to the charm of a garden or home, remember that lighting will enhance this charm in the hours of darkness.

Swimming pools can best be lighted by floodlights built in during the construction of the pool; two types of G-E floodlights have been designed for such an application. However, existing pools can be lighted satisfactorily by General Electric submersible floodlighting projectors built especially for this purpose.

Electric fountains, such as the one shown at the left, are not expensive. At night, floodlights submerged in the basin of the fountain produce varying color combinations which, combined with the changes in jets and sprays of water, produce a large variety of water effects. General Electric engineers and artists have incorporated the most pleasing of these in standard fountain equipment.

Further information on floodlights for pools and fountains, or on complete fountain installations, will be sent on request. Use the coupon at the left. General Electric engineers will be glad to help you solve any complicated or unusual floodlighting problems which may arise. Address General Electric, Schenectady, N.Y.
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To Answer Your Safety Problems

You Need This Folder

Safety is a well-nigh universal problem for all who design, build, or manufacture. And Inland 4-Way Floor Plate is a solution of tremendously widespread application for safety problems involving slippage of foot or wheel.

To solve quickly and right, these safety problems, you need complete information on the floor plate which has 4 vital advantages. You need this new folder.

It is complete, giving the information you need regarding 4-Way Floor Plate. It illustrates a diversified selection of safety problems already solved with 4-Way Floor Plate. There is a coupon below for your convenience.

INLAND STEEL
ABLE SERVANT OF THE CENTRAL WEST
Sheets Strip Tin Plate
Plates Structural Piling
Rails Track Accessories
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Room No. 1101, 38 S. Dearborn St., Chicago

Gentlemen: Please mail a copy of your new folder on Inland 4-Way Floor Plate—its use and advantages.

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Company
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State
Sound-absorbing, resilient, sanitary and colorful, linoleum has proved a most practical floor-covering for hospitals. 82,000 square yards of Sloane-Blabon Linoleum are used in the new Los Angeles County General Hospital. The bulk of this linoleum is used, of course, for floors. Some of it, however, is employed to cover the seats of the operating amphitheatre—the first time, we believe, that linoleum has been used for this purpose. Sloane-Blabon Corporation.

**SLOANE-BLABON LINOLEUM**

WHEREVER
Rollator Refrigeration is Known
nothing but a NORGE will do!

Because users find it possible to save up to $11 a month with Rollator Refrigeration, and because apartment house operators find it low in cost of operation, the popularity of Norge increases daily with those who investigate before they choose any refrigerator.

- Norge has the vital distinctive advantage of the exclusive Rollator cold-making mechanism. Extra powered, it keeps more food longer and uses less electric current to do its better work.
- More than a score of handy features make the Norge outstanding in convenience. And the modern cabinet is designed for lasting beauty and harmony with any interior arrangement.
- The necessity for superior refrigeration makes it worth while to see the Norge before you buy any refrigerator. Find out why the swing to Norge has increased rapidly each year.

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Manufacturers of Rollator Refrigeration • Electric Washers • Broilator Stoves • Aerolator Air Conditioners

THE ROLLATOR • Smooth, easy-rolling power instead of the hurried back-and-forth action of the ordinary refrigeration mechanism. Results — more cooling power for the current used, and a mechanism that actually improves with use. Only Norge has the Rollator.
Another fine example of "Piping Tailored To Fit"

The New York State Reconstruction Home at West Haverstraw, N. Y., a recently completed project, provides this excellent example of the rapidly spreading practice of installing WELDED piping in buildings, using the AIRCOWELDING Process. This is the oxyacetylene process that was developed specifically for pipe welding. It greatly reduces pipe welding costs by more than doubling welding speed and reducing welding rod and gas requirements from 30 to 50 per cent.

The extra heavy pipe used on this project presented no problem for AIRCOWELDING. Typical sections of the 6- and 8-inch piping are shown. These views are expressive of the way in which welded piping is literally "tailored to fit." Note the smooth, easily insulated joints. That neat swedge reducer in the center illustration is eloquent of the easy, effective way in which piping problems can be solved with the oxyacetylene welding torch.

Send for these bulletins

These two Bulletins clearly define the many decisive advantages of WELDED PIPING for buildings, and the reasons for the substantial reductions in pipe welding time and costs effected by the AIRCOWELDING Process. Copies will be supplied for the asking.

AIR REDUCTION SALES CO.
General Offices: 60 East 42nd Street
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