

THE
ARCHITECTURAL
FORUM

INCLUDING "BUILDING MONEY"

APRIL, 1934

SMALL HOUSE FINANCING REFERENCE NUMBER

RECOVER RIGHT
with a
Barrett
ROOF

UNITED STATES POST OFFICE, AT CHICAGO, ILL.

The world's largest post office. Architects: Graham, Anderson, Probst and White, Chicago, and Office of Supervising Architect, Treasury Department, Washington, D. C. Gen'l Cont.: John Griffiths and Son Company, Chicago. 254,000 sq. ft. of Barrett Roofs applied by Luse-Stevenson Co., Inc., Chicago.



the MOST DEPENDABLE roof protection America has developed

Barrett Specification Roofs are the result of eighty years of successful research and manufacturing experience. They are constructed of the finest quality pitch and felt it is possible to produce, and applied to the building according to the time-tested and time-proved Barrett Specification. Bonded for 20 years (or 15 years) against repair or maintenance expense, they are built to outlast by many years the term of the bond.

Leading architects, contractors and building owners place in them a degree of confidence that finds few parallels in the building industry. Their preference is based upon knowledge of performance records.

For new buildings or for reroofing old buildings, Barrett Roofs cost less in the

long run. Recover right—the Barrett way. Consult with your local Barrett Approved Roofer, or write us.

THE BARRETT COMPANY

40 Rector Street
2800 So. Sacramento Avenue
Birmingham, Alabama

New York, N. Y.
Chicago, Ill.

In Canada: THE BARRETT COMPANY, Limited
5551 St. Hubert Street
Montreal, P. Q.

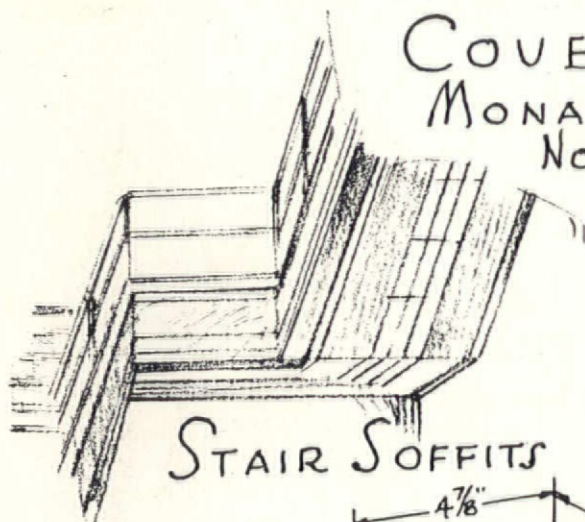
BARRETT REFERENCE MANUAL Is in "SWEET'S"



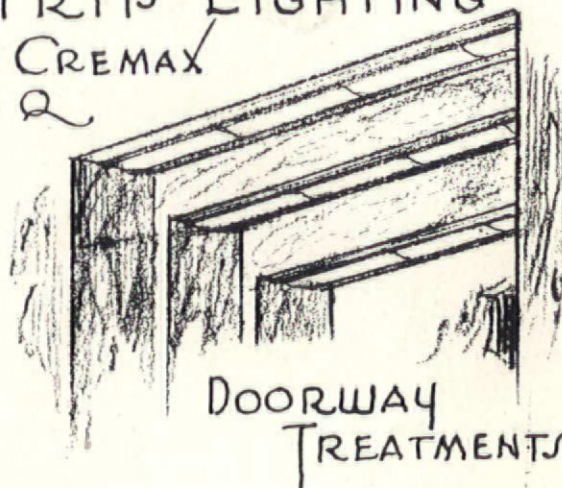
The Barrett Company's Architect's and Engineer's Reference Manual is published in Sweet's Architectural Catalogue for your convenience. It contains 70 pages of information on built-up roofing for flat and steep roof decks, roof flashing, roof drainage, waterproofing and damp-proofing.

COVE STRIP LIGHTING

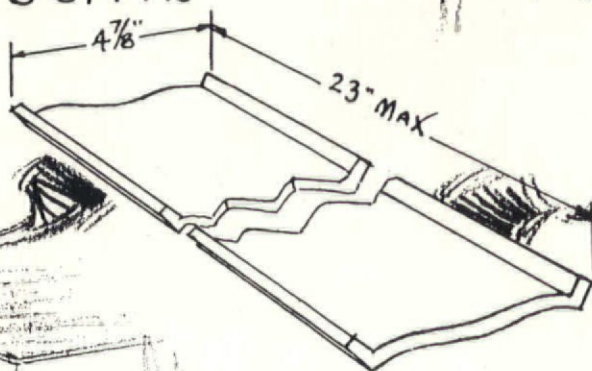
MONAX OR CREMAX
No. 12141 Q



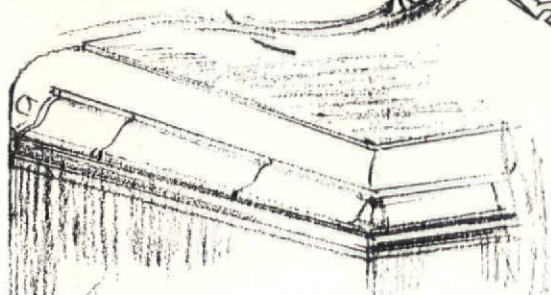
STAIR SOFFITS



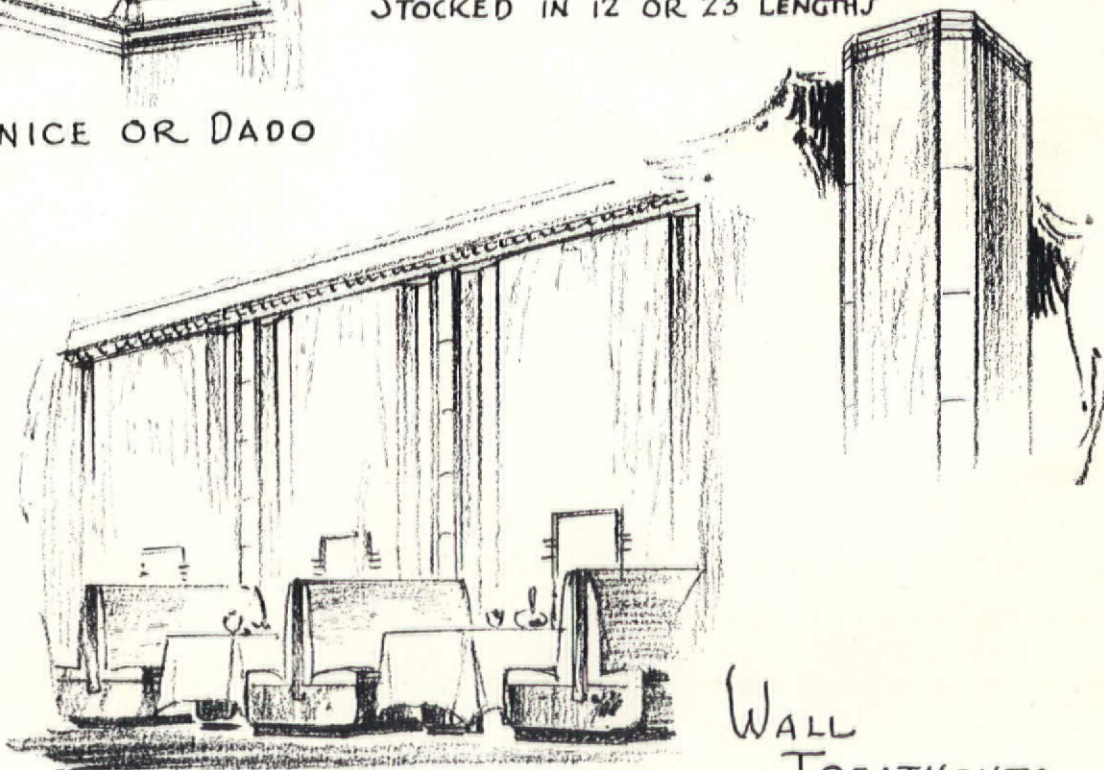
DOORWAY
TREATMENTS



STOCKED IN 12" OR 23" LENGTHS



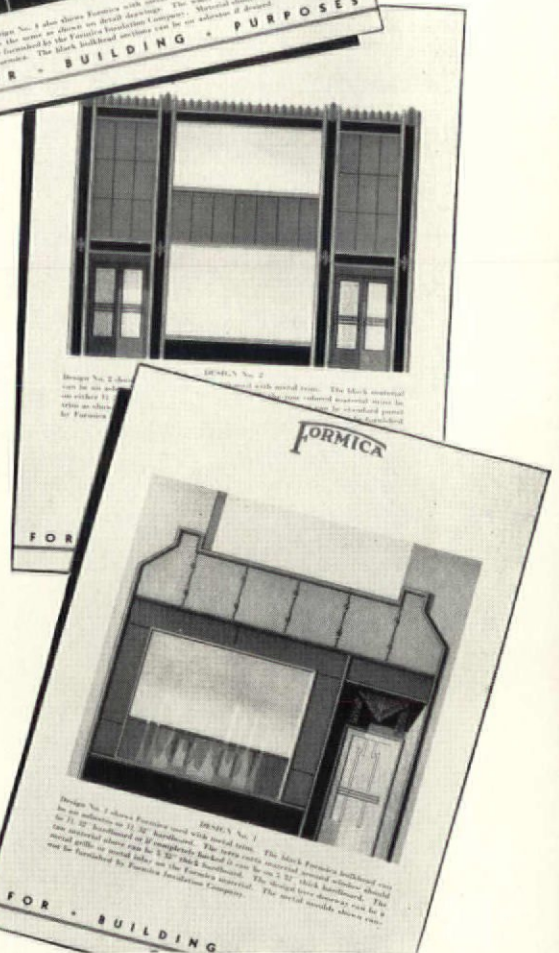
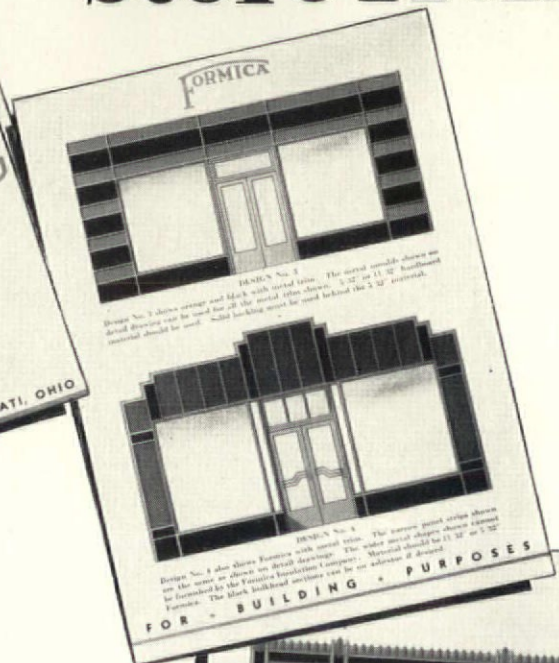
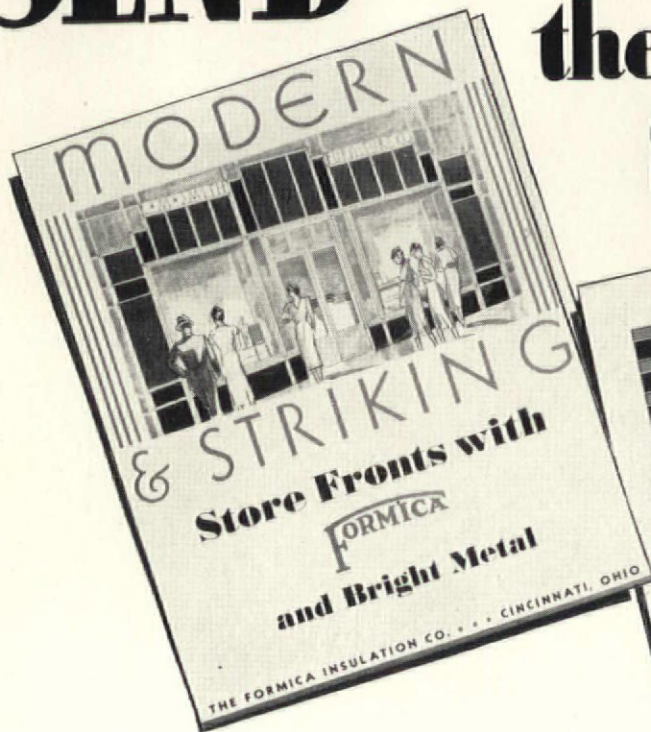
CORNICE OR DADO



WALL
TREATMENTS

COMPLETE DESIGNER'S HANDBOOK ON REQUEST
Macheth-Evans Glass Company.
Charleroi, Pa.

• SEND for these Plates of these Interesting Store Fronts



COLOR suggestions for vivid and attractive modern store fronts—the work of a leading New York designer—are now available for those who have modernizing work to do.

This publication suggests some very interesting ways to use Formica on the exteriors of buildings, and shows in detail methods of erection—which are very simple and inexpensive.

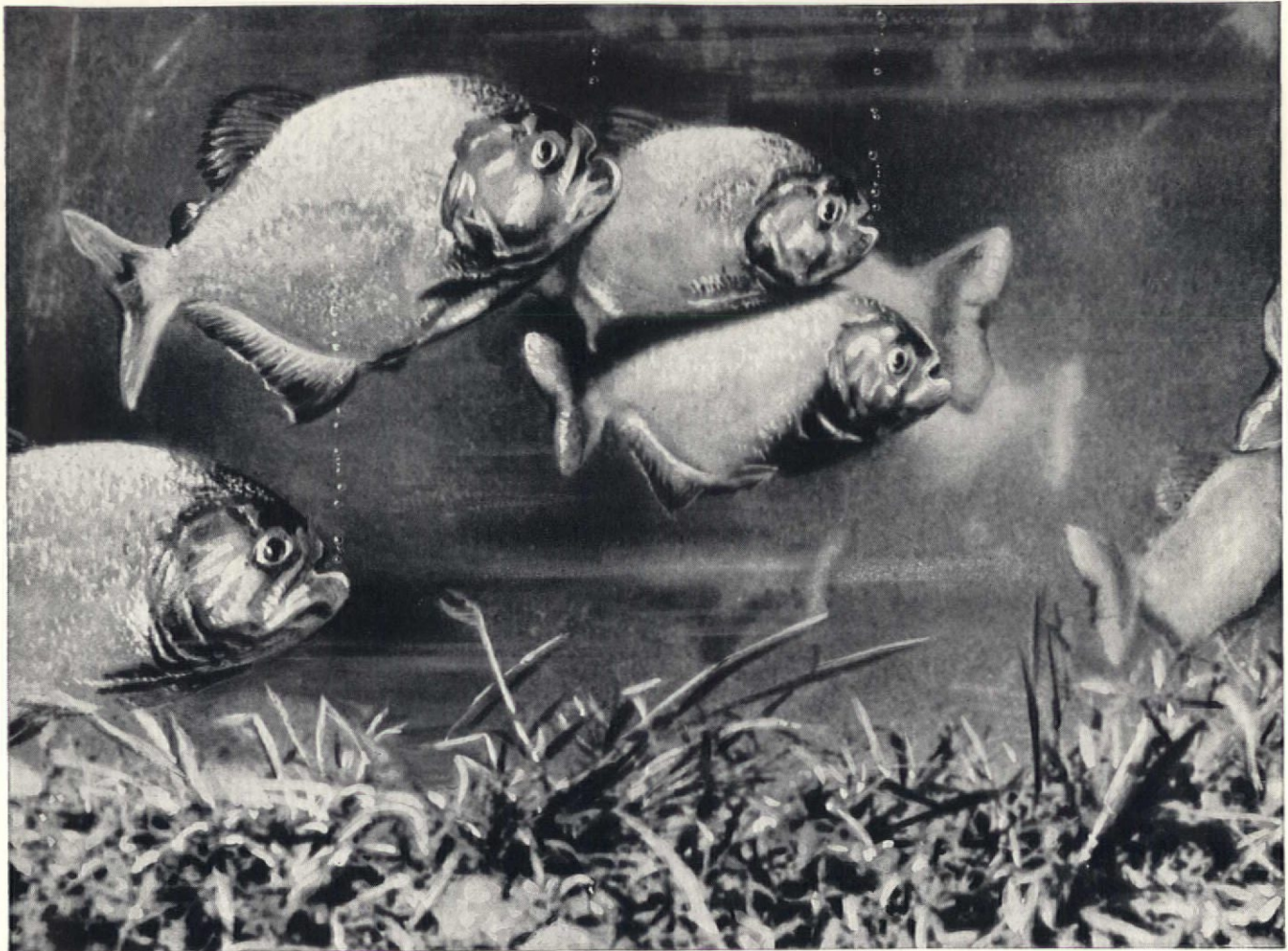
If you have store fronts to install, ask for “Modern Store Fronts with Formica.”

THE FORMICA INSULATION COMPANY
4618 Spring Grove Avenue, Cincinnati, Ohio

FORMICA

FOR BUILDING PURPOSES

OUR AQUARIUMS...



The home, the shop, the office, the store, the public building . . . these are man's aquariums. And the medium in which he moves, eats, sleeps . . . is AIR. Without air he perishes. ¶ In the vitally important work of making man's "aquariums" more habitable . . . the air he breathes more healthful and comfortable . . . B. F. Sturtevant Co. has spent a lifetime of effort. ¶ It is the benefit of this unequalled air engineering experience which you get in Sturtevant Equipment . . . whether fans for moving air, unit heaters for heating only, or apparatus for partial or complete air conditioning.

B. F. Sturtevant Co., Hyde Park, Boston, Mass.

Sturtevant
REG. U.S. PAT. OFF.



VENTILATING • HEATING • AIR CONDITIONING EQUIPMENT



STARTLING • NEW

Revolutionary in design . . . An entirely different
"Standard" Bath will be presented about April 15th

WATCH! —WAIT!

**TWO JOBS WELL DONE,
MR. ARCHITECT!**

... An attractively designed interior ... and effective insurance against food spoilage

Steuben's Tavern, Philadelphia, Pa. Architect Frank E. Hahn, has protected food and drink supply with Armstrong's Corkboard.



... to insure efficient refrigeration, at minimum cost, this tavern has five corkboard lined storage rooms



THE architect who designed this tavern did more than make it attractive to customers—he minimized refrigeration expense for the owners by specifying Armstrong's Corkboard for five cold storage rooms where perishable food, milk, and beer are kept. These rooms are completely insulated with two courses of Armstrong's Corkboard, each two inches thick.

Many architects have learned the value of specifying Armstrong's Corkboard where heat or cold insulation is necessary . . . in tap rooms, restaurants, or wherever cold storage is required . . . as insulation in air-conditioned homes and offices . . . and where fuel economy and comfort are desired, whether in small rooms or great auditoriums.

For further information about Armstrong products write Armstrong Cork & Insulation Company, 900 Concord Street, Lancaster, Pennsylvania.



Two of the five rooms lined with corkboard. General Storage (below), Beer Storage (above). This effective insulation minimizes refrigeration expense.



Armstrong's

**CORKBOARD ~ CORK COVERING
ACOUSTICAL PRODUCTS ~ VIBRACORK
INSULATING BRICK ~ TEMLOK INSULATION**

ANNOUNCING ARCHITECTURAL For the Design of

SPONSORED by THE FLAT GLASS INDUSTRY
PLATE GLASS MFRS. OF AMERICA
WINDOW GLASS MFRS. ASSOCIATION
ROUGH AND ROLLED GLASS MFRS. OF AMERICA

NOW OPEN TO ALL IN THE PROFESSION

CONDUCTED by RUSSELL F. WHITEHEAD,

**SOME OF THE ADVANTAGES TO THE ARCHITECTS
AND DRAFTSMEN OFFERED THROUGH PARTICIPATION IN
THIS COMPETITION**

The 29 awards for winning designs total \$3,100 and are apportioned as follows:

First Prize	\$1,000.00
Second Prize	500.00
Third Prize	250.00
Fourth Prize	100.00
25 Mentions, each . .	50.00

The fair, collective, critical judgment of a Jury of seven distinguished practitioners is assured, as the following members of the American Institute of Architects, representing as many sections of the U. S. A., have accepted the invitation to act as the Jury of Award, giving of their time and talents for at least three days of judgment.

Chicago	David Adler
Philadelphia . .	Wm. Pope Barney
New York	Otto R. Eggers
St. Louis	Louis La Beume
Boston	J. Lovell Little
Pittsburgh . . .	Louis Stevens
Los Angeles . . .	David J. Witmer

In this competition, the high professional standing of the jury gives assurance that the relative rating of the contestants will have the concurrence of the profession at large, or at least would not be dissented from in any marked degree. A fairly true mirror is held up in which one may see his architectural face.

REPRINTS OF THE COMPETITION PROGRAM LEADING ARCHITECTURAL JOURNALS

AN OPEN COMPETITION a Detached House

AUTHORIZED by THE PENCIL POINTS PRESS, Inc.

PUBLISHERS OF

PENCIL POINTS

330 WEST 42ND STREET, NEW YORK CITY

CLOSING DATE, JUNE 4, 1934

A.I.A., PROFESSIONAL ADVISER

This competition presents an opportunity to exercise and develop skill in solving a contemporary architectural problem and in presenting such solution in an attractive and convincing form. By contesting with his peers, both by brain and by hand, the architect and the draftsman is gaining strength for his private professional practice as truly as the athlete trains himself by his physical competition.

This competition, being of an altruistic or educational nature, may be treated as an exception within the meaning of the *Circular of Advice and Information Relative to the Conduct of Architectural Competitions* issued by the AMERICAN INSTITUTE OF ARCHITECTS' Committee on Competitions.

The program contains uniform conditions for all competitors. The problem is stated broadly and its solution is left to the competitors. Mandatory requirements are as few as possible and are set forth in such a way that they cannot fail to be recognized as such.

This competition provides an extra stimulus to refresh the architect's knowledge of an

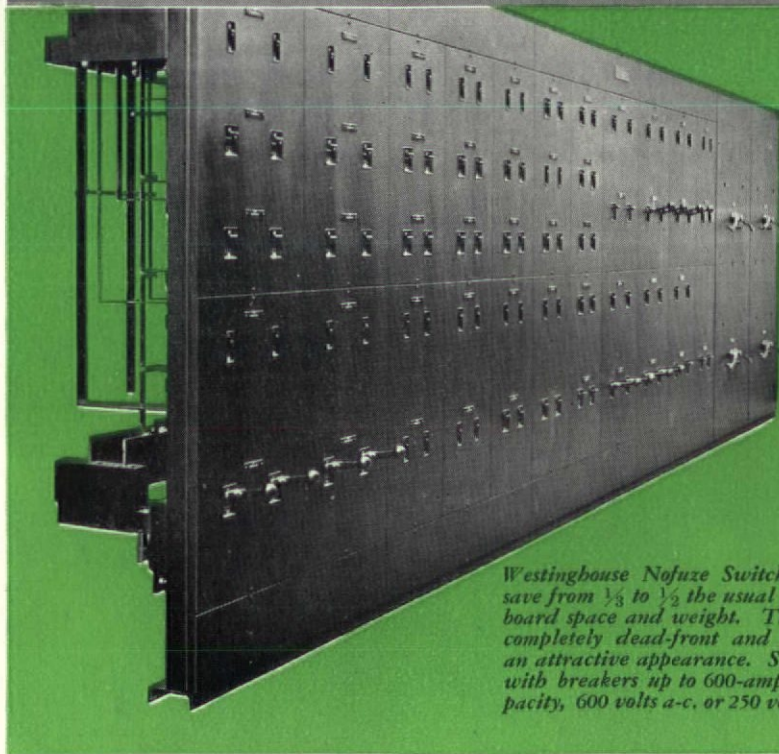
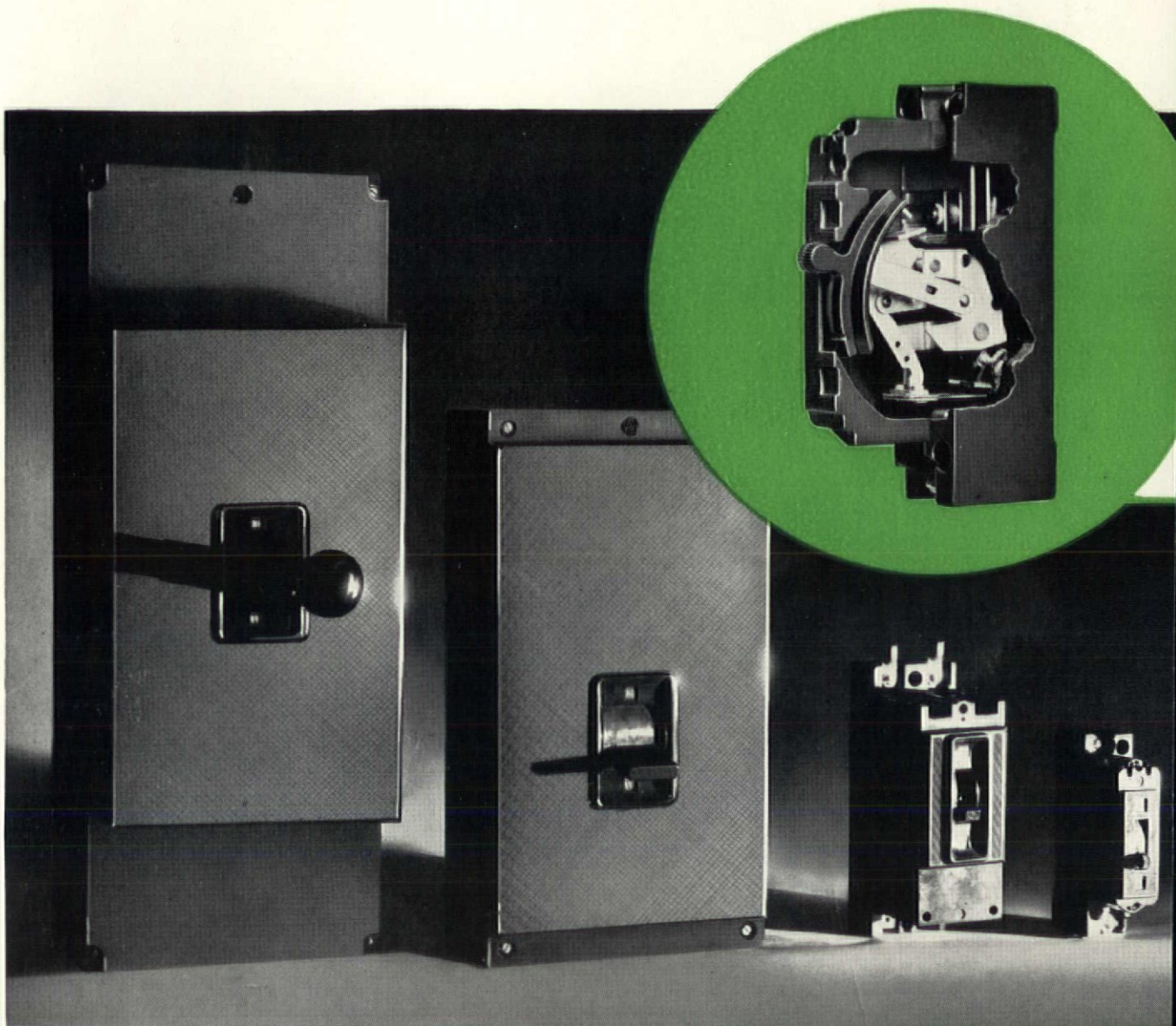
important building material — Glass — and to acquaint himself with recent advances and improvements in the form and quality in which it has been made available.

It also offers the possibility of gaining, through the wide publicity that will be given the authors of the winning designs, added professional prestige in the eyes of potential clients. What impresses a client is that a good solution of certain fixed conditions was found and the inference is gained that there are other good solutions in that designer's head.

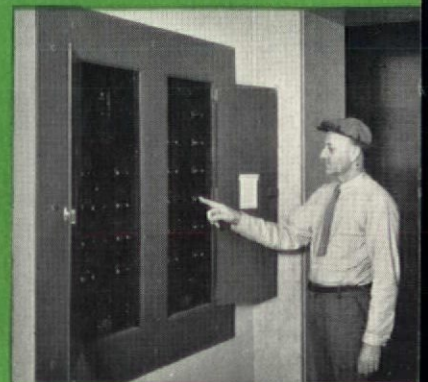
As the purpose of this competition is to secure evidence of the imagination and skill of the competitors rather than to obtain elaborately prepared drawings, only one sheet of drawings is required, thereby reducing the expenditure of money. The time saved on draftsmanship is left for the study of the problem.

The Professional Adviser selected by Pencil Points and the sponsors to conduct this competition brings to it the experience gained in the conduct of eighteen competitions of similar type.

MAY BE OBTAINED FROM ANY OF THE OR FROM THE SPONSORS



Westinghouse "De-ion" Breakers—used in Nofuze Panelboards, Switchboards, Load Centers and Industrial Circuit Breakers—are available in capacities up to 600 amperes, 600 volts a-c, 250 volts d-c. (Inset) Cut-away view shows the "De-ion" operating mechanism.



Westinghouse Nofuze Switchboards save from $\frac{1}{3}$ to $\frac{1}{2}$ the usual switchboard space and weight. They are completely dead-front and present an attractive appearance. Supplied with breakers up to 600-ampere capacity, 600 volts a-c, or 250 volts d-c.

Nofuze Panelboards can be supplied with "De-ion" circuit breakers to protect any number of circuits. Capacities range from 15 to 600 amperes, up to 600 volts a-c, 250 volts d-c.

Specify WIRING PROTECTION that *NEED NEVER COST A PENNY for Replacement*

THERE is nothing to burn out or replace in the electrical circuits for which you specify Westinghouse Nofuze protection.

In Westinghouse Nofuze Panelboards and Switchboards, and Load Centers (for homes) . . . "De-ion" circuit breakers, in place of fuses, guard the circuits. They constitute a sealed-in, integral part of the wiring system . . . an overload protection that is constantly and permanently on guard, and need never cost a penny for replacement.

When a dangerous overload occurs, the breaker automatically opens the circuit without noise or flame. Restoration of service is as simple as the operation of a wall switch. The circuit-breaker handle in "TRIPPED" position indicates the interrupted circuit, and a mere flip of the handle restores service instantly. As an added protection, the breakers trip free from the handle, so that they cannot be held closed against damaging overloads.

Nofuze protection has these added advantages:

Fewer Service Outages—A time-lag feature prevents unnecessary tripping on slight, momentary overloads caused by motor-driven appliances.

Circuit Outage Time Reduced—After a dangerous overload has opened a circuit, a mere flip of the circuit breaker handle restores service at once. No time is lost in replacing blown fuses. No groping in the dark to solve baffling fuse-box problems.

Compact Installation—"De-ion" breakers permit the design of smaller, lighter, completely dead-front switchboards. Floor space requirements are cut almost in half, simplifying the building layout.

Westinghouse Nofuze Circuit Breakers are approved by the Underwriters' Laboratories.

For complete information, phone the nearest Westinghouse office or just mail the coupon below.

Westinghouse

quality workmanship guarantees every Westinghouse product



SEND FOR BOOKLET

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

Gentlemen:

Please send me full particulars about Nofuze Circuit Breakers.

Name

Company

Position

Address T 79914

AF 4-34

CORRESPONDENCE

Rivera

Forum:

I think your publication of the Rivera murals is a splendid service, and I sincerely hope that you can get hold of the pictures which were taken of the destroyed murals. I saw slides of them at a lecture and, if you will believe me, the Rockefeller Center mural was a far greater work of art than the ones in the New School for Social Research. By that I mean that it was a finer architectural construction and as great in its way probably as *The Last Supper* of Leonardo da Vinci. I am particularly anxious myself to get pictures of this mural.

RAYMOND S. STITES

Director of Art and Esthetics

Antioch College

Yellow Springs, Ohio

Slum Clearance

Forum:

In this same mail I am writing to your office to ask them to mail a February issue of THE FORUM to someone involved in a tentative slum clearance project. I consider the number so good that I wish to congratulate you on the work and intelligence it represents. I wish the issue could reach some of the heads of the PWA throughout the country as well as those philanthropically interested.

ALLAN SQUIRE

New Haven, Conn.

Forum:

I found more real meat in your February issue on Housing than in any other presentation on the subject I have seen recently. One of the most stimulating articles that has yet appeared seems to me to be Frederick Ackerman's thoughtful and readable "Controlling Factors in Slum Clearance and Housing." He has presented here fundamental factors which must be considered but which are frequently overlooked in the approach which so many people take toward housing. Low cost housing would progress faster if everyone could follow Mr. Ackerman's logic step by step through the phases of "declining rents, and increasing vacancies," through the factors of "appraisal," "obsolescence" and "declining income" to the underlying question of the adequacy of "debt as a foundation for houses."

I hope we may have more of Mr. Ackerman's clear thinking in subsequent issues of THE FORUM.

J. P. H. PERRY, *Vice-President*

Turner Construction Co.

New York, N. Y.

Small Houses!

Forum:

Two causes account for the rapidly increasing interest in the better type of small house. (1.) Office space in a city like New York is notoriously overbuilt; renting records of the architecturally successful Empire State Building eminently confirm this. (2.) Decentralization is going on apace, partly on account of unsatisfactory domestic urban housing, partly because present economic conditions made it profitable to live in smaller communities. As a result of this situation, the best architectural minds are now turning to small house design. I wish to congratulate THE FORUM for its continual emphasis on and interest in the small house; the series in the March issue was very timely. There is now some hope for the improved appearance of the average American suburban town.

JOHN H. BEARD

Chicago, Ill.

Czech and Double Czech

Forum:

I note that your March issue offers its foreign-printed Czechoslovakian section without benefit of comment. I would too. If ever anything typified the heyday of the new European nationalism, this is redolent with it. The Italians have outbuilt the Czechs probably four to one, but we do not hear them blowing any horns about being a "vital people." After allowing for this somewhat chauvinistic vein, it is very pleasing to see how modern Central Europe is going in architecture. The unfortunate sickly yellow of the cuts does not show them to best advantage. Trim and smooth as all the buildings are, they possess only the ornamental character inherent in various materials; they lack coloristic surface design. Functionalism and straight lines can be carried to the point of coldness, as the Czechs are doing. It is certainly the opposite end of the scale from gingerbread. We American architects should learn not to make their mistake of becoming impersonal as we go modern.

ARON G. WEISNER

Milwaukee, Wis.

Better Homes?

Forum:

If the houses you published in the March issue as the winners of the Better Homes in America competition are the best houses in America, people who are criticizing architects for their lack of original thinking are more than justified. Of all the conventional clap-trap!

I'm not a modern fanatic, nor am I an unbudgeable conservative. I can appreciate

both. The prizewinning house was perfectly all right; I am sure the owners got their money's worth — but why give it a prize? Especially since there were at least four houses better than that one. Even Dwight James Baum's Greek Revival No. 22 with variations should have been rated above it. And the house in California by William I. Garren was much superior; at least, it seemed so from the one photograph and plan shown. . . .

One thing I will say for the jury — it was broad-minded. A modern steel house getting an honorable mention from an American jury! And especially a jury with Chester Aldrich on it! Where was he when the mentions were awarded? Or has he just gotten religion?

The Better Homes is a splendid idea. Only let's have some homes that are really better.

C. H. LOHRKE

New York City

Springing Archers

Forum:

Although I am no longer young, spring always turns my thoughts to love — love of my fellow men in this case.

I have been a subscriber to THE FORUM and most of the other architectural journals for a good many years and I must confess that I am getting a little bit bored month after month as I turn the pages and see the work of the same architectural firms published over and over and over again — and this includes the offerings of my own firm.

Now of course I am interested in everything that the Ray Hoods do, and the Harvey Corbetts, the Ely Kahns, the Holabird & Root boys and the Graham, Anderson delegation. But I suspect that there must be some young men who are doing some refreshing and significant work and I wish you could dig them out and give them some of the encouragement to which they are entitled.

I don't know how you can go about it. Perhaps you might get out a Reference Number limited to the work of young men whose names have never appeared in any architectural paper before. Invite all of your subscribers to send in material. Not necessarily the work of their own office but ask them to call your attention to the work of some office, preferably a young firm, which has escaped notice. Or perhaps you might set an age limit on the architects whose work appears in one number.

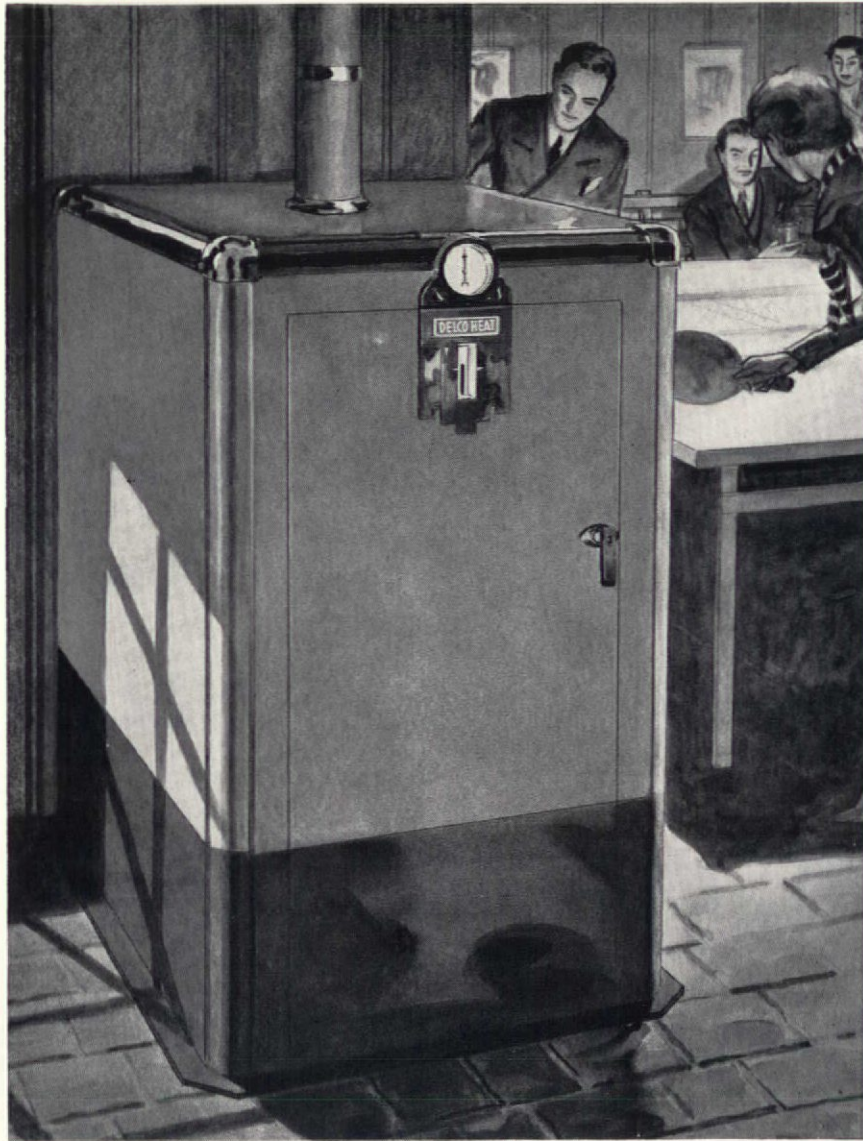
I am sure that a great many of my friends in the profession would share my delight in seeing some of the new men in print.

OLD BOY SCOUT

EDITOR'S NOTE: Good new ideas are few. Surely this is one. We invite all architects to submit for publication any interesting projects regardless of the type of building, designed by an office which has never had any of its work published. If this applies to you by all means send in your own work, or if you are of the established plutocracy, call our attention to some firm which merits it.

DELCO HEAT'S NEWEST ACHIEVEMENT

ENTHUSIASTICALLY ENDORSED BY LEADING
CONSULTING HEATING ENGINEERS



Consulting heating engineers everywhere are enthusiastic in their praise of the new, completely automatic Delco Heat Boiler. They claim Delco engineers have brought oil heat to a new pinnacle of perfection and efficiency. They heartily approve the manner in which Delco engineers have harmonized the super-heat-producing qualities of the Delco Heat burner with a super-heat-absorbing boiler of remarkable design.

Important New Features

Delco's principle of preheating the air before combustion, positive control of the oil-air ratio, the unusually large heating surface, and the scientific control of heat travel—all have received the stamp of approval of these prominent heating authorities.

And they are particularly impressed with the performance records—the higher efficiency attained, the savings in fuel costs. Actual savings up to 50% have been proved in hundreds of tests.

Unusually Compact

Equally important to the architect, the new Delco Heat Boiler, with automatic burner, boiler and hot-water heater harmonized into one handsome, furniture-steel unit, takes up only a small amount of floor space. Being only 55 inches in height, low ceilings present no installation problems. And it will go into any basement without tearing down partitions or doors.

The Delco Heat dealer in your city will welcome an opportunity to demonstrate this new Delco Heat Boiler. Or send the coupon for complete details and specifications.

DELCO HEAT BOILER

A GENERAL MOTORS VALUE

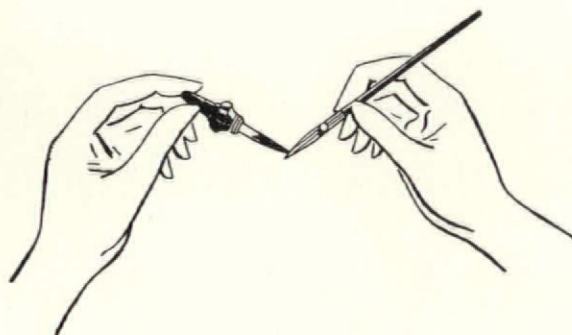
ALSO A COMPLETE LINE OF DELCO HEAT OIL BURNERS

DELCO APPLIANCE CORPORATION,
Subsidiary of General Motors,
Dept. 21-L, Rochester, N. Y.
Please send architect's file on the new Delco
Heat Boiler.

Name.....

Street Address.....

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



IN THE BLUE-PRINTS . . . In America, more than in any other country, the washing and ironing requirements of a building are considered when the original plans are drawn. Much of the credit for this is due to the influence of the nation's architects. These far-seeing men carry their specifications beyond the commercial laundry field. They anticipate the clean-linen requirements of hospitals, hotels, schools, department stores and clubs . . . and provide for modern laundry departments as a matter of course.

● IT HAS BEEN the privilege of The American Laundry Machinery Company to work with architects in the planning of laundries of every size—from big, multi-story commercial plants, to small institutional departments. When a laundry-layout problem looms up in your drafting-room, may we remind you that confidential "American" service is yours to command? **THE AMERICAN LAUNDRY MACHINERY COMPANY, CINCINNATI, OHIO**



THE ARCHITECTURAL FORUM

CONTENTS FOR APRIL 1934

Frontispiece: Investment or Illusion? *From a sketch by J. Floyd Yewell*

ARTICLES	ARCHITECT OR AUTHOR	PAGE
The New Deal's First Year		249
Debt As the Foundation for Houses	<i>Frederick L. Ackerman</i>	255

Six Small Houses and Their Costs:

House at Larchmont, N. Y.	<i>C. C. Merritt</i>	259
House at Summit, N. J.	<i>W. Roderick Wheeler</i>	261
House at Greenwich, Conn.	<i>C. C. Merritt</i>	263
House in eastern Massachusetts	<i>Royal Barry Wills</i>	264
House at Cambridge, Mass.	<i>Carroll Tiffany</i>	265
House at Massapequa, L. I.	<i>Randolph Evans</i>	266



KENNETH KINGSLEY STOWELL, A.I.A.
Editor

RUTH GOODHUE
Managing Editor

JOHN CUSHMAN FISTERE

WASHINGTON DODGE, II

MAX FORESTER

JAMES H. BREASTED JR.

HEYWORTH CAMPBELL
Format

CONTRIBUTING EDITORS

Kenneth M. Murchison
Alexander B. Trowbridge
Charles G. Loring
Harvey Wiley Corbett
Rexford Newcomb
Aymar Embury II

The Federal Fountain of Funds	<i>Washington Dodge, II</i>	267
Manufacturers Aid Home Financing		270
The Savings Bank Situation in Relation to Home Finance	<i>Robert Louis Hoguet</i>	271
Lending by Life Insurance Companies	<i>R. Graeme Smith</i>	273
American Houses, Inc.	<i>Holden, McLaughlin & Associates</i>	277
The Building and Loan Associations	<i>F. S. Cannon</i>	283
The Case for Mortgage Companies	<i>S. M. Waters</i>	285
With Benefit of Architect	<i>Harold Donaldson Eberlein</i>	287
Appraisals and Architects	<i>Philip W. Kniskern</i>	291
"Hors de Concours"	<i>Kenneth Murchison</i>	293
The Legal Side of Mortgages	<i>Loria & Martinson</i>	294
Sweden's Small House Answer	<i>Linton R. Wilson</i>	295
Some Statistics on Shortage		301
For Less Than \$3,000	<i>Randolph Evans</i>	304

BUILDING MONEY

Detailed Contents on Page 305

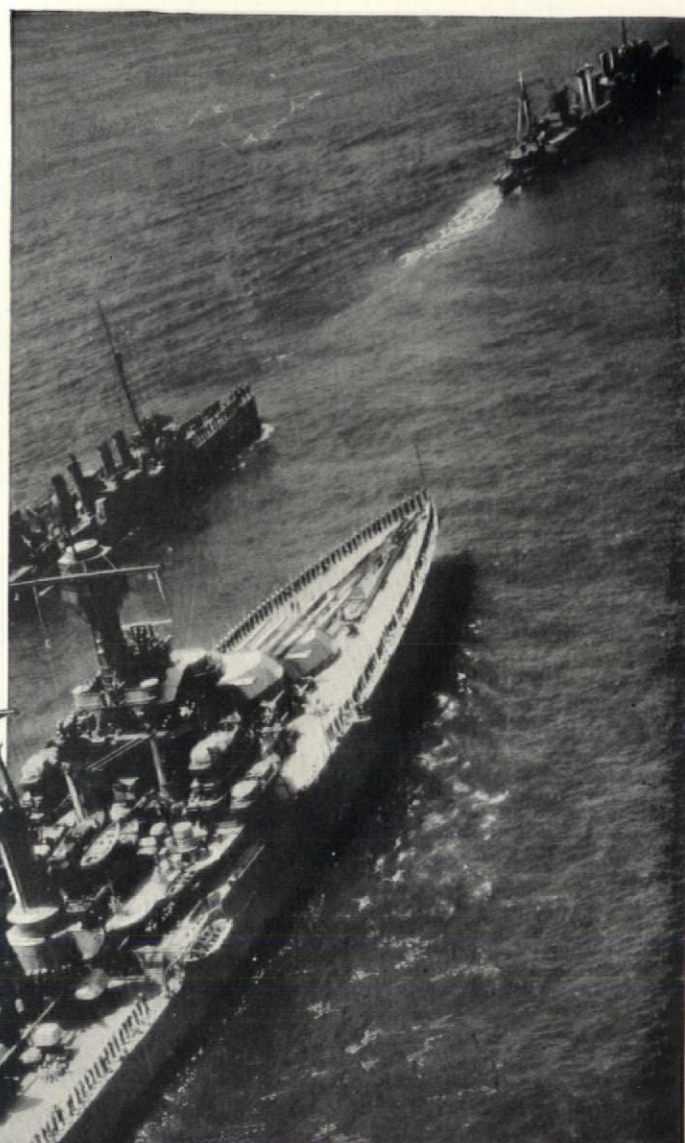
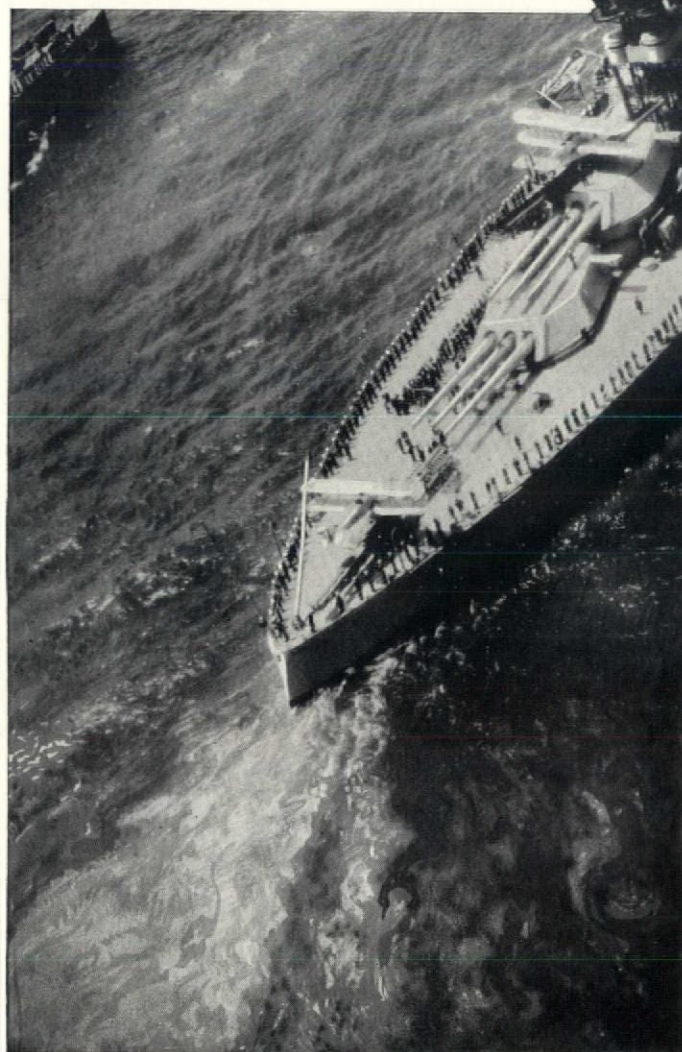
Correspondence	10
The Editor's Forum	15

VOLUME LX NUMBER FOUR

THE ARCHITECTURAL FORUM is published monthly by Rogers and Manson Corporation, Howard Myers, President; Publication Office, 10 Ferry Street, Concord, N. H. Executive, Editorial and Advertising Offices, 220 East 42nd Street, New York. Advertising Manager, George P. Shutt, Business Manager, W. W. Commons. Subscription Office, 350 East 22nd Street, Chicago, Illinois. Address all editorial correspondence to 220 East 42nd Street, New York. Yearly Subscription, Payable in Advance, U. S. A., Insular Possessions and Cuba, \$7.00. Canada, \$8.00. Canadian duty 60c. Foreign Countries in the Postal Union, \$9.00. Single issues, including Reference Numbers, \$1.00. All copies Mailed Flat. Trade Supplied by American News Company and its Branches. Copyright 1934, Rogers and Manson Corporation.

The strongest defense
against rust is to coat every metal
surface with good lead paint. One
lead paint is being accepted more
and more as the most efficient
rust inhibitive paint for all metal
surfaces . . .

EAGLE SUBLIMED BLUE LEAD



● Eagle Sublimed Blue Lead gives you these advantages:

1. Being pure lead, it is most enduring—gripping metal surfaces tenaciously.
 2. Being of extremely fine particles, it stays in suspension, doesn't harden in the container or clog the spraying nozzle. Equally satisfactory for brushing, spraying or dipping.
 3. Chemically stops corrosion, because of great basicity.
 4. Brushes easily, flowing out like enamel. Painters like it.
 5. Offers great economy. *First*, because lower in first cost than red lead or other high grade metal paints. *Second*, because of its greater coverage—600-800 square feet per gallon—offers economy of 40-50% in material cost. *Third*, because it is so long lasting.
- Sublimed Blue Lead is available in paste form (pure lead ground in pure linseed oil) under the Eagle label—or in ready mixed form from reputable manufacturers. Send for descriptive booklet and free sample.

THE EAGLE-PICHER LEAD COMPANY • CINCINNATI, OHIO

THE EDITOR'S FORUM

MORE FOR PUBLIC WORKS

ALMOST seven thousand Public Works projects are piled up with all their blue-print rolls and application figures waiting idly for examination and approval. But they wait in vain gathering PWA dust — four or five billion dollars worth of engineering and building that is both wanted and needed in every section of the country; wanted now to put men to work; needed to serve a public purpose. And the Administrator's cupboard is bare, or rather it is full of tight little packages all done up in red tape and legal papers and labeled "Allotments," each with its name tag indicating where it can be sent piecemeal when, if, and as the project progresses. Everything is being done to move them speedily from the shelves, so long as it is done in proper form to safeguard principal and interest and to prevent graft or undue profits, for the government must be more careful and cautious than the ordinary hard-headed banker. So the PWA's three billion three hundred thousand is all present or accounted for, and the seven thousand new projects and the million more men they would employ must wait.

Wait for Congress to realize that recovery and reemployment demand Public Works — from three to six billion dollars worth of public works in addition to the present allotted funds.

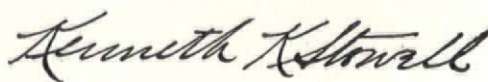
This new appropriation is imperative now, for within a month the CWA will swell the ranks of the unemployed by some four million men. Are they to go on the "Dole" or are they to be reemployed on needed construction? Will CWA be given a new lease of fast and effective life under new initials? Or will the PWA learn the lessons of the past year and organize itself for speed of operation in spending the billions which must be appropriated? We believe that there is no surer way to a real recovery than through increasing the Public Works program, speeding its action and efficiency. The new program must at least equal in size the present, and should, with its experience, operate with twice the speed.

The seven-thousand-project pile can even now be sorted to be ready for the inevitable funds. We pre-

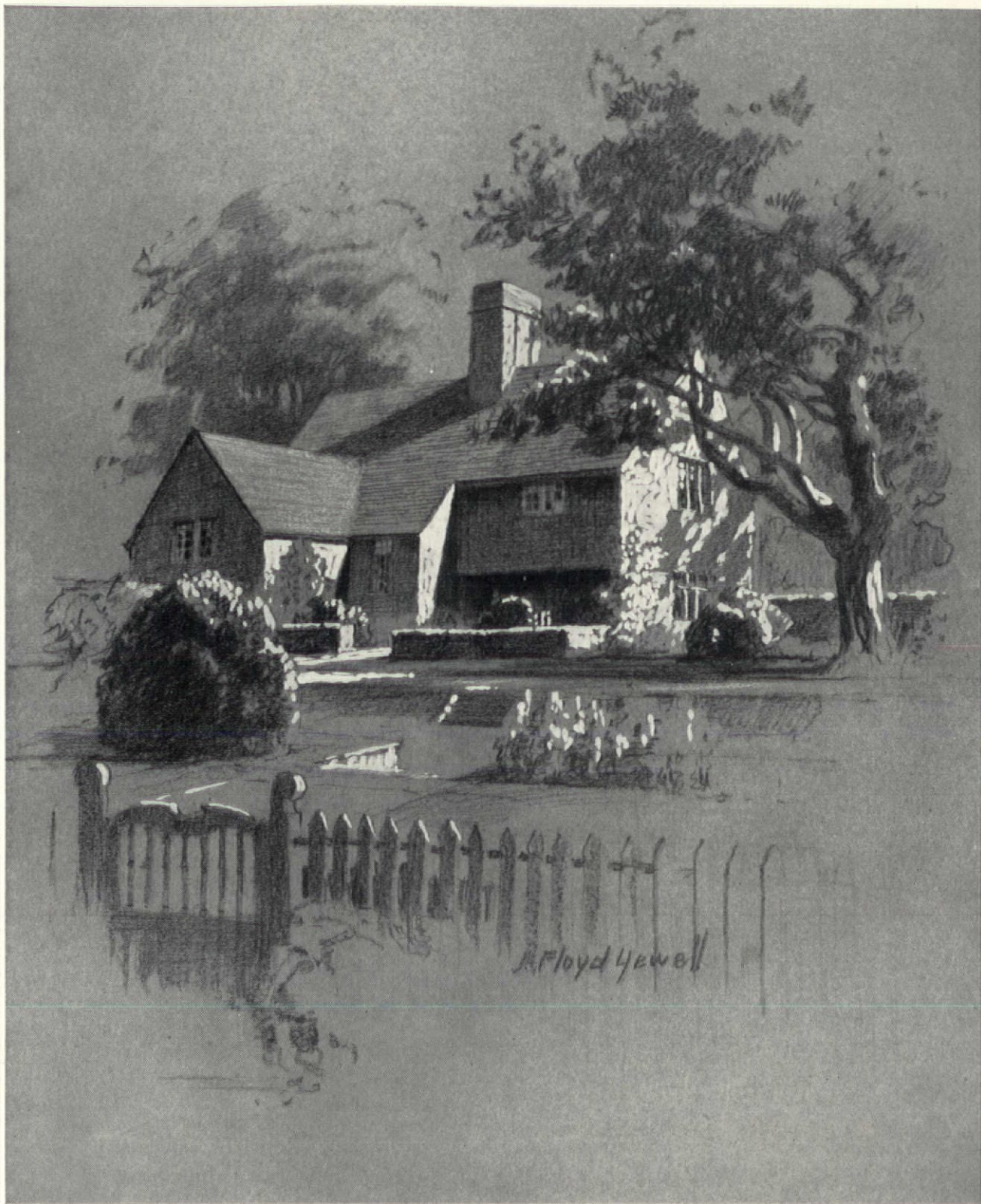
sume that these are being dusted off and given the usual thoroughgoing examination and analysis in anticipation of the new appropriation. If the Administrator feels that the Act does not sanction any such anticipation, at least the examination of the projects is a necessary part of the mandate of the law which requires "a comprehensive program of public works." There can be no reason then for not knowing which of the seven thousand will be best suited to go ahead at once when the new building money is granted. Undoubtedly there is enough money to carry on the work of analysis, correlation and judging with all speed, and enough to investigate ways and means for expediting the administration of "a comprehensive program."

The first three billion had to be spent without waiting for any such comprehensive program as was called for in the Act. Naturally, every government expenditure that could be rationalized into the term "public works" was given a PWA allotment to swell the totals. There is no necessity for including all government departments' capital expenditures under PWA when spending of the next three billion starts. A really balanced program of public works projects should be ready for the new funds. In this program *buildings* must play the most conspicuous part. Let it be shown that "the Administration realizes that dollars spent for needed buildings have a more widespread economic effect than money spent on many other types of projects. Therefore in administering the public works sections relating to buildings we are mindful of the broad provisions of the Act and their bearing on the economic status and purchasing power of the millions who are dependent directly and indirectly on construction for their livelihood." These words of Administrator Ickes* must be borne out by the facts and figures of the next three billion to be spent on Public Works. The Building Industry and the PWA must both be ready.

*From "Public Works in The New Deal," by Harold L. Ickes, THE ARCHITECTURAL FORUM, September, 1933, page 151.



Editor.



INVESTMENT OR ILLUSION?

From a Sketch by J. Floyd Yewell

The Architectural Forum

THE ARCHITECTURAL FORUM

VOLUME LX

APRIL 1934

NUMBER FOUR

THE NEW DEAL'S FIRST YEAR

Building's pittance: less than a dime out of each of 3,300,000,000 allotted dollars . . . And seven thousand non-Federal projects await funds . . . Housing's chances . . . The code may oil the wheels, but will it make the engine go? . . . Shaking out the mortgage clinkers . . . What of the second year?

ONE year old last month were President Roosevelt and the assortment of expediencies which are heaped up and labeled "Emergency" in the U. S. Treasury's statements of expenditure. Older was the Reconstruction Finance Corp., mud-caked but most stalwart of all relief agencies,* whose activities in direct behalf of the building industry began in 1932. On July 21 of that year Herbert Hoover signed the Emergency Relief and Construction Act, providing \$100,000,000 for a Federal building program, amending the R. F. C. Act so that savings banks might be granted loans. Next day he approved the Federal Home Loan Bank Act. This was the Hoover-heritage of the New Deal. How it was used, amended, added to, is set forth here to answer *What has the New Deal done for Building?*

To find that question's answer it will be necessary to look far beyond Mr. Roosevelt's big flapping flag with the \$3,300,000,000 on it. Much more important affairs for the industry may be its regimentation under the now partially complete Construction Code; the industry's gains from the Administration's home relief measures, which are beginning to

work; its share in beer uncapped, repeal, leniency accorded mortgages under the Securities Act, et al.

Diverted Building Dollars? On March 4, 1933, the incoming President asked for extraordinary powers and he was given them. New York's Senator Robert F. Wagner was hard at work on legislation which promised \$3,300,000,000 for public works, and no one minded when the President violated all precedent in financing the Civilian Conservation Corps by ripping \$92,000,000 out of the \$100,000,000 for new post office buildings, which President Hoover's Emergency Relief and Construction Act had set aside. Under this act the Treasury had allotted 85,000,000 post office dollars; total buildings, 410. But of these to this day PW Administrator Ickes has given the word "go" on only 216.

With but one aim — to put men to work, and at good pay, on socially desirable public works — Secretary Ickes launched his program in the midst of much criticism. From the first he proved a penny-pincher. He has a cranky way with mayors who come to see him. However caustic in his contacts and cautious in his spending, at least his caution has carried equally into safeguarding that spending from graft, political and otherwise.

The widely advertised "three billion three" for

* The R. F. C. had loaned \$2,500,000,000 on January 1. If it lends all 1934's budget provides it, it will have disbursed \$7,399,000,000 during 1932-33-34.



Admiral Christian Joy Peoples, head of the Treasury Department's new Division of Procurement, under which as many as possible of the Government's building activities will be centralized, shakes hands with a friend. Last month the President made him a member of his Special Board for Public Works

public works was deeply cut into by statute, not to mention Executive Orders, which made frequent raids in the public works pantry. Among such allotments, which relieved the PWA of approximately \$1,100,000,000, were those for the Tennessee Valley Authority (May 18, 1933) out of which may come a higher standard of living in the Valley, to building's profit; the Civil Works Administration (November 9, 1933) out of which, fortunately, the well-directed Real Property Inventory; The Federal Emergency Subsistence Homesteads Corp. (July 21, 1933) out of which two houses at Dayton, O.; and the Public Works Emergency Housing Corp. (October 29, 1933) out of which may come a \$12,000,000 project in Cleveland, a \$3,000,000 one in Detroit.

Considered broadly, the PWA's fund is now divided into three parts, each representing about a billion dollars: a third has been segregated by statute and Executive Order; two-thirds have been assigned to public works projects, on approximately half of which (\$973,384,000, exactly) construction

contracts are let.* Of this sum (\$885,000,000 of which is Federal, \$87,000,000 non-Federal work) THE ARCHITECTURAL FORUM estimates that only \$50,000,000 is represented in contracts for building, as opposed to other construction. This is 20 per cent of the total figure which includes many road contracts. Of the approximate two billion which has been allotted to definite public works projects, building's share is scarcely 10 per cent.

THE ARCHITECTURAL FORUM's estimate of PWA building work now under contract (\$50,000,000) assumes that of the \$87,000,000 non-Federal *contracts-let* figure approximately a fifth, or \$17,000,000, is building construction. Reason: \$120,000,000, or one-fifth, of the final total of \$600,000,000 worth of non-Federal projects for which *allotments* have been made, is known to represent buildings.** Bulk of the rest of the estimated \$50,000,000 in PWA contracts let to date is the Treasury Department's \$30,000,000, listed below.

The contracts-let figures, as of March 3, show:

DEPARTMENT	CONTRACTS LET
Agriculture (mostly roads).....	\$324,000,000
Commerce.....	6,227,000
Interior (mostly dams).....	41,930,000
Justice.....	549,000
Labor.....	569,000
Post Office.....	6,000
Treasury (post offices).....	30,000,000
Navy (ship-building).....	250,000,000
State.....	637,000
War (motorization, etc.).....	226,000,000
Independent offices.....	3,000,000
D. C.....	749,000

And the \$50,000,000 that the PWA has so far contracted to spend is, by way of comparison, less than what the Treasury Department spends on Federal buildings in an ordinary year under the 1926 building program: 1931, \$66,531,702; 1932, \$85,896,407; 1933, \$100,653,972. Last year's regular spending, of course, was in addition to that spent by the PWA during the year.

Federal Building Centralized. Though he is still a member of the Board of Awards, white-thatched James A. Wetmore, with whose name most building men are familiar, is no longer Supervising Architect in the Public Works Branch of the Treasury. His place has been filled by his hard-working assistant, Louis A. Simon, and his department has undergone great changes since the Roosevelt Administration began — changes which culminated last month in the shift of Assistant Secretary of the Treasury Lawrence Wood Robert Jr. to another division in the Treasury Department and the appointment by Executive Order of Admiral

*Out for bid: \$106,000,000.

** For a breakdown of non-Federal building allotments into types of buildings (a list led by schools, housing and hospitals) see THE ARCHITECTURAL FORUM, March, page 240.

Christian Joy Peoples to Mr. Robert's place on the President's Special Board for Public Works, which passes on all PWA plans.

On June 10 last year while other news events held the stage, the President ordered the creation of a Division of Procurement in the Treasury Department and broadly endowed it with power to determine "policies and methods of procurement, warehousing and distribution of property, facilities, structures, improvements, machinery, equipment, stores and supplies exercised by any agency." Into this division plopped the Supervising Architect's office. Admiral Peoples, long an officer of the supply corps in the Navy Department and for seven years directly under Mr. Roosevelt, when he was Assistant Secretary of the Navy, became Director of Procurement.

With the establishment of this Procurement Division, a study was begun to find what savings could be made by centralizing, among other things, the building activities of all the various departments of the Federal Government. "Determination of methods and policy of the construction activities of any department" has been vested in the new division from the first, and while it has made no attempt to dictate to such big construction divisions as the Interior Department's reclamation bureau, it has, lately, taken over the work of numerous smaller ones. Said Admiral Peoples at a hearing on the 1935 Treasury Department Appropriation Bill, answering a Senator who mentioned the possibility "that this Procurement Division would be likely to become unwieldy on account of the magnitude and variety of things it would have to purchase": "*A very pertinent question!*" The President has a way of concocting schemes of astounding magnitude, and yet a way sometimes of dropping such schemes in the laps of very practical men. For progress has been made, and progress of a kind few other than hard-headed Admiral Peoples could supply.

Architects winced when they read a PWA news release several months ago to find that "in place of the characteristic elaborately ornamented conspicuous stone structures frequently produced as new post offices" the PWA had decided to approve only those made up to a standard set of specifications evolved in the Supervising Architect's office. For they knew that under such procedure the Government might well dispense completely with the services of private architects. Word was not forthcoming from the Treasury Department last month as to how much Admiral Peoples hoped to save by building simplified post offices, nor could the Supervising Architect (whose lips are sealed under Secretary Morgenthau's orders) say whether in the future private architects are to have as large a hand in Federal building work as they have had in the past. Best conjecture is that there will be no change for the present in the Treasury's disposition

to let jobs out to private architects, for passing out work speeds and spreads it; which is exactly what Secretary Ickes likes to see done.

By last month about 100 private architects had been commissioned by the Treasury on Federal building projects for which the PWA has made allotments approximating \$65,000,000. There follows a detailed breakdown showing the status of these projects as of February 28, 1934:

Under contract, 37 projects.....	\$19,000,000
Bids in, on market or in specification stage, 54 projects.....	8,000,000
Drawing stage:	
Supervising Architect, 110 projects..	9,500,000
Private Architects, 56 projects.....	6,500,000
Land owned, ready for drawings, 12 projects.....	1,500,000
Sites selected, title not yet vested, 2 projects.....	135,000
Sites advertised for, examined or awaiting selection, 177 projects.....	20,000,000
Held, 2 projects.....	1,350,000

Non-Federal Log Jam. Seven thousand applications for non-Federal loans and grants in the amount of over three billion dollars were still pending early this year when the PWA's funds gave out. Secretary Ickes, known to be antipathetic toward post offices as work-creators because of a prevailing



Backed up in the PWA's offices in the Department of the Interior Building at Washington are 7,000 applications from States, cities and counties for loans and grants on three billion dollars worth of projects. But the PWA's funds are all assigned

inclination to "hold up" the Government on the cost of sites, had conceded that the non-Federal type of project would spread work more bountifully than all other types, and predictions were that at least \$1,500,000,000 would be thus spent. Instead, the total amount allotted in loans and grants to States, counties and cities is in the neighborhood of \$600,000,000, a figure which includes such heavy construction as sewage plants, streets and water-works, and which excludes housing. Of that \$600,000,000, to date only \$55,000,000 has been actually paid out according to the Daily Statement of the U. S. Treasury. Non-Federal construction-contracts-let figures for building projects are unobtainable, though PWA representatives say they will be made public "within about six weeks."

True, non-Federal projects came in slowly at first. And excusable were delays caused by many problems of municipal, State and county law which smart Edward H. Foley Jr. and his staff have competently attacked. To date bond purchase contracts have been written and sent out from Washington covering four-fifths of the total non-Federal projects for which allotments have been made; only about 500 actually signed. But some of these contracts were 70 pages long.

The PWA is following a piecemeal bond buying program, enabling it to cut off funds for projects whenever the local government's bonds show signs of weakening. The success of the PWA's recent bond retailing operations (see page 308) is no doubt due as much to Secretary Ickes' close and careful management as to the return of confidence in the municipal bond market which the Secretary said his successful operations indicated. Notable was his statement that "Today's sale establishes the broader conception of the public works theory of aiding employment to speed recovery. The PWA bought these municipal bonds when private finance failed to function for qualified public works. Today's bids show that in the instances involved private sources are now awakening and willing to assume their proper function. In returning the investment to the regular market by the procedure followed, the Government secured the national benefits of the employment involved and also sold the bonds it bought for more than it paid for them."

The PWA is required by law to turn funds realized from the sale of its bonds back into the Treasury. But even if it were allowed to reinvest these proceeds in more non-Federal projects, it would effect no landslides in the mountainous heap of applications now stacked at the PWA's door.

Housing Emergent. Stock-taking must highlight housing, which may yet provide more dollars for building than any other type of public work.

For four months the PWA's approach to the housing problem was the wrong one. Trouble was that the projects which Director of Housing Robert

D. Kohn was able to muster out of private initiative were equity poor. Projects he later found more to his liking were designed by large-scale planners who thought in terms of eminent domain. A half dozen or so low land-cost schemes, in cities like Detroit and Cleveland, were the kind of projects Director Kohn desired, and he and Secretary Ickes were not long in going after them. In all cities they found affirmative answers to the question whether city budgets stand to benefit from housing by curbing unemployment relief expenditures, improving the tax standing of contiguous properties, and lightening the work of police, health and fire departments.

When last month loans for seven of the remaining eighteen projects approved last year on the limited dividend basis were rescinded, with word that the Public Works Emergency Housing Corp. might possibly undertake the projects, the failure of the Housing Division's first four months' effort to find sound schemes was admitted, with admirable frankness.

Three Government housing projects are actually



Here is Mr. Fred F. French's "Knickerbocker Village" as it looks today. "Knickerbocker Village" came under the RFC self-liquidating public works before there was a PWA. It will cost \$9,500,000 and will have elevators. The twelve-story apartment h

in the construction stage today. Most advanced of these is Fred F. French's \$9,500,000 "Knickerbocker Village" project in Manhattan's lower East Side, for which the RFC is lending 85 per cent of the funds. This loan was approved prior to President Roosevelt's inauguration, and work has gone steadily ahead on the French housing project during this Administration's fruitless efforts to get other projects started on less expensive land. First PWA housing project to get started was Euclid's (single-family homes; allotment, \$1,000,000) and the other, Philadelphia's (apartments for American Full-Fashioned Hosiery Workers; allotment, \$1,000,000). Contracts with the Government have been signed by the sponsors of four others of the remaining twelve approved limited dividend corporation projects.

Whether and how quickly the PWEHC, with brusque Col. Horatio B. Hackett assisting Director Kohn, will set its \$100,000,000 to work depends largely upon developments of this month. Option-takers are in the field, concentrating, in most cities, on two or more districts at a time so as to confuse speculators. Director Kohn declares that reports to

date show the likelihood of obtaining properties in some instances under their estimated cost. The Government will not trifle with property-owners who hold out for high prices. "We will get ninety per cent of our land under option and then we'll condemn," says Mr. Kohn. Such tactics promise vigorous action soon.

NRA. Out of Secretary Ickes' money comes the NRA Administrator's salary. And General Hugh S. Johnson has been a thorn in the Secretary's side. It is a common complaint that the PWA has disrupted the economic tranquillity of many a town by starting construction at wage levels which have drained the best workmen away from private industry and faced employers with demands with which they could not possibly comply. But the fact that the General does not believe in \$1.10 an hour has not deflected Mr. Ickes' intent to increase purchasing power in the country by paying out big wages. Such a course has undoubtedly caused some trouble, but it has also been vastly catalytic. A case in point was Longmont, Colorado's decision last month to build and pay for its own \$60,000 sewage disposal plant in lieu of accepting the \$15,000 grant which the PWA had agreed to furnish. That Longmont's mayor found PWA wage specifications untenable may be overlooked in face of the fact that Longmont is to get its sewage plant and Longmont workers work.

Building construction got its basic code two days before the New Deal was exactly one year old, a code providing that no laborer engaged in construction work shall be paid less than 40 cents an hour, or be employed more than 40 hours a week, eight a day. There is now a Chapter II to the code, and a subchapter to this will provide more specific rules for building contractors. It is doubtless true that some construction has been held up because contractors have shied at signing lump-sum contracts involving long-time operations for fear that something might be put into the code which would raise costs. This fear was unnecessary, however, for the code expressly excluded from its operation any contract signed prior to the date it went into effect, as well as all *bona fide* bids made 60 days in advance of that date. That chapter, which will ultimately be known as the architects' code, awaits agreement on the point as to whether a standard schedule of fees constitutes price fixing.

While the code is still far from complete, and its present effects unobservable in a dormant industry, the fact that agreements exist, as they do, in an industry heretofore fraught with disagreement, represents a positive gain. Construction's code, like every code under the NRA, is being written primarily to increase purchasing power. Its approach is basic; but considered from the industry's standpoint—from the top down—the code as an integrative force alone is a definite step in advance.



The New York Sun

tain 6,030 rooms which will rent at an average \$2.50 per month apiece, a price which those who formerly lived in "the lung block" will not be able to pay. Such high rents will find a place in the PWA's housing program

As such, it will oil wheels for which credit must supply the motive power.

The present Administration realizes that only with the return of a basis for broad borrowing can industry swell again to 1926 proportions. And particularly in the field of home finance, where three Government agencies are speeding their work,* it has shown increasing appreciation of the importance of making building money both available and cheap.

Finance. Three wholly distinct elements of the Federal Government's activities in home loan finance are the subject of confusion in the public mind, because all three are the result of legislative steps which have been taken over a very brief period of time. Of those three agencies, one, the Home Owners Loan Corporation, deals only with the emergency situation and has for its objective the refinancing of distressed home owners, the relief of mortgagees holding such loans as are in difficulty, and the stabilization of the urban home mortgage market. The other two agencies, the Federal Home Loan Bank Board and the Federal Savings and Loan Associations, are dealing with the long-term objectives of creating markets for private investment in home loan finance and the establishment of a sounder method of lending money for home building.

The Government has not as yet tackled mortgage problems other than those having to do with home finance, except in so far as it has been necessary for the RFC to resuscitate some commercial banks, and to offer special aid to New York's savings banks by buying capital notes of the Savings Banks Trust Co. (THE ARCHITECTURAL FORUM, September, 1933, page 246). The RFC has also indicated its willingness to lend a hand in solving New York's complicated guaranteed mortgage problem. The National Association of Real Estate Boards will introduce "An Act to Amend the Federal Home Loan Bank Act" at this session of Congress providing for the creation of a Federal discount bank for all mortgages (see page 320). Most building money men favor such a bank's creation.

Statistics. Three recently created statistical agencies will provide the industry with facts which it has never before had at hand. The Real Property Inventory (see page 17), should prove of great use to those who invest in mortgages as well as to planning boards. Likewise both job registration with code authority officials and the PWA's check on material and labor costs, through its new Cost of Construction Authority (see page 309), will provide useful data, especially if it is made public.

* How amazingly growth of the H.O.L.C., the Federal Home Loan Bank System and Federal Savings and Loan Association has been accelerated within the past few months is told in "The Federal Fountain of Funds," on page 267 of this issue.

Retrospect. The cards have been flipped thick and fast at building in the New Deal. In rapid succession there came the PWA, attended by the best hopes of men who knew the building industry needed a "shot" sufficient to carry it past a crisis, to take over the RFC's public works program and greatly to expand it. There came promises that building, second only to vociferous agriculture in our total economy, should be given its full share in the drive to revive this nation's total welfare. There came orders that the second largest industry should be brought under the NRA. There came evidence out of Washington that the new Administration had made a fairly intelligent diagnosis of a sick industry's ills. A congested real estate market bore down unmercifully on building. There was no new money for building because everyone was in debt, and debts secured by property had to be liquidated in such a way that real estate suffered. To relieve this situation, the RFC fed money to commercial enterprises, and to home owners through the H.O.L.C.

But recovery of building could not wait for total recovery. Total recovery actually depended to great degree upon stimulation for the great building trades; and that the PWA promised to supply.

Though not wholly at fault, the PWA has not kept its heralded promise to the building industry. Building men knew the law said \$3,300,000,000 was to be spent on useful public works. They believed a fair proportion of this would go for buildings. They failed to make sure building got its due by failing to demand that a definite part of this large sum be earmarked for *building*. \$3,300,000,000 sounded big, and it was, until allotments for other relief agencies cut the heart out of it. Then came highways, bridges, dams — lined up in advance and ready to go. Slow to come were the non-Federal type building projects in which the industry's hopes were centered. Slowly but surely these came in — only to find the funds exhausted.

Outlook. Building is on a better basis. But the New Deal's first building year leaves much more untouched than started, much more begun than finished. In the air are credible rumors of pending public works legislation, and of additional appropriations ranging from a few million to six billion dollars. The attitude of the Administration has not been disclosed. Surely it must recognize that its 1933 shot fell short. The difficulty has been in underestimating the size of the shot that this completely demoralized industry needed — and still needs. To building men it is patent that much more Government money will have to come forth. Unlike last year, the question is not where to spend it. For 7,000 non-Federal projects alone wait to be acted upon, and the now well-organized PWA needs only cash to turn these blueprints into bricks and mortar and jobs for men.



Pirie MacDonald

DEBT

AS THE FOUNDATION

FOR HOUSES

BY FREDERICK L. ACKERMAN

*Technical Adviser
to The Housing Authority of New York*

DURING the past few years, news items dealing with what is spoken of as a "shortage" of houses have moved from the obscure spaces of newspapers to "Special Feature" sections and occasional front page displays. The question is now of more than passing importance; and more is involved than once was the case.

It looks as if "recovery," whatever that term means, will have to wait upon the production of habitation; at least it is generally admitted that recovery will not proceed very far with this element lagging far in the rear.

However that may be, we are not concerned with that question here: this has to do with but two points involved in current discussions. These are selected since they are of underlying importance and altogether neglected. The first deals with the procedures of "estimating" shortage and the significance of certain terms commonly used in such work. The second has to do with the function of the home owner's equity in our economy.

An article on housing in a recent issue of *The New Republic* may be used to illustrate the first point: it constitutes the typical approach by those interested in credit expansion in respect to housing. The article opens with the statement: "The present situation in housing can be reduced to a few simple elements. The first of these is that beneath the vacancies and the apparent surplus of urban dwell-

ings there is a huge shortage — probably greater already than that which followed the War.

"While housing statistics are wretchedly incomplete — although the census concerns itself with the number of radio sets used — the Department of Labor publishes statistics for 257 representative cities which give a fair indication of the general drift. Between 1921 and 1929 the average number of new dwelling-units built was 388,000 per year. This was preceded by a low of about 100,000 in 1920 and again went down to 125,000 in 1930: 98,000 in 1931 and 27,000 in 1932.

"Since the average rate of 388,000 probably represents something near the need for new dwellings and replacements with the present birth rate and the present rate of obsolescence, we are now *914,000 dwellings in arrears merely in the 257 cities represented*. In addition, the sag in domestic building operations began in spots in 1926, three years before the depression was registered in Wall Street, and it was marked in every domain (except apartment building in New York City) after 1928. The arrears for the country as a whole are obviously much greater, although they are outside the possibility of even the roughest sort of statistical presentation.

"When I refer to a shortage I mean a physical shortage on the basis of the actual population and the actual accommodation necessary to house them

in health and decency. I do not mean a market shortage; for as long as the depression holds there will probably be a surplus of dwellings on the market, as the result of the drastic contraction of space per family. The physical shortage was occasioned by the recent lack of building for every class, and by the chronic lack of decent buildings for the lower income groups."

The reader should be warned before going further. I am not discussing the question as to whether there are too few or too many houses, according to arbitrary established criteria. The inadequacy of houses occupied by a large percentage of our population is notorious; I am not discussing that: *I am discussing the use of facts.* We count the vacancies in habitations and note that they are increasing. And then we make calculations upon sheets of paper and declare that there is a "physical shortage" of houses.

THIS procedure suggests that we must have passed through the Looking Glass with Alice and there, joining the Red Queen, had taken a walk about town. We had little more than begun our stroll through the streets when Alice exclaimed "Oh! what a lot of empty houses: where do you suppose the people have gone?" To which the Red Queen replied, "They haven't gone anywhere: there is no place to go; there is a shortage of houses." Alice walked on thoughtfully for several blocks when she said gleefully: "Oh! what a nice place to live; the people have more houses than they need. One could —." But the Red Queen interrupted her right at the beginning of a sentence — "It is not a nice place; there aren't enough houses to go 'round."

This was very puzzling to Alice who, after thinking for a moment, began to ask questions and to argue with the Red Queen, saying, "But if every seventh house is empty, if there aren't enough houses to go 'round —" But the Red Queen again interrupted by very haughtily saying, "You do not understand the economics of this country — when we have too many houses, that proves that we have too few." Alice sat down on a bench along the sidewalk right in the boiling sun and began to fan herself with her handkerchief.

But when in the cool of the day we returned from Looking-Glass Land we kept thinking and thinking about what the Red Queen had said. To describe a condition in which there is a large percentage of vacancies in nearly all categories of dwellings as a "physical shortage" does not make sense: but a "market surplus" is comprehensible; it has a very definite meaning in our price system economy. It means that people have insufficient income to permit them to make use of our industrial capacity. Alice said that she could understand that — but she still continued to puzzle over what the Red Queen had said. The next morning she said that she hadn't slept a wink.

So let us return to the quoted section and consider how we use the facts. What ground have we for using 1921–1929 quantities of production as a base of reference? Why was it suggested that that period constitutes a condition of "normality"? We know very well that events take place in time and that they stand in causal relationship. To separate events within the period of 1921–1929 and 1929–1932, and to treat them independently, is an arbitrary action which completely ignores reality and the chain of causal sequence which link events in time.

The earlier period was one of unprecedented debt expansion and of rapidly diminishing equities as expressed in terms of "valuation"; and total production was growing at a decrement. Home ownership involved, ordinarily, going into debt to the extent of 75 to 85 per cent of an arbitrary "valuation" which, as it then appeared to some, was merely an utterly fantastic concept. Multi-family houses were financed with no other foundation than the debt incurred in the course of their erection. Indeed, the dollar magnitude of the debt sometimes exceeded by a wide margin the total dollar appraisal of land and building. It was during the period that the erection of habitations involved the creation of debt claims which were nearly equal to the magnitude of their fantastic appraisals.

But another equally important procedure of debt creation marked the period. Due to the expansion of debt in other fields, the incomes of owner-occupants and tenants were in the nature of fiat currency. Incomes were largely derived from debt expansion. So, when we handle facts as in the four paragraphs quoted, we assume as a base of reference, a period during which the cost of producing houses the same as the cost of living in them was paid by the creation of debt claims in respect to future production.

It should be obvious now, without resort to a rigorous demonstration, that such procedures cannot be continued through time. The year 1929 merely marked a point in time when it was no longer possible to continue the process. When the debt structure collapsed, the social effect was much the same as would have been the case had the physical foundations of structures crumbled. It swept away the incomes which had supported the debt upon which the physical structures had been built. Without people with income sufficient to cover operating costs, fixed charges and amortization of the debts upon habitations, habitations became vacant and were of no more use to those whose incomes had vanished than had the houses been built upon the moon.

It is our failure to link the events of the entire period 1921–1932 in a chain of causal sequence that leads to the curious use of words in the third quoted paragraph. According to the first sentence of that paragraph, we may declare a "physical shortage" when we find that production has been growing with

a decrement. That is all that we seemingly need to know. Coincident with our finding a "physical shortage" the facts as to current vacancy require that we declare a "market surplus."

Under our economic system, use or occupancy depends upon the relation between individual incomes and the cost of occupancy or rentals charged. *Our industrial capacity has no direct bearing in the case, nor has the quantity of houses available. The "market" settles the question as to whether there are too few or too many houses; it is the final arbiter and there is no appeal from its decisions.*

Hence one may question any proposal that looks toward a "permanent" solution of this vexing problem so long as production of habitations depends upon the exigencies of debt creation and a favorable turn of the market. This applies with equal force to "solutions" offered under the auspices of a "profound knowledge of the problem," the same as "solutions" offered by those who profess no such knowledge but know what they want and how to get it. So we may turn to the efforts of the latter group and consider what part they and the home owner's equity play in their proposed solution of the problem.

During recent months, Washington has been host to a small army seeking to tap the "reservoir" of Federal credit and direct its flow to the repair, renovation and the building of homes. All sorts of schemes have been proposed, but they differ little except in respect to detail and magnitude of the plan.

All of these proposals rest upon a broad, generalized assumption that Recovery depends upon the creation of a still larger magnitude of debt. And support is sought through resort to variations of the argument that patriotism and national integrity flourish in a direct relation to the percentage of houses owned by their occupants.

It is not the intention here to question the alleged connection between home ownership and the state of the nation. The inquiry moves in another direction. What animates this insistent demand for this particular use of credit; and what is the function in our economy of the home owner's equity?

Space does not permit a description of the many proposals, but we may note how they fall into groups according to the special interests of their sponsors. To the Federal credit agencies and the Public Works Administration go those concerned in the ownership of vacant land, in the sale of land, and in the building and sale of homes as a speculation. What these groups want is access to Federal credit; and many seek conditions of greater freedom surrounding its use than obtained in the orgy of speculative building that marked the last decade.

It is assumed that with a promise of an 85 per cent loan, the 15 per cent equity can be induced to come out of hiding.

Another group approaches the Government through Congress and the doors of its many administrations. It seeks the creation of still another Federal loaning agency, its function being to bridge the gap between first mortgages and the small equity that, under favorable circumstances, may be provided by the home owner. The Federal Government, through this agency, would provide the funds by means of a two-part mortgage under a scheme of insuring against loss that portion which would replace the second mortgage, thus tending to stabilize the entire debt structure. There are numerous variations of this idea. Backing this group of proposals are many individuals and associations interested in the use of building materials and devices now in need of a market.

A wide range of schemes propose Federal loans in respect to minor repairs, renewals and renovation of homes. Some of these suggest that loans be limited in terms of per cent of total value of property; others propose a definite limit of \$1,000, \$1,500, or \$2,000, as the case may be, the amount depending upon the optimism of the sponsors. These loans would be secured by notes. And it is even proposed that these notes be made eligible to rediscount by the Federal Reserve Banks.

When all of these proposals to tap the source of credit are examined as a whole, the absence of the would-be home owner among those clamoring for credit is conspicuous. His absence is explained by the sponsors on the ground that would-be home owners are not organized and that as a consequence they are voiceless.

Now under our economy the current differential distribution of income restricts the use of new habitations to something less than one-third of our population — and acquisition of a new home to but a fraction of that number. It would therefore seem that a large program of home building, even though animated by the prospects of large loans to small home owners, would fall upon ground that had already been pretty well exhausted by a building boom, before the current depression set in, and which has since then been subject to erosion by depletion and deflation of savings. Something might result, no doubt. But under present and prospective conditions surrounding the distribution of income, it is flying against a strong head wind of facts and probabilities to bank upon other than meagre results from such an adventure in credit expansion for a long time to come.

The provisions of habitations, the same as other things, is preceded under our economy by an advance of credit — that is to say, provision is preceded by the creation of debt. But under this same economy, prices oscillate in time through a very wide range, affecting value in a like degree. These oscillations set in train financial disturbances and

dislocations which run throughout the whole social and industrial system.

Out of these two characteristics of our economy have grown the procedures of finance which seek to render absentee ownership immune from the effects of such disturbances. Thus, in the field of home ownership, safeguards have been thrown around the lender, which safeguards serve to increase the risks of the borrower who lives under the belief that his name in the deed makes him an owner in fact. So long as he is a mortgagor with small equity, his ownership is conditional and his position that of a transient paying rent, but carrying the responsibilities of ownership in fact, while assuming the risks of a trader with small margin.

Qualification should be made to the above in that the second mortgage cannot be rated as other than a bet. The odds are defined by the magnitude of the spread between the face of the mortgage and the funds actually advanced to the borrower. The higher the borrower rates as a risk, the more he is charged for what has come to be dignified by the term Junior Financing. No way has as yet been found of betting without involving the probability of losses.

The investment made by this so-called owner is the last in line in respect to security. Upon the holder of the equity falls the full force of the train of dislocations involved in the fluctuations of prices. It is true that a 10 or 15 per cent payment on a home is not looked upon as taking chances, as in the case of the 10 or 15 per cent margin put up with the broker. Changes of value of habitations do not move with the same velocity in time as is the case with equities upon the exchanges. But in the long run, they move over approximately the same range, and in due course, the effect is very much the same. A wide change in prices will wipe out a small equity the same as a small margin.

Home ownership as sponsored by the promoters of these credit proposals would remain a highly speculative venture in investment of savings on the part of the holder of the equity. His ownership is suspended upon the very slender thread of his employment and his wages; and his savings repre-

sented by his equity would remain subject to the prior claims of absentee ownership represented by the first and second mortgages.

It has come about that the situation in the field of home ownership has been reversed since the turn of the century. At one time a small loan secured by mortgage was an aid, in most instances, toward the acquisition of a home or ownership in fact. But the introduction of Junior Financing under the driving force of salesmanship and ballyhoo over the relation between home ownership and national integrity have served to transform the ownership of a home into a speculation.

The holder of the equity is called upon to bear the burden of the speculative risks which arise out of an uncontrolled credit economy that is so set up that it produces goods at a higher rate than it produces income with which to purchase them. Home ownership based upon small equity investment and large debt claims foots up to a scheme of subordinating the savings of the home owner to the interests of absentee ownership. Banks, guaranteed mortgage and insurance companies and estates cannot carry the risks attendant upon full ownership within a field of fluctuating values and prices and at the same time serve this function. To be rated as "safe" under our economy, investment must be limited to a small portion of actual cost; and it must be surrounded with such conditions as to constitute a claim upon the whole, should the owner fail to comply with the terms of the bond. The certainty that the home owner may lose his equity is what provides the factor of safety to absentee ownership in this field.

* * *

A reader who desires to look more deeply into the question as to the relation between the growth of debt and the growth of production will gain some insight into the need of maintaining these two growths in strict alignment by referring to "*Debt and Production — The Operating Characteristics of Our Industrial Economy*," by Bassett Jones, John Day Co. We certainly cannot continue the process of "putting our goods in hock," as he puts it, faster than we produce them.

* * *

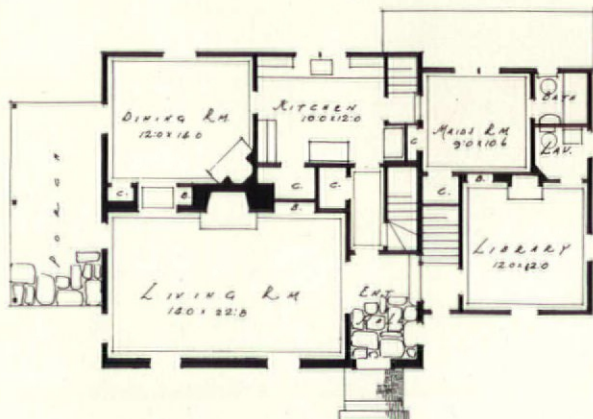
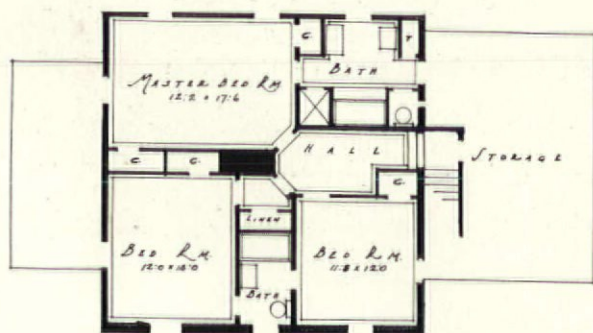


Designed to fit a sloping lot, this Georgian house in Larchmont, N. Y., is snug and dignified. C. C. Merritt, architect

SIX SMALL HOUSES AND THEIR COSTS

THE small house is the knot in the present tangle of domestic architecture and its financing. Believing that architectural interest today is centered largely on the problem of planning for use and providing attractive design on a strictly limited budget, THE ARCHITECTURAL FORUM presents a short series of houses submitted in the recent Better Homes in America Competition, along with figures based on the cost per cubic foot adjusted to that of a single locality, at the price levels for 1929, 1931 and 1933. As costs vary in different regions, cubage is stated in each case.

House at Larchmont, N. Y.	C. C. Merritt, Architect	Page 259
House at Summit, N. J.	W. Roderick Wheeler, Architect	Page 261
House at Greenwich, Conn.	C. C. Merritt, Architect	Page 263
House in eastern Massachusetts	Royal Barry Wills, Architect	Page 264
House in Cambridge, Mass.	Carroll Tiffany, Architect	Page 265
House in Massapequa, L. I.	Randolph Evans, Architect	Page 266



Enlivened with natural pine-battened walls, the living room at the left continues the feeling of the exterior (shown on the previous page). More informal is the recreation or "rumpus" room of the same house, at the right, as the mantel would indicate. This basement room has a grade entrance, with windows above the ground. For its cubage there is a large amount of accommodation and convenience, with considerable storage space

COST AND CUBAGE

Cubage: 32,185

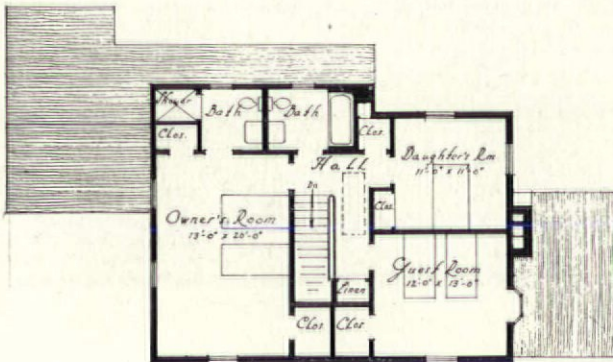
Cost, 1929.....	\$18,023
Cost, 1931.....	\$15,062
Cost, 1933.....	\$10,814



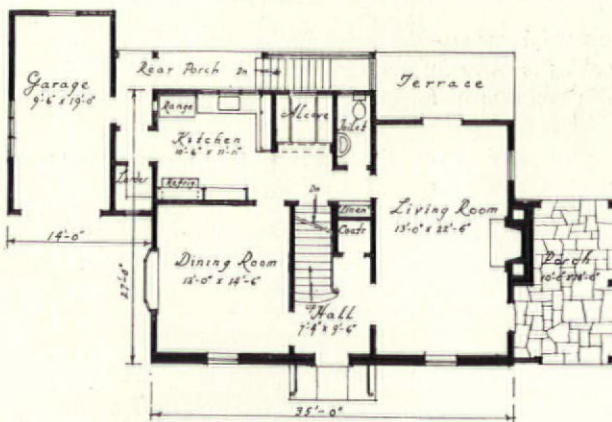
A first-story partially of stone veneer on a wood frame produces a pleasing contrast with the white shingles above in this modernized version of Colonial. The entrance and sundial above are modern adaptations which carry out the spirit of the style. Despite the fact that the dormers allow almost full headroom under the eaves, the roof-line still has a pleasing low effect. Plans and another view follow on the next page

HOUSE AT SUMMIT, N. J.

W. RODERICK WHEELER, ARCHITECT



Unusual compactness of plan marks this house, with its first floor lavatory and adequate coat closet. Because the ground floor is practically at grade, the building becomes part of the landscape. The garage conveniently adjoins the kitchen, and the two baths over the kitchen effect an economy in plumbing



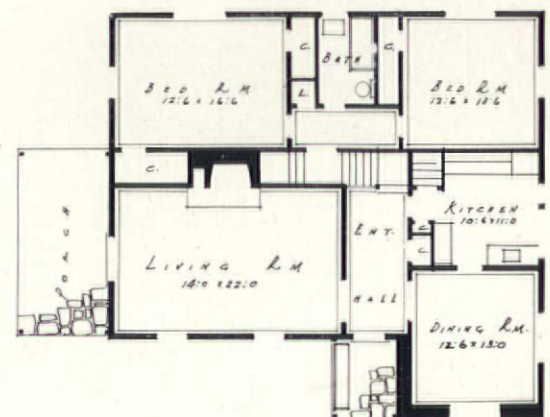
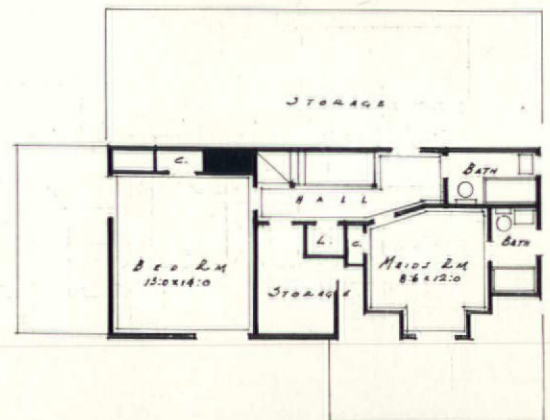
COST AND CUBAGE

Cubage: 21,030

Cost, 1929	\$11,786
Cost, 1931	\$ 9,842
Cost, 1933	\$ 7,066



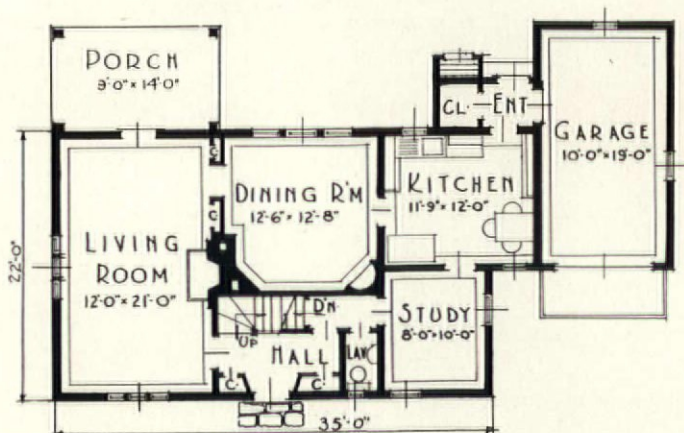
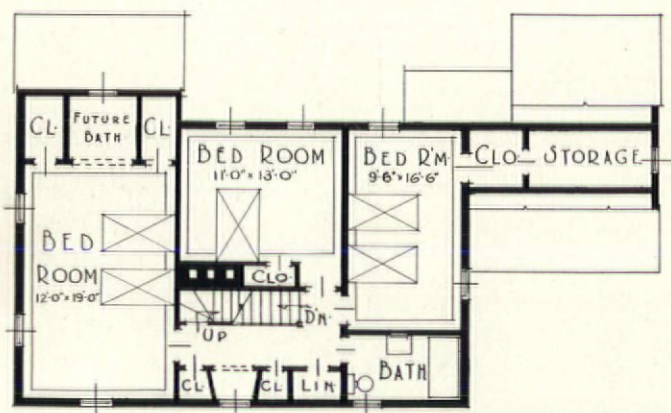
The plan takes an ingenious advantage of the sloping site by having the main bedroom floor half a flight up from the living room. The result is ample storage space and a sweeping roof-line. A garage was easily included as part of the basement. House at Greenwich, Conn. C. C. Merrill, architect



COST AND CUBAGE

Cubage: 28,500

Cost, 1929.....	\$13,690
Cost, 1931.....	\$11,400
Cost, 1933.....	\$ 8,065



More in keeping with its eastern Massachusetts setting than most present-day houses is this Early American house by Royal Barry Wills, architect. Rough sawn, the boards are stained a warm dark brown, a contrast to the nail-studded front door of planks, painted red. A future second bathroom has been allowed for on the second floor

COST AND CUBAGE

Cubage: 27,000

Cost, 1929	\$14,310
Cost, 1931	\$11,880
Cost, 1933	\$ 8,910

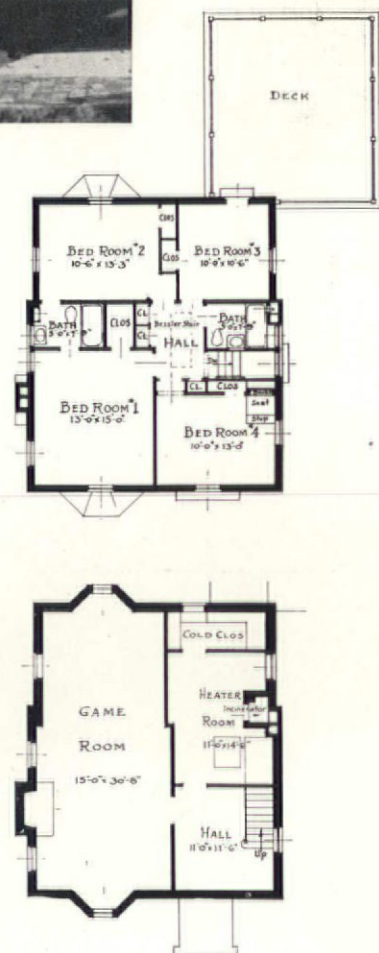
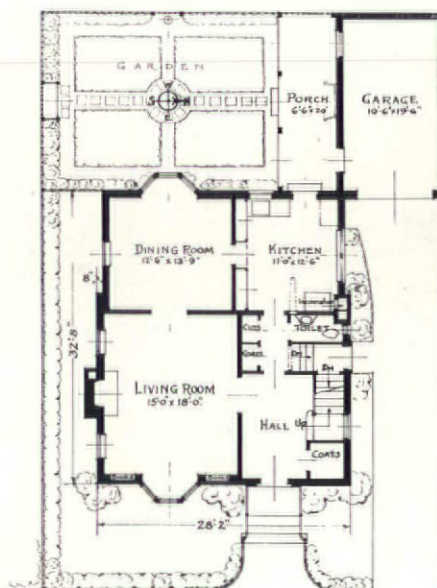


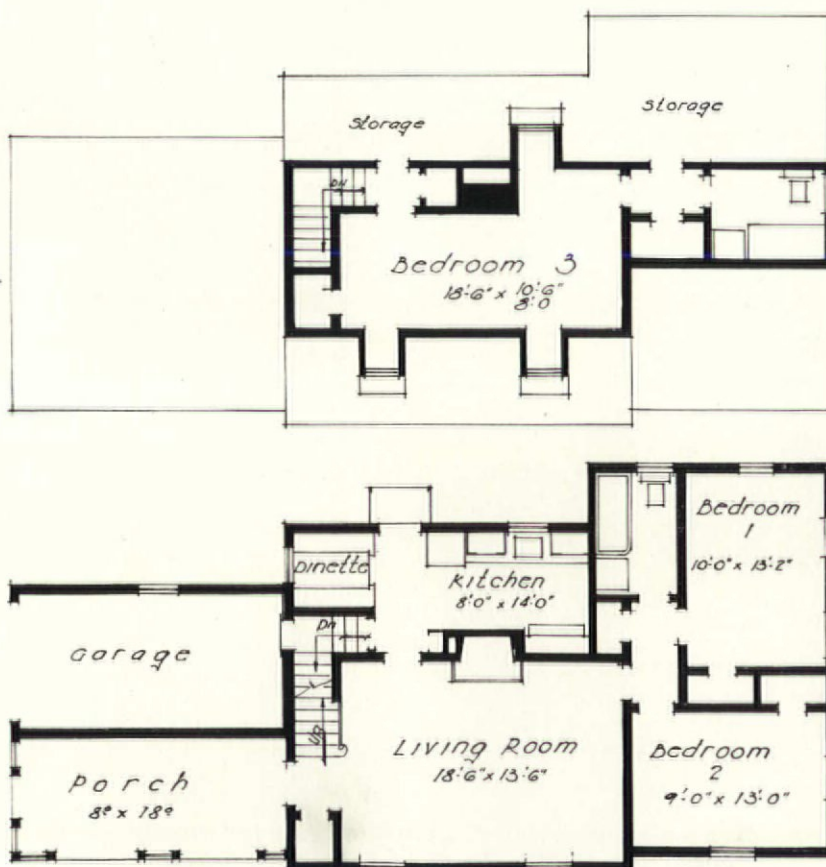
For a narrow lot in a congested district of Cambridge, Mass., Carroll Tiffany, architect, designed this Georgian Colonial house of brick veneer on a wood frame. The brickwork is given life by cream-colored shutters, green doors and a black roof

COST AND CUBAGE

Cubage: 30,351

Cost, 1929	\$16,086
Cost, 1931	\$13,415
Cost, 1933	\$ 9,651





By far the most modest of the six in size, Randolph Evans' design in Massapequa, L. I., achieves livability in plan within and much outward simplicity. The white clapboard walls are set off admirably by tasteful planting and the green of the shutters and shingle roof

COST AND CUBAGE

Cubage: 18,232

Cost, 1929.....	\$8,569
Cost, 1931.....	\$7,183
Cost, 1933.....	\$5,141

THE FEDERAL FOUNTAIN OF FUNDS

BY WASHINGTON DODGE, II

THERE is little doubt that the future fountainhead of money for residential construction will be the U. S. Treasury. That does not mean that the line will form at the right for Mr. John Citizen, anxious to plunge himself into debt so that he may indulge himself in the pleasure of possession (if a 15 per cent equity can be called possession). Nor does it mean that contractors and subdividers will be given the wherewithal to start a little speculative building just because they feel there is a home shortage (without concerning themselves with the sorry fact that there is also a mighty income shortage). The Governmental building money will translate itself into work for the building industry through existing channels, although the New Deal engineers will continue to extend these channels and to deepen them through the application of new financial reservoirs.

In Washington it is estimated that the urban home debt of the land is thus distributed:

Building and loan associations	\$6,000,000,000
Mutual savings banks	3,000,000,000
Insurance companies	2,000,000,000
Individual investors	4,000,000,000
Banks and mortgage companies	5,000,000,000

The general run of thought in Washington is that ideally a great part of this debt should be in the first three classifications; that practically it will have to be because most banks are withdrawing from all but short-term commercial loans, many mortgage companies are hopelessly lost in a slough of bad paper, and most individual investors are wondering why they called themselves investors.

The outline for machinery to put home lending on a sound but flexible basis was conceived of by Herbert C. Hoover, the first president to be deeply concerned with the American Home as a social institution of prime importance to the well-being of the State. To the student of real estate economics there was no more valuable document than the voluminous report of "The President's Conference on Home Building and Home Ownership," a report whose value was tragically lowered when conditions began to change so rapidly that many of its unique figures became obsolete before they were digested by the people for whom they were meant. And it is significant that the present plans for Government participation in home lending involve the Hoover-created Home Loan Bank System.

In November, 1931, after three months of discussions with experts, President Hoover announced the Federal Home Loan Banks and the move was hailed throughout the land as a mighty blow against Depression. Not until seven months later was the badgered executive able to negotiate the bill through a hostile and sniping Congress. And while this institution is destined to be the most important single factor in the residential mortgage money field, its creator did not remain in the presidency long enough to see it even on its feet.

Ludicrous delays marked the attempts of the Home Loan Bank Board to carry out the provisions of the Act. Board Chairman was Franklin William Fort, lame duck representative from New Jersey, politician and banker. By December 16 the System had thawed the mortgage situation by only the paltry sum of \$165,000. Congress howled to have the Act stricken from the statutes. But it remained and while succeeding months brought a swelling volume of loans, March 4 found the mortgage situation as bad as ever and the home owners of the land still parading from their homes as fast as foreclosures could be filed.

Judging from what was done, President Roosevelt at first seemed to feel the Home Loan Bank System was but a useless structure which might present the danger of being turned into a large political patronage rookery. He appointed William Francis Stevenson, a kindly, easy-going gentleman of 72, known as "Steamboat Bill," to the chairmanship and the Home Loan System remained in financial obscurity.

By early summer the home situation was so acute that President Roosevelt acted with direct swiftness. He called upon Congress to create the Home Owners Loan Corp., an emergency corporation with a three-year life, formed to relieve distressed home owners. While the H.O.L.C. is managed by the Home Loan Bank Board, the connection stops there.

As a sop to Western senators, President Hoover put in the Home Loan Bank Act a clause that "Any home owner who comes within the limits of this Act and who is unable to obtain mortgage money from any other source may obtain same from any bank organized under this Act." This clause turned out to be a joker. A distressed home owner had usually already mortgaged his home up to the limits pro-

vided for in the Act and there was no machinery provided by which he could get the old mortgage rewritten by the Home Loan Bank. And if the home were owned free and clear, he could not prove that he was unable to get money elsewhere—for no loan was made under this clause. The Home Loan Bank Act provided for relief from the top down.

The H.O.L.C. functions from the bottom up. As everybody knows, its chief function is to exchange its bonds for mortgages on distressed homes and then to re-write these mortgages on kindlier terms: 5 per cent interest; loan to be amortized in 15 years; three-year moratorium on amortization and principal in dire cases. So long as the total loan did not exceed 80 per cent, the H.O.L.C. was able to back up its assistance with cash advances for taxes and repairs. And on unencumbered property it was authorized to lend up to 50 per cent for taxes and repairs. Important to bear in mind however is the fact that the H.O.L.C. will deal only with home owners who can prove they are in distress.

Although the H.O.L.C. started off more auspiciously than the Home Loan Bank System, it was far from a blazing comet in banking skies. The money markets did not feel that its bonds were worth more than some 80 cents on the dollar despite the good collateral value which the Government had arranged for them, and the fact that a small market for them was created by the theory that home owners could use them to pay back indebtedness to the H.O.L.C. The money markets felt that the Government's guaranty on interest alone was not of great value and that the fundamental value of the paper was in doubt because of the fact that even if its appraisals were conservative (about which there were and are arguments), the mortgages it accepted were not prime paper since the home owner was in distress and his credit admittedly gone.

The low price of the bonds hindered progress. Institutions with the interest of policy-holders or depositors or shareholders at heart realized the gravity of the home situation. But they did not see why they should exchange a \$10,000 face-value mortgage for \$10,000 worth of H.O.L.C. bonds, if those H.O.L.C. bonds had a market value of but \$8,000. And argue as one may, the only worth of a security is its open market price. Facing even greater than 20 per cent write-downs in many cases, the institutions as a whole issued statements that they would cooperate with the H.O.L.C. when it was in the interests of all parties, and did little about it.

His emergency corporation in an emergency, the President acted quickly. Mr. Stevenson was dropped from the Chairmanship and the post filled by John H. Fahey, a hard-headed Boston businessman. And then the President said that the Government would guaranty the principal as well as interest on the bonds. Because with their principal guaranteed the bonds have the same rating as other

government issues, they started to rise at once on the announcement. Chairman Fahey set to work, added capable, trained men to the staff. And the volume of lending, as the chart on page 269 shows, rose smartly.

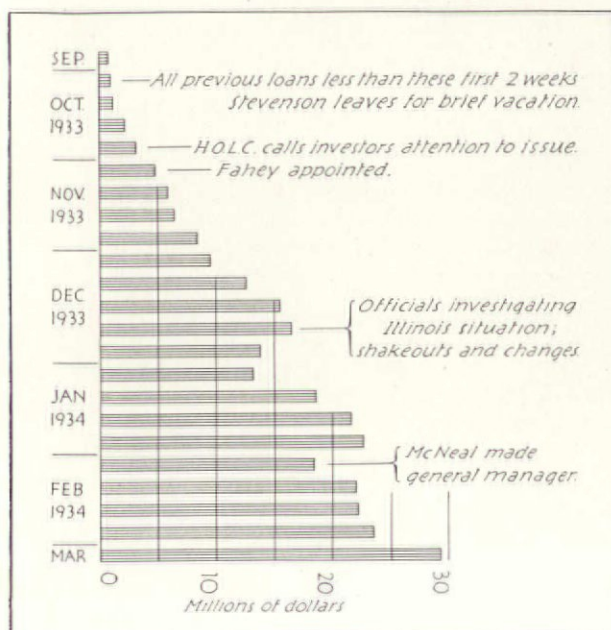
The H.O.L.C. is a distress measure. In the accompanying chart is a box showing where its funds have gone thus far. The lending powers of this organization may be broadened. A very likely happening is the granting of permission for bigger repair and modernization loans to distressed homes. Far less likely is any authority to lend on non-distressed homes. And unlikely indeed are any loans for new construction.

WHILE the H.O.L.C. has been spectacular, far more important is the Home Loan Bank System, with which the public has no direct contact. The U. S. A. subscribed \$124,700,000 worth of stock to the Loan Bank System, and subsequent investments of members (who can buy stock up to 1 per cent of the total of their unpaid mortgages) have brought the aggregate capitalization to \$145,445,000. In the System now are some 2,100 members with over \$3,000,000,000 in resources.

The Cincinnati Home Loan Bank has already paid a dividend and members of other banks have reason to expect that their investment in the System's stock will yield a fair return. In addition, members have the great advantage of being able to take good home mortgages, borrowing up to 60 per cent on them and using those borrowed funds at a higher rate of interest if opportunity presents. At present most of the System membership consists of building and loan societies, but a great milestone was passed on January 10 when the Provident Institute for Savings was admitted. This \$112,000,000 Boston institution boasts among its directors such men as W. Cameron Forbes, Charles F. Abbott, Philip Cabot, and Leverett Saltonstall and it is felt that other large savings banks may soon start entering the System. Thus, on this front, Government aid consists of supplying existing institutions with a vast reservoir of credit for new construction loans when needed in good times and for cash when needed in bad times.

When last month the President, asking to have the H.O.L.C.'s bonds guaranteed, also asked that it should be given authority to buy bonds of the Federal Home Loan Banks, he was looking ahead rather than meeting an immediate demand. The Cincinnati Bank, its funds exhausted, has borrowed from other banks. It may wish to convert these loans to a bond issue which it can now do by going to the H.O.L.C. whereas previously the chances of floating a Home Loan issue on the open market were slim. Other banks in the system however still seem to have a plethora of funds.

Another Governmental channel is the Federal



The volume of H.O.L.C. lending, by weeks

Savings and Loan Association. The Treasury, at the word of the Federal Home Loan Bank Board, has \$100,000,000 to use in buying stock in these associations. The Federals are to be organized in communities where existing facilities cannot serve the community. For every dollar of paid-in capital, the Government buys a dollar's worth of preferred stock. In addition, the Federals are all members of the Home Loan System. Thus in a small community an architect, a banker, a lumberman or any combination of men who feel there is no building money can organize a Federal, chipping in \$25,000 as soon as the Home Loan Board determines a real need exists. Then the U. S. Treasury buys \$25,000 worth of capital stock. The Federal buys \$1,500 worth of Home Loan Bank stock and therefore has an \$18,000 line of credit, or a total lending power of \$66,500. Under Chairman Fahey these Federals are being aggressively sponsored. Their lending power and financial set-up is strictly confined by rules prescribed by the Government.* Members of the Home Loan System can convert to Federals if they want to, thus being able to sell preferred stock to the Government. Chief reasons why there have been few conversions is that associations anxious to sell stock to the Government are usually badly off financially and before they can convert they have to revalue their assets

* Obtainable by addressing the Federal Home Loan Bank Board, Washington, D. C.

WHERE THE FUNDS HAVE GONE

Totals of

Home Owners Loan Corporation

Figures:

Final Corporation appraisal completed on 281,524 applications.

125,736 applications forwarded to closing officers.

40 per cent Cash Loans... \$1,307,912

50 per cent Cash Loans... 1,106,981

Bond Loans..... 292,892,378

Total Loans Closed..... \$295,307,271

as of March 2, 1934

at true worth, an act many do not like to face.

These are the three chief ways in which the Government is aiding residential construction. The H.O.L.C. is attempting to forestall foreclosures (at which it is being aided by moratoria) and to keep homes livable. This prevents more homes from being thrown on the market and therefore indirectly helps the construction business, as does the fact that institutions accepting H.O.L.C. bonds may sell them or borrow on them to make construction loans if they wish. The Home Loan Bank System is attempting to inject lending power into worthy established institutions and to create lending institutions in communities now without them. The program is finally in the hands of excellent men. If it works, as it well should, next year there will be few demands for direct Government loans because worthy borrowers will be well served.

BIBLIOGRAPHY. The H.O.L.C. Described; Its organization compared to that of the Home Loan Bank Board; Chairman Stevenson a politician. *THE ARCHITECTURAL FORUM*, July, 1933, p. 74.

The Success of the H.O.L.C. to depend on the attitude of mortgage holders; that attitude not wholly favorable. *THE ARCHITECTURAL FORUM*, September, 1933, p. 232.

Low Prices of H.O.L.C. bonds endanger the program; how they may be pegged; Chairman Stevenson gets some financial helpers. *THE ARCHITECTURAL FORUM*, October, 1933, p. 335.

Chairman Stevenson resigns; John H. Fahey supplants him; Ten home loan banks said to be operating at a profit; Federal Savings and Loan Associations, their lending power, organization and possible great future importance. *THE ARCHITECTURAL FORUM*, December, 1933, p. 511.

H.O.L.C. accelerates lending. A new general manager is appointed. *THE ARCHITECTURAL FORUM*, February, 1934, p. 167.

MANUFACTURERS AID HOME FINANCING

UNFORTUNATELY there can be no statement of how much construction was made possible last year because of the lending policies of manufacturers who were willing to advance money to move their wares. For obvious competitive reasons, as well as dealer relationship reasons, these figures are not a matter of record and estimates are impossible. There have been quite a few efforts along these lines, in addition to arrangements by which manufacturers turn installment contracts over to outside finance companies. And present indications are that in the future finance companies will become increasingly interested in the possibilities offered through one- and two-year loans to finance replacements, repairs and modernization.

Two of the more interesting plans by which manufacturers with great cash resources tried to aid their volume of business are those of American Radiator and Standard Sanitary Corp. and Johns-Manville.

First alphabetically, and first by far chronologically, is American Radiator's plan. It consists of loans for repair and modernization involving use of the company's equipment, although in certain cases exceptions will be made for a large contractor who usually utilizes American Radiator products but in a particular instance must use a competitor's goods, or for a loyal jobber who is in the same predicament. Likewise, the company will in special instances finance a gas range, an electric furnace, a mechanical stoker, pump, a refrigerator and other special products when their sale is made by a large user of the company's own products—the amount of the loan a percentage of the cost of the material and installation (not more than 90 per cent). Loans will not be made for new construction, the company feeling that such funds must come through the established mortgage channels.

American Radiator handles this type of financing through the Heating and Plumbing Finance Corp., a wholly owned subsidiary which does business under the banking laws of the State of New York and was organized in 1923. Its charges are around 7 to 8 per cent and based on the costs of operation rather than a desire to conduct this part of the business for a profit. The credit of a purchaser is thoroughly investigated as is the reputation and financial standing of the contractor who proposes to do the job. The terms are up to two years, provided monthly payments will be not less than \$10. A down payment of at least 10 per cent is required.

The purchaser must have a good equity in the property, the amount required running from 30 to 50 per cent depending upon other factors in the risk. The notes accepted are *with recourse* to the

contractor. This means that if the Finance Corp. fails to collect, and it assumes all the expenses of collection itself, it may collect the amount due from the contractor. Likewise, the contractor must buy back the note if it is shown that his workmanship has been faulty. Notable in the Finance Corp.'s experience is the fact that three or four out of five people who ask for credit finally decide to pay cash.

American Radiator and Standard Sanitary is well equipped to finance its Finance Corp. At the end of 1932, its cash in the banks came to \$19,844,000 while its current liabilities were only \$6,674,000. In addition it had marketable securities worth \$946,000.

The Johns-Manville plan was heralded widely last year through a radio and newspaper campaign under the slogan "A Million Dollars To Lend." Under this plan, the company will finance any repair or modernization job where at least 25 per cent of the materials used are Johns-Manville products and no competitive products are used in the balance. It costs the purchaser 1 per cent a month on the total sum borrowed (not on the unpaid balance). It is a *non-recourse* plan. When the company accepts the note of the purchaser from the contractor or dealer, it assumes all the risks of non-payment.

Each contractor however must sign a guaranty that his work will be satisfactory. In case of complaints he must make adjustments satisfactory to the company or else repurchase the note. The company therefore makes a thorough investigation of the purchaser's credit standing and the contractor's financial standing and his ability. On balances up to \$300, the company allows a 12-month credit, on balances between \$300 and \$500, 18 months, and over \$500, 24 months. The loans are only for repairs and modernization. Credit will be extended to buildings other than homes when their credit is satisfactory.

Johns-Manville is also in a strong financial position. Its last report showed its cash at \$3,452,000, its trade accounts payable at \$622,000. Its investments in marketable securities came to \$1,212,000 and it had no long term liabilities.

Both plans have been tied in with sales efforts to help the dealers and contractors. Thus, in addition to moving stocks, they must be considered also as a promotion of good will. If adequate financing for new construction remains so difficult to obtain, it is reasonable to expect that strong companies in the construction industry, satisfied with the results of loans for repairs and modernization, may investigate the possibilities of assisting in new construction involving the filling of a definite need and bolstered by a strong equity.

THE SAVINGS BANK SITUATION

IN RELATION TO HOME FINANCE

BY ROBERT LOUIS HOGUET

First Vice-President, Emigrant Industrial Savings Bank

New York

ARCHITECTS are justly entitled to some expression of the viewpoint of lending institutions with regard to the financing of new construction, without which the architect cannot to any large extent live.

I have no warrant to speak for any lending institution, and still less for any group of such institutions, but I have at least an individual point of view based upon some years of close contact with a large mortgage portfolio. Such contact, and an interchange of views with others charged with administrative responsibility for mortgage portfolios, give me at least some idea of what might be called the consensus of opinion of mortgage officers, at least in the eastern part of the country, on this interesting and timely question.

At the outset it is necessary to dispel an illusion. There is a belief in the minds of the multitude, and to some extent in the minds of the more enlightened, that lending institutions have at the present time large sums of money in cash and in banks waiting for investment. Such is, unfortunately, not the truth. It is true that since the end of the year 1933 deposits in banks of all kinds have shown a very gratifying increase. It is equally true that the mortgage portfolios of lending institutions are not nearly so liquid as mortgage officers would like to see them.

In what might be called normal times there is a considerable sum of money in every lending institution waiting for reinvestment because, in such normal times, as properties are being bought and sold, and as buildings are being torn down to make way for larger and better ones, the *principal* of mortgages is being paid off. Refinancing, in other words, is going on. At present, and for the last two or three years, the amount by which the principal of mortgages in any mortgage portfolio has been reduced is relatively negligible. In other words, what lending institutions have available for lending on real estate mortgages is a portion of their current income, plus a portion of such new deposits as have

come in within the last few months, if they choose.

It must also be remembered that the events of the last few years have shocked and troubled trustees of lending institutions, have resulted in a lack of confidence in mortgage investments as a whole, and have led to an increased demand for investments in government bonds and other securities possessing, at least theoretically, a greater degree of liquidity than is possessed by real estate mortgages. In short, there is relatively little money available for the creation of new construction, even if such construction were economically desirable.

Granting, however, the existence of a fund which might, under certain circumstances, be available for the making of new mortgage loans, or, to speak more exactly, for the making of mortgages on new construction, are the lending institutions ready to use such moneys for this purpose? However disappointing it may be to the architectural profession, this question cannot as yet be answered in all fairness in the affirmative. There is no use mincing words in making the statement that, in the opinion of the great majority of those closest to the mortgage portfolios, we are still a long way from a shortage of improved real estate.

Present-day incomes are still woefully insufficient to meet the carrying charges of improvements erected in many cases on the extravagant price scale of the 1920's. It is elementary political economy that the *cost* of production must be absorbed by the *price* at which consumption takes place. If the operation is to leave a profit, it must be more than absorbed. In the last decade, we witnessed a cost in the production of real estate never before equaled. The land speculator, the broker, the mortgagee, the architect, the general contractor, the material men, and finally, the laborer, banded together to load the contemplated project with every conceivable item of cost. That was called, "doing a really good job," and we actually patted ourselves on the back for it!

The conception of trying to build as cheaply as possible was one that did not appeal to any but the very few. We went on the theory that new building, however extravagant, could and would be consumed by a race of supermen whose incomes would be derived from some other sphere. We forgot that *we ourselves* are the only possible consumers for our own work, and that we would have to consume it on the same price level as that on which it was erected if the economic process was to flow on smoothly.

Now, that is precisely what the consumer of the 1930's has been unable or unwilling to do. He simply cannot live up to his former concepts. His present-day income will not enable him to maintain the structures which he erected on the basis of a vanished price scale. We all know the steps in the dismal drama that has taken place. Our ability to pay rent decreased as wages fell, unemployment became more general, and business slackened. Eventually, incomes fell considerably below the point needed to maintain carrying charges and to pay even a moderate return on invested capital. The owner found himself deprived of income on his equity. He, in turn, was obliged to default on the secondary financier. In too many cases not even the primary financier or first mortgagee got any income on its investment — and as the first mortgage in America represents, in the last analysis, very largely the accumulated savings of the nation, the income of the general public was affected and the cycle of depression was complete.

Even the paramount overlord, the municipality which, in the form of taxation, takes the first fruits from every piece of real estate, was affected and in turn was obliged to default on its bonded indebtedness, if it did not, as in too many cases, suffer its employees, its policemen and its school teachers, to go for months without pay, thereby creating new categories of non-income enjoying persons. The result of our general overindulgence in expensive, extravagant and unnecessary construction has been indigestion of the worst sort. The financial institutions are all of them involuntary owners of real estate for which there is as yet no market. A large percentage of every mortgage portfolio is in arrears for taxes or interest, or both. Real estate mortgages are no longer liquid because as yet there is no market for real estate, and no rental demand sufficient to create a fee value. Improved real estate is, in short, not a satisfactory asset because it does not show a return on its cost.

This is not the place for a discussion as to why depressions occur nor as to how they reach a climax and eventually overcome themselves. We have, however, I believe, real reason for thinking that in the present instance the worst is over and general recovery is on the way. Have we reached a point where we should begin again to create that ultimate form of capital goods, namely, improved real estate?

However desirable it might be from the national point of view to get the building trades to work, I do not think the time for this has yet arrived. The financing of new buildings of a competitive character will be opportune when existing building are no longer sufficient to meet the demand. Goods already in existence must be consumed before it is economically advisable to create and put new goods upon the market.

Financial institutions can certainly be relied upon for cooperation in liquidating the existing stock as quickly as possible. They will rent on the basis of a moderate return. They will sell with a long term mortgage on a low rate of interest. But until the public's ability to take up the stock of the existing supply has advanced still further, those responsible for the wise investment of the nation's savings cannot see their way clear to financing new building. A little starvation is generally recognized as the best means of treating an acute attack of indigestion. If our economic system is suffering from an inability to digest a product that is at once too abundant and too rich, is it not self-evident that we are prolonging the malady by loading it down with a still greater burden?

There is, however, some work which the architect, even in the present juncture of affairs, can do, not only to his own profit but in the interest of the advancement of the general welfare. I refer to what is called "rehabilitation," or "modernization." All of our big cities are full of buildings which are obsolete and out of date, either with respect to plan, or with respect to equipment. In a great many cases these buildings are structurally sound and yet they now bring in very little, if any, return. It is often possible, by the expenditure of a relatively small amount of money, to rearrange the layout of these buildings and replace the equipment so as to produce something that is esthetically attractive and economically desirable. I favor the doing of work of this kind even though there is no indication of any return beyond reasonable income and depreciation on the *new* money. If lending institutions generally could be brought to look upon inadequate and obsolete buildings from the point of view of the income they actually bring in, and without reference to the amount of their unproductive mortgages, we could open up a new and fertile field for the work of the architect.

I realize that, from the architect's point of view, work of this kind is not particularly remunerative and involves a relatively very large amount of labor for a relatively very small fee, and that it is, of course, pleasanter for the architect to spend his time planning a new twelve-story apartment house or a new fifty-story business building. It is certainly far better for architectural talent to be employed in simple work of the kind I have outlined than not to be employed at all.

LENDING BY LIFE INSURANCE COMPANIES

BY R. GRAEME SMITH*

IN marshaling my thoughts on present day attitude of life insurance companies toward lending on residences, I keep before me a picture of the aims, interests, and desires of the architects and their allies the builders who are interested primarily in financing for new construction and the modernization and rehabilitation of older residences.

To understand better the current situation visualize in your mind the sudden and even, dramatic shift that took place in 1930 from the easy days of mortgage lending to the intense servicing and salvage work so necessary in protecting our mortgage investment. Life insurance companies, doing a national lending business, were unprepared for it. They had to drop from their minds the more constructive phase of financing and step knee-deep into the turmoil. And now with the resumption of lending in the offing they find the human machinery and the more or less technical mechanics of the system in a state of flux. Perhaps another transition will soon take place, but until they get a breathing spell, an opportunity quietly to look about them, there can be only a limited sending up of trial balloons and a limited experimentation to test the lending attitude, procedure, and policies. It is too soon to know anything.

One must keep in mind that the life insurance companies in the aggregate are far from being the largest or most powerful source of funds for residential lending, and, while accurate figures treating solely with residential mortgages are not available, the consensus of guesses by those well-informed is that they are topped by the building and loan associations and the trust companies. The depression has thinned the ranks of institutional lenders. Most mortgage companies are gone; affiliates are to be divorced from banks of deposit and in many cases liquidated. The big mortgage guaranty companies are largely in the hands of State banking departments for liquidation, and so it is that though the relative ranking and position of life insurance companies among institutional mortgage lenders may not be greatly altered, they may have to take up in dollars a larger share of the residential loans, unless the Government agencies aggressively enter the field. This is very good reason for architects'

interest in the life insurance company lending attitude. Besides that, it is well-known that they do have today some funds available for long-term investment.

Why Lending Ceased. Approaching the subject of resumption of lending, let us first see why it ceased. The housing construction boom after the war occurred simultaneously with a tremendous influx of premium income and sent the life insurance companies pell mell into the residence lending business short of man power, of organization, of experience, and of tried field representation. When the bubble burst an oversupply of housing was apparent. Values fell, borrowers were overburdened, houses were repossessed. During 1931 and 1932 an unfavorable experience record was built up against residential loans. Lending ceased, at least until the life insurance companies could find out whether they faced the prospect of a substantial loss over a period of time.

The cessation of lending on residences during 1931 and 1932 was also based on several secondary and concomitant reasons. Policy loan withdrawals and the attractiveness of the bond market limited available funds. Each month brought on a more belligerent attitude of the public toward institutional mortgagees. Many borrowers ceased trying to pay, wanted to deed their properties to the mortgagees, and had to be encouraged to hold on to their equities. Adverse moratoria and other legislation, antagonistic courts, and a general diminution of recourse to the security and to the signer of the note led the mortgagees to feel that their policy holders had had their legal rights curtailed. The mortgage of 1928 was a different creature in 1932.

Outranking all of these secondary reasons was the comparison with foreclosure values. For instance, when the lending officer and the finance committee saw that they were foreclosing a \$6,000 loan in the middle of the 2700 block on A Street in Hushpuckin, that no one wanted to redeem the house at that figure, and that no one wanted to buy it from the owner, how could they be expected favorably to consider lending \$5,000 on the house next door? Multiply such instances by thousands and imagine the accumulative effect on the minds of these officers who are, in the last analysis, guardians of trust funds.

No Borrowers. While all of these factors were working against lending, the most pertinent ques-

* Mr. Smith is an executive in one of the large New England life insurance companies. Since this article reflects his personal views and is not an official statement from the company its name is being withheld. — Ed.

tion could be asked — Who was there to lend to? The free and clear house owned by a good man with both ability and intent to pay was not offered for security because this man did not want to imperil the safety of his family, because he knew no safe way to employ the money. It was the man with inability to pay, perhaps with not full intent to pay, who insisted on sending good money after bad in some other venture, who would imperil the safety of his family by mortgaging a free and clear house. There were a few people with cash enough to build, except for a few months in 1932 and 1933. If their project were meritorious, money was available for their first mortgage financing if they knew how to reach it. As to the lifting or refinancing of existing mortgages, it is a fair general observation that the mortgagees, *i.e.*, the investors, would let go only of their poor loans while holding on to the good ones — Another reason why lending halted was the rapid and devastating breakdown of the field force which had heretofore depended on commission income from the borrowers and which was now swamped with an avalanche of collection and salvage work.

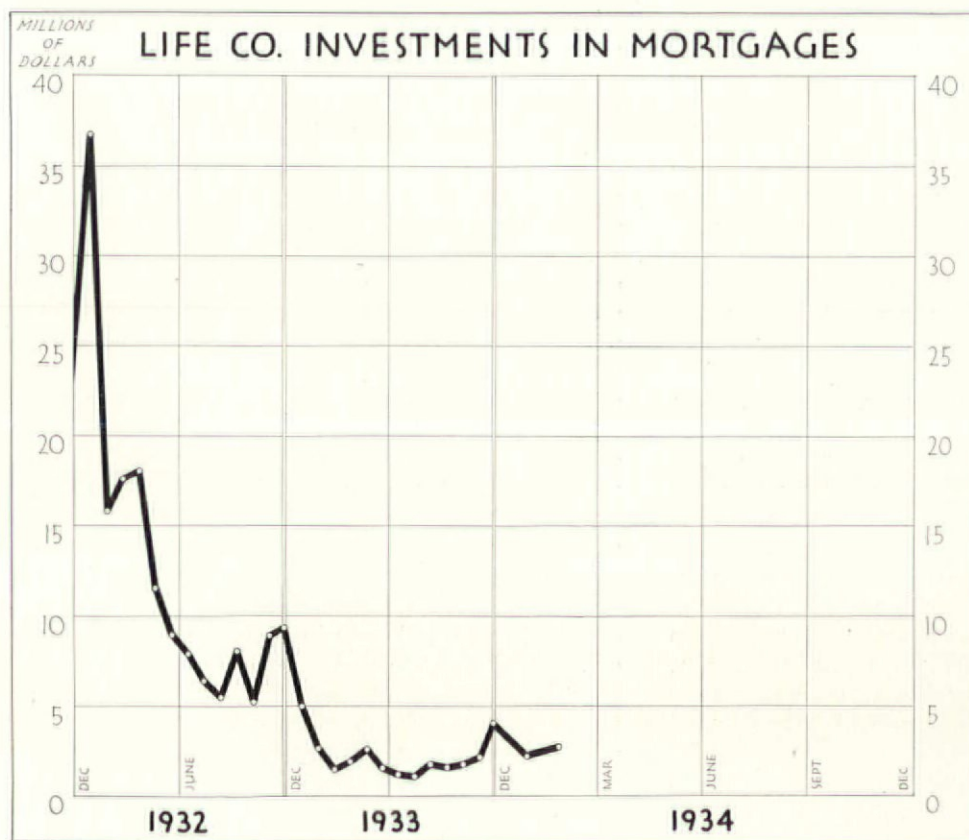
Present Promises. Now the situation gives some slight promise of changing. Though each and every one of the unfavorable factors still prevail with unabated force, except that of shortage of funds, there are a few hopeful signs. If the antagonistic attitude of the legislatures and courts is no better,

it is at least no worse — and we no longer are beclouded by uncertainty. If the bitter criticism by borrowers, and the general resistance toward keeping of contracts still prevails, at least the first shock of its effect is past.

Old boom-time values are forgot and even in the optimistic mind of the promoter, developer, broker, and real estate man there now prevails recognition of the fact that foreclosure values are a major factor in considering new loans. Perhaps borrowers can get on with less money.

With the dissipling of the national fear complex good prospective borrowers with free and clear houses or with cash for legitimate equities may want to borrow. Those holders of mortgages who by law or force of circumstance must liquidate or raise cash are now willing to let go some of their good liens and these, if paid down sufficiently, may be refinanced, but his field is very limited, for in the main old loans are too high to fit today's valuations.

Little Needed Construction. The need for new construction in any quantity is very doubtful. If new construction gets in the hands of aggressive developers, harm will be done to the municipalities through lessened tax collections on older properties that must lose tenants or occupants. Individuals with real, legitimate need for homes, with money to pay for them above the first mortgage, or with money to have them built, may be found here and



The curve indicates the mortgage investment policies of 28 leading life insurance companies, by spotting the total purchases of real estate mortgage loans for each four-week period, beginning 1932. The chart is based on figures compiled by The Wall Street Journal

there. In short, a limited number of choice, sound residence loans may become available.

Requirements of Security. Let us consider what are most likely to be the present day requirements as to the inherent qualities of the residences offered as security, taking a few lessons from depression experience. Limit these to modern houses, those that will compete for popular favor, for instance those having at least one bath for each two bedrooms, a heated garage, automatic hot water, economical heating system, of simple, usable design. Older houses must be modernized or altered along these lines. New houses should avoid freakishness or too great a departure from the standard demand of the market.

The houses should be located in sections protected against invasion by business, by colored occupancy, or by a type of people that tends to destroy the social advantages and desirability of the neighborhood. Uniformity of architecture, of size, and of cost along a given street or in a given neighborhood is essential. Of course, it goes without saying that the houses should be served by all utilities, should face paved streets, and should benefit by rapid public transportation facilities. There is no gainsaying the fact that houses in very small towns, or in widely scattered outlying sections of the larger cities will be at a relative disadvantage as against those in the more compact sections of large cities.

Then, too, there is the pressing burden of tax assessments, special assessments and tax rates, for preference will undoubtedly show itself in favor of those territories where for known political or other reasons the tax burden is not a mill-stone around the neck of the average house occupant.

Standard and sound construction as such will go hand in hand with the use of a large number of the best grade, uniform, well-known products such as, for instance, brick, window sash, electrical fixtures, hardware, heating plants that have proved themselves in these dark days of neglect and hard usage to be more dependable than loosely supervised substitutes thrown together on the job.

Earning Capacity. Turning away from the inherent qualities of the houses to the requirements on the loans themselves, the penetrating rays of inquiry will be turned on the dependability of the earning capacity of the property and of the prospective house occupant or owner. True rental, not necessarily actual rental, will be weighed carefully. Along with this a study of the earnings, earning capacity, and potential earnings of the borrowing applicant will be made and will receive more attention than his so-called statement of net worth. The house must fit his income and his income must fit the house, for not soon again will institutional lenders aid and abet the aggressive real estate broker, architect, promoter, developer, and builder by furnishing money to place owners in houses

so large and costly as to constitute burdens on their personal earning capacity.

Any evidence that this over-burdening has existed will be used against the prospective loan. Outstanding unpaid taxes and neglect of normal repairs are all too clearly indications of this same overloading. Without wishing to stand in opposition to the general conception that home ownership is a great social advantage to the country, the lender may think twice before assisting such home ownership where second and third mortgages and land contracts are evidence that the borrower has not previously accumulated a substantial cash down-payment. The home owner is not making a true investment, he is buying a luxury. His return will be in pride, comfort, and independence rather than in dollars. Therefore, he should be prepared to put up substantial cash.

Loan Limits. Loans of over \$17,500, regardless of the size of the house or its cost, will receive scant consideration, for the indications are that these large homes take the most money to recondition, must be carried with the greatest operating deficit, and are the slowest to sell. One is always on dangerous ground when pointing out what will be the positive favorable factors, but you want to know what loans will receive most favorable consideration.

Existing houses that are modern or have been made modern, or the right type of houses to be constructed in restricted, uniform areas, with total investment of \$8,000 to \$10,000, where the owner-occupant has put in or will put in cash for his equity above the first mortgage, will probably be looked on as prime. Heavy junior financing by the contractor, developer, or others, which was formerly considered an element of strength, has been proved a burden on the borrower and the embryo of legal complication. New houses built by a prospective owner under contract will appear in a more favorable light than those built by the developer, speculative builder, or promoter. So much for the inherent qualities of the houses and the requirements on the loans.

Mortgage Department Organization. No two mortgage departments of any insurance companies are alike, but like all organizations, the mortgage departments can be visualized as pyramids. At the apex sits the finance committee determining matters of general policy, allocating funds for investment, passing on large loans, controlling the personnel and organization further down the pyramid. The chief lending officer appears before the finance committee, seeks decision on general policy, determines operating policy, directs the machinery of lending and servicing.

Except for occasional trips he stays in the home office and sees, hears, and feels the field problems through the eyes, ears, and minds of his liaison

force. Under him comes the investment department (his liaison force) and the mortgage department. The former (a highly mobile force) has to do with determination of where to lend, what to lend on, valuations, appointment and rearrangement of field representation; the latter (stationary force in home office) carries on all of the mechanical operations of correspondence and handling funds, of closing, servicing, and collecting loans, of bookkeeping, records, etc.

The Investment Department. A good many of the larger companies now have regional offices (on a salary basis) which under the investment liaison force direct, supervise, and control the local correspondents or branch offices over a wide territory. Other companies without regional offices control the local representatives directly through the investment liaison force.

The local representative may be a correspondent or a branch office, but for purposes of this discussion the distinction is not pertinent for from the standpoint of the borrower or applicant his functions, duties, and authority are the same whatever may be his legal status. It does not necessarily follow, although it may be true, that the branch offices will have a different method from the correspondent for securing compensation for the expense of examining, appraising, closing, and servicing the loan, but in the end the charge for this work is much the same and is fair.

Whatever you have to do in connection with borrowing funds from a life insurance company must be done through the local representative; there is no use in direct appeal to the company. In connection with any loans he makes appraisals; in some companies he may secure also an independent appraisal. He investigates the borrower, checks outstanding taxes and insurance premiums, arranges for payment of costs and commission to cover the expenses of his work, has the title cleared by attorneys or a title insurance company, and sits in on the closing of the loan, for he is the one who actually transmits the lender's funds. While the loan is in force he collects and remits interest and principal reductions, sees to it that the taxes and insurance premiums are paid, and is the guardian and watch dog of the lender's interests.

He can kill any application by not submitting it to the home office and in doing so he will be backed up by the home office. He can stop lending in certain territories. He can stop lending to certain types and classes of borrowers. He can stop lending through certain brokers or architects or real estate

men. Now, if he recommends a loan, the regional office, if any, or the investment liaison man can kill it. If all of these parties recommend it, the home office can still alter or reject the application. All the way down the line from the home office there is no one that can give a definite commitment until the home office acts on the application.

When you have occasion to deal with the local representative, bear in mind that he is as anxious to make good loans as you are, but they must be sound according to his ideas and the restrictions of his company for his reputation depends on that. If you want to keep his good will give him all the information and study the way in which he likes to have it presented.

Finding Representatives. Not many local mortgage representatives are to the general public identified with their particular life insurance companies. How then are you to find out the names and addresses? If you do not care to take the trouble to scan the local legal news for a listing of mortgages being put on record, then you can consult with the local abstract offices or title companies which naturally are in constant touch with everyone in the mortgage lending business. Where there is a local branch of the Mortgage Bankers Association or an active Real Estate Board there is bound to be someone in these offices who can readily supply a list of the mortgage correspondents.

The insurance companies have made great strides forward in strengthening and rebuilding their field forces. They have added to their home office staffs so that some larger portion of the burden of inspection and field work can be handled by themselves. The true lessons of the depression have yet to be analyzed and studied so that they can be applied to future lending. The demoralizing break-down in our field force which so consumed our time and energy has nearly run its course, and if there comes the breathing spell so sorely needed, attention can be turned to more constructive measures, to the gradual lending of funds.

Remodeled, modernized residences, perhaps even a few new ones, with all the elements of strength inherent to the property and the borrower, may come to be given consideration providing every safeguard is thrown around the loan. Money will be cautious and justly so. Emphasis will still be on collection and salvage work. Pressure to place money in residential loans is not evident, nor is it apt to be for some time. Selection will be strict and anything of a promotional nature may well be frowned upon.



otos, F. S. Lincoln

AMERICAN HOUSES, INC.

HOLDEN, McLAUGHLIN & ASSOCIATES, ARCHITECTS

OPINIONS for and against prefabrication of houses remain as sharply divided as economists' sentiments on controlled currency. For every seven architects, engineers and financial experts who predict Atlantic-to-Pacific prefabrication in two years, seven can be easily found who view these new construction systems as so much radical clap-trap.

Whatever its future may be, prefabrication is today being practiced by architects as a means of solving the problems of the economic design of small houses, a field which they have too largely neglected for many years. One firm in particular, Holden, McLaughlin & Associates, whose activities have already been described in *THE ARCHITECTURAL FORUM* (April, 1933; December, 1933) has stepped promisingly into the field with American Houses, Inc. Still feeling its way in a new world, its operations may, however, indicate a way in

which small house architecture can be developed on the basis of prefabrication.

Meaning of Prefabrication. American Houses' mainspring, Robert W. McLaughlin Jr., finds in prefabrication no threat to architects' existence. He believes that mass design is not the inevitable consequence of mass production of units, and that original thinking in plan and design is not appreciably diminished by use of large rather than small construction units.

While most prefabricators strive to produce a house for the masses, American Houses subscribes to the old doctrine that "style percolates downward." The aim is not to liberate the slum-dweller, but to supply distinctive houses for families in the middle income bracket. Of the 10,500,000 urban dwellings in the United States, 45 per cent are in the \$3,500 to \$7,500 price range. This is American



Side porch of the prefabricated house (shown on page 277) at Oyster Bay, L. I. Exterior walls are $2\frac{1}{4}$ in. thick insulating boards faced two sides with asbestos stucco. Caulked at the joints, they require no paint and are fastened with extruded aluminum pilasters

Houses' prime market, and a ready one at present.

Prefabrication offers one immediate, one distant advantage. The first is reduction in cost, the second a revised conception of land value. The cost of materials in American Houses is equal to or less than the cost of materials employed in houses of similar cubage built by conventional methods with conventional materials. Labor costs at the site are significantly lowered.

In prefabrication lies a possibility of curbing land speculation. Though staunch, McLaughlin's houses can be dismantled and set up elsewhere. The element of portability may be a lever to pry the nation loose from its existing notions of land use and value. This is prefabrication's least certain, but most significant promise.

Operation. American Houses is set up to do volume business. Obviously prefabricated units imply standardized details, in the quantity production of which the principal economies are effected.

Logically, one of the first objectives of the company was the analysis of all possible types of construction adapted to speedy assembly. Framed and frameless systems, lumber, steel, and concrete, wall and insulating boards—all were subjected to rigid tests to determine the best-for-all-purposes construction. The result of many months of research was the adoption of the following general specifications:

Foundation: Eight-inch continuous, of concrete blocks, 6 in. above grade, 3 ft. 6 in. below grade.

Framework: Continuous steel sill bolted to foundation. Steel stud every four feet with continuous steel plate.

Exterior Walls: Two and one-quarter inches thick, of insulating board, faced two sides with asbestos cement board. Panels caulked where abutting frame and fastened with extruded aluminum pilasters on exterior. Aluminum cornice.



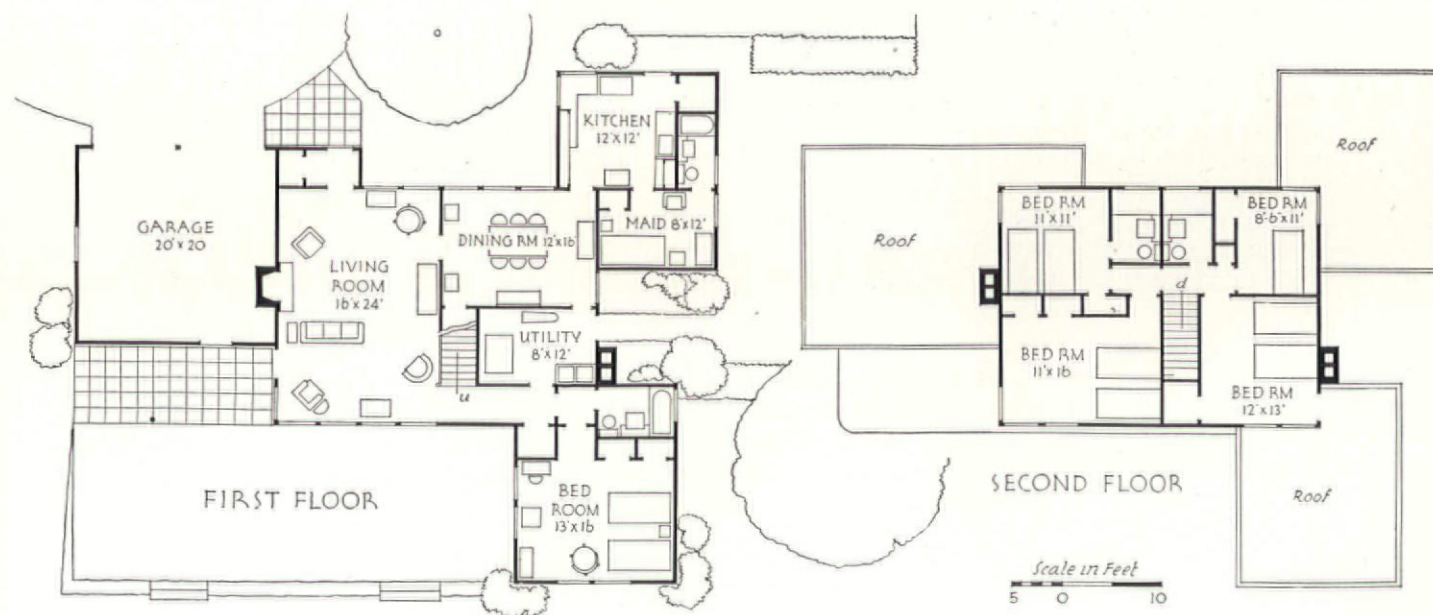
Compact stock manufactured units in the bright kitchen of the house at Oyster Bay, L. I.

Floors and Roof: Open truss joists with gypsum plank. Finished flooring, laminated pressed fibers laid in mastic. Built-up roof; 3 ft. air space under first floor. Aluminum foil insulation in first floor and roof.

Ceilings: Of insulating board held by concealed steel moldings.

Partitions: Two-inch gypsum plank doweled together. Interior door bucks steel. Interior doors 1 $\frac{3}{8}$ in. wood.

Plans of the prefabricated house at Oyster Bay, L. I. The unit system is adapted to asymmetrical design. Furniture placement was part of the functional planning





Unobtrusive evidences of the unit construction are seen in the ceiling panels and in the vertical steel cover-joint which has been papered over. The nursery of the Oyster Bay home

Exterior Doors: One and three-quarters inches thick in special wood frame.

Windows: Steel or wood optional, with screens and under-screen operators.

Interior Finish: Washable wall covering, or special fire-resistant plastic paint.

Plumbing: Steel bathroom wall unit, built-in lavatory, tub, shower, and cabinet. Copper tubing or brass piping throughout.

Heating: Forced draft warm air; fuel optional. Heating is not included in base prices. Heating unit located either in utility room on first floor, or in small utility basement.

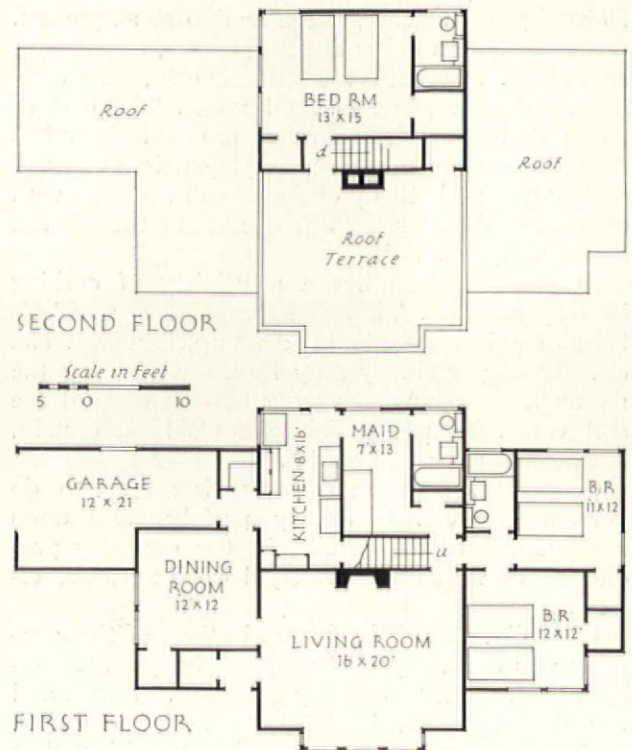
Electrical: Base outlets stamped in studs. Ceiling outlets in each room. Stock fixtures.

Porches: Fabricated wood members; floor flagged.

Closets: Fully equipped.

Kitchen: Combination sink and laundry tub. Fabricated kitchen cabinets.

Interior Base and Cornice: Standard wood.



Flexibility of planning is evident in the Convent, N. J., house. Needs of the particular family can be as easily met with prefabricated construction as in the traditional house. The exterior is shown in the photograph opposite. A basement is under the central portion. The second floor bedroom is practically a penthouse, but the roof terrace is available for the use of the entire family

Order of Erection: 1. Frame; 2. Roof; 3. Floors; 4. Walls; 5. Partitions; 6. Ceilings; 7. Finished Floors.

With the materials determined, the preparation of details to cover every possible contingency was completed, each detail being assigned a key number. Working with the standard units, 140 typical house plans were created. With the same details, however, 140 or 240 more plans and designs will soon be produced, which demonstrates the McLaughlin theory that design standardization is not inherent in prefabrication.

To its clients, American Houses will offer any one of its already prepared plans, or will design individually to meet particular requirements. In either case, drafting costs are reduced to the minimum, since working drawings are completely eliminated. Instead of "Section A-A," "Detail at B," the key numbers for details are indicated on the plans and elevations, and a schedule of ma-



This house can be built complete with winter air conditioning for \$11,290, as designed and constructed by American Houses, Inc.

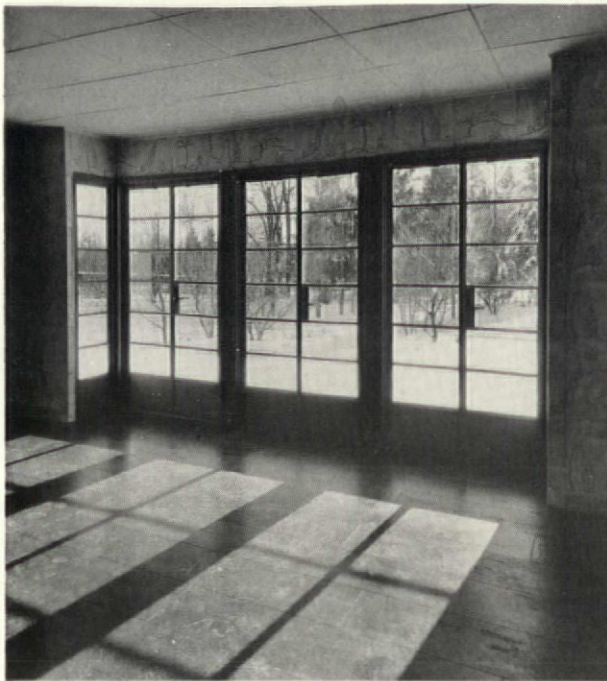
terials is drawn up for the entire house in terms of so-many X-2C cornices, so-many B-3C wall panels, etc.

American Houses departs further from current practice by assuming also the role of general contractor. From the day of its birth on paper to the day the owner moves in, divided responsibility is eliminated. Its contracts call for the production of a house for a limited and specified sum.

American Houses will be sold through authorized dealers. It has not yet been decided whether dealers

will be building material men, contractors, or specially trained representatives. Before each authorization is completed, the proposed representatives are given an informal education in the production of the houses in the company's main office in New York.

The company, furthermore, will operate in association with any architect. Such consulting architects would furnish preliminary designs only, for which he would receive from his client an independent fee.



The living room floor is pressed wood laid with a mastic on gypsum planks. Walls are covered with washable parchment. House at Convent, N. J.



Rabbeted gypsum planks are clamped directly to the pressed steel truss-joists. First floor and roof planks are aluminum foil insulated



Mirrors, indirect shaving lights, lavatory and medicine cabinet are installed as a single manufactured unit. Bathroom in the house at Oyster Bay, L. I.

AMERICAN HOUSES, INC.



While the equipment shown at the left is deluxe, this penthouse bathroom of the house at Convent, N. J., uses stock units

Holden, McLaughlin & Associates, Architects

THE BUILDING AND LOAN ASSOCIATIONS

BY F. S. CANNON

*President, the Railroadmen's Building and Savings Association
Indianapolis, Ind.*

IT IS generally conceded that recovery in the major industries is absolutely essential to the return of prosperity. The ability of the construction industry to absorb man power and materials makes it one of the greatest factors in solving the problem of spreading employment and starting up basic industries. There are two factors missing at present which are most essential. They are (1) bulk buying power for the products of the industry, and (2) a definite finance plan for the larger developments, such as apartment houses, hotels and large housing projects. This second difficulty will have to be solved in the future.

In the meantime, we find that the great bulk of use for men and materials is allocated to the building of small houses and to remodeling and repairs. For this type of mortgage finance, we are fortunate in having, in the Home Loan Bank System, both the machinery and funds in ample quantities to take care of all reasonable requests for loans.

No picture of home financing is complete without the type of organization commonly known as a Building and Loan Association, or Savings and Loan Association, or Cooperative Bank, or Homestead Association. In the East we find it as a cooperative bank, and because it operates more nearly as a bank functions, it is sometimes not classed in the same group as the association type of organization more common in the country from Pennsylvania to the West Coast. They are essentially the same, however, in that both of these institutions function in the same way, namely the deposits of cooperative bank members and the investments of association members constitute the source of funds used in making loans to borrowing members. The one great difference between the operations of these institutions and those of other corporate mortgage lending institutions lies in the fact that a building and loan or cooperative bank does its business altogether with members. In other words, an institution of this type is a common fund of money, invested by citizens and loaned out to others, all of whom have a voice in the management of the institution.

Of course the extent to which such associations can handle the entire small home finance demands of the community depends upon the extent to which the citizens invest their funds. In a great many of our medium-sized and larger cities investments in building and loan associations are held in especially high favor because of their remarkable safety rec-

ord, their liberal return, and convenient investment plans. Like financial institutions of all other kinds, the associations have suffered from a falling off in new money during the depression years, but certainly the stage is set for the return of investors.

The cooperation between borrowers and savers in management of their institutions assures the equal protection and privilege accorded each member. It should be pointed out here that as a rule the prospective borrower from a building and loan association does not find it necessary to have been enrolled several months before as a member, but becomes a member by simply applying for and obtaining a mortgage loan.

Today there are 10,997 associations with an aggregate membership of 10,000,000. The aggregate investment in associations amounts to approximately seven billion seven hundred fifty million dollars invested in first mortgages made on the homes of our citizens.

In the years preceding 1932, all of these units of this vast group were under individual State or territorial supervision. The only coordinating influence was the United States Building and Loan League which was founded in 1893. In 1932 in order to meet the situation then existing in the mortgage loan field, the Congress of the United States passed a law creating a reserve system for these, the Federal Home Loan Bank System. This new system of twelve district banks enabled the associations and cooperative banks and life insurance companies dealing in mortgage finance to affiliate and obtain conservative advances on mortgage collateral assigned to the Federal Home Loan Bank of the district in which the member organization operated. This great mortgage reserve provides a well-protected and administered pool of resources available to all associations, savings banks or insurance companies who are able to qualify as members of the system. Under the Home Owners' Loan Corporation a new type of Federal Savings and Loan Association is being organized in communities not adequately served by members of the Home Loan Bank System or by institutions eligible for membership.

The methods of obtaining service in the matter of mortgage finance are as follows: First, the type of mortgage most typical is the amortized loan. The payments necessary to handle the repayment of borrowed money are usually on a percentage basis or a definite monthly amortizing rate based on each

hundred dollars of debt. Thus 1 per cent per month per \$100 borrowed would necessitate \$10 being paid on each \$1,000 of debt, or as has been suggested, \$1.25 to \$1.50 per month per \$100 with a corresponding increase in payments due on each \$1,000 of debt. Due to this very reasonable plan of repayment, it is possible for the manager of an organization operating on this plan to adjust the size of loan and cost of debt service to the prospective home owner's ability to pay the dues.

The cost of making loans can be broken down as follows: If the loan is considered a proper loan to make after due examination of the basic factors, then the first fee involved is that for the appraisal of the property, if it is ready for occupancy; or, if new construction, the fee is for the careful examination of plans, lot, owner's finances, and the ability of the constructor (both as to credit rating and the grade of product he turns out). If the money is to be loaned on a properly regulated construction loan, the final charge for appraising is deferred, and a supervisory fee is charged for periodic inspections of the work as it progresses, except in cases where a competent architect is employed on the work. If the ideal set-up of owner, architect and contractor exists, then only a final inspection is necessary to satisfy the association that the house is a proper base for mortgage collateral. These fees range from \$3 in small communities to \$6 or more in large cities. Distance which involves much time is a determining factor in this charge.

The amount of the mortgage loan is based on competent appraised value attested to by at least two appraisers. The usual State law sets the limit of loan at from 50 to 65 per cent of the appraised value. The resulting mortgage made by the Building and Loan Association is a first lien mortgage on the entire improvement and lot set up in the appraisal. The fees for supervision of construction,

where an architect is not retained by the owner, will vary from one-half of 1 per cent to 3 per cent depending on the amount and quality of inspection given.

The next charge is the attorney's fee for examination of the title of the property. This charge varies greatly but usually ranges from \$5 to \$10 for each examination. The basis of this examination is the continuance of the abstract of title or search of records, depending on the methods and facilities existing in each community. This latter cost is a purely local cost and is hard to estimate. Rough averages show that it will cost the owner from \$15 to \$20. A summary of approximate costs in making the average building and loan mortgage will run about as follows:

Appraisal fee.....	\$3 to \$10
Credit report.....	\$1 to \$2
Abstract continuance.....	Check local costs
Attorney's fee.....	\$5 to \$20
Filing of mortgage.....	Check local costs

These items are charged to the cost of granting a mortgage and are paid at the time the mortgage and note are signed by the owner.

In selecting the best finance plan for clients who need a reasonable balance in cash to pay for the improvements contemplated, it is possible to adjust the payment plan to the ability of the client to pay the monthly dues out of his income. The amortized loan is based on regular monthly payments and hence a time table can be set up for the borrower. The usual running time of amortized Building and Loan Association mortgages is from eight to fifteen years.

Millions of dollars are available in our country for the erection of properly balanced home building projects. It is generally admitted that speculative projects are definitely out of the picture so far as Building and Loan Association finance is concerned.

THERE has been here and there throughout the country a tendency to treat and regard building and loan associations as savings banks or sometimes as adjuncts to real estate development. . . . Our mortgage companies have guaranteed too many mortgages in the past; have not hesitated to void their contracts, to take refuge behind the pretense that the "banking holiday" sanctioned such action. . . . Careful estimates show that the entire indebtedness of this country is not more than 115 to 125 billion dollars, or perhaps 30 per cent of our estimated national wealth. There has been an enormous amount of apology for measures that were not economic on the ground of false estimates of this debt and of the impossibility of carrying it. . . . The object must be to develop more and more binding codes of professional ethics, tending to restrict overexpansion, and to restore the real estate mortgage to its original position as the best embodiment of thrift, the best form in which the savings of the individual may be reposed. *H. PARKER WILLIS, Professor of Banking, Columbia University.*

THE CASE FOR MORTGAGE COMPANIES

BY S. M. WATERS

WHATEVER our thoughts may be on the political aspects of the National Recovery program or of its economic soundness, there is no denying the fact that a spirit of business recovery is in the air. The visible evidences of change are dim, even imaginary in some lines, but the idea persists. Wherever men meet, their conversation is not, as formerly, a recital of the sickening evidences of depression but deals with volume and cost comparisons in their own or similar lines.

With this change growing more noticeable day by day and with the approach of the season when building is usually most active, some pertinent questions arise in the minds of architects, builders and real estate owners with regard to financing. These men know the supplies of material and labor available and realize that costs of both are advancing, but what about the supply of mortgage money which plays such an essential part in any construction? Is there such a supply of funds? Is it available and how is it to be reached?

These questions are natural. In the past the real estate mortgage loan has been of equal importance to new building, especially residence building, as the architect's plans and specifications. One immediate source of mortgage funds has always been the local mortgage company. What about these companies now? Are they definitely out of the picture? Are they likely to be permanently out and, if so, what is to take their place in the mortgage financing field?

In order to answer, we must recall what a mortgage company is, what functions it performs, how it operates, whether its services are necessary and essential to mortgage financing and what the situation of these companies is now. We must inquire whether these companies are willing and able to operate as formerly and whether it is possible for them to do so under the new conditions and to re-establish their connection with loanable funds.

By the term "mortgage company" is meant an individual firm or partnership, local in operation, having a procurement organization within itself, actively in touch with borrowers, general contractors and home builders, and having an established relationship with investors who are always able to furnish funds for mortgage loans.

In the city loan field, enough of these firms remain

to fill all needs, if they will be able to function as formerly. We see, with some concern, that many important firms which confine themselves to farm loan business entirely have been converted into service organizations only for collection and renewal, and that in many instances their places have been taken by branch service offices. Is the same change to take place in the city loan field and, if so, how are these service organizations to handle new loans?

These loan companies have acted as joint agent of the borrower and the lender, bringing these two together to consummate loans and furnishing to each principal certain types of service and assistance in the procurement, completion and servicing of the investments and in the management of real estate for borrower or lender, or both. They have exercised a lasting influence in the planning and building of every American city. This influence has been against over expansion; toward proper location of improvements and sound and practical building methods. They have always realized the importance and value of the architect's services.

The method of operation of such a company is familiar to us all. Each item of business starts with an application for a loan on real estate of definite location where the improvements are either completed, in the process of erection or are being planned. The service is completed with the final payment of the debt. The average life of a loan is about seven years. The business is one of endless detail. The mortgage company must do all things necessary to comply with the complicated rules of real estate, insurance and building laws. It must be familiar with the intricacies of the building trades and have up to date knowledge of changing land values. It must maintain a dependable insurance department, an efficient property management department, and a collection department where an intimate knowledge of the security and a thorough understanding of the owner's resources precedes a tactful and persistent pressure. It will take years of time and an untold amount of money to overcome the damage already done by mortgage moratorium laws and these laws are the result of unskillful collection methods.

The earnings of such a company, performing service of so many kinds, should, in order not to be

burdensome, come from various sources and be contributed over the life of the service by the persons benefiting from it.

The contact of the mortgage company with the borrower and the lender is not terminated with the completion of the loan but continues for the life of the debt and usually beyond one, and sometimes two or more, renewals of the obligation. The incidental services to borrower and lender continue with this contact and the compensation for such service should be spread over that time and be adequate to fully meet the cost. It is on this point that we have thoroughly learned a lesson in the past few years.

There are those who reason that the services of the mortgage company are like that of a middle man and that it would be desirable if they could be eliminated. It has been freely predicted that laws would be made and business practices established which would do away with this intermediary. Some go so far as to predict that in future the Government, through some of its subsidiaries, will ultimately make all real estate loans. Even a brief study of the business, however, will convince any thinking person that the mortgage company is not a mere middle man, acting only as a distributing center, but that such company really creates the business and guides the investor to a sound line of securities and the borrower to practical types of construction and to a proper balance between investment and building and a possible return of usability. The real estate mortgage loan business is not a useless, unnecessary evil arising out of custom and encumbering the desirable improvement of our cities. If so, it would be a proper subject for replacement, or elimination, by Government activities. On the contrary, it is a private business, profitable to all three parties.

The situation of mortgage companies, in the past few years, has been an unenviable one. The shrinkage of real estate values and the drop in cost of building material and labor, unemployment and increased vacancies have created strain between the investor and the mortgage company which has been difficult to bear. The first and natural feeling of the holder of a mortgage which goes to default and into trouble is one of criticism toward the company through which the loan was made. This is particularly true because, in the past, the holder of the mortgage gave less attention to that type of investment, after it was procured, than it deserved. There is every evidence, however, that this is being corrected and in future we may anticipate that the investor will maintain close contact with his mortgage account and assist in selection by closer supervision.

The relation between the mortgage company and the borrower has likewise been one of strain for it has, of course, been necessary to bring increasing pressure for the payment of interest, principal and

taxes and the maintenance of the property and to emphasize, and sometimes enforce, the personal liability upon the debt aside from the security. Fortunately, we can see that even in this situation a better understanding is being established between the borrower and the mortgage company. Their interests are really one and the same and that is now quite well recognized, where collections and renewals are properly handled.

The mortgage companies, as a class, have met these trying situations by most heroic effort and at great sacrifice to themselves. No class of business people could have more freely given of their efforts and of their savings to surmount the difficulties of the times and to keep the business in good standing for the investor and avoid bringing the borrower to failure. In fact, if any criticism were made in this regard it could well be said that the mortgage companies, as a class, contributed away beyond their capacity for the preservation of their business. Numerous failures of such firms are witnesses to this and these failures have frequently occurred among the stronger companies with the best connections. With the passing out of the moratorium laws and with the modification of tax charges on real estate, which change is everywhere under consideration now, we can look forward with confidence that the real estate mortgage will continue to be the soundest type of investment in this country. It will continue to offer a better rate of return than other investments of anywhere near its quality. There is an abundance of investment funds, much of which is lying idle now, that will be put to use in this field, largely through the activities of local mortgage companies.

In reviving such business and making the best use of the mortgage companies, there are dangers to be avoided. Each of us can best reform his own business, if he has a business to reform, and our efforts should be given to rebuilding the business rather than to tearing down or destroying the machinery through which it has always operated. Someone has said that our recovery movement has already drifted into a reform movement. The two ideas are contradictory. There is enough of truth in this to be evident at every point where legislation and Government activities touch industry. One of the immediate threats is a code which would hamper and restrict a mortgage company from conducting a fire insurance business. We should be able to see that if we are to depend upon the mortgage company to protect both investor and borrower by proper fire insurance, we should not restrict the mortgage company from contracting so to do.

It is safe to predict that the mortgage company of the future will have a larger usefulness to both borrower and lender and will make more use of such safeguards as proper architectural and engineering service in selecting its investment.



Seeing the light before it was too late, the owner of this small home reneged on contractor-drawn plans, obtained more room and more conveniences for his \$8,000

WITH BENEFIT OF ARCHITECT

BY HAROLD DONALDSON EBERLEIN

THIS illuminating episode is strictly anonymous, for obvious reasons. The actors in it are, first, a layman who wishes to build himself a small house, shops about for ideas and such plans as he can pick up gratuitously, and expects to be his own architect so as to save money by cutting out an architect's commission. Second, a builder, who furnishes plans based on the customer's purloined ideas. Third, the architect, appealed to *in extremis*, who saves the day for the client. The naïve story clearly shows that an architect's sound professional advice, no matter how

small the house, is (1) a prime essential and (2) a means of actual money-saving.

For his small house the client had made a budget of \$8,500. His requirements were, downstairs, a living room, dining room, kitchen and two-car garage; upstairs, four bedrooms, one of which he could use for a study if he wished, a bath, provision for a second bath to be equipped at a future date, and the possibility of ultimately using the space above the garage for a maid's room and bath, with access from the master's portion of the upper floor.

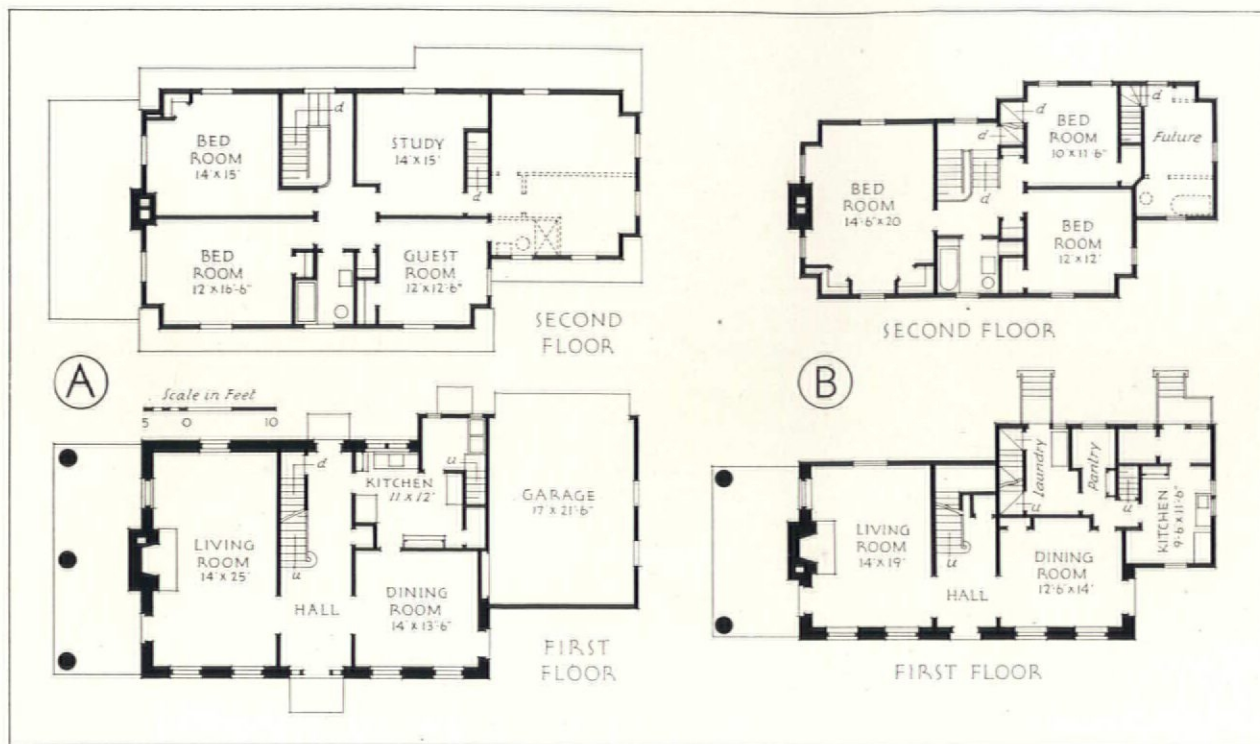


Outside, he wished the house to have long, low lines, as far as possible, and he had a preference for a gambrel roof.

He thought the job too insignificant to enlist a competent architect's interest, and he wished to eliminate an architect's commission so that his whole outlay would go into actual structure. A friend, whose house he admired, happened to have a set of his own architect's blueprints. Borrowing these, he went to a building contractor and got his draftsman to make plans and elevations, with certain changes and adaptations he designated. The builder agreed to erect the house for the sum named in the budget. Up to this point the whole proceeding was thoroughly unethical on the part of everyone concerned.

Although the builder's draftsman had faithfully followed instructions and incorporated all the features agreed upon, when the client got the drawings he began to be troubled with doubts. He was not convinced that the finished house would look as it did on the elevations. He determined to seek an architect's opinion, offering a small fee for professional criticism.

The architect consulted frankly pointed out the folly of the whole course pursued and flatly refused to advise on the builder's plans. If the client wished, he would undertake the job as an altogether independent commission and endeavor to give him his full money's worth, but he would have nothing to do

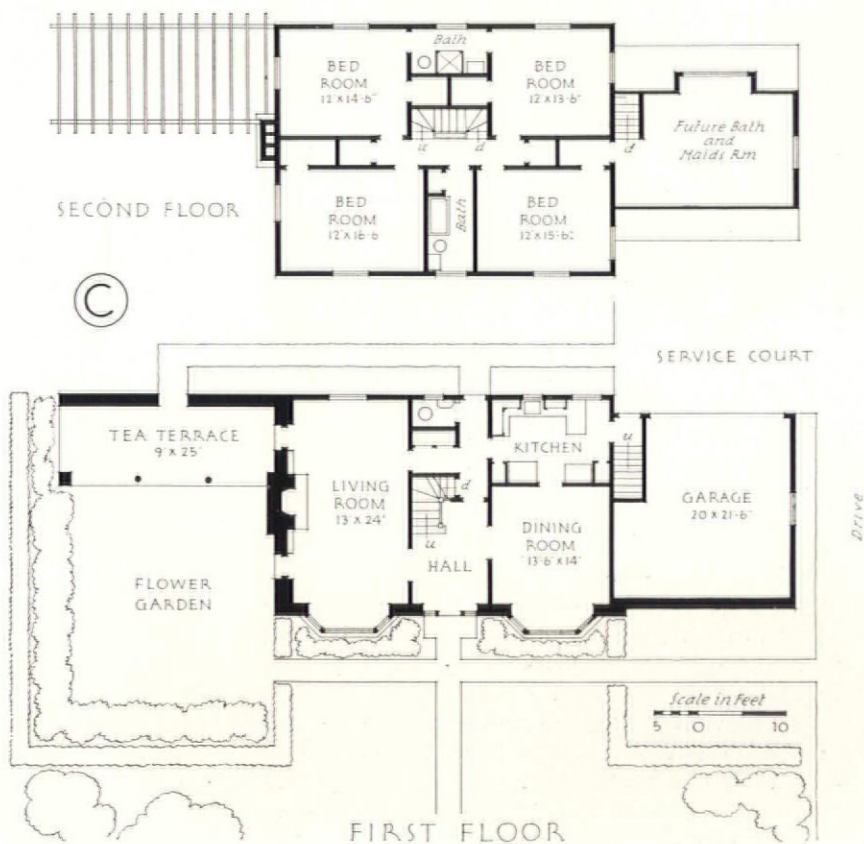


THE STORY IN PLANS

A. The plans he borrowed in blueprint form, to take to a contractor to show him "it should be like this, but smaller." And . . .

B. The plans the contractor drew up as best he could to meet our owner's wishes, and then . . .

C. The plans, — simple, convenient, efficient that the architect evolved to solve the whole problem





with correcting the plans submitted to him. The architect's trained insight and imagination detected various possibilities unperceived by the builder's mechanical mind; also sundry ways of effecting positive economies. The outcome of the interview was that the client entrusted the commission to the architect, with the stipulation, however, that the cost must be within the budget.

The builder's plans provided no lavatory and no coat closet downstairs, and the backstair was unsatisfactory; abovestairs the bedrooms were badly cut into by ill-assigned closet spaces, the slope of the roof cut off much headroom, there were no arrangements for a second bath, and if the space over the garage was eventually to be used, there was no way of getting to it without sacrificing one of the existing bedrooms.

The plans devised by the architect afforded a lavatory and an adequate coat closet, downstairs, with a better-arranged backstair; on the upper floor a second bath was planned, there was better bathroom communication, and there was easy access to the space over the garage without destroying the desirability of any of the rooms. By means of an overhang beyond the ground floor, the bedroom area

was increased without enlarging the first floor.

After examining the architect's plans and specifications, with \$1,700 to \$1,800 worth of desirable features *added*, the builder first consulted confirmed his former estimate of \$8,500. Plans and specifications were then put out for competitive bids. The builder already mentioned then reduced his price to \$8,200. The lowest tender, \$7,600, was finally accepted. Then the owner authorized \$300 worth of extras, thus making the ultimate construction cost \$7,900.

Thus, at a cost of \$7,900 the client really got \$2,000 worth of house (\$1,700 through new plan and \$300 of extras) more than he had originally expected to get for \$8,500.

From this saving of \$600 from the figure set in his budget, added to a small extra fund for final contingencies the client had put by and not mentioned, he was able to pay the architect's commission and still have a sufficient balance remaining to spend on planting and other incidentals. On the ultimate balance sheet, the architect's services appear as an indubitable item of economy. The client has gained a considerable store of building wisdom and now assiduously preaches the architect's cause.

APPRAISALS AND ARCHITECTS

BY PHILIP W. KNISKERN

Director, Appraisal Division, H.O.L.C.

President, American Institute of Real Estate Appraisers

SEARCHING around for profitable employment of their time, some architects have turned hopefully to real estate appraisal. Not without good reason, either, for the business of appraising is not so somnolent as architecture; and architects have by training and experience some of the attributes that make good appraisers. Unfortunately, they have not all, and those in which they are most likely to be lacking are the most difficult to acquire. Nevertheless the field of appraisal is there, and architects are as eligible as real estate salesmen, contractors, engineers, or anyone else to enter it.

Appraising residential properties is, like appraising all other types of properties, an examination to determine value — and value, as I most frequently define it, is the present worth of all the rights to future benefits arising from the property.

One piece of property can, of course, have several values, depending upon its use. An industrial property in Massachusetts, which I had the opportunity to appraise, for instance, cost \$2,000,000 to build; it was assessed at \$1,750,000. It carried \$1,500,000 insurance; it was sold at forced sale for \$42,000. But its actual value, because of its location and the specialized activities previously housed in it, was \$0.00. No one could use it.

Appraisal Bases. For assessment purposes wholesale methods must be applied to obtain uniformity between properties of similar character and location. One must strike an average for a district.

For fire insurance, *replacement value* is the prime consideration.

For lending, *re-sale value* is uppermost.

For buying and selling, *use and permanent value* are major influences.

Appraising is not a mathematical science, and although there have been many formulæ aimed at eliminating personal judgment in appraisals, none has ever worked satisfactorily.

Nearly every architect-appraiser tends to lean too heavily on *reproduction cost*. He has a keen eye for physical value and can compute the rate of obsolescence fairly accurately. When he has done that, he is inclined to think a fair appraisal has been reached. If this were all, the problem would be simple. But this is far from all.

Where the architect usually is weak, and woefully weak, is in knowledge of the market. There is no

short cut to knowledge of this kind, nor formula to be followed. It simply means a persistent effort to know what is going on in buying and selling circles.

As to the individual properties, every real estate holding has myriad characteristics which contribute elements of value toward the value of the whole. And appraising them becomes an assignment of proper value element to each characteristic and the summation of these value elements into a whole.

Characteristics may be entirely external, that is, not a part of the property itself but environment, neighborhood, and even very distant conditions in the same city or in other cities; or they may be inherent, that is, a part of the property itself, such as structural members, roof, lot shape, topography, floor plan, etc.

Characteristics cannot and must not be considered nor their worth determined in relation to any particular individual, but we must consider them in respect to the average individual, for, when recourse is taken to the property as collateral, to realize upon, or liquidate it, the lender must deal with the general public under conditions as he finds them then existing, and cannot wait to deal with any particular individual. The value to be sought is that which can be developed by fair and reasonable selling energy over a reasonably short length of time and with sufficient substantial investment in the equity so that when accomplished it will be a complete permanent sale.

To analyze the particular property under appraisal and to determine its characteristics, each must be considered from the viewpoint of *utility, popularity, physical elements, suitability, supply and demand, appreciation, speculation, obsolescence, and depreciation*.

Utility and Popularity. In finding the actual use and utility value, it must be determined whether particular features of the property are necessary or whether they are luxuries, whether each is efficient for its purpose or whether it is of only partial efficiency and, likewise, whether or not each is consistent and harmonious with the other characteristics of the property.

They should be suited to the neighborhood, to the general territory, and to the city itself. A large house, say twenty-eight foot front, is not suited to a thirty foot lot. Flat low land adjacent to a railroad is

not suited to residential purposes but it might be suited to industrial use.

In considering the question of popularity with the public, one must think only of those who may be interested in the particular type of property and the particular neighborhood. Obsolete features such as lighting fixtures, exposed lead plumbing, dark bathrooms, or characteristics which are old-fashioned, such as extremely heavy moldings and trim, excessive ornamentation and mill work around porches, some types of mantels, and the like, although built of the very best of materials and shaped by craftsmen who are unobtainable today, are negative in their contribution to value rather than positive. Careful planning and small details in a kitchen, even a swing faucet over the sink, increase the desire of buyers and will add considerably more value to the property than the mere cost.

Supply and Demand. There are improvements built in certain localities where the people either interested or able to own them are not present in sufficient numbers to create sufficient competitive demand to develop the full value of the property. Take for example a large elaborate home of ten to fourteen rooms in a town of say 1,500 people, with a genuine cost of \$20,000 to \$25,000, and worth that in the environs of a large city. Nevertheless, in this small community there are not enough people of sufficient wealth to develop among themselves a competition for property which would bring about anything near the approximate cost of the property. This is an amplification of the theory that has been expressed as misplaced improvement.

Appreciation of Land Value. The appraiser in determining a value as the basis of a loan must be extremely careful when he includes in the value any amount which may arise from appreciation or from a speculative element. Appreciation which is assured beyond any question or doubt and which, with the same certainty, will accrue in a short period of time might be recognized. But anything that is speculative, and by that I mean any increment in value which however probable and certain may still contain a possibility that it will not mature, must, generally speaking, be left out of an appraisal for this purpose. The reason for this is clear when it is remembered that if the speculation does mature the lender receives no benefit other than a slight increase in his collateral but if the speculation does not mature and he has based any portion of his loan upon such speculative increase he very soon finds himself with a portion of his loan without proper collateral.

Transportation. The urban transportation by common carriers, by buses, and intercommuni-

cation on boulevards and other high speed traffic ways both within the city itself and to its suburbs will be found to be a major controlling factor on the values of particular parcels within the city itself. The greater the ease of internal communication the more uniform will be the values in different parts of town.

The automobile has in recent years considerably changed this situation so that locations which were considered virtually useless are now recognized as accessible, convenient and valuable. Zoning ordinances tend to enhance and stabilize the value of particular pieces of property, but this cannot be taken as a final answer. The ordinances must be fully understood and their influence upon any property which is being appraised must be separately determined. It may be negative.

Competition of Properties. There is a competition existing between different parts of any one city. Every suburb of a large city has its influence, by way of competition, upon values of other comparable suburbs of the same city. The person seeking a home adjacent to New York will compare Great Neck on Long Island, Greenwich in Connecticut, Montclair in New Jersey and some others as to the convenience in location, transportation, living expenses and many other features, always including the element of price and value.

The Lot. Primarily, we have the quantity and quality of title. In the great majority of cases, the title is the fee simple estate but even with this form we find innumerable kinds of restrictions, reversions, easements, encroachments, and the like. Determine the effect of those which exist. The easement creating rights for overhead construction, such as telephone poles or the like, may create a highly serious potentiality. Restrictions against certain races, if they carry no particular penalty, may not be detrimental and sometimes may be a benefit but remember they may not always give the protection expected. If reversion is the penalty, then from the lending viewpoint restrictions are highly dangerous.

Eaves or walls a few inches over a set-back building line are not serious, while even a small encroachment over the lot line, in the trouble that it may lead to, may affect the value, especially in retail locations. Encroachments must be accurately determined by survey before passing judgment.

Before the unit value is seriously affected by the size and shape of the lot these must be such that they seriously confine building operations or make parts of the lot unusable because of the angles.

Reference reading. *Real Estate Appraisal and Valuation*, Kniskern, The Ronald Press Company, N. Y. Also *The Journal of the American Institute of Real Estate Appraisers*, a quarterly.

"HORS de CONCOURS"

WITH KENNETH MURCHISON

AROUND the World with Ely Kahn. *Being a more or less authentic version of what a Carnegie-foundationized-investigator-on-craftsmanship picked up (with other little things) on a seven-months' trip to the Orient, the Occident, Bali, Anghor and other hot spots.*

The greatest mystery of the whole trip, according to Ely, was how he got the job. Nobody knows that, not even the Foundation itself. But, anyway, Ely was dozing in his office one afternoon, when the telephone rang. Ely woke up, dusted off the phone, and answered.

"What are your plans for the next nine months, Mr. Kahn?"

"Being a modernist," Ely answered with caution, "I have made no plans. I do it by ear. And besides — I've had all I want of this here nine-months' stuff."

"Well," continued the voice, "the Carnegie Foundation wants you to go around the world, from left to right, and make a study of — um, — ah — yes, that's it — craftsmanship. Craftsmanship, Mr. Kahn, in the far East."

"Okey by me," confirmed Mr. Kahn. "But what do we do with it when we get it?"

"Never mind," said the Foundation. "We'll find something to do with it. You can write a book about it and we'll buy you a Kodak for illustration purposes."

"First Class?" asked Ely. "Beds, not berths?"

"More or less," answered the Foundation. "And you will have plenty of time on those Chinese river steamers to think up plots for two or three books."

"Okey," again confirmed Mr. Kahn. "When do I start?"

"This afternoon?" from the Foundation.

"Okey," again said the architect, just to show that he couldn't be stumped.

So he put on his coat, locked the office door and went away from there. Such indeed is the simplicity of an architect's life. Just go away for awhile, come back, and nobody notices that you've been away at all.

On the way to the railway station Ely stopped and bought a copy of "The Travels of Marco Polo" (dedicated to Sir Roderick Murchison in 1869). He then and there decided that to be a Kahn in New York and Detroit was all right but in China it's better to be a Khan. So he got the ship's printer to dash off some new business cards:

ELY JENGHIS KHAN

Seventh Son of the Seventh Son of
Kublai Khan.

Architect and Investigator

Estimates Cheerfully Furnished

The adventures of our young explorer were too humorous to mention. His experiences in the Japanese Bathing Establishment at Peiping (formerly Peking, formerly Khanbalu) will be furnished by him to adults at 50 cents a copy, sent in a plain sealed envelope.

These particular adventures sprang from the fact that Ely wasn't tipped off, until his undershirt was off, that the rubbers and masseurs weren't that at all but were rubberesses and masseuses! Ely, however, had prepared for college at Middlesex School, an experience which should prepare one for everything. Consequently, Ely didn't blush the way he should have blushed nor the way that Harvey Corbett, for instance, would have blushed. There's more lineal feet of Harvey to blush, anyhow, when you come to think of it.

After a good Japanese wash-out, Ely tackled China, Indo-China, Burma and Bali. By looking at Architect Kahn's Kodak of Bali entitled, "Some of my Bosom Friends," one may see quite readily why Ely lingered there longer than the Foundation had planned. They wired: E JENGHIS KHAN HOTEL SEPIA BALI HOW DO YOU LIKE BALI ARCHITECTURE CARNEGIE. He replied: CARNEGIE NY FRONT ELEVATIONS SWELL And so on from strange country to stranger.

In Singapore Ely was taken by Frank Bringembackalvie Buck to a compound and shown a couple of big animal fights staged for the movies. So next time you see the hero and the heroine peering through the tangled underbrush and starting back in affright at the sight of a black puma attacking a great armored crocodile, don't worry, folks. The animals are in the compound at Singapore and the actors are in Culver City, California.

At Anghor-Vat Ely said that the temple was almost as good as the reproduction in the Exposition Coloniale in Paris that summer when the American

architects took it by storm. He, however, liked the Paris Vat much better because it was nearer the Café des Deux Magots.

Mr. Khan admired Mandalay so much that he felt someone ought to write a song about it. Something like this, he suggested:

On the road to Mandalay
Where the flying fishes play —

But he got no further, because he couldn't quite work it out, why flying fishes were on the road and besides fishes isn't right, it ought to be fish.

Our voyageur de luxe gave a lecture at the Architectural League last month which had the

audience holding on to their chairs. (These chairs showed that they needed a little carpenter work.)

He touched on sex-life in the Himalayas with the same freedom as he did the fret-work of Old Rangoon; he claimed that Modernism had supplanted Mesmerism in Mongolia; he regretted the passing of the paper partition in Japanese domestic architecture; he thought the Taj-Mahal was all right in its way but no good otherwise; he claimed that the Pyramids were a dead steal from his 120 Wall Street building, and finally, he couldn't find Mecca, although he asked a couple of his Muezzin friends where it was and they didn't know.

THE LEGAL SIDE OF MORTGAGES

No mortgage should be signed without consulting a lawyer. But every architect sometimes runs across clients who know nothing about mortgages. It is worthwhile to look up one's own State's laws. And at least the following fundamentals are essential to know. This article was prepared by the law offices of Loria & Martinson, New York City.

MORTGAGING real estate is analogous to taking a watch to the pawn shop. Money is needed; security required. But the real estate mortgage has been treated by Court and Legislature like a mongrel. In sections where money is plentiful, the mortgagees are likely to be favored in doubtful situations. In poorer jurisdictions, the reverse is apt to be true. But in all States the foundation of the mortgage is the same. The principal debt, in theory, is the bond. A bond is executed providing repayment of a loan within a stated time and providing for interest payments on given dates of each year. The security is posted with the lender in the form of a mortgage. This, in brief, reads like a deed of property which is defeated if the conditions of the bond, executed simultaneously, are complied with.

The important standard provisions are: The borrower must keep the building on the premises insured against fire loss for the benefit of the mortgagee; the borrower must not cause demolition of the buildings, or waste of the lands without the consent of the lender; the taxes and water rates or assessments must be paid when due; and the principal and interest must be paid in accordance with the stated terms of the bond. There is also a proviso commonly called the *acceleration clause*. This makes it incumbent upon the borrower to perform all of the covenants and conditions, in default of which the whole debt shall become due. One minor slip-up accelerates the principal debt. The standard form is not mandatory and special clauses may be in-

serted. For obvious reasons the borrower should be sure that he has the right to pay the debt at any time before maturity.

Constant vigilance is necessary on the part of the lender — he cannot be satisfied with only regular payments of interest. Hence the reason why most mortgage owners give their mortgages to institutions for "servicing."

Both lender and borrower must be careful of the title. The history of the chain of title with liens has to be uncovered by a search in the Register's and County Clerk's Office. A careful purchaser of property usually applies for a title policy with a recognized title insurance company. If he is prudent, he makes his purchase subject to approval of title by a title company. If the latter does not pass the title, the purchaser does not have to accept. As with the purchaser, so with the mortgagee. A defect in the borrower's title renders the security nugatory.

Mortgages and deeds should be acknowledged and recorded immediately. The legality of the mortgage and deed does not depend upon recording, but a dishonest person can execute another deed or mortgage to a person without knowledge of the unrecorded instruments.

In theory, the bond is the principal debt. Practically, the loan is based upon the appraised value of the security — the land. An individual borrower may be of independent means. Placing his name upon bond and mortgage leaves him open to a deficiency judgment. A mortgagor of means can place his entire fortune in jeopardy in this manner. Smart borrowers see to it that dummies, more apt to be closed corporations, become possessed of the property, negotiate the loan, execute the papers. There is nothing unconscionable in this. As pointed out, credit is not extended to the individual, but based upon the value of the property entirely.



Aero Materiel

SWEDEN'S SMALL HOUSE ANSWER

Many small houses in Sweden are financed by municipal governments at economic rates, and on easy terms. The land is in any one of several planned communities owned and controlled by the city. In addition the government provides the owner with the materials for building his own "prefabricated house" at a very low figure (having bought them in quantities by taking competitive bids from manufacturers which are subject to profit limitations). The results suggest that a similar system, adapted to American conditions, might well be adopted by some of our smaller cities as a practical solution of a pressing problem. — Ed.

BY LINTON R. WILSON

STOCKHOLM has recently encouraged its citizens to build their own homes, and the result has been far beyond expectations. The fruit of the city's activity in this sphere of building, the so-called garden cities of Stockholm, stands today as a monument of what wise communal insight into an important social aim can come to mean.

This communally inspired and directed housing activity is rich in experience, knowledge for further development, and from the point of view of its origin is especially interesting.

At the end of the last century and the beginning of the present, there was a great scarcity of dwelling facilities. There was much discussion in socially minded spheres as to the possibilities of meeting the difficult conditions which had arisen. Committees were chosen by the community, and the discussions waxed hot. In these conferences it was maintained that the ordinary type of dwell-

ing house, the so-called rentable caserne (apartment house) was subject to significant social and economic disadvantages and had contributed in no small way to the difficulties of procuring cheap land for dwellings. It was necessary, therefore, that the new housing policy should proceed on different lines. Intuition, investigation and understanding pointed to the small private house as the most desirable type of housing. The primary requisite for such a solution was the availability of cheap and suitable land. The city did not have this at its disposal then, but it began to buy. In 1904 the first property was purchased — Enskede — and it was soon followed by others. Now the city owns more than 5,000 acres of well-situated land, destined for urban development, principally for small houses.

Garden Cities Start. The authorities did not hesitate to put the purchased land into use and the following year



A two-story type of prefabricated house of wood, with variations, which is both economical and popular

Below. The whole family helps in the excavation, for the head of the house can contribute his labor in lieu of 10 per cent cash

Putting in the first floor joists. The prefabricated wooden walls are piled up at the right

One corner up, the next being poled into place



the plan for the garden city of Enskede was completed. To hasten the process of building, about 100 one- or more family houses were erected with subvention from the city in 1908-1909. After this the town built up quickly, and in 1911 the city felt justified in starting a new garden city, this time to the west — Appelviken.

Both these suburbs, which are the result of private enterprise on city owned land, have enjoyed increasing popularity. One has grown up after another. In the west Appelviken, Smedslätten and Ålsten adjoin each other, and in the south there is Enskeda — Skärpnäck.

The area laid out embraces over 600 acres, and is thus about half as large as the inner city of Stockholm. Within these garden cities there are built, or are being built, more than 2,800 dwellings of which 2,600 are one-family houses. At present, about 22,000 people live in these small-house communities. About 28 per cent of Stockholm's population is registered here.

Reasons for Success. The reason the garden cities became so popular is explained by the facts that (a) they have all the comforts the inner city has to offer — well-built and well-maintained streets, sewage lines, water, gas, and electricity; (b) they are served by cheap and comfortable communications, the street car lines having been extended into all the garden cities so that living there occasions no inconveniences of transportation; (c) they provide a home for real family life, making it possible for children and adults to enjoy the benefits of fresh air and open spaces; and finally, (d) the dwelling in the garden city is so much cheaper than a dwelling of comparable size in the city.

When the city began the policy of exploiting the idea of the garden city, it aimed at first to improve the conditions of that group of the population which suffered most from shortage in housing accommodations, and which, due to labor conditions, were most in need of wholesome surroundings, namely manual laborers. Enskede was built for the most part by workers. An investigation undertaken in 1914 showed that the first owners of the dwellings erected were about 62 per cent workers. At the time the investigation was undertaken a reduction had taken place in the number so that only about 48 per cent were workers, and later investigation in 1922 showed that

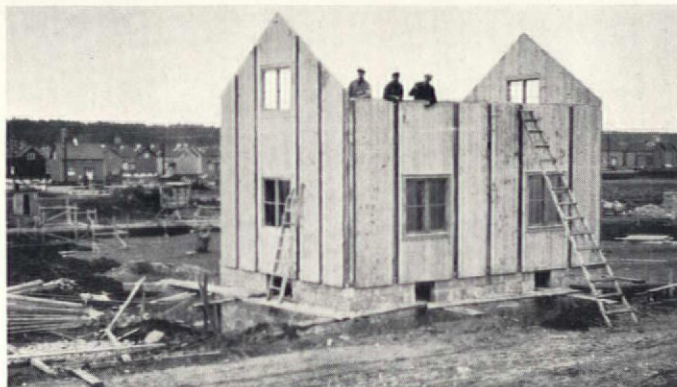
this percentage had fallen to 42 per cent. In the western garden cities, the figure was even lower, with about 18 per cent workers.

Cheaper Houses. This state of affairs, and the still existing conviction that the apartment caserne did not satisfy the demands from both hygienic and moral standards for a spacious enough cheap dwelling, led to a motion before the city council in 1924 to take measures for procuring cheaper ground, suitable for private houses. The framer of this motion showed that in the so-called "koloniträdgårdsområden" (allotment gardens for summer use) fairly large cottages had been built, and he asked why the city could not bring it about that cottages of this type but for permanent residence might be realized within certain bounds in the garden cities themselves. Furthermore, it was intimated in the motion that standardized material should be used wherever possible so as to bring down the building costs.

This motion resulted in action. The department of the city government which has charge of this work brought out a plan in 1926 to build 200 private houses in the sections of the garden cities specially laid out for the purpose. Because of the fact that a very small type was discussed at the beginning of the undertaking, these houses have come to be called "smastugor" (small cottages).

As the plans were then drawn, this type contains one room of about 215.2 sq. ft. and a kitchen of about 134.5 sq. ft. on the ground floor. The floor above may be finished if so desired with two smaller rooms of which one has about 139.9 sq. ft. area and the other about 96.8 sq. ft. The cellar is finished throughout. There is a laundry or wash room (which serves also as a bathroom), a furnace, and a food cellar. The building is supplied with all necessary conduits for sewage disposal, water, gas, electricity and central heating.

Cost and Financing. The estimated cost, including fitting, is about 9,400 kroner. Loans may be had on this cottage up to 90 per cent of the cost. To reach those who are unable to pay the remaining 10 per cent in cash, that is, about 1,000 kroner (about \$270 at normal exchange), an arrangement has been worked out so that the remaining 10 per cent may be pledged in the form of labor. The gain which has thus been won in eliminating the building



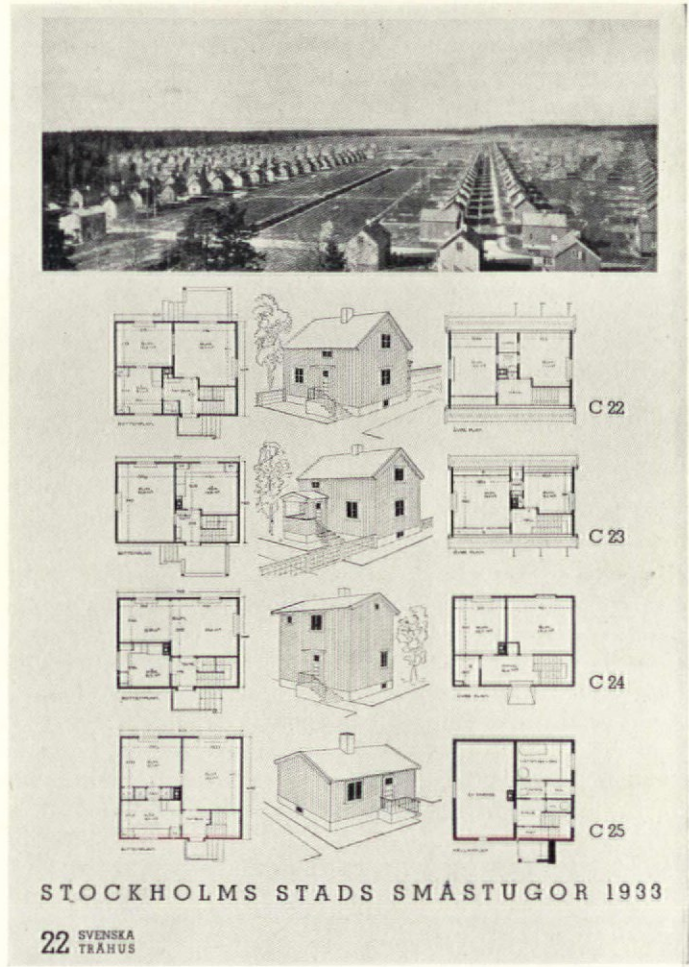
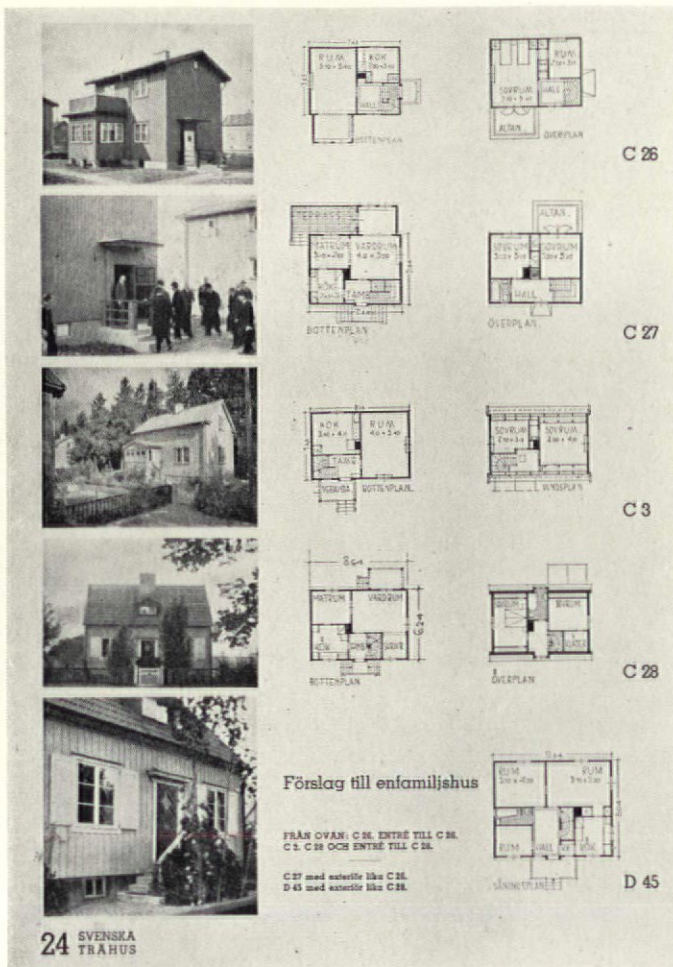
Top. A factory-made wall and window section is pushed into its position in the wall

Sides up ready for the roof and final wall battens

Setting a chimney block. These chimney units are cast all in one piece with five terra cotta flue linings

Bottom. A type of prefabricated cottage much in vogue at present because of its low cost. It is shown as C25 in the reproduction from the catalogue on page 298





FROM PAGES LIKE THESE

in Stockholm's cottage catalogue, the prospective home-builder may choose the house to suit his needs

expenses has been given outright to those who are willing to build their own house with their own hands.

The interest aroused and the desire for such a scheme has been particularly gratifying. When the plans were finished and announcements were made in the daily papers, about 800 persons expressed their desire to build such a house. With such a number of applicants for a small number of houses it was necessary to choose. Certain qualifications were therefore drawn up whereby persons were chosen who had steady work, preferably with some industry, or who had an income not less or more than certain sums, or who had skill in gardening, etc. Judging by the results achieved, a very good choice must have been made.

Taking into consideration the fact that the greatest number of prospective owners were not workmen experienced in the building trade, the material was standardized as much as possible. Aerated concrete has been used for the foundation, the walls are in wooden sections, and the fittings are as nearly ready to install as possible. On the initiative of the city even the chimney blocks have been standardized.

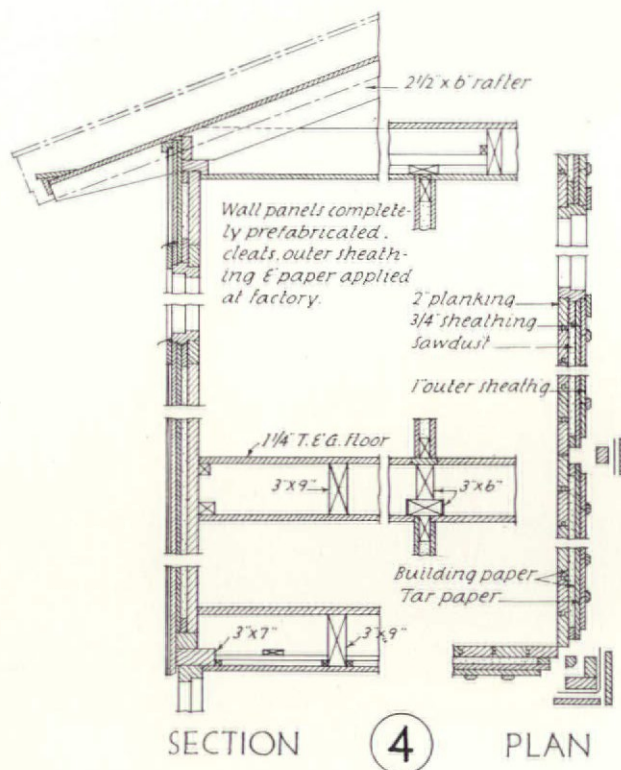
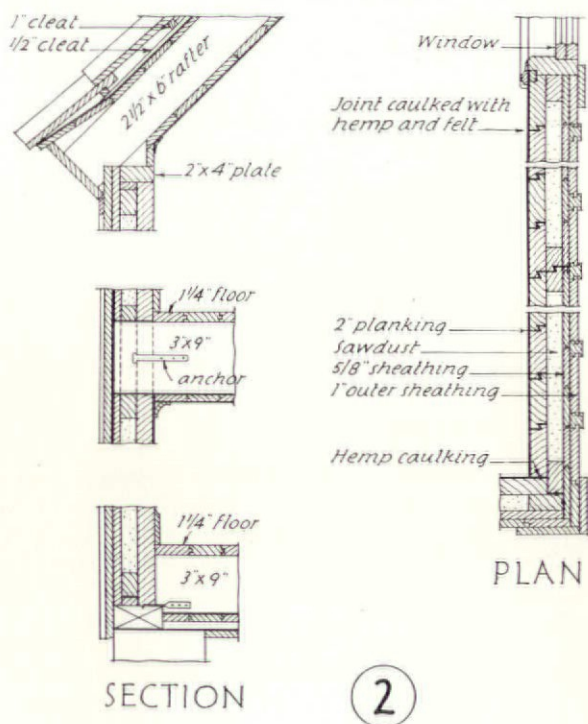
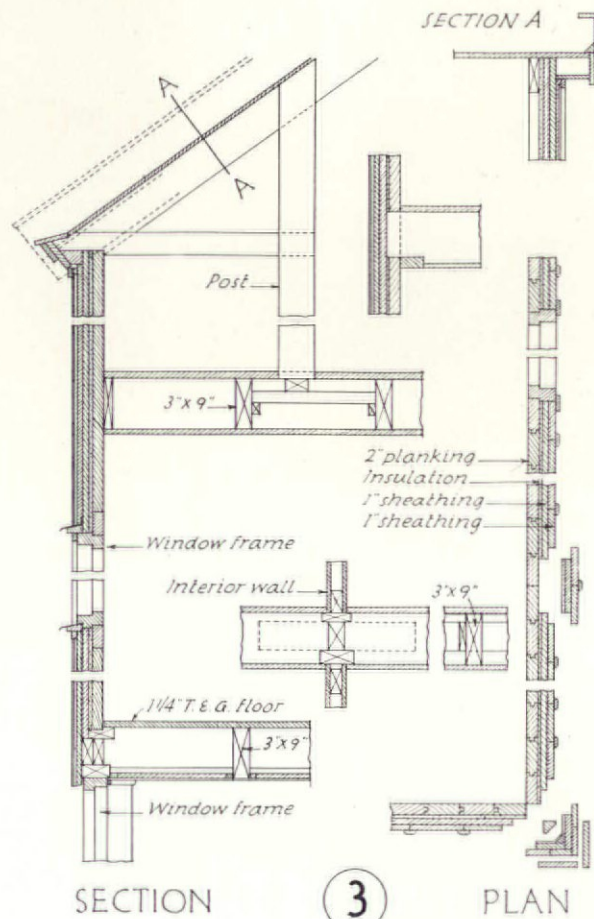
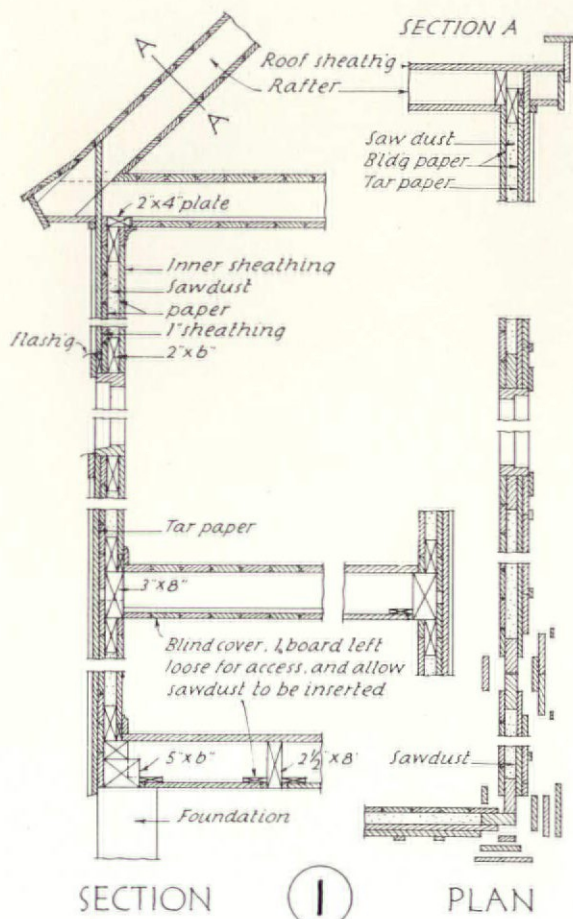
To lower the costs of the material even more, the city has also centralized the methods of supplying it to the builders. All material is bought by the city and delivered on trucks to the private builder at the site. This expedient

has reduced the cost by about 1,000 kroner. For directing and facilitating the building of this small house a special department has been created in the city administration. In this way business-like relations are maintained with the owner-builders. One section of this department is concerned with building credit. Payment is made as the building proceeds, by the city directly to the furnisher of the material. Nothing is required of the owner-builder in cash since he has pledged his work to the extent of 1,000 kroner. He has merely to give notice when he will need his material, and the city delivers it to his lot. He need have no large capital or financial backing. The city finances the whole undertaking.

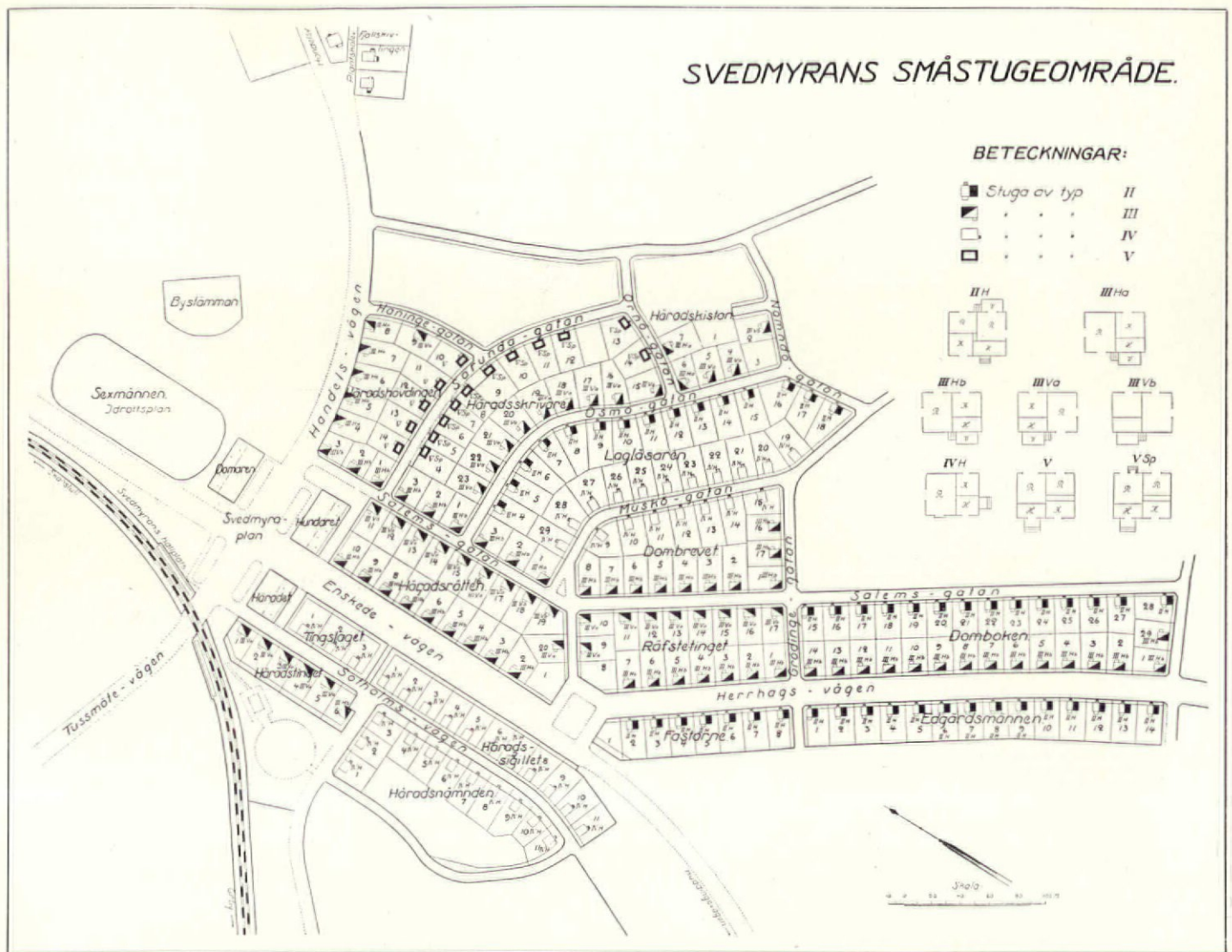
The city also supplies instruction and supervision. This is a most necessary item. Information is given on staking out the building, excavating, the erection of the wall sections and mounting the fittings.

When certain work cannot be performed by the owner and his friends, or must be done by professional crafts, the city has made arrangements to have this work done. One firm does the piping for gas, water, sewage; another the heating, and another the electrical installation. This also applies to glazing and roofing if necessary.

In this way it seems as if a very successful and at the same time socially beneficial grasp of the housing problem has been made. Great and small take part in the produc-



Construction sections of four systems showing development and simplification; (1) SYSTEM IBO, (2) SYSTEM KNIVSTA, (3) SYSTEM SESAM, (4) "STADENS" SYSTEM, which has been adopted by the city



Map of a planned community of low cost houses developed by the City of Stockholm. The various types of houses and their respective locations are shown on the map and in diagrammatic plan at the right

tion of the house and the labor itself leaves little to be desired in the matter of careful workmanship.

The yearly payment (covering interest, amortization, taxes, services) for the small cottages amounts to 880 crowns for the first five years and thereafter to about 770. The difference in the periods depends on the mortgages. Comparatively, an apartment of one room and kitchen in one of the cooperative houses is about 940 crowns. Heating is included in this it is true, but the rent can be estimated at 870 at the least, disregarding this.

For a proper judgment of the comparative housing costs, however, one should remember that the area of the living room in the small cottage is about 215.2 sq. ft. and

the kitchen about 134.5 sq. ft. Corresponding rooms in the cooperative apartment house are 182.9 and 96.8 respectively. In the small house there is a finished cellar and the possibility of finishing two additional rooms under the roof for an insignificant increase in cost.

The success of this enterprise has proved that a large step has been taken towards the goal which envisages a humanized habitation in a planned community for every citizen, even in the lowest income groups.

A full, illustrated description of this effort of Stockholm to provide small houses economically may be found in the book called, "Stockholms Småstugar," by Axel Dahlberg who is the head of the city department in charge of this work.

SOME STATISTICS ON SHORTAGE

ESTIMATES of the state of the nation's small houses, their number, kind, value, quality, and financial status, are necessarily in the nature of guesses, educated and otherwise, and they will continue to be such until the Real Property Inventory is completed. Then we may expect to have some comprehensive statistics about the physical facts of our houses. These must be related to equally reliable statistics regarding population trends, migration and decentralization, and income and employment curves, before the *effective demand* for small houses and housing developments can be determined accurately. To make demand effective (*i.e.*, possible in relation to the income of the tenant or owner) it may well be that new types of financing plans, with low interest rates and perhaps governmental participation, will be necessary.

Any number of agencies, national, municipal and industrial, have estimated in their several ways the shortage in small houses or in domiciles of all kinds. Some of the statistical results of these investigations, and the way in which they were carried on have been gathered together and are here presented in brief form.

WHAT is a shortage in dwellings? James S. Taylor of the Department of Commerce calls it "the extent to which present supply of dwellings of any type falls below a smooth long-term trend line." Mr. Taylor puts that shortage now at half a million homes, and present new building activity at 20 per cent of any low normal.

How these conclusions are reached is worth following. First, the Department of Commerce's Division of Building and Housing, of which Mr. Taylor is the head, sent out questionnaires to 1,500 local real estate boards, building and loan associations, and regional divisions of the Architects' Small House Service Bureau. Next, he collected reports on residential vacancies that had been made by the local real estate organizations of various cities. Then he collated the latest vital statistics on the national population: births, deaths, marriages, immigration and emigration, and the Department of Agriculture's reports on population migrations since the 1920 and 1930 censuses. Finally, he made secondary studies of trends of population growth and movement, drawing data from the documents of the President's Research Committee on Recent Social Trends (1933).

The questionnaire revealed that more persons than not had no prospect of moving into better living quarters "when recovery comes," that perhaps 20 per cent of the population canvassed was "doubling-up" because of curtailed incomes, that

"undoubling" will require more new houses (and with more space about them than before) than new apartments, and that the largest expected demand will be for homes costing \$5,000 or less. The local residential vacancy surveys made since January, 1932, showed that in 51 towns and cities the ratio of residential vacancies to total accommodations varies from 3 to 12.8 per cent, most of the cities showing small increases in total vacancies, especially in apartment houses. "The percentage of vacant single houses ranged from 1.6 to 9.6 per cent . . . decreases (in this class of vacancies) occurring in about one-fourth of the cities." The vital statistics put the national population at 24,352,000 families in 1920, and at 29,980,000 in 1930, a net increase of 563,000 families a year. From which it is not hard to account for an annual needed provision of something like 700,000 new homes.

THE NRA Survey conducted by the Division of Economic Research and Planning, estimated a shortage at the beginning of this year of 810,000 new family units. At \$2,000 apiece this survey proposed an expenditure in home building of \$4,532,000,000, to be carried on at the rate of \$200,000,000 a month, employing 2,000,000 persons, for the next several years. The now oft-quoted "800,000 new homes needed" figure attests the popularity of this estimate. The NRA estimate of the need was obtained through two analyses: (1) by "regarding the ratio of new residential dwelling units to the number of families during the highest consecutive five years of building in the '20's" as a "reasonable norm" for present building activities; (2) by investigating increase in urban families, estimating return of families to cities upon recovery, and numbering replacement of abandoned homes, homes burned and not replaced, obsolescence and substandard homes in 1929 to be replaced. A breakdown of the findings follows:

Increase in urban families, Apr. 1, 1930-Jan. 1, 1934 (from census estimates and Bureau of Agricultural Economics)	595,000 homes short
Families returned to cities (from Bureau of Agricultural Economics)	250,000 homes short
Replacement of homes abandoned since 1930 (from sample city reports, based on 1920-30 rate)	520,000 homes short
Homes burned and not replaced (from insurance companies' estimates)	100,000 homes short
Obsolescence (from sample city records, at rate of 1/2 per cent)	340,000 homes short

Vacancies in new building (allowing 5 per cent)
 ...90,000 homes short
 Substandard family units in 1929
 ...1,250,000 homes short

Deducting 1,085,000 units oversupplied in 1930 and constructed since 1930, and also 1929's substandard homes, from the total of all above items gives the total shortage of 800,000.

THE most complete recent tabulation of vacancies in houses in the U. S. (made by NRA research in December, 1933, from reports of many local real estate boards and similar organizations) estimates that there are over a million family-units vacant (525,000 due to oversupply in 1930, and 560,000 built since 1930 and unoccupied). The Bureau of Labor Statistics puts our 1930 surplusage of dwellings at 700,000, equivalent to one year's total residence construction at the 1921-29 rate. The same source states that families increased to the number of 757,112 and new homes for only 257,300, or one-third of them in the 3-year period 1930-32. The Department of Agriculture estimated in 1930 a population shift from cities to farms of 1,392,000 persons. But the 1930 Census enumerated something over 6 million families already on the farms. Forebodings come from the prospect of a nationalistic program of forced abandonment of perhaps 50 million farm acres of submarginal and exhausted lands (Secretary of Agriculture Wallace's "Course No. 1"). Assistant Secretary of Agriculture Tugwell adds, "Our farms even now are producing some 50 per cent more children than can be used there." Beyond this, stranded industrial groups of many sorts are creating both vacancies and shortages by their movements, to mention only the well-known case of the 200,000 unemployed bituminous coal miners who will never return to the mines (*Journal of Farm Economics*, January, 1934).

FROM 176 cities came reports early this year of local members of the National Association of Real Estate Boards on their home shortages. The Association sent this question to its member boards "How many houses would be built in your community in Spring of 1934 if first mortgage financing should become available?" No very large city was represented.* According to latest releases (*National Real Estate Journal*, February, 1934), only Madison, Wis., and Denver, Colo., have begun to absorb vacancies in residential units, the former claiming a third absorbed since May, 1933, the latter about

* Some cities attempting an estimate were:

	Homes		Homes
Toledo, O.	2,500	Madison, Wis.	100
Canton, O.	400	Racine, Wis.	100-150
Columbus, O.	200-300	Kenosha, Wis.	50-100
Omaha, Neb.	300	Ft. Worth, Tex.	1,000
Delaware Co., Pa.	1,000	Kansas City, Mo.	500
Uniontown, Pa.	500	Springfield, Mo.	700-1,000
Charlestown, W. Va.	200-300	Oakland, Calif.	1,000

an eighth since 1932, while a general statement without figures is given for absorption of vacancies in St. Louis. Retired President of the NAREB, W. C. Miller, says this is typical of the rest of the country (ib.).

A 1,350,000 home shortage at the end of 1933 is the figure stated by *Building Supply News*. This is based on an increase of 5,629,000 families from 1921 to 1930; an estimated fire loss of 25,000 dwellings annually, while demolition and obsolescence are taken to account for shortage of 350,000 more homes during 1930-34.

THE National Association of Lumber Manufacturers arrives even more confidently at the conclusion that shortage in housing is, and will be, chiefly shortage of low-priced houses. They say that 87 per cent of the families in the United States must live in homes costing per unit "from \$600 to \$11,000, with the great majority from \$1,000 to \$7,500. Nearly 23,000 bona fide home building prospects are found, and 21,523 farm buildings are needed. Shortage, according to this authority, is localized strongest in California, 4,880 prospects; Wisconsin, 1,572; New York, 1,461; Illinois, 1,356; Ohio, 1,325; Minnesota, 1,294 (January 1934 results of questionnaire to 7,000 retail building supply dealers). The lumbermen estimate 700,000 new homes are needed each year with normal population increase. They see also an especially acute shortage of farm structures due to a "back to the soil" movement. (*The American Lumberman*, July 8, 1933.)

Bureau of Labor Statistics, which gives the starting point for many surveys, shows that the average amount spent per family for building a roof over its head was highest in 1925, when it was \$4,464; in 1930 it was only \$3,705 (*Monthly Labor Review*, reporting building permits in several hundred cities).

Possibly typical of the attitude of real estate developers is the view of the Harmon National Real Estate Corporation of New York, which finds that low building costs have been boosting demand in the suburban real estate market. W. B. Harmon thinks 200,000 new low and moderate-priced units none too many for the country to build now.

A contractors' magazine goes several steps further in claiming that there is piled up today among the 30 million families of our population an actual demand for nearly one million new homes. Doubling-up is found for 4 million families, home shortage in 27 per cent of cities; and the NRA survey estimate of at least 800,000 units needed a year meets with enthusiastic approval.

Reports from several city surveys follow.

PHILADELPHIA, PA.

The Philadelphia Housing Association attributes a shelter shortage for about 70,000 of its 1,950,000 citizens, to slum clearance demolition since 1923.

In the last four years alone over 10 million sq. ft., valued at more than 56 million dollars, were cleared. But in 1933 only 484 families were provided with new homes, 3 per cent of the number provided in 1925, and 8 per cent of the estimated need. In terms of employment on dwelling construction work Philadelphia has on its hands 25,000 men out of work. The average sales price of houses dropped from \$8,400 in 1925 to \$5,400 last year. Ninety-eight per cent of the new living accommodations erected last year were in the form of one-family dwellings.

CLEVELAND, OHIO

Cleveland claims to be the home of the real property inventory idea: the 1931-32 analysis of the city's buildings resulting in the 1933 report "said to have had more effect on Cleveland's recovery than any other single endeavor." Instead of finding an enormous oversupply in family units, a 9 per cent vacancy was reported, covering both apartment houses and one-family dwellings. Vacancies were about six times as numerous in apartments as in single houses; 12,635 families were doubling up. Cleveland happens to be the one place in the country to date where PWA money is going into construction of single-family units. At Euclid about a dozen houses are now being built as part of a plan to provide lot owners with homes near their work. These cost \$3,697 to landowners, who pay about \$35 per month, on a 20-year amortization plan.

UTICA, N. Y.

For thirteen years the Utica (N. Y.) Housing Survey has made a very thorough canvass of residential vacancies, and has tabulated mortgage loans for home building (THE ARCHITECTURAL FORUM, March, 1934). The 1933 report shows 116 single-family houses and 1,083 apartments vacant, enough to accommodate 1,245 families or 4.8 per cent of the population, which has increased by 400 families since 1930.

AKRON, OHIO

Akron, Ohio, with 260,000 population, has 6.6 per cent of all classes of residence structures vacant, of which 3.6 per cent are vacant single-family houses. Here the survey was made by the local real estate board with the cooperation of the Post Office authorities.

DORCHESTER, MASS.

All the residential sections have been analyzed by a local real estate concern, which reported last month 10,881 buildings in 1934 against 10,851 in 1933; 22,510 apartments against 22,482; 899 vacancies (3.68 per cent) against 1,289 (5.51 per cent). These vacancies include 3,500 single-family homes. The real estate men consider these conditions a fair criterion for other local districts of Boston, and 10 per cent a normal vacancy for real estate there.

MILWAUKEE, WIS.

The Mayor's Housing Commission reported in September, 1933, after using 1930 census districts as units in a city-wide survey, 145,605 dwellings of all types, of which there were 11,282 vacant, or 7.7 per cent. Largest number of vacancies were in apartments and old row houses. Doubling up of 7,703 families, 11 per cent of the population was reported. Adjusting vacancies to extra families, the Commission predicts a serious housing shortage in two years, advocates building on outskirts to prevent rents from rising "out of all proportion to other living costs" and to save the city's poor from having to move into the worst quarters in the central wards.

WILMINGTON, DEL.

City and suburbs surveyed and reported December, 1932, by the Delaware Housing Commission, showed 1,986 dwellings vacant out of 27,148 and 93 per cent of these being offered for rent at less than \$30 per month. A vacancy rate of 5 per cent was found "just about sufficient to hold rents and prices on a reasonable basis. . . . The shortage of homes in the last few years with abnormally few vacancies has resulted in unduly high rents and sales prices;" 1,200 families doubling-up.

INDIANAPOLIS, IND.

The Chamber of Commerce made studies in 1932 on census tract base map to determine the cost of slums. Certain "black areas" were found to cost the city more than \$15 a year per capita. In these areas vacancies ran from 30 to 35 per cent with tendency among the poor to move into still poorer quarters when times became hard, thus aggravating vacancies and slum conditions at the same time.

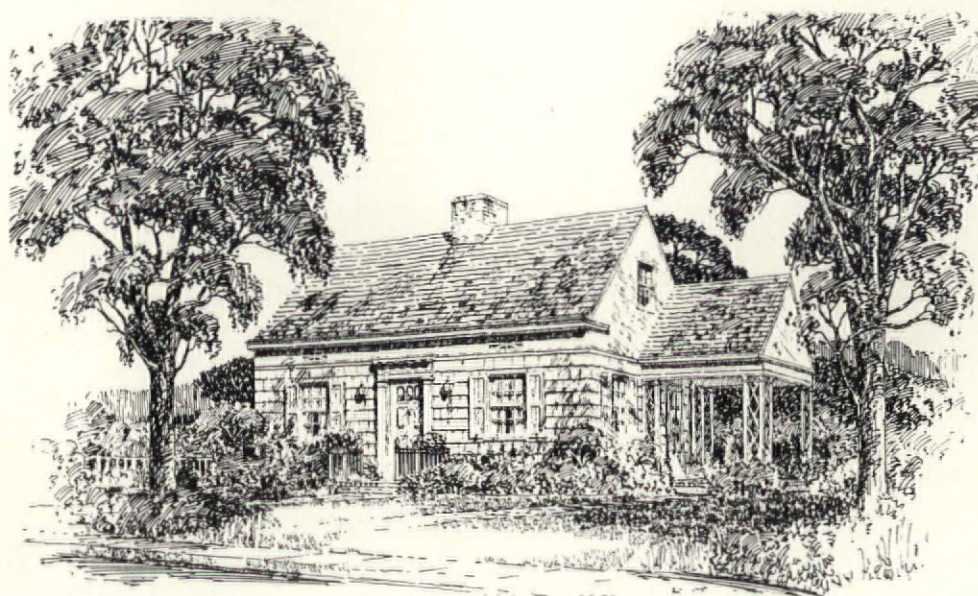
ILLINOIS

The Illinois State Housing Commission reported, April, 1933, on sixteen cities: Chicago, Aurora, Cicero, Elgin, Evanston, Oak Park, Bloomington, Danville, Decatur, East St. Louis, Moline, Peoria, Quimby, Rockford, Rock Island, Springfield. Quoting from the Illinois report: "In apartment and other housing units renting for less than \$40 a month in Chicago and adjacent cities, the vacancy percentage was high (17 per cent), but the percentage of doubling up also was high (12 per cent). Judged by this sample the actual surplus of housing space is approximately 5 per cent."

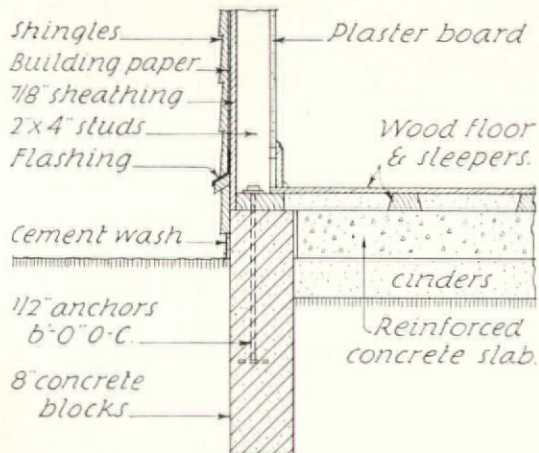
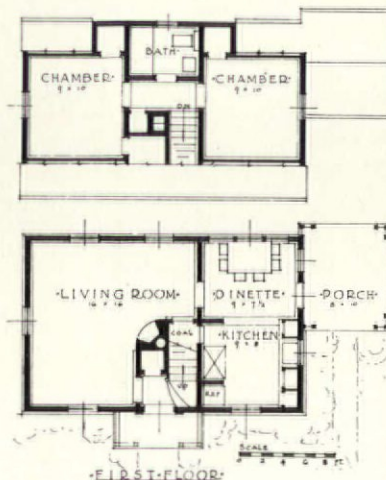
NEW YORK

The Land Utilization Committee under the direction of Arthur C. Holden has divided the city into districts to indicate present conditions and population shifts over a period of years. The number of substandard and obsolete dwellings is now being checked by CWA enumerators, in order to determine the net amount of genuine excess of housing accommodations in all five boroughs. No figures are being offered as authoritative until the Real Property Inventory is completed for this area.

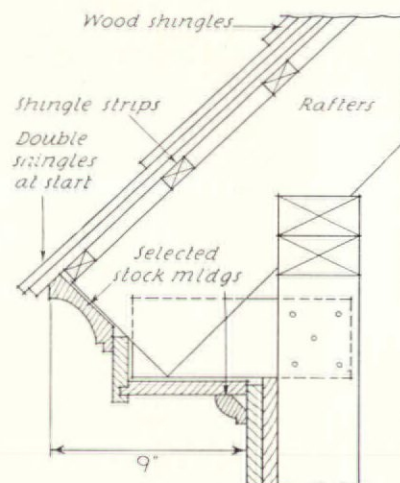
FOR LESS THAN THREE THOUSAND DOLLARS



A SMALL HOUSE
DESIGNED BY
RANDOLPH EVANS
ARCHITECT



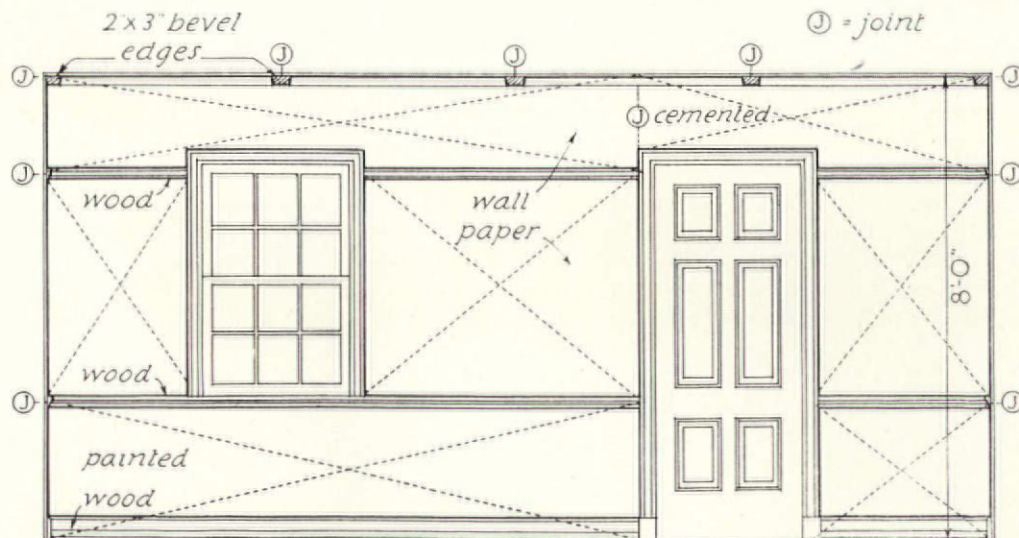
Savings in the cost of small houses of distinction are largely matters of ingenious detailing and careful selection of materials. In this house the cellar is eliminated, the heater is part of the kitchen range, and the foundation and ground floor are constructed as shown at the left. Below is a way of using wall-board that eliminates vertical joints by using horizontal moldings. The cornice, of stock moldings, is shown at the right. The house contains 7,000 cu. ft.



SILL SECTION

CORNICE SECTION

① = joint



ELEVATION

THE
ARCHITECTURAL
F O R U M
▼
BUILDING MONEY

A monthly section devoted to reporting
the news and activities of building finance,
real estate, management and construction

HARMON NATIONAL'S NEW DEVELOPMENT and some Harmon History	306
ICKES SELLS SOME PWA BONDS. The Treasury's New Admiral	308
NEW YORK'S MORTGAGE MESS. Rosenwald's Housing Suffers a Loss.	310
MONTGOMERY WARD'S RELOCATION. Pending Codes	311
CHARTS — Money, Costs, Activity	312
AN INCOME CREDIT SYSTEM For Home Financing	314
PROPERTY TAX LIMITATION LAWS: A Review	316
SHIFTS IN THE HOUSING SCENE. Vincent Astor's Offer	317
MODERNIZATION FUNDS FROM H.O.L.C. Walker Has a Plan	319
FEDERAL MORTGAGE BANK Outlined by its Proponents	320

\$1.00 DOWN, 25 CENTS A WEEK

were the terms that sold the first Harmon property. Not so with Harbour Green.

HERE and there throughout the land are some subdivisions notable for the quiet way in which they have been able to keep selling homes during the last few years. No roster of these would be complete without mention of Harbour Green, present pet subdivision of the mighty Harmon National Real Estate Corp.

Harbour Green is 50 minutes from Manhattan's Pennsylvania Station, located on a wooded section of Long Island's South Shore near Amityville and Massapequa. Since the division was opened in the summer of 1932, half a hundred homes have been sold, with 35 sales last year. Until the beginning of this year the financing plan required the owner to pay half the total cost of his home and lot. This amount was counted towards payment for the house, figured at cost, so that the payer acquired almost complete ownership. The Harmon corporation, making its sole profit in the land, acquired a 6 per cent first mortgage. Taxes, insurance and water were extra. The new plan allows the buyer to have an equity of but 25 per cent, giving a first mortgage for the remainder. Terms call for payment of 1 per cent of the total each month, which includes amortization, interest, taxes, insurance and water.

Ability to sell homes last summer on a 50 per cent cash basis testifies to the astuteness of the Harmon National Realty Corp. First of the Harmon developments was launched in December, 1887. The property: 200 lots along the Little Miami River near Branch Hill, Cincinnati suburb. The subdividers: William E. Harmon, 26; Brother Clifford B. Harmon and Uncle Charles E. Wood. The original capital was \$3,000, equally contributed.

Unique at the time was William E. Harmon's decision to sell lots on the installment plan. For each \$25 lot the buyer was asked to put \$1 down and pay 25 cents a week. There were no interest charges, no formal mortgages or notes involved. A free deed was given in case the buyer died before completing the payments. The advertisements proclaimed that all improvements were free, including "wooden sidewalks and natural grade streets."

Not only was this the first development using the installment plan; it was the first to use a full page newspaper display. Boomed the headlines: "WE ARE GIVING THE BEST CHANCE EVER OFFERED FOR A POOR MAN TO ACQUIRE GOOD PROPERTY." At first it seemed as if these advertisements

had failed. All through the morning and early afternoon the three partners waited in vain for customers. Then they adjourned for some beer and a discussion of what was wrong. When late in the afternoon they returned to the office they found a line of buyers waiting. Overlooked had been the fact that potential customers read the newspaper on the way to work in the morning, had no chance to respond until late in the day.



Harmon (right) and Friend

After Cincinnati, Harmon ventures were started in Columbus, Youngstown, Pittsburgh and Chicago. Then in 1898 William E. Harmon opened a New York office and started buying land in Brooklyn. His firm's capital was thereupon upped to \$50,000, from whence it has increased to several millions. Although all the Harmon stock is not held within the family, the company is a closed corporation and definite figures on it and its 35 subsidiaries are not available.*

*Famed in realty the Harmon name is also well known in charitable circles through the Harmon Foundation. Distinctly a family affair the elder Harmon willed its responsibilities to his children to interest them "in their responsibility to the social structure." It has spent over \$800,000 for playgrounds, lent \$600,000 to students, spent \$250,000 for vocational guidance and religious motion pictures, given away \$135,000 for awards to Negroes, the blind, farmers' wives, cartoonists, writers, social welfare and industrial leaders.

By 1928 Harmon National had sold \$200,000,000 worth of developed land, comprised of 50,000 lots, 270 developments. It had over 1,000 employees and had rung up a record of over \$1,253,000 worth of sales represented by 2,000 building lots sold in a day. This record was made on a Sunday, opening a development on which the salesmen had but three days in which to prepare. Then, 40 years after its foundation, the business passed into the hands of W. Burke Harmon, son of the founder. Tempted by the Florida land boom, he turned away, advertised the fact that better investments could be made. The collapse of realty in 1930 found him, at 38, well able to handle the large corporation's destiny. Seeing that there was no market for speculative land developments, he decided to build small homes that salaried men could buy.

In search of a site, he discovered Harbour Green, a beautiful and untouched part of the Biltmore Shores Developments which his company had bought from Movieman Fox and Pantsman Frankel after their ill-advised attempt to make of it a "Coral Gables of the North." In search of an architect who could design attractive small homes, he found young Randolph Evans, 32, a Southerner from Birmingham, who had designed some large buildings and homes and believed such training necessary for any architect who would design small homes (for a description of the business of small-home designing by Architect Evans see page 304). How good a selection this was was demonstrated last month when one of Mr. Evans' small homes for Harbour Green got him a Better Homes in America second place award (THE ARCHITECTURAL FORUM, March). In search of a marketer, Mr. Harmon uncovered Harry Bertell, a Swede who abhors high-pressure salesmanship.

When Harbour Green was opened in the summer of 1932 the public came, speeding out through Jamaica and Queens and shuddering at the rows upon rows of shiny box-like dwellings. This public however was not the speculative-mad public of the 20's, but a home seeking public. For the most part, the Harmon organization found it to be made up of solid, substantial young business and professional couples with a sprinkling of mothers and fathers whose children had married leaving too-large homes upon their hands.

This public was not lured by gaudy signboards or sleek salesmen. It knew that it wanted small, inexpensive homes and was attracted by the Harmon slogan: "HOMES FOR GENTLEFOLK OF LIMITED MEANS BUT UNLIMITED GOOD TASTE." Typical full-page Harmon advertisements in city newspapers and in a few national magazines described Harbour Green's attractions. The sales pamphlets were restrained and in good taste. No attempts other than these advertisements were made to obtain prospects. At Harbour

Green, visitors were greeted at the white and green "Architect's Cottage" and shown around. Lacking were armfuls of literature, impressive automobiles and offers of a free ride.

The roads of Harbour Green are macadam, occasionally forking to round some tree. Cut stone curbs replace sidewalks. Lawns are from 30 to 40 ft. deep. All garages are attached to the homes and the staggering of houses on adjacent streets gives an unusual impression of spaciousness to the quarter-acre plots. There are handball courts, a private beach club with boat anchorages. A good golf course is nearby and a school is only half a mile away.

The average home in this development, plus its quarter-acre lot with a frontage of 100 ft., plus kitchen, bathroom and heating equipment, sells from \$5,000 to \$7,000. The price of the lot is represented by around \$2,100 of that sum.



One of the "homes for gentlefolk with unlimited good taste" at Harbour Green. \$7,000 for house, lot and landscaping.

The Harmon corporation urges the buyer to work out his own ideas of a house with Architect Evans who usually manages to vary one of the wide choice of plans to fit the owner's tastes. For a \$100 deposit the owner's ideas will be sketched in rough form and an estimate of the cost given. Should this prove unsatisfactory, the money is refunded. If desired, an outside architect may be selected to do the plans. Only requirements are that the house must be colonial, must cost at least \$4,900, and the plans must be submitted to Architect Evans for his approval.

This season Harmon expects to continue the same sales plan. President Harmon, a polished gentleman and a fluent talker, feels that a tremendous demand for homes exists, and that it will be translated into orders as soon as reasonable terms can be offered. Last year, with business bad, Harbour Green's sales were good on a 50 per cent cash basis. This year, with business better and 75 per cent financing offered, it would seem that the development's full 200 homes may soon be sold and that Harmon National Realty will be turning elsewhere. But, points out Subdivider Harmon, "You are never entirely

through with any development. There's always something occurring demanding your attention to it."

NO PROSELYTING,

No Free Rent in Cincinnati's Temporary Management Code.

Tired of waiting for an office building code, the Building Owners and Managers Association of Cincinnati last month sponsored a trade practice agreement which was not to become effective until representatives of 90 per cent of the city's office space had signed it. It asked non-members as well as members to agree to avoid:

- 1) The giving of free rent to obtain a tenant or the renewal of a lease. The assumption of a lease in the building of another member of the industry.
- 2) The making of an excessive amount of alterations in order to secure a tenant. Excessive amount is defined as the cost in excess of the ordinary charges necessary to put the space in standard condition.
- 3) The paying of all or any part of a tenant's moving expense or other expenses incidental thereto. This does not apply to tenants being transferred from one space to another in the same building.
- 4) The rebating of rentals or the unjustified cancellation of arrears.
- 5) The general personal canvass, without discrimination, of the tenants of another member's building, endeavoring to cause tenants to vacate.

Cincinnati's code provided further "that within fifteen days after the adoption of this agreement each member of the industry shall file with the Secretary a complete set of accurate, annotated floor plans of the space in his building. On these shall be given the floor area and rental of each unit. The price that will be accepted for a group of units which might be rented as a single area shall also be shown.

"Any member of the industry may revise his rental schedule previously filed by filing a new schedule 60 days in advance of the change. The new schedule is to remain in effect until again revised by the same procedure."



A typical Harbour Green \$5,000 house



Like the others shown this house was designed by Harmon architect Randolph Evans. Cost about \$6,000.

ICKES MAKES MONEY

on PWA bonds, and brings an end to regional and State boards. An admiral comes to the Treasury.

PWA's first sale of municipal bonds — all at premiums — brought great satisfaction to Administrator Ickes last month, who labeled the transaction the "successful achievement of the theory of public works as practiced by PWA." Four of the five blocks offered, of \$737,000 par value, brought \$757,050.19. Aiming at higher prices, Ickes rejected the two bids on the fifth block.

In accordance with National Recovery Act provisions, the money received from the sale was dumped back into the Treasury. It will not, as many hoped, be re-used to finance additional public works.

Within two minutes after the 31 bids had been tabulated by PWA's Director of Finance Philip M. Benton, Ickes announced his decision to the assembled bidders in the auditorium of the Department of the Interior Building.

Said he:

"Today's sale establishes the broader conception of the public works theory of aiding employment to speed recovery. PWA brought these municipal bonds when private finance failed to function for qualified public works. Today's bids show that in the instances involved private sources are now awaking and willing to assume their proper function. Therefore, the investment was returned to the regular market and by the procedure followed the government secured the national benefits of the employment involved and also sold the bonds it bought for more than it paid for them."

The bonds sold, the high successful bidders, and the bids were as follows:

Bonds	Bid	Name of Bidder
\$125,000 Cedar Rapids, Iowa, 4% sewer bonds, due Jan. 1, 1937-41.	\$127,839.00	White Phillips Co., Davenport, Iowa.
\$250,000 Erie County, N. Y., 4% road and bridge bonds, due Oct. 15, 1935-36.	250,010.00	Salomon Brothers & Hutzler, New York.
\$200,000 Lynchburg, Va., 4% water supply bonds, due Nov. 1, 1936-50.	203,530.00	Brown, Goodwyn & Co., Washington, D. C.
\$162,000 Richmond Co., Ga., 4½% school bonds, due Jan. 1, 1935-60.	175,671.19	Chase National Bank of New York.
\$100,000 Bel Air, Md., 4% sewer bonds, due Oct. 15, 1934-50.	Rejected.	

Investment houses were warned before and after the sale that neither expressly nor by implication could they represent to prospective purchasers that bonds bought from PWA were guaranteed in any way by the U. S.

✚ Cities with shaky finances who had

hoped to get their bonds approved by PWA's finance department found some clue to their chances of success last month when a committee from Cleveland headed by powerful Senator Robert J. Bulkley and the city's complete roster of Representatives called on Ickes. Less than a month before, Cleveland had defaulted on \$6,600,000 maturities which had prompted the Administrator to hold up a \$8,990,000 sewer loan.

"You know," said Ickes to Bulkley, "that the act you passed, Senator, requires me to demand reasonable security for our loans. Is it reasonable security if the city defaults on its bonds?"

"We contend it is," snapped Bulkley, "We believe this situation is only temporary."

"It happens that I asked the President only the other day whether we could be more lenient on security," added Ickes. "Suppose a congressional investigation committee should ask us, in your case, if we got reasonable security? What could we say?"

"In all sincerity, I think you could say you got it," retorted Bulkley.

With Ickes still refusing to budge, Bulkley announced his intention of submitting an amendment to the next appropriations bill making bonds of Cleveland and other cities in similar predicaments acceptable as "reasonable security."

Nettled by criticism of his slow motion running of PWA, Ickes expressed a belief but did not promise that \$1,382,000,000 would go from public works into private pockets during 1934, reaching a peak rate of \$164,000,000 monthly in June.

With the same cold look he gives to money seekers Ickes studies PWA bond bids with his director of finance Philip M. Benton.

✚ With PWA's money all allotted, Administrator Ickes scrapped his organization of regional advisers and State advisory boards. He found jobs for five of his advisers as District Chairmen for the National Planning Board. Their duties: "to assist in the coordination of interstate and regional planning proposals and studies into a carefully considered longer range program."

Three newcomers to PWA were also given District Chairmen berths: Alfred Bettman of Cincinnati, J. C. Nichols of Kansas City, and Duncan McDuffie of San Francisco. The holdovers were George L. Radcliffe, Baltimore; Henry T. McIntosh, Atlanta; Charles N. Moderwell, Chicago; Vincent M. Miles, Fort Smith, Ark.; Marshall N. Dana of Portland, Ore. Four more are still to be appointed.

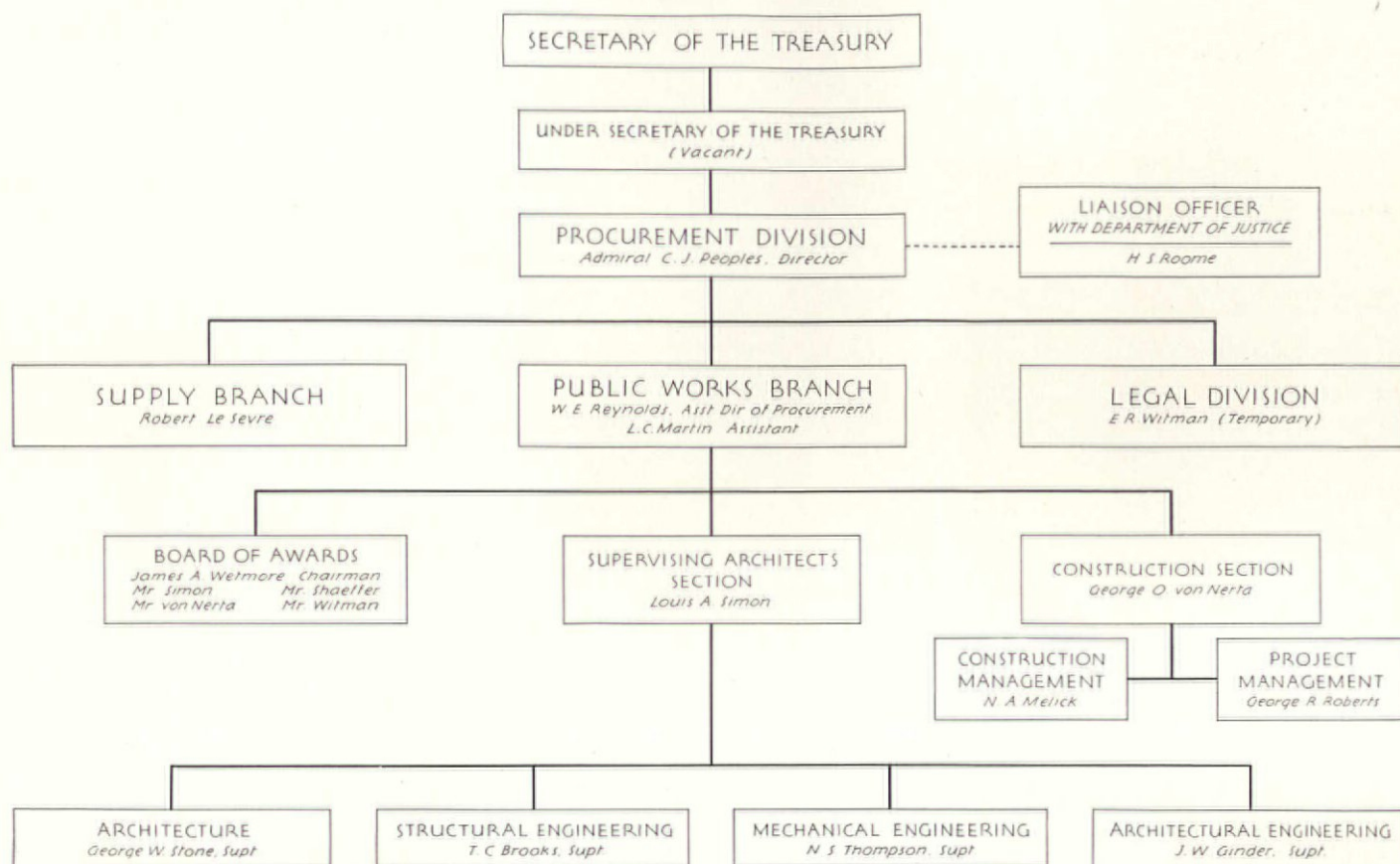
The National Planning Board, through its District Chairman, will attempt to link the activities of all State planning boards into one national plan, covering all types of land utilization and public works. Though no large sharer in the emergency activities of PWA, NPB may yet become a most significant set of initials in the New Deal.

✚ The rumored retirement of Assistant Secretary Robert from the Treasury Department materialized last month when he was transferred to the Bureau of Engraving & Printing and the Mint. To take his place, but not his title, was named Rear Admiral Christian Joy Peoples, the Navy's one time big supply buyer. He will head up a new procurement division which includes both public buildings and purchase of supplies. Emergency public building has been transferred to the Public Works Administration.

Born on an Iowa farm Admiral Peoples, is not an Annapolis graduate. He entered the Navy supply department in 1900 and has been in it ever since. He is credited with having developed the purchase system of the Navy. His last job was head of the Navy Supply Depot in Brooklyn.

Robert's removal was the signal for a complete shake-up in the Assistant Secre-





© Harris & Ewing

Treasury Admiral Peoples

tary's Office. Louis A. Simon, long the chief point of contact for private architects in the Supervising Architect's office, was named to succeed James A. Wetmore as Supervising Architect. Wetmore became chairman of the Board of Awards.

W. E. Reynolds remains as technical adviser, and L. C. Martin as assistant. Subdivision appointments include: Architecture, George W. Stone; structural engineering, T. C. Brooks; mechanical engineering, N. S. Thompson; architectural engineering, J. W. Ginder.

Construction Division: George O. von

Some old, some new names appear in the reorganized public building division of the Treasury Department. Notably absent is the name of L. W. Robert Jr. Conspicuously present as Supervising Architect is the name of an old friend of private architects, Louis A. Simon

Nerta, chief; Neal A. Mellick, construction management; George R. Roberts, project management.

Legal Staff: E. R. Whitman, chief; H. S. Roome, acquisition of sites.

Office Management: John H. Schaeffer.

Board of Awards: Wetmore, Simon, von Nerta, Schaeffer and Whitman.

One architect, two municipal finance experts were added to Major Carey Brown's Technical Board of Review. The architect was Robert E. Lee Taylor, member of the firm of Taylor and Fisher, architects. The experts were Clifford W. Ham and Carl H. Chatters of Chicago.

✚ That the finger of graft may never be pointed at PWA is one of the guiding principles of Ickes' administration of his \$3,300,000,000 corporation. To that end he has whittled down contractors' prices to the bone, has forced architects to accept less than standard fees, and has established the Cost of Construction Material Authority.

The last is one of his most notable achievements, for it brings together for the first time in the history of U.S. construction a complete picture of building material prices. Established less than two months ago it has already tabulated on 60,000 cards material and labor costs on every commodity that goes into public works projects, on every labor operation that is

performed in the erection of a building, in the laying of a road.

To direct the activities of this gigantic research organization Ickes plucked from the Division of Investigation, a 60-year-old Texas lumberman, who from the age of 14



© Harris & Ewing

Cost Finder Loney

has earned his living in the selling and distribution of building materials, Arch W. Loney. Starting as a mill hand in a Beaumont, Texas, lumber mill, Loney helped build his home town from a village of 5,000 to a city of 50,000 during its oil boom. Entering the building supply business for himself in 1905 he became president of the Construction Lumber Company, and passed therefrom to become one of New York's leading commission brokers for materials used in heavy construction.

Loney's men gathered their figures for PWA engineers in checking estimates, for its accounting and inspection divisions, for approving requisitions, for its investigation division in examining projects under construction. It gathered them for three cities in every State, from State Engineers, building exchanges, manufacturers, NRA code authorities, and labor trade councils.

To the construction industry the figures will not be available.

✦ There is no surer sign of approval than a repeat order. Such approval came last month to the homestead development in Dayton, Ohio, in the form of an additional loan of \$309,400 for 165 more homesteads. Many houses built by the homesteaders and their neighbors have already been completed with the first \$50,000 loan. (See THE ARCHITECTURAL FORUM Sept., 1933.)

Hand-picked homesteaders will populate the newest subsistence farm tracts staked out in Los Angeles County as a model for all future homestead projects. It was in his capacity of Secretary of the Interior, under which the Subsistence Homesteads Division operates, that Ickes made this announcement last month. Rurban Homes, Inc., the local management company, got a loan of \$408,000 from PWA to finance 140 units: 40 in San Fernando Valley, 100 in San Gabriel Valley. All are contiguous to employment areas, all are good farming. Homesteads will be sold on a 20-year amortization basis for from \$2,700 to \$3,000.

Coalminers in Granger, Iowa, are also getting a homestead colony. Since most miners live on part-time wages they will have ample time to plant and reap. About 50 homesteads will be built with the \$100,000 U. S. loan.

BONDHOLDERS' RELIEF

grows nearer in N. Y.'s mortgage company muddle.

THE nation-wide lid-lifting that followed last year's bank holiday brought to light few sorer situations than the guaranteed mortgage mess in New York State. Of the \$2,000,000,000 outstanding, more than \$1,000,000,000 was already in default against which guaranty companies had relatively negligible assets. Half a million certificate holders, 22,000 issues, and 30,000 pieces of property were involved.

Since it touched widows and orphans both parties scrambled to do something about it. The first thing done, the Shackno Act, brought great confusion, much injustice. It forced minority groups of bondholders to yield to majority wishes in reorganization plans. It gave tricksters an excellent chance to frighten naive investors into relinquishing their bonds for returns as low as 10 per cent on relatively good bonds.

Sympathetic Governor Lehman named lawyer George William Alger as commissioner to get to the bottom of the difficulty, to prepare remedies. Last month the Commissioner's staff had its remedy in legislative form, hoped to get it passed early in April. The investigators did not do what many had thought would be done: recommend criminal prosecution against certain mortgage company executives.

The bill provides for establishing two corporations: (1) Certificate Holders Corp., which with \$100,000,000 borrowed from RFC and \$10,000,000 subscribed by banks and insurance companies, would lend up to 25 per cent of certificate face value and a maximum of \$2,000 to any applicant, (2) Certificate Holders Emergency Corporation to act as trustee for all certificates, with full power to extend maturities, reduce interest, borrow to meet tax and interest arrears, repair and remodel buildings, reorganize the property and if necessary service it.

A Housing Corporation Reports a Loss of \$8,000.

LIMITED dividend corporation housing projects sometimes earn no dividends at all. For its fourth year of operation the late Julius Rosenwald's Negro apartment house in Chicago, Michigan Avenue Garden Apartments, showed its first net loss, \$8,000. For the first three years return on the \$1,500,000 capital stock dwindled from 4 to 3.7 to 0.9 per cent, and \$280,000 of the \$1,000,000 mortgage was amortized out of profits.

Last year rents averaged \$10.50 per month per room, a drop of 30 per cent from the original 1930 figures. Rent includes gas, electricity, refrigeration, and bonus certificates. Average occupancy for 1933 was 87 per cent; present occupancy 96 per cent. Bad debts amounted to 3½ per cent.

The building company's president Alfred K. Stern told directors at the annual meeting that "the least one may say is that on a basis of 1929 costs a continuous record of earnings has been shown on this building with a very conservative write-off for depreciation (3 per cent annually) and all other charges. This is a better showing than most of the largest industrial corporations have made during the depression. The experience of Michigan Avenue Gardens calls for the prompt action on the part of the Federal government to provide new housing for those who have not been reached by private capital."

Texas Swindler Finds Contractors Easy Prey.

IF the building business were good, Murfee N. Faulk of West Texas would not now be in a New York jail. For no contractor but one who was hungry for work would have paid any attention to a letter received by 2,000 contractors last month.

Unsigned, but on the stationery of ALBERT L. GOWDY, ARCHITECT AND ENGINEER, 19 West 34th Street, the multigraphed letter stated "plans and specifications for Croton Lakes School for Boys will be ready about April 1, and contractors desiring to bid must send a certified check for \$100 or cash with each application." About a dozen contractors sent in certified checks, a dozen more called at Gowdy's office. But one went to the State Board of Education to find out more about the school.

It developed that no such school was contemplated, that no such architect or engineer was registered in the State. The board of education reported its suspicions to Assistant Attorney General John F. X. McGohey, head of the State's racket bureau who dispatched Chief Investigator Thomas L. Ward to look in on Gowdy.

Finding no one in the architect's office, Investigator Ward seized all office papers, waited until Gowdy came in and arrested him.

The dapper, 34-year-old Texan admitted his name was Faulk, that "Croton Lakes School for Boys" would never exist anywhere except in his imagination. What he did not admit, but what is alleged to be true of him, is that he is wanted for grand larceny in Texas, for bigamy in New York. Two more charges will be filed against him: using the mails to defraud, and posing as an architect.

Outdoor Bowling Alleys Launched As New Fad.

IF Tom Thumb golf's successor this summer is not the "Drive-In" theater (THE ARCHITECTURAL FORUM, July) it may well be the outdoor bowling alley, now being promoted by the Portland Cement Association. The outdoor alley's inventor is one Roy L. Marsh of Little River, Fla., who says he intends to construct a string of such alleys throughout Florida and eventually throughout the U. S. Says Mr. Marsh: "Alleys could be built in the North, left to be covered with snow and ice during the winter, and when swept off for the summer's play, be ready without the slightest attention." A new type of binder for the cement not only makes a smooth surface possible, but prevents erosion, bane of previous attempts to build cement alleys. Little River's bowlers claim they can see no difference in their game on the outdoor alleys and are said to be delighted at being able to bowl out-of-doors either day or night.

WHOLESALE MOVING

and standardized architecture for Montgomery Ward's stores.

SITE pickers for Montgomery Ward & Co. have been on the go for the last thirteen months, will probably be just as busy for another thirteen. The reason: president Sewell Avery, one-time head of U. S. Gypsum, ordered a wholesale moving out of secondary locations for Ward stores into prime shopping centers. Last month Ward opened its 28th relocated store.

The relocation program is a direct result of too-rapid expansion of the retail store division. Started in 1926, it reached its peak in 1928, when stores were being opened at a rate of twelve to fifteen monthly. The leases, all made for five years, are now expiring. How many of its approximately 475 stores will get new addresses is not known.

The chain has also adopted a standard architectural style, worked out by Graham, Anderson, Probst & White as consulting architects. The new style, "chosen as being most adaptable to every part of the country from Maine to California" is early American, distinguished by two-

story bays and a sizable "W" emblazoned on a shield in the center of the front parapet. Buildings on newly acquired sites are either torn down or remodeled by local contractors.

Ward's merchandisers have defined the ideal store thus: corner location, 50 to 75 ft. front width, 140 ft. depth, three selling floors and one floor for stock. Where ground space permits, selling floors are larger and reduced to two in number. Where possible, two- or three-car garages are included in the building where customers may get free tire, battery, oil changing. Otherwise a service station is put up close at hand.

In the interior arrangement experience taught Ward what experience taught Woolworth—big counters with merchandise within easy reach and easy purchase of customers. Eliminating all sales-floor storage, Ward widened its aisles to permit rapid flow of buyer traffic.

How much the chain's relocation program will cost, director of the building program F. C. Wood would not say. Executives felt, however, that increased rentals and cost of new and altered construction would be more than crossed out by increased sales. Sales for the year ending January 31, 1934, were up to \$187,632,543 from \$176,488,690 for the preceding thirteen months.

CODE CHAPTERS

are still unsigned but headway is being made.

By the middle of last month it was hoped by most, expected by a few, and promised by none that a handful of chapters to the Construction Industry code would be signed by the President by April 1. Almost all had been agreed to by the parties to be governed; what remained to be done was getting code administrators' approval.

Actually only one complete chapter had received presidential endorsement, that for Painters, Paperhangers and Decorators. Part of Chapter 2 (for general contractors of all types) had been signed, but its most significant parts, subdivisions A, B, and C, providing individual regulation for building contractors, road builders, and heavy construction, were still unsigned.

Still pending also was the architects' chapter, in which the controversy is still going on over the right of the code to fix a 6 per cent minimum fee. NRA contends it is price fixing; the A. I. A. code drafters say it's not. At one time it was suggested that architects, being professional men, needed no code, and for a few days it looked as if they might withdraw altogether. But they were back again at the next meeting.

The Real Estate Brokers Code had only slightly better success. After having been endorsed by NAREB, the code administrator decided to decentralize the code authorities. NAREB readily agreed, but held out for only two provisions: (1) that wherever the local real estate board could establish itself as representative of all real estate interests, it should automatically become the local code authority; (2) that there should be no tampering with existing commissions.

Only a brief period away from approval also was the code for building owners and managers, except for apartment house operators who were wandering about between the hotel code and the code for commercial buildings.



In Kalamazoo, Mich., Ward decided to tear down the old building, above, and put up a new one, left. In this, as in other jobs of comparable size, Graham, Anderson, Probst & White prepare preliminary plans. Ward's men make working drawings.



They picked a good corner site and a building that could be remodeled in Kokomo, Ind. To make more spacious selling floors the basement was dropped two feet. Comparison with Kalamazoo will show how stores are standardized but are not of stock design.

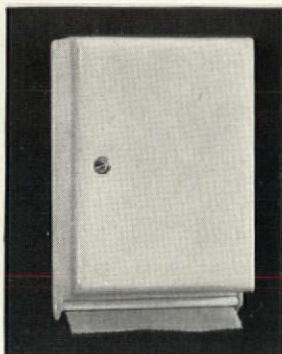
SPECIFICATIONS:

Onliwon Towel and Tissue Cabinets

OK



Onliwon White Enamel
Toilet and Towel Cabinets



IT'S part of an architect's job to "think of everything"—and it's far from an easy one. Yet you can make it so much easier by standardizing on A.P.W. Onliwon Towel and Tissue Cabinets for *all* your washroom specifications. Onliwon is a name your clients know and respect. They have become familiar with it through the every-day use of washrooms in office and public buildings, hotels, schools and colleges from coast to coast.

A.P.W. Onliwon Towel and Tissue Cabinets are neat in appearance. They are simple, foolproof and do their job efficiently—dispensing high quality towels and tissue in a way that prevents waste, unnecessary litter, and gives genuine health protection to every user. Onliwon Cabinets are always available in correct sizes, the right materials. Send today for a catalogue giving full details of all types—surface and recess, metal and solid porcelain. A.P.W. Paper Co., Albany, N. Y.

A.P.W.



A.P.W. PAPER CO., ALBANY, N. Y.
Please send me the latest and complete catalogue
of A.P.W. Cabinets and Fixtures.

Name.....

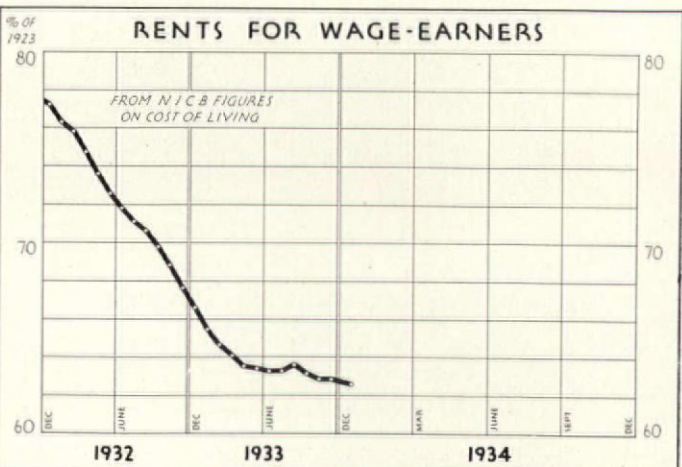
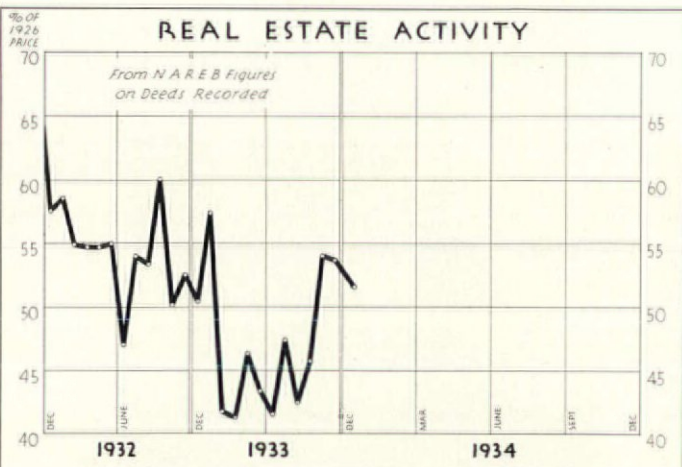
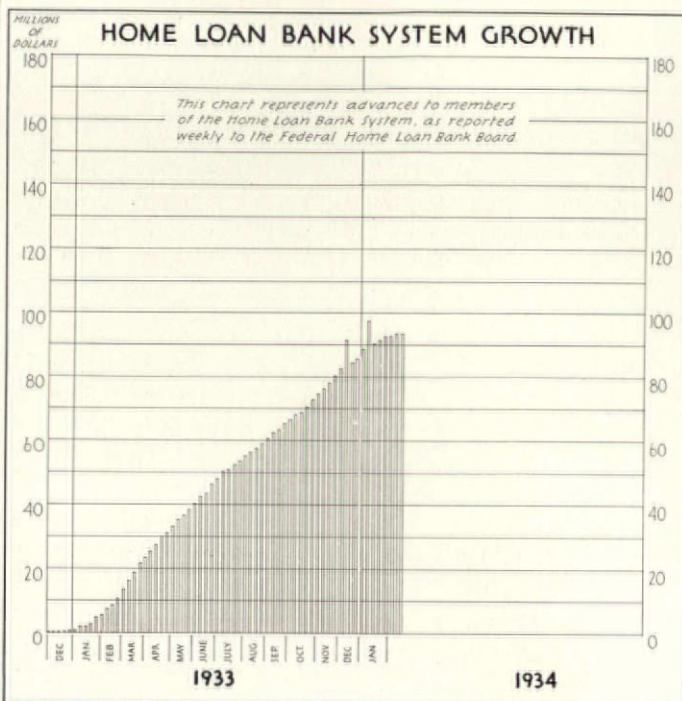
Address.....

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

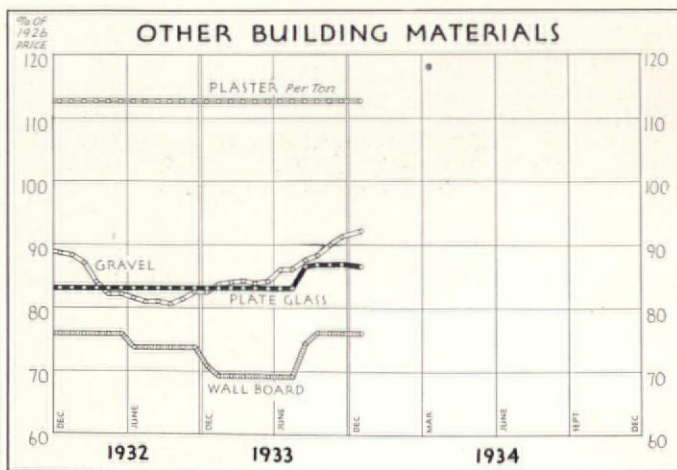
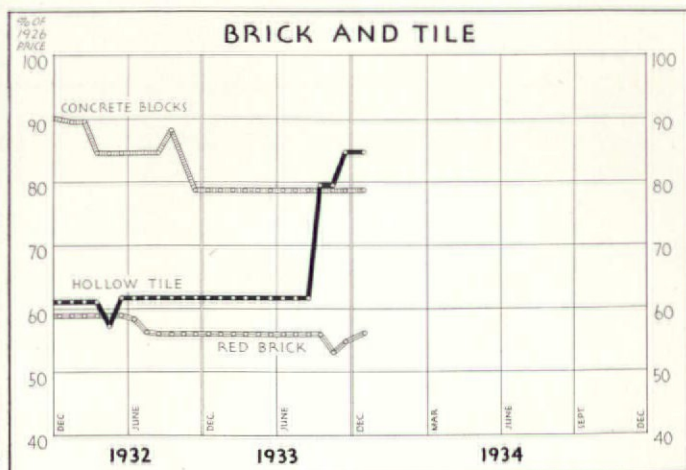
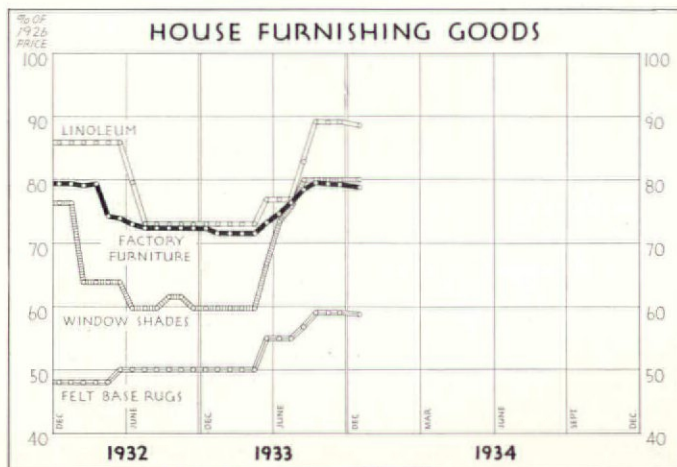
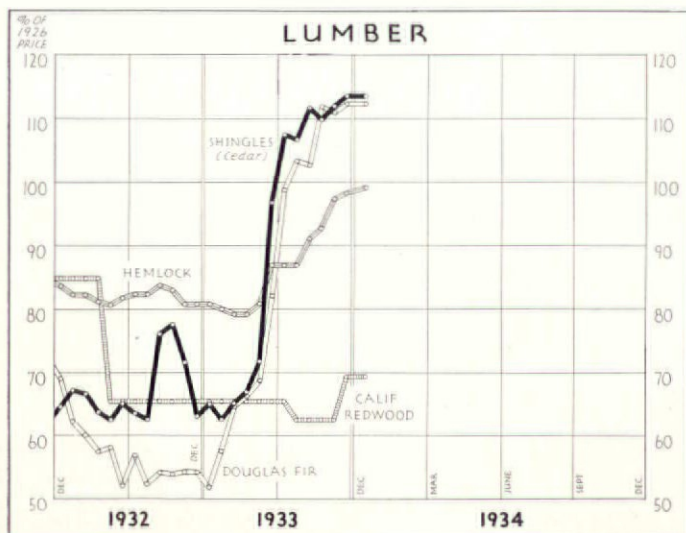
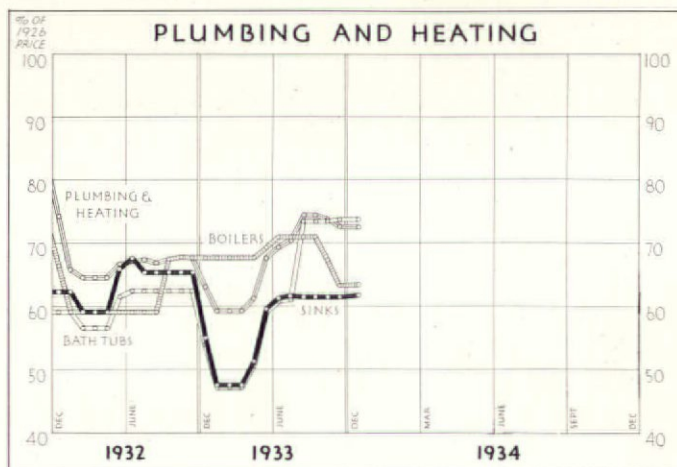
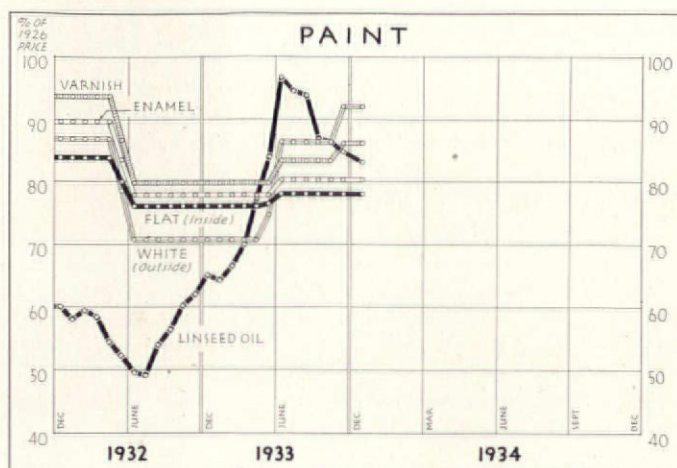
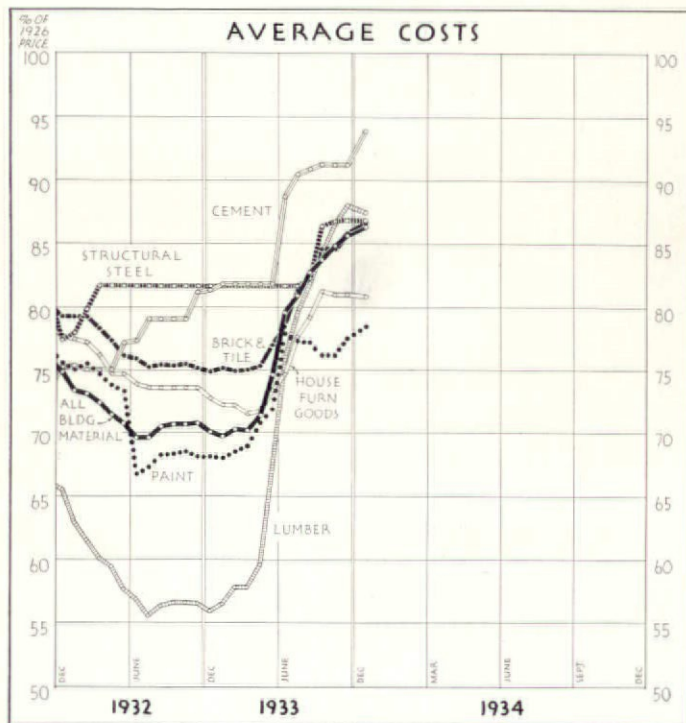


HOMES ARE COSTING

more than they did in 1926, but Home Loan Banks get ample funds for builders.



COST OF BUILDING



NO DEFAULTS DESPITE UNEMPLOYMENT

under the Stangle Income Credit System for Home Financing providing a 5-year moratorium for emergencies.

BY WILLIAM HULL STANGLE

LIKE every human being, every building has a relatively fixed life span. An insurance company levies a premium on a person insuring him in some form or other against loss of income through accident, disability or death. In life insurance that premium increases with the age of the individual because his life span is shortened and the risk increased. There is a case history of every insured individual. With the building the analogy holds.

The building has a life span; it depreciates with age and the risk of its inhabitation as to relative income increases with age. Its value as a residential structure to the owner also depreciates with age. Abnormal developments in science and appliances tend towards abnormal obsolescence. A life span on a building can be reasonably established. The treasury department recognizes this in income tax adjustments. But on mortgage loans increased premiums are not required to offset this shrinkage in life span.

The more sensible solution is to establish an amortization or periodic reduction in the lender's equity in the property and provide a factor of safety between depreciation and amortization to offset possible abnormal obsolescence.

The lender does and should protect himself to cope with the fluctuations in values and the possibility of abnormal obsolescence or accelerated depreciation. To do this the lender makes the loan on a percentage of the appraised value and should establish a fair amortization rate. The present 50-60 per cent average could be raised to 80 if the total amortization period were held to not

more than 50 per cent of the total life span.

There now enters another factor, which is the decreasing equity of the owner due to depreciation and obsolescence. There are two solutions to his problem; one is to write off his equity decrease or loss as rent for and in consideration of his occupancy of the property; the alternative is paying himself that amount, preserving the moneys as a sinking fund. It is simply a question of whether or not the owner wishes to pay himself a return on his investment in his own home.

Unfortunately this amortization system has not been carried out to the fullest extent. In its stead modified forms have been used. Two of the most used forms have been the time and call loans.

Since the factors affecting the ability of the owner or borrower to meet mortgage obligations depend upon his income, herewith is proposed the income credit system by which his income would be assured in so far as the requirements of the mortgage and taxes are concerned. With this assurance the borrower could obtain credit against income in addition to the security of the property asset.

The asset back of the loan in the monetary credit system is the physical value of the property. In the income credit system it is proposed that, since the ability to retire the loan is entirely a function of the home owner's income, the transaction should be in strict ratio to the average anticipated income, based upon the case history of the applicant.

It is *not* intended to abandon the mort-

gage against the physical property asset; rather it is planned to incorporate in the income credit system the good qualities of the monetary credit system with a twofold purpose: to improve the risk of the lender and to decrease the hardships of the borrower.

Further it is intended to build a reserve to provide assurance in each individual transaction that the principal and interest and the taxes will be met, thereby forestalling foreclosure should the income of the borrower be affected. Fundamentally, the income must be assured if credit is to be advanced against income.

To accomplish this income credit system it is proposed to do the following:

1. Establish a central mortgage bureau or a department within the State to function with the banking and the insurance departments.

2. Maintain in this central mortgage bureau all records pertaining to the case history of the property, such as: (a) land purchase and value; (b) land improvement and value; (c) community improvement and value; (d) cost of new building; (e) appraisal of old building; (f) record of old building; (g) cost of building improvements; (h) inflation and/or deflation influences; (i) depreciation; (j) obsolescence; (k) taxes; (l) liens; (m) transfers of title.

3. Establish a home owners' credit bureau, either by joint cooperation of the home loan institutions or brigaded with the central mortgage bureau. The latter has its advantages as will be shown.

4. Maintain in the home owner's credit bureau records pertaining to the case history of the borrower, such as: (a) age; (b) citizenship; (c) education; (d) experience; (e) field of activity; (f) employment record; (g) past income; (h) anticipated income; (i) family history, dependents, etc.; (j) references; (k) record as tenant; (l) mercantile credit record; (m) banking record; (n) previous property ownership.

Year	Loan	Amortization	Interest	Differential	Reserve	Co-Insurance
0	1,000	50	60			20
1	950	50	60			20
2	900	100	57	3	3	40
3	850	150	54	6	9	60
4	800	200	51	9	18	80
5	750	250	48	12	30	100
6	700	300	45	15	45	120
7	650	350	42	18	63	140
8	600	400	39	21	84	160
9	550	450	36	24	108	180
10	500	500	33	27	135	200
11	450	550	30	30	165	220
12	400	600	27	33	198	240
13	350	650	24	36	234	260
14	300	700	21	39	273	280
15	250	750	18	42	315	300

Table 1. Showing loan operation under Stangle plan, assuming \$1,000 loan, 6 per cent interest, 20-year amortization on 40-year life span residence, with co-insurance providing 5-year leeway in event of unemployment, sickness. The combined reserve and insurance will retire loan at end of 12th year and the reserve alone will retire it at the end of the 15th year.

Year	Loan	Amortization	Reserve	Depreciation	Increased Equity	Co-Insurance	Estate
0	1,000	50	0	25	25	20	0
1	950	50	0	25	25	10	35
2	900	100	3	50	50	20	73
3	850	150	9	75	75	30	114
4	800	200	18	100	100	40	158
5	750	250	30	125	125	50	205
6	700	300	45	150	150	60	255
7	650	350	63	175	175	70	308
8	600	400	84	200	200	80	364
9	550	450	108	225	225	90	423
10	500	500	135	250	250	100	485
11	450	550	165	275	275	110	550
12	400	600	198	300	300	120	618
13	350	650	234	325	325	130	689
14	300	700	273	350	350	140	763
15	250	750	315	375	375	150	840

Table 2. Yearly increase of estate through addition of reserve, increased equity, and co-insurance. Reserve is taken from Table 1. Increased equity is found by subtracting depreciation from amortization since amortization is twice the rate of depreciation (40-year life, 20-year amortization). At end of 15th year the loan outstanding may be retired from reserve.

5. Establish legal fees, financing charges and interest rates on all home ownership loans. This has been done in part in some States.

6. Establish safe margins for ratio of land to building values preventing top-heavy or unsound finance.

7. Establish safe ratio of total property value to average anticipated income preventing the borrower from entering into an obligation that is beyond the scale of his income.

8. Establish safe ratio of total loan value to average anticipated income again preventing the borrower from entering into an unwise obligation but also to assure these payments to the lender.*

The ratio of \$600 income required per \$1,000 loan is established as follows:

Amortization	\$50
Interest and reserve	60
	<hr/>
	110
Taxes	30
	<hr/>
	140
Co-insurance	20
	<hr/>
	160
Protective insurance	12
	<hr/>
	\$172 Total
\$140 represents 25% of the annual income.	
\$140 × 4 equals \$560 or income required per \$1,000 loan.	
	<hr/>
	\$560
Insurance required	32
	<hr/>
Surplus	8
	<hr/>
	\$600

9. Establish amortization rates to retire any loan within a maximum period not to exceed one-half or 50 per cent of the total life span of the building.

10. On resale, to establish amortization rates to retire the loan within a maximum

* The maximum annual carrying charges comprising the principal, interest and tax increments should not exceed 25 per cent of the annual income of the borrower.

period not to exceed 50 per cent of the total life span of the building, but deducting the past life of the building from the amortization period and not from the total life span.

11. Establish a reserve in each individual account by accumulating funds from the differential in interest payments. This to be accomplished by collecting a fixed sum per annum (all payments will be made monthly — like rent) and deducting the interest differential from this fixed sum for the reserve. The interest each year reduces by virtue of the amortization and by the same token the reserve differential increases each year. (See table 1.)

12. Provide for automatic payment of principal and interest increments in event of a partial or total cessation of income out of reserves.

13. Establish a system of increment payments on a monthly basis so that the owner will pay off his obligations like rent. This will prevent the development of carelessness on part of the owner and afford the lender an excellent and continual check on the owner's income conditions.

14. Establish a co-insurance at the rate of 2 per cent per annum on the initial loan value and for the life of the loan, insuring against failure to pay the principal and interest in the event of failure of income. This 2 per cent has been established on the basis that 6 per cent interest on \$1,000 for 5 years is \$300 and 2 per cent on \$1,000 for 15 years is \$300. Since the margin of time in the twenty year loan fifteen year payment plan is five years the \$300 fund will offset the interest charge for this period while the reserve will offset the principal due.

15. Establish a rebate or bonus to the owner out of co-insurance whereby one-half the premium is returned at the retiring of the loan if the payments on principal and interest, etc., have been promptly made.†

16. Provide for the payment of taxes in the event of partial or total loss of income.

In the event of death of the owner to provide for payment of taxes for not more than one year to allow the heir or heirs time to settle the estate without undue incumbrance.

17. Insure the property against any physical damage or liability according to the risks or hazards of the community. Practically all such forms of insurance are now written.

18. Establish a periodic inspection system of all property under a home loan to assure proper maintenance and prevent accelerated depreciation.

19. Insure the owner or borrower against loss of income through sickness, accident or death, all of which forms of insurance are now written at very nominal premium rates. However, there will be a demand for a special form of insurance to cover these conditions because the risk decreases in part with the amortization of the loan. In the event of death the entire loan would be automatically paid or retired and title given the heirs.

It must be definitely understood that any insurance referred to herein refers only to the assurance of income in so far as the mortgage loan requirements are concerned. Nothing is intended to convey the impression that a dole is recommended. Rather, it is intended to guaranty the payment of principal, interest and taxes and to prevent foreclosure.

From these established principles the risk of the lender is reduced and the protection of the owner or borrower greatly increased.

Therefore, with the combined asset of the physical property and the owner's income it is consistent to propose that homes be financed with a maximum of 80 per cent loan and with a ratio of not less than 20 per cent land value nor more than 80 per cent building value.

Any acceptable applicant owning his land free and clear should on this basis be able to purchase a new building erected on that plot without the additional immediate investment of principal; or, he should be able to buy land and building with not less than 20 per cent cash if he owns no land.

Although 80 per cent of the total value is advocated as the maximum loan value it is not intended that this should apply to all properties. The case history would indicate the quality of the building as to materials, workmanship and equipment as well as the relation of the plot and community on which the building would be built. From this qualification the property should be graded or classified. The percentage of loan allowed would then be decided from the classification. Naturally, a prospective home owner would appreciate the wisdom of a better classification, for he would gain in the amount loaned to him and in the savings in repairs and obsolescence.

† One of several economists to whom this plan was submitted advocates the return of the entire premium but it would seem advisable to adhere to the 50-50 plan until better historical records are available. It is almost certain the lending institutions must build some sort of reserve or revolving fund to provide against an abnormal condition.

Year	Amortization	Interest	Taxes	Carry. Charges	Co-Insurance	Pro. Ins.	Total Ins.	Total Outlay
1	50	60	30	140	20	12	32	172
2	100	120	60	280	40	24	64	344
3	150	180	90	420	60	36	96	516
4	200	240	120	560	80	48	128	688
5	250	300	150	700	100	60	160	860
6	300	360	180	840	120	72	192	1,032
7	350	420	210	980	140	84	224	1,204
8	400	480	240	1,120	160	96	256	1,376
9	450	540	270	1,260	180	108	288	1,548
10	500	600	300	1,400	200	120	320	1,720
11	550	660	320	1,540	220	132	352	1,892
12	600	720	360	1,680	240	144	384	2,064
13	650	780	390	1,820	260	156	416	2,236
14	700	840	420	1,960	280	168	448	2,408
15	750	900	450	2,100	300	180	480	2,580

Table 3. Complete table of expenditures under Stangle plan, including taxes, protective and co-insurance, totaling \$172 yearly for \$1,000 loan. Taxes assumed at 3 per cent, and protective insurance at \$12 per \$1,000, although lower rates may be obtained in many sections of the country. Taxes and protective insurance need not form a part of the payment plan, but experience dictates the advisability of including them. The payment set-up in Tables 1, 2 and 3, can be employed for all incomes on basis of \$600 yearly income for each \$1,000 loan. See text for explanation.

SHALL THE LAW PROVIDE

a limit beyond which taxes shall not rise? Some say yes, some no.

In eight States* real property tax limitations have been written into the law. In others real estate associations are looking for a more scientific system of assessing real estate. Reforms would center on a shift of certain large costs from local to State governments in order to put costs on the wider tax base. The most recent summarization** of what has actually been accomplished to date does not attempt to conceal the fact that there are two sides to the matter. It presents statements by 24 authorities on the subject; the editors are Glen Leet and Robert M. Paige. Herbert U. Nelson, Secretary of the National Association of Real Estate Boards, puts the case for tax limitation and Arthur Buck of New York's Institute of Public Administration the case against it.

The protagonists of these measures, Mr. Nelson says, find strength in a movement of this sort because "it arises as a naïve expression of popular will . . . [and recognizes] the point beyond which a given type of wealth cannot be asked to pay without an anti-social destruction of values." Others, according to Mr. Buck, see inherent weaknesses causing virtual failure of existing tax-limit laws, and grave abuses and evasions cropping up in local finance wherever such laws are passed. They report that a general tax limitation "cripples the revenue system which it aims to repair." That is, there is such a thing as too much limitation. The case of Ohio, where a constitutional tax limitation was voted late as 1933, is, strangely enough, cited in proof of both sides of the argument.

With the desire for "accurate and fair assessments of property for tax purposes" the stand-patters can have no quarrel. What they claim is that fluctuations in real values inevitably attend the passage from prosperity to depression, and that tax limiting is a naïve resort in times of distress, affording no all-time solution for local fiscal problems. The way out is conceived by the opponents of tax limits as "some form of direct supervision [by the State governments] if local governments are to avoid ruinous pitfalls in their future financing," and, "if the States are to maintain their own credit standing," possibly some form of direct supervision of them by the Federal Government.

On the other hand the fighters for tax limitation are making no little plans. They say "Our tax system is a shell—a hard shell, an XVIII Century cocoon. Inside this cocoon we have a very different economic order from the XVIII Century economic order. Now we must crack the shell of the old cocoon. . . . Radical re-making of the tax system has followed tax

limitation . . . giving substantial and definite relief to real estate . . . reflected in stiffening property values . . . creating a better balanced revenue system." School, street and road costs are the costs most effectively transferred from municipality to State, claims Mr. Nelson.

He cites:

Indiana's 1932 broad tax base of 1 per cent outside of municipalities.

Washington's 40-mill over-all check on the general property tax, premised on a 50 per cent valuation, the State taking over one-half of all costs of education and giving about one-half of the gasoline tax to the cities.

California's 1933 constitutional amendment limiting, in 1935, the share of State expenditures to be carried by taxes on realty and personalty to 25 per cent, and the State taking over school costs formerly borne by counties.

Michigan's 1½ per cent limitation adopted in 1932 with a view to realizing revenue from other sources than taxes on real estate, a retail sales tax having been substituted to provide 19 millions for State government expenses, and 17 millions for welfare and unemployment relief.

Ohio's pioneer tax-limiting constitutional amendment (1931) forcing legislation to provide other forms of revenue to relieve the burden on real estate.

Present centers of agitation for either statutory or constitutional amendment provisions limiting taxes on land are Illinois, where a 1 per cent over-all constitutional proposal is supported by civic groups; Iowa, with a 1½ per cent limitation bill pending to relieve real estate (after 50,000 State-wide petitions had cited that the tax burden on real estate exceeded in some instances total gross income); Rhode Island with a 1½ per cent proposed limitation.

While detractors of tax limitation claim that nothing has come of it to date, its sponsors estimate these gains: In Ohio, 45 million dollars relief to real estate and a higher percentage of tax collections on the lower amount levied; in West Virginia, 20 millions removed from the real estate tax; in Washington, 45 millions saved for real estate; in California, 40 millions relief in the common property tax per year; in Michigan, a Legislature said to favor further reductions on real estate; in Indiana, 45-50 millions cut from real estate taxes, by reducing the State's property levy from 29 to 15 cents per \$100.

Tax limitation enthusiasts frankly state that their measures do not so much result in tax reduction as tax spread. With "half a million governmental units [in the U. S.] many of them overlapping, sometimes six or eight of them levying on the same property," the proposed spread of real property levies is said to restore economic simplicity and equalize burdens. Chief advantage to local government seems to be shift of school costs to the State.

WITHOUT COMMENT

LaZink, William, architect, of West Hartford, Conn., suggesting a survey to link Connecticut manufacturing and transportation facilities with a proposed harbor to prevent diversion of shipping from New England to the St. Lawrence River: "It is a known fact that steamships leaving New London are in full speed within 30 minutes of sailing. This would make shipping ideal and has greater advantages than either New York or Boston. . . . Thirty-five years ago the State of New York was known as a great dairy and manufacturing State. New York was a great commercial, manufacturing and financial center. Today, alas, it is but a shell, and depleted of its greatness."

...

Eubank, Frank F., Detroit broker: "Today we are standing on gold and diamonds."

...

McKee, Joseph V., ex-mayor, "Very few realty investors ever think of carrying their holdings free from a mortgage debt of some kind. While this debt has always been a term debt, that is, to be paid in a stated number of years, nobody, practically, expects to pay the debt. The expectation is rather to be refinanced and to run along as eternal as the land itself."

...

Danilova, Alexandra, dancer, in St. Paul: "I was so glad to see wooden houses again! In Europe, everywhere except in Russia, the houses are all stone or brick, and seeing wooden houses again when we started this tour was like being in Russia again. And it is good to see wide open spaces again. . . . Here there is space between."

...

Lieber, Philip, president, of the U. S. Building and Loan League: "I hardly foresee placid acceptance of pre-fabricated cubicles."

...

Sullivan, Mark, journalist: "It is my conviction that if the present program of the Administration about cotton be carried on to its inevitable conclusion, that end would include comparative depopulation of large sections of the south-eastern States. To express it with intentional extremeness . . . I should say that cities like Atlanta, Greensboro and Charlotte would become mere gateways to great national parks, the parks to be made out of land taken out of cultivation by the Federal Government. To suggest that these cities would be reduced to the status of selling hot dogs and souvenirs to travelers in the national parks is frankly a little fantastic, yet it is no more fantastic than some processes which are actually under way."

*Illinois, Indiana, Iowa, Kansas, Michigan, Ohio, Washington, West Virginia.

** *Property Tax Limitation Laws*, Public Administration Service Publication No. 36, 75 cents.

TEMPORARILY REJECTED

are six approved projects which, like Cleveland, failed to qualify. Pittsburgh's mayor is irate and prejudices in New York abate.

RESCINDED last month was the PWA's approval of allotments for the Spence Estate Housing Corp., Brooklyn, \$2,025,000; the Hutchinson (Kan.) Suburban Housing Association, \$40,000; the Indianapolis Community Plan Committee, \$4,460,000; the Harms Park Housing Corp., Chicago, \$1,333,000; and for Atlanta's two projects, Techwood Inc., \$2,600,000, and the University Housing Corp., \$1,212,500. In each case the sponsors had failed to meet requirements as to equity.

"This does not mean," read the announcement, "that all these projects have been abandoned by the PWA." And Secretary Ickes made his attitude clear by transferring the funds formerly assigned to them to the Federal Emergency Housing Corp., which may take over the projects. Contracts signed with Neighborhood Gardens Inc., St. Louis, and with a limited dividend corporation in Altavista, Va., brought loans closed to a total of six such corporations to \$11,418,458. Six remaining projects are still "tentatively approved." Nineteen, including the \$12,000,000 Cleveland project from which promised funds were withdrawn in January, had originally been thus approved.

Still uncertain was the status of the PWEHC. For though Attorney General Homer S. Cummings had upheld the corporation's constitutionality he had added that its broad charter powers were in excess of those intended by the NRA. As a result, amendments to the charter will be filed shortly. But Comptroller-General J. R. McCarl, first to raise objections, can still refuse to honor the corporations' requisitions. Pseudopod of the PWEHC last month was Arthur W. DuBois, Cornell and Yale man widely experienced in construction work, who went to take charge of U. S. operations in Cleveland. Cleveland's citizens read in the papers that he had "built ten complete towns" near Warsaw, Poland, as well as a railway in Persia; had studied Vienna municipal housing problems at close range. His first act was to set a Real Estate Board committee to work making appraisals in Cleveland slum districts.

Pittsburgh Plan. Four major housing projects in Pittsburgh have been submitted to the PWA. The city has promised to tear down as many old houses as will be necessary to offset any space to be provided. In January 29 old buildings were razed. Last month Mayor William N. McNair was nettled by a letter from Housing Director Kohn stating: "Up to the present time, we are not satisfied with regard to any project

thus far submitted." The Mayor exclaimed that Mr. Kohn evidently did not understand what he had in mind. Later, the Mayor had the following run-in with CWA's Harry L. Hopkins, in Pittsburgh for a conference with welfare delegates for nine States:

Mayor: "Mr. Hopkins, we are giving \$30,000,000 to the Federal government each year. Will you tell me why you are penalizing this Democratic administration in Pittsburgh? We can't even get a loan of a million and a quarter for a housing project that is absolutely guaranteed. . . . I am going through the State and holler."

Hopkins: "Well I favor a democracy and I think you ought to go right ahead and holler. I do it myself every once in a while. I don't have a thing to do about your housing problem, Mr. Mayor. Have you seen Secretary Ickes about it?"

Mayor: "Yes, I spent a whole day with Ickes. He was cold as an iceberg."

Hopkins: "I think your facts are about 100 per cent wrong."

Mayor: "Well I am a lawyer and here are the facts. We want to build 200 houses. We want a loan from the Government. We can't get it because the Administration seems to think I am playing politics."

Refusing to pose for a picture with Mr. Hopkins, the Mayor rushed off to a garbage hearing.

Firetraps in New York. "The owners are financially unable at this time to complete

these violations which would average \$2,000 to \$3,000 a house, or about \$200,000,000 for the 67,000 properties involved. If he insists in his drastic order, we will dump the whole thing right in his lap."

Speaker of these words last month was Joseph Goldsmith, president of the Council of Real Estate Associations of Greater New York. The "he" with the lap in jeopardy was Commissioner of Tenements Langdon W. Post. The "drastic order" was a sudden termination of the moratorium which has permitted owners of old style tenements to violate fire and health rules. A fire toll of fifteen lives during the recent cold spell aroused public demonstrations against firetraps and motivated Commissioner Post.

The War Against Firetraps had a grand opening. Down to Cherry Street (in the heart of the lower East Side) drove the Commissioner and his staff. Behind him were two carloads of reporters and photographers. Commissioner Post quickly condemned two buildings while members of a large crowd shouted, "Come see my house." Always good copy for newspapers is the East Side's squalor, as vile today as ever it was. Reporters noted: dirt had accumulated 15 ft. in the bottom of an airshaft; no lights in hallways; three-ft. icicles hanging from the ceilings; when matches were struck a fine fog was revealed; there was no running water and the toilets wouldn't flush; rainy days the ceilings dripped sufficiently to extinguish candles; foul odors.

The second movement took the Commissioner to Harlem.* There he condemned five buildings on one block and promptly moved the occupants out. During the process some excitement was caused by a large rat leaping from a bureau drawer. Killed

*A recent bulletin of the Regional Plan of N. Y. delineating "blighted areas" fails to find slums in Harlem because conditions there do not supply an affirmative answer to one of three test questions: "Are land values decreasing?" "Are rents decreasing?" "Is the population decreasing?"



New York excitement. Uppermost in marchers' minds: housing quenches fire

by a CWA worker, it was found to be 10-in. long exclusive of tail. Many tenants had no stoves and were accustomed to remaining in bed throughout a cold spell.

In each building the gentlemen of the press had a field day interviewing tenants for human interest stories. General reaction of tenants was that they knew conditions were terrible but didn't want to move, that they were behind on rent so how could the landlord fix the building? Prize capture of the two raids as far as the newspapers were concerned was The Rev. Jacob Q. Moses who asserted that he was born in slavery in Charleston, expected to live to be 102 by following his father's recipe of drinking a pint of corn whenever obtainable. In bed



Underwood & Underwood

Vincent Astor

"to rest his feet a spell," the Reverend was not happy over moving. He said he had lived in those rooms for 22 years and that the building was "a little bit of heaven."

Commissioner Post followed up his visitations with a letter to all owners of the city's 3,000 abandoned and vacant tenements offering free demolition by CWA workers.

Bugs? Many metropolitan newspaper offices are equipped with bells which ring whenever there is a fire. To the uninitiated it seems strange that a roomful of reporters often will pay no heed to these alarms. Fires are common, generally not worth writing about. But last month they were news in New York, and headlines got bigger and bigger as total deaths from tenement fires grew in mid-March from fifteen to seventeen, and then one day to twenty-four. The public's interest in these fires might have been due to the fact that for one long week it had fed upon the phantasmagoria of Commissioner Post's slum junkets. But not to be so explained was interest in the matter held by the New York Board of Fire Underwriters, which knows its statistics. The board promptly requested Commissioner Post to notify it whenever he ordered a building vacated, and so the

Commissioner promised he would. It will have watchmen keep an eye on such structures.

The Commissioner ordered an investigation, and he was in turn investigated by the District Attorney. Subpoenaed for questioning on the possibility of incendiarism, he agreed to give over all his records on the fires, said he had no evidence of arson. But to reporters he admitted "It is perfectly logical to assume that some of them might have been caused by firebugs."

Landlord's Offer. A play by John Galsworthy which Vincent Astor has undoubtedly read deals with a narrow-minded rapscallion who owned rows of tenement houses in London's Soho district in an early industrial day. To Galsworthy's landlord, housing would have been reprehensible. But last month to land-rich Mr. Astor, who is fond of fishes, the Federal housing program seemed "tremendously worth while," and he said as much for Commissioner Post and the papers.

Of a serious mien, the youthful owner of many a good-sized chunk of Manhattan has given the property he inherited from his Grandfather John Jacob reputedly careful, conservative management. He prefers not to develop property showily, and is not often involved in big deals. He has modernized some of his holdings, however, on a large scale.

To the Tenement House Commissioner last month Mr. Astor bore a list of 38 lower East Side tenements which he said were not earning him three per cent on his investment and which he called "older than the hills."

"I told Commissioner Post that as far as my properties on the lower East Side are concerned, he can write his own ticket. I mean it!" said Landlord Astor. "I don't believe anyone has gotten rich off those properties. They stopped paying their way a long time ago. . . . Certainly I would be glad to get rid of them, and I think a 35 per cent capital loss is about reasonable."

"My desire is to do anything I can do within reason to clear these slums. . . . Certainly something must be done, and certainly under this program something can be done at last. Private capital is not in a position to do it, and it is now up to private individuals to cooperate with the Federal and municipal authorities in seeing that it is done."

Reports flew as to the actual price which Mr. Astor asked for his 38 tenements, and as to Commissioner Post's disposition toward the offer. The *Herald-Tribune* reported as an "amusing feature" its information that the Commissioner had refused to consider paying \$600,000 for the property, which is the assessed valuation of the land. Said the *Herald-Tribune*: "If the assessment is too high for the city it should be too high for private ownerships, was the opinion of real estate interests, who may carry the question of lower taxes for this section of the city to the Mayor and the Tax Department."

Realtor in Housing. Typical of what most real estate men think of housing is the following extract from the speech of W. C. Miller, delivered at the recent mid-winter convention of the National Association of Real Estate Boards at Miami when he retired from the presidency:

"We are of the belief that there are classes in this country which must be satisfied to inhabit housing which has grown obsolescent for the use of the more fortunate ones, just as there are those who of necessity drive second-hand cars and wear second-hand clothing. New housing should be the reward of industry and initiative and not a grant from a benevolent government."

Because of this attitude, many a housing enthusiast was surprised last month to learn Peter Grimm, president of the big Manhattan real estate firm of William A. White & Sons, had joined the Municipal Housing Authority. One of the first (and one of the few) real estate men to support housing,



Peter Grimm

Mr. Grimm will supervise the assemblage of property and advise on values. One reason Mr. Grimm's selection is popular among real estate men is that he is chairman of the Citizens Budget Committee, and will thus see to it that projects are sound and will not drain the municipal coffers.

Said Mr. Grimm, "Other countries where this scheme has been tried have failed too frequently because they were improperly set-up and came back upon the municipality. . . . Although the city may be deprived of taxables for a time, they gain in the long run. . . . When a new building is brought into a neighborhood it immediately forces up the values of others nearby. . . . This project can be a great thing. . . . Although \$25,000,000 [tentative PWA appropriation for New York] may seem like a huge sum, it is really very little when compared with the need existing."

MODERNIZATION FUNDS FROM HOLC

await passage of the Steagall Bill. Two rumors: one about 50 million dollars, the other about 50 billion.

CLAMORINGS for direct-to-owner home financing by the U. S. went unheeded last month as the Senate overwhelmingly passed and sent to the House an Administration measure to amend the Home Owners Loan Act. Following recommendations of the President contained in a special message March 1, the bill, drafted by Representative Steagall, called for: 1. guaranteeing the principal of HOLC bonds, 2. creation of a \$200,000,000 fund for financing repairs and remodeling, 3. rescinding the 3-year moratorium permitted in present HOLC financing; 4. permission to HOLC to trade in the open market on its bonds, 5. permission to HOLC to buy bonds from or to lend money to Federal Home Loan Banks; 6. permission to the Treasury to purchase income shares in Federal savings and loan associations.

Thus, through the expected signing of the Steagall Bill some time this month, the administration hoped to free funds for new construction without resorting to direct financing.

Besides the month's most limelighted colored man, Sylvester, from Columbus, Mississippi, who as the nation now knows, had the personal assistance of the President in having his mortgage re-financed by HOLC, relief had been supplied to 104,994 home owners with loans totaling \$295,307,271 by the first of last month. Though only a beginning, there were evidences of more freely flowing credit in scattered areas, indications, though not conclusive proof, that the government's activities were having the desired effect.

Another source of home building credit began to assume significance, if not great proportions, last month when the Federal Home Loan Bank Board released figures on the growth of Federal savings and loan associations. † On March 10, 186 had been organized. One state, Minnesota, had passed a law permitting building and loan associations to convert themselves into Federal associations, and another state, Iowa, had a similar measure pending before its legislature. Even with the tremendous growth of b. & l. membership* in the Federal Home Loan Bank System, some enthusiastic boosters foresaw the time when all building and loan associations would re-charter to become Federal savings and loan associations.

One unique result of the altered loan act

was a ruling by Ohio's Superintendent of Building & Loans Paul A. Warner that State associations might, if they wish, pay out HOLC bonds to their depositors in lieu of cash.

Rumors. So full is the capital of rumors about the next cards to come off the pack in the New Deal that only because of their sponsors' prominence was any credence given to two hazy schemes for home construction stimulation. One was Frank Comerford Walker's plan for a national renovation campaign; the other was the possibility of U. S. financing of mass produced houses.

Many Washington correspondents regard



Renovizer Walker

Frank Walker as the suavest of all the Roosevelt men. Certainly he is the least noisy. As executive secretary of the National Emergency Council (variously termed the Super-Cabinet and the Town Meeting) he has directed his efforts toward harmonizing all the emergency activities of the administration.

Until last November short, stocky, unassuming Frank Walker was treasurer of the Democratic National Committee, a job given to him by Roosevelt partly out of gratitude for a \$10,000 campaign contribution in 1930 when it was badly needed. With only secondary political experience he was rated one of Montana's ablest lawyers, and proved to be equally able as a money raiser.

With Winfield W. Riefler, who has no

title but is referred to as the Emergency Council's central coordinating statistician, Walker drafted a plan for house-to-house canvassing to stimulate home repair at cut rates. Whether canvassers would be CWA workers or volunteers the Walker-Riefler plan did not specify.

Owners would be told that if they repaired or modernized at once labor would be available at a 20 per cent reduction, that manufacturers would lop a percentage off list prices, that railroads would haul materials at reduced rates — and further, that if local financing were not forthcoming the U.S. would supply it from a \$50,000,000 fund.

Said correspondent Arthur Krock of the *New York Times*: "It is said to have an excellent chance of adoption by the President and the industrial interests concerned. There is opposition to the plan in the President's councils. But it seems to be more of a 'show me' variety than downright hostility."

Outside opinion regarded the plan as too complicated, and felt that the modernization element of the Steagall Bill would probably accomplish the same end.

Rumor No. 2. Even more nebulous was the reported interest of the President in a proposal to "facilitate and direct" the expenditure of from 30 to 50 billion dollars of private funds for mass production of small houses. From the White House little specific information was forthcoming except that four cabinet members (probably Ickes, Perkins, Roper and Wallace) were making a study, that a committee of fifteen was being assembled for further study.

The program would be long range, ten years at the least, with the government undertaking none of the financing. Since it would involve the establishment of a relatively new industry, the U. S. would probably lend its protection in several ways. Further developments await the naming of the committee of fifteen.

EARNINGS

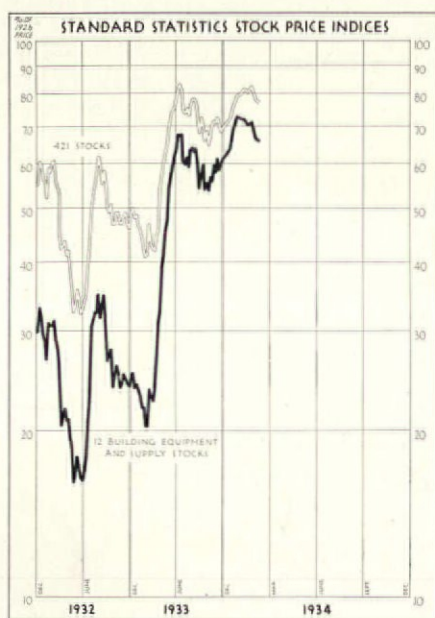
SURPRISING Wall Street, General Electric upped its dividend on common stock to 15 cents a quarter as against a 10-cent rate prevailing since the first quarter of 1932. Net earnings for 1933 were down to \$13,429,739 from \$14,404,110 in 1932. Though fourth quarter sales registered a gain of \$5,000,000 over the same period in 1932 yearly sales were \$136,637,258 as compared with \$147,162,291 for last year. January and February sales for 1934 were running 49 per cent ahead of the first two months' sales of 1933. Between March 1 and December 1, 1933, 8,363 employees were added, boosting the annual payroll by \$17,448,000.

†See THE ARCHITECTURAL FORUM, December, 1933, for description of Federal Savings and Loan Association set-up.
*2,250 members March 1.

Calling attention to a 7 per cent drop in construction contracts for 1933, Johns-Manville's president Lewis H. Brown was able to report a net profit of \$105,331 for the year as compared with \$2,680,873 loss for 1932. Sales gained \$826,066 over the preceding year, amounting to \$21,232,272. 1,200 more employees were on the payroll at the year end than on April 1, the low point.

Noting that elected officers receive no bonuses and less than 1 per cent of the total payroll, Westinghouse Electric & Manufacturing Company reported a net loss for 1933 of \$8,636,841 as compared with \$8,903,540 for 1932. Sales were \$68,188,353 against \$77,073,586.

A net loss of \$881,000 after depreciation and depletion of \$4,121,000 and other deductions was reported by American Radiator and Standard Sanitary Corp.



Still Dipping

This compares with net loss of \$5,990,986 in 1932 after depreciation and depletion of \$1,782,000. Publication of executive salaries by the Federal Trade Commission revealed that 1933 salaries for its three top executives, Clarence M. Woolley, Theodore Ahrens and Rolland J. Hamilton were way below figures for the heads of comparable companies, — \$24,000, \$24,000 and \$15,980 respectively. Principal personnel change — elevation of sales chief A. R. Herske to a vice presidency.

To stockholders Sears, Roebuck & Company's report of \$11,249,295 net income for 1933 as compared with a 1932 loss of \$2,543,651 was heartening. Also heartening to private architects, contractors and materialmen was the drop in sales of its home construction division, now being liquidated, from \$7,516,835 in 1932 to \$3,575,858 in 1933. On its books were \$44,128,708 mortgages, \$29,488,656 of which repre-

sented mortgages sold under repurchase contract, leaving \$14,641,051 against which was set up a reserve of \$4,247,399. During the year the company acquired \$900,000 HOLC bonds in exchange for mortgages about to default.

Certain-teed Products Corporation reported a net loss for 1933 of \$1,071,886 against \$1,600,077. Commented president George M. Brown, "The company continued in excellent financial condition with cash and short-term investments of \$1,939,572 and no bank loans."

U. S. MORTGAGE BANK

for all-time liquidity sought by NAREB, proposed by Walter Schmidt.

WHAT the Federal Home Loan Banks are doing for one-family residential mortgages, a Federal Mortgage Bank should do for commercial properties. This was the essence of a proposal submitted to the Committee on Banking and Currency of Congress by the National Association of Real Estate Boards. Drafted by NAREB's Walter Seton Schmidt, a bill will in all likelihood be submitted to this session of Congress.

For nearly 30 years one of Cincinnati's front-rank realtors, sponsor Schmidt is well able to express the needs of the nation's mortgagees. He was the founder and is president of Frederick A. Schmidt & Co., the Queen City's largest real estate company. He also heads Cincinnati Land Shares Co., Quality Homes, Inc., and is a director of the First National Bank. With the late Col. Wm. A. Starrett and architect Walter W. Ahlschlager he helped promote Cincinnati's biggest and second most famed building, the Carew Tower. Most famed is the new Cincinnati Union Terminal.

The bill provides that:

A corporation with \$500,000,000 capital supplied by the U. S. be organized as the Federal Mortgage Bank to issue bonds against mortgages in its possession up to 90% of the principal due, but not exceeding \$5,000,000,000. The U. S. would guarantee bond interest but not principal.

All first mortgage agencies and individuals "in good financial condition," with practices "sound and ethical," and who pay \$1,000 membership fee may use the bank's facilities.

Acceptable mortgages be limited to urban properties and divided into three classes: (1) 60 per cent amortized home mortgages on residence for 1-4 families, (2) 55 per cent unamortized mortgages on 1-4 family residences and low cost housing projects, (3) 50 per cent mortgages on all other urban properties. No mortgage which bears higher than 6 per cent interest or on which the placement fee is more than 5 per cent is discountable.

The bank shall reserve 5 per cent of the

principal due on all mortgages as a possible loss fund. Discounters will be allowed interest on the reserve at a rate of 1 per cent less than the rate on the mortgage itself. On maturity the 5 per cent reserve is returnable to the discounter.

The Federal Bank would inspect all property securing preferred mortgages. The bank could if it wished have all mortgages serviced by the originating agency.

Said sponsor Schmidt:

"There is little real long term financing money available in the country. The bank would provide a steady flow of credit, capable of expansion or contraction. Lending agencies now fearful of investing funds because of the necessity of maintaining an extraordinary liquidity would recognize that on sound and conservative mortgages they would have a place of sale and could, consequently, lend funds now unemployed.

"The Reconstruction Finance Corporation now will lend funds for new construction. These funds, however, are short term funds and must be repaid through heavy amortization in a very few years. Permanent real estate financing will not permit such heavy repayment of capital investment. These RFC funds could well be used during the construction period and upon completion the mortgage, if a sound one, would be salable to the Federal Mortgage Bank."

FIXTURES FOR LIQUOR

cost \$893.51 in Ohio where the State will outfit, operate its own stores.

EMPTY store fronts denote dead towns. But repeal meant one less empty front for most towns in eleven States of the U. S.

States like Ohio will rent and run their own stores, while landlords elsewhere will rent to private firms simply licensed by the State. In such regions building owners are rustling tenants by remodeling show windows, helping tenderfoot storekeepers select fixtures.

Announced last month was the average cost of equipping a State liquor store in Ohio, where taxpayers are in the liquor business for fair. Equipment for a 20 x 75 ft. store, including steel shelving, counters, cashier's cage, desks and racks, but excluding safes, cash registers and chairs, will cost \$893.51, the Ohio department of liquor control figured. Cash registers will be rented rather than purchased outright. Other Ohio economizing: a temperance society is being sought which will finance the printing of price lists, reverse sides of which will contain temperance messages.

Ohio's board dismissed the protests of wood materials interests that they instead of steel equipment interests should share in outfitting the stores by pointing out that the unit cost of steel shelving delivered and erected was \$11 as compared with wood at \$16.50.

ARCHITECT'S CLINIC

grows out of Cleveland's Renovizing Exhibition.

In Cleveland last month there opened and closed a renovizing campaign that was in many respects unlike any that have been run in 111 other cities and towns of the U. S. during the past four years. Its sponsors recognized that efforts to emotionalize people into spending money by waving the flag, with the inevitable slogan of "Buy Now," had fallen comparatively flat. In promoting the campaign, therefore, civic pride was definitely ruled out.

Organized by the Cleveland Chapter of the American Institute of Architects, the campaign had 38 sponsoring organizations, all with a definite sales stake in the outcome. In the Builders' Exchange Building, already established as a construction center through its permanent Building Arts Exhibit, the exposition opened March 5. From then until March 9, 1,500 inspected the show daily. Principal attraction was a "house of the future," completely furnished in modern style. Scattered over three floors were 150 different manufacturers' booths.

Throughout the day seminar courses were conducted on renovizing different types of buildings. Tuesday was given over to office buildings, stores, and apartments; Wednesday to industrial plants, hotels and restaurants; Thursday and Friday to homes.

In this much of Cleveland's show there was nothing unusual. But out of it grew three permanent activities that were decidedly different.

The Architectural Clinic. Chairmanned by architect Bloodgood Tuttle, who started the show itself, a committee of the A.I.A. chapter will conduct a clinic for all types of building problems, but principally for renovizing. A competent registered architect is available all day at the Building Arts Exhibit, ready for conferences. Questions he answers for nothing. But for \$10 an owner may retain the architect to make a survey of his building to determine roughly what should be done, what the cost would be. The owner may then hire the surveying architect or another Institute member of his own choosing to do the work at the regular fee.

Training School. For general and subcontractors, who are notably deficient in sales ability, classes are held every Monday night. From architects, company sales managers and others, they learn how to obtain leads, how to sell partial or complete modernizing jobs, how to do the work. Sessions are rotated by trades, plumbing one night, roofing another, etc. Seven weeks have convinced all of the value of the classes; they are to be continued indefinitely.

Dramatized Remodeling. Twice a week, architects demonstrate to hand-picked lively prospects how old houses may be converted into new. Draftsmen draw up

shabby or outmoded houses and the demonstrating architect works out before the assembled prospects a renovation solution.

Cleveland's annual "Clean Up-Paint Up" week, to be held in May, will this year be enlarged into a "Clean Up-Paint Up-Renovize" week. CWA workers are to canvass the city listing buildings requiring architectural surgery, and Institute architects will attempt to convince the owners by demonstration what should be done with them.

Though Cleveland's campaign was highly successful, Cleveland's bankers were not as enthusiastic about offering to lend money. Interviewed by the *Cleveland Plain Dealer's* real estate editor, James G. Monnett Jr., all were willing to say for print that they were ready to lend for remodeling, "where conditions warrant it."

63 CITIES

yield housing facts in Real Property Inventory.

"GOOD morning, madam. Have you any relatives living with you? Is your rent paid? How much does your husband earn?"

Five thousand CWA workers finished going from house to house, from apartment to apartment, in 63 cities last month asking these and a dozen other questions to learn the facts on U. S. housing. Answers were speedily dispatched to the Department of Commerce in Washington, there to be tabulated to form the first national Real Property Inventory ever taken. (See *THE ARCHITECTURAL FORUM*, February, 1934.)

Director of the Inventory is statistic-minded, 34-year-old Willard Thorp, head of the Bureau of Foreign and Domestic Commerce. Until his appointment he was professor of economics at Amherst, had been research director for New York's State Housing Board. For both the National Bureau of Economic Research, Inc., and the American Statistical Association he has been a frequent fact-finder. Under Thorp's direction, active charge of RPI



Director Thorp

will be in the hands of D. E. Casey.

More accurately termed a Residential Property Inventory, for no facts on commercial properties are being gathered, the study will give a detailed picture of occupancy, physical and financial condition of property. The tabulation will show types of construction, age of building, type of heating, presence of mechanical refrigeration, number of toilets, tubs, showers, type of utility service; workers will find out how long it takes people to get to work, and how they get there; whether they have vegetable gardens and automobiles.

House and apartment owners will tell how they acquired property, existing loan, outstanding indebtedness, holder of mortgage, financing cost, method of payment, loan status, and market value.

When completed, figures on physical condition will be placed at disposal of building material manufacturers to serve as guides to sales campaigns. Financial data will go to government and to private financial institutions.

Listing the hoped for results, Director Thorp stated: "The study will have value for Congress in planning legislation: to the Federal Home Loan Bank Board and other public and private credit agencies as a basis for more intelligent extension of credit to local communities in city planning and tax revision projects; to real estate dealers, builders and contractors in business planning.

"There has been much talk about giving aid to building. But when several persons get together to discuss the matter they quickly divide into two groups: those who argue that there is a housing shortage, and those who insist there is a surplus. Which of these groups is right? That is exactly what the Government hopes to find out, along with a good deal more, from the Real Property Inventory."

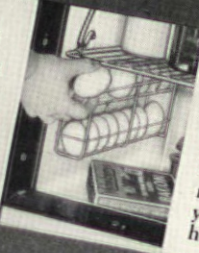
Country's Largest Savings Bank Cuts Its Interest Rate 1/2 Per Cent.

NEW YORK's Bowery Savings Bank, the country's largest, tempted unwanted big depositors to withdraw their money last month by clipping the interest rate on deposits over \$1,000 from 3 to 2½ per cent. Balances under that figure will still get 3. Though other large New York banks considered doing likewise, all postponed action until the end of the next quarter. Bowery's reason was obvious: U. S. and sound municipal bonds have been bid up so briskly that they are yielding little more than 3 per cent. With revenues down, paying interest on large deposits of individuals and firms which are glad to take advantage of a 3 per cent free ride until other investments pick up, has become annoying.

In real estate circles up sprang a rumor that savings banks would make 4 per cent money available for real estate borrowers. It died soon after when bankers let it be known that no such policy was contemplated.



IMPROVED DOOR LATCH
Opens at a touch when hands are full—closes easily and firmly. Sure in action.



EGG BASKET
Sixteen egg capacity. Saves breakage and shows how many eggs you have on hand.



BUTTER AND CHEESE RACK
Convenient for keeping packages of butter and cheese at the right temperature.



EASY SLIDING ICE TRAYS
A tray of cubes slide out easily. A new type tray shelf makes this possible.



EXTRA CONVENIENCES AND EXTRA VALUE in the Norge

Hundreds of thousands of users have selected Rollator Refrigeration on the basis of comparison!

NORGE owners report "savings up to \$11 a month and years of excellent refrigeration service." And today's new Norge is an even greater value than ever before. The famous Rollator cold-making mechanism is extra powered, with a surplus ability to meet every emergency and for added years of usefulness. New features, standard in lead-

ing models, such as the light-touch, positive-action door latch, shelves that can be adjusted for extra storage capacity, easy sliding ice trays and many others make the Norge an essential, modern home convenience.

The handsome modern cabinet is a style note for any decorative scheme and there are sizes for every

dwelling requirement, from the kitchenette apartment up.

Before you specify or install any refrigerator investigate the reasons for owner enthusiasm... See the Norge.

NORGE ROLLATOR REFRIGERATION

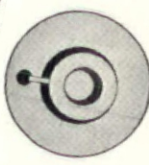
THE ROLLATOR • Smooth, easy rolling power instead of the hurried back-and-forth action of the ordinary refrigerator mechanism. Result—more cooling power for the current used and a mechanism that actually improves with use. Only Norge has the Rollator.

ELECTRIC WASHERS

BROILATOR STOVES

AEROLATOR AIR CONDITIONERS

NORGE CORPORATION
Division of Borg-Warner Corporation
606-670 E. Woodbridge St., Detroit, Mich.



NORGE
Rollator refrigeration

Armstrong's NEW LINOTILE

gives you
6 big
advantages
!



*Corridor of
the Citizens
& Southern
National Bank,
Atlanta, with a dis-
tinctive, dignified floor
of Armstrong's Linotile.*

- A heavy gauge resilient tile floor
- Unlimited design and color effects
- Greater resistance to indentation
- Greater durability
- Greater ease of installation and repair
- A mirror-like, dirt-resistant surface



WHERE traffic is heaviest and wear is greatest — that's where Armstrong's Linotile excels. Over a period of years this dependable tile floor has earned an enviable reputation for beauty and duty.

Now, Armstrong offers an *even finer . . . more serviceable* Linotile. It's **NEW LINOTILE!** Improvements in manufacturing methods have further increased its durability . . . produced a mirror-like surface that repels dirt . . . given it *twice* the resistance to indentation of heavy battleship linoleum.



Other advantages include complete freedom of design, underfoot comfort, quiet, non-slipperiness, sanitation, low maintenance cost, and ease of repair. Investigate New Linotile! You'll get a new conception of the beauty, wearing qualities, and greater economy available today in a modern resilient tile floor! Prices? We *invite* comparison!

Let us send you full information. Also names of Linotile contractors in your community. Armstrong Cork Co., Floor Division, 1203 State Street, Lancaster, Penna.

*Perhaps you have walked
on some of these*

LINOTILE FLOORS

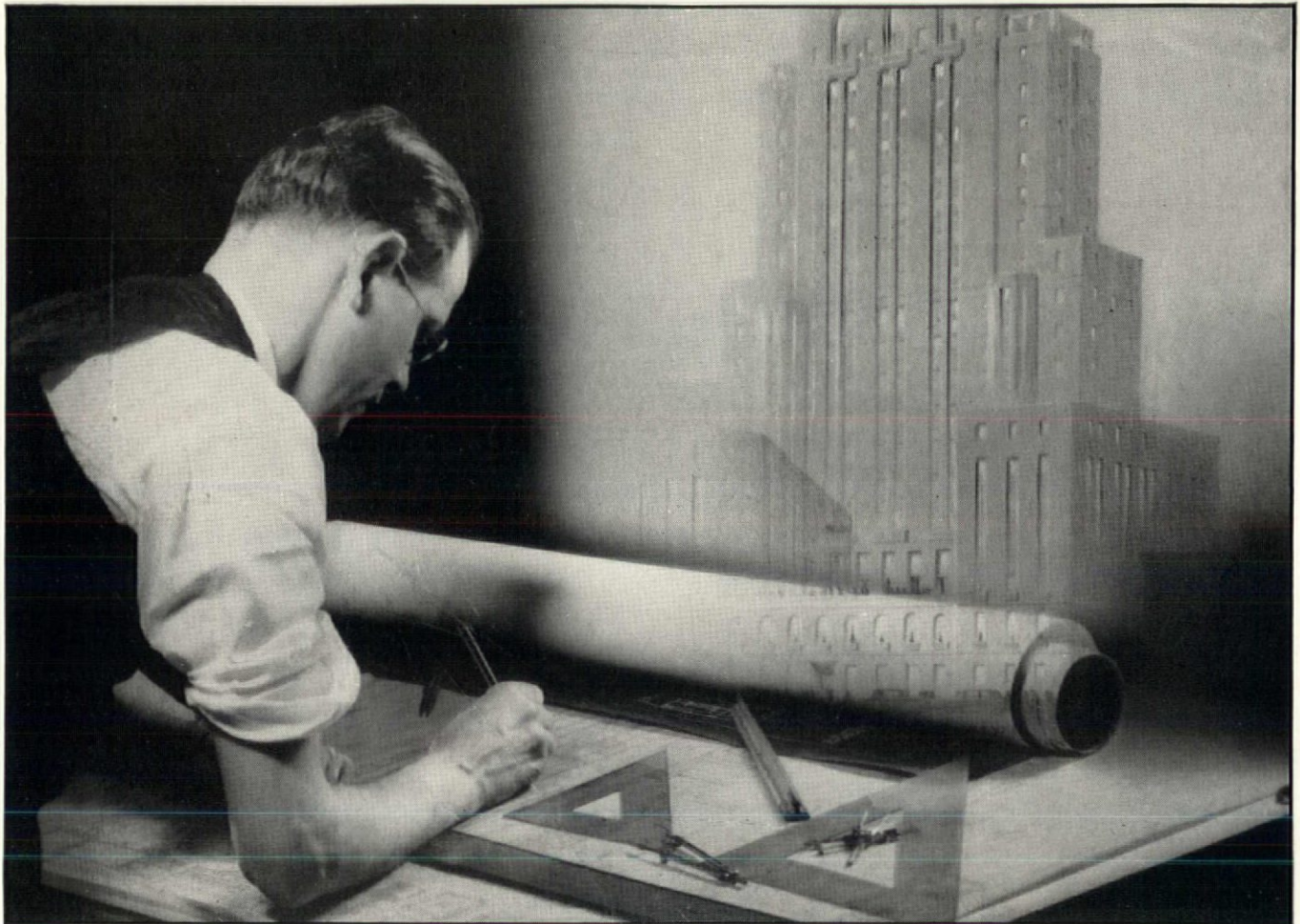
New York Hospital—Cornell Medical Center
New York Telephone Bldg., Brooklyn
Henry Ford Hospital, Detroit
Girard College, Philadelphia
Columbia Broadcasting Company, N. Y.
Brooklyn Textile Building, Brooklyn
Consolidated Gas, Electric Light & Power
Company of Baltimore
Bullock's Wilshire Store, Los Angeles
Airport Administration Building, Floyd
Bennett Field
Georgetown University, Washington
Chesapeake & Potomac Telephone Bldg.,
Roanoke
Emigrant Industrial Savings Bank, N. Y.

Armstrong's LINOTILE FLOORS

LINOTILE ~ CORK TILE ~ ACCOTILE ~ RUBBER TILE

A Major Aid to Structural Progress

TODAY—in the development of new buildings and the modernization of old ones—USS Chromium and Chromium-Nickel Alloy Steels are rendering a vital and appreciated service. Their beauty combined with scientifically determined strength—great resistance to corrosion—and remarkable ductility, makes them the ideal alloys for architectural progress. The applications listed below cover but a few of the important uses. In the interest of appearance, economy and service—request us to forward to you detailed information covering USS Stainless and Heat Resisting Cold Rolled Strip Steel, Wire and Wire Products.



For lighting fixtures and similar accessories



For moulding and base trims and countless other applications

USS STAINLESS AND HEAT RESISTING ALLOY STEELS

USS Chromium-Nickel Alloy Steels are produced under licenses of the Chemical Foundation, Inc., New York; and Fried. Krupp A. G. of Germany.



For building hardware and furniture



For elevator enclosures, spans, drels, casements and doors

1831



1934

AMERICAN STEEL & WIRE COMPANY

208 South La Salle Street, Chicago
94 Grove Street, Worcester

SUBSIDIARY OF UNITED STATES STEEL CORPORATION
AND ALL PRINCIPAL CITIES

Empire State Building, New York
First National Bank Building, Baltimore

Pacific Coast Distributors: Columbia Steel Company, Russ Bldg., San Francisco

Export Distributors: United States Steel Products Company, New York

THE FORUM OF EVENTS

MEDAL FOR KOHN

HOUSING Director Robert D. Kohn took off enough time last month to listen to something besides requests for money from his professional colleagues. At a dinner in his honor, he heard himself eulogized in sonorous terms while the New York Chapter of the American Institute of Architects presented him with its 1933 medal of honor "for distinguished work and high professional standing."

The award was "for devoted and inspired national leadership of the architectural profession; for initiating the unification of the building industry; for clear vision, understanding and continued national effort for the betterment of humanity in housing and city planning; for high ideals as a man; for fine qualities as an architect."

In accepting, Mr. Kohn expressed disappointment that PWA Housing "had not put to work the large number of men that had been hoped for." One difficulty, he explained, was that private money, though required in relatively small amounts, had not come out of hiding to help finance limited dividend projects. After the first delay, he added, the Housing Division had to turn to local housing authorities for money outlets.

STATE ARCHITECTURE

FOR weeks at a time during the last two years the A.I.A.'s chairman of the committee on Public Works, Louis La Beaume, lobbied in Washington for government recognition of private architects on U. S. buildings. So successful were his efforts that along with other recommendations limiting U. S. competition with private business, Congress forbade federal departments to use its own architectural help when private firms could be hired to advantage.

Times, since then, have changed. So much so that last month from the Institute's publicity man James T. Grady a story went out to newspapers quoting Architect Howard Dwight Smith of Columbus in favor of the establishment of "State Architecture." Far from being an official recommendation of the Institute, its appearance upset many an A.I.A. member, who saw in the proposal a new threat to their position in municipal, State and federal work.

Architects in many cities have already had occasion to resent government hiring of architects and draftsmen for housing work. In Philadelphia particularly, CWA



HOWARD DWIGHT SMITH

Who thinks the day may come when State Architecture will partially replace private practice

activities have nettled local aspirants to housing jobs. And in New York draftsmen have been hired at CWA's wages to do work for CWA-paid architects. One of New York's largest projects is a group of zoos for three of the city's five boroughs. Their architect is Aymar Embury II, who receives \$50 per day for three day's work each week.

In such operations architect Smith found the embryo of State Architecture. Said he,

"Some recent experiences of the Civil Works Administration may suggest a point of departure. Bunglesome as many attempts have been in the performance of local architectural service in connection with this item of our government's recovery policy [CWA] some instances are noted where sincere efforts have been effected to provide the necessary architectural guidance for remuneration, but not profit, as part of the common good and as service in a great common cause. Be this socialism or not, it does, perhaps, suggest a way of bringing the supply and demand for such services into the common circle.

"Much as the organized profession and some of the professional press have dis-

couraged the institutionalization of public and quasi-public architecture, the economic advantage and the administrative convenience of such a scheme force the idea to our consideration. If it is freed from political control and interference, which is possible, and if it is assured of the highest professional ability, by the career method, for instance, the great advantage of continuous sympathetic study of the architectural problems of city, State, or nation and their political subdivisions cannot be successfully denied. The extension of this sort of service to the housing problem is indeed feasible.

"If big business finds the inclusion of departments of architecture and construction, with an architect sitting on the board of directors, to be a satisfactory administrative procedure, big government can as well find it so. It may be that many new places which can be satisfactorily and capably filled by the architects in the various newly developing phases of the new deals will offer renewed opportunity for the profession of architecture to be of service to society in making its environment graceful and practicable."

COMPETITIONS

FOR all architects and draftsmen a competition for 29 prizes totaling \$3,100 is being conducted by the flat glass industry for a detached residence. Sponsors are the Plate Glass Manufacturers of America, Window Glass Manufacturers and the Rough Rolled Glass Manufacturers of America. For complete details, see advertising pages 6-7.

...

Through a competition the Department of Architecture of the College of Fine Arts at New York University will award a scholarship for the year 1934-35, equal in income to one year's tuition. The incumbent will pursue graduate work leading to a degree of Master of Architecture. Application forms must be filled on or before June 9, 1934. For further details address Dean E. R. Bossange, College of Fine Arts, New York University, 250 East 43rd Street, New York City.

...

Two prizes, a year's tuition at Princeton and \$500 each, will be awarded to the two 21-27 year old architects, draftsmen or students who win the competition in design conducted by Princeton's Department of Architecture from May 19 to May 31. Application blanks and full information may be obtained from the Director, School of Architecture, Princeton University, Princeton, N. J.

THE FORUM OF EVENTS

(Continued)

MONUMENTAL COINCIDENCE

IN July, 1932, famed Sculptor William Zorach submitted to the U.S.S.R. a three-foot model of a Monument to Lenin, as did fifteen or so other U. S. artists entered in a world-wide competition. For many months he wondered what had happened to his model, packed and shipped by Amtorg Trading Corp. Registered letters failed to bring an answer and Sculptor Zorach got an attorney. Finally written assurance came that the model had been received.

From friends, Sculptor Zorach heard that the model had been exhibited in Moscow, that it had been described in the Russian press. Last summer he saw the first plans for the Palace of the Soviets and was struck by certain similarities. Advised by a friend fresh from Russia that the Leningrad competition committee merely dumped all letters in a spacious box, he decided that a check-up on correspondence would be difficult, to say the least, and put the resemblance down as a coincidence.

Last month Sculptor Zorach held his peace no longer. The U.S.S.R. released final plans for the Palace. On top of the building was a tall monument surmounted by a figure of Lenin (see cut). In that monument, Sculptor Zorach saw a mutilation of his own model, which of course was intended to stand upon its own base. He immediately protested, not at all in the role of an artist plagiarized but as one shocked by what he termed "a colossal architectural atrocity."

"I don't believe this can be a coinci-

dence," said Mr. Zorach. "They have embodied my basic design in an imitation classical architecture. They have chosen a reactionary form of architecture wholly unsuited to revolutionary ideals. On the other hand, my design was to be carried out in simple and modern architecture. The accepted plan is an artistic atrocity which should not be permitted. It goes back to the most decadent pseudo-Roman development, the sort of thing the old kings and the old queens loved, a sort of tremendous wedding cake, the most terrific taste in architecture."

Thus for the second time arose a conflict between an American artist and the U.S. S.R. over its Palace. Scrap No. 1 arose when Architect Hector O. Hamilton of East Orange, N. J., was deprived of what he claimed was a commission to do the Palace. He, too, had entered a competition. Now in England, Hamilton has started suit to collect \$275,000 in fees.

WORLD'S FAIR: SECOND EDITION

ENABLING legislation having been passed, Chicago announces that the More-Than-A Century of Progress Exposition will open June 1 with new acts, new actors. Biggest star signed up to date: Henry Ford, with an Albert Kahn hall bigger than the huge Travel and Transport Building.

Though all the large buildings stand as before, they will vibrate with an altered color scheme and new lighting effects. Prompted by the success of Daniel Burnham's immensely successful Belgian Village, fifty smaller structures have been demolished to make way for a bevy of foreign villages. One need not bemoan the impossibility of going to war-scared Europe this summer, for the Fair is bringing the mountain to Mohammed, and a few

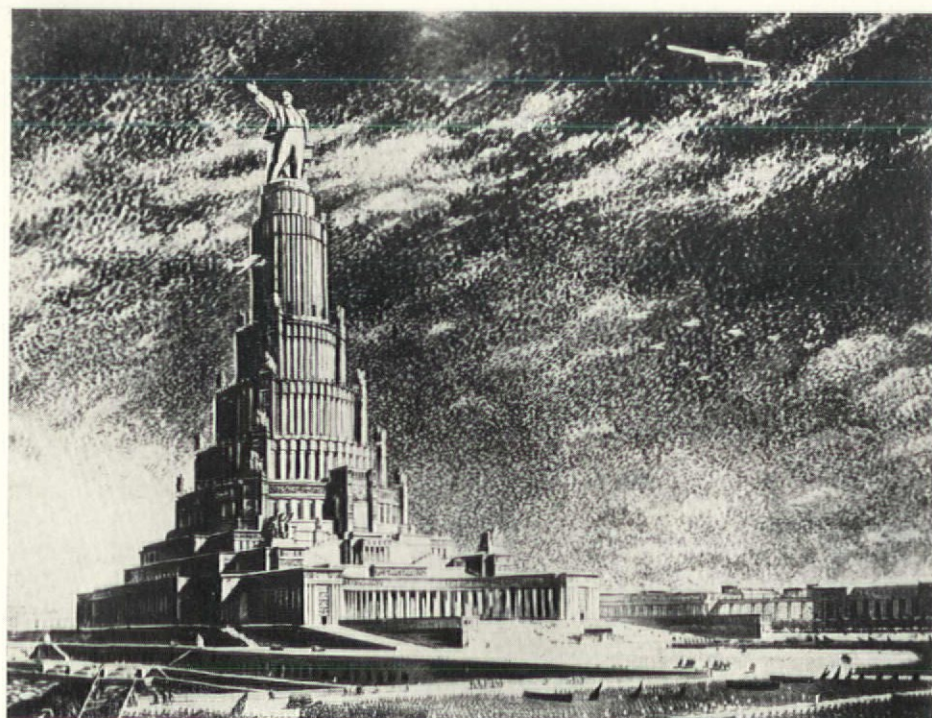
Mohammedans, it is advertised, besides.

Overshadowed by castle towers, a little feudal Spanish town will have a native population, whose workshops and restaurants will line "old" winding narrow streets. Not far away lies a Beau Geste Moroccan village called the "Oasis." Those less exotically inclined may prefer the Italian village, whose entrance is the gateway of Signa; the tower above is a reproduction of the Campanile of San Gimignano. From the Piazza Benito Mussolini the visitor can look toward the vias Marconi and Cristoforo Colombo to his left and right, and before him to a rising street ending with a Roman temple of Apollo.

Good Swiss republicans may argue that reproducing their little country is not quite right. Near the Swiss village stands the "Schwarzwaldler Dorf," done as a winter scene with synthetic snow and icicles. A frozen pond will permit summer skating.

Lovers of Samuel Johnson can enter a reproduction of part of the famous London Cheshire Cheese Inn. The Old English village includes Sulgrave Manor, ancestral residence of the Washington family in England, not to mention Anne Hathaway's cottage, Haddon Hall, and the Church at Stokes-Poges, where Gray wrote the "Elegy in a Country Churchyard." Those who have not seen Williamsburg, Va., may visit with delight the American Colonial village, where they will find text-book pictures come to life.

In new modern architecture this second edition Fair will probably have little to show. Some improvement may be expected in the housing exhibit. Perhaps the most instructive part will be to see the same modern buildings with new colors and different exterior lighting. 1933 visitors will find enough to justify a 1934 trip.



Wide World



July

SOVIET STEAL?

Left is B. M. Iofan's proposed Palace of the Soviets. Above is Zorach's Lenin monument

"GLAZED WITH PENNVERNON"



PENNVERNON IN EVERY WINDOW. The U. S. Marine Hospital, recently completed in Seattle, Washington, is glazed throughout with double-strength, "A" quality Pennvernon Window Glass, save for certain sash in the operating rooms. Architects: John Graham-Bebb & Gould, Seattle; Contractor, N. P. Severin & Co., Chicago; Glazing Contractor, W. P. Fuller & Co., Seattle.

... means Glazed with the Highest Quality Window Glass

THE name Pennvernon is an accepted guarantee of quality in window glass. That's why, for the modest private home, or for the largest public building, more and more architects and builders are specifying Pennvernon Window Glass as the glazing material.

Pennvernon is made by a special process from the purest ingredients obtainable. It has remarkable transparency and clarity of vision. A greater freedom from defects. A more lustrous, brilliant and reflec-

tive surface finish ... on both sides. Better and more permanent powers of color transmission. And a longer-lasting beauty.

We will be pleased to send you samples of Pennvernon upon request, so that you may examine them and see for yourself that when

you specify Pennvernon, you specify the highest quality in sheet glass. Pennvernon is available in single and double strength and in thicknesses of $\frac{3}{16}$ " and $\frac{1}{32}$ ", at the warehouses of the Pittsburgh Plate Glass Company in all principal cities, and through progressive glass jobbers and sash and door manufacturers. Pittsburgh Plate Glass Company, Grant Building, Pittsburgh, Pennsylvania.

**Pennvernon
Window Glass**



THE FORUM OF EVENTS

(Continued)

ELECTIONS

To succeed H. Augustus O'Dell, Clair W. Ditchy of Detroit was elected president of the Michigan Society of Architects at its annual convention last month. Other officers elected were Emil Lorch, Harry L.



PRESIDENT DITCHY

Who now heads the Michigan Society of Architects

Mead, and William D. Cuthbert, vice presidents; Frank H. Wright, secretary; Andrew R. Morison, treasurer; and Talmage C. Hughes, executive secretary. Directors are Wells I. Bennett, Frank Eurich, Walter E. Lentz, Amedeo E. Leone, William G. Malcolmson, Richard Marr, H. Augustus O'Dell, and N. Chester Sorensen.

...

At its annual meeting, the Westchester County Society of Architects unanimously elected the following officers: president, Howard B. Peare; vice president, Charles Dewey; treasurer, Louise Levine, and secretary, Edmond N. MacCollin; directors for three years, Charles Dewey, Reynold E. Pauve, and Edwin F. Hayner; director to finish unexpired term of William Halbert, Theodore Richards.

DEATHS

JAMES M. MACQUEEN, architect, in Pittsburgh, January 30.

Mr. MacQueen was a native of Scotland, and went to Pittsburgh in the early 1900's, where he became associated with the firm of Alden & Harlow. In 1921 he went into practice for himself, specializing in church

architecture. Long interested in the activities of the profession he was president of the Pittsburgh Chapter of the A. I. A. in 1929-30.

...

Isaac Edward Ditmars, 84, architect, in Scarsdale, N. Y., February 28.

Born in Nova Scotia, Mr. Ditmars was first associated with John F. Miller, New York architect. In 1885 he established the firm of Schickel & Ditmars, retiring from it in 1930. Most of his prominent buildings were Catholic hospitals and churches, among them the Cathedral of the Sacred Heart, Newark, N. J. He was a Fellow of the Institute, and a founder and former president of the Brooklyn Chapter.

...

George Carnegie Palmer, architect, at Morristown, N. J., February 28.

Mr. Palmer was a member of the New York firm of Palmer & Plonsky. He received his architectural education at Columbia University, and was the designer of many clubhouses and public buildings.

...

Thomas Crane Young, 76, architect, in St. Louis, March 2.

A member of the firm of Eames & Young since 1885, Mr. Young was a collaborator in the design of the Federal prisons at Atlanta and Leavenworth. He was graduated from the Ecole des Beaux Arts, and was a draftsman for the firm of Ware & Van Brunt. Mr. Young was on the architectural board for the St. Louis and Trans-Mississippi Expositions. He designed the Masonic Temple, the University Club and other prominent St. Louis buildings.

CONNECTICUT LICENSING

WITHOUT examination scores of Connecticut architects were granted licenses to practice in the State last month in accordance with the act passed by the General Assembly requiring licensing of architects. Qualification consisted of furnishing satisfactory evidence to the examining board that they were exclusively engaged in the practice of architecture on July 1, 1933.

Connecticut thus became the first of the New England States and the 35th State in the Union to require licensing. Members of the architectural examining board are Yale's dean Everett V. Meeks, president, William F. Brooks, vice president, George H. Gray, C. Frederick Townsend and Edward B. Caldwell, secretary. The board's office is at 1029 Fairfield Ave., Bridgeport.

PERSONALS

THE firm of Lundeen, Hooton, Roozen & Schaeffer having been dissolved, Archie N. Schaeffer and Philip R. Hooton announce the formation of a new firm under the name of Schaeffer & Hooton, architects, 710

Peoples Bank Building, Bloomington, Ill., to carry on the practice as successors to the old firm.

W. Montgomery Anderson, architect, has opened an office at 409 Whitlock Avenue, Marietta, Georgia.

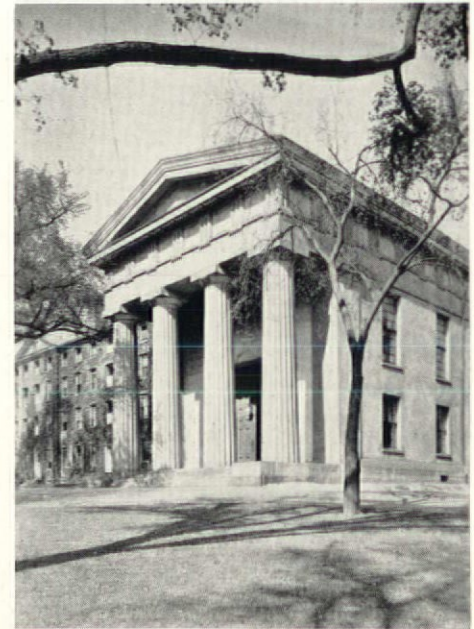
George H. Jones, for twelve years architect for School District No. 1 in Portland, Ore., is now associated with Harold D. Marsh, architect, 701 Woodlark Building, Portland.

Following the death of Arthur B. Chamberlain in September, 1933, the firm of A. B. Chamberlain and E. J. Prondzinski is being carried on under the name of Edmund J. Prondzinski, architect, at the same address, 616 Civic and Commerce Building, 107 South 4th Street, Minneapolis, Minn.

David A. Giller, architect, has opened an office at Room 225, 27 School Street, Boston, and requests manufacturers' publications, particularly those on remodeling.

BROWN'S GREEK REVIVAL

WITH the exception of Thomas U. Walter's Girard Trust Building in Philadelphia, the Greek Revival of the early Nineteenth Century had few finer representatives than the Manning Hall at Brown University, in Providence. Last month it celebrated its 100th anniversary.



100 YEARS OLD

Manning Hall at Brown University

Designed as a prostyle type of temple, it has four fluted Doric columns rising directly from the stylobate. Each corner, together with the rear, is set off with pilasters. Above the columns and pilasters a Doric entablature runs completely around the building, having a traditional architrave, frieze and cornice, ornamented by triglyphs, mutules and guttae. The tympanum in each gable is plain.

OF INTEREST TO ARCHITECTS

FOR some twenty-five years the Herman Nelson Corporation has pioneered in the development of heating and ventilating equipment for schools. In all this time our prime consideration has been the health and conditions under which school children must work. Never has the cost of producing this equipment been paramount in our thinking. We have felt that school authorities and their architects have desired the most healthful and nearly ideal working conditions for their children obtainable—that and nothing else. And even though Herman Nelson air conditioning equipment for schools often sold at a somewhat higher price than other equipment, when the facts were presented in full, the results obtainable justified this difference in price.

All of which is important for it has come to our attention that in some cases it is thought by architects and school authorities that non-Federal projects built under the P.W.A. require the use of wide-open specifications and that it is forbidden to mention materials and equipment by name. That in every case the lowest priced material or equipment should be purchased, regardless of their respective merits. Fortunately this is not the case. In fact, if we are correctly informed, on non-Federal projects receiving loans or grants from the P.W.A., it is only necessary to adhere to the local practice in such matters and specifications may be written accordingly.

Naturally this matter affects not only ourselves but all other manufacturers of high-grade, quality products. However, we publish this information because our past experience with the architectural profession leads us to believe that they desire their specifications to insure the builder the maximum return for each dollar expended. We feel that they will welcome any information to this end.

Herman H. Nelson
PRESIDENT

THE HERMAN NELSON CORPORATION

Heating, Ventilating, and Air Conditioning Equipment for Schools

MOLINE, ILLINOIS



THE FORUM OF EVENTS

(Continued)

MUSEUM

IF the old bromide — "Americans are so busy making money they have no time for culture" — is true, perhaps the fact that Americans are not so busy today accounts for the recent completion of museums and galleries in several important cities. Seattle, Worcester, Hartford, Springfield, New York and others have all within the last two years had an opportunity to feel artistically righteous upon the dedication of a new museum building.

Kansas City, with its \$2,750,000 William Rockhill Nelson Gallery, was the most recent to add an art center to its civic endowments. Made possible through bequests of Mr. Nelson's widow, his daughter, and his son-in-law, the gallery already has corralled many important foreign and domestic works, bought with part of the \$12,000,000 its trustees were given.

The building was designed by Wight & Wight of Kansas City. Classic in design it yet reflects modern tendencies in its simplicity and in certain details. Its ground

floor contains a 700-seat auditorium, administrative and educational departments and a library. The first and second floors are reserved strictly for galleries. To date, only one-half the building has been completed on the inside. Built of Indiana limestone, it is 390 ft. long and 175 ft. wide, with Ionic colonnades on all four sides.

Collaborating artists were Charles Keck, who designed twenty-three sculptured panels in low relief depicting the exploration and settlement of the Middle West, and Leroy Macmorris who did a series of murals for the lobby.

BEARDED QUAKERS

IN the town of Gerberville, Calif., some years ago civic-minded businessmen decided to hold a saxophone-playing marathon as a publicity-getter. Better to sweeten the publicity, they limited entries to bearded men, urged all loyal Gerbervillians to let their cheeks wax shaggy. Last month at University of Pennsylvania many a big shaver and many a little shaver shaved no more. Reason: The Architects Ball Committee sponsored a contest for the most magnificent hirsute growth, with mustaches and sideburns also eligible.



Kansas City's new \$2,750,000 civic monument, the Nelson Gallery, Wight & Wight, architects



John T. Windrim, Architect, Phila.

Day & Zimmermann Engineering & Construction Co., Genl. Contrs.

FRANKLIN MEMORIAL, PHILADELPHIA, Made Permanently Weather-tight with Pecora Calking Compound

ANOTHER monumental structure recently completed and built to endure through decades of time. Once again PECORA CALKING COMPOUND is relied upon to permanently seal all masonry joints, door and window frames, thus protecting vital parts most susceptible to early deterioration. Moisture and dust cannot enter. Heat losses are minimized in cold weather. . . . For public buildings, for commercial projects, in fact for every type of structure where capital investment is worthy of fullest protection, Pecora Calking Compound is the choice of architects and engineers who have come to know its absolute dependability. Specify Pecora, use Pecora, and be sure of best possible results.

For further details see Sweet's Catalogue or write direct to us.

**Pecora Paint Company
Inc.**

Sedgley Avenue and Venango Street
PHILADELPHIA, PA.

Established 1862 by Smith Bowen

ALSO MAKERS OF PECORA MORTAR STAINS

**"None
of these**

eyesores

in

my house!"

"YOU notice it in so many houses—that separation of the floor and walls, forming cracks that are eyesores, besides collecting dirt and letting in cold air and insects.

"I don't want that to happen in my house! And it won't, the architect assures me, because his plans call for floors built with Kalman Steel Joists.

"He explained that these joists form a floor structure that won't shrink. No objectionable cracks where the floor and walls meet. Greatly reduced fire risk, too, because Kalman Joists, with concrete slab and plaster, form a fire-resisting barrier between the basement, where most fires start, and the living and sleeping rooms.

"Anything that's better is more expensive, usually. I supposed this construction would add a lot to the cost of the house. But the architect said it wouldn't. That the difference would amount to only a few cents a square foot—because the builder erects these joists so easily and quickly, without cutting and fitting, and runs conduit and piping right through the open webs.

"I don't see how any man who understands the advantages of these steel joists would have any other floor construction in his house."

*

*

*

The use of Kalman Joists isn't confined to residences. They are used also in hotels, apartment houses, office buildings, schools—in fact, in every type of light-occupancy structure.

Kalman manufactures two distinct types of steel joists: Kalman Joists (one-piece steel trusses) and MacMar Joists (steel trusses assembled by pressure welding).

Either type of joist, in combination with concrete slab and plaster, provides rigid, fire-safe floor construction at moderate cost.

KALMAN STEEL CORPORATION, *Subsidiary of Bethlehem Steel Corporation.*
General Offices: Bethlehem, Pa. District Offices: Albany, Atlanta, Baltimore, Boston, Buffalo, Chicago, Cleveland, Cincinnati, Detroit, Houston, Milwaukee, Minneapolis, New York, Philadelphia, Pittsburgh, St. Louis, St. Paul, Syracuse, Washington. *Pacific Coast Distributor:* Pacific Coast Steel Corporation, San Francisco, Los Angeles, Seattle, Portland, Honolulu. *Export Distributor:* Bethlehem Steel Export Corporation, New York.



Kalman Steel Joists

THE FORUM OF EVENTS

(Continued)

LIGHTING COMPETITION

IF the projects submitted in the 1934 Illuminating Engineering Society competition are an indication, pendant fixtures for church illumination have seen their heyday. Only five out of 209 projects used pendant types.

First prize, \$500, went to George T. Licht, of New Rochelle, N. Y., whose multi-colored mosaic church interior was illuminated entirely from concealed sources, utilizing to the full the high reflection and dispersion character of glazed mosaic surfaces. An Episcopal Gothic design with a decidedly modern turn, by Vernon F. Duckett, student at the Catholic University, Washington, D. C., won second prize. It was marked by excellent shadow effects along the walls. Using a modern interior after the Italian manner, Henry Blatner, a student at the University of Pennsylvania, took third prize; he placed first last year.

Although the Illuminating Engineering competition offers a total of \$1,500 in prizes, including sixteen scholarships in the Beaux Arts Institute of Design, the committee of judges concluded that only eight projects were worthy of an award. Fifty-dollar

prizes were given the following: W. L. Newberry, University of Notre Dame; J. Stein, University of Illinois; G. E. Randolph, University of Pennsylvania; E. A. Flynn, Yale University.

ARCHITECTURAL AMERICANA

WHAT was easily the most comprehensive exhibition of early American architecture ever assembled was opened in Washington last month by the Historical American Buildings Survey. From every one of the 48 States had been gathered original drawings, photographs, historical data, maps and charts. Buildings, famous in their own localities but unknown to architectural historians, shared interest with all the recognized shrines of American history and American architecture.

For historians, the origin of each building and the reasons for its presence in the show were thoroughly documented. For architects, the buildings of architectural significance were completely drawn up, with details of design and construction.

Secretary Ickes, whose PWA money made the show possible, was as proud of the exhibition as he is of each allotment. But prouder than he was Leicester Bodine Holland, chairman of the A.I.A. Committee on the Preservation of Historic Buildings, whose idea the whole thing was.

The work of assembly has been carried on by architects and draftsmen in 39 dis-

tricts, and will continue until May 1. The Washington exhibition brought together only a fraction of the material that has been and is being assembled. It has not yet been decided whether the complete survey will be brought together for one big show; but each locality will stage its own.

PIGEON SALESMAN

RECEIVING bulky, odd-shaped packages is no surprise to architects. They contain samples. That is, all but one which arrived last month at Lansing C. Holden Jr.'s office in New York. It contained "White Flight," a carrier pigeon, expressed from the Hazelton Brick Company in Hazelton, Pa.

In the message tube attached to White Flight's leg was a letter asking Mr. Holden if he would like to learn about some brick. If so, he was invited to deposit a return note in the tube and open a convenient window. To help out the bird, who it was supposed was a stranger in the city, Mr. Holden, aided by a number of idle architect-neighbors, took the bird to the roof and freed him. After some hesitation White Flight took off and headed straight for Hazelton, arriving back home after a 50-mile per hour trip, the company reported.

Unfortunately for the happy ending of the story, the bird's efforts were not immediately successful, for on the Westport Post Office, the job which the pigeon was particularly after, another brick is to be used.



LEVEL LANDING

SHONNARD MOTOR STAIRWAYS



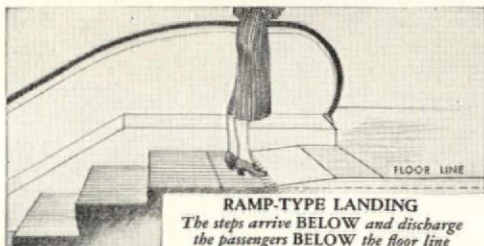
In planning new structures, or reconditioning existing buildings wherein extensive floor to floor traffic must be provided for, the consideration of architects and engineers is especially directed to the Shonnard Motor Stairways.

These stairways constitute a real advance in stairway engineering. They take on and discharge the passengers easily and safely at all speeds within the escalator code limit of 125 feet per minute, because—

Passengers do not *step down* to get on or *step up* to get off the moving steps—they merely **WALK FORWARD** as on any unobstructed level surface.



NOTE THIS IMPORTANT DIFFERENCE



The level landing makes effective an advanced operating speed, whereby the traffic capacity of these stairways is increased per unit of floor space.

The Ramp-Type landing is also available for these stairways where increased traffic capacity is not of special importance.

There are other commendable features which add to the desirability of this equipment. If you have any problem involving the movement of between floor traffic, we invite consultation. Should your office location permit, we particularly urge you to visit our address below and witness a demonstration.

PETER CLARK, INC. Manufacturers Established 1905 540 WEST 30th ST., NEW YORK

This is one of a series of pages devoted to the modern treatment of certain interesting details in construction.



GLASS

BY LIBBEY • OWENS • FORD

● These photographs show (1) the pleasing effect of a Picture Window on the interior of a room, and (2) the crisp, clear view through such a window when it is glazed with the highest quality glass. The room pictured is in the residence of D.W. Douglas, Santa Monica, California; L. B. Norman, designer and builder. L•O•F Polished Plate Glass and L•O•F double strength "A" Quality Glass were used exclusively in glazing. A similar closed specification will insure your client's complete satisfaction...and your own.

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 Wire Glass, manufactured by the Blue Ridge Glass Corporation of Kingsport, Tennessee.



LIBBEY • OWENS • FORD
QUALITY GLASS



HOME OF TOMORROW

EARLY last month the Westinghouse Electric & Manufacturing Company opened its "Home of Tomorrow" in Mansfield, Ohio. It was an "engineer's conception of what may be expected in household equipment five or ten years hence." With a connected load of 87 kilowatts, the roster of innovations included air conditioning, half a dozen different types of unusual lighting, electric heating, automatically operated sliding doors, a laundry and kitchen where manual labor is reduced to a minimum, and a bathroom with ten or fifteen different electric gadgets. On this page are shown a few of the rooms and appliances. The house itself was designed by the company, and Dwight James Baum was retained as a consultant on the interiors.



Announcer at front door for solicitors



Depository for tradesmen, at left



Above, automatic sliding door, operated by "electric eye" separating dining room from pantry

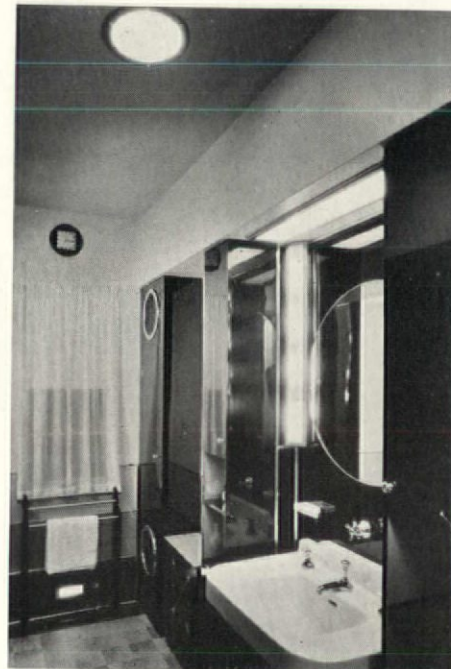


An electric switch on a post by the garage roadway to open or close the garage doors



Above, automatic electric clothes dryer, built into the wall of the basement laundry

Below, large level work areas mark the all-electric kitchen, which has "shadowless" lighting

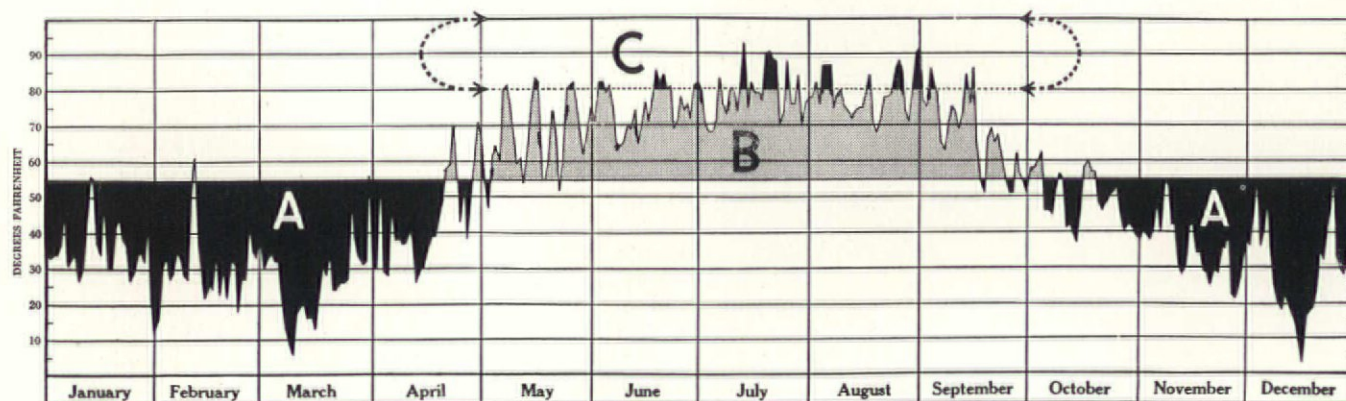


Recessed lighting, towel warmer, unit heater are a few of the features of the bathroom



Below, built-in electric ironer in the laundry, with racks on either side for finished work

ANALYZING AIR-CONDITIONING NEEDS



★ **A** ★ *In these periods air-conditioning entails*

HEATING
HUMIDIFYING
CLEANING
CIRCULATING

by some
combination
of

Warm Air Furnace
Boiler
Humidifier
Filter . . . Fan

★ **B** ★ *In this, the next major division of the year, air-conditioning simplifies to*

CLEANING
CIRCULATING

by continuing
to operate

Filter
Fan

★ **C** ★ *In these weeks cooling enters the picture*

COOLING
DEHUMIDIFYING

by
installing

Cooling Units
Driers



*Let the Pup be your
Furnace man and
weather man, too.*

• In other words, the long-term services of a prepared-air system, are handled by the heating plant, humidifier, filter, and fan unit. A Bryant Prepared-Air System to do this can be specified for any residence on your boards to provide any, or all, of the listed functions

for any, or all, of the rooms in the house. • Many a home-owner, as we are daily demonstrating by actual sales, will approve the installation of a prepared-air system if it is explained to him that it will satisfy all of his air-conditioning desires for most of the year.

For complete information write

THE BRYANT HEATER CO. • 17834 ST. CLAIR AVE. • CLEVELAND, OHIO

B R Y A N T
P R E P A R E D • A I R • S Y S T E M S



YES, LIGHT-FAILURES DO OCCUR...

If it were not for the unceasing vigilance of the utility companies, the number of current interruptions would be enormously greater. But these companies cannot control the effects of accidents, fires and storms. Records from all parts of the country, from cities as well as hamlets, show many light-failures from these causes.

There is always danger in darkness!

Every building where people gather needs an Exide Emergency Lighting Battery System. With this protection, emergency light is automatic the instant current fails. For as little as \$150, there is an Exide System that will illuminate 10,000 sq. ft. of floor space. Write for bulletins giving full details.



Exide

**EMERGENCY LIGHTING
BATTERY SYSTEMS**

\$150 AND UP

THE ELECTRIC STORAGE BATTERY CO., Philadelphia
The World's Largest Manufacturers of Storage Batteries for Every Purpose
Exide Batteries of Canada, Limited, Toronto

ARTIFICIAL PATINA

To members of the National Roofing and Sheet Metal Industries Conference last month William M. Crane Jr. of the Copper and Brass Research Association announced that a formula had been developed for the artificial formation of natural patina on copper. A chemical solution is sprayed on the metal, and following a rainfall the copper turns green.

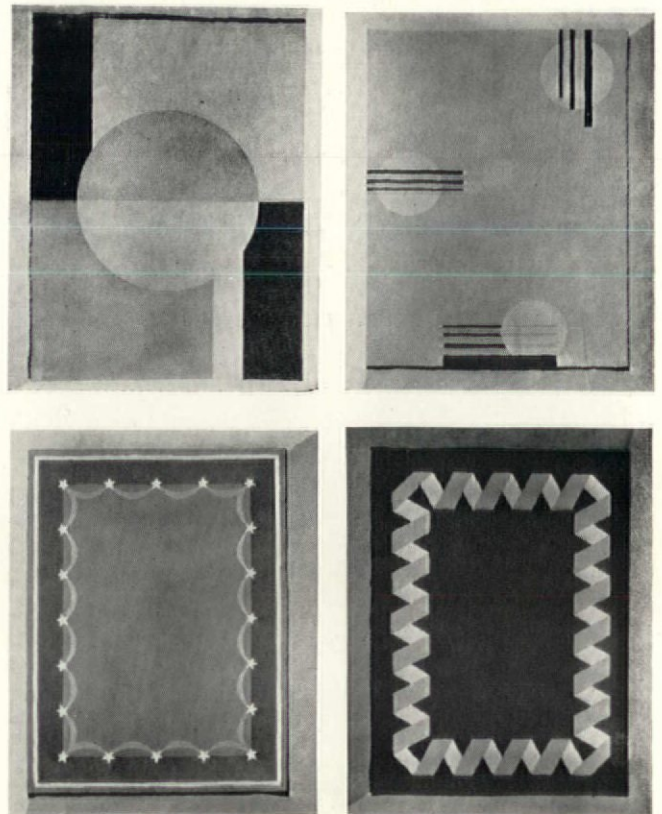
Chemist Crane said: "We have had very encouraging results with service tests on actual roofs. We cannot yet guarantee results. We can say the treatment will not injure the copper. Our chemists discovered after study that natural patina is a basic sulphate. Prior to that it had been assumed it was a carbonate. This set us off on a new track, and led to the development of an ammonium sulphate solution."

"Five or six spray applications are required with drying after each. The copper must be clean and must have weathered long enough for a brown tarnish to have developed on the surface. The first color is somewhat bluer, but on weathering the color approaches the natural shade."

CARPETS

ACCOMPANYING the announcement of three Seam-Loc new carpet qualities and five new colors, L. C. Chase let it be known that the distributing policies of the company had been changed. Instead of selling through distributors as heretofore, the company will maintain showrooms and workrooms in New York, Chicago, Los Angeles, and at the factory in Sanford, Maine, where architects may bring their clients.

The three new carpet grades are the close-tufted Hampshire, the popular-priced Sheridan, and the high-piled Cornish Frieze. The new colors added to last year's twenty-two are Modern Blue, Silver Gray, Rumba, Turquoise Blue and Jade Green.



Four new designs of Seam-Loc carpets announced by L. C. Chase, now available direct to the trade instead of through distributors

I SEE YOU'VE
CHOSEN
ELECTROLUX
FOR THE
BUILDINGS YOU'RE
MODERNIZING

THAT'S RIGHT.
ELECTROLUX
GIVES ME MORE,
GIVES MY
TENANTS MORE
TOO

ADVANTAGES *for you*

1. No moving parts to wear and need costly repairs
2. Long life
3. Gas Company service

ADVANTAGES *for tenants*

1. Low operating cost
2. Permanent silence
3. Every worthwhile modern convenience

MORE OWNERS and operators every month are choosing Electrolux for properties undergoing modernization. And with good reason!

Electrolux offers them—offers their tenants and prospective tenants—a finer, more dependable refrigerator than ever before developed.

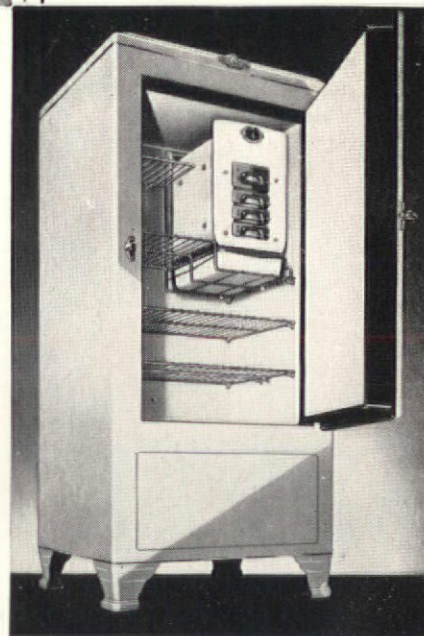
Electrolux has no moving parts to wear and need costly repairs. No moving parts, either, to cause noise or become noisy. When you install it—and after long use—you can depend on this modern gas refrigerator for the same silent, trouble-free refrigeration.

Tenants appreciate these advantages as much as you! Appreciate, too, Electrolux's low operating cost

—its many worthwhile modern conveniences.

And remember: should Electrolux ever require adjustment, your own gas company stands ready to give you prompt and efficient service.

In New York City alone, owners and operators of more than 4500 apartment buildings are daily proving the superiority of this remarkable modern refrigerator. For full information on Electrolux, see your gas company. Or write Electrolux Refrigerator Sales, Inc., Evansville, Ind.



NEW *Air-Cooled* **ELECTROLUX**
THE SERVEL *Gas* REFRIGERATOR



Randolph Evans, Architect

CALIFORNIA REDWOOD

A High Quality Wood For Low Cost Houses

Used by Harmon National Real Estate Corporation because of its **DURABILITY—LOW SHRINKAGE—EASE OF WORKING—EASY RECEPTIVITY TO PAINT AND STAINS**

CALIFORNIA REDWOOD ASSOCIATION

405 Montgomery Street
San Francisco, Cal.

1713 K St. N. W.
Washington, D. C.

101 Park Avenue
New York City

COX, NOSTRAND & GUNNISON, INC.

HAS RETIRED FROM BUSINESS AND THE JUNIOR
OFFICERS WHO WERE ASSOCIATED WITH THAT
FIRM ANNOUNCE THE FORMATION OF

A. WARD HENDRICKSON & CO. INC.

337 ADAMS STREET, BROOKLYN, N. Y.

THE PERSONNEL OF THE NEW FIRM IS TAKEN
ENTIRELY FROM THE OLD, AND WILL CONTINUE
TO SERVE IN THE FIELD OF ARCHITECTURAL
LIGHTING AS HERETOFORE.

OUR REPRESENTATIVES ARE IMMEDIATELY
AVAILABLE FOR CONSULTATION ON ANY
OF YOUR LIGHTING PROBLEMS.

PRODUCTS & PRACTICE

(Continued)

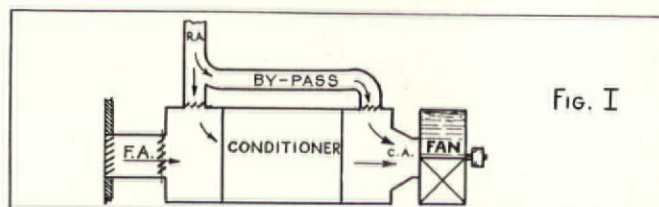
AIR CONDITIONING PATENTS

IF AIR conditioning cost no more than straight heating, the latter would become as obsolete as a Franklin stove. Hot summers and a constant educational campaign by manufacturers have pretty thoroughly convinced the nation that "made weather" is to be desired if it can be afforded.

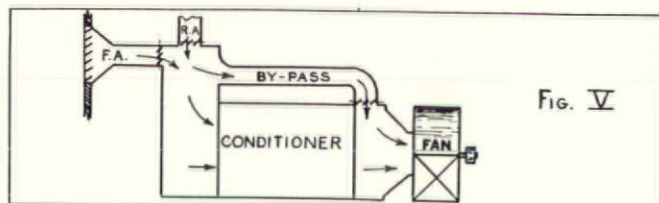
Consequently, with conditioning equipment having reached a stage of development where most of the experimental wrinkles have been ironed out, the industry's engineers are bending their efforts toward cutting of installation and maintenance costs. One secret of low maintenance cost is the familiar by-pass, of which there are many variations all covered by tested patents.

A holder of major by-pass patents is the Auditorium Conditioning Corporation, which does no actual installations itself but licenses 62 companies in all parts of the U. S. as special agents. Once a sore spot in the air conditioning industry the patent situation has apparently been cleared up.

In a recently issued booklet the Auditorium Conditioning Corp. explains all its patents, describing their advantages, and the best uses for different types of by-passes. Diagrams, such as are illustrated below, are plentifully provided. Further, the booklet contains six typical cooling layouts, with the requirements in tons of refrigeration and pounds of steam per hour under full and half load.



System by-passing part of recirculated air, the balance passing through conditioner with fresh air required for ventilation



System in which fresh air and recirculated air are mixed, then divided, part through by-pass and balance through conditioner

WOOD PRESERVER

THE search for wood preservatives still goes on. With the pestiferous termite widening the field of his activities, lumber manufacturers have been put to it trying to find an end-all to his destructive tactics. Recently the Tennessee Eastman Corporation, which is allied with the Kodak company, put on the market a concentrated creosote preserver extracted from hardwood timber. It is known as No-D-K.

No-D-K is applied with brush, by spray or dipping. It gives a brown finish to woodwork, and is said not to crack, chip or peel off. Being insoluble in water, the product is not leached or soaked out by rain or exposure to the elements. Far from being limited to wood foundations, the preserver is used for exterior wall and roof protection of houses, farm and industrial buildings. When applied with brush or spray, the company recommends application of two coats at a two- or three-day interval. Complete information is available from the company at its main office, Kingsport, Tennessee.

PRODUCTS & PRACTICE

(Continued)

CHASE ENTERS LIGHTING FIELD

THE Chase Copper and Brass Company, which has been in business for 50 years, announced last month its entrance into the lighting fixture business. Next month the company will open new exhibition floors in Chase Tower, 10 East 40th Street, New York, placing on display its complete line of new fixtures.

For the past three years, according to Rodney Chase, assistant secretary of the company, Chase has been studying all possible angles of architectural lighting, and for the last six months, has been making an extensive survey of architects and dealers in all parts of the United States. From the investigations they have evolved definite policies regarding the line of fixtures and the method of distribution, which will be announced when the show rooms are opened.

NEW INSTRUMENT COMPANY

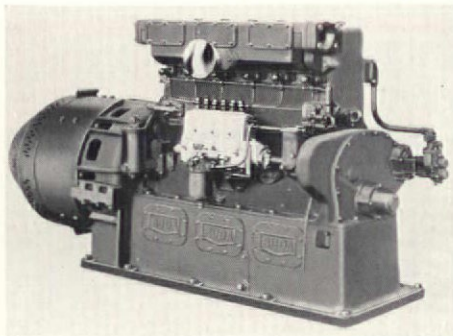
THE Wilbin Instrument Corporation, 40 East 34th Street, New York, has been formed to manufacture electric instruments for control of temperature, humidity, pressure, vacuum and liquid levels as used in heating, air conditioning, refrigeration, and process industries.

CONSULTING SERVICE

WESTINGHOUSE and Electric Manufacturing Company announces a new engineering consulting service under the direction of H. D. James, for thirty years a control expert and consulting engineer of the organization. A staff of seasoned engineers offers technical information to manufacturers without a research or technical department, and will give purchasing advice on engineering questions, cost analysis, and design of equipment.

DIESEL GENERATOR

MORE than one building owner and architect has recently studied the possibility of installing a Diesel generating set in buildings to replace utility company service. Heretofore, they have been used almost exclusively in power and industrial plants. In line with this trend the Buda Company has developed a light compact Diesel set producing current at approximately $\frac{3}{4}$ to 1 cent per kilowatt. The sets range from 10 to 90 kw., alternating and direct current.



According to the company, the engines do not require more than occasional visits to the engine room by the attendant engineer. They are suitable for 24-hour service.

The company, which is located at Harvey, Ill., has also put on the market a generator set with an engine of similar design fitted for natural gas or gasoline.



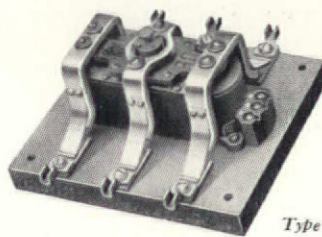
Law School, Yale University

Where Lighting Loads Are Conveniently Controlled

IMPORTANT lighting circuits in the many buildings of Yale University are controlled by Diamond "H" Remote Control Switches. Remote Control provides a dependable method for lighting instantly one or many circuits from several conveniently located switching points. Heavy loads are handled with ease. By their use wiring is simplified with savings in cost.

Remote Control can be used for master control of exterior and interior residence lighting, for flood and sign lighting, for automatic emergency use for schools, theatres and hospitals, and for automatic control in industrial uses. Our Bulletin No. 10-A should be in your files. It covers remote control switches, how they are used, with wiring plans. Send for your copy. Our engineering department will aid in selecting and recommending types for any control problem.

The HART MANUFACTURING CO.
Hartford, Connecticut



Type "F" Switch

DIAMOND H SWITCHES

• Hot water

THERMOSTATICALLY CONTROLLED



*Small item of cost...
Large item of comfort, safety,
convenience and economy*

Unruly water temperatures that scald the bather, waste millions of b.t.u.'s down the sewer each year, that prompt everything from profanity to suits for personal damages — have no place in the modern home, apartment, hotel, club, office building or factory.

Fulton Sylphon engineers, specialists in temperature control for more than thirty years, have developed a complete line of thermostatic water mixers that definitely solve the problem of control of water supply temperatures, permitting the heating and storage of hot water at any temperature desired, and modulating it to the safe and pleasant required warmth at the point of usage.

Rugged, reliable, long-lived, practically indestructible, these mixers provide maintenance of desired temperature with extreme accuracy in spite of sudden wide variations in supply water pressure. In addition, they offer the safety feature of automatically shutting off flow, entirely, if the cold water supply should fail.

No. 904 Sylphon Water Mixer illustrated above in use (with inset showing the mixer itself which is installed behind tiling) is ideal for individual showers and provides a convenient attractive manual adjustment for selection of exact temperature desired. This same mixer without external adjustment is known as No. 903, and is best adapted to use in controlling hot water supply at a constant pre-determined temperature to bathrooms, gang showers, progressive showers, continuous flowing baths, etc. Larger size Sylphon Mixers are provided for greater volume requirements of large buildings or for industrial use.

Investigate this modern, highly appreciated luxury which you may offer at small cost on both new construction and modernization projects. Write for Bulletin GA-509.

★ ★ ★ **FULTON SYLPHON CO.**
KNOXVILLE, TENN., U.S.A.
European Representatives, Crosby Valve and Engineering Co., Ltd.,
41-2 Foley Street, London, W. 1, England; Canadian Representatives,
Darling Bros., Ltd., 140 Prince Street, Montreal, Quebec, Canada.
REPRESENTATIVES IN ALL PRINCIPAL CITIES IN U. S. A.

MANUFACTURERS' PUBLICATIONS

No. 401

STAINLESS STEELS

The range of stainless steel alloys for building purposes is so wide, and the uses to which the different alloys can best be put are so well defined that no user of the material should permit himself to be confused on the subject. The subsidiary manufacturing companies of U. S. Steel have prepared another illuminating booklet on the properties and uses of the alloys which they manufacture. Forty-eight pages long, it is well illustrated, and contains much valuable information.

No. 402

RESURFACER

With modernization business running higher than ever before, those products particularly adapted to repairing and remodeling are receiving more than usual attention. The Stonhard Company, specialists in building maintenance materials, has issued a new bulletin on its different refinishing materials, for walls, floors, roofs, for waterproofing, rust-proofing, and other forms of protective coatings.

No. 403

REFRIGERATORS

Improvements in refrigerator manufacture are so frequent that it is difficult to keep abreast of important developments. The Norge Corporation, manufacturer of Rollator refrigerators, has just announced its 1934 line, which is marked by several notable advances. A recent booklet describes them, and also points out specific savings in operation. The new line, incidentally, is available in either porcelain or lacquer finish.

No. 404

MOTORS

The Louis Allis Company, manufacturers of motors of all types, issues a monthly magazine, *The Messenger*, which will be sent to architects free upon request. Each issue contains much of interest and much of entertainment. The company has also issued an 8-page bulletin showing the detailed construction of their motors, describing and illustrating completely the characteristics and uses of a dozen different types.

No. 405

ENGINEERING ACHIEVEMENTS

The yearly summation of the company's developments has just been issued by Westinghouse. In its 36 pages the booklet pictures and describes a great many advances in electrical equipment, some of which may have escaped the notice of architects and others who attempt to keep posted on all new building materials. The material includes many things outside the building field, but every page in it should be of interest if not of educational value to members of the profession.

No. 406

FIREPROOF HOUSES

Photographs and construction details of several small fireproof residences are contained in a booklet of the Portland Cement Association. The presentation is unusually clear, and the types of houses include modern and traditional. Architects and clients alike will find the booklet interesting.

No. 407

SWINGING BLACKBOARD

The partiality of PWA to school projects makes news of developments in school building equipment particularly interesting. The Weber Costello Company, manufacturers of a wide range of school apparatus and supplies, has recently developed a swinging leaf blackboard that supplies a considerable amount of board area in a limited space. Constructed of four pivoted, removable leaves, the board is fully described in a new pamphlet.

MANUFACTURERS' PUBLICATIONS

No. 408

SASH BALANCES

As is its custom, the Caldwell Manufacturing Company, makers of hardware specialties, has issued a bulletin on its sash balances that supplies exactly the information that an architect wants to have. After briefly describing the advantages of its product for counter balancing double hung windows, the bulletin is given over entirely to large size details and dimensional data.

No. 409

FLOORING TILE

In a brief, but well-illustrated pamphlet, some of which is in color, the Uvalde Rock Asphalt Company presents the latest information about its Azrock flooring tile. The peculiar advantages of the material, together with several good installations, details of patterns and color samples, compose the booklet. The company has also issued a new bulletin on its industrial flooring tile, presenting a photographic record that demonstrates the economical, long-wearing qualities of that specialized type of tile.

No. 410

ACOUSTIC STONE AND PLASTER

Engineers apparently never tire of improving the science of acoustics and the efficiency of acoustic materials. In the control of sound, acoustic plasters and cast stones play an important part — a part that is well described in a new bulletin of the Certain-Teed Products Corporation announcing its establishment as distributors for Kalite. Complete information, including coefficients of absorption, mixing and application instructions, finishing, and general specifications, is contained in the bulletin, together with photographs of several interesting installations.

No. 411

SIDEWALK DOORS

Briefly but completely the Potts Manufacturing Company describes its patented, flush watertight sidewalk doors in a new pamphlet. Besides full description and photographs of installations, the bulletin contains construction details.

No. 412

AIRLESS PAINTING

A new product, an airless paint spraying machine, is described in a bulletin of the Electrical Painting Equipment Company. It is said to have a coverage of 1,500 sq. ft. per hour, is easily portable, and its discharge easily controlled. Elimination of "paint fog" is one of its advantages.

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 ☐



Redick Tower, Omaha, Neb. Joseph C. McArthur, Architect, Omaha, Neb.—Parsons Construction Co., General Contractors, Omaha, Neb.—National Roofing Co., Roofing Contractors, Omaha, Neb.

For Enduring Protection— Genasco Built-up Roofing

In keeping with the enduring character of this imposing building a Genasco Standard Trinidad Built-up Roof was specified because of its lasting protection and economy of upkeep.

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 weather-sealed with Nature's own product — Trinidad Native Lake Asphalt — which cannot be equalled 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.

Write for full information

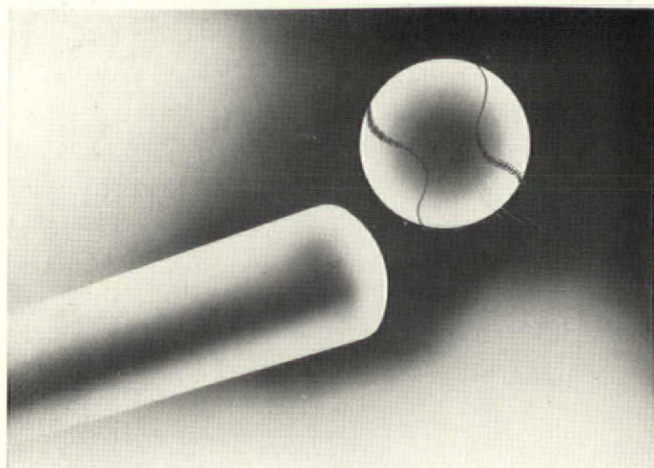
The Barber Asphalt Company



Philadelphia
 New York Chicago
 St. Louis



Genasco
 Reg. U. S. Pat. Off.
STANDARD TRINIDAD
Built-up Roofing



HOME RUN

IF BASEBALL were played with balls made of radiated heat, the usual bat would knock out no home runs, because radiated heat passes through wood easily. But cover the bat with Reynolds Metallation* and the next batter up could knock that mythical ball of radiated heat right over the fence.

Reynolds Metallation is a new and unique insulating material. Its remarkable efficiency is due to the fact that its polished metal surface is an almost impenetrable barrier to radiated heat. It turns back to its source 95% of radiated heat—and heat in that form is responsible for by far the greater portion of heat transmission through walls and ceilings.

Metallation consists of thin, polished sheets of a special metal cemented to a base of heavy kraft paper. It is easily applied. It supplies not only insulation in its newest form, but also wind-proofing, moisture-proofing and vermin-proofing. Its effectiveness has been demonstrated in the laboratory, and in actual use in homes and industrial applications. The low cost—about \$54 for the average 7-room home—now places insulation within reach of all.

Metallated Ecod Fabric

Ecod Fabric now may be had with integral Metallation; one economical application now installs both this favorite plaster base and the newest insulation material.

Send for samples, booklets and price lists.

* Metallation is the trade name for polished metal insulation products made only by the Reynolds Metals Company, Inc.

**REYNOLDS
METALS COMPANY**
INCORPORATED

19 Rector St., New York City 345 Ninth St., San Francisco
400 Wrigley Building, Chicago

COLD STORAGE DOORS ... As York Builds Them



...patented "corkboard dip seal"...extra heavy steel-angle corner reinforcement
...superior diagonal bracing...carefully selected, well seasoned wood...rugged hardware with easily operated straight-pull latch. Send for descriptive booklet.

York Ice Machinery Corporation, York, Pennsylvania
Send booklet describing York Cold Storage Doors

Name _____
Street _____
City _____ State _____

Bare Plaster Walls Are Mighty Poor Salesmen

That's the trouble with the interiors of houses — they repel rather than appeal.

The Harmon National Corporation agreed, so they asked the Thibaut Realty Contact Man to help plan their interiors.

Wallpapers — Thibaut Wallpapers — in smart, new colorful designs, as well as the authentic ones for Period Rooms, created an entirely different — more salable — atmosphere which helped to sell Harmon homes.

If you have homes to sell — we can help.

For information write Department K.

Richard E. Thibaut, Inc.
24 West 40th Street
New York City

TRANSFORMED!

and the magic wand is a paint brush



Architect Francis Keally modernizes the Hotel Collingwood and gives his surfaces the charm that lasts

A GREAT WAVE of renovating sweeps the country. Architects knock down, tear out and reconstruct...give old exteriors new faces and shabby interiors a new deal.

Of the New York hotels that have recently changed face and form, one of the outstanding examples is the Collingwood on West 35th Street. The photographs above show how charmingly the main floor has been remodeled...transformed by Architect Francis Keally who planned and supervised the job.

The "before" and "after" pictures show that much of the charm comes from surfaces treated with paint.

"When the architect accepts a commission," says Mr. Keally, "he assumes a real responsibility in reference to the expenditures of the owner. He must, therefore, ever keep before him the importance of using products which possess three factors: utility, beauty, durability. This applies to paint as well as everything else in the building."

Dutch Boy provides paint for every surface...and every finish

Dutch Boy White-Lead makes paint for wood, plaster, wall board, metal, brick, stucco and other surfaces.

Moreover it makes paint for finishes of every kind. Mixed with lin-

seed oil it produces long-wearing gloss paints. Mixed with flattening oil it provides washable, tile-like flat and eggshell finishes...undercoatings for enamel...mottled, blended and textured effects. And by adding Dutch Boy Colors-in-Oil you can obtain any one of a thousand tints.

So plan your modernization with Dutch Boy in mind, whether it be for a hotel, a home or any other kind of a building. It offers not only utility, beauty and durability, but exceptional economy as well.



DUTCH BOY

*All-Purpose
Soft Paste*

WHITE-LEAD

LINSEED OIL — FLATTING OIL — LIQUID DRIER — WALL PRIMER — COLORS-IN-OIL



NATIONAL LEAD COMPANY

111 Broadway, New York; 116 Oak Street, Buffalo; 900 W. 18th Street, Chicago; 659 Freeman Avenue, Cincinnati; 820 W. Superior Ave., Cleveland; 732 Chestnut Street, St. Louis; 2240 24th Street, San Francisco; National-Boston Lead Co., 800 Albany Street, Boston; National Lead & Oil Co. of Pa., 316 Fourth Avenue, Pittsburgh; John T. Lewis & Bros. Co., Widener Building Philadelphia.



WHAT IS MODERN ELEVATOR PRACTICE?

• NO. 1 OF A SERIES OF SIX •

This article concerns itself with the summarizing of modern freight elevator practices. This information comes from the many years of experience of Otis Elevator Company in installing thousands of freight elevators.

Moderate Duty: (2000 to 4000 lbs.—slow speed)

For economy of both installation and operation, the most popular type today is the electric machine with DOUBLE BUTTON CONTROL. This does away with the necessity of a regular operator, as it is easily and safely handled by any one.

For this type, standard arrangements are available. For instance, for a capacity of 2500 pounds at 50-foot speed, there are two platform sizes, 5' 6" x 6' 9" or 6' 6" x 7' 6". Other standard arrangements can also be obtained.

Medium Duty: (2000 to 6000 lbs.—medium or high speed)

Elevators of this size usually require a regular operator, as they are used in medium height buildings with fairly intensive service requirements. Therefore, they are usually furnished with Car Switch Control.

A number of practical combinations of load and speed have been worked out by us for this service. On the basis of long experience, they cover adequately and economically most requirements.

Special combinations for freight and service elevators in office buildings, hotels, etc., are usually special elevator engineering problems. We have a wide range of capacities, speeds and platform sizes which permit of much elasticity in solving individual problems.

Heavy Duty: (Special—large loads with or without high speed)

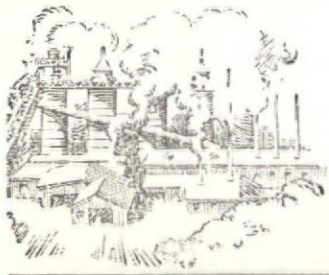
These problems involve specially engineered equipment. Requirements usually call for the working out of freight elevators along engineering and experience lines. Recent examples of such special installations are the large motor truck elevators in the Starrett-Lehigh Terminal and in the Inland Port Terminal, both of New York. Four of the elevators in the latter building have capacities of 40,000 pounds, a speed of 200 feet per minute, and platforms 17' x 34'. These are the largest commercial freight elevators in the world.

General Features:

We believe that freight elevators should be engineered, manufactured, and installed with the same high precision (for safety, operation and low maintenance cost) as our high-grade passenger elevators. Otis has one standard for both.

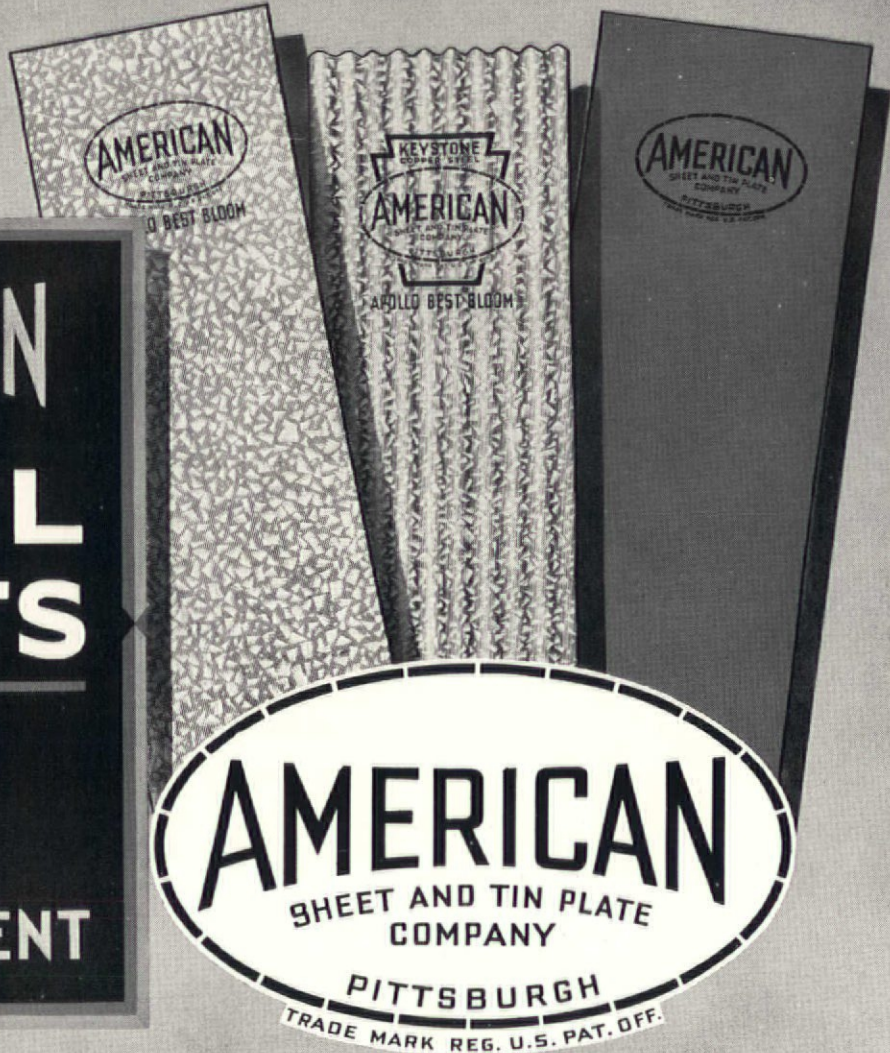
The success of this policy has been amply demonstrated, since over a long period of years Otis has built the majority of all freight elevators furnished in this country.

OTIS Elevator Company



AMERICAN STEEL SHEETS

TO MEET
EVERY
REQUIREMENT



ESTABLISHED standards of *quality* with reliability in service, are important factors to all architects, contractors, builders, and users of sheet metal.

AMERICAN products have demonstrated their adaptability to all industrial and construction uses, and their wide utilization is evidence of the tremendous progress that has been made in sheet steel manufacture. Supplied in Black and Galvanized Sheets, Formed Roofing and Siding Products, Special Sheets, Tin and Terne Plates. Specify KEYSTONE Copper Steel for uses requiring maximum *rust resistance*. Our Keystone booklets will interest you.

USS

Inquiries regarding any application of USS STAINLESS and Heat Resisting Steel Sheets or Light Plates, or any product fabricated from these alloy materials, will be given prompt and careful attention.



American Sheet and Tin Plate Company

General Offices: Frick Building, Pittsburgh, Pa.

SUBSIDIARY OF UNITED STATES STEEL CORPORATION



DISTRICT SALES OFFICES:

CHICAGO, ILL. - The 208 So. La Salle Street Building
CINCINNATI, OHIO - Union Trust Building
DENVER, COLO. - First National Bank Building

DETROIT, MICH. - General Motors Building
HOUSTON, TEX. - Petroleum Building
NEW YORK, N. Y. - 71 Broadway

PHILADELPHIA, PA. - Widener Building
PITTSBURGH, PA. - Frick Building
ST. LOUIS, Mo. - Mississippi Valley Trust Building

Pacific Coast Distributors—Columbia Steel Company, San Francisco, California.

Export Distributors—United States Steel Products Company, New York, N. Y.



Even on
Park Avenue

Monel Metal shows that modernizing is needed!

New York's swankiest apartment street demonstrates how smart kitchen handling keeps up rentals

NUMBER 399 Park Avenue isn't a really old building... but it isn't one of the newest either. So the owners tried an experiment in modernizing.

In 15 of the 40 apartments, they tore out the old porcelain pantry sinks with wooden drainboards and put in "Straitline" sinks of gleaming Monel Metal.

It worked like magic! All 15 apartments rented at once—and no sacrifices!

Of course, the owners now plan to put Monel sinks in the rest of the apartments.

If it pays to renovate fine apartments on Park Avenue, then surely more modest properties must modernize to keep up values.

Nothing attracts a woman more than a kitchen equipped with Monel Metal. Sinks, working surfaces, range tops, table tops... all absolutely rust-proof, solid metal right through, no coating to chip, crack or wear off, easy to keep spotless and enduring in service and beauty.

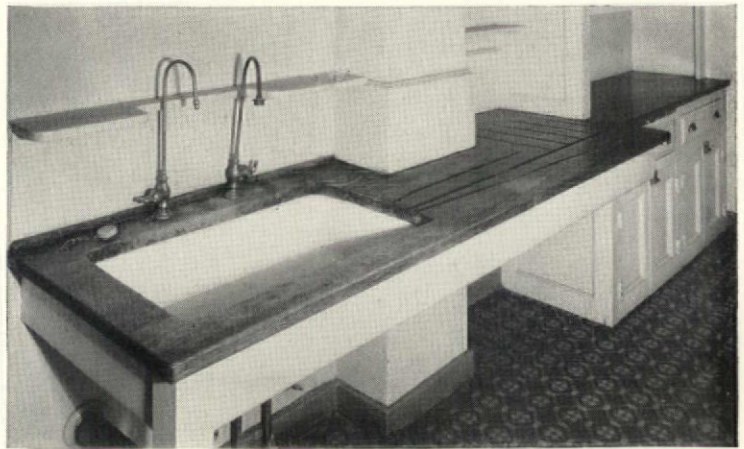
And such a kitchen is not hard to give her. Monel sinks are now made in 57 sizes and shapes, standardized to bring prices within reach of even quite meagre remodeling budgets.

We are always ready to assist in remodeling problems. Our new booklet (AIA File No. 29-H-6) "Planning Values with Monel Metal in Modern Kitchens" gives many concrete examples and suggestions. Write for the booklet today.

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, rolled and marketed solely by International Nickel.



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

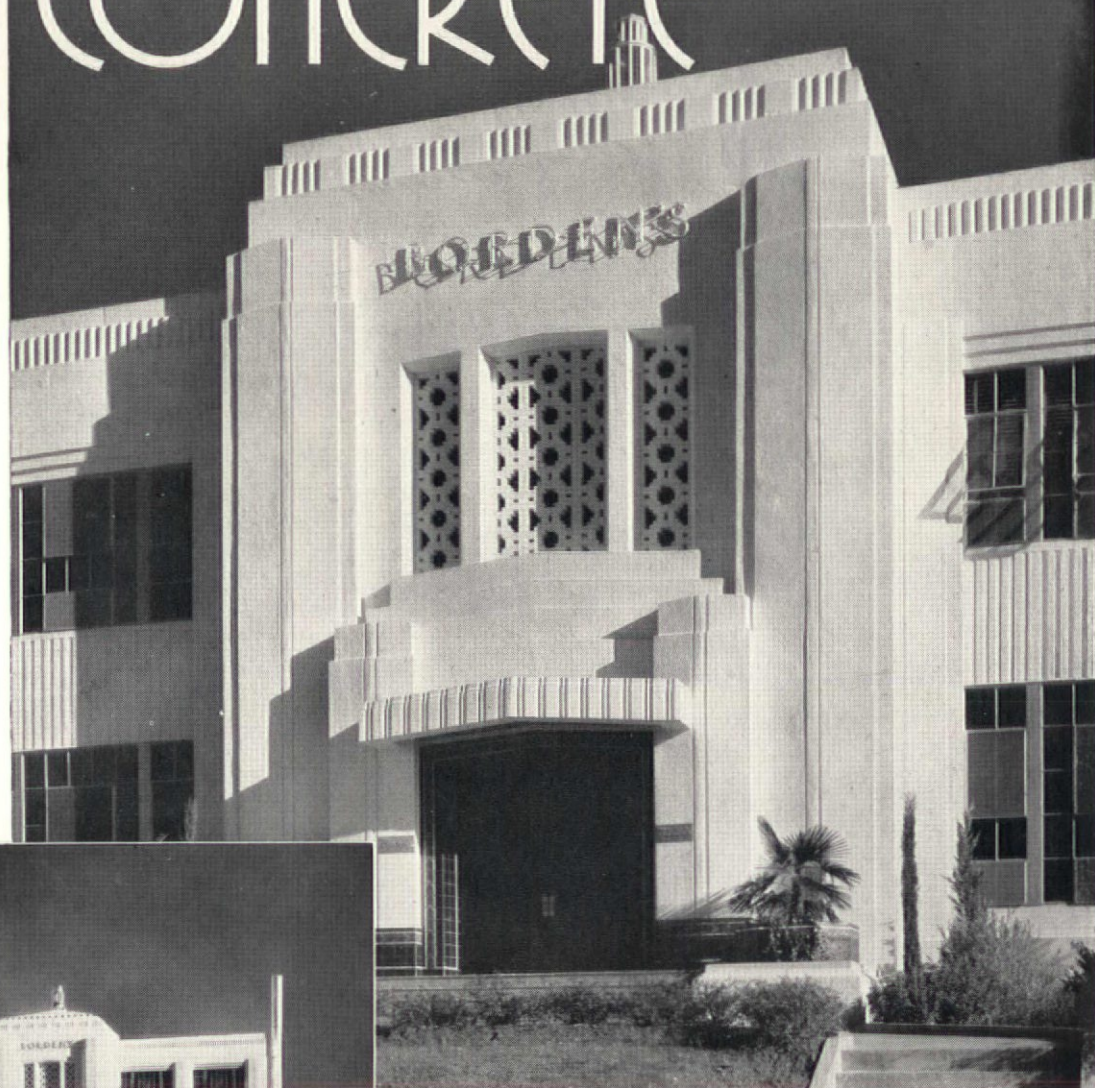


A pantry in one of the apartments of 399 Park Avenue, New York City, before remodeling.



The pantry after installing a Monel Metal "Straitline" sink. 399 Park Avenue is managed and operated by Slawson & Hobbs, 565 Fifth Avenue, New York, N. Y.

DRESS UP INDUSTRY *with* CONCRETE



The Borden Company's milk products plant at San Antonio, Texas. Architects: Atlee B. and Robert M. Ayers. Contractor: King B. Key.

All exterior ornament cast in place. Surface forms were of plywood with construction joints at designated intervals. Color scheme is mainly a white cement and lime dash coat with ochre color base at the grade line. Entrance steps a bright red.

Concrete was used throughout this milk products plant. Exterior walls are monolithic. Structural frame is reinforced concrete on foundations of concrete piles.

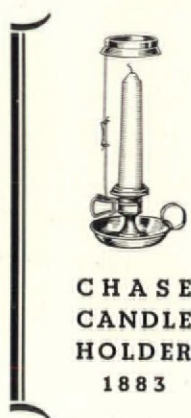
Information on concrete construction will be furnished upon request.

P O R T L A N D C E M E N T A S S O C I A T I O N

Room 274—33 West Grand Avenue, Chicago, Illinois

A REPORT OF ARCHITECTURAL OPINION

on the design, quality, and styling of Residential Lighting Fixtures



In discussing the conditions in the Lighting Fixture Industry, Chase speaks out of a 50-year experience of close identification with the business as one of the largest makers of fixture parts. Its opinion and viewpoint have been constantly brought up to date by periodic market studies to which leading architects have freely contributed constructive suggestions which Chase presents in this report.

"What the Lighting Fixture Industry needs is a *good dose of good taste*," says one of America's foremost architects.

★ ★ ★ ★

Is this *your* opinion of residential lighting fixtures?

Do you believe there is *room for improvement* in the design, quality of basic materials, finish, and workmanship of residential lighting fixtures?

Do you believe fixture designs should be based upon accepted periods of architecture and decoration?



Can you secure *out of stock*, fixtures suitable to you in every respect—design, quality, cost, etc.?

★ ★ ★ ★

Pertinent questions! For five years and more Chase has been asking them of leading architects. Studying the residential lighting fixture needs of the architect from coast to coast. Asking opinions. Seeking advice. Requesting frank criticisms and constructive suggestions which will place the lighting fixture business on a new plane.

And what have architects frankly said? This:

"The lighting fixture industry is badly in need of a new viewpoint, new blood, new ideals, new policies and new merchandise which meet the architectural needs of today."

"From an architectural and decorative standpoint little or no progress has been made in the design of residential lighting fixtures from the early days."

"It is virtually impossible to secure lighting fixtures of pure design out of stock—hence the constant necessity of designing fixtures by architects."

"Each year the market is flooded by hundreds of 'novelties' which look the part and only add to the confusion of the public and the problem of the architect."

"Authenticity of form and decoration—not tricks—is all any reasonable architect asks in residential lighting fixtures."

"If architects frequently design their own fixtures even for medium priced homes, and they do, it is because the lighting fixture industry has failed to provide what is obviously necessary—fixtures of correct de-

sign, dependable material and respectable workmanship."

★ ★ ★ ★

Chase asks, as we often have been asked in our talks with leading architects: "Are these practices necessary?"

Do most lighting fixtures have to be queer? Do they have to offend the informed and intelligent good taste of the architectural profession?

Is there any sound reason why residential lighting fixtures should not be designed to agree with the accepted periods of architecture?

Is there a justifiable excuse, commercial or otherwise, for adding "touches", "tricks" or "novelties" to the classic lines of a stately Georgian chandelier, or to the chaste simplicity of an Early American sconce?



Should architects be forced to design fixtures for even average priced homes simply because authentically designed fixtures of good quality and at reasonable prices are not generally available?

Is there any sound reason why correctly designed fixtures made of the best basic materials and properly finished should not be manufactured in quantities and sold at prices far below comparable custom-made fixtures?

Is there any justifiable need from an architectural or economic standpoint for something "new" and "novel" in lighting fixtures each year?

★ ★ ★ ★

To each of these questions Chase answers, "No"!

Chase believes in and respects the fundamentals of pure architecture and pure design.

Chase believes that the established periods of architecture and interior decoration should wholly govern the design of residential lighting fixtures.



CHASE BRASS & COPPER CO.

WATERBURY

• INCORPORATED •

CONNECTICUT

Chase believes that since lighting fixtures are a means to an end they can best serve the architectural need by their good taste and harmonious beauty.

Chase believes that the lighting fixture industry, the architect and owner can best be served by supplanting "novelty" and "originality" in the design of lighting fixtures with intelligent and authentic designs from each architectural period.

Chase believes that good taste in fixtures should not be limited in availability or price — that fixtures for even medium-priced homes can be as authentically styled as those designed by the best architectural talent for the finest homes.

Chase believes that fixtures comparable in design, quality of basic materials, workmanship and finish to custom-made fixtures can be made, carried in stock and sold at from one third to one half what they sell for today.

Chase agrees with the constructive opinion of leading architects that the Lighting Fixture Industry needs a "new viewpoint, new blood, new leadership" in the creation of fixtures which fully meet the architectural need:

—A line sufficiently complete in items, periods and price range to meet practically all residential needs.



—each fixture of basically authentic and pure design.

—the entire line to be made of only the finest basic materials—brass and bronze.

—in workmanship, quality of every part, construction and finish, equal to the finest custom-made product.

—produced in sufficient quantity to be *carried in stock* at all times by manufacturer and trade and therefore priced well below what comparable fixtures now cost.

"What the Lighting Fixture Industry needs is a good dose of good taste."

Chase agrees. Chase accepts the challenge.

A D V E R T I S I N G I N D E X

A. P. W. Paper Co.....	312	The Hart Manufacturing Co.....	35
American Laundry Machinery Company.....	12	Hendrickson, A. Ward, & Co., Inc.....	34
American Sheet & Tin Plate Company.....	41	International Nickel Company, Inc.....	42
American Steel & Wire Company.....	20	Kalman Steel Corporation.....	27
Armstrong Cork Company.....	19, Third Cover	Libbey-Owens-Ford Glass Company.....	29
Armstrong Cork & Insulation Co.....	5	Macbeth-Evans Glass Company.....	1
Barber Asphalt Company.....	37	National Lead Company.....	39
Barrett Company.....	Second Cover	Nelson, Herman, Corporation.....	25
Brunswick-Balke-Collender Co.....	48	Norge Corporation.....	18
Bryant Heater Company.....	31	Otis Elevator Company.....	40
California Redwood Association.....	34	Pecora Paint Company.....	26
Chase Brass & Copper Co., Inc.....	44, 45	Pittsburgh Plate Glass Company.....	23
Clark, Peter, Inc.....	28	Portland Cement Association.....	43
Delco Appliance Corporation.....	11	Reynolds Metals Company, Inc.....	38
Eagle-Picher Lead Company.....	14	Sturtevant, B. F., Company.....	3
Electric Storage Battery Company.....	32	Standard Sanitary Manufacturing Co.....	4
Electrolux Refrigerator Sales, Inc.....	33	Thibaut, Richard E., Inc.....	38
Flat Glass Industry.....	6, 7	Westinghouse Electric and Manufacturing Company.....	8, 9
Formica Insulation Co.....	2	York Ice Machinery Company.....	38
Fulton Sylphon Company.....	36		
General Electric Company, Electric Refrigera- tion Department.....	47		
General Electric Co., Merchandise Depart- ment.....	Back Cover		

ONLY 1½¢ PER MONTH FOR SERVICE!



THE first 10,000 General Electric refrigerators installed in Greater New York apartment buildings have been on the job 4½ years. During that time, owners have paid an average of only 1½¢ per month per refrigerator for service. In 1933, 1576 G-E refrigerators replaced other makes in apartment buildings in Greater New York alone! Over the

entire country this replacement figure is many times greater. The General Electric refrigerator's unparalleled record for dependable performance free from costly servicing has made it first choice among architects, builders, building managers and tenants alike. General Electric Co., Electric Refrigeration Dept., Section CG4, Nela Park, Cleveland, O.

GENERAL  ELECTRIC
ALL-STEEL REFRIGERATOR

BELLERIVE COUNTRY CLUB, NORMANDY, MISSOURI. Architect Frank Cann, Engineers, W. J. Knight and Co. Complete equipment including 40 ft. special built front counter, back counter and mirrored top frame, special built workboard with double rinse tank, bottled beer cooler, etc., by Brunswick.



To ARCHITECTS who want more than blue print reading . .



● There is much more to the designing of a taproom than the blue prints show. The success of the room will rest largely upon the atmosphere your plans create for it.

Brunswick craftsmen can not only read your blue prints. They are masters at catching the spirit of your plan. They can not only build the service fixtures exactly to your specifications. They can impart to these fixtures the spirit of the complete room.

Other outstanding features of Brunswick service fixtures are their convenience and efficiency. A place is provided for keeping everything

at the proper temperature. Makes quick, smart service easy.

Before you specify any service fixtures, be sure and get all the facts from our nearest office. We will be glad to cooperate with you in every possible way. Brunswick service fixtures can be supplied from stock or specially designed to fit your needs or plans. We suggest that you also consult us on billiard tables, bowling alleys, toilet seats and squash courts.



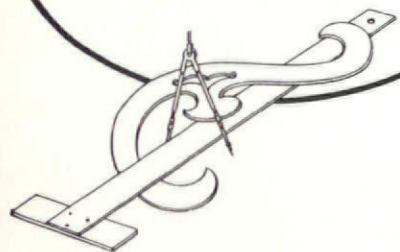
THE BRUNSWICK · BALKE · COLLENDER CO.

General Offices: 623-33 S. Wabash Ave., Chicago, Ill. • Branches and Distributors in Principal Cities of the United States

A MILLION PAIRS OF FEET

*... failed to
damage these floors*

*Armstrong's
Linoleum gives you
complete freedom of
design PLUS important
practical advantages*



MORE than a million people walked over these floors in *Good Housekeeping's* Model Home at the Chicago Fair last year . . . yet their striking beauty was not marred. Today they are as bright and lustrous as the day they were installed—convincing evidence that Armstrong's Linoleum can take heavy traffic without a whimper. Also, proof of easy cleaning.



Striking Armstrong Floors beautify Good Housekeeping's Model Home at the Chicago Fair.

What more could be said of any floor? When you specify Armstrong's Linoleum you may depend upon your client's lasting satisfaction.

Moreover, Armstrong's Linoleum gives you perfect creative freedom in designing floors to suit any interior. This enables you to make the floor an integral part of the decorative theme . . . to round out and complete the effect you want to express in the room.

Whatever you fashion in pencil on your drawing board will be

faithfully reproduced on the job by experienced linoleum layers employed by Armstrong Floor contractors. Expert service is now available in all parts of the country. A list of nearby Armstrong contractors should be in your file. May we send you their names?

For A.I.A. folders, or additional information address Armstrong Cork Company, 1203 State Street, Lancaster, Pennsylvania.



See Sweet's Catalogue File, pages B783-802, for colorplates, specifications and other details.

Armstrong's

• LINOLEUM FLOORS •

LINOTILE ~ CORK TILE ~ ACCOTILE ~ RUBBER TILE

40 YEARS OF G-E EXPERIENCE...

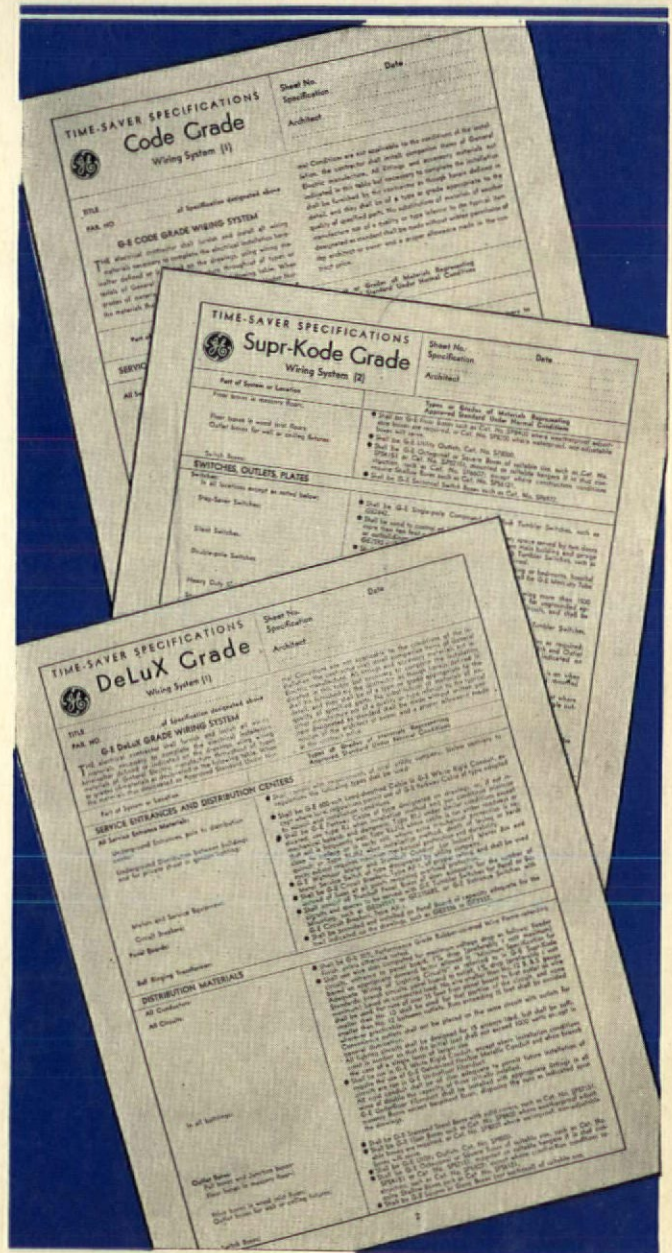


READY FOR YOUR USE

The Architects' Manual of G-E Graded Wiring Systems, published in Sweet's 1934 Architectural Catalogue, offers architects the help of General Electric's forty years experience in designing and planning efficient wiring systems.

To give architects a more practical use of this Manual, General Electric will supply working copies of "Time-Saver" Specification Sheets upon request. These specification sheets simplify planning. They enable the architect to quickly and easily specify adequate wiring systems. They are adaptable to any type of construction. They assure General Electric engineering standards and reliability. Their use is illustrated in the Architects' Manual of G-E Graded Wiring systems.

"Time-Saver" Specification Sheets for Wiring Installations and the Architects' Manual of G-E Graded Wiring Systems are supplied to architects without charge. Ask any G-E Merchandise Distributor for your copies or write direct to Construction Material Advertising Division, Merchandise Dept., General Electric Company, Bridgeport, Connecticut.



GENERAL ELECTRIC

WIRING MATERIALS

MERCHANDISE DEPARTMENT, GENERAL ELECTRIC COMPANY, BRIDGEPORT, CONNECTICUT