



AMERICAN BUILDER and BUILDING AGE, with which are incorporated National Builder, Permanent Builder and the Builder's Journal, is published on the first day of each month by the

**SIMMONS-BOARDMAN PUBLISHING CORPORATION**  
105 West Adams Street  
Chicago, Ill.

NEW YORK  
30 Church Street

WASHINGTON, D. C.  
National Press Building

SEATTLE  
1038 Henry Bldg.

SAN FRANCISCO  
485 California St.

LOS ANGELES  
530 West 6th St.



Samuel O. Dunn, *Chairman of Board*; Henry Lee, *President*; Bernard L. Johnson, Robert H. Morris, Delbert W. Smith and R. E. Clement, *Vice-Presidents*; Roy V. Wright, *Secretary*; Elmer T. Howson, *Assistant Secretary*; John T. De Mott, *Treasurer*.

Subscription price in the United States and Possessions and Canada, 1 year, \$2.00, 2 years, \$3.00, 3 years, \$4.00; foreign countries, 1 year, \$4.00, 2 years, \$7.00, 3 years, \$10.00. Single copies 25 cents each. Address H. E. McCandless, *Circulation Manager*, 30 Church Street, New York, N.Y.

Member of the Associated Business Papers (A. B. P.) and of the Audit Bureau of Circulation (A. B. C.)

(A Simmons-Boardman Publication)  
**AMERICAN BUILDER**  
and Building Age

NAME REGISTERED U. S. PATENT OFFICE AND CANADIAN REGISTRAR OF TRADE MARK

**APRIL, 1938**

60th Year

Vol. 60—No. 4

<b>Publisher's Page—Why the New Deal Has Failed—by Samuel O. Dunn</b> .....	43
<b>Editorial—Homes Prove Best Buy Today</b> .....	45
Rising Tide of Popular Demand Stamps "OK" on Building Industry's Present Big-Value Offerings	
<b>We Have Come a Long Way</b> .....	47
Sixty Years of Building Progress Culminate in Today's Big-Value Home—by Bernard L. Johnson	
<b>Builders Say "Buy or Build Now"</b> .....	50
Houses Built "for the Market" Are Selling Fast Because of Added Value and Easy Terms	
<b>Cutting Costs without Reducing Wages</b> .....	52
Power Saws and Modern Equipment Enable Builders to Give Higher Home Values	
<b>Building Progress Pictorial</b> .....	53
"Exhibit in Print" Illustrates New Ideas and Details for Homes and Apartments, Interiors and Exteriors	
<b>American Builder's "More House" Theme Widely Used</b> .....	58
Local Building Industry Groups and Newspapers Working Effectively to Spread Confidence in Today's Building Values	
<b>"More House for Less Money Is Our Aim" Says Arnold</b> .....	60
Baltimore Builder's Houses Priced at Fully \$3,000 Less Today Than in 1929	
<b>Amazing Progress Recorded in Detroit</b> .....	62
Albert E. Bill, Builder, Compares Popular Five-Room House of 1928 with His Present Offering	
<b>Nichols Keeps Abreast of Better Building</b> .....	64
Well Known Kansas City Builder Discloses Present Quality Specifications	
<b>"Indestructible" Low Cost Masonry Homes Reduce Upkeep</b> .....	66
Builder John W. Fries, Port Chester, N.Y., Demonstrates Scientific Progress in Concrete Construction	
<b>Better Living from Adequately Wired Home</b> .....	68
Electrical Progress Contributes to Higher Home Value	
<b>Community Planning by Operative Builders Delivers More Value</b> .....	70
H. & R. Anspach, Highland Park, Ill., Present a Five-House Project	
<b>Modern Ideas in Front Cover Home</b> .....	72
Latest Moderne by Elmer William Marx, Chicago Architect	
<b>Modernization Department</b> .....	73
42 Modern Apartments Made Out of 5 Old New York City Houses	
<b>Progress in Multi-Family Homes</b> .....	74
George Fred Keck, Chicago Architect, Presents "A Case for the Contemporary Apartment"	
<b>Progress in Commercial Structures</b> .....	76
Details of New Armco Research Laboratory—a Development in Steel and Glass	
<b>New Standards of Convenience Are Built Into Today's Kitchen</b> .....	78
Better Kitchen Planning Demonstrated in Peoples Gas Company Demonstration Homes in Chicago	
<b>Garage Improvements Rival Auto Advances</b> .....	80
<b>"We Can Help You Sell More Homes and Better Equipped Homes"</b> .....	81
Say Major Alexander Forward and John F. Quinlan in Announcing The American Gas Association \$10,000 Prize Contest	
<b>Wage-Hour Legislation and Building Material Costs</b> .....	92
R. W. Stone Predicts Higher Building Material Costs As a Result of Proposed Legislation	

**BERNARD L. JOHNSON**  
Editor

**JOSEPH B. MASON**  
Eastern Editor  
**LYMAN M. FORBES**  
Research Editor

**ROBERT H. MORRIS**  
Business Manager

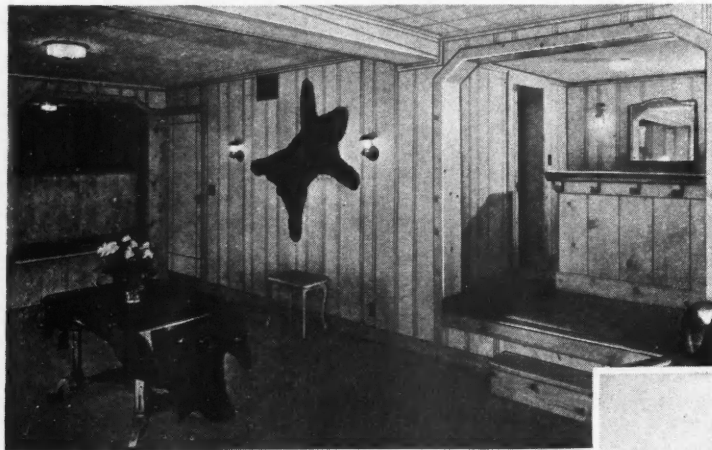
**R. E. SANGSTER**  
Associate Editor  
**A. W. HOLT**  
Contributing Editor

ADVERTISING: R. E. CLEMENT, W. F. COLEMAN, L. B. CONAWAY, J. S. CRANE, J. C. JONES, J. R. PARROTT, E. J. REICH, D. W. SMITH, C. J. WAGEMAN

FIELD STAFF: L. O. ANDERSON, V. L. ANDERSON, C. L. CONLEY, C. R. W. EDGCUMBE, J. H. FREE, CHARLES R. HARTUNG, A. W. HOLT

# Build with FIR-TEX

## Get Double Value for your Insulation Dollar

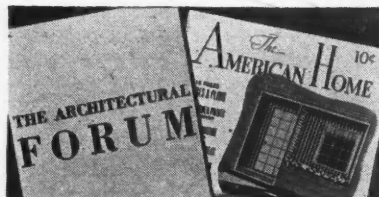


### Fir-Tex used as Interior Finish

Used for interior finish, Fir-Tex not only saves you money but also improves the salability of the house. Note the attractiveness of Fir-Tex panels in the room shown above. This room is finished in the popular Ivrykote finish, which is available on all Fir-Tex Interior Finish boards. Fir-Tex Ivrykote is a pleasing mottled-ivory finish which is smooth and washable. Ivrykote may be kalsomined or painted without further sizing. Fir-Tex gives you *insulation plus interior finish* at the cost of insulation alone.

### Fir-Tex used as Plaster Base

Get a better job—and save money on material and on labor—when you build with Fir-Tex Insulating Lath. There is no need to go to the expense of installing both wood lath and insulation, when Fir-Tex Insulating Lath serves both purposes. The bond between Fir-Tex Insulating Lath and plaster is greater than the bond between ordinary wood lath and plaster. Plaster wastage between lath is eliminated. Fir-Tex reduces plaster cracks to a minimum—eliminates unsightly lath marks on ceilings. Fir-Tex gives *insulation plus plaster base* at the cost of insulation alone.



### Sales Calls Every Month for You

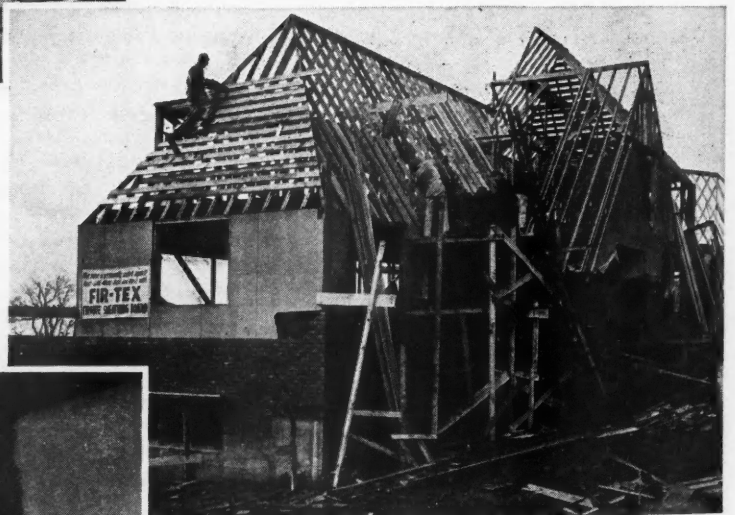
Your prospective customers *know* Fir-Tex. Over a period of years, a strong public confidence in Fir-Tex has developed. Every month we lay the Fir-Tex story before the many families in your community who read *American Home*, which has a circulation of 1,250,000. Your prospective customers in the "building money" group read Fir-Tex messages in *Architectural Forum*, foremost magazine of the building field.

DO two jobs at the cost of one. No longer is it necessary to spend good money for interior finish, lath and sheathing—and then buy insulation, too.

Instead, use Fir-Tex. This modern building board serves *both as insulation and as structural building material*. It does two jobs at the cost of one. These Fir-Tex Double Duty uses are: (1) Insulation *plus* interior finish; (2) Insulation *plus* lath; (3) Insulation *plus* sheathing.

### Made from Clean, Sterilized Fibers

There's nothing else like Fir-Tex. It is made from clean, natural fibers of sound wood. These fibers are sterilized, "felted," and then pressed into semi-rigid boards with tremendous insulating properties. The fibers are not broken down by chemicals. Fir-Tex is not subject to dry-rot. And does not harbor vermin.



### Fir-Tex used as Sheathing

Fir-Tex Firkote Sheathing Board takes the place of wood sheathing and building paper, and in addition does a better sheathing job. Fir-Tex Firkote has greater bracing strength than wood sheathing. It has a glazed surface; is clean to handle. Every fiber is treated to be water-resistant. Guide lines assure accurate nailing. Seals the house with an unbroken area of insulation. Fir-Tex Firkote gives you *insulation plus sheathing* at the cost of insulation alone.

### Send for Builders' Catalog

Brand new catalog for builders and architects gives helpful facts on use of Fir-Tex. Mail coupon for your copy.



DANT & RUSSELL, INC.  
Porter Building, Portland, Ore.

Name.....  
Address.....



# FIR-TEX

THE DOUBLE-DUTY INSULATION BOARD

SIM  
LEE,  
CLEI  
JOH



# PUBLISHER'S PAGE

## Why the New Deal Has Failed

**T**HE *American Builder* has opposed since their inception certain of the most important policies of the New Deal. It has done so because it has believed they would prevent recovery. It has been only too completely vindicated, first, by the failure of full recovery to occur, and, second, by the recent "recession" which made general business *the worst in the first quarter of 1938 that it had been in the first quarter of any year of the depression excepting 1933.*

The failure of recovery under the New Deal should cause more heed to be given in future to the views of those that developments have shown to have been *right* regarding the effects it would produce.

**P**RESIDENT ROOSEVELT says the New Deal will continue to seek the objective of increased mass purchasing power. Nobody ever has disagreed with this *objective*, the attainment of which would be in the interest of all. The disagreement has been regarding the best *means* of attaining it.

Why has the New Deal failed? *Because it has prevented full revival of the investment of capital in private business.* Before the depression the investment of capital for *productive* purposes was occurring at a rate of about 21 billion dollars a year. Under the New Deal it "recovered" to a rate of only about 7 billion dollars a year. To complete recovery it had to increase to a rate at least 14 billion dollars more. If this increase in annual expenditure of capital had occurred, some 11 or 12 billion dollars more annually would have been paid out in wages. This would have

given employment at average wages to around 8 million additional persons. Recovery would have occurred, the mass purchasing power the President desires would have been created, the huge tax bills for public works and relief could have been abolished and we would have entered a long period of great prosperity.

It was great increases in the investment of capital that pulled us out of all previous depressions and caused them to be followed by periods of prosperity, increasing wages and advancing standards of living.

**W**HY is no such huge increase in the investment of capital occurring now? Because almost every major policy of the New Deal has tended to reduce the return from investments in industry, or even to confiscate them. Numerous conclusive illustrations of this tendency could be given if space permitted. One of the most striking is the huge increases that have been made in taxes on incomes and profits to meet enormously increased government expenditures. Nothing tends more strongly to prevent investment than heavy taxation of property, incomes and profits.

What gives employment to labor? Capital—and *only* capital. The more capital is invested, the greater is the demand for labor. The greater is the demand for labor, the more labor there is employed and the higher are the wages it gets. Capital and labor are *necessarily* partners; and whatever prevents employment of one of them *necessarily* prevents employment of the other.

*Samuel O. Dunn*

SIMMONS-BOARDMAN PUBLISHING CORPORATION: SAMUEL O. DUNN, CHAIRMAN OF THE BOARD; HENRY LEE, PRESIDENT; BERNARD L. JOHNSON, ROBERT H. MORRIS, DELBERT W. SMITH AND ROBERT E. CLEMENT, VICE-PRESIDENTS; ROY V. WRIGHT, SECRETARY; E. T. HOWSON, ASSISTANT SECRETARY; JOHN T. DE MOTT, TREASURER, EXECUTIVE AND EDITORIAL OFFICES: 105 WEST ADAMS STREET, CHICAGO; 30 CHURCH STREET, NEW YORK CITY



## SAVED:

**38¢ TO \$1.49 A CU. YD. OF CONCRETE**

**C**ONTRACTORS' own cost figures, presented in Lone Star's new book, "Cutting Concrete Costs," show savings of 38¢ to \$1.49 a cu. yd. of concrete, simply by estimating the concreting schedule which shows the lowest overall cost of time, forms and cement. This book outlines a quick, easy way to estimate rock-bottom costs under any given set of job conditions. It points the way to substantial economies in concrete work of all kinds.

Like all sound ideas, it is very simple: Just plan each job so as to get the fullest possible use out of every dollar you invest in forms; and make the best use of time, so

that job overhead doesn't eat up your profit. Of course, no two jobs are exactly alike, so you can't apply any general rule. Sometimes 'Incor'\* 24-Hour Cement, which cures or hardens in one-fifth the usual time, shows the lowest overall concreting cost. On other jobs, Lone Star Cement is the better buy.

You can't tell unless you estimate in advance. Does it pay? Take the word of contractors whose actual cost figures appear in this new book. Write for a copy of "Cut-

**LONE STAR**  
**CEMENT CORPORATION**

ting Concrete Costs." Lone Star Cement Corporation, Room 2226, 342 Madison Ave., New York. \*Reg. U. S. Pat. Off.

MAKERS OF LONE STAR CEMENT... 'INCOR' 24-HOUR CEMENT

# AMERICAN BUILDER

## AND BUILDING AGE

### Homes Prove Best Buy Today

**RISING TIDE of Popular Demand Stamps "OK" on Building Industry's Present Big-Value Offerings, Bought or Built on New Low-Cost Terms.**

**N**EW values in homes, offered on attractive terms, have evidently caught the popular fancy this spring; *result*—a rush, all over the country, of planning and financing, preliminary to construction, that forecasts 1938 as a record-breaking home building year.

As evidence of this, consider the weekly figures released by Federal Housing Administrator Stewart McDonald summarizing home mortgages submitted to FHA and accepted for appraisal.

The week ending March 26, 1938, established an all-time high for FHA financing, according to these official figures, of home projects having a total mortgage valuation of \$22,500,000. This was the fourth consecutive week that new all-time high records have been set, and the fifth consecutive week in which 1938 volume exceeded that of the corresponding week of 1937. This five-weeks period showed a total of over \$94,000,000 in mortgages submitted to the FHA in 1938, a 32 per cent increase over the five-weeks total of \$71,000,000 for the same period in 1937—a period at that time considered gratifyingly active. These mortgage figures cover individual projects, single-family, or two-family houses.

They do not include some \$60,000,000 of large scale housing and operative builder projects which are going ahead strongly under the new regulations. Past experience indicates that a preponderant percentage of the total applications submitted will be finally accepted for mortgage insurance and that actual construction will proceed.

#### Home Building Public Approves

These FHA mortgage submissions are therefore reliable first indications of the volume of 1938 home building activity, and are striking proof that the buying public is well satisfied with the values, terms and prices now prevailing in the new home field. They indicate a widespread eagerness on the part of families of small and moderate income to gain the independence of home ownership under present favorable conditions.

If there was any question as to need for easier home financing, or as to the probable response from the home-hungry public to a proposition for a smaller cash down payment with a longer time to pay off the balance monthly at a low interest rate, that question is being conclusively answered by the people themselves in their quick response

to the new FHA 90 per cent, 25-year finance plan.

Last fall's "smoke screen" of propaganda, unloosed by interests then opposed to additional new home construction, to the effect that material and labor costs were "too high," is now clearing away as a result of the industry's united drive to acquaint the general public with the whole truth concerning costs and values being offered in the 1938 "more house for the money." The success of this building industry effort to correct the public's false price-thinking is reflected in Administrator McDonald's encouraging reports. Evidently the home-seeking public is about to take advantage, on a nation-wide scale, of today's opportunities to invest safely in needed homes under the present favorable conditions.

The advantages to be gained from building or buying now are being advertised by individual local builders and by associated groups of local building industry firms in a great many communities. As a result, confidence is being restored and the alleged hazards, difficulties and mysteries are being taken out of the home acquiring procedure.

#### "Case Studies" in Home Values

*American Builder*, beginning last July and culminating in the special October '37 issue, has illustrated many examples of present-day homes, contrasting them as to design, construction, equipment and cost with typical homes of a decade ago. Costs down 20 to 40 per cent and built-in value up a third and more have been found almost everywhere. Additional "case studies" of this sort are presented in this April issue. They show the *progress* that has been made in the art of building, and they exemplify many points of advantage to owner and occupant in the value and cost of today's homes.

Surveying, as we have, many current newspaper announcements and advertisements by builders and by local building industry groups, we get a very definite impression of the points of home building quality which the industry is today offering the public—sponsoring these quality points in such a public way as to constitute a genuine guarantee. Innumerable inspection trips by the editorial and field staffs, where hundreds of these new homes are under construction, have confirmed the fact that these quality points are being built-in as promised.

One of the best of these public statements of quality home-building policy has been sponsored—appropriately enough—by 29 firms active in the home building industry of the nation's capital. Prepared by "The Washington Post" to run as a series of six full-page advertisements, the following "20 Points of Superiority" are illustrated



and outlined in the issue of March 20 to "increase value in the modern home of today." A study of these quality points as emphasized by this group of Washington stalwarts (each of whom has signed the page with name and address) will reveal fairly accurately the *progress* which home building throughout the entire nation has made, and will highlight what home seekers, practically anywhere today, can count on when they buy or build in accordance with today's accepted standards. Under the statement, "It's the plus-features in a home that count," this Washington Post display lists the following:

1. **Good Design—Simplicity.** More of the building dollar goes into livability—less into ornamentation.
2. **Beautiful Multiple Baths.** Where one bath was enough in 1928—you now often find two baths and a lavatory.
3. **Lower Maintenance Cost.** Sound construction and fewer frills eliminate many items of upkeep.
4. **Quality Trim—Well Placed.** Ornamentation of the modern home serves practical purposes—costs less.
5. **Quality Period Hardware.** Hardware and lighting fixtures restyled to harmonize with home design.
6. **Complete Kitchen Equipment.** Refrigeration, range, cabinet units all included in your purchase.
7. **All Floor Space Utilized.** No odd corners to waste space—larger rooms at no increase in cost.
8. **Large Landscaped Lots.** Planned developments and rigid restrictions create better environment.
9. **Moderate Monthly Payments.** Lower cost and easier financing under the new single mortgage plans.
10. **Wrapped In Insulation.** Homes are cooler in summer—easier to heat in winter when insulated.
11. **Factory Pre-Built Windows.** Snug fitting and dry—eliminate leaks and rattles—yet cost no more.
12. **Weatherstripped—Caulked.** Extra protection against dampness and drafts—help cut fuel bills.
13. **Automatic Heating System.** Cleaner and labor saving. Air conditioning assures complete circulation.
14. **Copper Pipes and Gutters.** Too expensive to be practical in 1928—now standard in many 1938 homes.
15. **Basement Recreation Room.** Converts 15% of otherwise wasted space into a center of family fun.
16. **Treated Lumber, Masonry.** Termite-proofing and waterproofing protect against natural hazards.
17. **Sufficient Electric Outlets.** Plug-in lamps and appliances wherever you wish—there's always a place.
18. **Automatic Water Heater.** Plenty of hot water whenever you want it—at the turn of a faucet.
19. **Larger Chimney Flues.** Fireplaces that draw better—cheerful on cold winter days.
20. **Roof Built to Endure.** Your choice of today's roofings, improved for beauty and wear, give longer service.

Then follows this display line of good advice, "COMPARE HOMES ON A 10-YEAR BASIS" below which the case for today's big-value homes is concluded with this summary, "While these 20 points of superiority do not constitute *all* the improvements made by builders and manufacturers during the past decade, they are representative of scores of engineering innovations that make possible a better home for your money today. The archi-

tect's more beautiful and livable home designs have been coupled with new equipment and restyled fixtures that create plus values which were impractical or unknown in 1928. It is to these features you must look when you analyze home values. The compact, convenient, efficient home of 1938, planned as a complete living unit, is on an entirely different plane than any of its predecessors.

"The building dollar goes farther than ever today. Standardized materials have reduced the time required to erect a house, with subsequent saving in cost; new materials of higher quality have replaced many of the old standbys. Plumbing fixtures and kitchen equipment are finer and more beautiful—yet they actually cost less. A few price increases in basic building materials have been more than offset by decreases in others. The home of 1938 is the result of more careful planning and more efficient building methods."

### Keep on SELLING!

The widespread general interest in low-cost homes, as indicated by the FHA mortgage figures, should stimulate every building industry firm and individual to get busy now to turn this interest into definite building projects.

At a recent sales organization meeting of the Marquette Cement Manufacturing Company, W. A. Wecker, president of the company, said, "It is the fashion of these times, whenever business men gather together, for someone to get up and discourse on the immediate future and what it holds in store for us. This economic fortune-telling seems to have developed into much of a racket. There would be no need for anyone to work if the final result were known; but the result for this year is now *unknown*. The only thing we have that is a known quality is a *determination to achieve*—a will to do a job well. So we set quotas which represent to us a job well done and we strive for that result. It is essential in your part of this effort not only that you yourself do not falter nor hesitate but also that you imbue all you meet with this crusading spirit, carrying with it the will to achieve."

The progress in home design, construction and equipment, in labor skills and job management efficiency, and in lowered financing costs and easier payment terms—all proclaiming *more house for the money* than ever before—certainly gives a sound and favorable basis for building men to create a healthy growing home building business this year. Sales-mindedness in delivering more and more value for the home building dollar will create unlimited consumer demand.



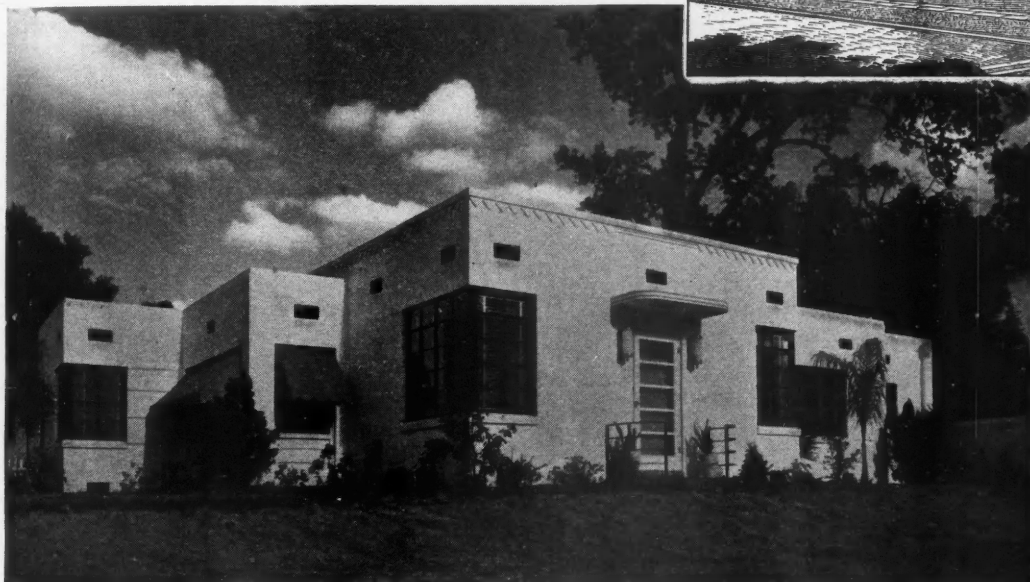
# We Have Come a Long Way

60 Years of Building Progress  
Culminate in Today's  
Big-Value Home

By BERNARD L. JOHNSON  
Editor American Builder



BEST brick house of 1884, a Prize Winner in fact in the "Building Age" competition of that year; H. L. Campbell of Buffalo, Architect.



SPIRIT OF 1938 as interpreted in concrete block and white cement paint by Kiehl and Stevens, Inc., designers and builders, Orlando, Fla.

TO GET the full meaning of the word, *progress*, as applied to homes and home building, one should probably go away back to the Caveman's hut and marvel at the ten thousand years he required to improve his heating plant by moving his open fire over from its central and *smoky* position to a side wall, where it became a hearth, with heat reflecting back and chimney flue—the first real move toward "air conditioning."

Change and improvement were slow in those days; no urge then to bring out a new yearly model; no motor car industry then to harass and inspire builders to be ever on the alert for salable points to catch the public's fancy!

However, coming on down to comparatively recent times, if we limit our house improvement survey to the sixty years, only, of the life of this publication, we will find plenty to marvel at; for indeed we have come a long way in the art of designing, building and equipping homes since 1879 when the old "*Building Age*," then known as "*Carpentry and Building*," was launched.

I have had a lot of fun browsing back through those old issues. They have a quaint flavor all their own—precise, stilted, thorough; all illustrations minutely hand engraved on wood; no photographs; much small type; much attention to "architecture" and to the building of speculative rows of houses, then in full swing throughout the country, many examples—sad to say—still standing.

One's first impression of course, of these old time houses is of large size and exuberance of ornamentation. Towers, porches, piazzas, spindle work, jig saw ornaments, and heavily carved mouldings both inside and outside testify to taste run riot and to cheap and abundant labor. The substantial contributions which present day home designers and builders have made to the cause of economy and good looks are highlighted by a glance back at these extravagant old-timers.

To give an idea of *size*, and of the savings, both in original construction cost and in housekeeping labor, upkeep and fuel expense which we now enjoy because of our present trim, convenient and space-saving houses, let me quote a typical description of the room layout of a dwelling house of 1879 as presented in the first issue of this publication, dated Jan. 1879.

"On the plan of interior, A (in floor plan, not shown here) represents the entrance hall, made in old-fashioned style like a room, with a cozy fire-place in it, stained glass windows, etc. The wainscoting of this hall is made high, with the top member forming a shelf all around. It is fitted up in ash. B, is the library, which is also the parlor. At each side of the entrance door of this room, as shown by the dotted lines, a book-case is built in. The mantel and all the trimmings of this room are in walnut. The dining-room is fitted up in chestnut and ash, with ash and walnut floor, paneled wainscot, fixed bouffé at one end, and Caen stone and tile mantel-piece





ABOVE; Authentic Early American house of hand squared timbers at Mishawaka, Ind., MODERNIZED in 1893 as pictured at right from plans prepared by one C. A. Brehmer, architect, of South Bend—Yes, tower, piazza and all to put it into the then current style!



opposite. This fire-place is arranged for an open wood fire, and immediately over it, above the mantel, is the window shown on the plan, which is filled with one sheet of plate glass. The faces of this chimney breast to the ceiling are covered with light buff and chocolate colored tiles, and there are introduced in it, as well as in the bouffé opposite, many hand-painted tiles by Messrs. Ward, of original design, of bud and flower patterns of unusual excellence. D, is a room designed to be used as a private office or library; this is fitted up in oak. The triple window of this room has rolling venetian blinds. E, the staircase hall, is in ash, same as the entrance hall. The staircase has a



ROCK-FACED cement block was a popular novelty in 1908 when this sturdy but somewhat warty dwelling was illustrated in the "American Builder." The tower roof was a master touch.

square chamfered and carved newel with ball at top, close string, square chamfered balusters and double hand-rail. The floor of this and the entrance hall is covered with ash and walnut bordered floor. F, the pantry, is fitted up with butler's sink, cupboards, etc., complete. From the plan the room might appear a dark one, but is not so, the window shown by staircase throwing its light across into the

pantry, and there being a skylight in addition immediately over the butler's sink. G, is the billiard room, fitted up in birch. H, the kitchen. K, conservatory. L, piazzas. On the second and third stories are nine bedrooms, with closets, etc., the bathroom and an attic. These are trimmed in pine, plain chamfered work. All the rooms of first story are fitted in separate and distinct designs, no two being alike. The mantel-pieces, with the exception of that in the dining-room, are of wood, made to order from designs, matching the other woodwork of the respective rooms. All rooms have inside blinds—hardwood on first story, pine on second."

Carpenter labor was cheap back in the '80's and plenty of it was used at the building site, very little back at the factory or shop. Doors and windows were mostly handmade right "on the job"; mouldings were planed out by hand; carving was hand-done. Power hand tools were unknown; in fact, in house building no power equipment of any kind was used. Still these old houses were solidly built and gave good service.

Sometimes we think of *modernizing* as being of recent origin in the home building field, dating back only about to "Title I" of the FHA. Wrong, decidedly! Back in the early '90's they were going to quite an expense, it seems, to "modernize" the old authentic Early-Americans into "Newport villas" and other current favorites of carpenter gothic.

I reproduce one example of this just to show progress in reverse. From the old "*Building Age*" of March, 1893, this remodeling job is reproduced. It was described, in part, as follows:

"It very frequently happens that some of the most interesting pieces of work which those engaged in build-



ing operations are called upon to execute are found in the alteration and remodeling of old structures, for whatever purpose employed.

"It is in connection with such work that many curious and perplexing problems are presented to the architect and builder for satisfactory solution. The results accomplished are strikingly illustrated in cases without number where old buildings have been transformed into structures of modern design, and this, too, in not a few instances, at comparatively small expense. A very happy example of what may be done in this direction is shown by means of our supplement plate. The small picture in the upper left-hand corner represents an old mansion which was transformed into the modernized dwelling, shown by the larger picture. The remodeled building has a new exterior, roof, porches and bay windows, enlarged sleeping and dining rooms, two new bathrooms, fully equipped with closets, tub, bowls and instantaneous heaters, as well as plate and art glass windows. The transformation from the old to the new was recently made for Martin Beiger of Mishawaka, Ind., from drawings prepared by C. A. Brehmer, architect, of South Bend, Ind., who also supervised the execution of the work. The old mansion was originally erected by a venerable resident of the city named, and was constructed of timbers hewn square, mortised and tenoned, and put together with pins, as was the custom in years gone by."

In home equipment the old-time houses were, of course, so far from present-day standards that a comparison only serves to amuse. Plumbing, heating, automatic controls, air conditioning, modern illumination, kitchen equipment, basement laundry and game room facilities—all of these are products of our modern times, at least as to their refinements and streamlined designs—plus their dependability and low cost.

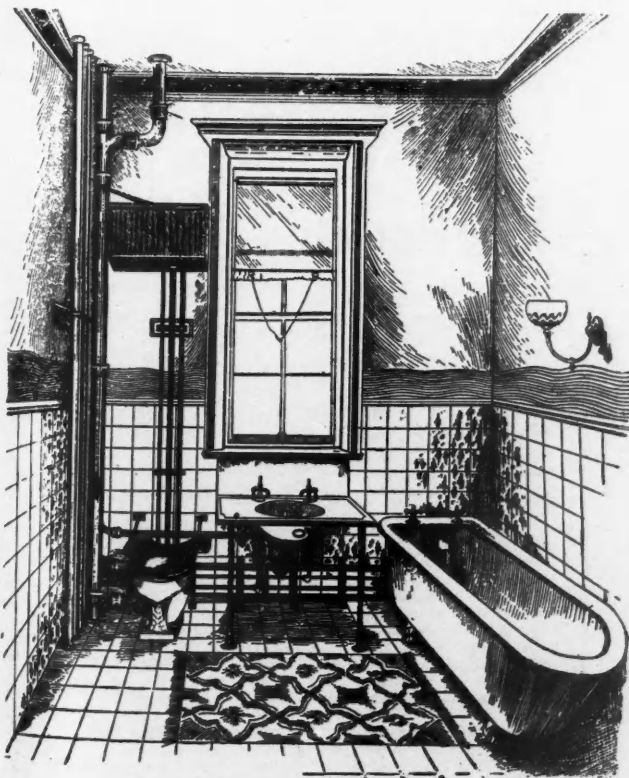


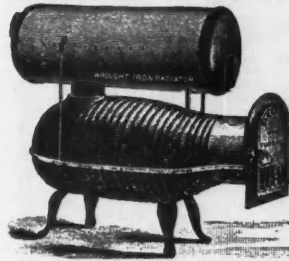
Fig. 1.—Bathroom in Fifth Avenue House.

POSITIVELY the latest word in modern bathrooms (in 1890); this one being in a house at 453 Fifth Ave., New York. "Very compactly arranged," the Building Age editor commented.

September, 1884.

CARPENTRY AND BUILDING

## BARSTOW'S WROUGHT IRON WOOD FURNACE.



In this Furnace we have produced a good, serviceable article, that for simplicity, durability and economy cannot be equaled.

The Fire-box is made of VERY HEAVY CAST IRON, CORRUGATED, thus insuring against any danger of warping or cracking.

The Radiator is made of HEAVY IRON, FIRMLY PUT TOGETHER, thus obtaining great durability and perfect freedom from gas and smoke.

The Flues are so arranged that the products of combustion are carried twice the length of the radiator before reaching the smoke-pipe, thereby utilizing all the heat, and securing a large and powerful heating surface. These flues can be readily cleaned through the openings at the ends of the radiator.

ONE SIZE.

Height, 5 feet 4 inches

Width, 5 feet 1 inch

Fire-box, 5 feet 8 inches

Size of door.

SEND FOR CIRCULAR AND PRICE LIST.

**BARSTOW STOVE CO., PROVIDENCE, R. I.**

HOW AIR CONDITIONING was promoted back in 1884. This was evidently a popular stream-lined model, yet built for service too!



Nozzles.—Fig. 10.—Folding Bath Tub.—Open.

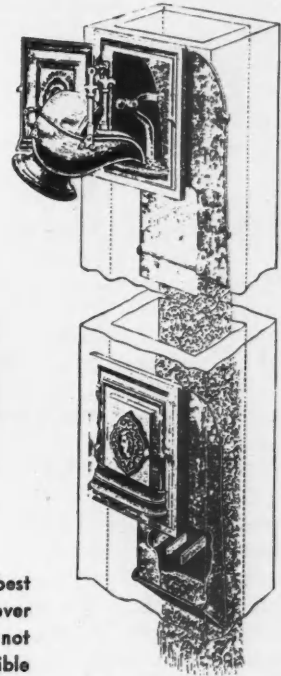


Fig. 15.—New Ash Shute.

MODERN CONVENIENCES in the best homes of the Eighties; ABOVE, a clever fold-away Bath Tub (wood-encased if not fur-lined); and RIGHT, the indispensable Ash Dump and Chute.

It must not be assumed, however, that our grandfathers and great-grandfathers and their families were without "modern conveniences" in their homes. Yankee ingenuity was at work and had already developed such marvels as gas lamps, bath tubs—both stationary and folding—central heating plants and coal-burning kitchen ranges. Some refinements in built-in equipment in those old days even exceeded our best of today. For instance, I find in our journal of June, 1890, a full-page announcement by a New York piano manufacturer of an upright piano action to be built into a house and encased by the woodworker. "What a renting feature to have a good piano a part of the house fixtures!" the advertisement argues.

It has been truly said that the average American family enjoys more home luxury and home convenience in its low-cost home today than royalty in its castles a hundred years ago.

Competition with other industries and the urge for something still better have carried the art of home building into new heights of luxury that has become a necessity for today's home seekers. Reviewing these sixty years of "American Builder and Building Age" history confirms this.

# Builders Say, "BUY or BUILD NOW"

STILL more Value!



\$5490.

An established, exclusive section, 3 minutes to 8th Ave. Express Subway at 169th St., Jamaica, 3 blocks north of Grand Central Parkway. Values you'd expect of America's largest home builders. Sewers, concrete streets, Celotex Vapor-Seal Sheathing, Fenestra Steel Casement Windows. 75 different models.

10% CASH

GROSS-MORTON  
Jamaica Estates  
CORPORATION  
UNION TURNPIKE & UTOPIA PARKWAY  
JAMAICA, L. I. NEW YORK CITY

GROSS-MORTON advertising features "Still more Value."

**T**HE greatest concerns in the U. S. have cooperated with us to produce a sensational home that—value for value—is the lowest in 17 years."

Thus one of the nation's prominent builders, Levitt and Sons of Manhasset, N. Y., advertised in a recent issue of "The New York Times" the lowest price in 17 years! Thus one builder is encouraging prospects to buy now, and in his advertising points out how progress in planning, construction and equipment enable him to give "More House for the Money."

The extremely large crowds that have attended the model home openings of developers and builders since the new FHA terms have gone into effect have clearly indicated that the public can be sold on the advantages of building or buying a home now. A recent survey of prominent builders by *American Builder* showed almost unanimous enthusiasm for the FHA plan and optimism about the sale of homes in 1938. The change in sentiment and the volume of new home construction that has been started since the passage of the Housing Act Amendments can be said to be nothing short of miraculous.

Not only are people coming out in great numbers to visit new home openings and demonstration homes, but those interested in individually designed and built homes are showing renewed interest. Architects, plan services and builders who render architectural service report the greatest activity in preliminary planning of homes for definite prospects in many years.

The reason for this change in sentiment is that the public is becoming more fully aware of the advantages of building or buying a home now. The campaign to drive home this thought was started by *American Builder* early in 1937, culminating with a special "Truth About Home Building Costs" issue in October. Since that time builders, dealers and building industry men have been doing their utmost to present the facts about the value of the modern home. This activity is beginning to bear results.

Most building men are familiar with the arguments for home ownership and for building now. But these arguments must be consistently and continuously brought home to the general public. It is the job of every building industry man to keep pointing out how vastly improved in

## Ten Telling Arguments to Convince Customers. Large Crowds Attend Home Openings. Change in Sentiment "Miraculous"

every respect the home of today is over those built a decade or more ago. It is the job of every building industry man to point out the progress in planning, construction, equipment and financing which makes home ownership today possible at reasonable cost.


To assist its readers in presenting this story to the general public, this publication has assembled some of the most outstanding arguments for building now, in the following text. It should again be pointed out that these are presented as facts for the consumer and should be passed on in every way possible—by word of mouth, in letters, in newspaper advertising and in promotional material of all kinds.

Well, what are the arguments for building now? Let us take them up step by step:

1. *It is cheaper to own a home than to rent.* The new long-term amortized mortgage loan at low interest rates not only permits the homeowner to pay for a home like rent but at less cost. This is now particularly true of the \$6,000, or under, house which can be financed over 25 years, getting the monthly carrying charges down so low that it is cheaper to live in a home of your own than pay rent. To illustrate this point, following is the typical finance plan as used by Frank Droesch, Long Island builder, in his new development in East Floral Park. His homes sell for \$3,490, with a down payment of \$350. The

NOW\*... \$1000 DOWN GETS YOU  
**60% MORE**  
FOR YOUR MONEY AT

Kew Gardens Hills



The new Housing Act makes a world of difference to home seekers who desire to improve their standard of living... now a very nominal down payment opens the doors to the luxury and the prestige of Kew Gardens Hills... the park community of sensationally different new homes, just a short walk from the 8th Ave. express subway, 20 minutes to Manhattan. Prices from \$8,000 to \$12,000.  
\*Subject to new Housing Law.

Facing the Traffic Pretzel, Grand Central Parkway, cor. Veigh Pl., 3 minutes east of Queens Blvd., at

KEW GARDENS, L. I., NEW YORK CITY

Directions from N. Y.: Queens Blvd. to Grand Central Parkway, turn left, continue on Parkway Commercial Road to first police booth, cross Union Turnpike Bridge to Veigh Place.

ALVIN WOLOSOFF, of Kew Gardens Hills, features "60% More for Your Money" under new FHA plan.



total monthly carrying charge on this house is only \$25.98. Here is the way he states it in his advertising folder:

25-YEAR FINANCING PLAN	
The price of the house is	\$3,490.00
Cash payment required	350.00
Balance on FHA Insured 25-year amortizing mortgage	\$3,140.00
Average Monthly Carrying Costs	
Mortgage interest and amortization	\$ 18.78
Taxes, insurance and water (approx.)	7.20
Total monthly carrying charge	25.98
Of this sum the average monthly amortization is	10.46
The average net monthly carrying cost is only	
After the mortgage is paid off the monthly carrying costs for taxes, water and insurance will be approximately	\$ 7.20

2. It is easier to own a home today. A second strong argument for building now is the small down payment required. It is easier today to finance and build a house than ever before in history. Not only is it easier from a financial point of view, but the improved organization of the building industry, with more and more functions centered in the hands of one responsible office, makes it easier to build.

3. A new home provides a better family environment. No other argument for home building is stronger than that it enables the family to select an attractive environment for themselves and children. Better planning of residential communities today provides healthier, safer, more beautiful places to live than ever before. A small home among ideal surroundings for the growing child is now possible for people of all income groups. Such a home provides a security and a protection for family life that cannot be obtained in any other way. It provides security and stability that makes for a higher type of living.

4. A new home today is a sound investment. The recent gyrations of the stock market once more call attention to the fact that a home of your own is still the most stable and profitable form of investment for the average man. It is a blue chip investment which the owner can  
(Continued to page 128)

# LEVITT AND SONS

achieves

## an Amazing New Home

### AT A REMARKABLE PRICE!



AIR-CONDITIONED BY GENERAL ELECTRIC

PRICE . . . . \$8,990  
CASH . . . . 1,198

● Today, under construction in Strathmore-at-Manhasset, is the third of a trio of sensational plans developed by Levitt and Sons. Sensational because—value for value—its price is the lowest in seventeen years! Listen to this large centre hall running clear thru to the rear; spacious living room with three exposures; dining room; kitchen; breakfast alcove with built-in leather upholstered seats; powder room and lavatory; three bedrooms, the smallest 12x10, the next, 15x11, the largest 16x13, a magnificent bathroom (more about this room later); five closets; a downstairs terrace, an upstairs sun-deck; garage, laundry, attic.

● And here's more: it's air-conditioned by General Electric; insulated by Johns-Manville; piped by Anaconda; refrigeration by Electrolux; cooking range by Magic Chef; hot water by Monel-Metal; glass by Pittsburgh Plate; linoleum by Armstrong; steel windows and screens by Fenestra; and—just as a finishing touch—all Venetian blinds by National Acme.

● The house features the new shower room designed by Levitt. Tub and shower are enclosed in a small room completely walled in glass! Don't confuse this with the usual glass-enclosed tub. Tub and shower are completely separate units; the shower has its own tiled floor.

● The grounds are large—8600 square feet—and exquisitely landscaped. Sketches and plans may be seen at the main office. Orders will be taken in Georgian, Regency, English, Colonial, or Modern architecture, and the purchaser may select his own colors, tile, etc.

● The price above includes all the items mentioned here. There are no extra charges. The community is rapidly nearing completion, orders are limited and will be taken on a first-come-first-served basis only.

*Levitt and Sons*

NORTHERN BOULEVARD • MANHASSET, L. I.

"LOWEST PRICE IN 17 YEARS," says Levitt and Sons in spectacular advertisements on new moderate-priced house, with host of modern features and equipment.

CHARLES REIS, New Jersey builder (at left) features air conditioned, quality homes at \$3,990. Advertisement says "monthly expense" is \$19.22, plus "\$12 average monthly saving" on new FHA plan.

**Reis proves it CAN be done!**  
COMPLETE PRICE

**\$3,990**  
ONLY \$400 CASH

Can AIR-CONDITIONED QUALITY Homes be built (under rigid government regulations) to sell for less than \$4,000? You'll find the ANSWER at the REIS Kenwood housing project—today's outstanding achievement in VALUE! Fully improved streets. No assessments. Convenient to schools and shopping center. 15 minutes by bus to 178th St. subway station.

Landscaped plots  
50 x 105

Attached Garage  
Interlocking Zinc  
Weatherstrips in  
Windows

Completely Furnished  
Model Homes  
OPEN FOR  
INSPECTION

DIRECTIONS:  
Cross George Washington Bridge and follow Route 4 to first traffic light. Turn right to Kinderhook Road and proceed north to Midland Ave., River Edge. Turn left on Midland Ave. to Kenwood. Grade 8-2300

HEATING IN WINTER COMFORT IN SUMMER

SUPERFLEX OIL BURNER

Air-Conditioned  
\$19.22 MONTHLY Expense plus \$12 average monthly savings on New FHA Plan.

QUALITY HOMES

REIS HOMES  
"Custom Builders in New Jersey Since 1923"  
"KENWOOD" RIVER EDGE Bergen N. J. County





PRECUTTING LUMBER on a low-cost home project.

**I**MPROVED power equipment and tools today enable the builder of homes to deliver higher values without reducing wages. Progress in the use of modern equipment is largely responsible for the fact that the modern home, with its extensive improvements and modern conveniences actually costs from 25 to 40 percent less than it did in 1929.

One of the most graphic recent illustrations of the use of efficiency methods and power equipment to reduce the cost of small homes has been interestingly presented by Captain R. B. Lord, director of construction of the Farm Security Administration, speaking before several of the lumber dealer conventions.

Captain Lord was called in to reorganize and put on an efficient basis the construction program of this organization, which in its early experiments found construction of individual houses rather expensive.

Captain Lord, in describing the steps he took to reduce costs, said, "Two elements, design and precutting have been the basis for our low-cost housing program." He pointed out that the cost limitation on houses to be built was \$2,200 in the North and \$1,500 in the South. He criticized architects who have universally applied themselves to the development of attractive design but failed to employ basic principles that lower cost. Under the procedure set up by Captain Lord plans for the small homes were reviewed by engineers, who eliminated all non-standard materials and checked all data with an eye to easy and inexpensive erection in the field. For example, where a frame house was used, no design was allowed to permit the use of studding length other than 8, 9 or 10 feet. Room sizes were made dependent on the use of standard materials and dimensions.

#### Materials Scheduled for Precutting

A thoroughly studied set of plans based on this type of planning was then prepared, but in addition to these plans a complete material list and precutting schedule was prepared, together with detailed sketches of the material to be precut with a power saw on the job.

Several DeWalt woodworking machines were purchased for this purpose and were used to precut practically all of the lumber. The result of this preplanning and precutting program was startling. Whereas in the earlier stages of the program the ratio of labor to materials was approximately 65 percent labor to 35 percent for materials, under the new cost-reducing methods the ratio was completely reversed so that 65 percent was

## Cutting Costs Without Reducing Wages

Power Saws and Modern Equipment Enable Builders to Give Higher Home Values

spent for materials and only 35 percent for labor. An important point to note is that it was necessary for a large part of the work to be done by unskilled labor taken from relief rolls. The fact that the lumber was accurately and skillfully cut on the power saw enabled rapid construction of the houses despite the shortage of skilled labor.

"Such a cost-cutting program can be easily put into effect by private builders," declares Captain Lord. "First of all," he says, "to reduce the cost of houses, the principles of practical design I have described can be applied by any architect or any association interested in producing a low-cost house. Secondly, the principles of precutting and prefabrication can be obtained through cooperation between contractors and their local material dealers, whereby this service can be supplied to the contractor at a small additional charge.

"I see no reason why, if designs can be prepared containing a complete precut schedule of materials, this material cannot be supplied custom-cut to the contractor ready for erection. Not only will it enable him to save labor in the erection costs of the unit, but it will also permit the construction of a more mechanically perfect house, as the cuts by machinery are more accurate than the best cuts by hand labor. Where houses are constructed in the rural sections, where little of the highly skilled labor is available, the production of labor in this construction through the use of these methods will be equal to that of the highest skilled labor."



CONSTRUCTION is speeded and simplified by power-cut lumber.

TYPICAL of  
entrance st  
stration hom



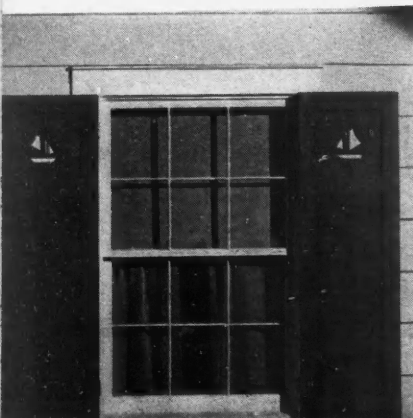
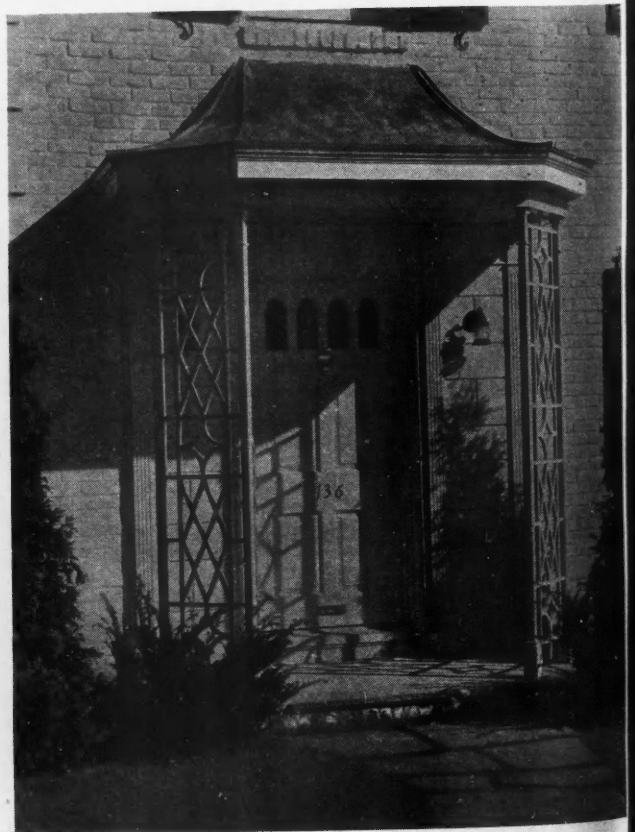
TYPICAL of the perfection of current home design and construction is this entrance stair hall of Regency period in Chicago Peoples Gas Co. demonstration home; Lincoln Construction Co., Builder; Elmer Wm. Marx, Architect.

## Building Progress PICTORIAL

An "Exhibit in Print" Showing  
Examples of Style and Value  
in Today's Building Improvements



LEFT; New Colonial door and trim designed for Curtis Millwork by Dwight James Baum, Architect. BELOW; French flavor in house at Munsey Park, L. I., H. W. Johanson, Architect.



ABOVE; Entrance styling by Olive Tjaden, architect; Left; Colonial blind by Curtis Companies.

## Exterior Detail Highlights

Doors and Windows of Authentic Style Mark the Product of Today's Home Builders.



or and  
is Mill-  
Baum,  
rench  
y Park,  
chitect.

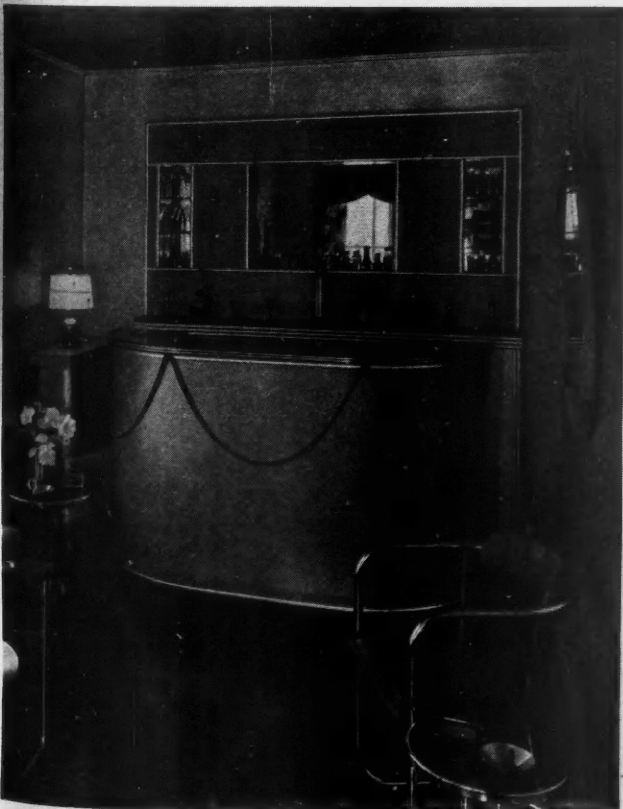
**KNOTTY Pine wainscot with Early American type stairway as built about 1700—very popular today in Colonial homes.**



## Home Interiors— Stair Halls and Basements

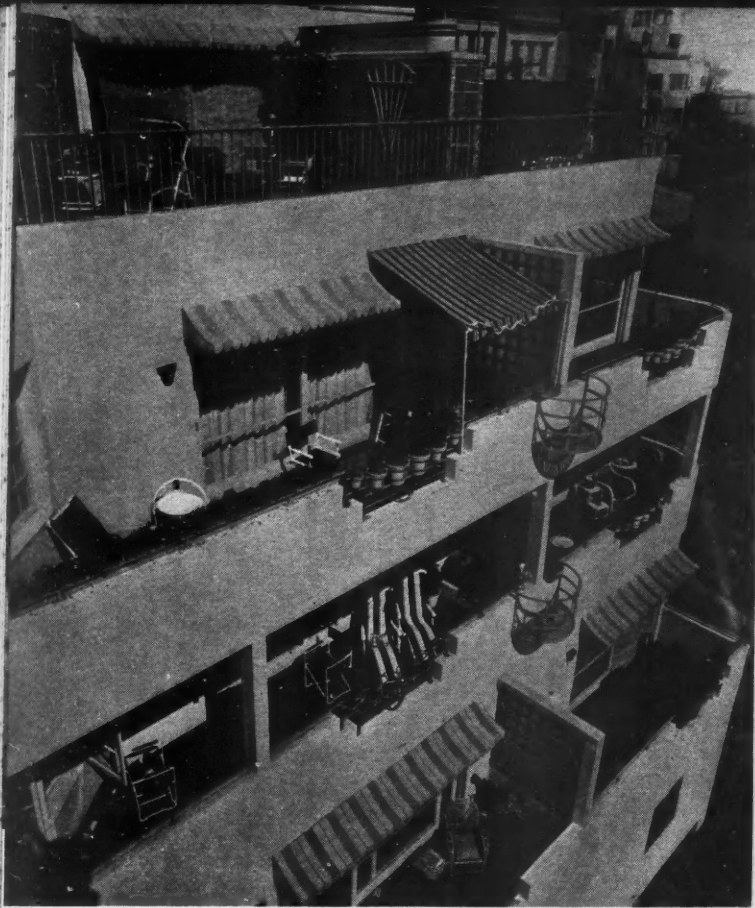
**Plenty of sales appeal here!**

**BELOW; Bar in a Montclair (N.J.) home has scorch-proof, alcohol-proof Bakelite top and moderne lines suitable for recreation rooms.**



**ABOVE; Basement recreation room in Gas Model Home, Beverly Hills (Chicago). BELOW; Entrance and stair hall in this same home; John J. Mangan, Builder; White and Weber, Architects.**



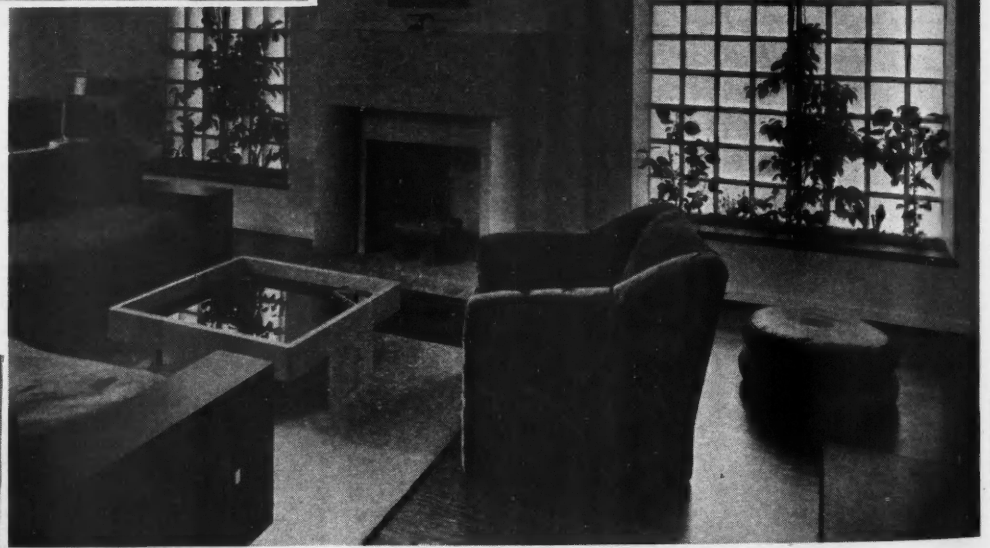


ABOVE; "Privacy panels" of glass block improve the sun terraces of this San Francisco apartment; T. S. and J. Ralph Malloch, builders.

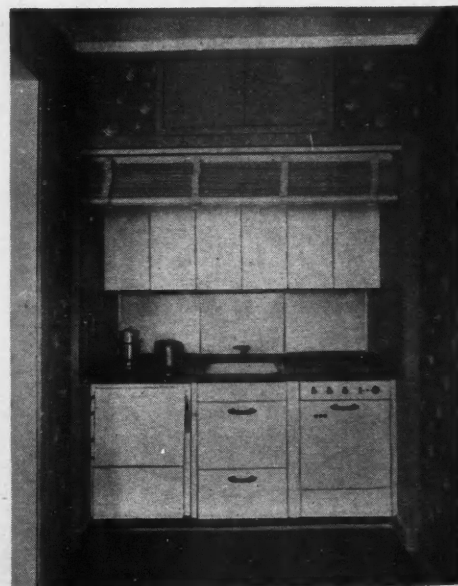
## Progress in Apartments

Streamlined Ideas, Inside  
and Outside, Embarrass the Past

BELOW; Living rooms in the Mallochs' San Francisco apartment have smart styling with glass block panels and softly curved mantel.



LEFT; Venetian blind conceals compact kitchenette in Brooklyn (N.Y.) apartment; Robert Helmer, Architect.



Living  
in Be  
Hills (I  
go) a  
model

Sp  
Wi

Book  
Fire  
Cont

RIGHT  
Paris,

BELOW  
Evans,



ment  
intel.



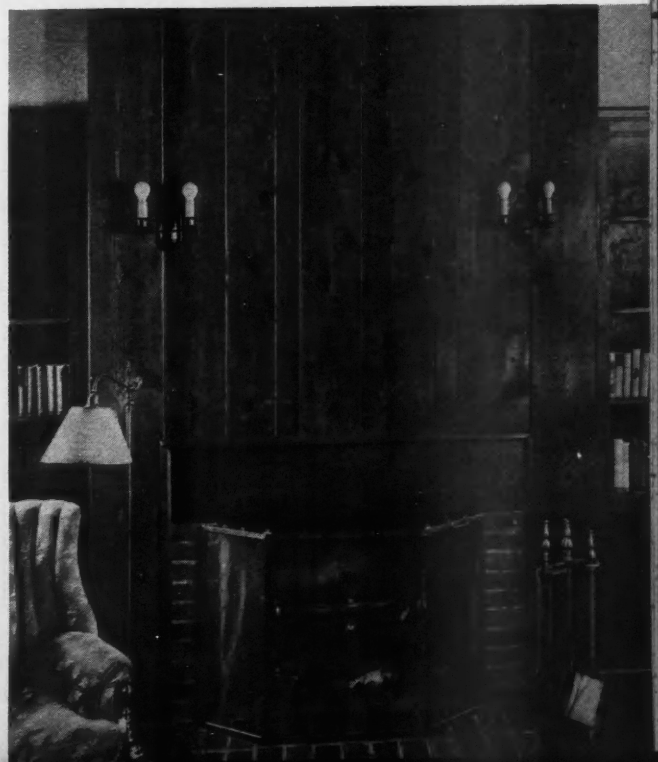
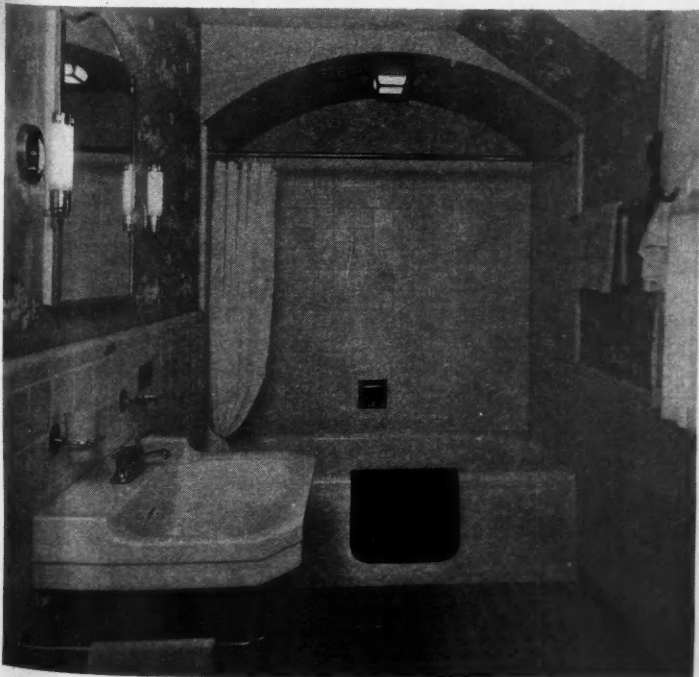
Living room  
in Beverly  
Hills (Chica-  
go) all gas  
model home.

## Special Interior Features Win Approval

**Bookshelves, Cupboards,  
Fireplaces, Bathrooms—All  
Contribute Value to the 1938 Home.**

RIGHT; Hospitable dining room in Summit (N.J.) home; Wm. M. Pareis, architect. BELOW; Bathroom typical of today's homes.

BELOW & RIGHT; Compelling fireplace treatment by Randolph Evans, architect at Nassau Shores.



blind  
kitch-  
klyn  
Rob-  
ect.



# American Builder's "More House" Theme Widely Used

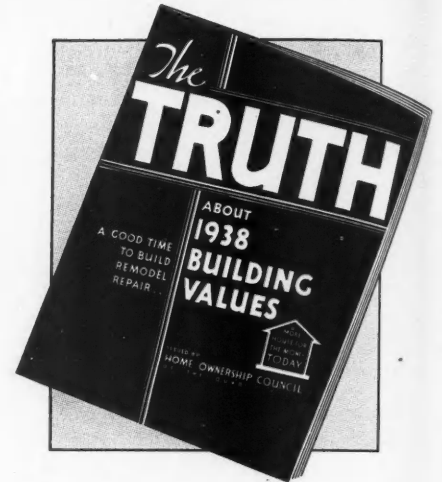
## Local Building Industry Groups and Newspapers Working Effectively to Spread Confidence in Today's Building Values

**P**UBLIC Enemy No. 1 of the construction industry has been a widespread belief that building material costs and building wages were so high that people could not afford to build homes. This belief, established and fostered by propaganda and uninformed writing on building costs gave the industry its major public relations job. In some cases this propaganda has been "swallowed" by building men themselves. They accepted frequent references to "high building costs" that were based on comparisons of building material prices and wage scales alone, without investigating the many other factors that must be considered, and so were unable to defend themselves.

The most effective weapon yet discovered for laying low the effects of "high cost" propoganda is the "More House for the Money" theme developed by *American Builder*, and presented to the industry when it needed a capable spokesman. Today this theme is used whenever and wherever building values are compared or considered. Local building groups are using it in co-operative campaigns in all parts of the country. These campaigns show that false price thinking can be corrected, and that home building can be stimulated by presenting the truth about present building values.

### A Great Selling Tool

The October, 1937, issue of *American Builder*, in which the "More House for the Money" theme was featured, frequently is described as "the greatest selling tool ever placed in the building industry's hands." Houses of today were shown with others of comparable size erected a decade or more ago. An amazing number of changes and improvements in construction methods were revealed. Research and development work of building material and equipment manufacturers were described. These manufacturers have improved their products, have made them easier to install, more attractive, more convenient, and in many cases have reduced their selling prices through more efficient production. Original material on financing methods and costs in this issue of *American Builder* was widely copied, and is considered "standard" on the subject today. Other articles showed how designing has improved; that costs of building sites are lower, and how production of building



THIS attractive, 12-page booklet, prepared by building groups in the "Quad Cities" presents a comprehensive and convincing story of "More House for the Money." It has caused prospects who had given up the idea of erecting houses to build this spring.

THE WASHINGTON POST, SUNDAY, FEBRUARY 20, 1938

As The Nation Grows—So Grows Its Capital City and the Value of Its Real Estate

In 1928 and in 1938 you get

# A Lot More Home For Your Money!

**MORE BATHROOMS**—Additional bathroom added to the bathroom present in 1928...  
**AIR CONDITIONING**—Modern air conditioning installed...  
**AUTOMATIC HEAT**—Added automatic heat...  
**COMPLETE INSULATION**—Full insulation installed...  
**RECREATION ROOMS**—Recreation room added...  
**BETTER FEATURES**—Better features added...  
**CHEAPER MONEY**—Cheaper money available...

**Give Values A 10-YEAR COMPARISON**

It is true that some material costs are above the 1928 level... but other materials of lower cost, higher quality and which require less labor to erect have taken the place of the old standard. In general, building costs are actually 20% to 25% below the 1928 level.

If you're making a comparison of home values you cannot afford to take either the wage of a carpenter or the cost of a yard as your basis of comparison. The house you get for your money is the only true estimate.

Home building has made tremendous strides forward during the past ten years. The additional experience of the builders and architects the finer materials and equipment available, the increased skill of workman, each have made their contribution toward a better home at a lower cost.

The sketch above is a composite of the homes which are offered for sale in Washington, today within the \$8,000 to \$12,000 price range. Contrast this with the homes of 1928. It had only one bath while this home has two baths and a lavatory. It had an old-fashioned heating system. This home has both automatic heat and air conditioning. Its basement was a dark, dirty hole... here is a game room for the enjoyment of the whole family.

In a score of features the 1938 home is superior to the home of ten years ago... yet it costs no more.

**By Any Standard of Comparison, Washington Homes, at Today's Moderate Prices Are a Safe, Sane and Sound Investment**

This is Number Two

NUMBER TWO of a series of ten full-page advertisements prepared by The Washington Post and signed by thirty sponsors. Ten-year comparisons of building values are used to convince prospects that this is a good time to build.

mechanics has increased through use of power equipment. Most important of all, it was demonstrated that houses today sell for less than did those of comparable size ten years ago.

The effect of this new approach to the question of building costs was instantaneous. The industry, struggling helplessly against a rising tide of increasing sales resistance, took new courage and began to strike back at "high cost" claims. "More House for the Money" became the industry's topic of the day. It was discussed in meetings. Trade convention programs were built around it. "More House for the Money" was made the subject of many convention addresses. The new promotional campaign of FHA featured it. Manufacturers of building products adopted it as their theme song, and borrowed liberally from contents of the October *American Builder* when preparing special literature.

What had been an *American Builder* theme became the industry's theme. Copies of the October issue were mailed to newspapers, chambers of commerce, associations and other trade groups. All were invited to make free use of "More House for the Money" material. The subject was news. Within a few months, newspapers with a combined circulation of more than 30,000,000 ran news articles, editorials, and special building sections devoted to this theme.

**Local Campaigns Organized**

A quite natural result was that local building groups organized co-operative educational campaigns to show that the industry is delivering More House for the Money Today. A number of these campaigns appeared last fall. Many more were prepared for spring use, and are appearing now in newspapers in all parts of the country. Here the "More House" theme reaches its greatest usefulness, and demonstrates that home building can be stimulated by presenting facts about building values. Most of these local campaigns were inspired by and are built around basic material taken from the October *American Builder*. Each campaign is different, although they all follow the same general pattern. In some cases an individual dealer or builder compares houses of today with those of a decade ago, waging a one-man campaign on the soundness of present values. Others are promoted by newspapers that have obtained comparative material from their files. Still others are sponsored by local dealer groups, and some are civic enterprises headed by community leaders, aided by all allied branches of the building industry, including labor groups.

The *Washington* (D. C.) *Post* recently began a series of ten full page advertisements showing building values of today compared with ten years ago. Typical headings from pages that have appeared: "Comparison is the only true estimate of real estate values. . . . Your Home of 1938—designed for better living at lower cost. . . . What a Difference Ten Years Make." Another advertisement of the series appears on a facing page. Each is signed by 30 sponsors, including builders, realtors, financing organizations, public utilities, manufacturers and distributors of building materials and equipment.

The series has been made available to newspapers for use in other communities, according to R. C. O'Donnell, real estate advertising manager. Copies of the advertisements are used by local builders, developers, realtors, dealers and others—"to give a new lease on life to the salesman who assumes that he has 'told it all'."

Another campaign, covering the Hammond, Whiting, East Chicago, Indiana area, is sponsored by the Calumet Building Bureau, of Hammond. The first full-page announcement appeared in the March 7 issue of *The*



## It's All in YOUR FAVOR to BUILD NOW

—IN THE QUAD CITIES



**1938\***      **1928**  
Lumber Prices are the same now as in 1928. \*

Lot prices are considerably less than in 1928. \*

Plumbing Fixtures are 21.3% less than in 1928. \*

Oil Burners are less than 1/2 of what they were in 1928. \*

Coal Stokers are less than 1/2 of the 1928 price. \*

Fewer hours of labor are required than in 1928. \*

Electric Refrigerators are 30% less than in 1928. \*

Plans are better than 1928 but cost no more. \*

More materials are pre-fabricated and of better design. \*

Finance methods of 1938 offer amazing savings and obtain complete home ownership on purchase payments equal to rent. \*

\*Activities since 1928, as a normal "hard" year, offers the lowest comparison in pricing 1928 building values.

**You have had a pet desire to build and own a home. No need, therefore, to tell you about the many real satisfactions which every member of the family will derive from the pleasant, modern, living a new home brings to you and yours.**

Home ownership means self respect, consideration from friends, business associates, employer and banker . . . less work for wife and mother . . . a new delight in welcoming the friends of the family. To the children it means health, pleasant surroundings, new friends and a storing up of choice memories.

You know all these things. That's why you want and NEED that new home. But you may not know that the very thing that has caused you to hold off and wait is a False impression regarding 1938 building costs.

Study this matter of building costs and building values in the Quad Cities from every angle. Make no decision until you've considered the ENTIRE cost of the new home. Then investigate the remarkable advantages which modern home financing methods offer you. You'll find that you can move toward complete home ownership, the creation of a family estate, the building up of a financial backing against old age WITHOUT PAYING ONE CENT MORE a month than you now pay in rent on a home of generally equal cost.

All that people need to go ahead with their long cherished home building plans is accurate fact and intelligent understanding. Get your copy of "The Truth About Building Values" today.

**It's FREE**



Read this book with your family, in your home, away from business. The explicit, accurate information it contains will convince you that NOW is a Good Time to Build. Ask for your copy of "THE TRUTH ABOUT BUILDING VALUES" at your merchant, dealer, realtor, loan distributor or bank—or write to:

HOME OWNERSHIP COUNCIL  
P. O. Box 24, Keokuk  
P. O. Box 101, East Moline  
P. O. Box 124, Davenport




EACH newspaper advertisement in the "Quad Cities" series features the free booklet around which the campaign is built. Inquiries for the booklet reveal prospects who might not be uncovered by a general free distribution.

*Hammond Times*, with two additional building pages, supported by individual advertisers. The campaign is designed to sell present values with few references to former years, and is supported by labor groups, dealers, financing organizations, contractors, sub-contractors, and others.

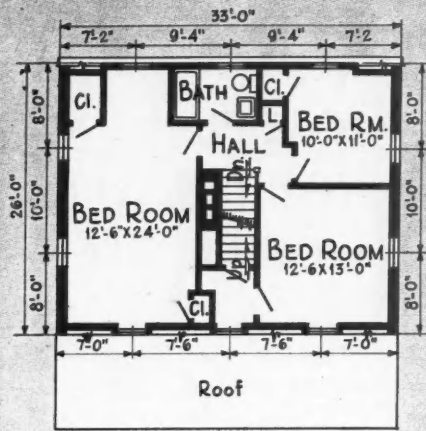
Part of the campaign, according to C. E. Fogel, acting as secretary of the Bureau, will feature "Modernization for Profit." Examples of how large, old houses can be converted into profitable income units will be illustrated and described. "This type of work," explains Mr. Fogel, "absorbs older craftsmen and lengthens the building season. It is good in any town over 30 years old, and the appeal to women is obvious.

"Our campaign has been running only a few weeks, but sufficient new business has been traced to advertising influence to say that it has been a profitable venture so far. We have had splendid support from our newspaper. The building pages are conducted so as to get a following among readers, and thus make the ads more effective."

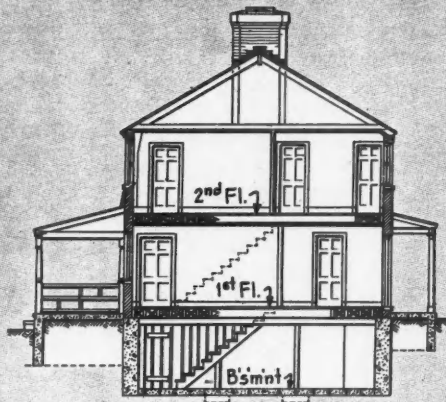
A comprehensive campaign recently was launched by building groups in Davenport, Iowa, Rock Island, Moline, and East Moline, Illinois—known as the "Quad Cities." Earl Larson, executive secretary, First Federal Savings & Loan Association, Moline, is credited with having originated the movement. Rock Island and Davenport

*(Continued to page 130)*

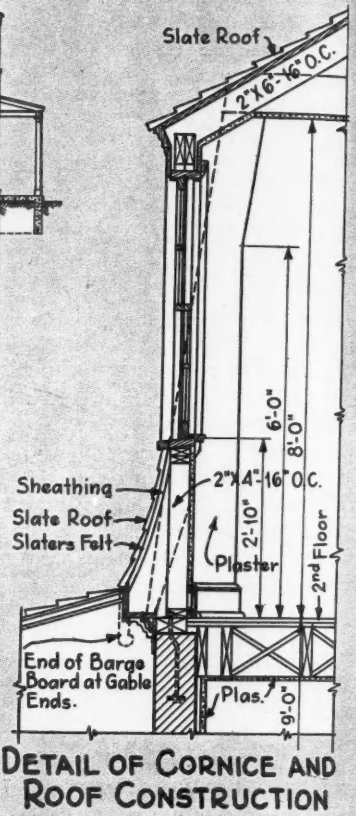




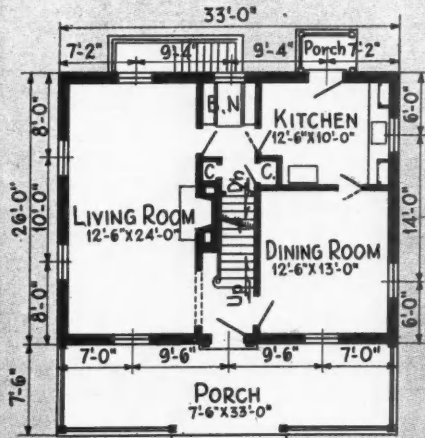
SECOND FLOOR PLAN



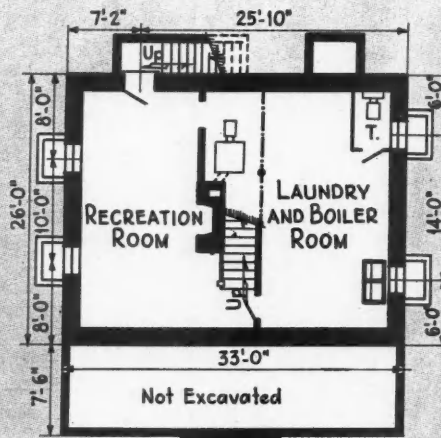
CROSS SECTION



DETAIL OF CORNICE AND ROOF CONSTRUCTION



FIRST FLOOR PLAN



BASEMENT PLAN

CAREFULLY DETAILED PLANS such as these, by Architect T. Worth Jamison, Jr., contribute to high value of Arnold homes.



BERNARD P. HOGE, (left) sales manager of The Roland Park Company, sells the homes built by Ray A. Arnold, (right) experienced builder.

## "More House for Less Money Is

Baltimore Builder's Houses Priced at Fully  
\$3,000 Less Today than in 1929

THE building firm of Arnold & Son was organized in 1920 and has been building soundly and well ever since. The forty years' of practical experience of A. Arnold, Sr., plus the twenty years' experience of Ray A. Arnold, the son, are strong contributing factors to their success. Both men were master mechanics long before they became master builders.

Today A. Arnold & Son are building substantial, attractive homes in "The Orchards," one of the highly restricted and very attractive communities of The Roland Park Company of Baltimore. Ray Arnold told *American Builder*, "Our aim is constantly to give greater home value and a better home at a lower cost."



## Building Progress Creates High Value

TO KNOW the inbuilt quality, convenience and substantial construction of the homes illustrated at right and on opposite page is to appreciate the work of the modern American builder. These houses, with a cubage of 29,300, have spacious living rooms; completely modern kitchens; 11 x 19 ft. garages; solid brick walls; slate roofs; rock wool insulation; copper gutters, spouts and screens. Floor plans are similar, with slight variations in detail.

LOCATED in "The Orchards," one of the attractive Roland Park properties in Baltimore, these solid masonry, fully-equipped, modern homes today sell for from \$2,500 to \$3,000 less than a similar house would have sold for in 1929. The equipment today is far superior, including such well-known products as Curtis Colonial millwork, Oxford kitchen cabinets, American Radiator heating, Standard plumbing fixtures, Oriole gas range, U. S. Gypsum rock wool, copper pipe, slate roof, ventilating fans, Chamberlin weatherstripping. They have the benefits of a beautiful restricted community and an experienced responsible builder.



## Is Our Aim,"—Arnold Better-Built, Better-Equipped, Higher Value in Today's Home

Last year Arnold built and The Roland Park sales organization, under the able direction of Bernard P. Hoge, sold ten houses. Four more have been built or are under construction this spring, and Arnold plans to exceed his quota of last year by several more houses. In analyzing the reasons for the successful sale of these homes it became apparent that they illustrate in a most definite way the progress intelligent builders have made in giving higher value at less cost. A house of the same cubage on equally valuable property would have cost from \$2,500 to \$3,000 more in '29 on a conservative esti-

mate, yet, as the construction details show these houses are far better-built and better-equipped due to the technological progress that has taken place.

As Arnold talked to the *American Builder* representative, a steam shovel was busily scooping out another basement excavation. "There's a good example," said Arnold, pointing to the shovel. "That modern machine, efficiently handled, enables us to excavate at a cubic cost less than half the 1929 levels."

Land, labor and material costs are all less than they were ten years ago, Arnold pointed out. In addition, both subcontractor and contractor are taking a smaller profit. The houses he is building today have the latest in heating and air conditioning equipment, are insulated, skillfully designed and substantially built. They are far superior to any house that was possible a decade ago. These are facts, Arnold points out, that the public should be told.

A specialist in residential architecture, T. Worth Jamison, Jr., designs the Arnold homes.

# Amazing Progress Recorded in Detroit

## Comparison Between a Popular 5-Room House Built in 1928 by Albert E. Bill and His Latest Model Shows Better Value Available Today at Lower Cost Due to Present Advanced Practice

**A** LARGER HOUSE, a better house, a lower cost house—that is what Albert E. Bill, Detroit builder, is delivering today as compared to houses which were built by him 10 years ago and were considered good values during that period. This record of home building progress is dramatized in this comparison of pictures, plans and specifications presented to show that “More House for the Money” is available today than a decade ago. Present advanced practice covers improved planning, construction and equipment.

In the matter of relative size and cost, the two houses are of plain type, having approximately the same cubage (12,500 cu. ft. in the 1928 house, 13,800 cu. ft. including attached garage in the 1938 model). The house of ten years ago was priced \$250 more than today's. According to Mr. Bill's figures, it lacked features in specifications which would have been valued at \$400; the attached garage would have added \$420 more. In other words, **PRESENT PRICES BUY ABOUT 20% MORE HOUSE THAN IN 1928.**

Mr. Bill states, “In breaking down this \$1,070 increased value (\$250 cost saving plus \$820 in extras), I figure that this is possible because of smaller contractor profits, lower total labor costs and a saving in material costs—about 50% of material being slightly lower, 25% about the same and 25% higher than in 1928.”

The Bill model home of 1938 is designed to qualify for the new 90% FHA loans. At 5% interest over a 25-year period, the monthly cost covering amortization interest, and insurance premium would amount to approximately \$33.

It is also interesting to note that the specifications of this house exceed FHA requirements whereas the 1928 house, as was typical of its class, would have not have met them if then in existence.

Plans of the two houses show improve-

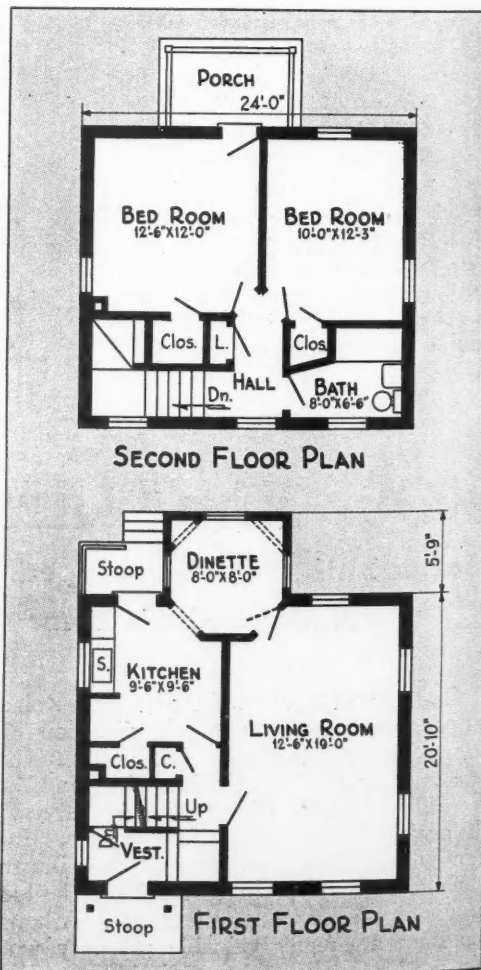
ments in space arrangement which have resulted from more scientific planning. Although the older house is compact, the stair placement is less convenient; the newer rooms are better proportioned; attached garage and 10' by 20' railed sun deck above give extra livability.

The construction and equipment highlights of the 1938 house appear in the comparative outline on the opposite page which lists the similar items of the 1928 structure. However, two of the important features are not listed because they were lacking in the older house. There was no insulation in the 1928 house; second floor ceilings are now completely insulated; with no recreation room then, now the basement is divided with masonry walls to enclose recreation room and coal bin with separate space for laundry and heating system.

Albert Bill has shown that in Detroit it is not only possible to build a better house that includes the latest features but that such a house can be sold for less money than during the last active building period between 1926 and 1929.

**THE 5-ROOM HOUSE** below with floor plans at right was built and sold in 1928 by Albert E. Bill in Detroit. It contains about 12,500 cubic feet in two floors and full basement. Price was \$250 more than 1938 model on opposite page.

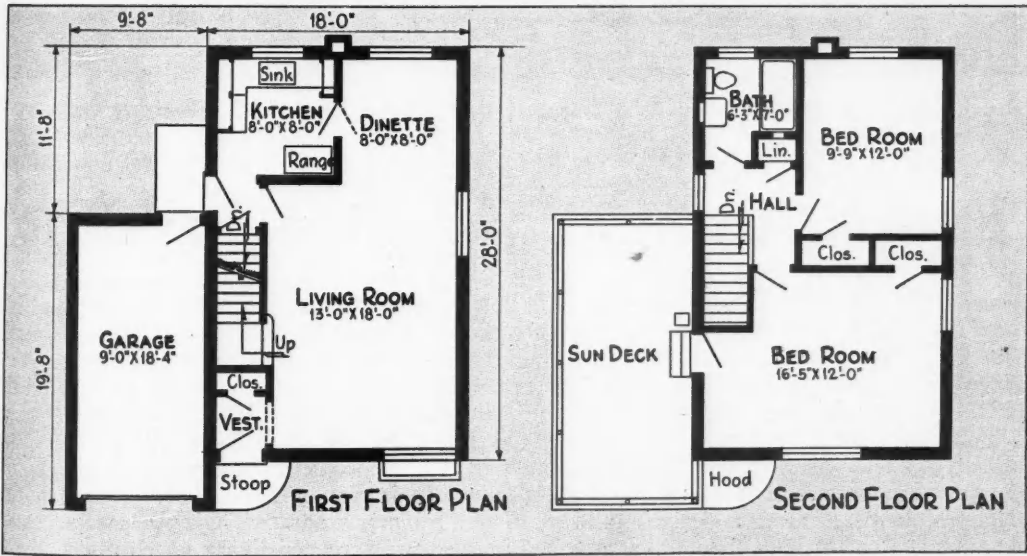
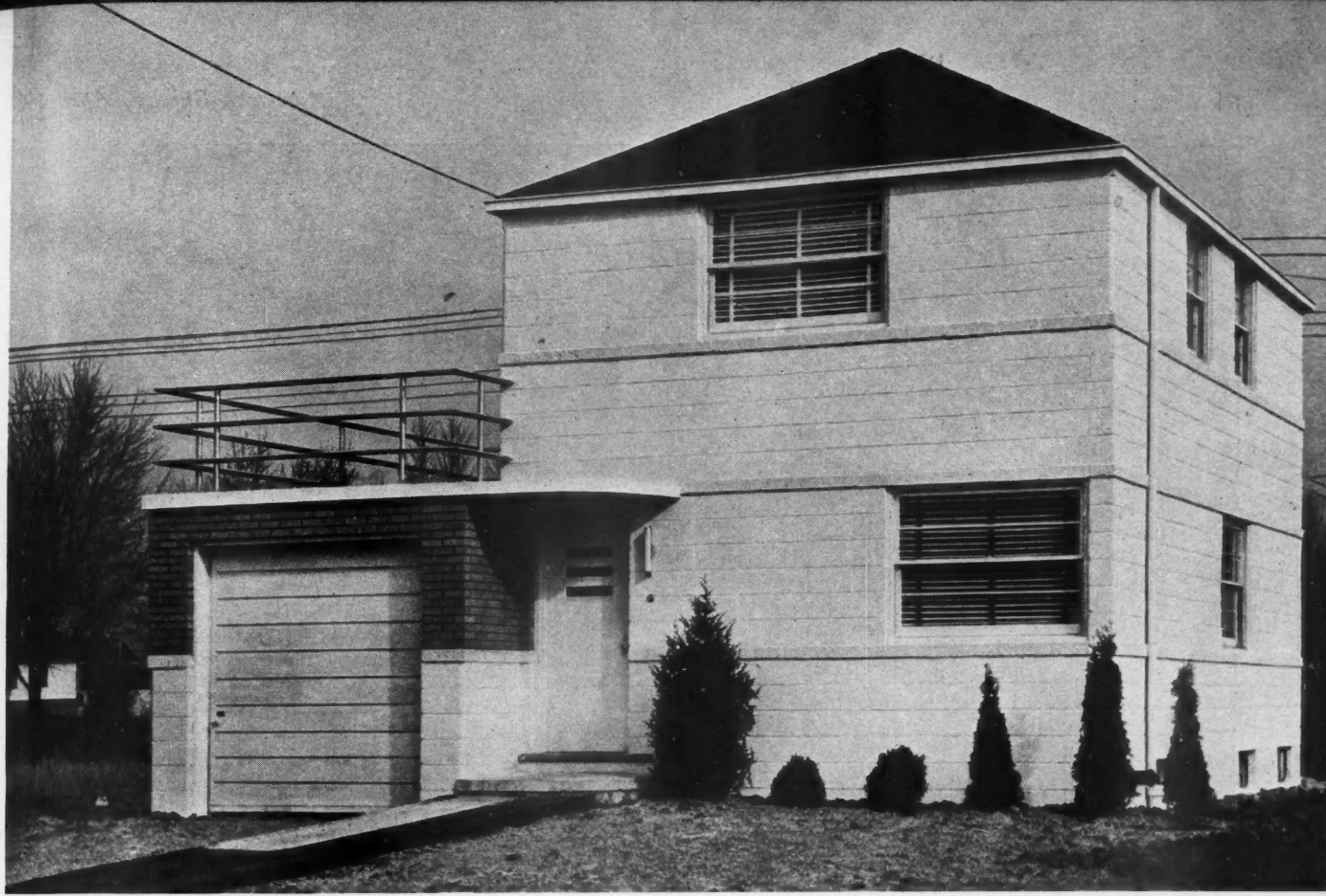
### 1928



1928  
const  
joist  
garag  
pipes  
Or  
First  
Ex  
ceilin  
wind  
12'6"  
Sto  
inside  
openi



38.  
se  
st  
at  
ce  
om  
is  
the  
age  
tra  
38  
ite  
re.  
ed  
ere  
gs  
om  
lls  
ate  
ly  
est  
ess  
pe-



# 1938

ALBERT BILL's model house for this year as seen above is modern in appearance and compact in plan. With attached garage and full basement cubic contents are 13,800. Efficient planning, concrete first floor and masonry walls, improved equipment and other items as listed below make it a much better value. It exceeds FHA requirements and represents 20% greater value than the 1928 house illustrated which would not meet FHA requirements.

## A COMPARATIVE SPECIFICATION OUTLINE OF BUILDING PROGRESS

**1928**—Common brick veneer. All wood joist and first floor construction. 2 x 10 2nd floor joist 16" o.c. 2 x 4 ceiling joist and roof rafters 16" o.c. Wall footings 6" x 20". No garage. Small sun deck, canvas over wood. Galvanized water pipes.

Ordinary wood kitchen cupboards. Ordinary wood sash—First floor finished No. 2 oak. Bath floor, tile.

Exterior walls 2 x 4 studding. All wood lath. Walls papered and ceilings kalsomined. 5X wood shingles stained. Cloth shades on windows. No. 1 common oak and 2nd floor. Master bedrooms 12'6" x 12'3".

Stock wood trim on windows. Stock wood sills on all inside windows. All door trim plain stock trim. Electric, 38 openings. Knob and tube. Single plug receptacles.

**1938**—Solid 8" cinder block walls (brick facing if desired). All concrete first floor (joist and slab). 2 x 8 2nd floor joists 12" o.c. 2 x 6 ceiling joist and roof rafters 16" o.c. Wall footings 10" x 20". Attached masonry garage with metal Tilt-a-door. Reinforced concrete sun deck over garage. Copper water pipes.

Metal kitchen units. Special N.S.W. windows, extra wide. All slab doors. Exterior doors weatherstripped. All first floor covered with asphalt tile; also bath and upstairs hallway.

Exterior walls furred over 15 lb. felt, and plastered on rock lath. Ceiling joists and corners covered with metal. Painted walls and ceilings; 3 coats. 216 lb. asphalt shingles over 15 lb. felt. Venetian blinds at all windows. Very best select oak floors in bedrooms. Master bedroom 12' x 16'8".

Metal bull nose window trim. Marble and slate sills throughout inside. All door trim is special round detail. Electric, 53 openings. Romax and rigid conduit. Double plug receptacles.



ONE OF J. C. NICHOLS' latest houses follows the popular Colonial Williamsburg styling; it was designed by Edward W. Tanner, A.I.A.

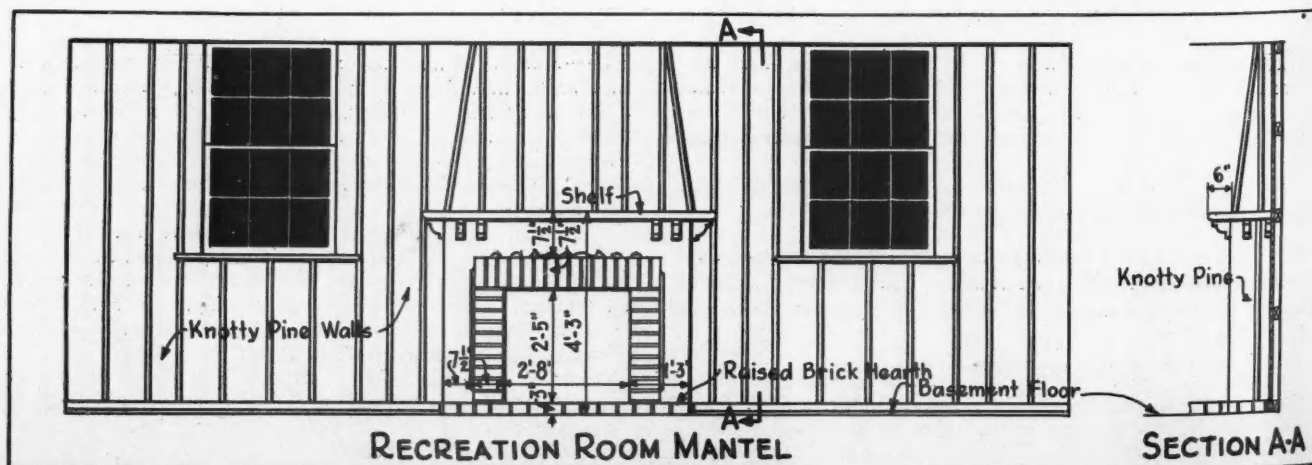
## Nichols Keeps Abreast of Better Building

**T**HE NOTABLE record achieved by J. C. Nichols Companies of Kansas City, Mo., in making their home developments in that city outstanding from a national viewpoint has been closely related to a policy of constantly improving the quality of their houses. They have incorporated into their operations of community planning and building such progressive features as assure high value and protection against depreciation.

In the planning of Nichols' homes, exterior design follows traditional styles which are harmonious throughout the projects; interior layout is carefully studied for

constant improvement toward space economy and convenience. Construction and equipment are of high quality as a final assurance of owner satisfaction.

The Nichols' house pictured above was completed this year and offers a typical example of how this firm keeps abreast of building progress. Floor plans as shown opposite present up-to-date improvements made in one of their sound basic plans. Ample closets, well lighted and ventilated rooms, separated living areas, accessible attached garage and screened living porch are a few of the plan features. The outline specification follows:



J.  
I  
sol  
top  
rub  
bed  
to  
Tre  
4'0  
gro  
high  
C  
ure  
and  
mix  
info  
cret  
cret  
M  
No.  
Flue  
of l  
Are  
with  
cons  
gas  
C  
comp  
mas  
S  
I-be  
and  
S  
lb.  
both  
spou  
galva  
IN  
have  
ceili  
seco  
wool  
LA  
Ceda  
floor  
Meta  
ducts  
3 coa  
in ga  
TI  
have  
tub v  
mat  
Tile  
Gravi  
for f  
CA  
No.  
rafter  
ing (C  
ally.  
(24"  
shing  
laid 5  
3/4" x  
laid o  
FLOOR  
good  
through  
ment  
detail



### J. C. NICHOLS COMPANIES PROGRESS OUTLINE

**FOUNDATION**—Excavate to solid ground; finish grade comes to top of foundation which is 18", rubble stone work thoroughly bedded in mortar of 1 part cement, to 5 parts of sand, motor mixed. Trench walls are 18" and at least 40" below grade or to solid ground. Foundation wall, 7'6" high.

**CONCRETE WORK**—Measured mixture for basement, porch and garage floor, 1:2:3 motor mixed. Porch and garage floor reinforced with heavy mesh. Concrete walk to driveway and concrete stoop.

**MASONRY**—All face brick are No. 1 hard burned common brick. Flue is securely anchored to studs of building with 1/4" pencil rods. Areways built of C. blocks capped with brick. Living room fireplace consists of dome damper, firebrick, gas lighter and ash drop.

**CAULKING**—Plastic caulking compound around all frames in masonry walls.

**STRUCTURAL STEEL**—Steel I-beams and columns in basement and angles for proper construction.

**SHEET METAL**—All tin is 40 lb. Old Method Tin, painted on both sides with red lead; downspouts and gutters are 26 gauge galvanized iron.

**INSULATION**—Outside walls have 1/2" blanket insulation. Sloping ceilings have 4" rock wool. Flat second floor ceilings have 2" rock wool.

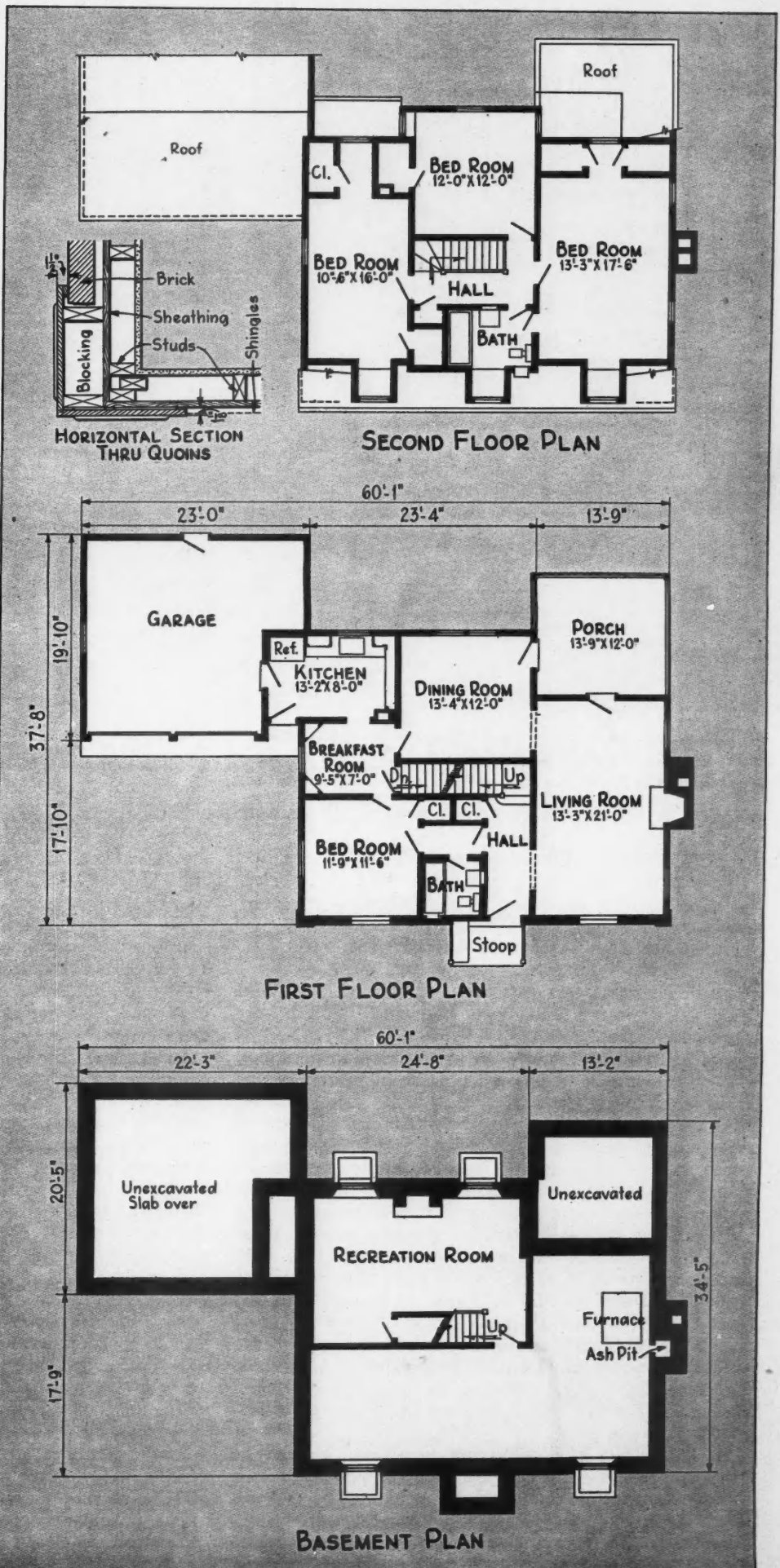
**LATHING, PLASTERING**—Cedar wood lath on first and second floor except rock lath in garage. Metal lath in all corners, over heat ducts and over all large headers. 3 coat smooth job, 2 coat sand finish in garage.

**TILE WORK**—Bathroom walls have 4'0" tile wainscot (6'0" over tub with shower) of 4 1/4" x 4 1/4" matt glazed tile. Ceramic tile floors. Tile accessories for each bath. Gravina Marble facing and hearth for fireplace.

**CARPENTRY**—Joists, 2 x 10's No. 2 Y.P.—16" o.c., studs and rafters are 16" o.c. Rough flooring (1" x 8" boards) laid diagonally. Wall shingles No. 1 Royals (24") laid 10" to weather. Roof shingles No. 1—5/2 Red Cedar—laid 5" to weather. Finish flooring 3/4" x 2 1/4" select Red Oak flooring laid on 14" tarred felt. Building

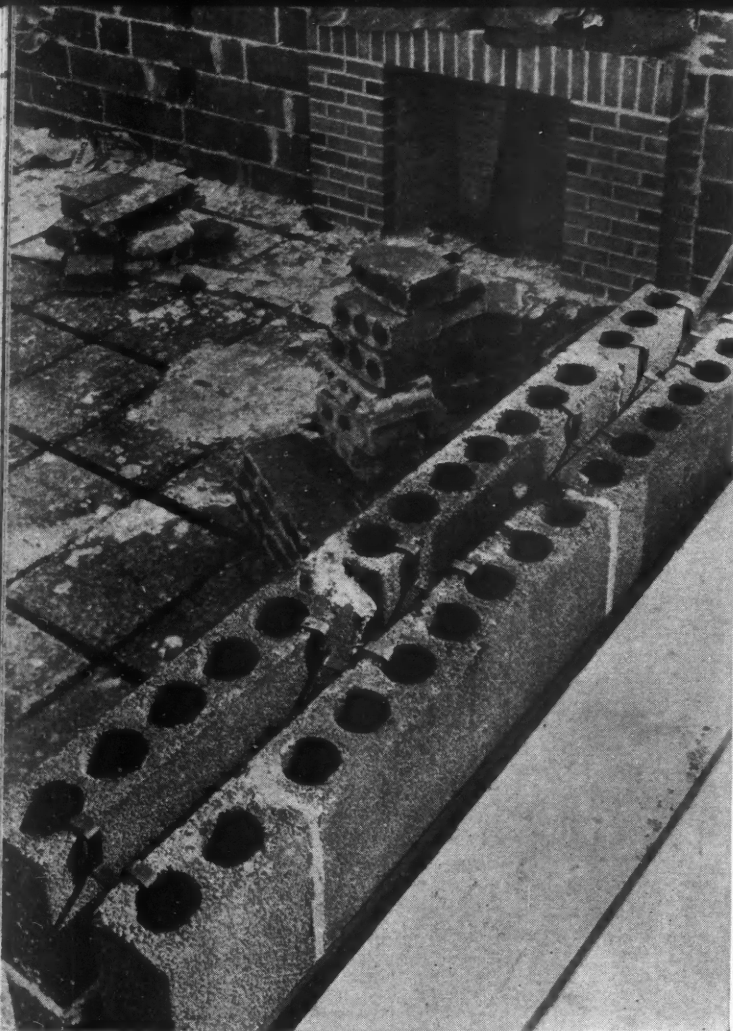
(Continued to page 130)

**FLOOR PLANS** at right indicate good arrangement; section detail through quoins shows corner treatment of joining brick and shingle; detail of recreation room at left.





BUILDER JOHN W. FRIES describes construction methods that reduce upkeep costs, provide better, low-cost homes such as the one shown on opposite page for less money.



DOUBLE WALL of 4-in. cinder block with a 2-in. air space between. Walls are tied together by "U"-shaped metal clips. Concrete floors are provided using concrete joist and cinder slab construction.

"ONLY a millionaire could afford a home like this heretofore," declares John W. Fries, builder of Alden Estates, popular new residential community at Port Chester, N. Y.

He set out to build what he describes as "indestructible, firesafe homes" at low cost, to sell for less than \$40 a month, including interest, taxes and amortization. These "millionaire homes" of today can be owned by Mr. Average Citizen.

Builder Fries acquired his early experience in Germany, where solid masonry construction is used almost exclusively. "When you look at such homes," he declares, "you are often astonished to learn that they are two or three hundred years old." In his Alden Estates development Fries is applying the latest scientific methods in concrete construction to small homes to achieve this same permanency with practically no upkeep.

To achieve his "indestructible, firesafe house," Fries is using all-concrete double masonry construction, consisting of two walls of 24" x 8" x 4" cinder concrete blocks, separated by a 2" air space. The walls are tied together by "U"-shaped, heavy metal clips. Because of the air space and because the cinder blocks themselves are hollow, this provides an unusually dry, warm wall. It is thus possible to plaster *directly on the interior surface*. The exterior wall surface is given two coats of waterproofing cement paint.

An *American Builder* representative and a party of newspaper editors inspected the Alden development on a wintry day, with the thermometer below zero. The editors found the double concrete walls, plastered directly, warm, dry and comfortable., Fries declares their experience

shows economy in heating, the estimated average being only \$50 to \$60 a year for a house with a cube of 20,000.

Floors of the Alden homes are also of concrete, consisting of precast concrete joists, over which are laid 24" x 8" x 2" lightweight, reinforced cinder-concrete slabs over which is placed 1½" of concrete. The finish hardwood block floors are laid in mastic directly on the concrete.

In striving for economical construction Fries almost completely eliminates wood trim in the Alden homes. Steel windows, painted with aluminum are set in the concrete block wall and no trim whatever is used around them. Baseboards are eliminated, with only a three-quarter round placed at the junction of floor and wall. Trim is also eliminated around doors and interior openings as the plaster is applied directly to concrete partitions. Fries declares that this construction not only insures lower cost at the time of purchase but reduces later upkeep cost in the painting of the trim.

Carrying his low upkeep theory still further, Fries uses a long-life asphalt roof which he believes will be good for 20 to 25 years. He declares that the cement paint exterior applied directly on the masonry will never have to be renewed, that it will merely mellow with age.

Included in the specifications of the Alden homes are American Gas Products heating and winter air conditioning; Fenestra steel casement windows painted with aluminum; Hygrade kitchen cabinets; Standard plumbing fixtures; Johns-Manville asphalt roof; Anaconda all-brass piping; precast concrete floors, double cinder block walls; Armstrong linoleum.

(Continued to page 102)

## "Indestructible" Low Co

DETA  
and

EXPE  
homes  
simple  
SHOW  
GARA

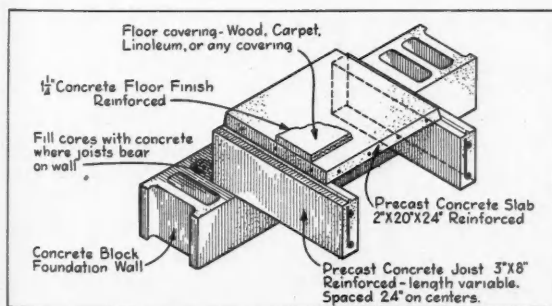




6-ROOM MASONRY HOUSE in Alden Estates, Port Chester, N. Y., is scientifically built to last indefinitely, with minimum upkeep costs. Walls are of double concrete block construction; floors are also of concrete.

## Low Cost Masonry Homes Reduce Upkeep

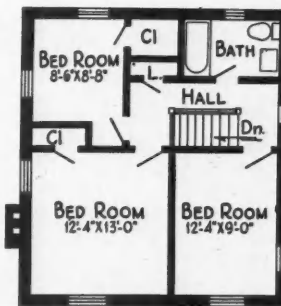
Demonstrate Scientific Progress in Concrete Construction



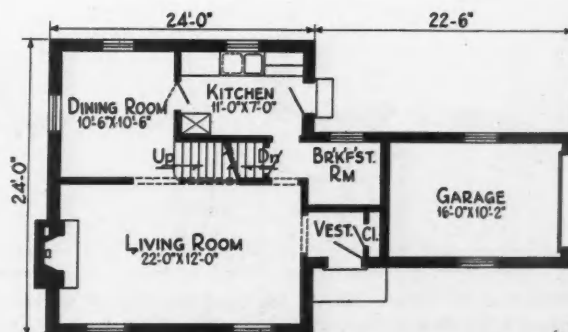
DETAIL of floor construction showing precast concrete joists and slab. Hardwood block floors are laid in mastic over slab.



EXPENSIVE TRIM is practically eliminated in the Alden homes. Detail above shows junction of floor with wall, using simple three-quarter round. FLOOR PLAN AT RIGHT SHOWS MODEL FLOOR PLAN WITH ATTACHED GARAGE AND A COMPACT ROOM ARRANGEMENT.



SECOND FLOOR PLAN



FIRST FLOOR PLAN

# BETTER LIVING from Adequately Wired Home

## Electrical Progress Contributes to Higher Home Value. Detailed Analysis of Wiring in Popular Small Home by New Jersey Builder

ELECTRICAL progress has contributed so much to the modern home that few people realize how much more they are getting for their money today than in times past. A host of new and improved types of electrical equipment and appliances require a greatly expanded wiring system.

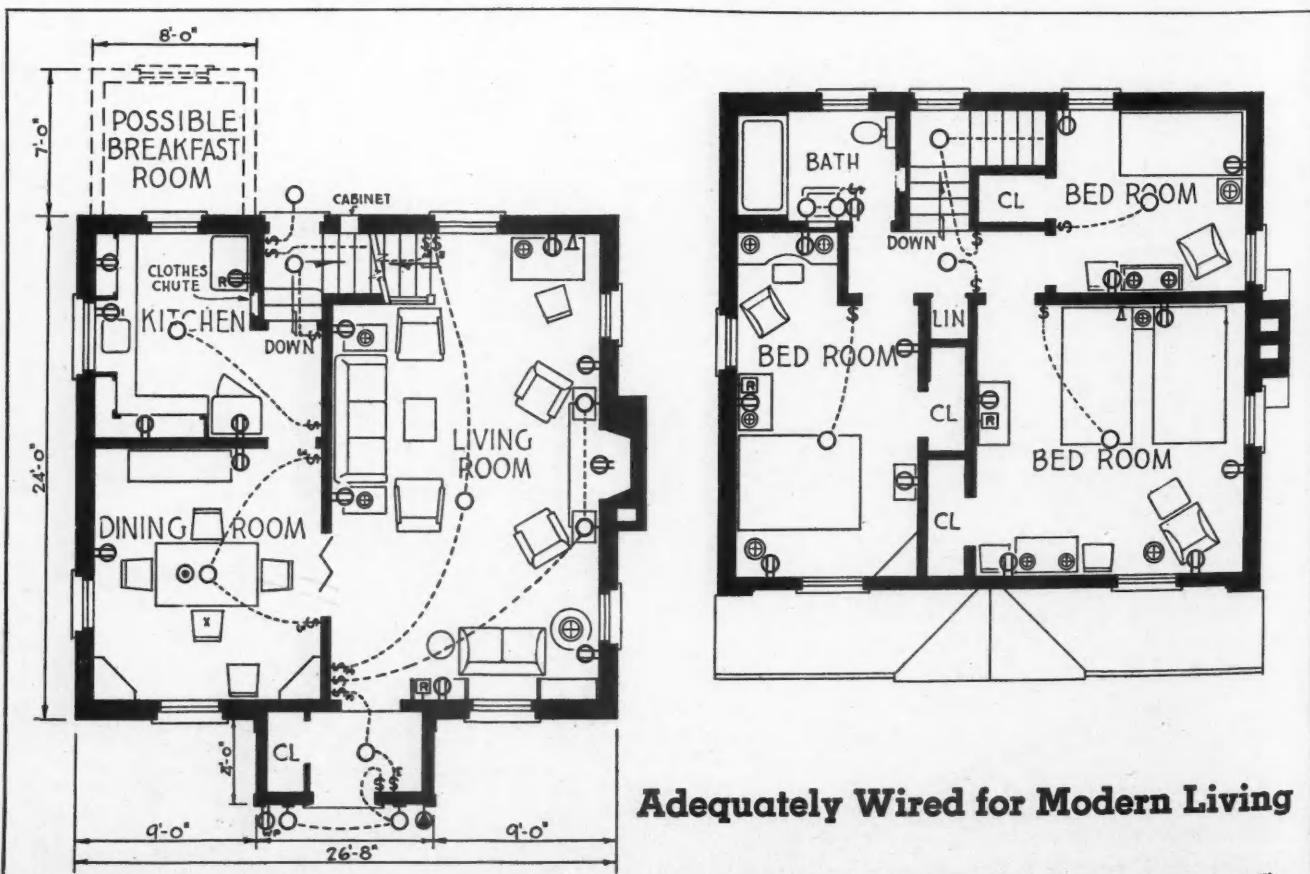
One active builder who has demonstrated the value and importance of an adequately wired house is Walter J. Harring, whose air-conditioned model home in Glen Ridge, N.J., is shown on the opposite page. This compact little house sold at a preview before its formal opening. The adequate and complete wiring system, providing for lighting, convenience outlets and the all-year air conditioning system was a strong contributing

factor that undoubtedly helped the quick sale made. "Practical, function-giving value" exerts the strongest appeal in the residential market," says Harring. "In small homes particularly, an adequate electrical installation provides better living in less space." He points out that this adequately wired house amplifies home comfort, health and happiness without increasing the operating budget.

To illustrate in a detailed and practical way the scientific method of wiring a small home of this type, engineers of the Adequate Wiring Bureau of New York have reviewed Harring's floor plan and presented their recommendations in the detailed plans below.

"Only by careful analysis of the electrical living requirements of a modern home owner, room by room, can a builder meet the requirements of today," the Bureau's engineers declare. They point out that this house is not "loaded" in any sense of the word but is economically wired to provide adequate service for a modern home.

Commenting on the manner in which electrical progress contributes to the value of the modern home, the Bureau points out that in the adequately wired home the owner today achieves a standard of living formerly



Adequately Wired for Modern Living

EVERY ELECTRICAL DETAIL has been scientifically worked out in this small home plan, along with the furniture arrangement. The house is worth more to its occupants because it has: 1. Service feeders of sufficient capacity for modern home's electrical equipment. 2. Enough branch circuits of large enough wire to carry full voltage to all appliances and lamps. 3. Enough lighting and convenience outlets, with correct switch control. 4. Efficient operation of lighting system, portable lamps and all appliances.

THIS  
sold q  
high b  
year-ro  
and a  
system  
owner  
age of  
ern e  
require

beyond  
for hi  
The  
dustry  
is emb  
homes  
ard of  
ards o  
trated  
CAP  
probabl  
BRA  
floor ar  
wire sh  
wire sh  
laundry  
purpose  
heavy-d  
CON  
determi  
FIRS  
or encl  
space u  
from an  
venience  
least on  
or more  
venience  
SECO  
20 feet,  
THIR  
fast noo  
having a  
dining ro  
height m  
outlets s  
room for  
FOUR  
venience  
cent to t  
FIFTH  
venience  
Also sing  
tion of  
(latter w  
SIXTH



SYMBOLS	
○	CEILING OUTLET
○	WALL OUTLET
⊖	CLOCK OUTLET
⊕	DUPLEX CONVENIENCE OUTLET
⊕	SINGLE CONVENIENCE OUTLET
⊕	WEATHERPROOF CONVENIENCE OUTLET
⊕	SWITCH AND CONVENIENCE OUTLET
⊕	RANGE AND CONVENIENCE OUTLET
●	RANGE OUTLET
⊕	SINGLE POLE SWITCH
⊕	3-WAY SWITCH
⊕	SWITCH AND PILOT LIGHT



THIS little Dutch Colonial sold quickly because it has high built-in value. It has year-round air conditioning and an adequate wiring system to enable the home owner to take full advantage of the extensive, modern electrical equipment required in homes of today.

beyond his reach. Room by room, his home functions for his greater comfort, leisure and dignity.

The Bureau has recently brought the electrical industry together on a standard wiring specification and is embarking on a program to certify adequately-wired homes. To assist builders in arriving at a sound standard of wiring, they have prepared the following standards of adequate wiring which are graphically illustrated in the floor plans with this article.

**CAPACITY:** Three-wire service, adequate to supply all probable electrical demands.

**BRANCH CIRCUITS:** For every 500 square feet of finished floor area in the house, one branch circuit of at least No. 14 wire should be installed. Additional branch circuits of No. 12 wire should supply convenience outlets in kitchen, pantry, laundry, dinette, breakfast room and dining room. Special purpose circuits of larger wire, as requirements indicate, for heavy-duty fixed appliances and motors.

**CONVENIENCE OUTLETS:** Number and location are determined according to size, character and use of rooms.

**FIRST:** In living room, bedroom, reception hall, sun room or enclosed porches, any point along the floor line in any wall space unbroken by a doorway should be no more than 6 feet from an outlet in that space. (For instance, one duplex convenience outlet in the center of a 12 foot wall space.) Also, at least one duplex convenience outlet in every wall space 3 feet or more in length at the floor line. At least one duplex convenience outlet flush in the top of any mantel shelf, if possible.

**SECOND:** In halls, one duplex convenience outlet for every 20 feet, or major fraction thereof, of hall or passage.

**THIRD:** In dining room, dinette, breakfast room or breakfast nook, two duplex convenience outlets in each such room having a floor area of 100 square feet or more. In very small dining rooms or dinettes, one duplex convenience outlet at table height may be sufficient. In larger rooms, duplex convenience outlets should be placed in every wall space where there is room for a buffet or serving table.

**FOURTH:** In bathrooms and lavatories, a duplex convenience outlet three or four feet from the floor and not adjacent to the tub or where water may splash.

**FIFTH:** In kitchen or kitchenette and pantry, duplex convenience outlets at elbow height adjacent to each work surface. Also single outlets, each conveniently located for the connection of refrigerator, dishwasher-sink, clock, ventilating fan (latter with wall switch control).

**SIXTH:** In laundry or laundry space, outlets conveniently

located for connecting ironer or iron, hot plate, portable clothes drier. For the washing machine, a single convenience outlet suspended on a heavy smooth rubber cord (unless the ceiling is quite low) to a point 6 feet above the floor, from an outlet box in the ceiling 3 feet in front of the laundry trays or tubs.

**SEVENTH:** In the basement, at least one duplex convenience outlet for electric tools or general use.

**EIGHTH:** In the garage, one duplex convenience outlet on the rear wall at each car location, not less than 4 feet from the floor.

**NINTH:** In the attic, at least one duplex convenience outlet for general use.

**TENTH:** At entrances, one weatherproof convenience outlet for decorative lighting is desirable.

**ELEVENTH:** For porches, terraces, patios, etc., at least one convenience outlet for each 15 feet of house wall is desirable.

**LIGHTING OUTLETS AND SWITCHES:** Also determined according to size, character and use of room and the size and type of home.

**IN LIVING ROOM, BEDROOMS, RECEPTION HALL, SUN ROOM, ENCLOSED PORCHES:** One ceiling outlet for a lighting fixture in each of these rooms—two in rooms which are more than 400 square feet in area, or which are twice as long as wide, or which have extremely low ceilings. Wall bracket lights are often desired for supplementary lighting. All lights should be switch controlled from the main entrance to the room, with additional switch control of the ceiling light if there is more than one entrance doorway and doors are more than 10 feet apart. This means that you can light your way ahead as you enter a room and turn them out as you leave from the further door.

**IN DINING ROOM, DINETTE, BREAKFAST ROOM OR BREAKFAST NOOK:** One ceiling outlet for a lighting fixture in each such room. Wall bracket lights are often desired as supplementary lighting. Wall switch control for both types of lighting from the main entrance to the room, with additional switch control of the ceiling light from other entrances if doorways are more than 10 feet apart.

**IN KITCHEN OR KITCHENETTE AND PANTRY:** One centered ceiling light, controlled by a wall switch, supplementary side wall or ceiling lights to provide local lighting at range, sink, and other work areas.

**IN THE LAUNDRY OR LAUNDRY SPACE:** One ceiling light over the laundry trays or tubs. One light over the place for ironer or ironing board. At least one of these lights should

(Continued to page 98)

GROUP of Colonial houses built for sale by H. and R. Anspach, Highland Park, Ill., illustrates added value given by proper planning for light, air and view. Each house is styled in a different version of Colonial design for varied appearance; floor plans on opposite page are similar in accommodations.



## Community Planning by Operative Builders Delivers More Value

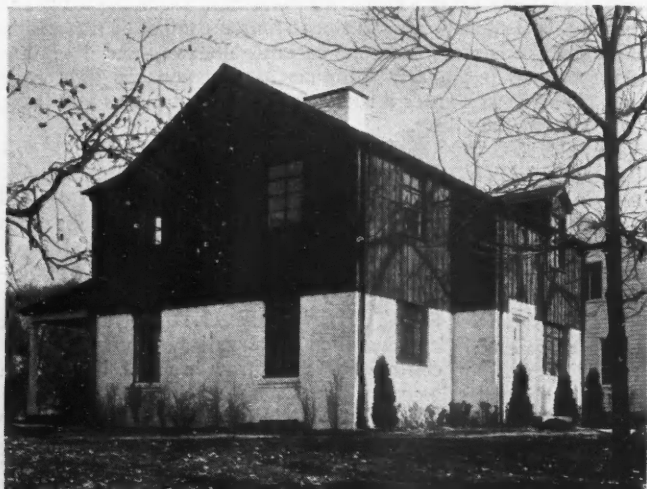
**N**OW that group building of homes has been given new impetus by Section 210, Title II, of the amended National Housing Act, much interest is being centered around operations calling for projects of ten or more houses. Better planning through proper relationship of the homes to each other and the construction economies in erecting a large number of houses at one time have long been appreciated as a means of delivering more value to the buyer. With the proper financing of such developments now made more generally available through FHA, these advantages can be spread to many additional communities.

Although undertaken before the new regulations mentioned above were passed, a five-house project completed this winter by H. and R. Anspach of Highland Park, Ill., demonstrates many of the good features of group planning and building.

These houses front on three streets, arranged as shown across the top of these pages and in the plot plan. Lot sizes vary from 55 to 58 feet by 132 feet. By placing the end houses farther back from the street on which the other three face, it was possible to give better views from all main rooms. Sunlight and air is not cut off by adjoining structures. The large living rooms have three exposures and in all cases face south, as do the dining rooms,



**LEFT:** Close-up view of Early American (House No. 1, farthest to left in group). Below, at left: Seattle Colonial (House No. 2) as seen from opposite side. Directly below: Front of Dutch Colonial (House No. 5) which has same plan as No. 1, reversed.







providing correct orientation for first floor living quarters.

The exteriors of these houses present separate variation of Colonial styling; from left to right in the group there are Early American, Seattle, Georgian, Delaware and Dutch versions of this popular family. Combinations of brick and stone with horizontal and vertical siding were used for exterior walls. While there is great difference in appearance, in plan they are very similar. Each has the same number of rooms; four have two identical plans reversed, and other has one side and garage moved forward. Yet no monotony of appearance occurs.

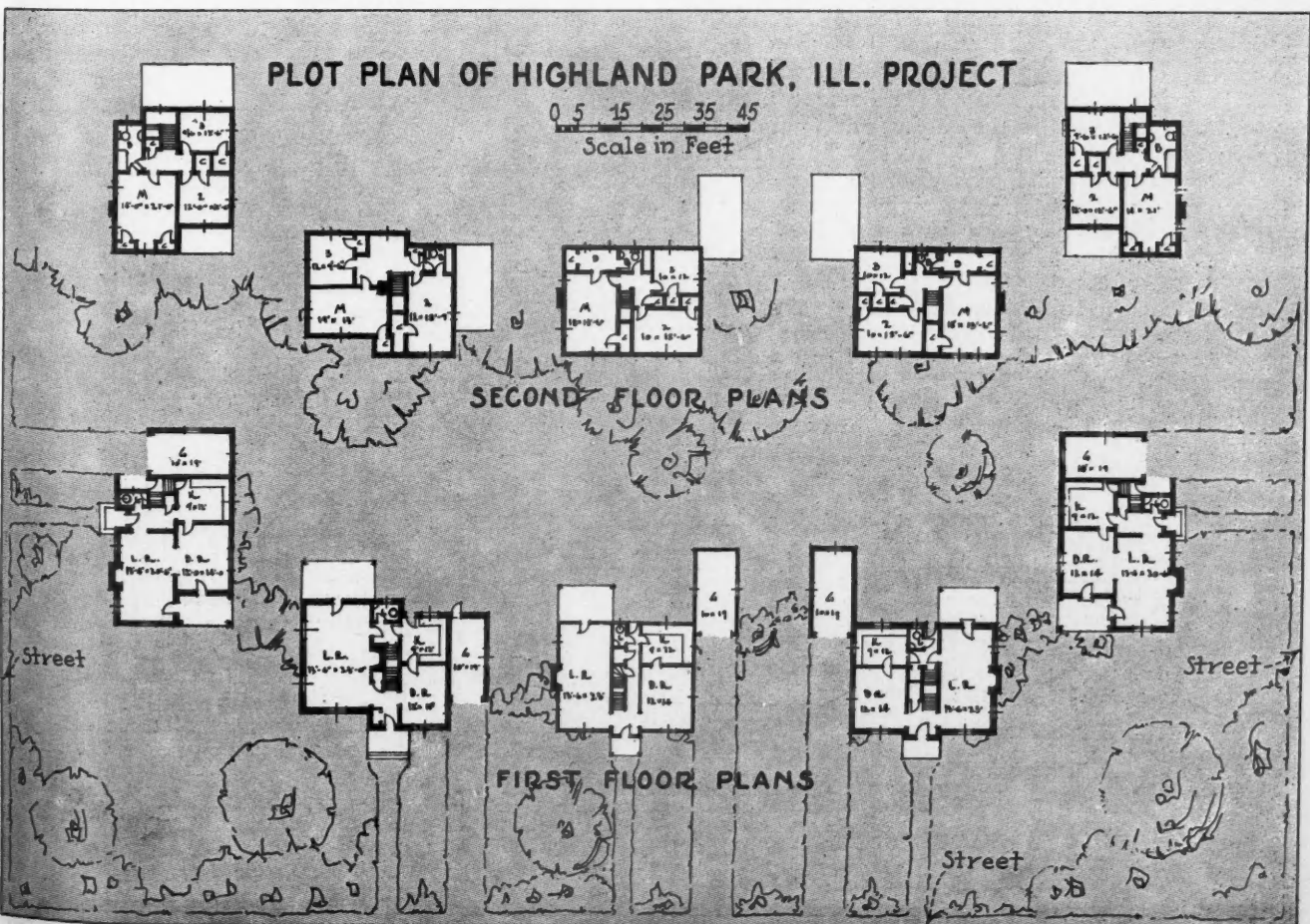
Planning of room arrangement is equally well handled. Traditional details have been simplified to assure minimum work for the housewife and at the same time give maximum livability. The relation of all the rooms is

very practical; accessibility is given due consideration.

These houses are flexible, planned for later additions. Rooms and baths can be added to the second floors of all the houses. The porches can be converted into libraries and later porches added, thus complying with the expanding needs of any family.

The shape of the houses is also important, providing for a minimum loss of heat for efficient winter heating, with air conditioning and oil burning equipment in them all. They are thoroughly insulated with Bildrite Sheathing and Lok-Joint Lath. In addition to all ceilings having Lok-Joint Lath, all second floor ceilings have rock wool protection.

The group was planned by Edward Loewenstein; Paul A. Wenhe was the general contractor.





MODERN home built in Chicago and also shown on this month's front cover features new ideas in plan and detail. Terraces and decks provide space for outdoor living. Special painted trim relieves any severity associated with such design and replaces blinds as window decoration.

## Modern Ideas in Front Cover Home

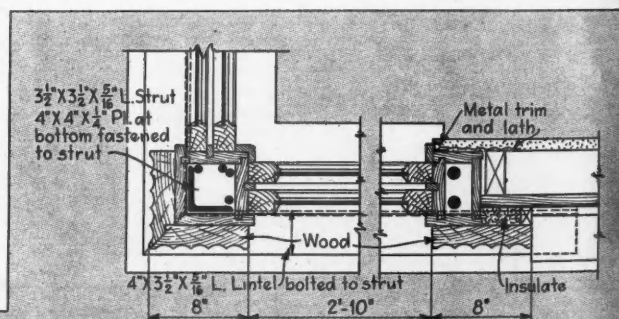
**E**LMER WILLIAM MARX, Chicago architect, states, "The average layman doesn't care for modern styling in his home if details of trim are foreign to his sense of design." For instance, by using conventional Georgian ornament on the modern form, as he has done in the house illustrated above, Architect Marx believes that functional design can be made as acceptable to most people as the traditional of the past.

Besides having been well planned, this home features a number of new ideas in construction. One of these is the lowering of second floor temperatures in summer by evaporating water on the roof. The scupper is set high so that about 1/4-inch of water is left. Dead air space between decks and rock wool fill over ceilings is ventilated with breathers for further heat reduction.

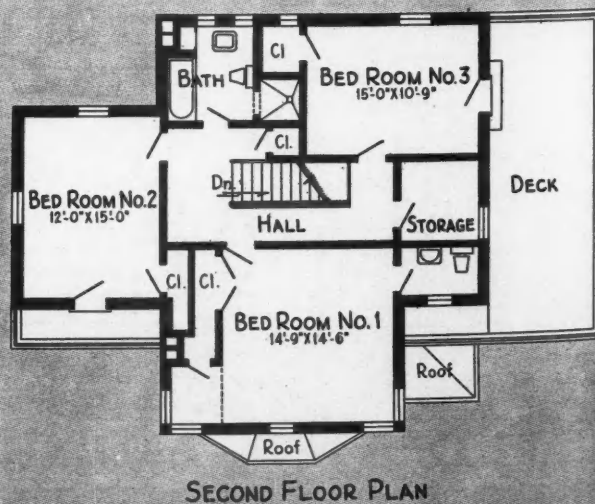
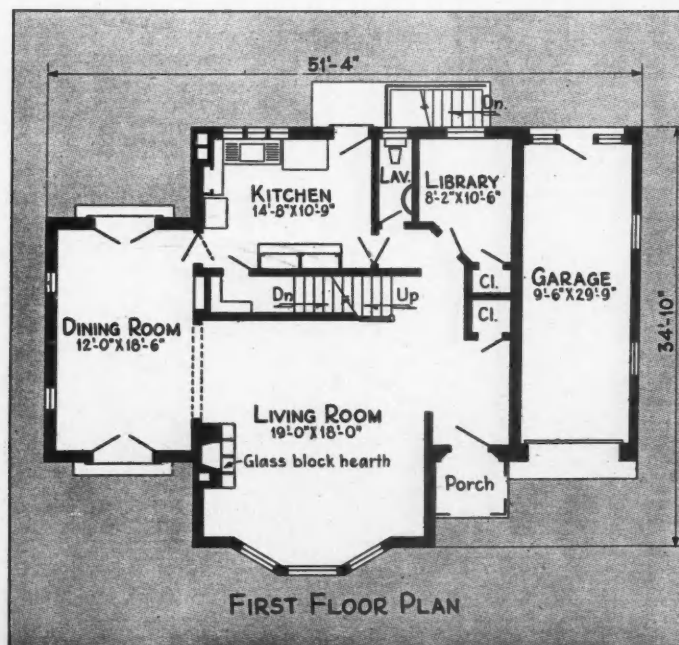
Attractive metal entrance trim and parapet railing

are assembled from stock ornament to give a saving in cost. A clever piece of design is seen in the window frames which dress up the exterior; wide brick moulds with vertical fluting frame the sides of window openings. This trim and the sheet metal coping are painted a dark brown to contrast with the white of the brick.

On the interior some of the outstanding innovations include a glass block hearth for the living room fireplace, wrought iron stair rail with tubular glass balusters, and a drop-down breakfast table of linoleum and stainless steel, shower with circular lining of same metal, and corner windows in master bedroom.



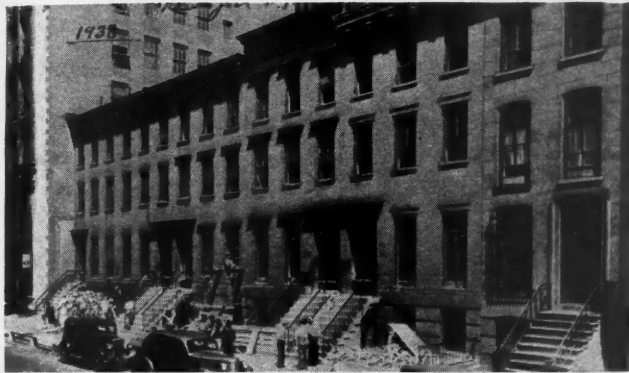
DETAIL OF CORNER WINDOW IN BED ROOM No. 1





# MODERNIZATION

"which makes buildings of all kinds more cheerful, more livable and more salable"



BEFORE MODERNIZING the old brownstones were a costly burden.



AFTER MODERNIZATION, costing \$62,500 and performed in 9 weeks' time, the buildings contained 42 highly-profitable apartments.

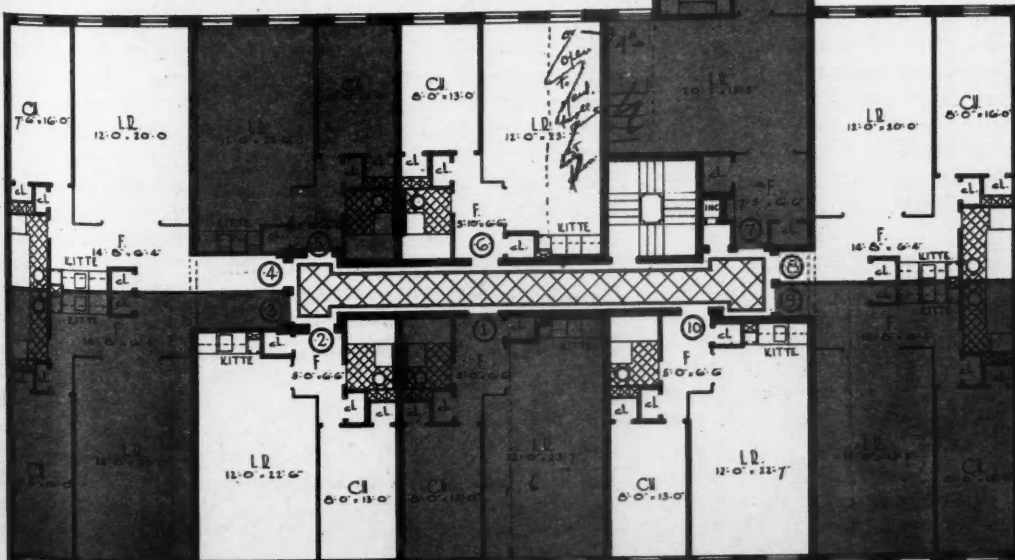
## 42 Apartments from 5 Old Houses

THE right kind of modernizing in the right place is still one of the best ways to get high value out of a building operation. Old apartments, commercial and light-load bearing structures can be restyled and rebuilt, with profit for all concerned. Under the amended Housing Act, financing can be secured for almost any type of project, since it is possible to arrange for several loans in connection with one piece of property.

An excellent illustration of the restyling of an old tax-eating structure in New York is illustrated at left. Located on East 26th Street in New York, this structure consisted of five one-family houses. The owner commissioned Abraham Leibowitz, contractor, and Oscar Silverstone, architect, to remodel this into a modern building housing small apartments. The typical floor plan below shows how this was done.

In less than nine-weeks' time the five old one-family houses were transformed into 42 modern, two-room and kitchenette apartments, which rent at from \$55 to \$85, with the average about \$65. The total cost of the remodeling was \$62,500.

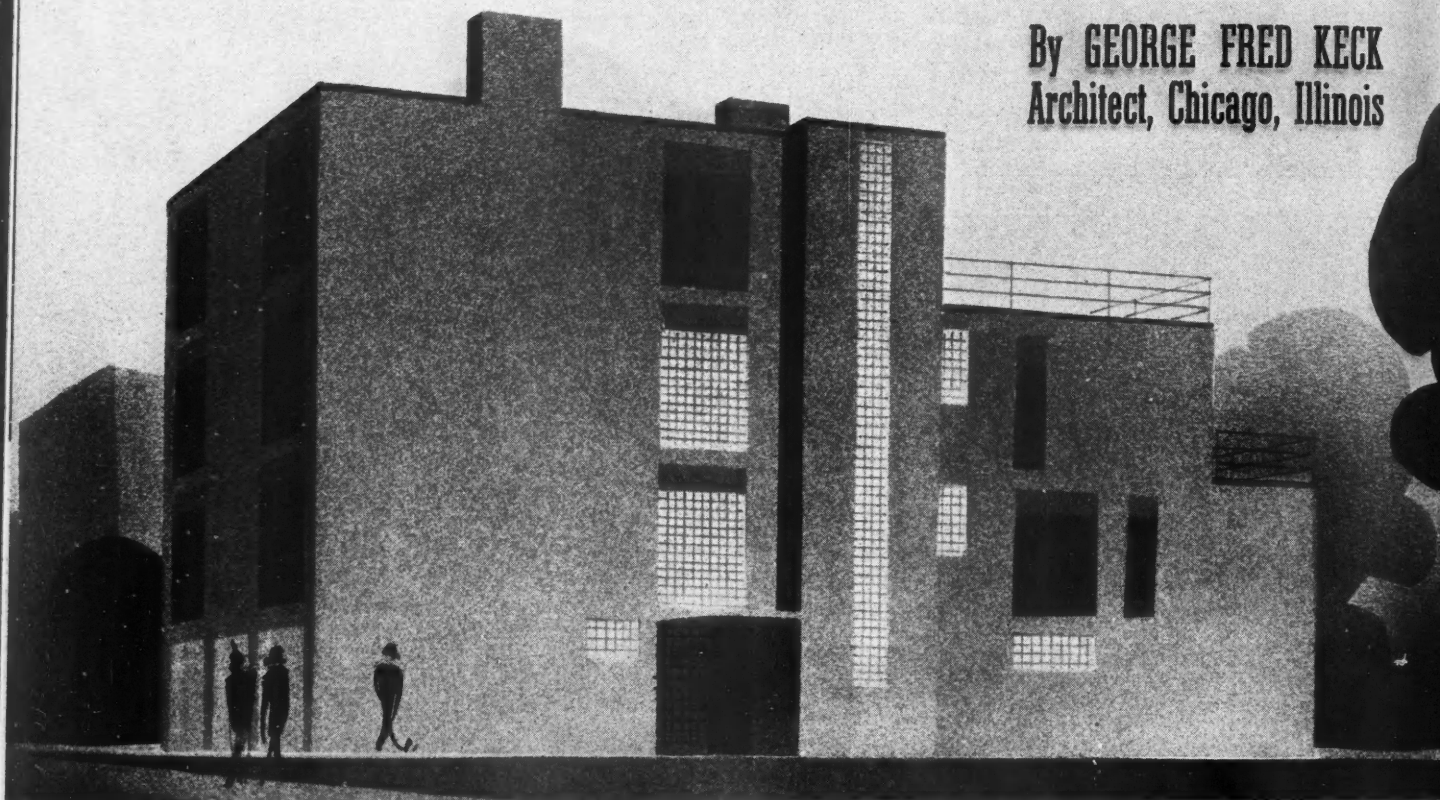
Included in the features of the modernized structure are incinerators, mechanical refrigeration, medicine cabinets, clothes hampers, an inter-phone system, enclosed clothes drier, brass plumbing. The exterior was given a simple, modern treatment, with a minimum of expensive detail.



TYPICAL FLOOR PLAN of the remodeled New York brownstones, showing how modern 2-room, kitchenette apartments, renting for an average of \$65 a month, replaced the old houses.

# A CASE FOR THE CONTEMPORARY APARTMENT

By GEORGE FRED KECK  
Architect, Chicago, Illinois



**In the Parade of Building Progress, forward-looking industry men point the course of tomorrow's practice. Architect Keck believes in practicability of planning—contemporary design breaking with tradition. In this article, he surveys the experience of the past and offers a preview of the modern trend in apartments.**

**T**HE general state of apartment building for income and investment in America has got itself into a pretty kettle of fish—it is, indeed, scandalous. The majority of such buildings have passed into receivership in the last years, and mortgages may be had for the estimable high average of twenty-five cents on the dollar. Let us examine a few reasons why this department of the building industry had to be subsidized to such a great extent by the public. To a large extent, the reasons itemized below overlap.

(1) Planning: By and large the architect (if he was called in at all) was the tool of the owner—and did as the owner or promoter suggested, including the appearance of the exterior. The average illiterate owner knows only what he sees, and thus hinders progress. Architects' fees on such buildings were reduced and no reasonable time could be given the work by such proceedings. Often the architect himself was incompetent.

(2) Financing: Bankers, who financed such plans, were interested only in paper returns—the more rooms and shops indicated over a given area, the more the paper

periods of high rents, or "prosperous" times, when all prices are high.

(3) Promotion: The owner's or promoter's point of view was identical with the banker's, he wanted maximum income for maximum loans.

No thought was given to the renter. The construction largely met the minimum local building requirements. No thought of social implications of such planning,—no sunlight, no recreation areas for children, no convenience for living, no thought to good construction—old fashioned everything—cheap everything. Such buildings deteriorate rapidly, they house more people per acre than the present slum areas and shortly they will become (many are) worse slum areas than those we now have. Real estate men and owners like to see such crowding because temporarily real estate values are increased in certain neighborhoods.

All such building is short-sighted.

In the face of tremendous opposition, our government is applying some (not enough) of the elementary principles of good planning to their housing schemes for

ABOVE: Sketch of Architect Keck's latest apartment building just completed in Chicago. Doors to the three garages face the street; entrances are at the sides; terraces overlook the rear of the property.

income; the more crowding, the more income; the smaller the rooms, the more income, with no consideration whatever for the man who rents. Naturally, building could only take place when rentals were very high, crowding construction into definite

PROPERTY LINE

ABOV  
ment  
Althou  
twelve  
ated n  
come  
obsole  
proper  
them.  
EXTER  
the rig  
be cla  
well pl  
air. T  
explai  
the ow



low income groups. It is quite natural to expect that higher income bracket people will demand better housing. This means deflation in present real estate values, and better construction, which in turn means new types of construction to replace the old.

The physical appearance of these new buildings will, at first, be condemned by all conservatives—but the force of necessity will overcome such objections, because these new buildings will be found to be more comfortable to live in, cooler in summer without refrigeration, sunlight

will bring winter warmth and cheer, construction will be speeded—and building codes will change. Building construction will become flexible to meet changing requirements over the long years.

Investment in such construction will be very profitable for an owner, enjoyable for his tenants, and an asset for the community. Below is an example from my own experience.

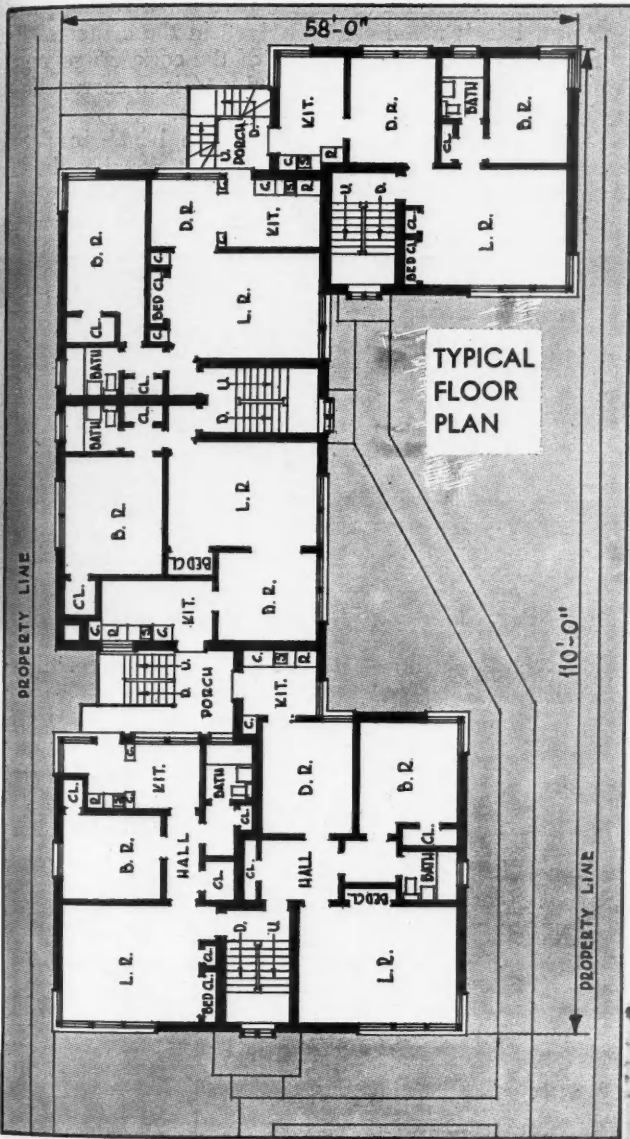
Twelve years ago, when I first started practicing architecture, an acquaintance of mine called me and asked me to build an apartment for him in his town of Elmhurst, Illinois. My friend was a very busy man, and he gave me full authority to proceed as I saw fit. The exterior and typical floor plan of this building as completed are shown at the left and below.

The first step in developing this seventeen apartment building required, in my opinion, a survey of the town to find out as nearly as possible the type of houses built and types of apartments already built; the size of such apartments, occupancy figures; the type of business structures in the town, schools, etc. Elmhurst, being largely a town of small homes, and within commuting distance of Chicago, led me finally to the decision that there were enough people in the town advanced in years and school teachers (since this structure was near a school and library) who did not want the responsibilities of a house, with the attendant chores of grass cutting, furnace tending, etc. Such thinking led to the small apartment type—of three and four rooms with extra room efficiency by using a folding bed in the living rooms.

The property upon which this apartment house was to be placed was an inside lot near the center of the town, well located and fortunately so placed that it was possible to develop a plan which allowed sunlight in all important rooms at some time of the day. The building ordinance in the town did much to dictate the type of construction, which is brick.

Since the building was built to produce income, room sizes could not be too generous, and it was necessary to plan the rooms in such a manner that they seemed large and that furniture of standard sizes might be so placed that the rooms were pleasing. And here lies the most important single feature of this unusual apartment. The windows were grouped and wall spaces so planned that the placement of standard furniture, and its possible rearrangement, was easy and possible and comfortable.

(Continued to page 100)



ABOVE: Typical floor plan of apartment building shown below at right. Although designed by Architect Keck twelve years ago, the layout incorporated many features which had not yet come into general use; today it is not obsolete. Corner windows to allow proper furniture placement is one of them.

EXTERIOR of this building as seen at the right would by present standards be classed as modern in design and well placed on property for light and air. The ornamental stone trim, as explained by the author, was added at the owner's request and expense.



## Progress in Commercial Structures

### New Armco Research Building Exemplifies Advanced Practice

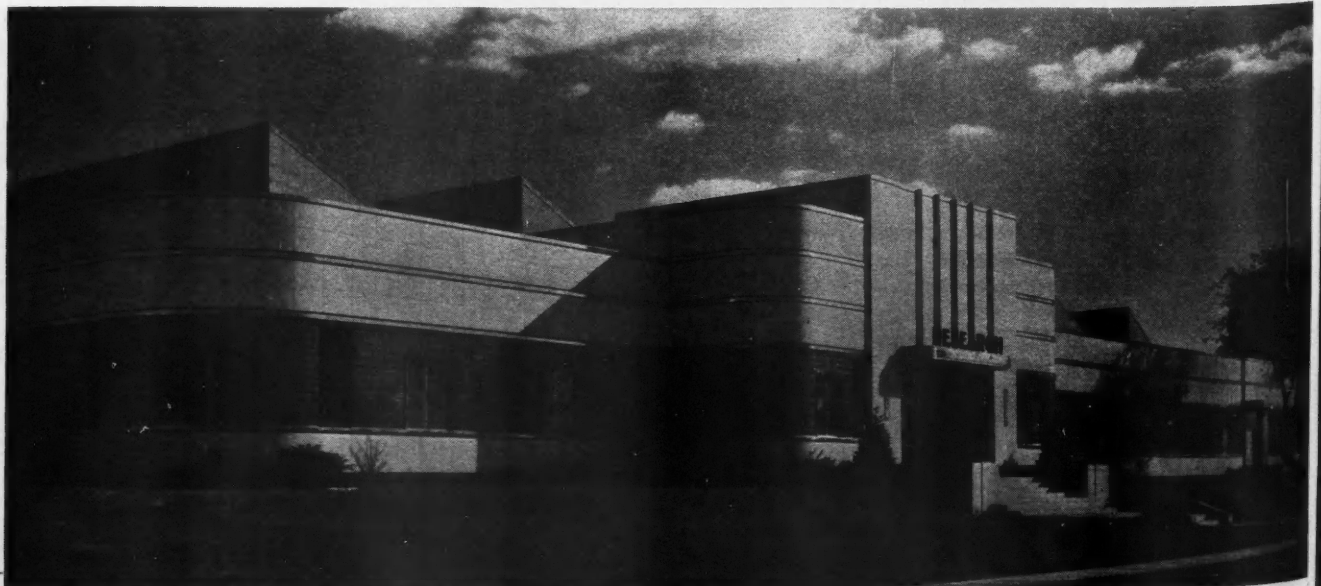
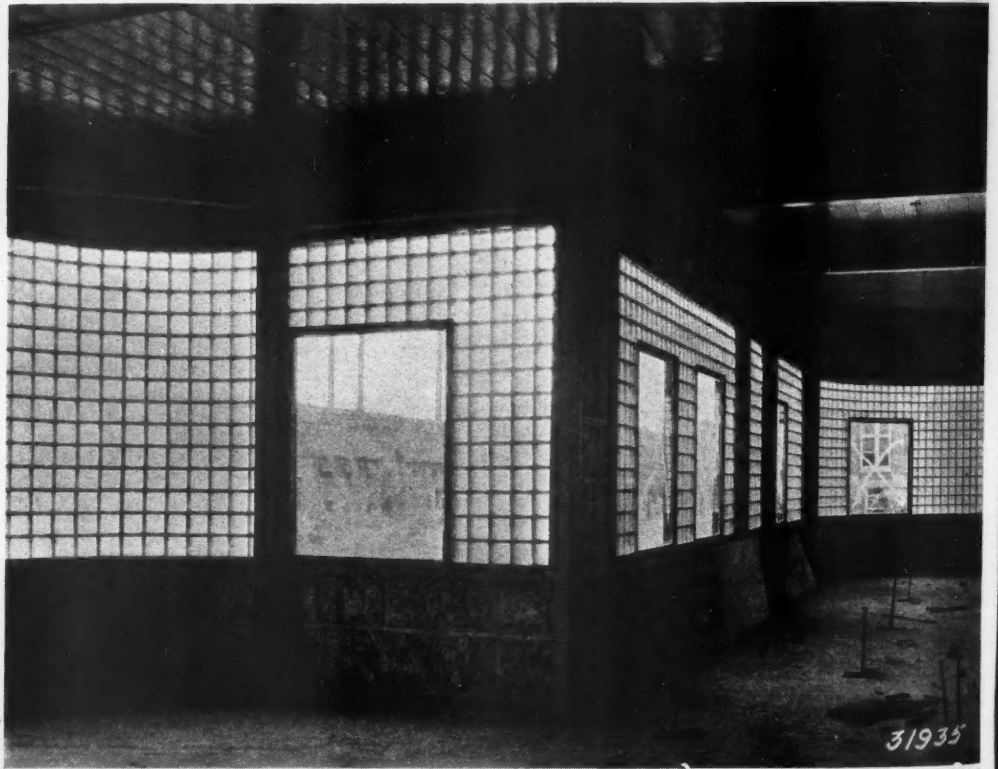
**M**ORE than 200 scientists from all parts of the country were guests of The American Rolling Mill Company at the dedication last November of Armco's colorful new research laboratories in Middletown, Ohio. They were practically unanimous in pronouncing it "the most modern in the industrial world." The building is tradition-breaking in design as well as in the combined application of new and old materials. Costing \$280,000, the building was erected by The Austin Company in cooperation with Harold Goetz, Middletown architect. A symphony of curves and angles accentuates

the modern "streamlined" architectural design. Blended in colorful harmony on the exterior are porcelain enameled iron, stainless steel and glass block. It has a frontage of 255 feet and a depth of 175 feet, providing 43,500 square feet of floor space. It is a saw-tooth type with welded steel frame construction of new design.

Steelex metal roof panels are 18-gage galvanized iron, with a five-inch web on nine-inch centers, spanning 15 feet from girder to girder. For acoustical purposes, the metal ceilings of the offices are perforated with about ten 3/32 inch diameter holes for every square inch of surface. Acoustical cork inside the perforated ceiling panels rests on 1-inch metal chairs welded in the center and at the ends of each panel. On top of the cork, 26-gage galvanized corrugated iron sheets, with 1/2-inch corrugations, run at right angles to the web members.

The corrugated iron is covered with 1-inch insulating cork, fastened down with helical sheet metal nails. To cover the cork, an asphalt material was used in the saw-tooth slopes. Tar and gravel were utilized in the valleys.

THE new Armco laboratory is itself a tribute to industrial research; it represents the practical application of extensive research in the use of iron and steel sheets and strip steel in building construction. Eight different kinds of metal products were used in the building, which encloses 43,500 square feet of space on one floor and was built at a considerable saving under the estimated cost for construction of a building of similar size in conventional materials.



into  
terri  
lain  
The  
tubi  
S  
ings  
wall  
oper  
faci  
has  
The  
ous  
web  
with  
gray  
F  
faste  
form  
black  
less  
Th  
in th  
other  
ducts  
Thes  
Cont  
the s  
Ve  
by tw  
office  
There  
for r  
sectio  
contro  
suppl  
ical la





32571

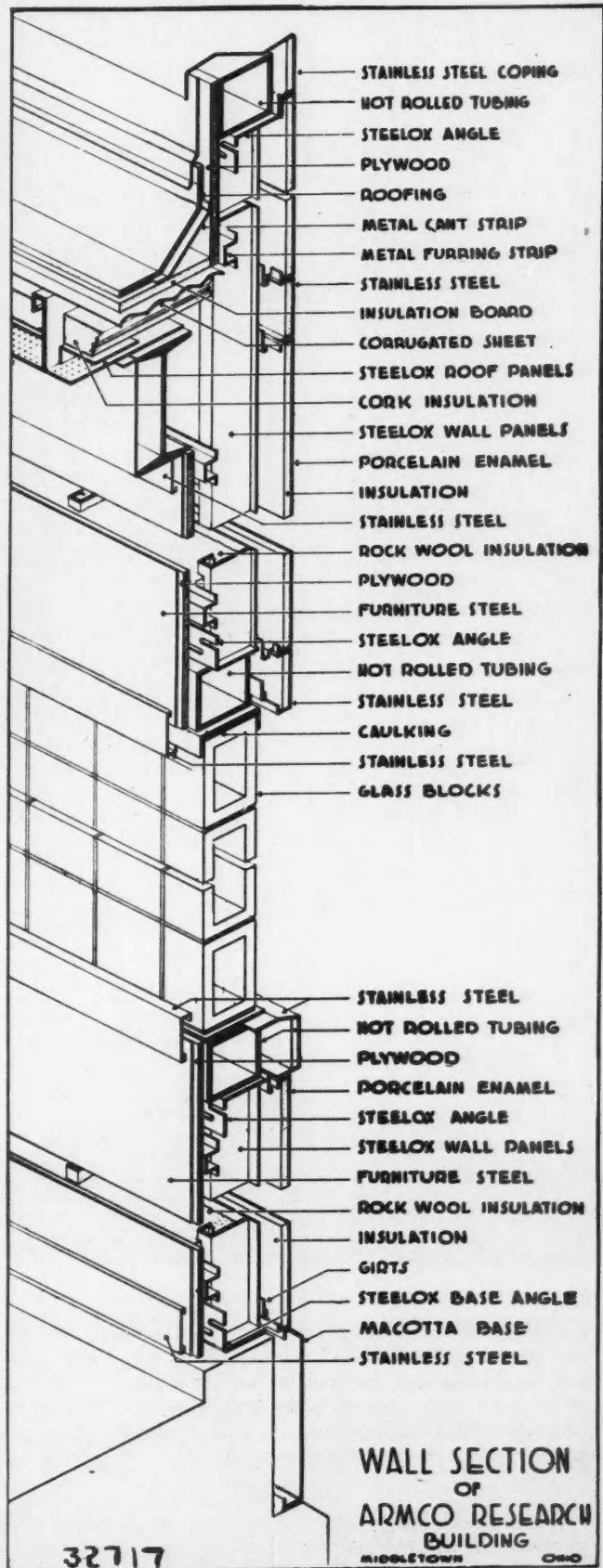
Exterior walls rest on a concrete floor slab which is integral with the building foundation. Three of the exterior elevations are faced with combinations of porcelain enameled iron sheets, stainless steel and glass block. They are formed with 13.6 pound 4-inch square metal tubing, which provides the skeleton for outside walls.

Steelex channel sections, manufactured by Steel Buildings, Inc., an Armco subsidiary, form the nucleus of the wall sections. In all sections except at the glass block openings, 20-gage galvanized Steelex panels, with flanges facing inward, are bolted to the framework. Each section has a three-inch channel filled with an insulating material. The channels are covered with one-inch square continuous hollow metal furring strips, welded to the Steelex webs. Interior walls of the laboratory section are covered with 22-gage flat steel sheets, painted in two shades of gray.

For the exterior facings, porcelain enameled panels are fastened to the Steelex wall sections with metal girt strips formed in the shape of a hook. The water table base is of black enameled iron, which is concrete filled and has stainless steel trim at the joints.

The entire floor is concrete, covered with asphalt tile in the main office sections. All electric, telephone and other service lines have been placed underground in fibre ducts, which have been encased in the concrete floor. These are accessible through manholes every 200 feet. Controls are grouped, with a main distribution center at the switchboard, in the center of the laboratory section.

Ventilation and atmospheric conditions are controlled by two air-conditioning systems, one for the research staff offices and one for the testing shops and laboratories. There are five units, two of which provide zone control for northern and western exposures. The laboratory section is conditioned by three units, each providing zone control in a self-contained group of rooms. These are supplemented by fume and heat exhaust systems in chemical laboratories.



Deep well water is used for summer cooling. It is pumped into the system at a rate of 400 gpm and pressure of 50 pounds a square inch. Summer maximum temperature of the water will be 60 degrees F.

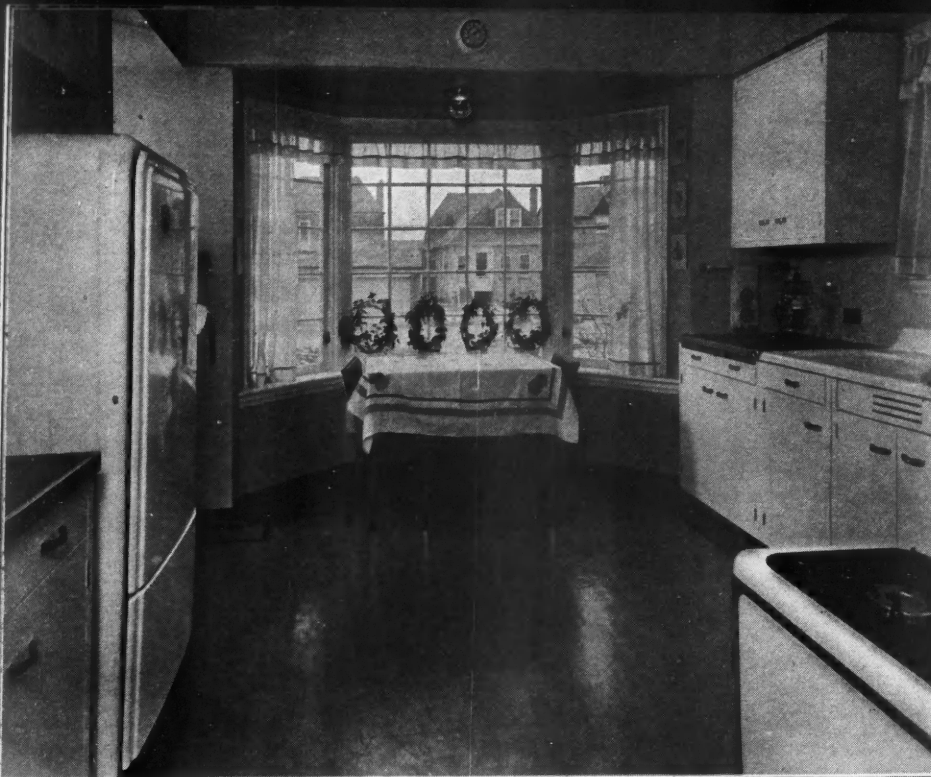
Fresh air intakes are set in the glass block saw-tooth walls, and conditioned air is supplied to rooms through diffusing grilles placed near ceilings. In summer, warm air is recirculated from rooms through grilles at floor.

## New Standards of Are Built into

**Better Kitchen Planning,  
Improved Materials and  
Co-ordinated Equipment  
Contribute to Make This  
Room a Center of High  
Efficiency and Beauty in  
the Better Modern House**

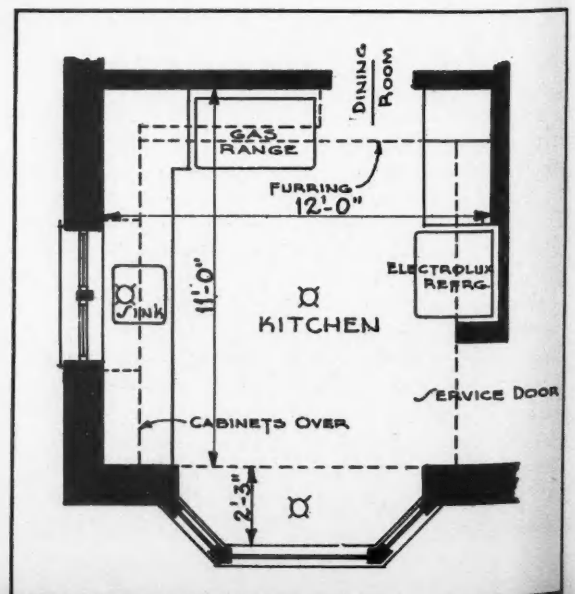
**I**N THREE exhibition homes recently opened in various sections of Chicago by the Peoples Gas Company, the progress made in kitchen planning during the past few years is amply demonstrated. Although the three kitchens as built and shown on these pages present the latest in planning and arrangement, the base dimensions and forms follow those of the average kitchen; careful design and the specification of modern equipment are responsible for their being pleasant and efficient rooms.

Bright, cheerful color is a feature of these kitchens. The attractiveness appeals instantly to housewives who spend a good portion of the day in this "workshop" room. The schemes for walls, floor covering and trim were carefully selected—one is done in harmonious shades of brown, the second in blues and the third in greens; bright contrasting color accents further set off the trim appearance of the equipment items.



**ABOVE:** Two kitchen views of the Peoples Gas Company demonstration home located in the Galewood section of Chicago. Upper illustration shows the inviting spot provided for daytime meals. The well lighted sink and work center appears in the lower view; an interesting feature is the tray storage space between stove and sink. The planning is the work of Architect T. Clifford Noonan, Chicago.

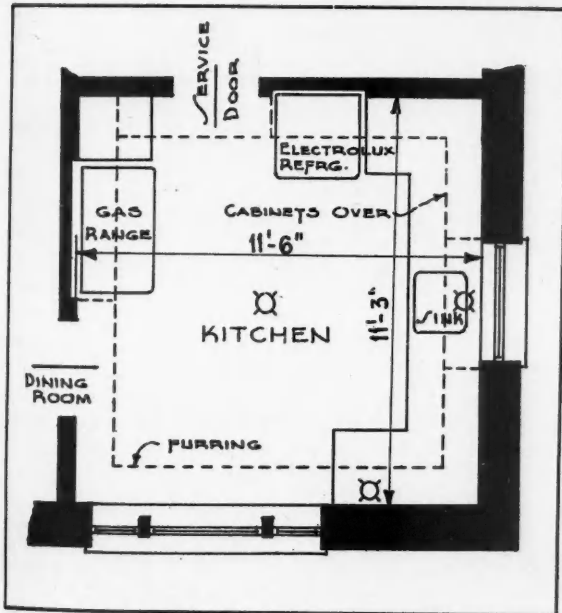
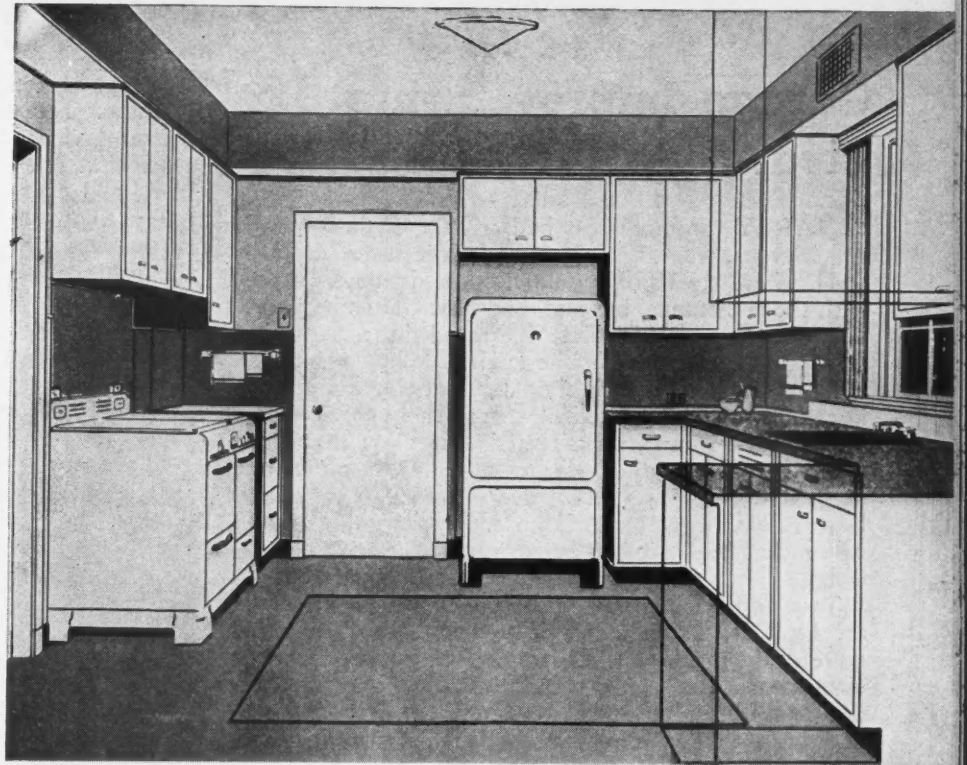
**IN THE KITCHEN** above, a bay window provides a cheerful space for a breakfast set. Directly opposite, as indicated in plan at right, is the door to the dining room and to the right, a vestibule leads to the rear entrance. The "production line" starts with the refrigerator. Adjacent counters, which are again carried out to the left of the gas range and flanking the sink, aid the housewife in saving steps—saving time and energy both in preparing the meal, and serving it in the dining room. This kitchen and the two shown opposite offer numerous ideas to planners interested in the latest features which combine to give 1938 styling.





# Words of Convenience into Today's Kitchen

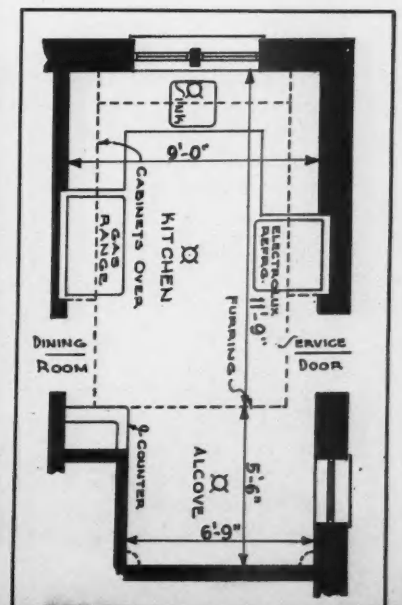
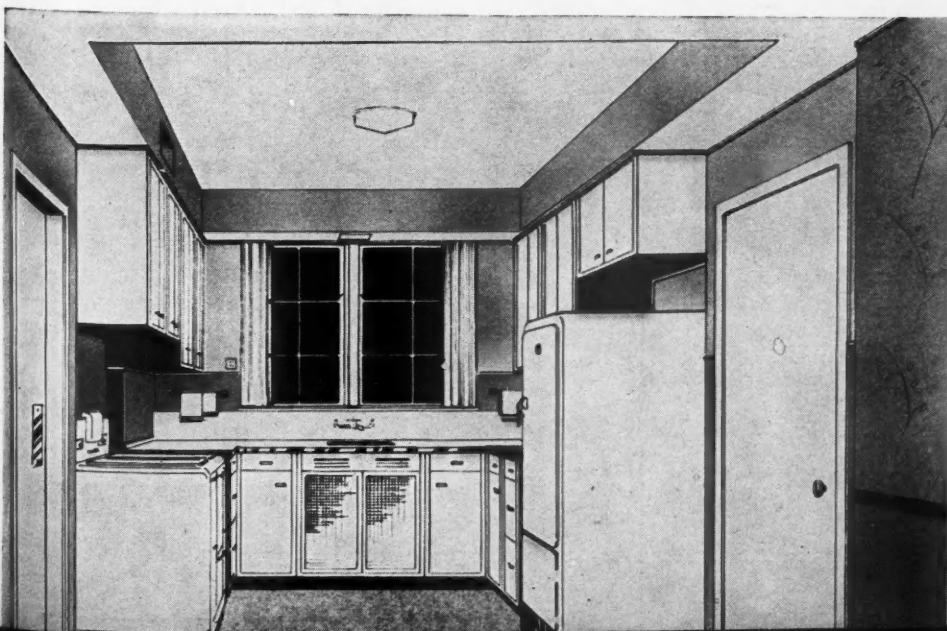
THE KITCHEN at the right with plan shown below fairly sparkles with the atmosphere of modern home efficiency. The sketch shows the room as viewed from the large east window. Here, in the strong morning light, a table is set for the meals of lesser importance. Again, the floor space is essentially the same as in thousands of kitchens. Preparation counters are arranged however to meet the line of travel toward the dining room at the left. The door at the rear gives direct



access to the front hall and to the side entrance. This feature alone has been one of the most popular ideas ever developed into the design of small homes. The phantom lines show how the counter and upper cabinets are carried around to the east window. The low back splasher at the sink affords extra valuable window light.

BELOW, the popular "U" shape is applied to kitchen design. This kitchen as seen in the plan is divided into two distinct parts—kitchen and breakfast nook. The side entrance is at the right with a direct aisle to the dining room door at the left. It may be said that production starts here with the "tradesmen's entrance," followed in line by the refrigerator and around to the gas range which adjoins the dining room door. An extra large double window supplies light directly over the sink and is reflected by the smooth enamel surfaces of the cabinets.

LEFT: "L" type plan of kitchen sketched above allows great working convenience; designed by Architect Elmer William Marx, Chicago. BELOW: "U" shaped plan offers compact arrangement of work center at one end of kitchen; designed by White and Weber, architects, Chicago.



## Garage Improvements Rival Auto Advances

**E**ARLY automobiles had carriage dash-boards, lamps, wheels, springs, and were stored in barns where smells of gasoline, oil, and rubber blended with those of horse, harness, and hay. Thus began the private garage, which has improved in recent years as rapidly as the automobile itself.

Horse-and-buggy thinking dominated garage building at first. Barns were isolated, so early garages were placed out in back, on a rutted, dirt alley that ran a gauntlet of garbage cans, piles of ashes, miscellaneous trash and tin cans. Many were unheated, unpainted lean-tos with dirt or board floors. Sagging doors swung on rusted hinges, unless snow was in the way, or were dragged open despite complaints of sagging track.

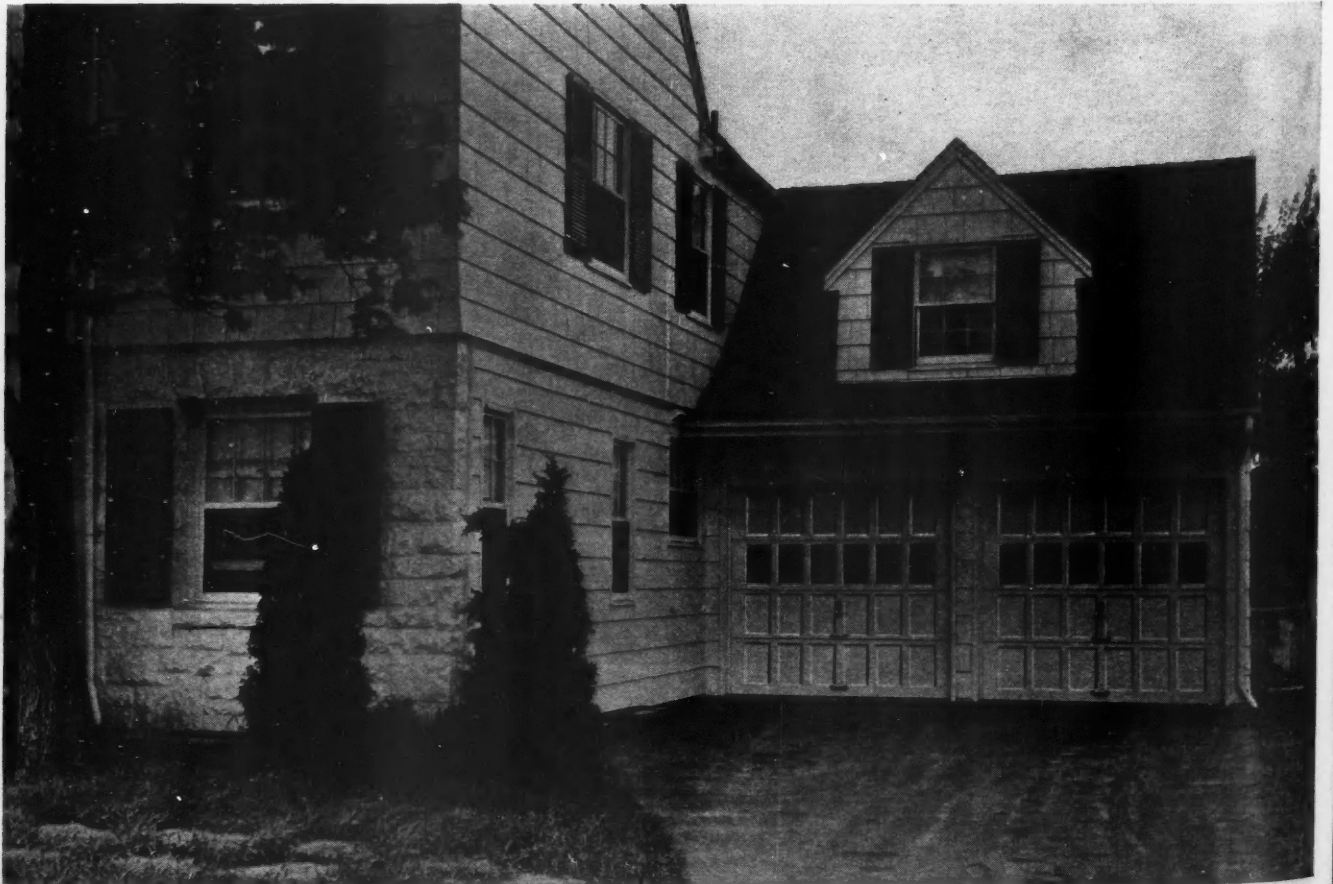
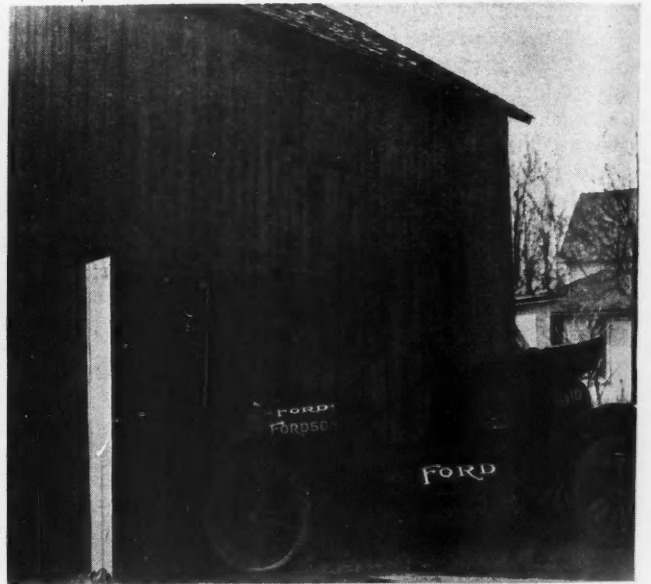
Today's detached garages stand on paved alleys that are kept clean. They are electrically lighted, insulated, have drained concrete floors, and efficient doors. An even greater change has come in attached garages. Once the need for isolation was removed, the private garage and driveway were placed where they would do the most good—beside or in front of the house, facing the street. The garage had to conform architecturally, so the appearance of doors was improved, and mechanical magic was applied.

Manually operated doors of all types now operate

**AT THE RIGHT** is seen an early vintage Ford beside an equally early garage—a converted horse barn. Below is shown a modern attached garage that conforms architecturally with the house of which it is a part, and is equipped with modern mechanical conveniences, especially smooth acting doors.

quietly and easily, regardless of weather conditions or snow. Mechanical controls include driveway push-button devices that operate from the driver's seat, another that operates doors at the sound of an owner's horn, and even remote control. An owner need only pull a knob on the instrument board of his car as he approaches the garage to open the doors and turn on the lights. Once inside, another pull of the knob closes the door.

There are more than 15,000,000 private garages in this country. Many should be remodeled so that exteriors conform to the houses of which they are a part. Others need new doors, windows, floors, drains, lights, insulation, heating facilities, or other improvements.



S  
B  
P  
ti

V  
the  
stin  
An  
wic  
its  
bui  
I  
det  
ask  
pag



# "We Can Help You Sell MORE Homes and Better Equipped Homes"

SAY MAJOR ALEXANDER FORWARD and JOHN F. QUINLAN



MAJOR ALEXANDER FORWARD, managing director, (left) and JOHN F. QUINLAN, director of Home Appliance Planning Bureau, (right) of American Gas Association, outline vigorous Home Promotion Campaign for builders, architects and material men in co-operation with local utilities.

## \$10,000 in Prize Money Offered to Builders as Part of Nationwide Program by American Gas Association to Stimulate Interest in Better Gas-Equipped Homes

**W**ORKING together we can do many things that cannot be done separately.

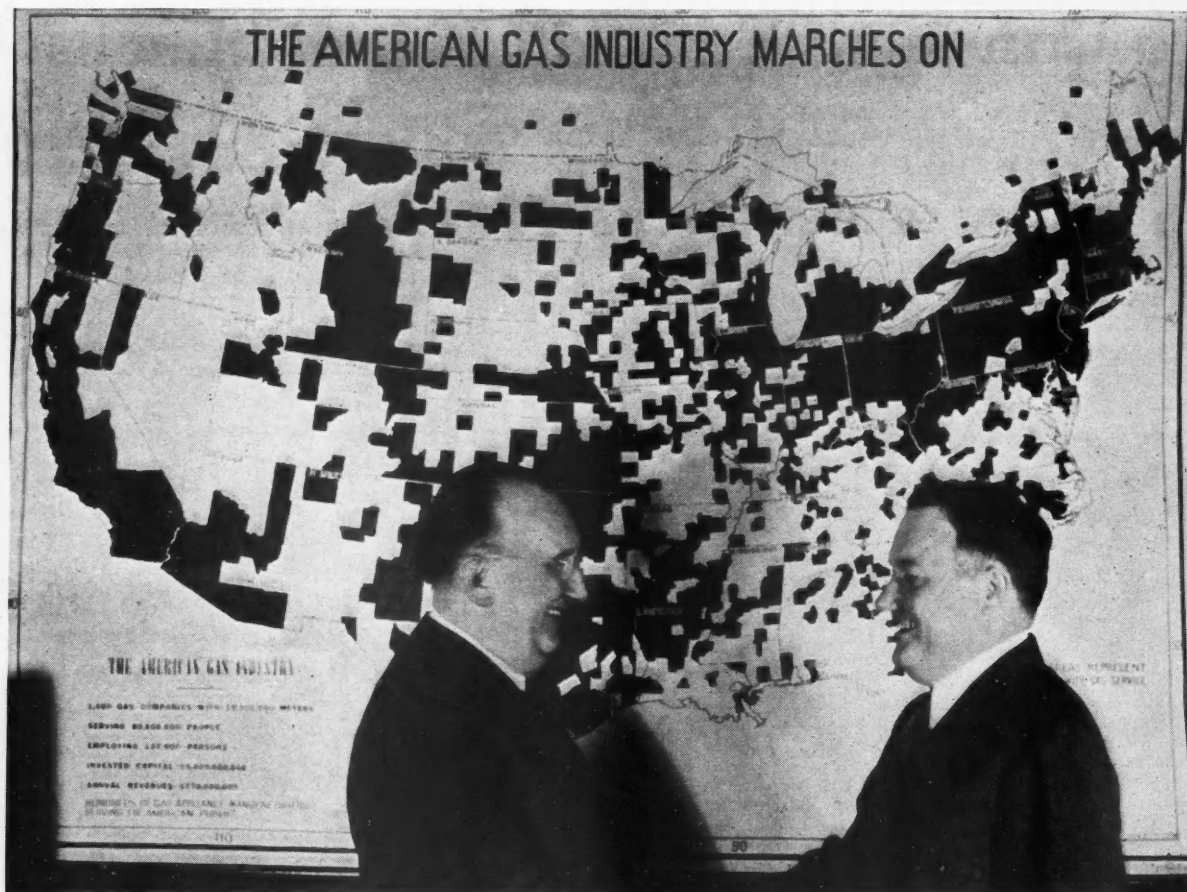
Two great industries—the gas industry and the residential construction industry can create and stimulate new home construction of the finest type. The American Gas Association is now carrying on a nationwide program that will not only promote and increase its own business but that of all home builders and of the building trades.

How can this gas industry program—described in detail in this issue of *American Builder*—help me? you ask. The answer is suggested in the map on the next page. The black areas on this map show how gas service

is today supplied in areas occupied by more than 80,000,000 people. This industry in 1937 represented investments totaling five billion dollars. It has more than 17,000,000 customers.

For the first time in history we are mobilizing this industrial giant to give vigorous support to the residential construction industry of America. We realize the importance of this industry to all American business as well as to our own business. The American Gas Association is embarking on a program which has the full support of public utilities, gas appliance manufacturers, and their local representatives and dealers. This program will help the building industry by stimulating interest in modern, well equipped homes. We believe that several hundred thousand homes will be built this year, and it is our hope that this program will result in a large portion of these new homes being equipped with the latest and best automatic gas cooking and refrigerating equipment, gas water heating, automatic gas house heating, incineration and automatic gas appliances.

The full details of this program are outlined elsewhere in this issue of *American Builder*. We should like to point out to readers of this publication the particular interest to them of the Builders' Competition. We know that the builder is, in the last analysis, the man who determines the type of equipment that goes into a majority of the homes built. He is the one who spends the money,



MERRILL N. DAVIS, president of the Association of Gas Appliance and Equipment Manufacturers, and N. C. MCGOWEN, president of the American Gas Association, shake hands as they inaugurate program for more and better gas-equipped homes, tying in with National Housing Program. The black areas on the map indicate places in the U.S.A. where gas service is available by some 1,400 companies serving more than 80 million people.

especially where the homes are being built for sale. As a practical builder you are interested in time-tested and approved equipment and utility company service that already has national acceptance. In selecting gas equipment *that* is what you get.

We hope you will build up-to-date, well planned, well constructed houses, completely equipped with modern gas appliances. You will find such homes easier to sell at a good price. There is, after all, the basic reason why you will build gas-equipped homes.

But to dramatize this type of home, the American Gas Association is conducting a Builders' Competition and offering \$10,000 in prize money. The Contest will be open for a year, and those builders who erect the best gas equipped homes and are willing to keep them open for an inspection period of 30 days will participate not only in handsome cash awards but will receive the benefits of highly valuable publicity and advertising. The builders who win these prizes will become overnight the best known builders in America.

We know that the building of homes is a local business. We will not attempt to dictate how you shall run your business or build your homes. You are the men who know best the needs of your local communities. The American Gas Association, with its great national organization and its representation in every local community by public utilities and appliance dealers, is in a position to give you the right kind of local co-operation. It will help publicize and advertise modern gas equipped homes. It is our hope that you will take an interest in this program and will let our industry work with you to produce more homes and better equipped homes in 1938.

Contractor-builders can get helpful co-operation from local gas utility organizations to promote interest in houses they enter in the competition—particularly promotional help that will arouse public interest and will bring a stream of visitors when the houses are open for inspection. Each can be featured as a "Liberty Home," and can be identified with a nation-wide program that will feature this distinctive name. Promotional advantages of this kind are not available under ordinary conditions, and for that reason builders will welcome and utilize them.

Rules of the competition, and helpful suggestions regarding the promotion of "Liberty Homes," can be obtained from either the American Gas Association, or from any of the 1,400 gas utility companies, located in every community where gas is manufactured or retailed to the public. Rules are broad enough so that a house of practically any price class can be entered. An attractive medium price or low cost house, ingeniously equipped with gas-burning equipment, has equal chances with a similarly equipped luxury home. Cleverly designed houses in the medium and lower cost brackets will be favorably received, because of widespread public interest in homes of this type and the market opportunities they offer for sales of equipment.

Obviously, the houses that will stand best chances in the competition will be those in which builders go beyond the minimum requirements of gas-burning equipment for "The 4 Big Jobs"—heating, cooking, refrigeration, and domestic hot water. There are many interesting specialties that can be installed in "Liberty Homes." Information regarding these items can be obtained from the Association, or from manufacturers.



**\$10,000**

*in prizes*

**“LIBERTY HOME”  
BUILDING COMPETITION FOR  
BUILDERS AND ARCHITECTS**

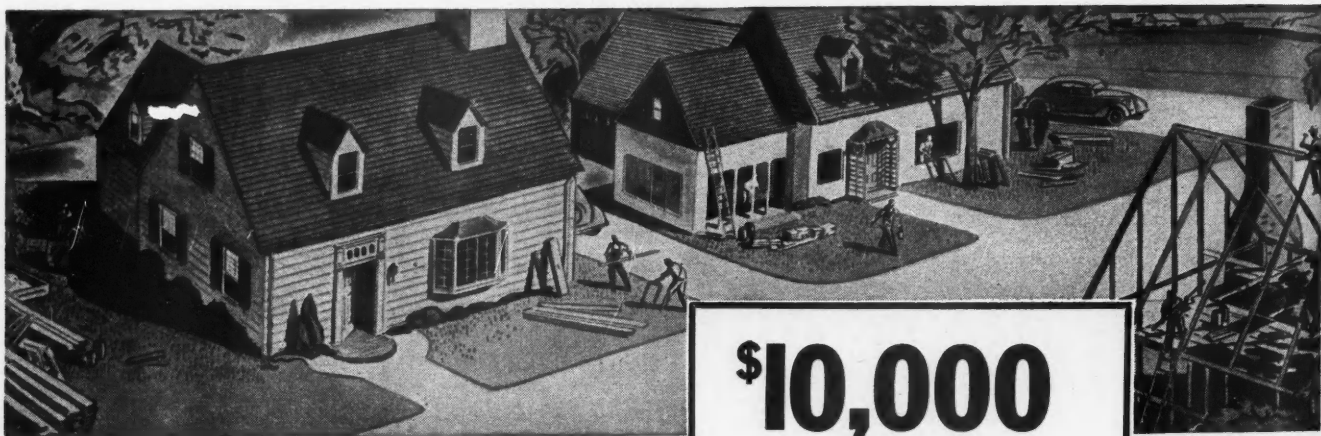
*Sponsored by the*

**AMERICAN GAS ASSOCIATION**



**SEE NEXT 2 PAGES FOR FURTHER INFORMATION**

# BIG PRIZES FOR BUILDERS AND ARCHITECTS... Both



**\$10,000**  
IN PRIZES

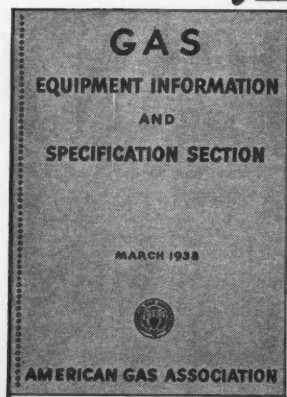
## THIS "LIBERTY HOME" COMPETITION

is open to builders and their architects who shall, before *July 1, 1939*, complete the building of one or more houses utilizing "GAS FOR THE 4 BIG JOBS"—cooking, refrigeration, water-heating, and house-heating.

Prizes for the best houses selected in this competition will be awarded to the builders of the houses and to the architects responsible for their design.

**ARCHITECTS' COMPETITION CLOSES MID-NIGHT MAY 23, 1938.** Mail entry coupon on next page for complete A.G.A. Competition Program.

*Every contestant must have this free booklet*



containing information and specifications on gas appliances for both the Home Design Competition and the Home Building Competition. See following page.

**GAS IS YOUR QUICK, CLEAN, ECONOMICAL SERVANT**



# HOW TO ENTER THE A.G.A. \$10,000 "LIBERTY HOME" BUILDING COMPETITION!

**MAIL THE  
COUPON TODAY**

for your free copy of the  
"A. G. A. Competition  
Program", containing  
all the rules which  
must be followed

COMPETITION DIRECTOR  
AMERICAN GAS ASSOCIATION  
420 Lexington Ave., New York City

Date \_\_\_\_\_

Last Name \_\_\_\_\_ First Name \_\_\_\_\_ State \_\_\_\_\_

(Please print)

Address \_\_\_\_\_ City \_\_\_\_\_

I wish to enter the A.G.A. Architectural Competition

I wish to enter the A.G.A. Builders' Competition

I am an Architect \_\_\_\_\_ Designer \_\_\_\_\_ Builder \_\_\_\_\_

Town Planner \_\_\_\_\_ Engineer \_\_\_\_\_ Draftsman \_\_\_\_\_

Kindly forward complete details as checked above.

Signature \_\_\_\_\_

ABBA

**PLAN TO USE GAS FOR THE 4 BIG JOBS**

# RUUD GAS WATER HEATERS...



OFFER PROSPECTIVE  
BUYERS THIS EXTRA  
HIDDEN VALUE AND  
THEY RECOGNIZE  
QUALITY  
CONSTRUCTION

## WITH TANKS OF SOLID MONEL

**H**OME buyers today no longer take property at its "face value". And when it comes to mechanical appliances you're expected to show them "the works"... tell more about quality of construction. Right there is where the new Ruud Gas Water Heater with its solid Monel\* tank fits snugly into the picture... proves that *beneath* the surface, too, you are offering *quality*.

Long known for dependable and economical operation, the Ruud Gas Water Heater has gained the confidence of a huge buying public.

And its new tank, of solid, enduring Monel, is equally popular... made known through consistent National Advertising to more than 10,000,000 home owners.

Stronger and tougher than structural steel, stoutly resistant to corrosion, completely and permanently immune to rust, Monel assures years of trouble-free, clean hot water service. And Monel tanks in Ruud Gas Water Heaters, good for working pressures up to 127½ lbs., are tested to 300 lbs. hydrostatic, with safety factor of 5½.

Available in 20, 30, 45, 60 and 75 gallon capacities, Ruud Gas Water Heaters with Monel tanks offer you plenty of sizes to choose from. And whatever size you use, a Monel-equipped Ruud Gas Water Heater can help you close many a deal. Write for further information. Address:

**THE INTERNATIONAL NICKEL  
COMPANY, INC.**

67 WALL STREET NEW YORK, N. Y.

\*Monel is a registered trade-mark applied to an alloy containing approximately two-thirds Nickel and one-third copper. This alloy is mined, smelted, refined, rolled and marketed solely by International Nickel.





# HERE'S HELP

## ON THE AGA "LIBERTY HOME" \$10,000 PRIZE COMPETITION

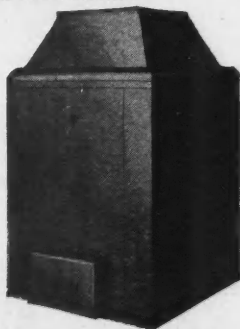
Send for This **FREE** Booklet Now!



AGP's new Manual—12 pages of facts and figures on GAS-FIRED heating, hot water and air conditioning equipment. All the information you'll need, and scores of new ideas to help you plan prize-winning homes with sales-win-

ning equipment. Products for every price range—every heating, hot water or air conditioning requirement. AGP—a great name in GAS—stands for the world's leading manufacturer of GAS-FIRED equipment. Let it help you sell.

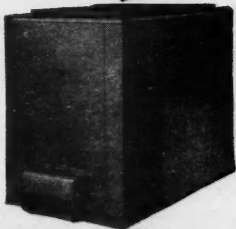
**AGP GRAVITY WARM AIR FURNACE**—Scientifically engineered to provide maximum comfort with warm air.



**AGP TYPE 1-PP**—A very flexible cast iron Air Conditioning Unit in three sizes: 50,000, 100,000 and 150,000 BTU.



**AGP TYPE K AIR CONDITIONER**—A new low-priced winter air conditioner with heavy steel heating unit built to AGP quality.



**AGP EMPIRE IDEAL**—The world's most beautiful gas boiler—a full range of sizes.

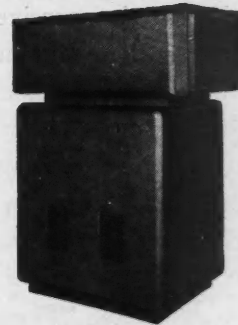


**AGP AUTOMATIC STORAGE WATER HEATERS**

— 3 types covering every price range in sizes from 15 to 75 gals. Tanks of copper bearing steel, galvanized, or new rust-proof Arcoloy.



**AGP TYPE 2-FE AIR CONDITIONER**—Utilizes counter-flow principle. Provides complete, low cost winter air conditioning.



AGP Equipment is distributed nationally—easily available. There is an AGP Representative near you. AGP Equipment is easy to install—saves on time and labor in addition to its original moderate cost. Approved by local utilities and by the AGA. It will help you win, and win you sales. Mail the coupon now for free illustrated 12-page manual.



This whole line of equipment may be had in beautiful, lustrous gun-metal-gray enamel finish.

**American Gas Products Corporation**  
40 West 40th Street  
New York, N. Y.

Send me your 12-page Manual with suggestions to help me on the \$10,000 "Liberty Home" Competition.

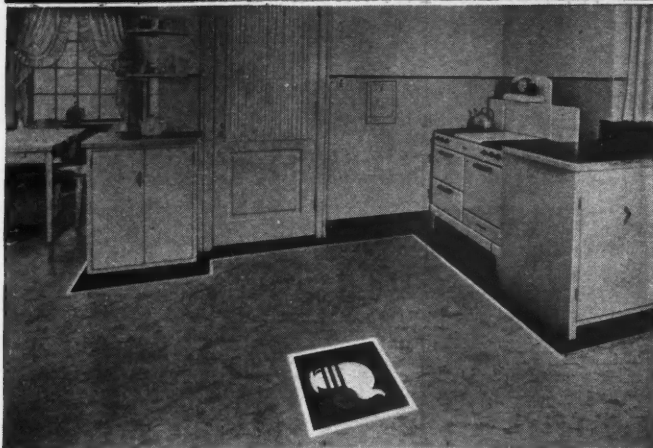
Name.....  
Address.....  
City..... State.....

**AMERICAN GAS PRODUCTS CORPORATION**

DIVISION OF AMERICAN RADIATOR & STANDARD SANITARY CORPORATION

40 WEST 40th STREET - NEW YORK, N. Y.

*This is the floor  
that makes the kitchen*  
**THAT SELLS THE HOUSE**



*This inset linoleum floor design representing a kettle and cup and saucer would make any house easier to sell. Linoleum is Armstrong's No. 029 Marbelle with design and border in plain colors.*

**C**ALLING attention to the Armstrong's Linoleum Floor in a kitchen often clinches a sale. Armstrong's Linoleum is nationally advertised in leading magazines. Your customers know that it means an easy-to-clean floor that stays beautiful and new-looking for years.

Floors of Armstrong's Linoleum are reasonable in cost—inexpensive to install. There are five thicknesses, for every purpose and every budget. These floors are colorful and cheerful. They brighten up rooms and make them more inviting. They never require expensive refinishing.

Find out today how Armstrong's Linoleum can help make your houses easier to rent or sell. Send ten cents now for your copy of the color-illustrated book, "Floors That Keep Homes in Fashion." Armstrong Cork Products Company, Building Materials Division, 1218 State St., Lancaster, Pennsylvania.



*Armstrong also manufactures asphalt tile, reinforced rubber tile, cork tile, Linotile (oil-bonded), and Linowall.*

RUBBER TILE • LINOTILE (OIL-BONDED) • ASPHALT TILE

*Armstrong's* **LINOLEUM**  
and **RESILIENT, NON-CERAMIC TILES**

CORK TILE • LINOWALL • ACOUSTICAL CEILINGS

# MAJESTIC

**WOOD, COAL OR GAS BURNING  
INCINERATORS**



No home or apartment is completely modern without an incinerator in the basement! And it's essential when an automatic heating system is used! Provides a quick and easy means for disposal . . . . eliminating the unsightly garbage can!

Scientifically and sturdily constructed for a lifetime of satisfactory service. Send for catalog and prices.



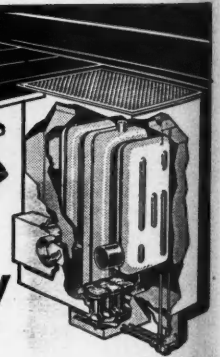
**The MAJESTIC Co.**  
HUNTINGTON,  
INDIANA



**BUILDING NECESSITIES**

**UNDER THE FLOOR**

*-But on top  
of the heap!*



Experts didn't have to go into a prolonged huddle to pronounce the Payne Floor Furnace the most efficient and economical ever built!

Here is a precision-built gas fired unit that is easily installed, occupies virtually no floor space and operates on an absolute minimum of fuel. Requires no basement.

Now is the time—with increased building activity, with helpful F.H.A. financing—to strike hard for new construction. Let the Payne Floor Furnace help you.

It's always good business to recommend a furnace that recommends you!

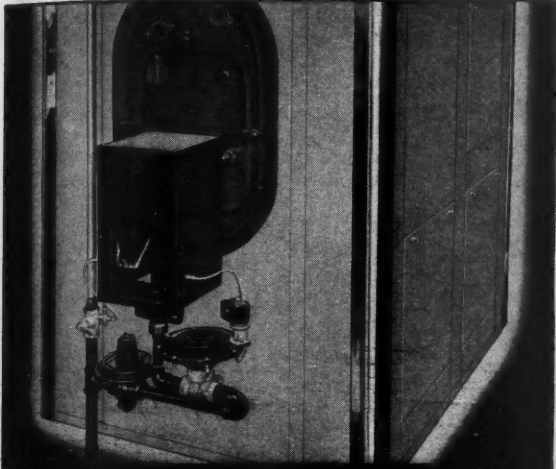


*Payne*

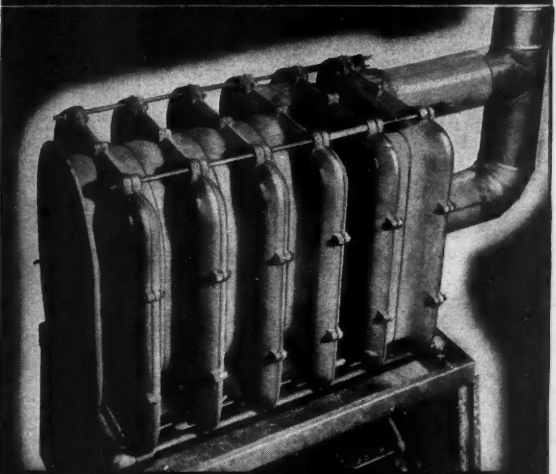
**FURNACE & SUPPLY CO., INC.**  
BEVERLY HILLS • CALIFORNIA



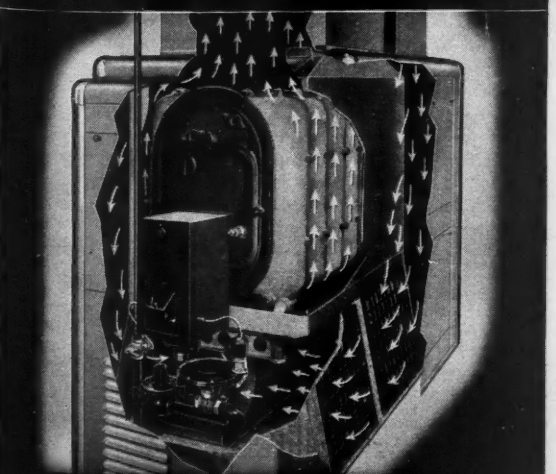
# HERE'S YOUR <sup>GAS</sup> FURNACE AIR CONDITIONER FOR THE \$10,000 A. G. A. CONTEST



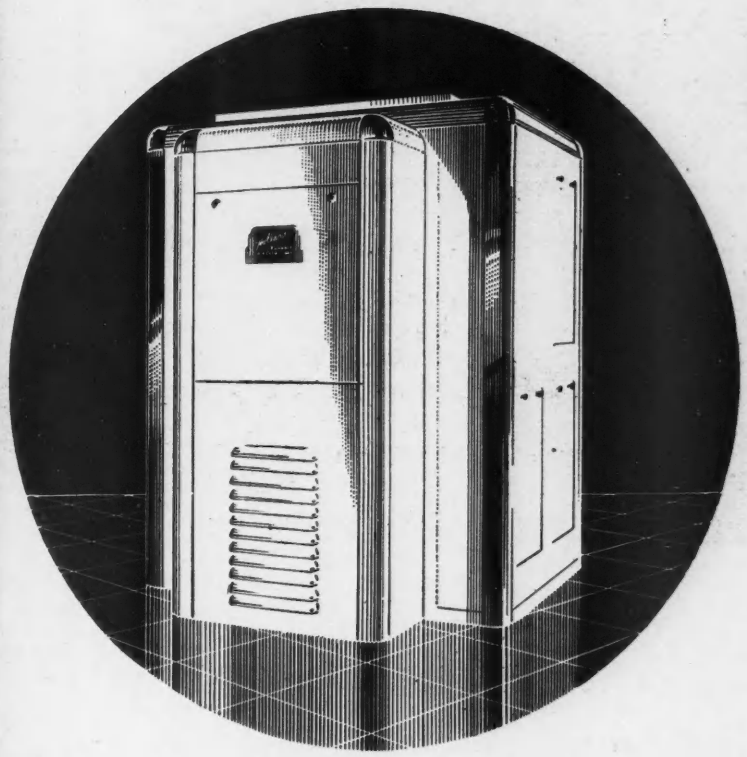
*New* IMPROVED BURNER



*New* HEAT STORING UNIT



*New* AIR CIRCULATING UNIT



## HOLLAND AUTOMATIC FURNACE AIR CONDITIONER

COMPLETE IN ONE UNIT

●An important factor in judging homes entered in the A.G.A. contest will be the efficiency of its gas burning units. You take no chance of losing points on your air-conditioner if you install the remarkable new Holland Automatic Gas-Furnace Air Conditioner. Its combustion efficiency is truly sensational, while a dozen or more revolutionary new features make it easily the most advanced equipment of its kind now available. Before you make any further plans, therefore, mail the coupon for complete information about this remarkable unit so ideally suited for an entry in the A. G. A. contest.

**HOLLAND FURNACE COMPANY**  
HOLLAND, MICHIGAN  
*World's Largest Installers of Home Heating and Air Conditioning Systems*

HOLLAND FURNACE CO., Dept. AB-4, Holland, Mich.  
Please mail information on subjects checked below:

<input type="checkbox"/> New Gas-Furnace Air Conditioner	<input type="checkbox"/> Holland Oil Burners
<input type="checkbox"/> Holland Coal Burning Heating and Air Conditioning Systems	
<input type="checkbox"/> Holland Automatic Coal Burner	<input type="checkbox"/> Have Engineer Call
<input type="checkbox"/> Holland Oil-Furnace Air Conditioner	

Name.....  
Address.....  
City.....State.....

# SELL Economical Housing

TO INDUSTRIES IN YOUR CITY



A Steel Garage 60x80x14', Citrus City Growers Ass'n at Largo, Florida



Bus Body Assembly Plant Wayne Works, Richmond, Ind. 1,300 tons of steel promptly supplied from stock!



Paramus Skating Rink, Park Ridge, N. J. 220'x120' floor area with clear span and no obstructions

Steel buildings solve industry's housing problem quickly, simply and economically. With International's help you can sell a complete industrial building service — buildings individually designed to fill specialized requirements, but assembled from standard parts carried in our stock!

International Steel Buildings are low in first cost, inexpensive to maintain, durable and fire-safe. Offer this complete service to the industries in your locality. Add this profitable volume to your regular business.

**Start at Once**—WRITE FOR CATALOG TODAY

Ask for Steel Building Catalog and Data on International Engineering Service. No obligation.

## INTERNATIONAL STEEL COMPANY

EVANSVILLE, 1321 CLEVELAND ST., Dept. A, IND.

Prompt shipment of Structural Steel—Standard Trusses—Steel Doors & Windows—Steel Buildings—Lintels—Joists—Beams—Store Fronts—Hangers—Steel Storage Garage Bldgs.—Steel Deck & Roof Sheets

### ● ESTIMATING FORMS ●

#### The Old Builder's Estimator

Complete estimating forms for one residential job, with a 300 item check list, 7 pages of estimating data, and memo sheets for use on the job. Facilitates the preparation of a complete, itemized, accurate estimate. Three columns are provided for checking every line of the detailed estimate and the forms follow the order in which a residential job progresses.

48 pages, 4 x 7 1/2, paper.....\$2.50  
12 for.....\$2.50

#### Contractor's Estimating Records

A complete estimating record for a single job. A 2-page ruled estimating form is followed by a check list for a frame, brick or stone dwelling or apartment house. There are 2 pages for material lists and 2 for millwork lists, with detachable duplicate sheets. On the backs of listing pages are tables and short cut rules for estimating materials.

24 pages, 8 1/2 x 11, paper.....\$3.00  
12 for.....\$3.00

#### "Practical" Carpenter's Guide

Contains 11 pages of estimating tables and 54 pages of estimating sheets for figuring any kind of a carpentry job. Forty divisions of work are listed. Space is allowed for writing in the amount opposite each trade.

64 pages, 4 x 7, paper.....\$2.25

#### "Practical" Estimate Sheets, Form 514

An excellent sheet for listing all classes of work from the plans. Provides ample space for a full and accurate description of all work estimated, dimensions, quantities, unit and total material and labor costs. Lithographed in green ink on white bond paper.

100-sheet tablet, 8 1/2 x 11 inches.....\$7.75

#### "Practical" Summary of Estimate Sheets, Form 515

The front of this sheet contains a complete list of the different classes of work encountered in residential construction, while on the back is a detailed list of practically every operation encountered in the different branches of work. This sheet prevents overlooking an item when making up an estimate. These sheets are particularly convenient when requesting building loans from mortgage houses.

50-sheet tablet, 8 1/2 x 11 inches.....\$7.75

#### Quantity Survey and Cost Sheets for Residence Work, Schedule "A"

Three sheets are required to list all the materials that may be required in the construction of a residence and garage. Spaces are provided for describing the materials and telling where they are to be used. Other columns are for price quotations on all items required. Provides for 25 jobs with duplicate sheets, or 50 jobs without.

150 sheets, 12 x 18, cardboard, spiral binding.....\$3.00

#### Schedule "B"

Requires one page to list materials required for the construction of a barn or other farm building. Sufficient sheets for figuring 50 jobs with duplicates or 100 jobs without duplicates.

100 sheets.....\$2.50

#### Today's Building Estimator

Contains 12 sets of blank forms for taking off quantities so that a complete bill of materials can be made up. The book also contains handy estimating tables.

96 pages, 5 1/2 x 8 1/2, cloth.....\$1.25

BOOK SERVICE DEPARTMENT

American Builder and Building Age

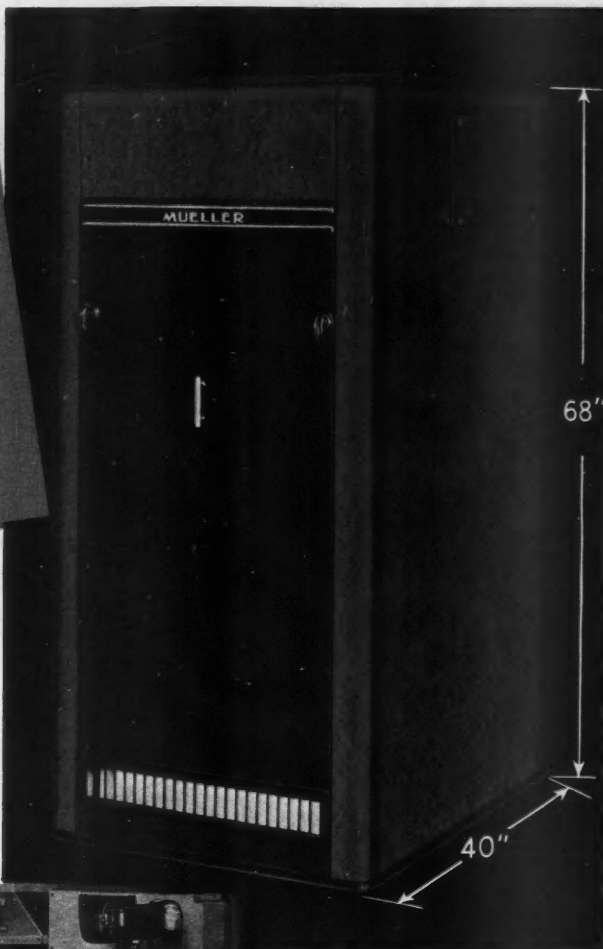
26 Church St., New York, N. Y.



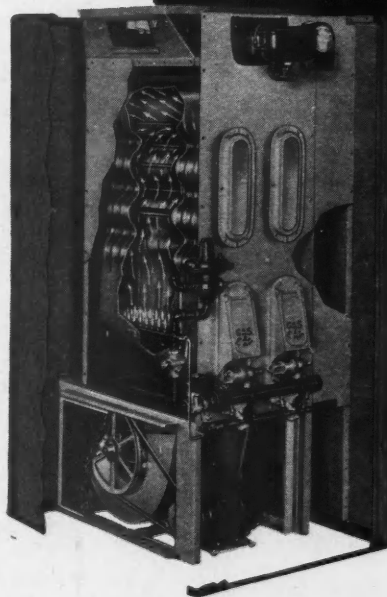
**NEW  
CLIMATROL  
JUNIOR**  
COMPLETE AIR CONDITIONING  
GAS FURNACE FOR . . .  
**SMALL HOMES!**

**ENTER A. G. A. BUILDERS' CONTEST!**

Get the facts about Climatrol Junior. Let your entry in the All-Gas Home Competition prove that you're alert to the latest, most efficient developments in gas heating and air conditioning. Get full details of contest elsewhere in this issue—then send coupon below for full details of modern Mueller Gas Era equipment. Don't delay—write today!



Here's a sure-fire winner for the small homes you plan to build this year. Climatrol Junior offers in one compact assembly the combined comforts of carefree automatic gas heat and healthful, winter air conditioning. It secures balanced distribution of warmed, humidified, clean air to every room—automatically—without one moment's attention after it is turned on in the Fall! Climatrol Junior is economical in first cost and a miser with fuel. Mueller Heat Speeder sends heat into the rooms six to eight times faster than old style units. Write today for full information about Climatrol Junior.



**CLIMATROL JUNIOR IS COMPACT**  
—The new Mueller Air Conditioning Gas Furnace may be installed in minimum space in basement or utility room. Its attractive green lacquer cabinet harmonizes perfectly with interiors of smart modern homes.

**HEATS, FILTERS, HUMIDIFIES, CIRCULATES THE AIR—**  
Climatrol Junior sends warmed, humidified, clean air to every room. In summer, operation of the fan provides circulation of air throughout the house, to substantially improve comfort.

**L. J. MUELLER FURNACE COMPANY**  
2007 W. OKLAHOMA AVENUE, MILWAUKEE, WISCONSIN

**CLIMATROL**—Full winter air conditioning, completely automatic. Summer cooling may be added, if desired.

**SERIES "E" GAS ERA STEEL FURNACE**—Instant heat response. Low operating cost. No temperature overruns. Famous Mueller Heat Speeder Sections.

**CAST IRON FURNACE**—Automatic operation. Attractive cabinet. In well-known homes coast to coast.

**MUELLERAIRE**—For use in homes without basements, stores, shops, show-rooms, where unit is to be installed in space to be heated.

**GAS ERA BOILER**—For steam, hot water, or vapor systems. Compact. Cast iron construction. No condensation. No stand-by losses. Insulated cabinet.

The Mueller line also includes coal and oil heating and air conditioning units.

**FREE MAIL COUPON BELOW**

L. J. Mueller Furnace Co.,  
2007 W. Oklahoma Ave., Milwaukee, Wis.  
Please send me literature on Mueller Gas  
Furnaces—Muelleraire—and Mueller Gas  
Boilers.  Coal Furnaces.  Oil Furnaces.

Name \_\_\_\_\_  
Address \_\_\_\_\_  
City \_\_\_\_\_ State \_\_\_\_\_

**MUELLER  GAS ERA  
CLIMATROL JUNIOR**

# Wage-Hour Legislation and Building Material Costs

By R. W. STONE

Professor of Industrial Relations,  
The University of Chicago

Professor Stone says in this article:

- (1) Wage-Hour Legislation will mean higher building material costs and will retard any building and housing program.
- (2) Minimum wage standards would actually fix the entire scale of wages.
- (3) Maximum hour standards can not be applied to the highly seasonal manufacture of building materials without increasing cost of production.
- (4) Seasonal factors in manufacturing building materials can not be leveled out by winter construction or storage.
- (5) Administrative experience in connection with like legislation forecasts utter confusion.
- (6) If such legislation must be passed, at least it must exempt the building material and construction industries and give our building program a chance.

—EDITOR

**T**HE proposed wage-hour legislation, at a time when increase in building is imperative, presents some interesting economic questions.

Any consideration of these two programs leads to the inevitable conclusion—that the wage-hour program, having for its purpose the control of minimum wages and maximum hours, will result in higher building material costs and will retard any building and housing program.

And this is true whether the act is administered by a board or an administrator in the Department of Labor, whether the act specifies the standards or they are fixed by a board or administrator—the fundamental purpose and effect are the same.

During the past five years we have had a variety of experience with wage-hour legislation in connection with the NRA, the Walsh-Healey Act, the "prevailing wage clause" in public works legislation, and various state minimum wage laws, and indirectly in connection with the bituminous coal acts and the National Labor Relations Act. It is therefore possible to forecast the nature and difficulties inherent in such legislation.

## Revival of Building a Major National Objective

There is one point on which economists and President Roosevelt are in complete agreement—revival of building is the key to business recovery. A major housing program is essential to the welfare of a major portion of our people.

## Building Costs Control Volume of Building

Development of a satisfactory volume of private building construction depends solely on one issue—the relation of building costs to ability of working people to pay rents.

This fact is also clearly recognized by President Roosevelt:

*"In the budget of the great mass of our families, the point is quickly reached where increased costs mean re-*

*duced consumption. Reduced consumption in turn, means a decline in someone's business and someone's employment."*

Despite the fact that wage rates in business and industry averaged 15 to 20% above the 1929 rates, this did not provide family income and ability to pay rents adequate to support a level of building construction which could make any inroad on the problem of the "ill-housed," or to bring anything approaching prosperity to the building construction and the building materials industries. Neither consumers nor producers of family dwellings got anywhere, and the barrier to progress was cost of building.

## Labor a Major Factor in Price of Building Materials

Labor cost is not a minor but a major element in the price of building materials. It is a popular notion that these costs are between 20-30% of the cost of the product. Such analysis overlooks the fact that labor costs are cumulative; although they may not be more than 20 to 30% in any single stage or process, the cumulative wage additions in the total series of processes make labor 84% of building material prices.

## Minimum Wage Standards Actually Fix Entire Scale of Wages

It has been frequently said of this proposed legislation that it is intended to raise the level of wages for common labor only.

Legislation that purports to establish wage standards for common labor only is highly deceptive. Control over the base price in any price structure is not limited to the base price but means, in fact, control over the whole price structure. Inasmuch as the differential productive value of the higher skills and abilities commands a price advantage, the wage rate set for common labor tends to determine the whole schedule of differentials above the minimum rate.

NRA experience, contrary to popular opinion, clearly established the truth of this analysis. Many labor leaders have opposed such legislation for precisely that reason.

## Maximum Hour Standards Impractical in Seasonal Industry

Limitation of hours of work would probably have even more significant effect on the cost and price of building materials than the minimum wage.

Building construction, and particularly the construction of family dwellings, is notoriously seasonal in character. Numerous government studies, as well as the authoritative analysis of Simon Kuznetz\* established the

(Continued to page 96)

\*Seasonal Fluctuations in Industry and Trade. New York. National Bureau of Economic Research. 1933.



# PAINE REZO DOORS

*There is no equal*



*Saves money*  
**IN EVERY HOME**  
*Says Builder Tesch*

The Rezo Flush Door Costs less to fit and hang because it is prefitted at factory. It costs less to paint as painter has no panel corners to work around as each coat of paint is applied. The paper wrapping keeps door clean and saves time of painter. The Flush Door is Modern. The first cost is more but final cost is less when economies are considered. They never have to be refitted. Therefore, I use Rezo Doors exclusively.

*Edwin C Tesch.*



Left—This shows the method of assembling the "woven wood" core for Rezo Flush Doors. Notched vents permit free circulation of air throughout door after plywood faces have been applied. They will not swell, shrink nor sag. Made in all commercial woods for both interior and exterior use. Manufactured under U. S. Patent No. 1,887,814. Mail the coupon for complete information.

Contractor Edwin C. Tesch of Oshkosh, Wisconsin, installed the first Rezo Doors used in the United States. Since the original installation he has used Rezo Doors exclusively. He says PAINE REZO DOORS

**COST LESS**  
**TO FIT AND HANG**  
**TO PAINT**  
**TO MAINTAIN**

*Never Requires Refitting*

**PAINE LUMBER CO. LTD.**  
Established 1855  
**OSHKOSH, WISCONSIN**

Gentlemen: Please send me complete information on your PAINE REZO DOORS.

Name.....

Address.....

Town.....

State.....

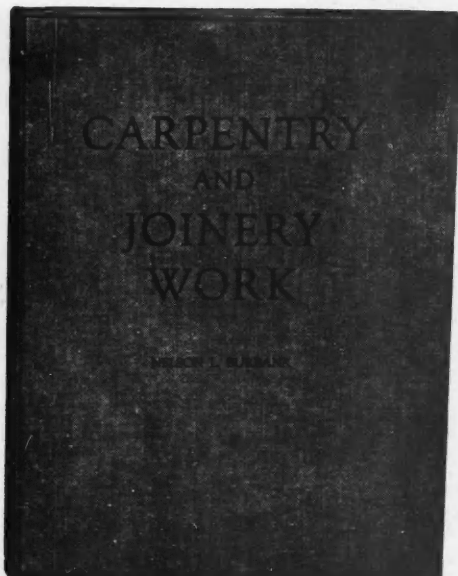
Mr. Dealer's Name.....

Second Edition

# CARPENTRY and JOINERY WORK

By Nelson L. Burbank

Formerly Instructor, Building Vocational High School, Cincinnati, Ohio



The new edition has been thoroughly revised.

The manuscript was carefully checked by a former contractor and ex-editor so that this book combines the practical outlook with the author's trade teaching experience. The cardinal principles of modern residential construction are set forth simply and logically with the aid of many photographs and line drawings. The Second Edition contains 90 revised pages with new illustrations and descriptions of new methods and materials.

The program of study as presented in this latest textbook for students of carpentry work involves class discussion, practical job work and related studies. These include Architectural Drawing, Plan Reading, Carpentry Mathematics, Business English, Applied Science, Civics and First Aid.

This book will be very useful to any man entering the home building field. Contractors can safely recommend it to apprentices and rough carpenters who wish to improve their knowledge of the work. The complete index makes it useful as a general reference book.

## Chapter Headings

Tools and Equipment—Tool Boxes—House Plans—Excavations—Foundation Forms—Foundations—Sills—Girders—Floor Joists—Sub-Flooring—Outside Framed Walls—Inside Framed Walls—Plumbing Framed Work—Sheathing Walls—Ceiling Joists—Roof Framing—Roof Sheathing—Cornices—Roofing—Porch and Bay Framing—Exterior Wall Covering—Interior Wall Covering—Stairs—Interior Trim—Windows—Doors—Hardware—Closets and Shelving—Finish Flooring—Finishing—Index.

280 pages, illustrated, 8½ x 11 inches. Cloth Bound, \$3.00.

## 369 Practical Job Pointers

A collection of many of the best "Job Kinks" which have been published in American Builder and Building Age. Each of these helpful time, labor and money-saving methods is illustrated with a line drawing. There are 76 pages of ingenious methods of doing work, 66 pages describing special tools and devices, and 54 pages of construction details and recommended methods. All are based upon actual experience. An index enables quick reference to a particular job hint and the book is pocket-size for carrying on the job.

192 pages, 275 illustrations, 4½ x 8½, paper binding, \$.75

*Money Back if Not Satisfied*

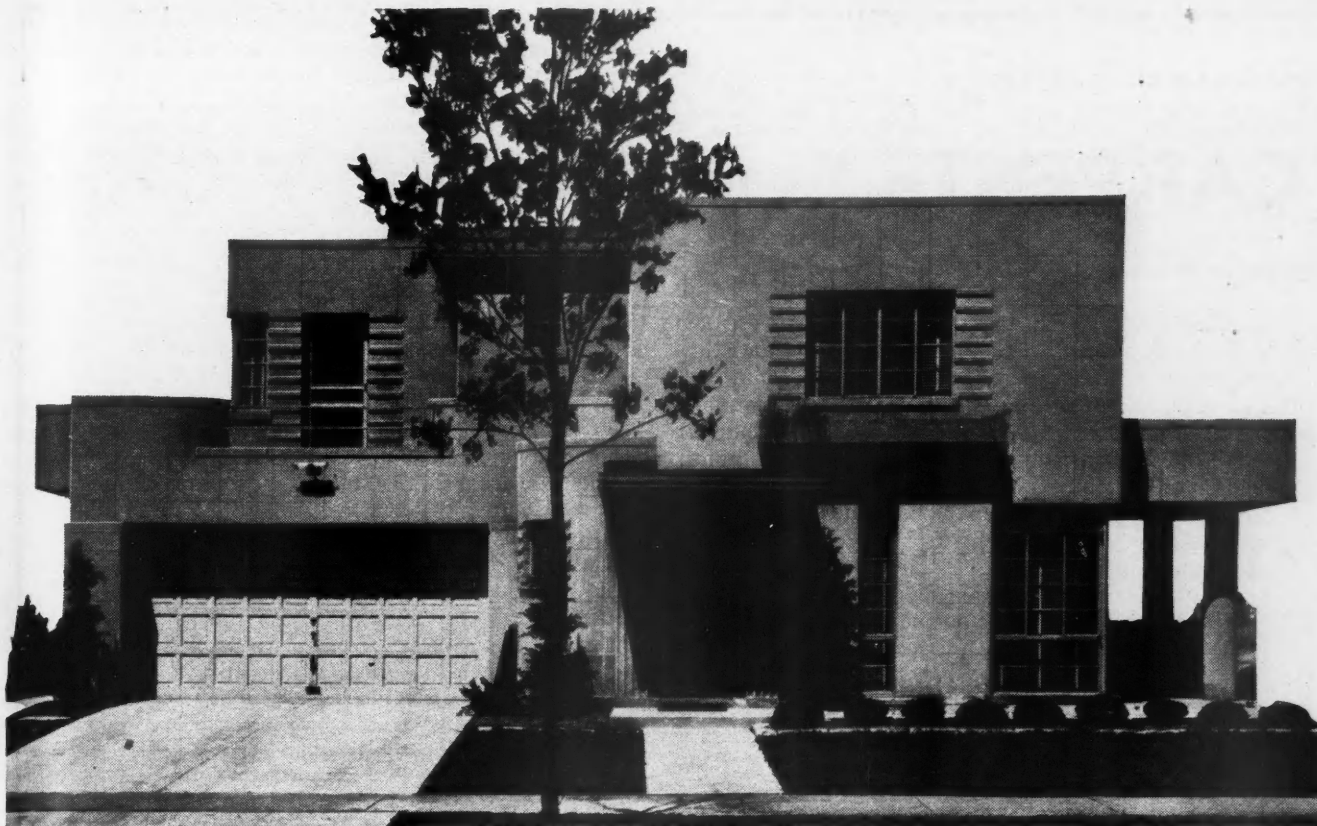
BOOK DEPARTMENT

**AMERICAN BUILDER AND BUILDING AGE**

30 Church Street

New York, N. Y.





*L·O·F double strength "A" quality glass used in this Joern-built house.*

## L·O·F QUALITY GLASS NOW USED EXCLUSIVELY IN JOERN-BUILT HOMES

◆ The subdivision development in LaGrange, Illinois of Wm. Joern & Sons, Chicago, is receiving widespread attention—the universal admiration of realtors, everywhere. For these Joern-built houses sell as fast as they are finished. Carefully planned, well equipped and soundly constructed, they invite inspection—compel purchase. And stressed to every prospective home owner is the permanence of his investment because of the use throughout of materials of the *highest quality.*

Naturally, L·O·F Quality Glass is the selection for these quality homes. For this finer glass is unsurpassed in clarity, brilliance and flatness by any that the industry has ever offered. And these outstanding characteristics are familiar to millions through many years of consistent national advertising. With glass used more generously than ever before in residential construction, its quality becomes a matter of paramount importance. Standardize on L·O·F Quality Glass in the houses that you build to sell. And leave the label on—it is the best-known trademark in the industry.

Libbey·Owens·Ford Glass Company, Toledo, O.

LIBBEY·OWENS·FORD 

*QUALITY GLASS*

(Continued from page 92)

fact that the minimum month of construction of residences is less than 60% of the maximum.

Although the manufacture of building materials is more steady than their use in construction, the amplitude of seasonal swing is still high, indicating that relatively small amounts of materials are stored.

### Impossible to Level Out Seasonal Swings

The possibility of reducing the amplitude of seasonal swing in the production of building materials and thus escaping or averting an increase in cost and price attendant upon a limitation of hours of work to a fixed number per week, depends upon the possibility of (1) reducing the amplitude of seasonal swings in the use of building materials, and (2) storage of building materials so that production of such materials may be conducted on a more regular schedule.

Inclement weather imposes a limit on the possibility of an even flow of construction activity throughout the months of the year, but despite such limitations it has always appeared theoretically possible greatly to reduce the amplitude of seasonal swings in construction. Numerous efforts have been made to that end, both in this country and abroad, but to date the results have been insignificant. In consequence it is only reasonable to assume that any progress toward the stabilization of construction lies in the far distant rather than the immediate future.

### Storage as a Solution is Economically Impractical

With respect to storage as a method of reducing peak periods in construction, it is fair to assume that this was carried on in the past in so far as it was economically practicable. In some cases building materials are perishable and thus not susceptible of storage for long periods. As for other materials, contractors are seldom equipped to store materials beyond the needs of immediate use; dealers have greater but still limited capacity for storage—in active periods their supplies are limited to the requirements of a few days, or at most a week or two. The problem of storage falls back then upon the manufacturer. Here the space now available is limited to the requirements of a few days, or at most a few weeks, of an active period of construction.

Storage space could be provided to reduce the seasonal swings in production of those products of a non-perishable character. To do so, however, would entail heavy financial expenditures, carrying charges on stored materials, and a serious if not impossible risk in forecasting future demands.

The only answer to all this balancing of costs and probabilities is that self-interest has carried the storage of building materials about as far as practicable under present circumstances—circumstances that will obtain in the foreseeable future.

### A Maximum Work Week Will Increase Wage Rates and Labor Costs

The building materials industry has in normal years been able to average only about a 20-hour work week. A limited work week would inevitably reduce that average and call for higher wage rates and consequently higher building material prices. It would also call for bringing in additional workers. Many plants are in isolated, sparsely populated areas, having limited housing accommodations. Addition of workers for peak periods would be

difficult, or prohibitively expensive. A law creating such a situation in addition to burdening the building industry and creating social disorder would definitely favor plants located in urban centers.

Any proposal for extending hours for seasonal industries beyond the fixed work week would only avoid this situation if it could be done without penalty overtime wages for all hours in excess of the maximum week. If penalty overtime wages are provided for working in excess of the maximum work week, then either choice substantially raises costs.

### Our Present Depression Largely Due to Labor Costs

Whatever may have been the cause of previous business depressions, the current depression is primarily a labor cost phenomenon.

Since March, 1933, starting costs for common labor in manufacturing has increased 68%; in building construction 45%. In the case of experienced workers, the "prevailing wage rule" in public works approximately restored and supported 1929 wage scales for building construction. As compared with that boom year, wage rates for manufacturing have risen 16%, and purchasing power of the hourly wage, 38%. Between July, 1936, and July, 1937, wage rates rose nearly 20%, while wholesale prices rose less than half that amount.

For industry in general, hours of work per week have declined more than 20% since 1929.

Between March, 1933, and August, 1937, a 50% recovery was accomplished (according to government reports, about 50% of the unemployed were reemployed). The upward pull of deferred demands for goods, and the flip to prices and enterprise from public spending were only partially impeded by the higher costs. The recovery accomplished, though slow, was encouraging until September, 1937—then business fell precipitately into a depression that promises to plumb the lows of 1932-1933. More than 3 million workers have lost jobs and dis-employment is as yet only well under way.

Rising labor costs and threats of labor troubles had caused an excessive accumulation of inventories, pinched out or seriously impaired profit margins.

The 20% rise in wage rates after July, 1936, was the last straw.

### Past Administrative Experience Spells Utter Confusion

Experience with the NRA clearly indicated that administration of labor standards entails an impossible burden. Any attempt to administer a wage-hour law must certainly result in confusion and disorganization highly inimical to the efficient conduct of business.

The NRA wrestled with wage standards for learners, apprentices and sub-standard workers but failed utterly either to achieve effective administration or to develop a workable body of rules and criteria.

Reporting on the NRA experience, the President's Committee on Economic Analysis concluded, "the apparently simple conception of fixing maximum hours developed wholly unexpected degrees of complexity."

Nobody having the least knowledge of the problems of multiple code coverage faced by NRA, and its impossible burden of petitions for exemption and exception, to say nothing of its experience with evasion and nullification, can fail to perceive the impossible burden imposed by wage and hour legislation upon an administrative board having power to set variable standards. To discharge such responsibilities would require nothing less than a complete and continually current knowledge

(Continued to page 98)

Am  
An  
TAKI  
insta  
of Doug  
applied  
and 60%  
costs co  
when o  
There  
panels fi  
without  
a good c  
floor wit  
last pane  
And i  
sheathed  
ingly su  
strength  
to the edg  
before th  
When  
Fir Plyw  
er's stan  
work and  
in a var  
thicknes  
clean edg  
ready sam  
using wa  
this love





HUNDREDS OF BUILDERS  
WILL TELL YOU—

Any way you  
figure a job there  
are many ways  
**DOUGLAS FIR  
PLYWOOD**  
will save you  
time and  
money



**TAKE** sheathing and subflooring, for instance. The big lightweight panels of Douglas Fir Plywood are so quickly applied and contractors report up to 40% and 60% savings in labor, with finished costs comparable and results better than when other materials are used.

There is no material waste—the 4-foot panels fit standard stud and joist spacing without wasteful sawing and fitting, and a good carpenter can usually lay a sub-floor without using a saw except on the last panel down.

And it's a solid job! Frame walls sheathed with plywood are outstandingly superior in both rigidity and strength. Six-penny nails driven close to the edge of a plywood panel will bend before the plywood pulls away!

Whenever it has been used, Douglas Fir Plywood has become the builder's standard material for cabinet-work and built-ins. Stock panels come in a variety of handy widths and thicknesses, with straight, square, clean edges, and surfaces that are already sandpapered to a silky finish. By using wax or shellac you can hold this lovely natural finish—or you can

stain, paint, lacquer or enamel plywood, or cover it with plastic paint.

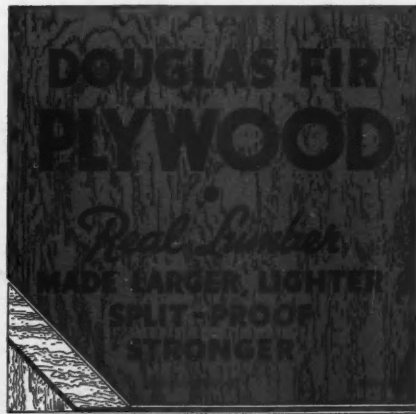
Concrete form panels made with special water-resistant glues proved their economy in the construction of such gigantic concrete projects as the Triborough, Golden Gate and San Francisco-Oakland Bay Bridges. These specially-developed Douglas Fir Plywood concrete form panels were re-used as many as *fifteen times*.

Architects discover gratifying beauty of texture in the finished concrete surfaces where Douglas Fir Plywood is used for major jobs. And on incidental concrete work—walls, driveway curbs, foundation walls and piers—the easy handling, automatic finishing, and high salvage value of special Douglas Fir Plywood concrete form panels make them indispensable to builders and contractors all over the world.

Your lumber dealer can supply you with Douglas Fir Plywood. There is a suitable grade for every purpose.

**INFORMATION**

Douglas Fir Plywood can be obtained in special grades for any construction need, including hot-pressed resin-bonded plywood developed for permanent exterior exposures. A well equipped Technical Division offers cooperation in adapting Douglas Fir Plywood to your problems, and recommending the proper types and grades to produce the utmost serviceability and economy. Technical data and handbooks are available to contractors, builders and architects. Address **DOUGLAS FIR PLYWOOD ASSN., Tacoma Bldg., Tacoma, Washington.**

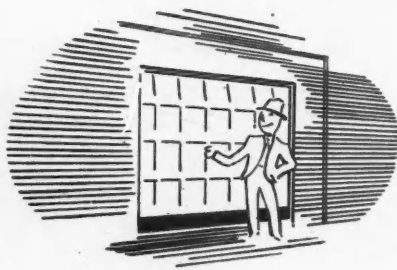


# The Barcol OVERdoor

AN IMPROVED OVERHEAD DOOR



... rattleproof  
AND  
Weathertight



... friction-free,  
... accurately  
counterbalanced  
AND THEREFORE

## Easy-Working

Look for this all-important combination of qualities in an overhead door and note, as thousands of others have, how the Barcol OVERdoor stands out by comparison.



### BARBER-COLMAN COMPANY

ALSO MAKERS OF ELECTRIC OPERATORS AND THE RADIP CONTROL

ROCKFORD • ILLINOIS

SALES, INSTALLATION, AND SERVICE BY REPRESENTATIVES IN PRINCIPAL CITIES

## Wage-Hour Legislation

(Continued from page 96)

of all the ramifications of technical detail and commercial relationships in our interrelated economic structure.

Consideration of—

The fact that a minimum wage rate for common labor fixes the entire scale of wages;

The highly seasonal character of the building materials industry;

The certainty that application of any wage and hour law would substantially raise the prices of building materials;

The present semi-impooverished state of the building materials industry;

The difficulty or impossibility of regularizing the industry except at exorbitant cost; and

The vital bearing of cost of building materials on business recovery;

leads to these conclusions:

1. The wage and hour legislation under consideration could not possibly be devised to serve any net social advantage.
2. The interests of promoting higher standards for workers, the development of a much needed housing program, and the recovery of employment and business would be seriously inhibited by further wage and hour legislation.
3. If, despite all this, Congress should feel impelled to enact wage and hour legislation, the least that can be done is to exempt completely the building materials and building construction industries.

## Better Living from Adequately Wired Home

(Continued from page 69)

be switch controlled at the door or entrance space.

**IN THE BASEMENT:** One ceiling light at the foot of the stairs controlled by a wall switch with a pilot light at or near the head of the stairs. A ceiling light in each enclosed space, in front of the furnace and over the workbench.

**IN THE ATTIC:** One ceiling light at the head of the stairs or at the entrance controlled by a switch with a pilot light at the foot of the stairs. A ceiling light in each enclosed space.

**IN HALLS AND STAIRWAYS:** One ceiling light or wall light on each floor to illuminate head and foot of stairways. An additional light for every additional 15 feet of hall. Wall switches for these lights. If the stairway has finished rooms at both ends, multiple-control switches should provide independent control of the lights on each floor from either floor.

**IN THE GARAGE:** One ceiling light over the location of the hood in each car space. In one-car and two-car garages, lighting should be controlled by one wall switch convenient to the entrance. In larger garages, no more than two lights should be controlled by the same switch. A wall light on the exterior with switch control from both garage and house.

**IN CLOSETS:** A ceiling light for every closet which has a floor area of 10 square feet or more, and which is more than three feet deep, except where shelving makes interior lighting ineffective.

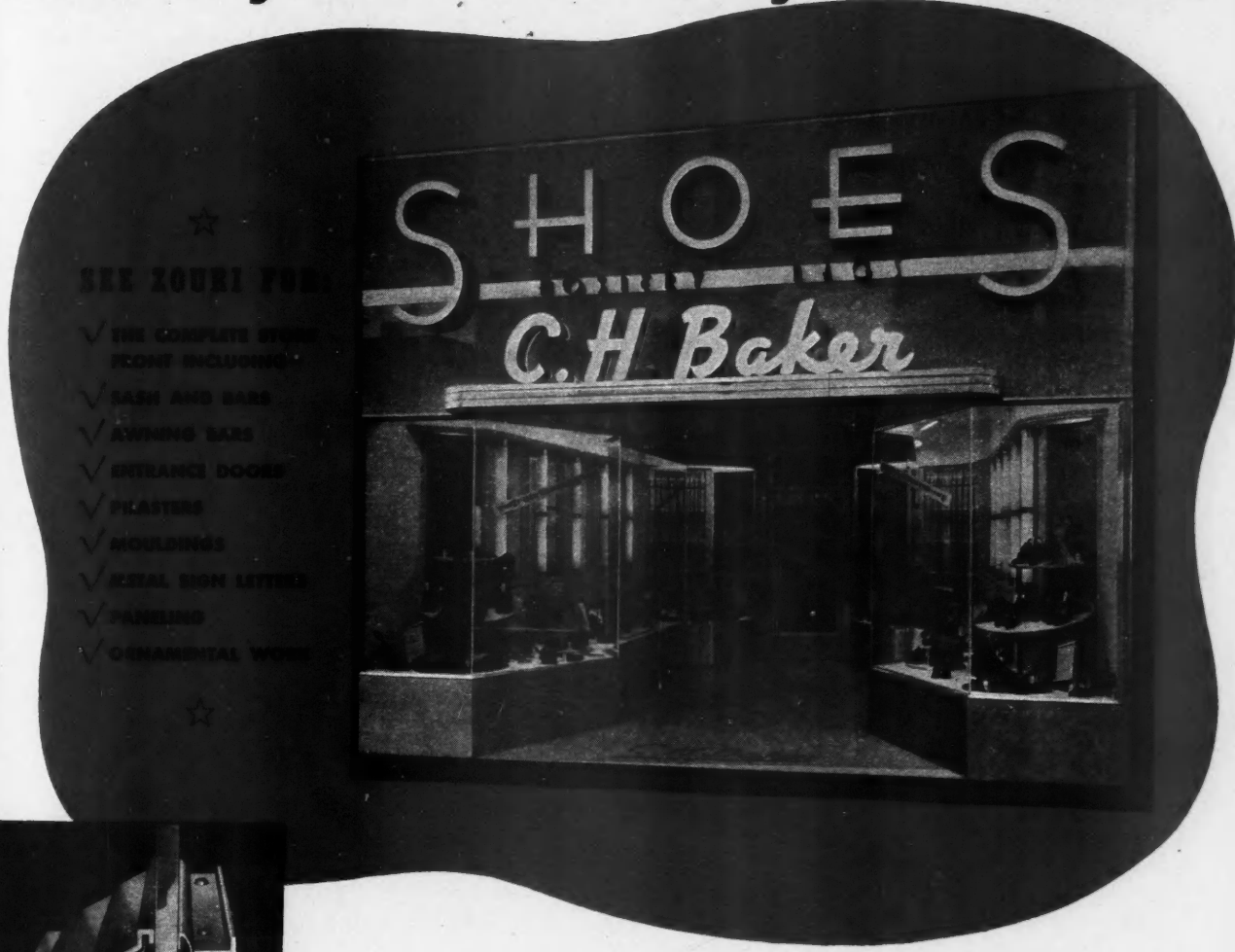
**IN BATHROOMS:** A wall light on each side of the bathroom mirror controlled by a switch near the door. In larger bathrooms, it is desirable to have the switch control a ceiling light and to have local switches for the mirror lights.

**ON PORCHES, TERRACES, PATIOS, ETC.:** One ceiling light, if there is a ceiling. On wall or ceiling, at least one lighting outlet for each 100 square feet of floor area or major fraction thereof. Lights to be controlled by switch just inside the door.

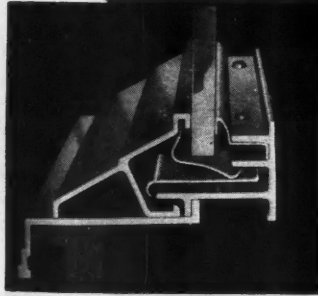
**ADEQUATE WIRING OF HOUSE ENTRANCES PROVIDES:** At front entrances, a wall light at each side of the doorway with switch control just inside the house or, if the architecture prevents this arrangement, an overhead light, or one on the lock side of the doorway. Illuminated house numbers, very desirable and easily installed. At side and rear entrances, single outdoor lights with switch control indoors.



# LIBERAL USE OF RUSTLESS METAL Makes Any Store Front Design More Effective



- ★ SEE ZOURI FOR
- ✓ THE COMPLETE STORE FRONT INCLUDING
- ✓ SASH AND BARS
- ✓ AWNING BARS
- ✓ ENTRANCE DOORS
- ✓ PLASTER
- ✓ MOUNTINGS
- ✓ METAL SIGN LETTERS
- ✓ PAINTING
- ✓ ORNAMENTAL WORK



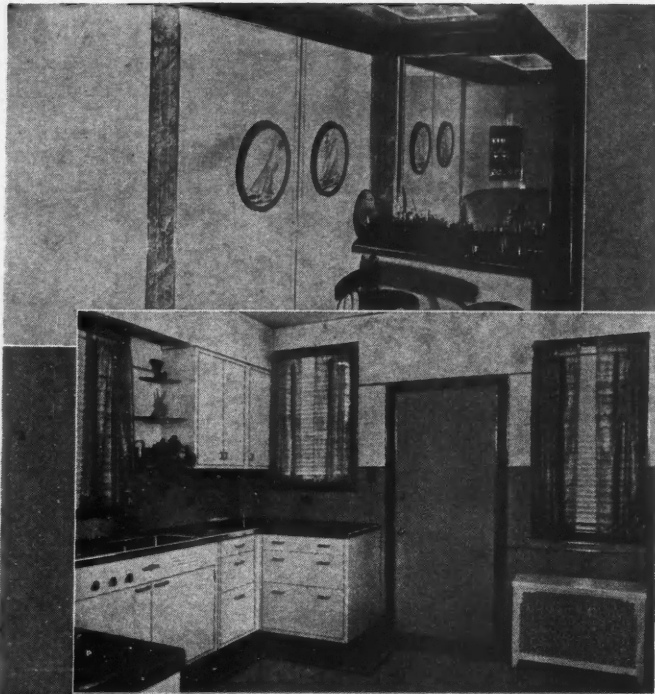
## Glass Protection

To be safe, plate glass must be handled and HELD with care! That's why the new ZOURI Extruded Sash and Bars as well as the famous Rolled Safety Key-set construction are designed to provide FULL CUSHION GRIP on glass. This important feature assures maximum protection against the danger and expense of glass breakage — protection vital to the satisfaction of owner and merchant.

Important to architects and builders is the modern demand for more attractive store fronts. That's why store front designers are turning to the liberal use of ZOURI Rustless Metal — for its life and lustre, for rich lasting beauty, and for interesting lines and contrasts. Zouri offers a complete line of store front construction in either rolled or extruded metal. In most cases striking effects may be obtained by the use of standard sections,

which are carried in stock. In others, ZOURI fabricates special architectural metal work in aluminum, bronze or stainless steel—to face the entire front with modern metal, to produce doors or metal letters in harmony with the store front design, or to satisfy any modern demand. A 14-page catalog is at your disposal in SWEET'S. See your ZOURI distributor or write direct to ZOURI STORE FRONTS, NILES, MICH., for full size details.

ZOURI STORE FRONTS



*Marlite* INTERIORS  
 FAVORABLY INFLUENCE HOME BUYERS  
 . . . they're modern . . . beautiful  
 . . . involve no upkeep cost!



● Women go for smart, stylish interiors...beauty in the kitchen and bathroom. Men want modernity and quality. Interiors of Marlite appeal to both . . . more favorably influence their decision to buy...quicker than will interiors of out-moded materials.

Marlite is not expensive in first cost . . . is economical to install. It comes in large sheets that carpenters saw to size and apply to walls and ceilings. Marlite appeals because it's modern . . . exquisitely beautiful . . . involves no upkeep cost. A damp cloth keeps its lustrous glass-smooth surface smart and clean. See this wonderful interior decorating material at your building supply dealer . . . the smartest of tile-patterns, scintillating plain-colors, rare marbles and rich wood effects. Write for free book that describes Marlite in detail . . . that illustrates numerous beautiful home interiors originated with Marlite.

**MARSH WALL PRODUCTS, INC.**  
 43 MARSH PLACE • DOVER, OHIO

*Marlite*  
 FOR CREATING BEAUTIFUL INTERIORS

**A Case for the Contemporary Apartment**

(Continued from page 75)

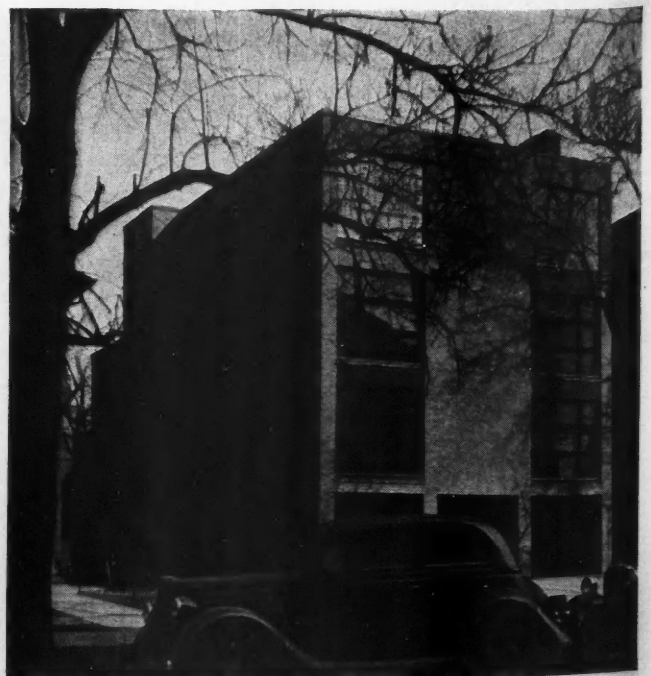
able. The financial success of this apartment is in part directly attributed to this feature. Prospective tenants found it easy to place their belongings in the rooms in their minds' eye. By grouping windows in a corner in the living room, I got a sun porch effect; by grouping windows at corners in small bedrooms, I got wall space for beds without having them in front of windows. It was also discovered that such window arrangement lit up all walls more uniformly than spaced windows did.

Stairways—traditionally badly lighted—when they should be generously lighted—were given continuous vertical windows, because of the hazards of walking up and downstairs, especially for high-heeled women and for thoughtless children, and for reducing electricity bills for the owner.

In short, the various functions of the building, from a profit making angle to occupancy use were all analyzed in turn and solved in the best terms possible under the given conditions at the site.

Naturally, the exterior of the building was slightly unusual in appearance—different from the majority of buildings less carefully thought out. This point the owner impressed upon me in no uncertain terms when he called me out one day after the brickwork was all up and the shape and form of the building was there. He threatened me with denunciations of all kinds asking what was I trying to do by building an apartment that did not look like the majority of the apartments he had seen. He forced me to add about \$750.00 worth of ornamental stone trim which has not enhanced the appearance of the structure at all, but which the owner felt the apartment needed, because he had seen it elsewhere. That money would have been better spent if it had enhanced the comfort of the occupants, by purchasing storm windows, for example.

Too many owners and real estate people would get better work from their architects if they gave them more authority regarding the appearance of the buildings they build. When every builder has opinions of the architec-



LATEST apartment of George Fred Keck, described in his article, as it appeared from the street at about the time of completion.



New  
Type

## FLOOR AND ROOF SYSTEM



### SPEEDS UP CONSTRUCTION REDUCES COSTS

You can finish multiple story jobs weeks ahead of time when you use the Wheeling Long Span Steel Floor and Roof System. There is no waiting for this type of construction to cure. As soon as it is laid it can be used by electricians, plumbers and other tradesmen. It puts an end to ordinary delays caused by the use of temporary planking or the long drying period required for concrete to set.

Wheeling Long Span System consists of channel shaped COP-R-LOY joists of sufficient length to span the distance from girder to girder or from truss to truss. It eliminates the need for intermediate beams or purlins. Its construction is fool-proof because the pre-fabricated joists are ready to set in place upon arrival at the job.

Every architect and builder interested in modern construction will want complete details on the economy and practical advantages of the Wheeling Long Span Steel Joist System.

### WHEELING CORRUGATING COMPANY

WHEELING, WEST VIRGINIA

NEW YORK  
CHICAGO  
BUFFALO

ST. LOUIS  
PHILADELPHIA  
LOUISVILLE

KANSAS CITY  
ATLANTA  
COLUMBUS, O.

MINNEAPOLIS  
RICHMOND  
DETROIT

### CHECK THESE ADVANTAGES:

1. Quickly erected. A six man crew can erect and complete approximately 1,000 square feet of Wheeling Long Span floor or roof in one hour.
2. Dry construction—no waiting for materials to cure. Electricians, plumbers and other tradesmen can "move in" as soon as the floor is laid.
3. Strong yet light in weight, Wheeling Long Span System assures maximum rigidity without bridging or other reinforcement. The light weight effects a substantial saving in the cost of the steel super-structure of the building.

Use



# LONG-SPAN

## STEEL FLOOR AND ROOF SYSTEM

# HOPE'S

1818 *The Name Guarantees* 1938



*Residence by Wm. Joern & Sons, Chicago... Wm. F. Kramer, Architect*

## *Sales Do Come In Through the Window*

● A Steel Casement Window by Hope's contributes generously to the beauty, the utility and to the salability of any property.

More than that, the present Hope's franchise gives dealer organizations an unusual opportunity to consistently make money ... even in a highly competitive market.

Descriptive literature will be sent to interested dealers immediately upon request.

**HOPE'S WINDOWS, Inc.**

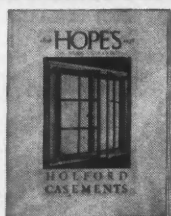
*Jamestown, N. Y.*

HOPE'S WINDOWS, Inc.  
Jamestown, N. Y.

Send copy of descriptive literature of Hope's  
Windows and dealer proposition.

Name \_\_\_\_\_

Address \_\_\_\_\_



## A Case for the Contemporary Apartment

*(Continued from page 100)*

tural treatment of buildings, we have retrogression and chaos.

This building was ready for May 1st occupancy in 1927, and it was entirely filled, with a waiting list, before completion. It has always been 100% filled.

One of the reasons for the financial and occupancy success of the building has been good owner management. The owner financed the building soundly by investing \$25,000.00 in cash into the apartment, making possible a first mortgage upon which he paid a reasonable interest rate. He based his rentals not upon what the traffic would bear, but upon a reasonable return on his money invested, and as the building paid itself off, reasonable reductions were made.

At this date, twelve years after, the owner, by investing a little more cash and amortizing more rapidly than was necessary, owns the property outright, and has a reliable source of income for many years to come. The architect had given this owner a building more modern and up-to-date than most apartments now being built, both in plan and exterior appearance.

To be seen on the first page of this article is a sketch of my latest apartment building built in Chicago. On the ground floor are a three-car garage, heater and laundry rooms, a storage room, a work room, and a recreation room opening to a large garden in the rear. The first floor contains an eight room, two-bath apartment; the second floor a six room, two-bath and terrace apartment; the third floor a four room, one-bath and terrace apartment. The rooms are so arranged that by a few minor changes, the building can be made into a five apartment building, of four rooms each. Such flexibility is highly desirable. The exterior walls are of brick and all windows are of the transom type, giving an upward motion to outside air as it enters the building. All windows are equipped with outside aluminum venetian blinds operating from the interior, thus stopping the hot summer sun before it enters the uninsulated glass, and allowing much light penetration. The building is completely insulated, floor construction is of thin concrete slabs. There is an incinerator. The front stairway is of metal and concrete, and stairways are of brick inside facing. Glass brick is extensively used on the lot lines, in stairways, and in baths. Glass block is equivalent to three layers of glass for insulation. The building is heated with gas, using three separate forced air heating units, which are convertible to five for separate circulation in each apartment, zone controlled. Less than one-third of the total ground area is covered by the building, insuring permanent maximum light and air and garden space in a highly built-up section of the city.

There are no rental problems here, for there is no competition, and the possibility of permanent 100% rental is maximum.

## Masonry Homes Reduce Upkeep

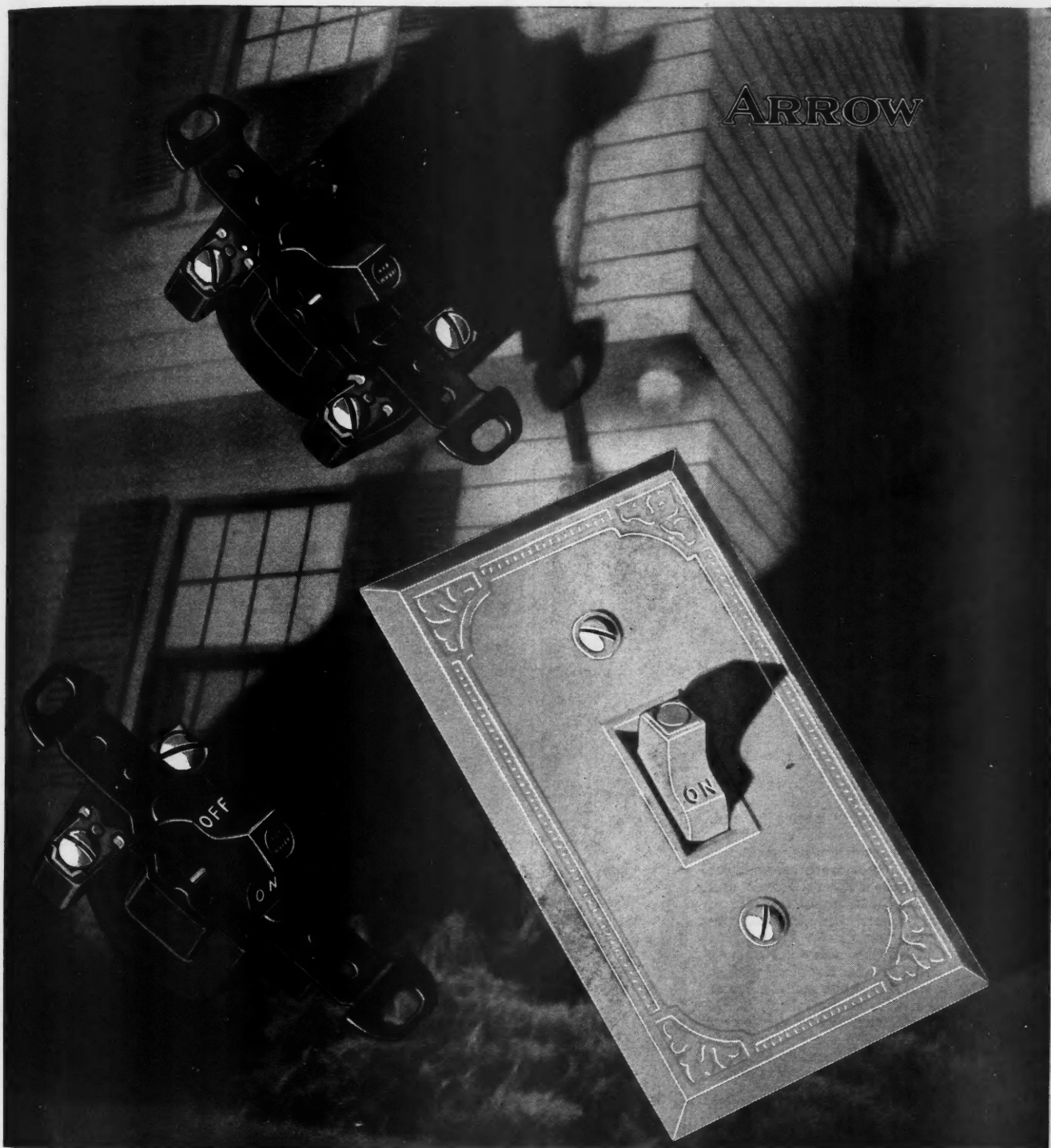
*(Continued from page 66)*

Speaking on the advantages of home ownership over renting, Fries declares, "The best security for an American citizen today is to own his home free and clear—a home which will not wear down the owner with its high upkeep costs and repair bills during his old age, but a home that is good enough for him and his children and which can be maintained at a very nominal figure. One of the principal reasons people hold back buying a home is their fear of high upkeep costs. A builder can do only two things: be an honest builder, and sell the customer what he can pay for. But before he can sell a home he must overcome these fears and uncertainties."

Small  
the  
to e  
for  
free  
befo

SOLD





## New Residential Switches

Small but dependable all-Bakelite switches to fit the modest budget of your largest market. Priced to encourage *adequate wiring*—plenty of switches for *convenience*—in small residences. Use them freely in 3-way combinations to light up rooms before entering.

Bakelite enclosed bases; dust-proof mechanisms. Handily top-wired; connections easily made from front. Equipped with IVORYLITE handles *if specified* by adding "I" to the Catalog Number:—1301 S.P., 1303 3-way. Request on your letterhead brings *sample* for test.

SOLD THROUGH YOUR

**ARROW ELECTRIC DIVISION**  
THE ARROW-HART & HEGEMAN ELECTRIC CO. HARTFORD, CONN.

ELECTRICAL WHOLESALER

Houses Sell Faster with  
**RITTENHOUSE**  
 ELECTRIC  
**DOOR-CHIMES**



INSTALLATION IN HOUSE & GARDEN IDEAL HOUSE

New equipment that contributes to more enjoyable living attracts the prospective buyer's attention and makes houses easier to sell. A good reason why Rittenhouse Electric Door Chimes are being installed in new houses everywhere. Rittenhouse Chimes were selected for House Beautiful's Bride's House, House and Garden's Ideal House, 5-Star Homes and others. Superb tone quality, smart styling, rugged construction, popular prices, make Rittenhouse Electric Door Chimes the universal choice. Easily installed using regular door-bell wiring. Made in tubular and bar chime models. Prices \$1.00 to \$50.00 list. Model at right, \$7.00 complete with transformer. (Model for 2-door operation, \$8.00). A model for every Chime need. Choice of several attractive finishes. Nationally advertised in leading magazines.

At electrical wholesalers everywhere.  
 Mail coupon below today for folder describing entire line.  
 The A. E. RITTENHOUSE CO. Inc., Honeoye Falls, N. Y. Dept. 309



NATIONALLY ADVERTISED IN THESE MAGAZINES



**RITTENHOUSE**  
 ELECTRIC DOOR-CHIMES

The A. E. RITTENHOUSE CO., INC.  
 Dept. 309, Honeoye Falls, N. Y.  
 Send folder describing complete line of Rittenhouse Door Chimes.

Name \_\_\_\_\_  
 Address \_\_\_\_\_

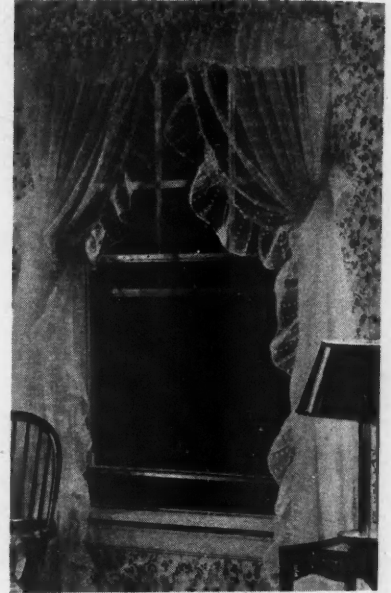


**New Products Contribute to Building Progress**

AMONG the many items being developed by manufacturers to do a better job in their particular application, there are such products as the improved **DOUBLE-HUNG SEALAIR WINDOWS** built of aluminum or bronze by The Kawneer Company of Niles, Mich., to assure permanent installation without danger of future costs for repairs and maintenance. A most effective weatherstripping is built into the window at the factory insuring exceptionally good protection against infiltration or leakage of cold air or dust.

The residential window is built in designs suitable for use with Colonial, English and modern style residences and the prices compare favorably with other windows. They are built up to a maximum size of four feet in width by eight feet high.

The commercial type of window incorporates metal glazing and is built in designs suitable for use in schools, office buildings, hospitals and public buildings. This window is built up to a maximum of five feet in width by nine feet high.



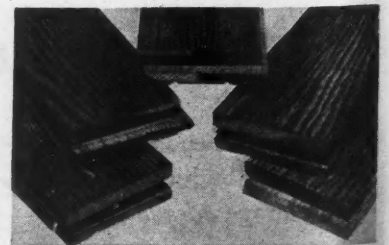
INSTALLATION of new Sealair window in home.

**Thick-Size, Factory-Finished Oak Flooring**

**FACTORY-FINISHED** oak flooring is now available in a new Thick size—25/32" x 2 1/4", being made by The Cromar Company, Williamsport, Pa. This product gives a full 25/32-inch thick floor when completed, ready for use. A unique self-leveling side joint with an unusually massive tongue means fewer split tongues, tighter joints and a more uniformly level floor.

Nailing on ten-inch centers is recommended but nail holes are punched every two inches for convenience in installation. On the end match, the tongue is longer than normal, fits snugly and is rounded on the edges for easier membering; clean and smoothly cut for even end joints.

The finish is of high quality, consisting of a sealer and a heavy bodied waxlike compound that is actually "ironed" into the wood by heat and high pressure to give a remarkably durable, long wearing and easily cared for finish. The lumber is scientifically air seasoned, kiln-dried and the flooring strips treated on all surfaces to retard moisture. It is crated with metal bands for delivery in practically damage-proof bundles.



CROMAR 25/32 finished flooring showing T and G and end joints.

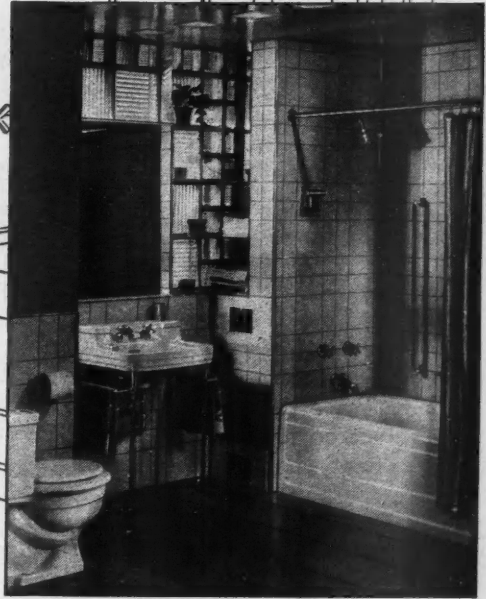
**Temseal Insulating Sheathing**

THE NEW Armstrong's Temseal, manufactured by the Armstrong Cork Products Company, makers of the Temlok line of insulating board, combines structural strength and resistance to

(Continued to page 106)



# They like the Convenience



## OF A CRANE-EQUIPPED HOME

When Mrs. Prospect begins to picture herself in a charming Crane bathroom . . . when Mr. Prospect gazes wistfully at a gleaming, convenient Crane Lavatory . . . they're not far from signing on the dotted line! For people respond immediately to the greater convenience of a Crane-Equipped home. They "fall in love" with the modern Crane features that promise them more comfort and better living. Their pride of possession is stimulated by the obvious quality of Crane

products. And the name "Crane" assures them that they are getting full value for their money.

It costs you nothing extra to get the extra selling aid of Crane-Equipment in the homes you build. Crane-Equipment is available for every type of dwelling, at every price level. Let Crane-Equipment help make your sales faster and more profitable. Call on a Crane plumbing contractor or visit a Crane Display Room, where you can see and examine Crane quality for yourself.



Housewives quickly sense the charm and livability of Crane-Equipped kitchens. Scientifically built, they mean greater efficiency, more comfort, more leisure.



The Crane Fin-Type oil-burning boiler well deserves its popularity. Fully automatic and highly efficient, it provides economical heat without work or worry.

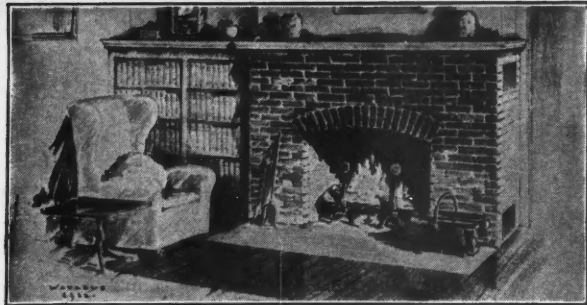
# CRANE

VALVES · FITTINGS · PIPE  
PLUMBING · HEATING · PUMPS

CRANE CO., GENERAL OFFICES: 836 SOUTH MICHIGAN AVENUE, CHICAGO

NATION-WIDE SERVICE THROUGH 134 BRANCHES AND MORE THAN 500 WHOLESALERS

# Makes Every FIREPLACE Easier to Build . . .



## Assures Smokeless Operation CIRCULATES HEAT

Build a Heatilator Fireplace on every job. It is easier to build. It provides a correctly designed metal form for the masonry, around which any style fireplace can be built. And it affords the homeowner the latest, most advanced type of fireplace on the market—a fireplace that circulates heat, that *will not smoke*.

### Simplifies Construction

All the essential parts—the firebox, damper, smoke-dome and down-draft shelf—are built into the metal form of the Heatilator. It greatly simplifies construction, saves labor time. It guarantees the proper ratio between the fireplace opening, throat and flue—assuring you of a perfectly operating fireplace in every installation.

### Warms Adjoining Rooms, too

The Heatilator draws the air from the room, warms it in a concealed heating chamber, then circulates it to far corners—even to adjoining rooms. It solves the heating problem in basement rooms . . . makes summer homes and camps usable weeks longer. No other heating equipment is needed in mild climates.

Thousands now in use in all parts of the country. Builders and architects recommend the Heatilator. Ask your building-supply or lumber dealer.

#### MAIL THE COUPON FOR COMPLETE DETAILS

HEATILATOR COMPANY  
554 E. Brighton Ave., Syracuse, N. Y.

Please send me complete Heatilator information and price list.

Name.....

Street.....

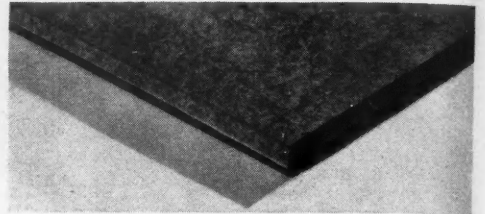
City.....State.....

# Heatilator Fireplace

(Continued from page 104)

the infiltration of air and moisture. A surface application of asphalt forms an effective vapor seal, and permanently bonds the layer of strong kraft to the Temlok board. Both sides and the long edges of Temseal sheathing are sealed with asphalt and kraft paper. Asphalt sweated into the ends of the boards completes the seal. Severe laboratory and field tests have shown that this factory-applied finish makes the use of asphalt impregnated building paper or building felt unnecessary. Submersion tests indicate that it is outstanding in resistance to water.

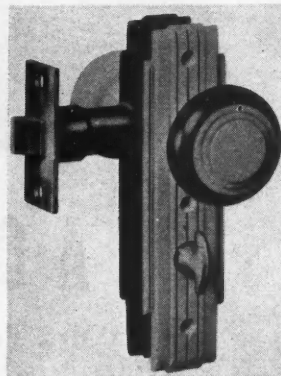
TEMSEAL insulating sheathing with asphalt treated paper coating.



### Hardware of Color

A COMPLETE, moderately priced line of all-plastic inside door trims has been announced by the National Brass Company, manufacturers, Grand Rapids, Mich. Trade named "Duralin," denoting the plastic composition of the same material, the line is offered in a selection of ivory, yellow, red, green, blue, orchid, walnut, and black. A new type knob, having interchangeable insert tops and four new escutcheon designs, is included in the line. These designs are also offered in metal of any finish, permitting many pleasing combinations of metal and plastic, with the escutcheon and knob insert of metal and the knob body in "Duralin." Many effective color combinations with contrast between knob body and the escutcheon and knob insert may be had.

The line is designed with the thought of replacement on remodeled buildings, as well as new homes, as color brings a wide market in both modernizing and new construction. Featured is the exclusive tubular latch, the round latch having the tubular case that makes installation very easy, requiring no laborious mortising, only three round holes, bored with a drill. Application by use of the unique bit guide which directs the drilling true and square with the door assures an accurately installed latch.

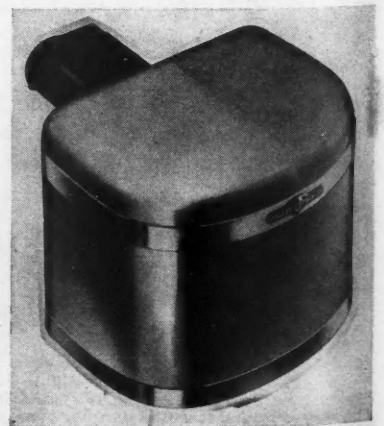


LINE of hardware featuring knobs and escutcheons of colored plastic.

### G-E Develops New Oil Burner

AN IMPROVED type of oil burner, for use in any standard house heating boiler or warm air furnace and embodying the results of ten years of laboratory study and testing in the field by General Electric engineers, is now in production at the company's plant in Bloomfield, N.J.

In appearance and in the method of oil atomization, among other things, the new burner departs from conventional types. It also features a "tailored flame" which can be adjusted simply on the side of the burner tube to conform to most types of combustion chambers, (Continued to page 108)



G. E. OIL BURNER is result of ten years laboratory research.



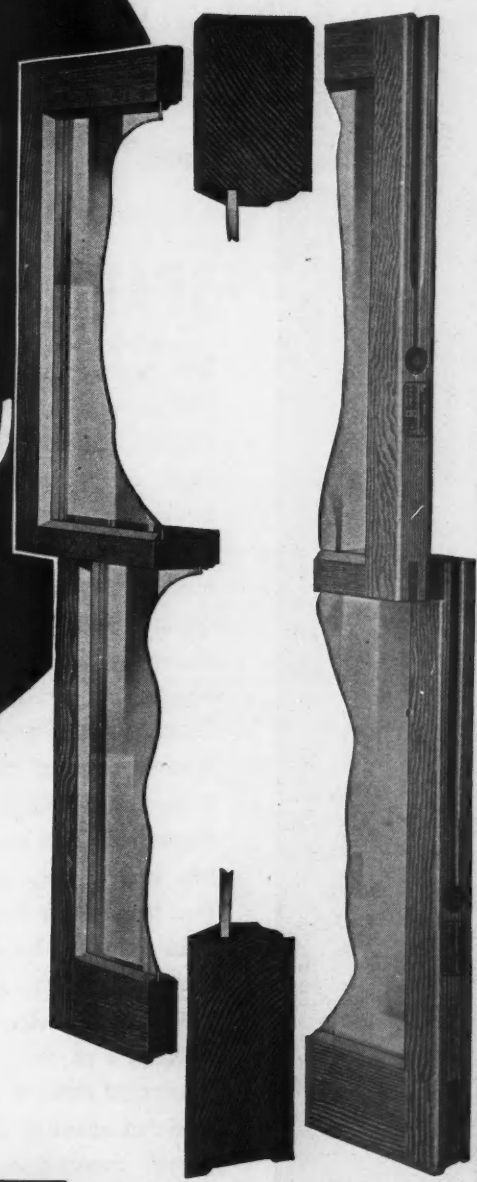
THE ORIGINAL

MADE ONLY BY



**RED - E - FIT**  
**ROT - PROOF,**  
**WINDOW**  
TRADE MARK

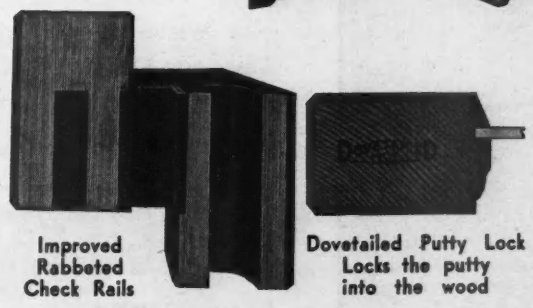
*saves*  
*25 to 50¢*  
*a window*



CHEMICALLY TREATED AND FACTORY FITTED, GUARANTEED FOR TWENTY-FIVE YEARS AGAINST ROT.

**RED-E-FIT ROT-PROOF WINDOWS OFFER**  
*The first great improvement in stock window construction in a generation.*

**THIS IMPROVED WOOD WINDOW—**  
Is ploughed and bored for weights and cord.  
Has the dovetailed putty lock.  
Is ready fit for any standard frame.  
Saves 25 to 50 cents on each window on the job.  
Is chemically treated to prevent rot.  
Is better than the old style and costs less installed.  
*Look for the Trade Mark Brand on Edge of Each Sash*  
Ask your lumber dealer for the *Huttig* of Muscatine  
**Red-E-Fit ROT-PROOF WINDOW**  
*or write us for free descriptive literature*



Improved Rabbeted Check Rails

Dovetailed Putty Lock Locks the putty into the wood

**HUTTIG MFG. CO., Muscatine, Iowa**



## CAN YOU SPARE A DAY?

THE answer is "No." Whether you're working on a schedule contract or not, there's no spare time on your building jobs. Every hour counts.

When you use Armco Galvanized PAINTGRIP Sheets for downspouts and gutters, there's no delay before painting. No acid washes or weathering. Armco PAINTGRIP has a full-weight protective coating of zinc plus the base-metal durability of ARMCO Ingot Iron. This special zinc coating has a neutral surface film that helps keep the paint flexible, thus insuring longer life. Every sheet carries the mark of quality — the famous Armco triangle.

If you're not using Armco PAINTGRIP now, it will pay you to find out about it. Ask your sheet-metal contractor or distributor — or write to us direct. The American Rolling Mill Company; Executive Offices, 941 Curtis St., Middletown, Ohio.

**ARMCO**   
**GALVANIZED**  
**PAINTGRIP SHEETS**

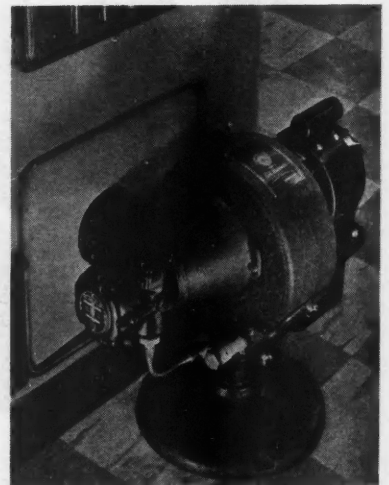
(Continued from page 106)

resulting in low installation costs and high efficiency in combustion. With the complete device in one enclosed unit, the time and cost of installation is cut to a minimum. All parts are readily accessible when the jacket is removed.

Burners are available for oil rates of three-fourths to three gallons per hour for pressure steam, hot water, vapor steam, and warm air systems, insuring the user of a burner of correct size and design for this heating system. The unit will burn number 2, 3 or 4 fuel oils, resulting in a saving in localities where a price difference exists. The oil flow is kept at a constant rate by a stabilizer, regardless of the viscosities of various grades of oil.

### Oil Burner for Boilers and Furnaces

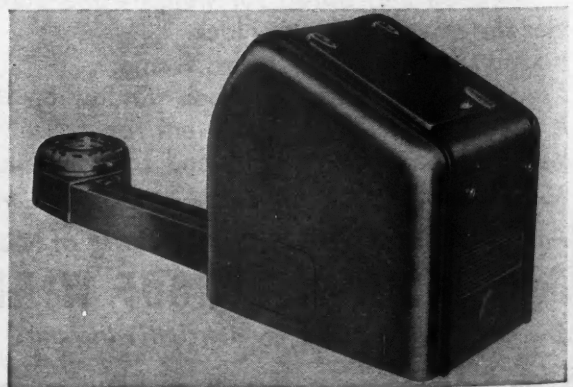
THE Iron Fireman Manufacturing Company, Cleveland, Ohio, has introduced nationally the Iron Fireman oil burner for installation in domestic boilers and furnaces. The new oil burner has a two-stage pump, which not only supplies a stream of oil to the nozzle but also circulates another stream of oil from tank to burner. Constant circulation of oil prevents air-lock. Fuel clogging is said to be reduced to minimum by seven strainers. Mechanical strainer in the nozzle is of "washer" type. One-sixth horsepower capacitor motor has automatic shut-off protection against overheating. Motor has resilient mounting, reducing vibration and can be replaced on the job. The fan rides a motor shaft sleeve. The cover plate can be removed without dismantling machine. Transformer terminals are enclosed within machine for safety; bus-bars are used to convey current from transformer to contacts. By sliding on slots, the air cone can be adjusted in relation to nozzle.



OIL BURNER for domestic boilers and furnaces is product of Iron Fireman Manufacturing Co.

### Delco Automatic Coal Stoker

MORE EASE in the duties of home heating will be available in connection with the new Delco automatic coal stoker, one of three sizes announced by General Motors' Delco-Frigidaire Conditioning Division. It will provide for homes the convenience of automatic heating, at the same time permitting use of smaller sized, lower priced, soft coal. Controlled by thermostat, the stoker will automatically maintain a fixed temperature, requiring attention only once a day even during very cold weather.

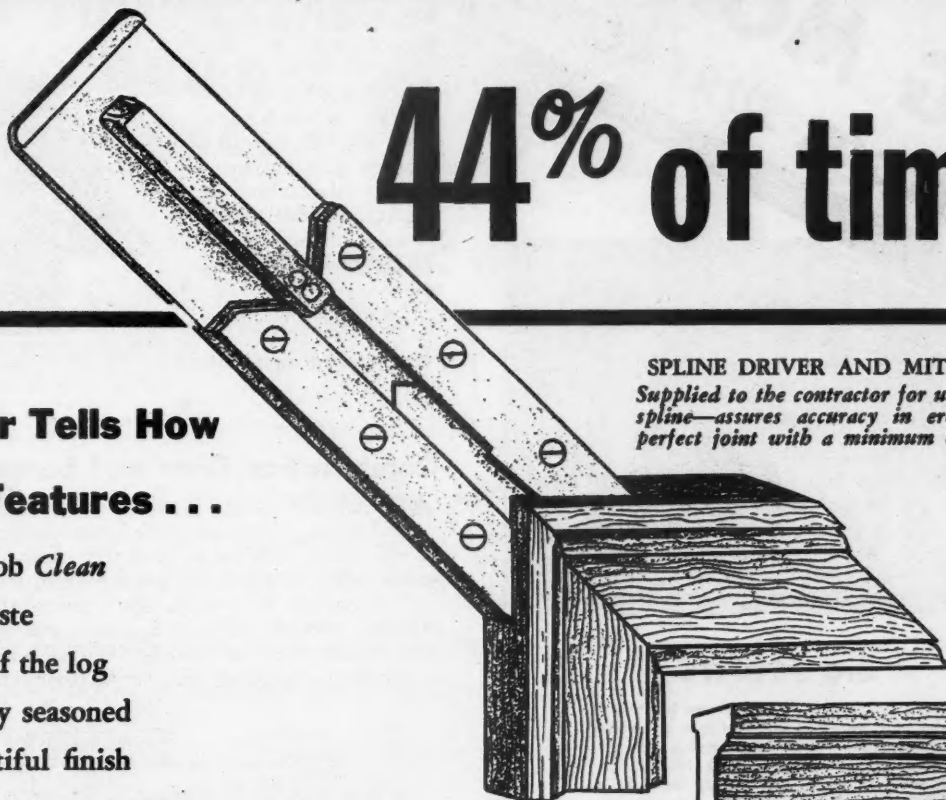


DELCO automatic coal stoker for home heating.



# TRIMPAK SAVES

## 44% of time!



**SPLINE DRIVER AND MITRE CLAMP**  
 Supplied to the contractor for use with metal spline—assures accuracy in erection and a perfect joint with a minimum of labor.

### Free Folder Tells How Trimpak Features . . .

- Goes to the job *Clean*
- Eliminates waste
- Is the *cream* of the log
- Is scientifically seasoned
- Takes a beautiful finish

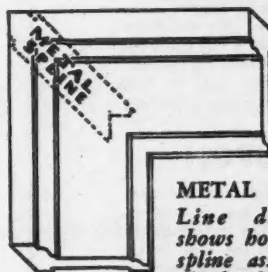
Trimpak, the packaged interior wood trim, goes up in little more than half the usual time!

And that's only *one* advantage. Trimpak is made only from the cream of the log and comes to the job clean and bright—free of marring and soiling—ready for use. Trimpak eliminates waste, because every piece is cut to approximate length—you get just enough trim to do the job—no more no less. Trimpak is seasoned thoroughly and uniformly in the scientific way—in modern, automatically controlled steam dry-kilns. *There's no shrinkage!* Because it is manufactured properly and correctly seasoned, Trimpak takes and retains paint and varnish perfectly—providing a perfect base.

Learn the full story of Trimpak, "the ultimate in trim."  
 Write for free folder giving complete details.

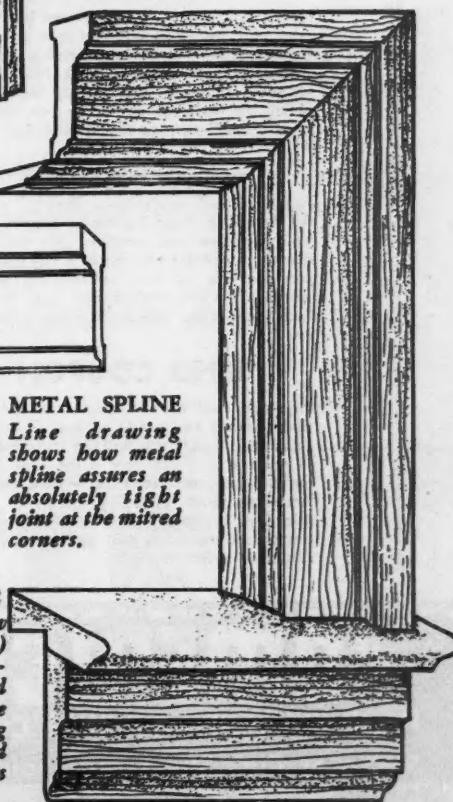
Ask your Retail Lumber Dealer or write—

**TRIMPAK CORPORATION**  
 44 Whitehall St., New York City



**METAL SPLINE**  
 Line drawing shows how metal spline assures an absolutely tight joint at the mitred corners.

**TRIMPAK SPECIAL No. 2**  
 Popular window trim (at right) has mitres accurately cut and kerfed to receive the metal locking spline. Stools and aprons have ends returned.



# TRIMPAK

CARPENTERS-CONTRACTORS  
THERE IS  
**BIG MONEY**  
IN FLOOR SURFACING



**BIG PROFITS**

Here's your chance to make some big money—be your own boss and get into something for yourself. There is no reason why you should not be a big success in the floor surfacing business—you already know a lot about the building game, so you naturally have a head start on the other fellow.

**EASY TO RUN**

An American Floor Sander is easy to run—truly a professional machine. No skill is required to operate and within a few hours you can run one as well as an "old timer." American floor sanders are easy to take from job to job. You don't need any helpers.

**SEND COUPON**

Sign and mail coupon below and get complete details and prices without cost or obligation. It costs you nothing to investigate. If you are in a rut, now is the time to get out and become independent—have your own American floor surfacing business. Wide selection available in from small six-inch drum sanders to largest twelve-inch, in a complete price range.

**THE AMERICAN**  
FLOOR SURFACING MACHINE COMPANY  
511 So. St. Clair Street • Toledo, Ohio

Gentlemen:

Send complete details and prices on your American floor sanders without any cost or obligation to me whatsoever.

I am a contractor and want machine for my own use.

I am thinking of getting into business for myself.

I already own one—quote trade-in value.

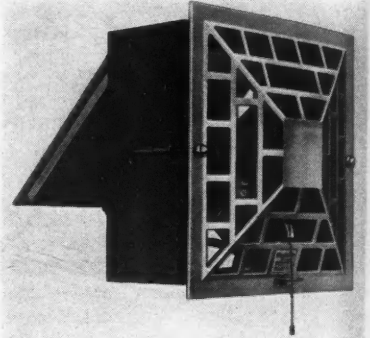
Name .....

Street .....

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

**Low Cost Kitchen Ventilating Fan**

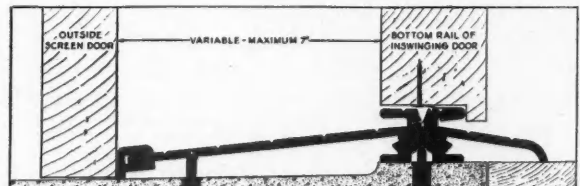
THE Majestic Company of Huntington, Ind., has introduced a new low-cost kitchen ventilating fan to meet the demands of the low-cost home. This is a ten-inch fan, efficiently controlled by a high quality, standard make, water sealed motor that is mounted on an attractive cast interior grille. By the removal of two convenient thumb screws the grille and motor mechanism can be removed for easy cleaning. By releasing a control chain that hangs perpendicular to the floor, the fan is started and a spring hinged outside door which is fully insulated and weather-tight, is simultaneously opened. Assembled in two square units which telescope, the unit is adjustable to various thicknesses.



NEW kitchen ventilator.

**Combination Door and Screen Saddle**

ACCURATE Metal Weather Strip Company of New York City has announced a newly patented combination door and screen saddle. This door saddle has been designed so that it is wide enough to engage the lower edge of the screen door and act as a stop, thus eliminating any opening through which insects can pass. Because of its sectional construction, the saddle is available in any width and can be installed without the necessity of any drilling or tapping, thus saving labor time on the job.



DOOR SADDLE acts as screen stop for tight closing.

\* \* \*

**Better, Cost-Saving Jobs from Improved Contractor's Equipment**

THE MALL ELECTRIC LOCK MORTISER manufactured by the Mall Tool Company, Chicago, will mortise forty-five to fifty doors an hour. It does a perfect job every time and does the work almost automatically. Every mortise is centered, and there is no chance of damaging doors; every lock will fit perfectly.

The Mall Model D mortiser cuts both the lock barrel mortise and the face plate recess at the same time. It is not necessary to do the barrel mortises first and then go over the doors for the face plate. It is not necessary to change the cutters between operations.



USING electric door mortiser.



**TO YOU  
WHO BUILD  
OUR HOME:**



**We want our New Home to be**

**Comfortable** the year around. We want no cold north rooms, drafty floors or uneven temperatures in the winter, or hot bedrooms in the summer. It must be

**Easy to Keep Up.** We can't afford high fuel bills, or expensive repairs.

**Quiet,** rooms where noise from the kitchen, bath or basement won't disturb people in other parts of the house. And we don't want floors that creak or drop away from baseboards. We'd like

**Good Looking** walls in all the rooms, without having to worry about cracked plaster or discolorations. If we can have them reasonably,

**Easily Cleaned** walls would be nice in the kitchen, bath and children's playroom. We want all space to be

**Usable,** including that in the attic and basement, because we can't afford to waste any room. We're ready to build if you can give us the kind of a home we want.

*Mr. & Mrs. Prospective Home Owner*

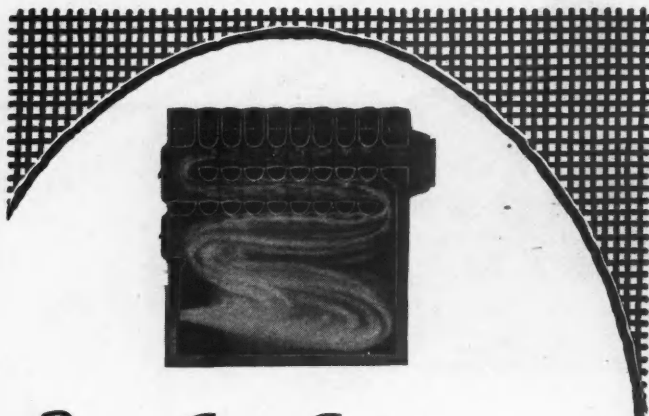
**YOU CAN MEET THESE DEMANDS WITH**

**THE INSULITE  
WALL OF PROTECTION**

*And Other Insulite Modern Building Materials For Floors, Ceilings and Roofs*

See Your Local Lumber Dealer

**THE INSULITE COMPANY • • MINNEAPOLIS, MINNESOTA**



*You Can Switch*

**From Oil to Coal With  
This Burnham Boiler**

Why be tied down to a one fuel boiler when with this Burnham you can burn either oil or coal?

Admittedly there are some advantages in the Burnham Biltin Special Oil Burning Boiler and we like to sell it, knowing the economies it gives. However, should a shift to coal be desired, it would mean an entirely new boiler.

But not so with our Jacketed Conversion Burnham. All it would mean to shift from one fuel to another, is a change in the base, costing but little in comparison to a new boiler.

It has that famous Burnham long fire travel which makes its short fuel bill. Send for catalog. Get the full facts. See for yourself.

**BURNHAM BOILER CORPORATION**  
Manufacturers of Heating Equipment Since 1873  
IRVINGTON, NEW YORK ZANESVILLE, OHIO  
Export Department,  
116 Broad Street, New York

*Burnham Boiler*

**New Alloy Steel Hammers**

FOUR new Stanley alloy steel nail hammers, companion numbers to the "100 Plus" 16 ounce, curved claw hammer, which for years has been the favorite of exacting mechanics, have been added to the line of Stanley Tools, New Britain, Conn. The line now includes five Stanley "100 Plus" hammers: three with the curved claw—20, 16 and 13 ounce weights; two with straight claws—20 and 16 ounce weights.

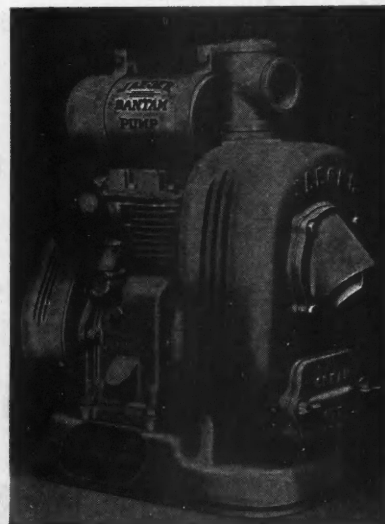
100 Plus hammers are the highest quality hammers made by Stanley. Heads are made of chrome molybdenum alloy steel and are super-heat-treated. "Evertite" hickory handles are securely wedged to heads. Heads have bell face, round poll, mirror polish with orange ribs on neck and black enamel under claws.



TWO new hammers, curved and straight clawed.

**Light Weight, Large Capacity Pump**

AN automatic priming pump, built of aluminum alloy and weighing only 52 pounds, is being offered by The Jaeger Machine Company, Columbus, Ohio. Its rated capacity of 5200 gallons per hour is very large for a pump of this light weight. The priming action, employing the Jaeger patented priming jet, insures fast self-priming at lifts up to 25 feet. Including standard 3/4-1 H.P. ball bearing engine with carburetor and unusually large gasoline tank of 4 gallon capacity, the Bantam measures only 9 1/2 x 19 inches, may easily be carried by a boy or shoved into the front or back of any automobile. It is also furnished with 1/2 H.P. splash-proof electric motor which may be plugged into any light socket.



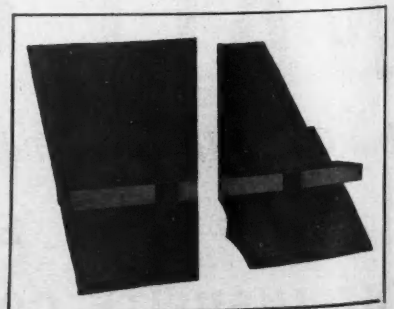
LIGHT weight, automatic pump has 5200-gallon capacity and lift of 25 feet.

**Wagner Roofing Brackets**

THE Wagner Manufacturing Company, Cedar Falls, Iowa, is marketing a line of roofing brackets which offer convenience and safety features.

They come in two styles—No. 42 for asphalt or composition shingles, No. 40 for wood shingles. Both models are provided with safety hooks to prevent timber from slipping.

ROOFING brackets for wood or composition shingles.





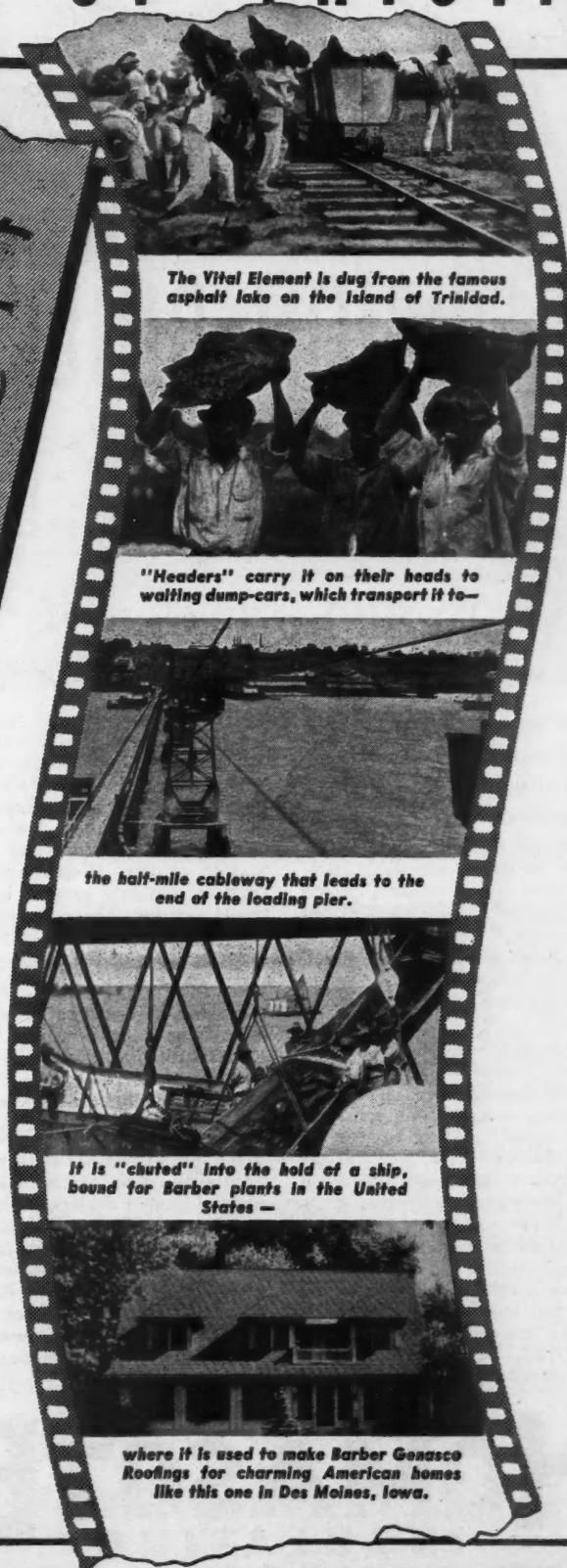
# MAKE A NOTE OF THIS...

*The Vital Element*  
 (Trinidad Native Lake Asphalt)  
 has no "equal"!

The only way you can be sure of the superb service and additional protection afforded by *The Vital Element*—genuine Trinidad Native Lake Asphalt—is to recommend and use Barber Genasco Asphalt Roofings.

*The Vital Element* recognizes no "equal"! Nature has endowed it with unduplicated qualities . . . "tempered" it under the scorching heat of a year-round summer sun . . . exposed it to the fury of countless tropical tempests. It offers an inimitable balance between adhesion and cohesion. It contains a uniform colloidal suspension of wear-resisting mineral filler. It possesses an inherent vitality which it retains indefinitely. And *The Vital Element*—Trinidad Native Lake Asphalt—is an exclusive Barber Genasco feature.

Whenever you recommend or use roofings, make sure they bear the name Barber Genasco, for this is the only way you can be sure they contain *The Vital Element*. And when questions regarding roofings or other asphalt uses arise, send them to Barber for the correct, authentic answer. The Barber Company, Inc., Asphalt Headquarters since 1883, Philadelphia, Pa.



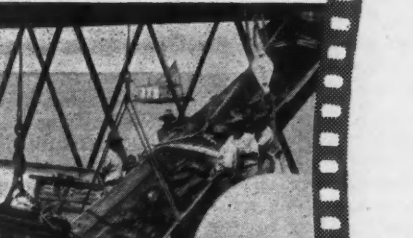
The Vital Element is dug from the famous asphalt lake on the Island of Trinidad.



"Headers" carry it on their heads to waiting dump-cars, which transport it to—



the half-mile cableway that leads to the end of the loading pier.



It is "chuted" into the hold of a ship, bound for Barber plants in the United States —



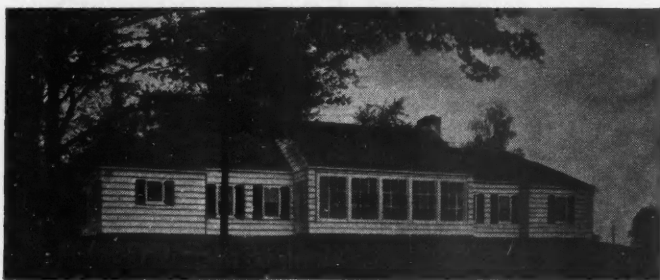
where it is used to make Barber Genasco Roofings for charming American homes like this one in Des Moines, Iowa.

<h1>BARBER Genasco ROOFINGS</h1>	SHINGLES • SIDINGS
	ROLL ROOFINGS
	BUILT-UP ROOFINGS

Now they're  
demanding



# PRECISION-BUILT!



...the **NEW METHOD** that reduces your costs... lets you build in 30 days instead of 90!

Here are five outstanding features of this remarkable, new Precision-Built method which you, as a builder, can't afford to overlook!

**You build rapidly.** Your Precision-Built house, large or small, is completed and ready for occupancy in 30 days instead of 90.

**You handle more jobs with one crew.** Precision-Built lets you handle three times as many jobs with one crew. Your construction money is tied up for 30 days instead of 90. And you get business which might otherwise be delayed to next season or next year.

**You build even in winter months.** Except for weather limitations on excavating, Precision-Built lets you build all Winter. Each house is completely enclosed and ready for temporary heat in two days' time.

**You reduce your costs.** Using Homasote (the oldest insulating and building board on the market) in Big Sheets, up to 8'x14', you make important savings in both time and labor. No wall joints to fit—no waiting for plaster to dry. Precision-Built framing methods provide additional savings. These combined savings can be as much as 10% in many sections of the country.

**You satisfy home owners.** Give them any size or type of house—Precision-Built—with the best in construction principles and building materials. All are doubly insulated, economical to own—and eligible for FHA Mortgage.

**Make this a Precision-Built year.** Capitalize on the selling efforts of local lumber dealers, realtors, architects and the Homasote field representatives. Write today for free descriptive book which gives complete details of Precision-Built Homes. Also for our Simplified Method of Estimating—more accurate estimating in less time.

## WEATHERPROOF **HOMASOTE** INSULATING AND BUILDING BOARD

HOMASOTE COMPANY, TRENTON, NEW JERSEY

Send FREE literature on

- Precision-Built Homes       Homasote Big Sheets  
 Simplified Method of Estimating

Name \_\_\_\_\_

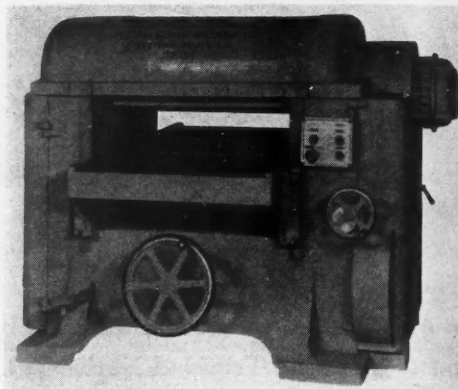
Address \_\_\_\_\_

### New 24-Inch Planer

THE Crescent Machine Company, Leetonia, Ohio, is making a new 24-inch planer. This machine is totally and completely enclosed. All guards are of aluminum. The top hood is hinged at the back and lifts up out of the way, which gives free access to the feed rolls, chip breaker, pressure bar and cutter head.

The entire frame of the machine is cast in one piece of semi-steel. All rolls are power driven and mounted in replaceable bronze bearings. The feed works is driven by means of a Reeves drive giving a continuous change of feeding speeds from 20 to 60 feet per minute. Cutter head is of the four knife, round safety type mounted in extra large precision type ball bearings. The cutter head is mounted direct connected with a Woods motor of 5 H.P., 7½ H.P., or 10 H.P.

The finger tip control station is mounted on the front of the machine. The head motor is connected to a start and stop button and the feed motor is connected to a start and stop brake and reverse button. Also, this machine can be equipped with a new direct motor drive grinding attachment and jointing device.



NEW planer is completely enclosed with controls in handy location.

### Tilting Table Shaper

THE first shaper ever to be equipped with a tilting table has been announced by the Yates-American Machine Company of Beloit, Wis. It is the newest addition to the company's "W" line of machines intended for use in homes, schools and light industry. The manufacturers stress the ease with which it can be set up, the inexpensive knife equipment it uses, and its low power consumption.

The new type of table (optional) makes it possible to cut bevels and intricate moulding with standard shaper knives and adds much to the versatility of the machine. Two other exclusive features are a screw operated outside holdover fence and a spring-loaded chip-breaker for surfacing operations.

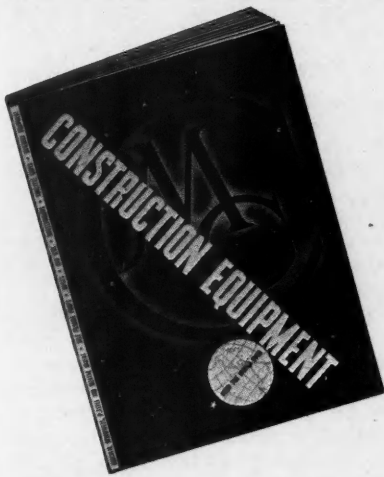
Speeds of 8,000 or 10,000 R.P.M. are provided. A rigid foundation—essential at high speeds—is furnished by the extra heavy base. Guarding on the machine is complete; every possible safety feature has been incorporated in its design. The shaper is decidedly attractive in appearance; its modern lines express the new trend in machine design. The smooth unbroken surfaces are very easy to keep clean.

Green lacquer, unusually resistant to the action of oils, gasoline and dirt, is used as a finish. Motors of either ¼ or ½ H.P. are supplied. The machine can be had as a bench or floor type model.



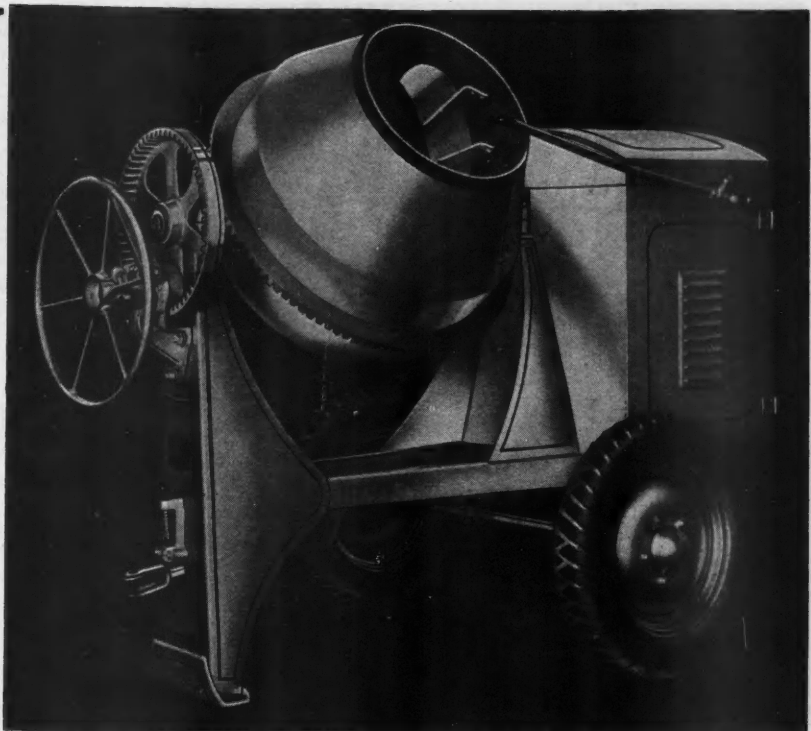
SHAPER has tilting table to allow added operations; extra heavy base makes it rigid.





The equipment book of the year. Crammed with pictures of new models—new features—new items in the CMC Line. Get your copy. Write today!

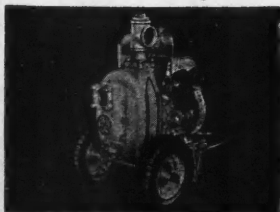
Wenger Streamlined 3½ Tilter, the Leader of a Complete Line of Modern Half Bag Mixers.



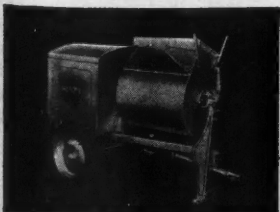
# PROFITS ARE MADE WITH CMC EQUIPMENT



\*New CMC Streamlined Two-Wheel Trailers. Compact—fast moving—built to stand the "gaff." 5s, 7s and 10s sizes.



\*CMC New Dual Prime Pumps—faster priming—greater efficiency. Sizes 1¼ inches up.



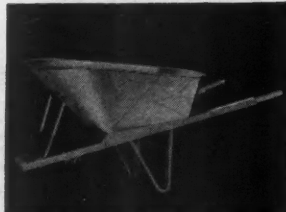
Wenger Plaster and Mortar Mixer. A low priced modern machine. Handles lime and cement mortars; also patent plasters with hair or fibre.

No other line offers the contractor such an array of genuine profit-making equipment as CMC. New time-saving features—innovations that speed up work—new dependability and PRICES THAT ARE RIGHT. That's what you get in every piece of equipment in the line. See what's what in modern concrete mixers, Plaster Mixers, Pumps, Hoists, Saw Rigs and Carts before you buy. Write for the new CMC catalog.

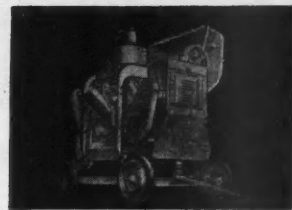
## CONSTRUCTION MACHINERY COMPANY WATERLOO, IOWA



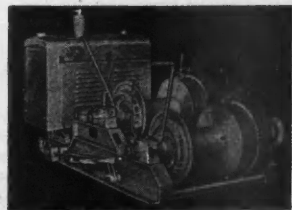
CMC Pneumatic Tired Material Carts. Save Planking—speed up work. Cut costs.



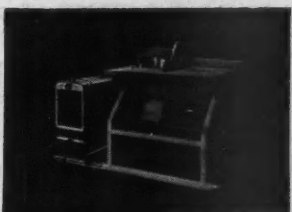
CMC Pneumatic Tired Wheelbarrows. All types of Trays. Also available with steel wheels.



CMC Streamlined 4-Wheel Side Discharge models in 5s, 7s, 10s and 14s sizes. Also built as End Dischargers.



\*CMC General Utility Double Drum Hoist. 100% hoist efficiency without extravagance in cost.



CMC Power Sawyer. Heavy duty type. Faster work on all types of cutting. Timken Bearing Arbor insures long life.

# WHERE do Cooking Odors go in the houses you build?



• Do they go to meet the guests at the door and embarrass the home owner?

• Or—do they go out into the living room to deaden the air, produce headaches and make the family miserable?



• Or, are you one of those who has learned the big advantage of installing Victor Electric Ventilators in the homes you build—providing fresh, clean air and comfortable living?



## VICTOR In-Bilt KITCHEN VENTILATORS

• There's no excuse for cooking odors, greasy fumes or smoke in any modern home. Victor's complete line of residential ventilators solves this serious problem by thoroughly exhausting all odors and fumes before they can spread to other rooms. And, because they do keep the home supplied with fresh, clean air at all times, they definitely add to its salability and value. Victor offers you the choice of three attractive models—the De Luxe, the Standard and the Master. In these three quality-built **FREE!**

ventilators you will find a size and price to meet the needs of every home you build, including not only kitchen installations, but bathrooms, recreation rooms, and laundry rooms as well. Be sure to mail coupon below for new free data book!



**VICTOR ELECTRIC PRODUCTS, INC.**  
724 Reading Road Cincinnati, Ohio

Send us your new data book on residential ventilation, describing your complete line of Victor In-Bilt Ventilators.

Name.....  
Address.....  
City..... State.....

Indicate here whether you are Architect, Builder, Electrical Contractor or Home Owner.

# News of the Month

Building Activities and Meetings

## February Residential Building Volume Shows First Upturn Since Last June

RESIDENTIAL building undertaken in the 37 eastern states rose 10 per cent during February, 1938, as compared with the preceding month, according to F. W. Dodge figures. This gain represents the first break in the series of successive monthly declines for residential building which began last June. Residential contracts for February totaled \$40,023,000 as compared with \$36,207,000 for January. It is currently reported that preliminary applications for mortgage insurance, both on single dwellings and development projects for sale and for rent, have greatly increased since enactment of the new amendments to the National Housing Act; this may be an indication of increased residential building contracts some weeks hence. Dodge figures for the first half of March, 1938, continue and increase this trend. In fact the first half of March almost equals all of February, and if the second half does as well March will show the greatest increase in any single month since 1929 and current home building will be back to last spring's level.

Total contracts awarded for building and engineering work in the 37 eastern states during the month of February amounted to \$119,038,000. This was a decline of 37 per cent from February, 1937, and followed a drop in January of 20 per cent from January of last year. Thus the decline of the later months of 1937 was carried through the opening months of the new year.

Contracts for private building and engineering work amounted to \$67,891,000 in February as compared with \$74,630,000 for January. Public construction, on the contrary, dropped sharply from \$120,842,000 for January to \$51,147,000 for February.

By classes of construction, the February contract record amounted to \$40,023,000 for residential building, \$48,533,000 for non-residential building, \$25,333,000 for public works and \$5,149,000 for utilities.

The figures for the first half of March follow:

37 Eastern States	Mar. 1-15, '38	Mar. 1-15, '37	Mar. 1937
Residential .....	\$ 36,496,000	\$ 42,431,000	\$ 90,168,000
Non-Residential .....	39,161,000	45,391,000	89,228,000
Public Works .....	20,853,000	10,736,000	32,550,000
Utilities .....	5,646,000	6,552,000	19,300,000
<b>TOTAL .....</b>	<b>\$102,156,000</b>	<b>\$105,110,000</b>	<b>\$231,246,000</b>

## New National Mortgage Association Outlines Plan for Purchasing Mortgages

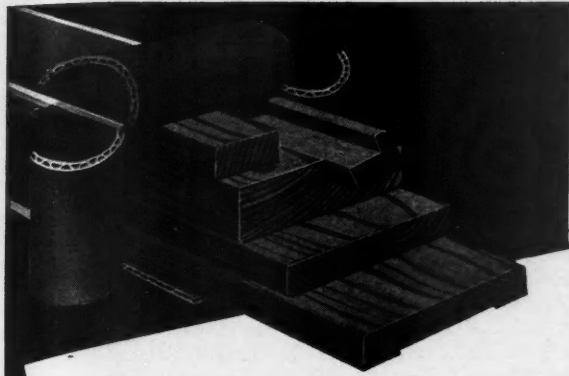
POLICIES of the newly organized National Mortgage Association of Washington, first of its kind to be formed under the recently enacted amendments to the National Housing Act, were recently discussed by James L. Dougherty, assistant general counsel of RFC and a director of the new Association.

Mr. Dougherty announced that the National Mortgage Association will purchase all FHA insured mortgages on new structures begun on or after Jan. 1, 1937. Service fee to mortgagees has been set at three-quarters of 1 per cent on the reducing principal balance of the loan. One per cent of the face amount of the mortgage must be paid by the mortgagee when he applies to the National Mortgage Association for a commitment, but this is later returned.

Title must be such as to be acceptable to FHA in the event of foreclosure. The National Mortgage Association will make loans on Section 207 projects directly at 4½ per cent, or will purchase from approved mortgagees. In making a commitment to purchase a fee of 1 per cent of the amount is required, but the National Mortgage Association will buy at par and return the 1 per cent when the mortgage is delivered.

Loans on Section 210 projects (\$16,000 to \$200,000) carry 5 per cent interest rate. In the case of purchase, ½ of 1 per cent service charge is allowed. In the case of 207 and 210 loans, FHA will examine all titles. A 2 per cent service charge may be collected from the mortgagor if the loan is made directly by the National Mortgage Association.





**SPOKANE PINES'**  
**UNITRIM AND PACTRIM**  
 OF PONDEROSA PINE AND IDAHO WHITE PINE  
*Contribute to More House for the Money*

### INSIDE TRIM FOR WINDOWS AND DOORS.

**UNITRIM**—Packed in paper  
**PACTRIM**—Packed in cartons.

All horizontal members in one package for one opening. All vertical members in one package for one opening. Door Trim packed the same, or one complete side or two complete sides in one package.

*Mr. and Mrs. Builder: Save your money and insist on Inside Wood Trim The Unitrim or Pactrim Way because:*

- 1** It means Lower Cost for the finished Product.
- 2** Protection from the elements retains the original sparkling appearance.
- 3** **PRECISION** millwork and **PERFECTION** quality.
- 4** Convenience of buying—correct quantity to fit every opening. The Home completed **SOONER**.
- 5** Manufactured from thoroughly kiln-dried lumber and no joints to open up later on, because the original dryness is sealed in the packages.



This seal will be found on every genuine **SPOKANE PINE** "Precision" Weatherite Frame of Idaho White Pine or Ponderosa Pine.

**Idaho White Pine**  
**Ponderosa Pine**  
**Lumber**  
**Mouldings**  
**K. D., Frames**  
**Trim, Lath**  
**Cut Stock**  
**Industrial Items**

**SPOKANE PINE PRODUCTS COMPANY**  
**LONG LAKE LUMBER COMPANY**

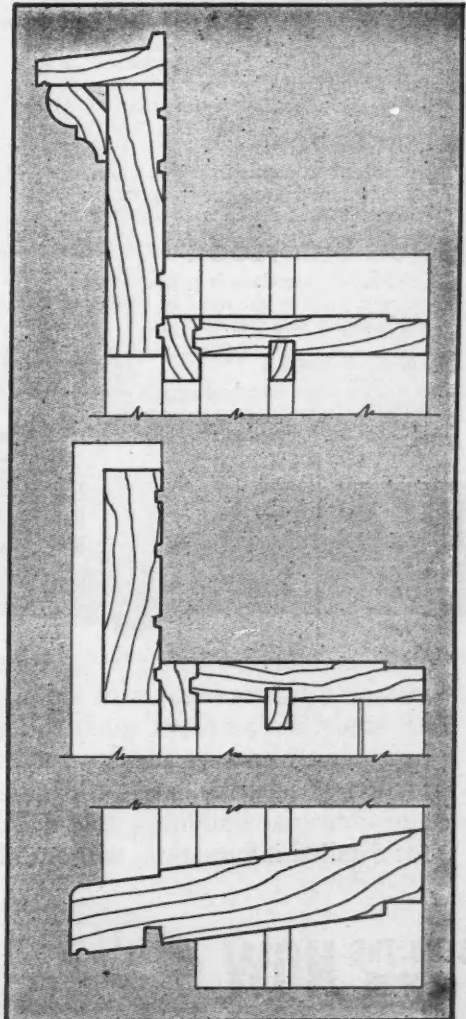
Plants and General Offices — SPOKANE, WASHINGTON

## WINDOW AND DOOR FRAMES

Our Spokane Pine **PRECISION** Frames have no superior. The millwork is a cabinet job—not an ordinary job of millwork. Weatherite special Tongue and Groove joints between pulley stiles and blind stops, and blind stops and casings. No time wasted re-fitting when putting frames together.

**ask your dealer**

for Spokane Pine **PRECISION** Frames and Trim.



### MR. DEALER:

We ship mixed cars of Frames, Trim, Lumber, Mouldings and Lath in Ponderosa Pine and Idaho White Pine. Send us your orders or inquiries.

# PUT THIS *Extra Bath* IN THE HOMES YOU BUILD OR REMODEL



## ● WEISWAY

Cabinet Showers help sell homes. As extra baths Weisways have won instant appreciation from thousands of home owners and buyers.

## ● EASILY INSTALLED

in new or old homes, Weisways require no special treatment of building walls, no alteration of floors.

## ● LEAKPROOF

guaranteed construction combines sturdiness and strength with light weight, assures dependable service.

## ● NON-SLIP FLOOR

of vitreous porcelain is permanent, sanitary, quiet as the tread of a bare foot, equally safe wet or dry.

## ● FULL RANGE

of models make extra baths easily possible in all homes, from finest master bath to simple basement installations.

Wise builders are using Weisways as a sale-closing feature, for extra baths with the first floor convertible study, maid's room, guest room, off the family bedrooms. Weisways are also particularly adaptable for use in schools, hotels, institutions, commercial and industrial buildings. *Send coupon* or write now for detailed information, without obligation.

SEND THE  
COUPON NOW

**WEISWAY**  
*Cabinet Showers*

HENRY WEIS MANUFACTURING CO. (Est. 1876)

401 Oak St., Elkhart, Indiana

Without obligation please send detailed information about Weisway Cabinet Showers for (here indicate use) \_\_\_\_\_

Name \_\_\_\_\_

Street \_\_\_\_\_

City \_\_\_\_\_

State \_\_\_\_\_

## Plywood Association Announces New Officers

W. E. DIFFORD of Louisville, Ky., recently president of W. J. Hughes & Sons Company of Louisville, and one-time president of the National Association of Millwork Jobbers, has been appointed director of the Douglas Fir Plywood Association with headquarters in Tacoma. In his new position Difford will be in active charge of the million dollar three-year program of trade promotion of the Association. The Association has also announced its new officers. These are: president, Philip Garland, Oregon-Washington Plywood Company, Tacoma; vice-president, A. R. Wuest, West Coast Plywood Company, Aberdeen; secretary, V. A. Nyman, Aberdeen Plywood Company, Aberdeen; treasurer, N. O. Cruver, Wheeler-Osgood Sales Corporation, Tacoma. The executive committee is composed of these officers: E. W. Daniels, Harbor Plywood Corporation, Hoquiam; Huntington Malarkey, M & M Woodworking Company, Portland; E. E. Westman, Washington Veneer Company, Olympia; and Frost Snyder, Vancouver Plywood and Veneer Company, Vancouver.

## Republic Opens World's Largest Strip Mill

REPUBLIC Steel Corporation formally opened its new 98-inch hot and cold strip mills in the Cuyahoga Valley at Cleveland, Tuesday, Mar. 15, with a large group of newspaper and trade paper editors present for the event. The mill is the largest, fastest and most modern continuous strip mill in the world; the mill buildings cover 21 acres and stand on a 182-acre site, part of which is land which was made by the Cuyahoga River channel, a feat requiring removal of more than a million cubic yards of dirt.

## Chicago Modernized Basement Contest a Success

THE \$2,500 prize modernized basement contest of the Chicago Coal Merchants Association which closed Mar. 7, established Chicago as one of the leading cities in the general movement for home improvement. Twenty-seven basement owners were included in the distribution of cash awards which ranged from \$1,000 to \$25. Actually, more than 200 up-to-date basements were entered in the contest. In all coal or coke was the fuel used.

## Tanner Elected President of Milcor

EARL A. TANNER, formerly executive vice-president of the Milcor Steel Company, has been elected to the presidency of the company. Louis Kuehn, former president, was named chairman of the Board, a newly created post. E. L. Lipman was chosen to succeed A. J. Luedke as secretary and treasurer. Mr. Luedke recently resigned.

Mr. Tanner, the new Milcor president, has been associated with the company for 18 years. At 42 years of age, he is one of the youngest heads of a major industry. He started in the Sales Department of the company and was made manager of Jobbing Sales shortly afterward.

## H. A. Knapp, Celotex V.P., Dies

HAROLD A. KNAPP, vice president and general sales manager of The Celotex Corporation, died on Mar. 24 following a short illness. Mr. Knapp had been in the lumber business before he joined the Celotex organization in 1927.

## Celotex Names Assistant Sales Manager

IN THE sales organization of The Celotex Corporation, Lee Bartholomew, manager of the Cleveland division since 1934, has been made assistant general sales manager with headquarters in Chicago. His place is being taken by George J. Dinges, who was assistant manager of the New Orleans division. Mr. Bartholomew joined Celotex as salesman in 1931, having previously been eastern sales manager for I. F. Laucks, Inc., manufacturing chemists.

## Russell to Promote New Hoffman Products

THE Hoffman Specialty Company, Waterbury, Conn., has announced the appointment of William A. Russell to promote the distribution and sale of certain controls and heating specialties which have been developed and perfected by the Hoffman organization and will be announced shortly. His headquarters will be at the company's New York office.





**A. N. WANGSTAD,**  
contractor-builder of  
Minneapolis, Minnesota

# “ESPECIALLY FINE FOR SASH ...”

## Says Mr. Wangstad

● “Outside and inside, I’ve found a lot of use for those well-seasoned woods, the Western Pines. And when it comes to sash, I think they are practically indispensable,” writes Mr. Wangstad. “They mill so beautifully, hold their shape and fit snug without frosting in the cold weather. Believe me that’s important in Minnesota.”

**THE WESTERN PINES WILL DO YOUR NEXT JOB BETTER\*\*\* TRY THEM**

**Specify Western Pines**



**From Association Mills**

**Western Pine Association, Yeon Building, Portland, Oregon**

**\*Idaho White Pine**

**\*Ponderosa Pine**

**\*Sugar Pine**

**\*THESE ARE THE WESTERN PINES**



**SMITH 3½-S TILTER**

—the ONLY small mixer equipped with a feed chute. The handy Smith chute is 31" wide and only WAIST HIGH. It provides a big, roomy target for the shovelman to shoot at. Allows much faster and easier loading than is possible with any other mixer.

**MORE FOR YOUR MONEY** — Feed chute loading — famous "End-to-Center" mixing action — fast "Tilt and Pour" discharge — every one a BIG MIXER feature. You get them ALL with a Smith 3½-S Tilter—yet you pay no more. Get the complete Smith story.

**THE T. L. SMITH COMPANY**  
MILWAUKEE, WIS.  
2849 N. 32nd STREET



Rest Bag on Chute. You can add the cement directly from the bag. Another convenient, time-saving feature.



**SMITH MIXERS**  
THE BOULDER DAM MIXERS

**LETTERS from Readers on All Subjects**  
Facts, opinions and advice welcomed here

**Old-time Subscriber Notes Improvements**

Grinnell, Ia.

To the Editor:

I am enclosing herewith check in amount of \$2.00, same being in payment for extending my subscription to the "National Builder" (now *American Builder*) to and including the June number 1939, and also send me a copy of your new book, "American Builder Guide to Better Homes."

I like the "American Builder" very much and have taken it from the start in 1905 when it was published under the name of the "American Carpenter & Builder." I also took the "Carpentry and Building" trade paper, first subscribing for it in 1892 and continued up to the time when it was taken over as the "Building Age" by the *American Builder*.

Your publication has been very much improved since the depression has somewhat let up, and I believe it is now up to and even better than during the prosperous times we had during the Rådford management.

The Publisher's Page is very good and right to the point. I have shown this to several business men and also to my banker, and they all agree that it gives the facts correctly as they exist today, as well as touching on the cure for same.

Your editorial several months ago on the Government proposition on building cheap rent houses with high priced labor certainly was very instructive of about what would happen if the Government undertook it as outlined; for it is a well known fact that it always costs the Government more to have work done by the hour under government management than if let to a good reliable contractor or company of contractors. I almost always find it this way—that when the Government undertakes to gather up a bunch of workmen, many of them are incompetent and holding their jobs through some political friend, whereas when the work is let under contract to some good, reliable contractor, he usually has a good organization to carry on the work efficiently and speedily in less time and he always turns out better work; he has a reputation to maintain, the same as his foreman and his master workmen who have been with him for a long time.

Compare the above with the Government undertaking to fill the contractor's place with a bunch of gather-up men who have no teamwork among them and a part of them being PWA or other relief workers who have no interest in the work at all, only their pay check. Even though the Government is lucky enough to get a good superintendent on the job, he absolutely can't get the results or turn out the work that a good experienced contractor with a good organized force of workmen can and will. I say the Government should stay out of the construction business.

G. J. SHUSTER.

**Will Now Keep Up-to-Date**

Richmond, Ind.

To the Editor:

I received my first copy of *American Builder* and also your new book, "American Builder Guide to Better Homes." It sure is the tops in building. I don't know how I ever got along without it. It has so many things in it that I am sending for all of the catalogs listed in February issue so that I can file them and also have on hand the latest. I know I have lost some contracts from not having the newest to show my prospects.

HOWARD W. ROBERTS.

**Small Homes Program to "Snowball"**

Washington, D. C.

To the Editor:

I want to take this opportunity to thank you for the very splendid job you did for the National Small Homes Demonstration Program in the March issue of the *American Builder*. We are

(Continued to page 122)

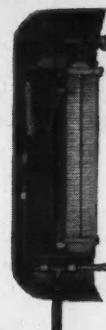


# Air Circulation Without Ducts

— BUT NOT RECIRCULATED FROM ROOM TO ROOM

## ARCO THERMO SYSTEM HEATS LIKE LIGHTNING

American Radiator Company, after years of field and laboratory work, offers its latest development — the ARCO THERMO SYSTEM — with all the advantages of the smooth, even flow of heat derived from Hot Water Systems.



### BUILDERS! CONTRACTORS!

Use the American Radiator Company's "New" ARCO THERMO SYSTEM to arouse interest — create enthusiasm — bring profitable inquiries. IT'S NEW — IT'S INDIVIDUAL — IT'S AMERICAN RADIATOR COMPANY'S CONTRIBUTION TO THE HEATING TRADE. Write today for full information including complete piping and installation instructions so you can take full advantage of this opportunity to sell the latest in automatic, fully controlled, air circulating systems — WITHOUT DUCTS!!!



### CONSIDER ITS PRINCIPAL POINTS

- 1. AIR CIRCULATION** — But no recirculation from room to room.
- 2. NEEDS NO DUCTS** — No headroom sacrificed in basement — No jogs in walls — No cut up closets — Saves floor space — Blends with decorations.
- 3. HEAT AND COMPACT** — Requires no more space than ordinary outlet grilles — Room Units are installed flush in walls — easily painted to match any color scheme.
- 4. REQUIRES NO NEW TECHNIQUE FOR INSTALLATION** — Standard copper tubing and accepted principles of piping installation, understood by the steamfitter, assures satisfactory results.
- 5. APPEALS TO BUILDER AND HEATING CONTRACTOR ALIKE** — No special, expensive enclosure studding is required — Unit is installed complete without insulation or other annoying installation requirements.
- 6. DOMESTIC HOT WATER** — From indirect heater built-in or attached to boiler.
- 7. 100% AUTOMATIC** — Oil, gas or stoker.

*Package unit supplies everything needed for complete installation*

INSTALLED COST COMPARES WITH OTHER LOW COST HEATING SYSTEMS  
THAT CANNOT OFFER COMPARABLE ADVANTAGES

### HOW IT WORKS

Compressed air driven fan blows air through special radiators through which hot water circulates — Eliminates stratification and maintains even temperature — Reduces temperature difference between floor and ceiling.

## AMERICAN RADIATOR COMPANY

DIVISION OF AMERICAN RADIATOR & STANDARD SANITARY CORPORATION

40 West 40th Street, New York, N. Y.

# THE FIRST PRACTICAL, PERMANENT STORM WINDOW



## THE PHOENIX All-Metal Combination SCREEN AND STORM WINDOW (Patented)

*Indestructible, rust-proofed metal frame. Each unit includes sturdy, metal bound screen; interchangeable in less than one minute.*

At last! A practical method of permanently stopping heat loss through windows. A method that reduces heating costs up to 30% by effectively insulating and weather-stripping the entire window area.

Architects, builders and home owners are quickly recognizing the advantages afforded by Phoenix Windows. Positive, draft-free ventilation in all weather; economical to install on old or new buildings; only one minute to change from winter protection to summer comfort.

### LOWERS COST OF AUTOMATIC HEAT

By reducing heat loss, thereby saving up to 30% in fuel, automatic heating with gas or oil is now placed within the reach of the average budget.

You will want to know all the amazing advantages of Phoenix All-Metal Combination Screen and Storm Windows. Send the coupon for complete data and details.

- Phoenix Windows Actually Give the Builder MORE PROFIT because:**
1. No screens to buy and install
  2. No weather-stripping necessary
  3. Smaller heating plant
  4. Smaller radiators, smaller pipes
  5. Makes property more salable
  6. Gives builder a strong selling point

**THE F. C. RUSSELL INSULATION CO. — Baltimore, Maryland**



The F. C. Russell Insulation Co., Balto., Md. AB-4  
 Gentlemen:  
 Please send me full particulars about the Phoenix All-Metal Combination Screen and Storm Window.

Name.....  
 Architect  Builder  Dealer   
 Address.....  
 City..... State.....

## Letters Dept.

(Continued from page 120)

getting a tremendous reaction from your article and it certainly speaks well for your circulation.

When you were last in the office talking to Kimbell and the writer, I believe we told you at that time that we are much pleased at the initial dealer reaction to the program. Since that time we have every evidence that the program is going to "snow-ball" this year.

We here cannot escape the feeling that, particularly in the small homes field, the preliminary estimates of most of the housing analysts are going to fall considerably below actual accomplishments this year.

The efforts of publications such as yours will, in our estimation, have played a very vital part in this whole program.

NATIONAL SMALL HOMES DEMONSTRATION,  
 H. R. Northup, Secretary.

### Bound Volumes Prove Valuable

Echo, Minn.

To the Editor:

We get a lot of help from your magazine, and we are binding them together twelve issues in one volume. In this way we have at hand at all times a reference library that is worth a lot more than the price of subscription.

SLETTEDAHL BROTHERS,  
 Building, Painting and Decorating.

### Good Council from John J. Mangan

Chicago, Ill.

To the Editor:

The six-day congress on low cost housing recently held in our city council has ended. The increase in building activity resulting from the session will be zero. The speakers who insisted that our most urgent need is not greater mortgages but lower construction prices were correct. However, their objective has not been reached for up to the present time the organized minorities who control construction prices have refused to co-operate.

For those who doubt the statement, "no building—no prosperity," we offer as proof: General business dipping. Unemployment increasing. The national debt shooting skyward. A staggering stock market and 11,000,000 people out of work.

Bugle calling small business men, predicting a pick-up in 90 days, 110 per cent loans, huge appropriations for ship building, super-highways, etc., can no more cure our economic ills than a hot water bag can cure a ruptured appendix.

The need of the hour is more brick trucks on the streets. All other cures are worthless. The record discloses the stagnant condition of private construction.

The building industry is like any four wheel vehicle. All four wheels must be properly balanced to obtain results. Cutting wages and materials will not produce an appreciative amount of building. A reduction in prices would temporarily step up production but the buyers could not possibly hold on to their homes if the six per cent interest charge and present exorbitant taxes were permitted to remain.

On the other hand, if interest rates were cut to three per cent and real estate taxes reduced to a maximum one per cent and wages and materials remained at present peak prices, only one out of every sixty-five citizens could afford to buy a home.

The tendency of various groups to protect their inroads was clearly demonstrated at the Chicago Housing session. A vice president of the First National Bank suggested lower labor and material costs and lightening of the tax burden on real estate. He made no mention of the need of a maximum three per cent interest charge. Material manufacturers cited high taxes and labor costs, remaining silent on material prices.

In another interview the president of the Chicago Building Trades strongly opposed a wage reduction. Under the circumstances with other agencies refusing to co-operate, labor is correct in refusing to cut. Labor contends that the average annual income of a building tradesman is only \$1,360. Yet the barriers preventing greater annual income to its members were built by labor itself.

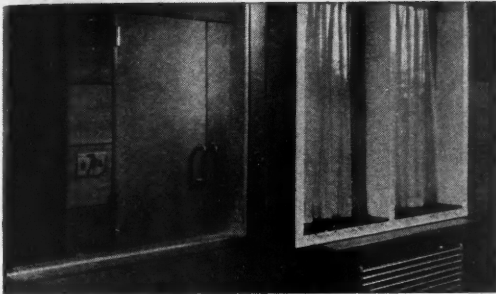
With set hours from 8:00 a.m. to 4:30 p.m. for some, and

(Continued to page 126)

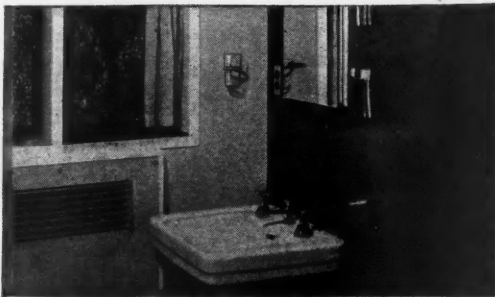




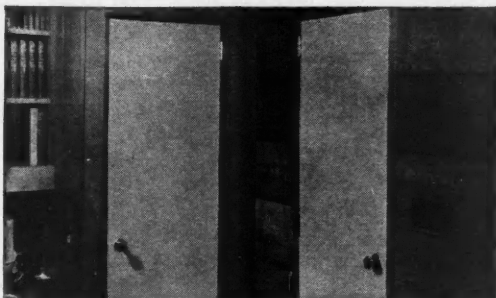
**HAVE YOU TRIED  
THESE PRACTICAL  
HOME USES OF  
GENUINE MASONITE?**



• There are hundreds of ways to achieve beautiful, unusual effects in the home — with Genuine MASONITE. In the hallway shown above, the neat mirror frame is MASONITE TEMPERED PRESWOOD with sanded edges. The radiator cover, impervious to temperature changes, is MASONITE TEMPERED PRESWOOD.



• The bathroom walls are MASONITE TEMPERED PRESWOOD. Two are enameled and two are clear-varnished to produce a smart two-tone color scheme.



• These "flush" doors are regular doors with MASONITE TEMPERED PRESWOOD glued to each side. They not only offer a neat modern appearance, but also provide surfaces which can easily be kept spotlessly clean.

• Why not discover the many improvements you can make with Genuine MASONITE in properties you are interested in? Mail the coupon for FREE samples and details about MASONITE — THE WONDER WOOD OF A THOUSAND USES.

MASONITE CORPORATION, Dept. AB-4, 111 W. Washington St., Chicago, Ill.  
Please send me FREE samples of Genuine MASONITE and more information about THE WONDER WOOD OF A THOUSAND USES.

Name \_\_\_\_\_  
Address \_\_\_\_\_  
City \_\_\_\_\_ State \_\_\_\_\_

**WANTED THEM**

Floor sanding machines that could tackle the toughest jobs at lowest cost per square foot . . . so strong and sturdily built that they were free from breakdown faults.

**BUILT THEM**

**TO YOUR SPECIFICATIONS**

**THE HIGH "SPEED-O-LITE" SANDING MACHINE**

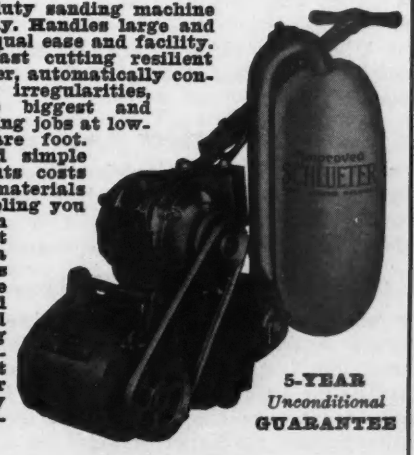
. . . is the choice of CONTRACTORS and PROFESSIONAL FLOOR SANDERS for a light-weight easily carried unit. They found out through actual operation that the Speed-O-Lite cut time, labor and material costs and produced a better job in less time. If you have never tried a Speed-O-Lite you have yet to experience the satisfying thrill of efficient speedy work that quickly adds up extra profits. Easily carried up or downstairs by one man. It sands right up to the quarter-round — picks up all dirt and dust and leaves a glass-smooth ballroom finish on every floor. If you accept the generous 5 DAY FREE Trial Offer you, too, will see why 40 years of dependable floor machine manufacturing experience has built the best light weight sander on the market. As simple and sturdily built as a farm wagon, no delicate adjustments to cause breakdowns.



**NO DIRT  
NO DUST  
NO MUSS**

**THE Improved SCHLUETER**

The finest heavy duty sanding machine that money can buy. Handles large and small areas with equal ease and facility. The high speed, fast cutting resilient rubber covered roller, automatically conforms to all floor irregularities, roughing out the biggest and toughest floor sanding jobs at lowest cost per square foot. Strong, sturdy and simple in construction. Cuts costs of time, labor and materials to a minimum, enabling you to figure closely on that big job and yet leave room for extra profits. Surfaces right up to the quarter round and picks up all dirt and dust. Ball bearing equipped throughout. Full V-Belt drive. Uses either 110 or 220 volts by merely throwing inter-change switch.



**5-YEAR  
Unconditional  
GUARANTEE**

**MAIL COUPON TODAY**

**LINCOLN-SCHLUETER FLOOR MACH. CO.**  
222-24 W. GRAND AVE., CHICAGO, ILL. 438

Send full details on your 5-DAY FREE TRIAL OFFER  
 SPEED-O-LITE  IMPROVED SCHLUETER. Also tell me how I can own one of these machines.  Interested in Time Payments.

Name \_\_\_\_\_  
Address \_\_\_\_\_  
City \_\_\_\_\_ State \_\_\_\_\_

**Your  
Clients  
are from  
Missouri!**



**They  
Demand  
to be  
SHOWN!**

# With this Great New Plan Book at Hand you do not have to Talk your Head Off

### The Supreme Question

on the lips of prospective home builders, now that under the new FHA they make but a 10% down payment, and have 25 years to pay, is no longer "What will it cost?", but "How Much do I get for my Money—are Today's Home Values Such as to make a New Home a Good Buy?"

### The Perfect Answer

to such questions is contained in this, the latest and best of the American Builder's long line of superb Planning Books, "Big-Value Homes," a March, 1938, publication. Within its 172 pages is massed a wealth of

### Incontrovertible Evidence

that never was there a more favorable time to build or buy than NOW. In article after article, in charts, diagrams, "deadly parallel" tables and in photographs, it marshals the arguments that can be used by the wide awake architect, building contractor or dealer in demonstrating that the houses of today are vastly better planned, better built and better equipped, and are priced less, than in the boom days. It shows that houses are being built today that represent a 25 to 40 per cent increase in value over those built in the 1926-1929 era. It lists, describes and analyzes the advantages of

### The Many Recent Developments

in materials, equipment, space economy and styling that have given the architect and builder NEW TOOLS with which to deliver greater comfort, exterior and interior charm and all-around value in today's market, at today's prices and in tune with today's ideals and standards.

to  
Convince  
them  
that  
Today's  
Home  
Values  
are  
Greater  
than  
Ever  
Before

### As By-Paths

leading up to the supreme demonstration of today's increased home values in 90 Selected Home Designs—the crowning feature of "Big-Value Homes"—discussions are presented of such subjects as:

"Good News for Today's Home Builders"

"Ten Favorable Factors in Holding Down Home Costs"

"Why Present Financing Costs Allow Increased Home Values Today"

"FHA Amended Rules Help Toward Low Cost Homes"

"Homes or Stocks?" Which is the wiser and More Prudent Investment!

"Pictograph Analysis Shows Impressive Increase in Home Values"

"Scientific Methods Reduce Home Costs"

"How to Build to Save Fuel"

"More House Today for the Money than in 1926 or 1929"

"Common Sense in Kitchen Planning"

"50% More Outlets in 1938 Homes"

"A Camera Study of the Methods of one of the Nation's Most Successful Builders"

"How to Build Modern Coal Bins"

"How to Build Double Bunks"

More Information on next page



To get a copy of "American Builder Big-Value Homes" absolutely FREE with your American Builder subscription or renewal order, accompanied by \$2 for one year, \$3 for two years, or \$4 for three years,

# Use This Form

AMERICAN BUILDER, New-----  
30 Church Street, Renewal---  
New York.

For the enclosed \$-----enter my  
subscription for 1 year, \$2-----  
2 years, \$3----- 3 years, \$4-----

And Include AT NO EXTRA COST  
a copy of "AMERICAN BUILDER  
BIG-VALUE HOMES."

Name -----

Street -----

City -----

State -----

Occupation -----

*This offer good only in United States,  
Possessions and Canada*

4-38

(Continued from preceding page)

## THE SIX BIG SECTIONS

- I  
"VALUE IN TODAY'S HOMES"
- II  
"BIG VALUE SMALL HOUSES"
- III  
"LOW COST HOMES THAT PAY  
THEIR WAY"
- IV  
"LARGER HOMES WITH ADDED  
VALUE"
- V  
"MODERNE HOMES FOR ECONOMY"
- VI  
"SAVINGS IN GROUP HOME  
BUILDING AND MODERN  
APARTMENT HOUSES"

## Facts and Figures about the Book

172 pages  
same size as this

More than 300  
Illustrations—

Interiors, Exteriors, Diagrams,  
Charts, Graphs, Tables, Construc-  
tion Details, Elevations, etc.

8 pages

in 4 colors on enameled stock,  
and 4 pages in 4 colors on cover  
stock. Cloth-strip reinforced bind-  
ing.

### Specifications

and detailed cost records are given  
for many of the homes.

# Some of the 90 Selected Homes

Three homes showing successive steps in perfecting a Home Plan from year to year to meet trends in home buying and secure more salability—Modern Design that is Beyond Comparison, with Specifications and an entrance detail of wonderful refinement—Modernistic Manor from Oklahoma, compact, inexpensive, with an unusual 2nd floor deck and flat roof.

Concrete masonry house of delightful French style—6-room Colonials with distinctive architectural charm—Apartment Cottage, ideal for young couple or elderly pair, with many interesting construction details—Little but Livable 4- and 5-room Cottages making every inch of the floor area count—

Devon Cottage of 1938, extraordinarily compact and embodying features which would have been impossible in 1926—Attractive Period Styled Small Homes in Broadview Development, perfect gems in planning, materials and construction.

"Master Built" Plywood House in Detroit—White Brick 5-room Bungalow, with charming dinette separated by arched opening—E. E. Olsen Construction Co. of Pittsburgh Builds Basementless Utility Houses saving \$1,000 in costs—

Country Colonial with first-floor bedrooms whose good proportions and careful detailing put it in a class by itself—Compact 25x25 English Home—Model House for the small income that "Grows"—Nifty Connecticut small house built at an angle.

each  
recording  
Progress  
Recently  
Made  
Toward  
Better  
Home  
Values  
Offering  
More  
Livability  
and Better  
Appearance  
at a  
Reasonable  
Cost

Dri-Bilt Ohio House—With 1st floor Bedroom and bath—

\$35 per month Colonials—California Cottage with Barbeque  
Fireplace—A fine assortment of Cape Cods—Shingled Home  
from the Northwest—California-Monterey Style Hillside  
House—Home among the Pines at Orlando, Florida—

A marvelous Hardwood Model Home at Memphis—Country  
Homestead with city conveniences—French Norman Home  
at moderate cost—Attractive Georgian Home on Wooded  
Site—Mott Bros. Homes show 33% Greater Value than in  
1926—Stone Colonial of Big Value—New Jersey Colonial  
of Simple Charm—

Early American Design in Brick, Boards and Battens—New  
Style Home in Newark, Ohio, modern Glass Block Design  
—Cubist Creation at Glen Ellyn—Modern St. Louis Home  
that features New Type of Heating—Garage and Doors  
Beautify this House—Two no less than Amazing Basement  
Transformations—

Modern Efficiency and Style in Texas—Some Harmon Dutch  
and American Colonials—Charming Colonial with 2-story  
Portico—New Homes Inspire Old Home Remodeling—  
Home perfectly designed for Entertaining—

First Modern Row Houses in Chicago—Economical Plan in  
Kansas Apartments—Modern Two-Flat combines new materi-  
als and Advanced Planning—Philadelphia "Row Houses"  
still sell with considerable success—Group Home Planning  
Cuts Costs and Increases Values.

"Characterful" Interiors Invite Admiration—Outdoor Liv-  
ing Room providing a quiet, restful corner for relaxation—  
Bedrooms, Living Rooms, Kitchens, Bathrooms, Entrances,  
Dinettes, Libraries, Basements, etc., that are out of the  
beaten track and cost but little, if any, more than the com-  
mon garden variety.



Two beautiful examples of Minwax finished floors and paneling.

## WOODWORK FINISHED WITH



## HELPS SELL HOMES, because . . .

1. Minwax beauty and durability on floors, paneling and trim offer *visible* evidence of a *quality* house.
2. Owners are satisfied. Floors finished with Minwax *never need rescrapping*—actually improve with just ordinary care, because Minwax *penetrates*, stains and waxes in one simple operation, and becomes permanently part of the wood itself. Moreover, worn places, should they occur, can be "patched" without lapping. It is often just such seemingly "little" quality points that close the sale of a house.
3. Minwax enables you to meet "price" with "quality" every time. Minwax is so simple to apply that no special knowledge is required and difficulties on the job are eliminated. There is a definite saving in time and labor.

## MINWAX Co., Inc.

Dept. AB4, 11 West 42nd St., New York

In Canada: { The Atlas Asbestos Co., Ltd., Montreal  
Herbert J. Loney, Vancouver, B. C.



### Send for FREE TEST KIT

Clip this coupon to your business letterhead, and we will send you a Minwax Test Kit containing liquid sample of Minwax, wood test panel, color card and complete information. Also check other Minwax products on which you would like information.

- Caulking Compounds  Foundation Dampproofing  
 Transparent Waterproofings

- Coatings for Stucco, Brick, Concrete  
 Finishes for Concrete Floors (basements, garages, sun porches)

AB4

## Letters Dept.

(Continued from page 122)

9:00 a.m. to 3:30 p.m. for others, labor would have to control the sun, rain, winds and all other elements to step up income. In the fall, and especially in the spring, heavy rains often reduce the week to three working days. I suggest that labor permits the members to work ten or eleven hours on bright sunny days to make up for time lost on rainy days. Why not permit its members to work 200 hours per month putting in time at any hour or any day except Sundays.

The quickest and surest way to obtain a higher wage is through the medium of a lower wage. Idleness at \$1.75 per hour will put less food on the table than work at \$1.00 per hour. Provided all other agencies co-operated and labor reduced to \$1.00 per hour, volume would quickly increase. In less than one year's time the salary of good mechanics would automatically rise to \$1.25 per hour. If the 200 hour month were in effect, deserving building mechanics could earn \$3,000 per year.

The 30 hour week is handicapping construction. Speed in building keeps costs down. Ten years ago it took ninety days to complete a home; today it takes six months. Today the owner has to pay ninety days' additional interest on his entire investment. Also, the costs of liability, fire and theft insurance, watchman service, temporary heat, taxes, etc., are double what they formerly were during the construction period by reason of the short working week.

We cannot continue indefinitely under the present set-up. Everyone realizes that the man making sixty cents per hour cannot buy and pay for a home built with labor at \$1.75 per hour. Productive labor can be furnished to the millions of unemployed only when construction prices are reduced to a point where the great majority of our citizens can afford to buy a home. Someone has to lead the way. I suggest organized labor do so.

Let labor call in the building material manufacturers, tell them that if they immediately slash material prices 40 per cent; notify the money men that if they cut interest rates to three per cent throughout the nation; let the politicians know that if they reduce taxes to a maximum one per cent property tax,—that organized labor will do its share by reducing wages to \$1.00 per hour and restore the 44-hour week.

Following the present trail of everyone blaming the other fellow can produce nothing other than a greater national debt, more unrest, and increased unemployment. No prosperity is lasting unless shared alike by all classes of people. The sorrowful plight of the present 11,000,000 unemployed will eventually spell the downfall of the above mentioned organized minorities unless they are intelligent enough immediately to make the sacrifices necessary to open private construction.

JOHN J. MANGAN, Real Estate.

## Building As She's Done by De Membersheep of De Builder Assosh.

June 1st, 1937

*Ketch de prospec Sunday noon—  
Sunday night de plan she's drew'n.*

*Monday stake an' dig de base  
Put de sewer an' block in place.*

*Tuesday jois' an' stud an' sheathe  
Roof she's set before we leave.*

*Wednesday plumb an' brick an' wire  
Fix a place to build de fire.*

*Thursday lath an' stick de plas'  
Build garage an' set de glass.*

*Friday trim an' make de floor  
Fix de light an' hang de door.*

*Saturday morning paint an' clean  
Saturday noon de cust' move een.*

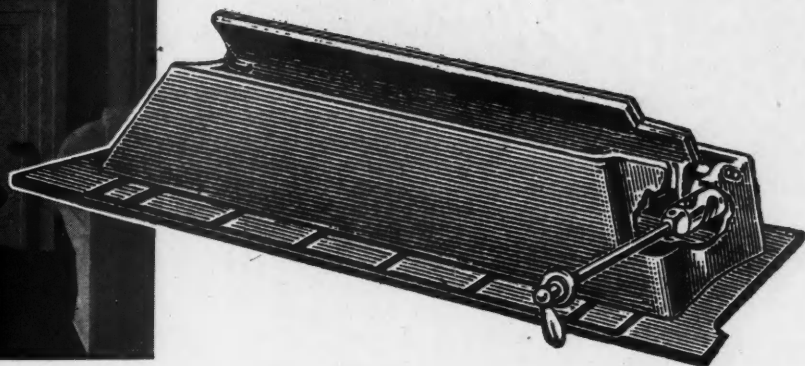
*Monday call the mortgage ko.  
And about June 1st, 1940, get de dough.*

—From: "Greater Detroit Home Builders Association 1938 Yearbook."





# PEERLESS DOME DAMPERS



## As Essential as the Front Door in any Air Conditioned Home

THE utmost efficiency of air conditioning units positively demands that the chimney flue be sealed when fireplace is not in use.

Peerless Dome Dampers accomplish this and, in addition, fulfill every other requirement of the ideal damper in a superior way—no back drafts—no heat losses—no smoke.

They are built of heavy stove plate cast iron and will give

a lifetime of satisfactory service. Three models to choose from—Rotary, Poker or Chain Control.

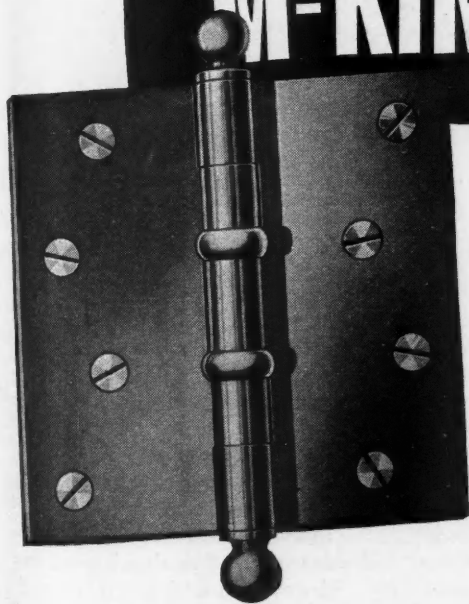
Write for illustrated literature and also ask about other Peerless products that make modern homes more livable—Fireplace Fixtures—Radiant gas Heaters—Gas Fired Circulators—Coal Doors—Garbage Receivers—Ash Pit Doors and Stokers.

**PEERLESS MANUFACTURING CORP.**

1400 W. Ormsby Ave.

Louisville, Ky.

# MCKINNEY *Oilite bearing* BUTT HINGES



## Cost No More Than Ball Bearing Hinges

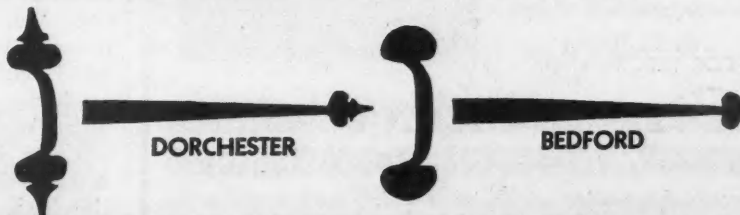
Builders everywhere are enthusiastic about McKinney Oilite Bearing Butts as applied to exterior doors. It's the one Butt Hinge that offers absolute silence, perfect alignment and long service—at no extra cost.

These modern hinges are the result of two years testing with "Oilite"—the self-lubricating metal that has been so successfully applied to automobiles, farm implements, washing machines, etc.

McKinney hinges are available in all sizes and styles for public buildings, churches, schools, and residences. Let us send you complete information.

**MCKINNEY MANUFACTURING COMPANY, PITTSBURGH, PENNA.**

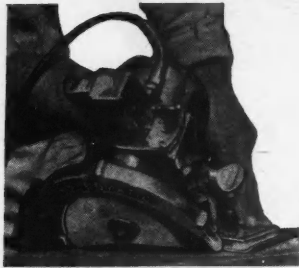
MCKINNEY OFFERS TWO NEW DESIGNS  
IN FORGED IRON—AMERICAN COLONIAL



DESIGNERS AND MANUFACTURERS OF GOOD HARDWARE FOR 72 YEARS

*Lower your costs  
— boost profits*

## WITH THESE THREE PORTER-CABLE TOOLS



**SPEEDMATIC SAW—**  
Speed up your work with one of these fast-cutting, accurate and dependable electric hand saws. Finger tip adjustment for depth and angle cuts. The only saw with guaranteed cutting speed. Easy one hand operation.

Works on wood, metal, stone, tile and composition. Built in 4 sizes to cut  $1\frac{7}{8}$ ",  $2\frac{11}{16}$ ",  $3\frac{1}{8}$ " and  $3\frac{5}{8}$ " material. Speedmatic saws are saving hundreds of contractors time and money in home building.

### PORTER-CABLE E-6 EDGER



Use this light, portable, time and money saving edger to sand hard-to-get-at corners, edges and stair treads. Cuts your working time in half and turns out a matched finish. Light, powerful, equipped with vacuum dust pick-

up system. Low priced yet dependable and guaranteed for years of faithful and efficient service.

### PORTER-CABLE CONTRACTORS SPECIAL FLOOR SANDER

Built for you men who want to do a first class job in a hurry. Dependable and efficient, designed to stand up under day-in and day-out service on new and old floors. Perfectly balanced drum, permanently lubricated for lifetime use. Easy drum removal. Efficient dust collecting vacuum system. Move quickly from job to job. Motor removable from chassis in 15 seconds without the use of tools. Compact gas motor available for the standard chassis.



WRITE TODAY  
FOR INFORMATION

*The* PORTER-CABLE  
MACHINE COMPANY

Porter-Cable Sanders are the most widely used in the world  
1721-4 N. SALINA ST. SYRACUSE, N.Y.

## Builders Say, "Buy or Build Now"

(Continued from page 51)

see, use and control for his own benefit. Its value as a place to live in and enjoy remains unchanged. In times of uncertainty a home is more than ever a sound investment.

5. *Building a home today is a hedge against rising prices or inflation.* As a protection against rising prices and, most of all, rising rents, which economists are unanimously predicting is inevitable in the next few years, a home built today is an excellent investment. The person living in a rented property is at the mercy of the landlord at a time of rising or inflated prices. The person who owns his own home, financed on a mortgage that never comes due because it is paid off over a long period of years, has everything in his favor.

6. *Material prices are likely to go higher.* It is a well-known fact that inventories and stocks on hand of building materials and products of all kinds are low. There has been no stocking up as there was previous to the last depression. As a result, any appreciable increase in building volume will create a demand for products that is bound to have a tendency towards higher prices. Early last winter materials prices declined and became stabilized at a satisfactory level in relation to general commodity prices.

7. *Land costs are low today and will probably go higher.* Present real estate prices are far below levels of former years, and the person who buys or builds a home today benefits by this condition.

8. *Overhead and profit items at minimum.* At the present time, contractors, subcontractors and all who contribute their skill and services to the erection of a home are working on a minimum basis of overhead and profit. There is a definite advantage in building now while this condition prevails, for it is not likely to continue when there is a more competitive demand for the skill and services of the building industry.

9. *Today's home is better planned.* Remarkable progress has been made in the design of residences to enable builders to offer better accommodations at less money. According to Arthur E. Allen, well-known residential architect who has designed more than 15,000 dwellings for New York builders, a saving of from 5 to 10 percent in the initial cost of the house can be accomplished by proper planning alone. "Floor plans no longer are accidents," Allen declares. "Rooms are arranged and the layout is planned with as much science and art as is given to modern motor-car design. The results in a finished home can be itemized definitely in savings on construction costs and increase in usable space, comfort and convenience." In addition to its improved plan, the home of today has 50 percent more electrical outlets; modern, step-saving kitchens; improved bathrooms; insulation; air conditioning; life-long products, such as copper piping, flashings and downspouts.

10. *Efficient construction methods enable builder to give more.* The builder of today operates more efficiently and transmits the savings to the homeowner. He organizes his work better, uses modern electrical and power equipment and takes full advantage of technological improvements in the field. More products are "prefabricated," that is, built in the factory and delivered to the job ready for quick and efficient installation. The parts of a house have been more highly standardized so that stock units of higher quality can be employed. The result is a better-built, better-equipped home at a lower cost. On the basis of built-in value today as compared with a decade ago, the 1938 home represents from 25 to 40 percent greater value.



Choose the rule with the Green Ends — the color that identifies all first quality Stanley Zig Zag Rules — and you'll get a rule that's first in accuracy, easy reading and long life!

LEFT OR RIGHT... UP OR DOWN...

## STANLEY GREEN END ZIG-ZAG RULES

NEW! Zig Zag Rule No. 266 has Vertical Figures and heavy  $\frac{1}{4}$ ",  $\frac{1}{2}$ " and inch graduations. It is readable in any position — up or down, right to left or left to right, in either hand without reversing or flopping the rule. Also available with numbers beginning on inside face of rule so markings always lie close to the work — No. 266F.

No. 106 White and No. 06 Yellow, the rules you've always carried, now have larger figures and a longer wearing finish.



Look for the Rule with the Green Ends when you want your money's worth in a rule. Send for Catalog No. 34 describing rules and the complete line of Stanley Tools.

**STANLEY** "The Tool Box of the World"

# STANLEY TOOLS

NEW BRITAIN, CONN.



This illustration is from a full-page Portland Cement Association advertisement which appeared in the Saturday Evening Post, February 26.

WITHIN the past three years, 40,000 families have decided that the best and most economical way to get a *structurally modern* home is to build with concrete. That's a big endorsement—big enough to make concrete the fastest-growing type of home construction.

Architects, builders and realtors have capitalized the beauty as well as the structural advantages of concrete. It has proved adaptable to every size and style home. You'll find these homes warm and dry in winter, cool in summer; free from such troubles as creaking floors, sagging walls, gaping baseboards, sticking windows; proof against fire, storm and termites.

Salable, livable, re-salable homes. In short, the answer to realtors and builders looking for an idea that will lift them out of the ordinary run of competition.

The cost? You will find that concrete costs little or no more than any good construction you have been using. Let us send helpful literature.

### PORTLAND CEMENT ASSOCIATION

Dept. A4-3, 33 West Grand Avenue, Chicago, Ill.

Yes, I am interested in the profit possibilities of featuring concrete home construction.

- Please send booklet, suitable for showing to prospects, entitled "Why People Like Concrete Homes."
- Want literature on construction details.

Name \_\_\_\_\_  
 Firm \_\_\_\_\_  
 Address \_\_\_\_\_  
 City \_\_\_\_\_ State \_\_\_\_\_

# To give walls PERMANENCE . . .



## BUILD BETTER WITH OHIO HYDRATE FINISHING LIME . . .



● Builders who think years ahead in planning, specify *lime plaster* . . . with Ohio Hydrate Finishing Lime! The excellent sound-deadening qualities of Ohio Lime are ideal for modern design of homes or big buildings wherever "noise-protection" is desired. The beauty of lime-plastered walls is low-cost and lasting! Ohio Lime

comes from the world's lime center, and is 99½% pure dolomite. . . It is highly plastic for easy spreading—preserves metal lath—and has important acoustic-improving qualities. Always dependable and guaranteed to meet A. S. T. M. and U. S. Government standards. See your building supply dealer. The Ohio Hydrate & Supply Company, Woodville, Ohio.

### BUILD BETTER WITH LIME In famous ZIG ZAG BAGS

Ohio White Finish—Hawk Spread  
White Finish—Ohio Ritewall  
Fibred Lime Plaster—Ohio San-  
lime Finish—Mastite Masonry  
Mortar—Ohio Masons Lime  
—Ohio Ground Lime.

## OHIO WHITE LIME FINISH

(Illustration) Residence of Dr. W. W. Walker, Syracuse, N. Y. Architect: M. E. Granger. Builder and Plasterer: Skeels Construction Co. Hawk Spread Finish Lime furnished by Cummins Supply Co.

## "More House" Theme Widely Used

(Continued from page 59)

dealers heard of it, and suggested it be expanded. This was done. The central committee that was appointed included representatives of dealer groups, financing interests, labor organizations, contractors, and builders. Financial support came from retail lumber dealers, sash and door manufacturers, department stores, paint and glass companies, public utilities, plumbing and heating companies, architects, contractors, and organized labor groups.

The Fred A. Hinrichsen Advertising Agency, Davenport, Iowa, was employed to prepare advertising and publicity material, to be sponsored by the newly formed Home Ownership Council of the Quad Cities. A series of newspaper advertisements is running in five newspapers covering four cities, featuring the Council's booklet, "The Truth About 1938 Building Values." Both newspaper advertisements and booklet have been made available for use in other communities.

"It has been very interesting to see how these booklets are used," stated Mr. Hinrichsen. "I have been assured by numerous individuals that they are quite effective. Some organizations have sent them to people with whom they have been in contact during the past twelve months, and who, because of widespread misconceptions regarding costs, had given up the idea of building. I have been told that prospects of this type have, in a number of instances, reversed their attitude, and will build this spring."

## Nichols Keeps Abreast of Better Building

(Continued from page 65)

paper, 14" tarred felt. First floor ceiling height is 8'0". Second floor ceiling height is 7'9". Basement ceiling height is 7'6".

**MILLWORK**—All interior woodwork B & Better W.P. thoroughly kiln dried. Main stairs, all cases and mantel mill built by experienced mill men. Interior doors, No. 1 W.P. 8 panel Colonial doors. Screens, 16 mesh galvanized iron. All windows rot-proof and upper and lower sash divided. All doors and windows weatherstripped.

**WORKMANSHIP**—All work is done in neat and sound manner by experienced men many of whom have been in the building business from 15 to 30 years.

**LINOLEUM**—Standard gauge Armstrong inlaid linoleum laid on 15 lb. felt in breakfast and kitchen and on drainboard. Linoleum is laid on sanded oak floors.

**PAINTING**—Enamel work is 3 coat work. Wall shingles have one spray coat and one brush coat. Roof shingles have one brush coat of roof stain.

**DECORATIONS AND LIGHT FIXTURES**—Selected for total harmonious effect.

**RECREATION ROOM**—13'0" x 22'0" with walls of knotty pine and asphalt tile on floor and gas fireplace.

**WIRING**—In accordance with both the local light company code and the National Electric Code and with the required number of outlets to make a "Red Seal" job. All wiring is BX cable except rigid conduit in basement. 60 ampere switch in basement.

**PLUMBING**—Fixtures are chrome leg lavatories, "A" grade toilets, double shell recessed tubs, double compartment sink, 30 gallon automatic water heater. Downspout lines to storm sewer in 4" standard cast iron pipe.

**HEATING**—Forced hot air heating system with gas fired furnace.



# ALLITH 50-50

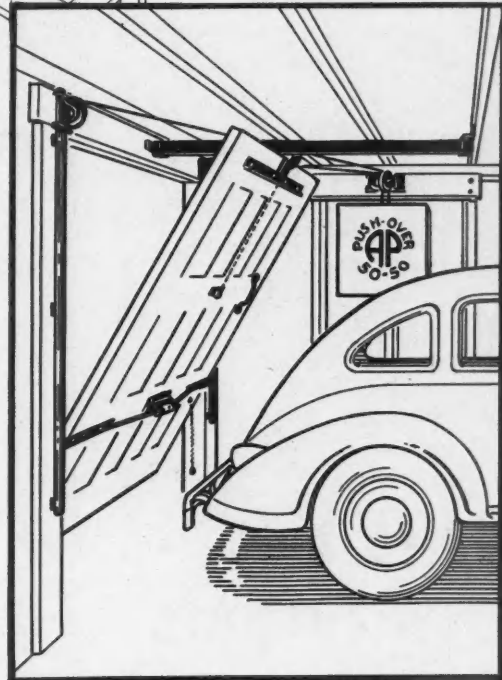


## PUSH-OVER DOOR HARDWARE When SPRING is in the Air . . .

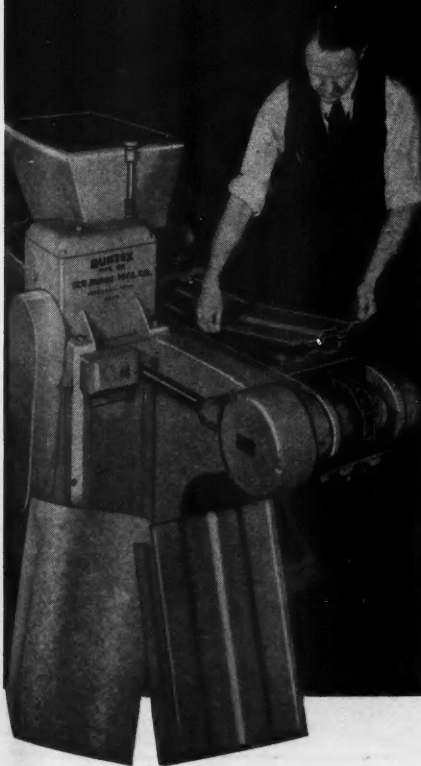
Now's the time when your customers and prospects tend to "loosen up." They are in a buying mood—ready to make improvements around their place or start new building. So now's the time when you can sell more "50-50" Push-Overs! The Allith "50-50" is so practical and simple to operate—it is easy to install on either old or new doors—it needs no maintenance (there is nothing to get out of order)—and it is priced low, yet has Allith quality in every detail! Get your share of this profitable business this Spring.

Send for catalog on Allith Hardware for doors of every type.

**ALLITH-PROUTY, INC., Danville, Illinois**



# PROVEN EARNING POWER



When DUNBRIK Manufacturers show sales of three million brick per year with production costs as low as \$5.00 per thousand—others with selling price of 100% over cost—proves the great earning power of this line-production brick machine.

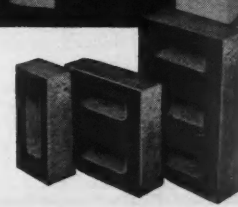
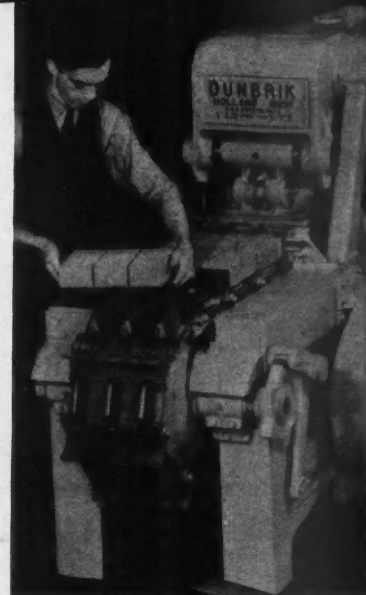
These enviable records are the result of producing a superior product,—lighter weight, greater strength, lower absorption, absolute accuracy, and with true corners. In addition, multiple sizes of standard brick (DUNSTONE) can be produced that permit hollow, insulated wall construction at cost level of frame.

Write today for new book "4 Keys to Success" and learn about this wonderful machine, permitting large production with only one or two men and costing but a fraction of what would be required for other processes of equal capacity.

### DUNTEX ROOF TILE MACHINE

With this machine you can dominate the vast roofing material market with a product unequalled in value, permanence, beauty and fire safety. Your manufacturing costs are low, investment moderate, and selling prices offer attractive profit. Send today for "DUNTEX Survey."

**W. E. DUNN MFG. CO.**  
450 W. 24th St. Holland, Michigan





U.S. Patent Nos. 1743454 1830402 (Listed in Sweet's Catalog)

## THE ONE BIG IMPROVEMENT IN WINDOW CONSTRUCTION

(Pre-Fabricated—Weatherstripped—No Weight Pockets)

In line with the greater values offered in homes today at no higher cost, the Non-Stick Window is an outstanding contribution. It is a quality window, adaptable to all priced homes.

**The First Completely Assembled Double-Hung Wood Window; Sold as a Unit Since 1929.**

The Non-Stick Window is provided with a 2x4 FRAME, the jamb being built in as a cripple stud. No air space behind jamb. ONE-PIECE ZINC SASH GUIDES cover the face of the jamb, forming tongue-and-groove weatherstripping and channels for the sash, overcoming air infiltration. No paint stick, no binding. Equipped with rust-proof spring balances, guaranteed for the life of the building. The Non-Stick Window, furnished as a COMPLETE UNIT, eliminates contractors' gambling on the cost of the completed window. Once installed, it requires no further attention.

**Be sure to Include Non-Stick Windows in Your Specifications Before Obtaining F.H.A. Approval.**

See the Non-Stick Window at Your Dealer or Write Us.

**N. S. W. COMPANY, 2137 Gratiot, Detroit, Mich.**

### CLIP COUPON - MAIL TODAY

Gentlemen: AB 4-8  
 Please send free literature  
 Name \_\_\_\_\_  
 Street Address \_\_\_\_\_  
 City \_\_\_\_\_ State \_\_\_\_\_



## You're Paying For This NOW!

**Why Don't You GET It?**  
 With labor and materials at their present levels you MUST operate efficiently to make money. You must get sixty minutes worth of production for every hour's labor you buy. If your men—on the job or in the shop—are still sawing, planing and fitting by hand you are paying right now for modern cost-cutting machines without getting them!  
 Learn how other progressive contractors all over the country are cutting their erection and millwork costs with Delta low-cost, high-production machines. Write today for complete details and prices.

**Delta Manufacturing Company**  
 602 E. Vienna Ave., Milwaukee, Wis.

**MANY FINE PEOPLE HAVE PRAISED**

the world of ease and comfort—the genial atmosphere of the world's largest hotel. When you come to The Stevens, you'll find their stories true. This good will is the result of the constant effort of our entire staff to make the most discerning traveler feel at home.

OTTO E. EITEL, *Managing Director*

**STEVENS**  
*Commerce Grand Hotel*  
**CHICAGO**

Room, with Bath, from \$3



WITH



You build better without extra handling cost or effort

Handle a sample, or a truck load, of Wolmanized Lumber\* all you want. It's the treated material which won't hurt your hands, or increase handling cost. It's clean, odorless, paintable. And it gives reliable protection against decay and termites.

Wolmanized Lumber is the answer to modern demands for enduring construction which every carpenter understands. It makes lumber substitutes unnecessary. Applied strategically, only at danger points such as sills, joists, subfloors, it adds less than 2% to the total cost of a house. Banks and other financing agencies recognize the value.

Fourteen plants are well located to supply lumber yards everywhere. Inquire of your lumber dealer, or write for information, to AMERICAN LUMBER & TREATING CO. 1406 Old Colony Building, Chicago.

\*Registered Trade-mark

**WOLMANIZED LUMBER**

ENDURING • CLEAN • ECONOMICAL

**450  
Cubic Feet  
Capacity**



**The Ilgette Kitchen Ventilator**  
*... Is Powered by the*  
**ILG SELF-COOLED MOTOR**

When it comes to comparing prices or measuring the efficiency of any electric kitchen ventilator — remember, the motor is the true basis of value and performance. That's why it pays to buy and specify the Ilgette — powered by the Ilg self-cooled motor, capacity 450 C. F. M. Power consumption 40 watts — more air, less power — ever so quiet — easy to install — guaranteed as a complete unit. Everything you should know and want to know about Ilg Kitchen Ventilators is in the new Ilg data file — send for it. Sign and mail coupon.

**ILG ELECTRIC VENTILATING CO.**  
2852 NORTH CRAWFORD AVENUE, CHICAGO, ILL.  
*Offices in 43 Principal Cities*



**VENTILATION**  
*and Air Conditioning*

Without obligation, send Ilg Kitchen Ventilator data file.

Name \_\_\_\_\_

Address \_\_\_\_\_

## Don't plan homes with DEAD END CELLARS



Specify  
**BILCO**  
COPPER STEEL  
CELLAR  
BULKHEADS

**T**HINK how easy to move large furniture in or out of a basement with an exit like this. A really convenient, safe cellar has a Bilco all-metal bulkhead. Shipped knocked-down complete for quick installation, to replace old wood hatchway, or on new homes designed for a modern, outside basement entrance. Three standard sizes and to order. Last virtually forever. Burglar-proof. Moderate in price. See Sweet's or write for complete data. If dealer can't supply order direct.

Agents: Write for territory.

**BILCO MFG. CO.** 165 Hallock Ave. NEW HAVEN, CONN.  
Sidewalk Doors - Cellar Bulkheads



New  
**FLOORING  
IDEA**

### BRINGS BUILDERS GREATER PROFITS

from  
**HOMES,  
OFFICES,  
HOSPITALS,  
CHURCHES,  
SCHOOLS,  
PUBLIC  
BUILDINGS**

New markets! Extra profits! Easier, faster installations! That's what hundreds of building contractors are enjoying with Wright Rubber Tile. An exclusive process puts this high-grade flooring on price level of good grade linoleum. Owners like its rare beauty, comfort, durability and easy cleaning qualities. One job sells another. Write for prices and complete details.

**WRIGHT RUBBER PRODUCTS CO.**  
1603 Layard Ave. Racine, Wis.

**WRIGHT RUBBER TILE**



### Chosen for Racine's "HOUSE-OF-THE YEAR"

From Podunk to Pittsburgh, promoters and builders of model homes aim to install the last word in built-in conveniences. And where garages aren't slighted you'll find "Over-the-Top" Door Equipment most often the choice. At Racine, Wisconsin, thousands of visitors who jammed the "House-of-the-Year" sponsored by the Journal-Times newspaper there, were amazed at the simplicity, convenience and low cost of this revolutionary equipment.

"Over-the-Top" Door Equipment . . . the modern method of operating doors over-head . . . is what the majority of home owners and builders want. A demonstration and an installation estimate close a sale. Don't pass up the profits that can be yours with "Over-the-Top" Door Equipment. Write today for facts . . . no obligation.

**FRANTZ MANUFACTURING CO.**  
STERLING, ILLINOIS

**OVER-THE-TOP<sup>®</sup>**  
**DOOR EQUIPMENT**

## MAJESTIC

**CIRCULATOR  
FIREPLACE**

with

*Radiant  
BLADES*



What everyone wants today in fireplace construction. More efficiency and economy! It radiates and circulates heat like a modern furnace, and can be adapted to a fireplace of any exterior design. Heat generating surface is increased 91% by the ingenious RADIANT BLADE design. It cannot smoke. It saves fuel. It saves labor and materials in constructing a correct fireplace. Prominent contractors report that the average initial cost of installing a Majestic Circulator is only \$17 more than the old fashioned fireplace, a cost that is quickly offset by operating economies. Write today for **FREE** scaled model and details.

**The MAJESTIC Co.**  
HUNTINGTON,  
INDIANA



**BUILDING NECESSITIES**



## HOW MUCH IS HAND LABOR COSTING YOU?

- ✓ Other builders are making from \$125 to \$200 more per house, thru the use of the Wallace No. 1 Radial Saw.
- ✓ This efficient, fast-cutting machine handles not only the cutting of framing stock, but the making and installing of cabinet work as well.
- ✓ The progressive builder uses the No. 1 Radial Saw for:—

**X-CUTTING  
MITERING  
RIPPING  
SHAPING  
ROUTING  
DADOING  
TENONING**

A letter today will bring you full acts about the Wallace No. 1 Radial Saw.



**J. D. WALLACE & COMPANY**  
136 S. California Ave.  
Chicago, Illinois.



## KEEP THESE FELLOWS OUT with MASTER METAL WEATHERSTRIPS!

The necessity for good weatherstripping in homes, old and new, is now generally conceded. Reputable weatherstrip contractors everywhere are featuring MASTER Equipments because of their permanent efficiency. Although guaranteed to endure for the life of the building, their cost is no more than others.

Dealers: Many territories still available for reliable agents. Write for agency plan.

WRITE TODAY FOR ILLUSTRATED CATALOG & PRICE LIST

**MASTER METAL STRIP SERVICE**  
1720 NORTH KILBOURN AVE., CHICAGO, ILL.

## HOW TO LAY and FINISH 'PERFECTION' BRAND OAK FLOORS

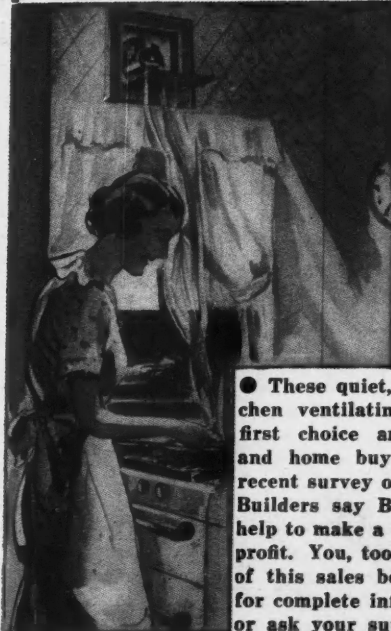
THIS BOOKLET TELLS HOW TO HAVE BETTER OAK FLOORS FOR THE MONEY. Write for YOUR FREE COPY TODAY



**ARKANSAS OAK FLOORING COMPANY**  
PINE BLUFF, ARKANSAS

## Survey Shows "Buffalo" KITCHEN VENTILATING FANS

FANS in over 50% of NEW HOMES



● These quiet, easy-to-operate kitchen ventilating fans are proving first choice among both builders and home buyers, according to a recent survey of newly built homes. Builders say Buffalo Kitchen Fans help to make a sale, and that means profit. You, too, can make good use of this sales booster. Write today for complete information and prices, or ask your supply dealer.

**BUFFALO FORGE COMPANY**  
145 MORTIMER ST., BUFFALO, N. Y.

Branch Engineering Offices in Principal Cities. In Canada: Canadian Blower & Forge Co., Ltd., Kitchener, Ont.



**—GUARANTEED WATERPROOF**

• Resnprest is the perfect all purpose building board. It is guaranteed weather-proof and water-proof at any temperature, freezing or boiling. It is impervious to termites, and insects; resists rot, mold and fungi; and is stronger than steel by weight.

Specify and use Resnprest for cleaner, faster, easier, more permanent and more economical jobs. Available from 1/8" to 1/2" thick, in sizes up to 72" x 144" sanded and up to 96" x 144" unsanded. Ask your dealer for Resnprest or write

**M and M Woodworking Company**  
Kenton Station Portland, Oregon

**KWIK-MIX**

**MODERN 3 1/2-S MASCOT**  
LESS WEIGHT — END DISCHARGE  
COMPACT — AIR-COOLED ENGINE  
FASTER WHEEL BARROW LOADING  
ANTI-FRICTION BEARINGS

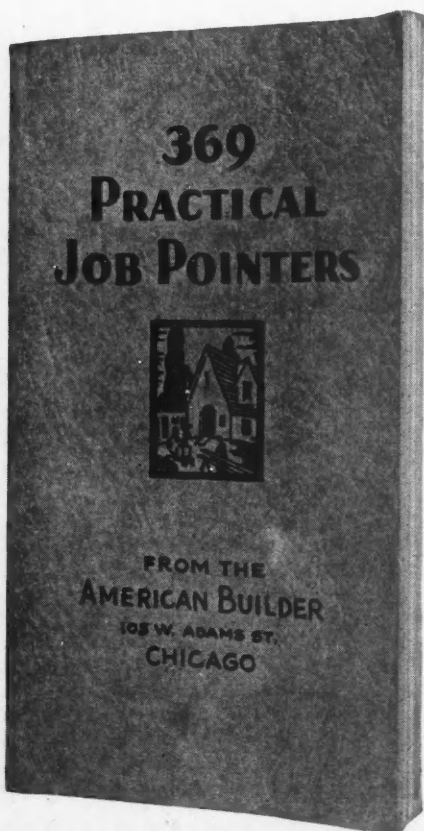
**N  
E  
W  
!**



**N  
E  
W  
!**

**WRITE FOR BULLETIN TODAY!**

**KWIK-MIX CONCRETE MIXER CO.**  
PORT WASHINGTON WISCONSIN



**369 Practical Job Pointers**

This collection of "Practical Job Pointers" contains some of the best of the kinks, tricks and ideas for short cuts published in the Job Pointer Department of American Builder and Building Age. Architects, contractors, material dealers, carpenters, job superintendents, shop foremen, cabinet makers and other men in the building industry have contributed these practical ideas out of their own experience.

Every pointer is clearly illustrated by a clear working drawing or photograph. Some pointers show alternate methods. An index facilitates quick reference to a particular problem. The book is roughly divided into three sections:

1. Ingenious methods or practical pointers on how to do it.
2. Clever tools, devices and kinks from experience.
3. Details of construction and recommended ideas.

The book is pocket size and can be slipped into the pocket and carried on the job.

192 pages, 275 illustrations, 4 1/2 x 8 1/2, paper, \$.75.

**BOOK SERVICE DEPARTMENT**

**American Builder and Building Age**  
**30 CHURCH STREET NEW YORK, N. Y.**



# FREE Demonstration Outfit

## Edwards Twin (2 in 1)

### METAL SHINGLES

*Awaits Your Address*

Send your address. By return mail we will send you, prepaid and without cost or obligation to you, a set of Edwards Twin (2 in 1) Metal Shingles with descriptive folders and prices. You will see at a glance at least 8 features of superiority that no competitive roofing material can touch. Your customers, too, will prefer TWINS because they have every desirable quality and none of the weaknesses of wood and composition shingles.

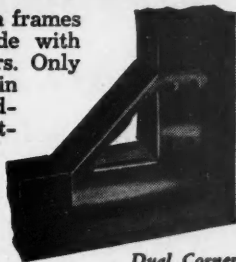
*Send your address today. Ask for Twin Shingle Demonstration Outfit and Roofing Catalog 92.*

**THE EDWARDS MANUFACTURING CO.**  
 542-562 Eggleston Avenue Cincinnati, Ohio

# MICKLIN METAL CORNERS

## REINFORCED SAGPROOF CONSTRUCTION

Reinforced sagproof window screen frames and screen doors are easily made with self-squaring Micklin Metal Corners. Only a hammer and saw needed. Micklin Metal Corners are made of lead-coated steel, which is rust resisting and takes paint without priming. The position of the nails is indicated and the nails are driven through the metal. This countersinks the nails flush with the metal. The nails supplied will never loosen or split the wood.



Dual Corner

### MICKLIN DUAL CORNERS

Reinforce both sides of the wood. The diagonal channel base permanently prevents sagging.

### MICKLIN SINGLE CORNERS

Provide a quick and easy repair for loose, sagging frames. Applied to the back of the frame without removing wire or other facing. Order a supply at once—to save labor and lumber on new construction and remodeling jobs.



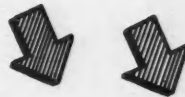
Single Corner

Complete New 1938 Catalog just off the press. Write for free copy today.

Manufactured and sold exclusively by

**W. J. DENNIS & CO.**  
 2110-20 WEST LAKE ST. CHICAGO

Look for the  
 COLORED SPOTS



● Samson Spot Sash Cord can be instantly identified by the colored spots, our trade-mark. Its installation means at least 25 years of service without replacement. Spot Cord comes in one quality — the best we can make. In cost per year of service, it is the least expensive material for hanging double-hung windows, and it is noiseless.

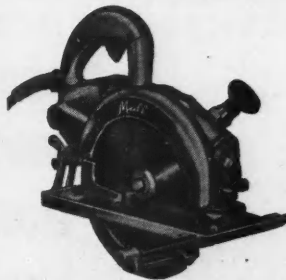


## SAMSON SPOT SASH CORD

Write for Specification Data and Samples  
**SAMSON CORDAGE WORKS**  
 89 BROAD ST. BOSTON, MASS.

## Regardless of Claims

### It's Performance That Counts!



The MALL Model IA Hand-saw. A lightweight, accurate, heavy duty tool that incorporates a number of notable features. Capacity 2 3/8".

Let a

*Mall*  
 TRADE MARK

portable electric handsaw tell its own story on your construction job. Ask for a demonstration—you be the judge!

MALL electric handsaws are earning hundreds of dollars for contractors and builders everywhere. You owe it to yourself to investigate today to learn what these efficient, cost-cutting tools can do for you.

Mail the coupon or write on your own letterhead for complete details.

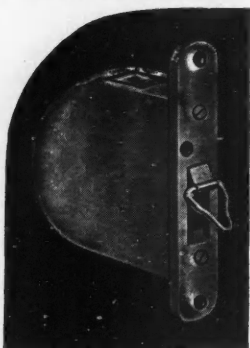
**MALL TOOL COMPANY**  
 Successors to  
**WAPPAT INCORPORATED**  
 7737 South Chicago Ave.  
 Chicago, Ill. (4)

Please send complete data on the Model IA and other MALL electric saws, door mortisers, and planers.

NAME .....  
 ADDRESS .....  
 CITY ..... STATE .....

# CALDWELL

(TYPE SA)



## SPRING BALANCES

*Sell Faster  
Last Longer*

More economical than box frames, cords and weights.

One compact case covers the range of residential and apartment house sash (4 to 23 lbs.)

The mortise is machined by any standard 1/8" pulley mortising bit.

Tapes are cold rolled steel, stronger and practically kink proof.

New, handsome and durable metallic lacquer finish. Priced for all types of construction.

Write for frame details and prices.

CALDWELL MANUFACTURING CO.

78 Industrial St.

Rochester, N.Y.

## NOTE THE COLORS AND QUALITY OF THIS BEAUTIFUL BOARDTILE



Eighteen standard colors, with black and white, are shown accurately in the true shades furnished in

### GIBBS BOARDTILE

Craftsmen will find this the most artistic and permanent for modern work in business buildings, offices or homes. Easily handled and installed by any good carpenter. Furnished in economical dimensions, with Baseboards, Moldings and other accessories. Proof against moisture, grease and insects.

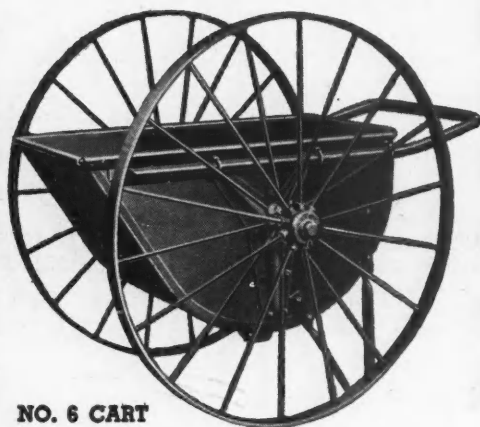
We will help you plan or estimate any job, great or small.

Write for this new chart of true colors. Mailed upon your request.

**GIBBS BOARDTILE CORPORATION**  
624 N. Aberdeen Street Chicago

# Sterling CONCRETE CARTS

PLAIN OR ROLLER BEARINGS



NO. 6 CART

### THIS IS THE STRONGEST CART MADE

Tray is 12 Gauge — 6 Cubic Feet Capacity. Wheels 42 Inches Diameter. Flat or Oval Tires, with Plain or Roller Bearings. Trunnion Axles.

EASILY WHEELED • EASILY DUMPED

**STERLING WHEELBARROW CO.**  
MILWAUKEE, WISCONSIN

## The Building Cost Calculator and Estimator's Handbook

By J. R. Smith, Architect

A simple, rapid and accurate method of estimating construction costs by the use of tables giving the cost of standard units of construction when figured at varying labor and material costs. Practical for the small contractor. Gives at a glance the cost of materials and labor based on local prices. The units of measurement used are based upon the decimal system. Surface areas are measured in squares of 100 square feet. When areas are once determined it is unnecessary to refigure for different materials entering into the same unit of measurement.

217 pages, tables, 8 1/2 x 11, Fabrikoid, \$10.00.

*Satisfaction Guaranteed or Money Refunded*

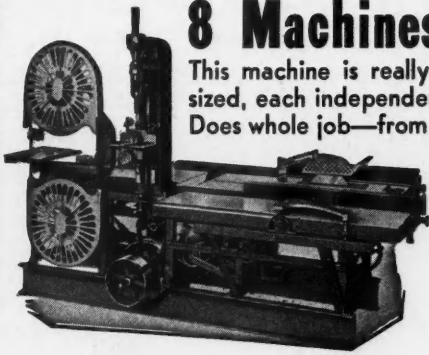
Book Service Department

**American Builder and Building Age**  
30 Church Street New York, N. Y.



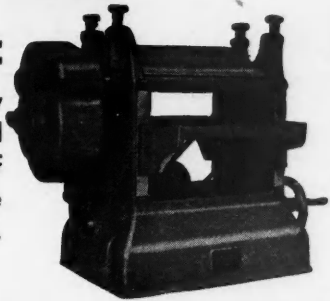
## 8 Machines Here!

This machine is really 8—each full-sized, each independently operated. Does whole job—from start to finish.



MODEL "A"  
PLANING MILL  
SPECIAL

Rip and cross-cut saw, 22" band saw, 12" jointer, tenoner, hollow chisel, mortiser and borer, swing cut off saw, reversible spindle shaper and sand disc.



### 12" BENCH PLANER

Planes material up to 12" wide x 4" thick. Maximum cut 1/8". Takes pieces as short as 6" and as thin as 1/16". Bearings highgrade New Departure ball bearings. Chip breaker and pressure bar completely guard the head and feed rolls. Power: 1/2 to 2 H.P. Weight 300 lbs.



Good Woodworking Machines Since 1887

THE PARKS WOODWORKING MACHINE CO.  
Dept. BL-4 1524 Knowlton Street Cincinnati, Ohio



USED ON  
ALCOVE RECESS  
TUBS



The  
**LUCKE**  
Leak Proof  
Tub Hanger  
is Going Up  
in Demand

Contractors and Architects are specifying and installing the Lucke Tub Hanger in both remodeling and new work because it puts an effective and lasting stop to water seepage between the walls and prevents tub from settling or pulling away from tile or plaster.

The more you use Lucke Tub Hangers the better you will like them. Your customers will like them too, because they eliminate any further repair expense.

PATENTED AND MANUFACTURED BY

**WILLIAM B. LUCKE**

INC.

WILMETTE,

ILLINOIS

## Install Tile-Tex



for  
**LASTING  
BEAUTY AT  
LOW COST**

Flexible  
**WALL TILE**

Tile-Tex Decorative Wall Tile is easily applied in old or new buildings. Made in a wide range of colors and gives a permanent wall of lasting beauty at low cost. Ideal for Bathrooms, Kitchens, Stores, Barber Shops, Beauty Shops, Public Buildings, Restaurants, Bars and Lobbies.

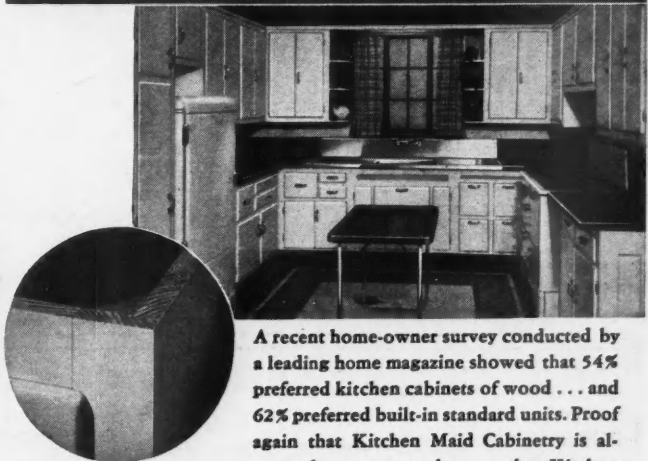
Tile-Tex is a unit-laid wall tile that will not craze, crack, warp or mar. Can be applied right over plaster walls or wall board.

Write us today stating whether you are interested in a dealer proposition or if you want information for prospective home builders. Free literature will be sent promptly.

**THE TILE-TEX COMPANY**  
1229 McKinley Avenue Chicago Heights, Illinois

Decorative WALL TILE  
**TILE-TEX**  
Resilient FLOOR TILE

## HOME OWNERS PREFER CABINETRY OF WOOD



Top view of BASE CABINET shows sturdy construction. Note accurate mortise and tenon joints... also the heavy corner block.

A recent home-owner survey conducted by a leading home magazine showed that 54% preferred kitchen cabinets of wood... and 62% preferred built-in standard units. Proof again that Kitchen Maid Cabinetry is always the most popular... that Kitchen Maid Kitchens meet modern demands in the homes you plan or build. Write for beautiful new catalog and details.

The Kitchen Maid Corp., 804 Snowden Street, Andrews, Indiana.  
Send new catalog and details on standard unit Kitchen Cabinetry.

Name \_\_\_\_\_

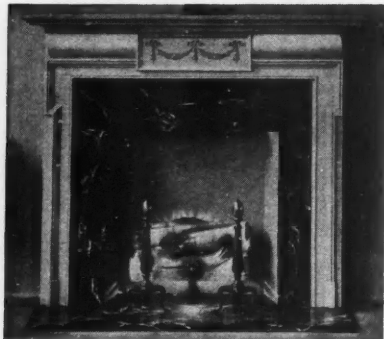
Address \_\_\_\_\_

Architect  
 Builder

Dealer  
 Owner

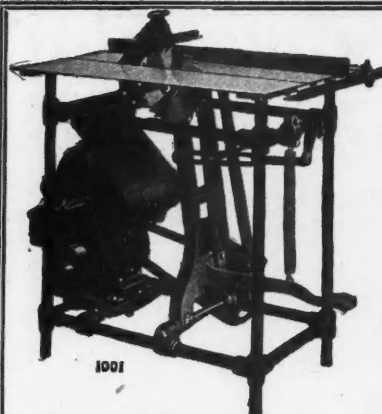


**THESE PERIOD WOOD MANTELS ARE NOT EXPENSIVE . . . . .**



Illustrated is one of fifty wood mantels of genuine period design shown in our catalog. All of our mantels are made by master craftsmen, according to the standards of the finest cabinet furniture building, from selected, thoroughly seasoned woods, screwed at the joints and sanded, ready for decoration. Catalog will be mailed to Building Supply Houses and Building Contractors. Write for literature.

**THE BRECHER COMPANY, INC.**  
441 W. Jefferson St.,  
LOUISVILLE, KY.



**This High Production PORTABLE TREADLE SAW**

**IS A REAL TIME AND MONEY SAVER.**

Write for complete new catalogue of our woodworking and contractor's machinery.

**AMERICAN SAW MILL MACHINERY CO.**  
60 Main St., Hackensack, N. J.

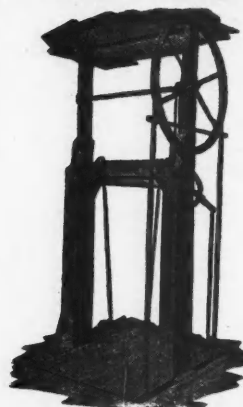
**METAL WEATHER STRIPS**

**ACCURATE**

**TOMORROW MAY BE TOO LATE!**

Good times or bad, there's always a demand for metal weather strip. Residences and commercial buildings must be protected against weather. Accurate offers you an unusual opportunity to make money in your locality if you act promptly. Tomorrow may be too late. Write for full details.

**FREE FOLDER ACCURATE CATALOG IN SWEETS**  
**METAL WEATHER STRIP CO.**  
218 East 26th Street, New York



**KIMBALL HAND POWER ELEVATORS**

A complete line of efficient Hand Power and Electric Elevators built to suit any requirement. Fitted for rapid installation in your building. These straight-line-drive machines are little giants of lifting power and are surprisingly nominal in costs.

**FREE Engineering Data**

Give us your problems and let our engineers help you. Full descriptive literature on request.

**KIMBALL BROS. CO.**

915-989 Ninth Street Council Bluffs, Iowa

**FOR GREATER SPEED • SAFETY • ECONOMY !**

**"TROUBLE SAVER" Nail Attached BRACKETS**

Right from the start this season—make more profit on your jobs by **SAVING MONEY** on scaffolding! **TROUBLE SAVER** durable steel Nail Attached Brackets cost just a fraction of what you spend on lumber for staging—they are easy to put up, are absolutely safe—and can be used for years on any and every job!

**A Complete Line**

These fool-proof, wear-proof **TROUBLE SAVERS** are available in Studding and Nail Attached Brackets, Adjustable Trestles, Ladder Jacks, Wood Shingles, and Single Pole Scaffolds—all of them time and money savers!

**The STEEL SCAFFOLDING CO., Inc.**  
402 Missouri St. — Evansville, Ind.



**BOOKS ABOUT BUILDING**

Authoritative information about the designing, construction and financing of buildings can be found in up-to-date books. We will be glad to recommend suitable books on any subject you are interested in.

Book Service Department

**AMERICAN BUILDER AND BUILDING AGE**

30 Church Street

New York, N. Y.

**DRILL HOLES IN CONCRETE**

with the **WODACK "DO-ALL" ELECTRIC HAMMER**



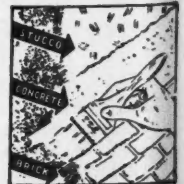
A combination hammer and drill. Two tools for the price of one. Don't turn down jobs involving concrete drilling. A "Do-All" soon pays for itself and earns money for you. Drills concrete up to 1 1/2" — metal 3/4". Also chips, chisels and vibrates. Runs from lamp socket AC or DC. Shipped on approval. Write for Bulletin and prices.

**Wodack Electric Tool Corp.,** 4630 West Huron Street, Chicago, Illinois, U.S.A.

**MASON-SEAL**

**WATER-PROOFS EXTERIOR MASONRY**

**BRICK • STUCCO • CONCRETE**



Mason-Seal fills the long felt need for a plastic, weather-proof, exterior wall compound. Provides a protective permanent coating over brick, stucco, or concrete, covers cracks up to 1/16" eliminating expensive repairs to cracked or porous walls that admit dampness. Applied with a brush but is not a paint. Coating is 15 times as thick as ordinary paint. In 13 colors.

**CALBAR** ★  
**PAINT & VARNISH CO.**

Manufacturers of Technical Products  
2612-26 N. Martha Street  
Philadelphia, Pa.





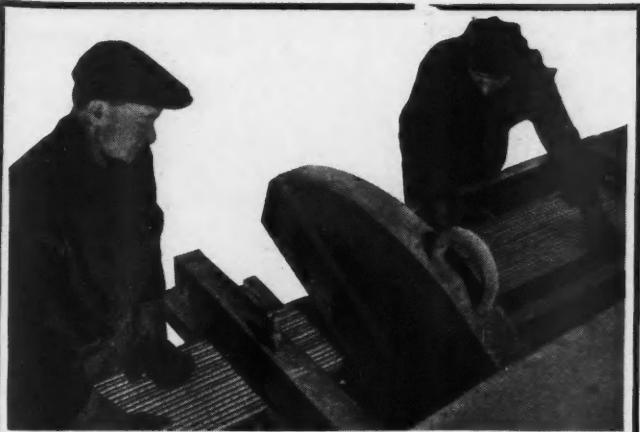
**Now Offers Big Earnings**

This new machine and-process completely solves the problem of permanently surfacing new or resurfacing old masonry buildings, walls, etc. It fuses a waterproofed plastic mixture on any masonry. It fills all cracks and can be applied in any thickness desired and in 30 colors and shades. Fully proven by over twelve years actual use under all conditions and every climate.

**LARGE WAITING MARKET**

Owners everywhere want to enhance present values and make their buildings more attractive and livable. The better builders are striving for greater permanence, beauty and salability in their new construction. With Colorcrete Stucco Spraying, you can supply this waiting market and can offer permanent, colorful surfacing at amazingly low cost. Operators report costs of 2c and up per sq. ft. and sell up to 7c. Some have paid for their equipment from first few jobs. Machine capacity up to 600 sq. ft. per hour. Get the facts. The new Colorcrete Books tell the whole story. Write today. It may mean business independence for you.

**COLORCRETE INDUSTRIES, Inc.**  
505 Ottawa Ave. Holland, Mich.



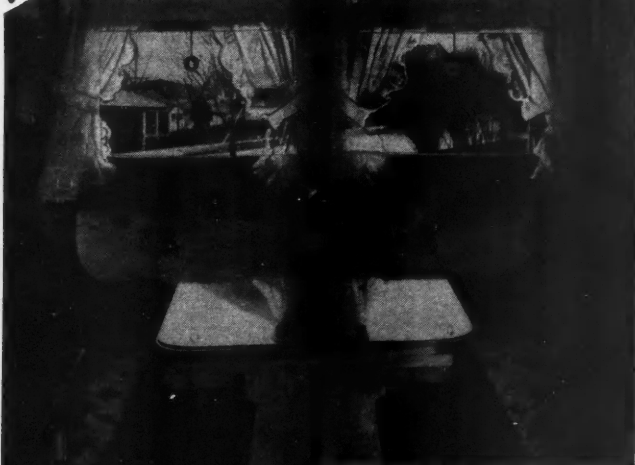
**CONCRETE REINFORCING AND OTHER STEEL BUILDING PRODUCTS**

Everything the contractor needs, from Reinforcing Bars to Stainless Steel—Foundation Bolts to Structural, is carried in conveniently located Ryerson stocks. Experienced crews—complete equipment and special dispatching methods assure accurate cutting or forming to specifications and delivery according to schedules. When you need steel, order direct from Ryerson. No order is too small for personal attention or too large for Immediate Shipment.

Joseph T. Ryerson & Son, Inc., Plants at: Chicago, Milwaukee, St. Louis, Cincinnati, Detroit, Cleveland, Buffalo, Boston, Philadelphia, Jersey City.



*Glass for the Breakfast Room*



SPECIFY—



**FOURCO GLASS CO.**  
CLARKSBURG, W. VA.  
Branch Sales Offices:  
NEW YORK • CHICAGO • FT. SMITH, ARK.

EASY ON THE EYES



**RELIABLE**  
SCAFFOLD BRACKETS  
*are saving MONEY*  
*for thousands of*  
*builders . . .*

Besides being safer, stronger, and more dependable than wooden scaffolding, Reliable Scaffold Brackets cost less, are easier to erect and remove, and less bulky to handle. Savings are obvious. The brackets pay for themselves in a short time. Can be used on wood or stucco.

Write for catalog. Let us prove that they will save time and money for you.

**RELIABLE JACK CO., 1401 W. Second St., DAYTON, O.**

**RELIABLE**  
SCAFFOLDING BRACKETS

Lower Your Costs with a

# "POWER KING" SAW



Safe—Compact—Easy to operate—Sturdy Construction—Powerful motor—Full Ball Bearing—Automatic Telescoping Guards—Adjustable for Bevel Cutting

MADE IN 6 SIZES 6" TO 11"

Write for full information

## POWER KING TOOL CORP.

DEPT. AB WARSAW, INDIANA

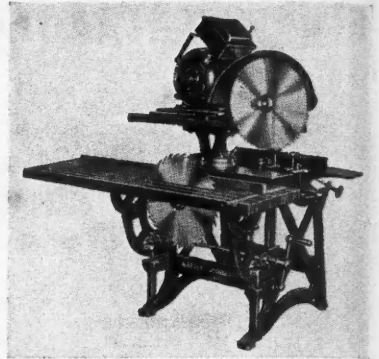
# The MASTER

Dependable  
Safe

The Old Reliable, constantly improved. Never equalled. Investigate The Master's sturdy construction.

### 12 Machines in ONE

Will Joint, Rip, Cross Cut, Bevel and many other operations. Gasoline or Motor Drive.



**THE MASTER WOODWORKER MFG. CO.**  
Congress and Brush Sts. Detroit, Michigan

# INSTALL IRON RAILING



BEAUTIFUL  
PERMANENT

For All Interior  
and Exterior Use

We manufacture iron fence, gates, iron and wire window guards, chain link wire fence, etc. Send us measurements showing your requirements—We will forward suitable illustrations—And quote you prices.

**CINCINNATI IRON FENCE CO., INC.**  
3411 SPRING GROVE AVE. CINCINNATI, OHIO

# How To Increase Your Sanding Profits with the New REID-WAY System

YOUR prestige as a leading floor man . . . and your profits . . . will increase when you use the new Reid-Way System for floor finishing. You can put a perfect piano finish on any floor and finish every inch of the floor with the grain with no expensive, tedious hand work. Not one cent is added to your labor cost because the new Reid-Way Oscillator substitutes the final finish cut with your drum sander. It is what you have been looking for. The Reid-Way System is backed by years of experience in the sanding field. Write today for free details on Reid-Way's complete floor finishing system.



The new Reid-Way Oscillator is designed for all rubbing operations on any kind of floor. Order today.

**The REID-WAY Corporation**  
2527 First Ave., E. Cedar Rapids, Iowa

... THIS SEASON

# MAKE THAT EXTRA PROFIT

## GET YOUR SHARE of the WEATHERSTRIP BUSINESS

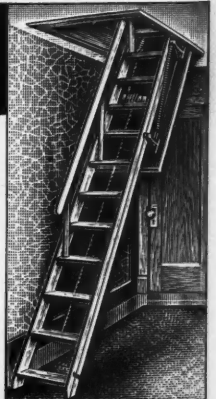
... with ALLMETAL

New building and remodeling jobs are creating big demands—the time is right for quick action. Team up with easy-to-install, always satisfactory, **ALLMETAL WEATHERSTRIP**. Write now for price list and free display charts. Over 20 years satisfactory service



# QUALITYBILT DISAPPEARING STAIRWAY

Here is the modern way to get more for your building dollar. Eliminate waste attic space by installing this perfectly balanced disappearing stairway. It is strong, rigid and non-folding, easily installed in new or old buildings. Rests on attic floor when not in use; does not take up valuable space in room below. Adds many times its cost to the value of the home by providing extra storage or livable space.



Ask your lumber dealer or write us for details  
Address Dept. AB-438

**FARLEY & LOETSCHER MFG. CO.**  
DUBUQUE, IOWA

# 10 Day Trial No Deposit

## TRY A STERLING CONVERTIBLE LEVEL

for 10 days on your job with no expense or obligation to purchase. Sturdier construction, higher power telescope, and exclusive patented features assure greater accuracy and lower operating costs. Save time and make more money by using a Sterling Level.

Clip this coupon to your letterhead.

**WARREN-KNIGHT CO.**  
136 N. 12th St., Philadelphia, Pa.  
Send new Bulletin F-34 describing Sterling Convertible Level, Model No. 40, and giving details of free trial offer and easy payment purchase plan.  
Name \_\_\_\_\_  
Address \_\_\_\_\_  
Position \_\_\_\_\_



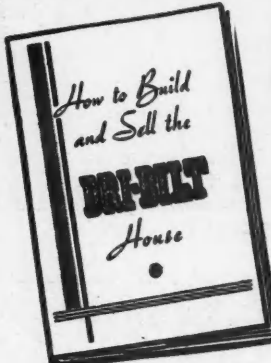
(Patented)

The Gold Medal Level  
Sterling Model No. 40  
**\$100.00**


# DRI-BILT HOUSES MEET LOW-COST DEMAND

Erect DRI-BILT Houses from your own plans, using *Westboard Panels and Trim*. This valuable booklet tells you how. A copy is yours for only 20c in stamps or coin. Hundreds of contractors, builders, and lumber dealers are using this informative book.

Complete plans, working drawings, details, and suggestions for building and selling a DRI-BILT House.

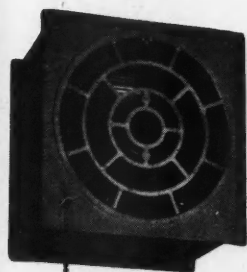


**WASHINGTON VENEER CO.**  
OLYMPIA WASHINGTON





## These RADIA Conveniences help sell homes

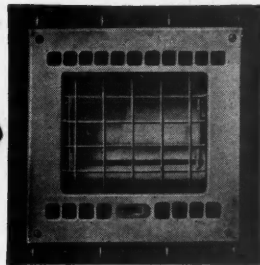


**FOR THE KITCHEN, DEN OR BATHROOM**

### RADIA KITCHEN VENTILATOR FAN

- Removes odors, heat and steam!
- Sturdy design; Cast Aluminum Frames and Grill;
- Powerful R. & M. Motor; 10-Inch Blades.

- Easily installed; Simple in operation.
- Pull chain operates motor and shutters.
- Retail Price \$25.00.
- Builders' Price as low as \$16.63



**FOR THE BATHROOM, DRESSING ROOM OR NURSERY**

### RADIA BUILT IN HEATER

- Instant heat when you want it!
- Saves in central heating costs.
- Hourly operating cost only 2c for average bathroom.
- Long-life heating element.
- Retail Price as low as \$12.00 in Chromium finish.
- Builders' Price as low as \$7.98.

Builders—Include these RADIA Appliances in your plans—they'll pay in appeal and selling value! Women appreciate their practical advantages. Write for complete information and prices.

Distributors, Agents: Some profitable territories still available!

**F. W. SHEPLER STOVE CO.**  
1302 Sheffield St., N.S. Pittsburgh, Pa.

## New De Walt Purchase Plan One Dollar a Day—Pay as You Save

"GN" Model for Building Contractors

Here is a popular priced model you can buy on Easy Payment terms. It has all the flexibility and accuracy of heavier De Warts. Ideal because easily portable right to the job and operating on minimum adequate power consumption. Quickly financed through the savings effected.



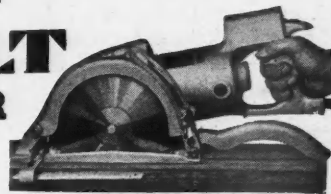
Write or wire for specifications, prices, etc. Or we will demonstrate the "GN" right on your job without obligation.

De Walt - Wodack Portable Electric Hand Saw. Powerful yet light. Several models. Many improvements over other styles.

**De Walt Products Corp.,**  
313 Fountain Ave., Lancaster, Pa.

## DE WALT WOODWORKER

*It talks through its teeth*



MAKES soft wood...

FINISH like Hardwood

Quick drying

Economical



STOPS GRAIN RAISE ON FIR PLYWOOD

Use REZ on fir plywood and soft woods and finish them "like hardwood"; no grain raise, beautiful smooth surfaces that stay smooth with any kind of stain, paint, enamel... prevents moisture absorption, decay, checking. REZ also stops swelling and binding of sash and doors; seals, primes all such millwork against weather.

wear, moisture, before and after construction. Saves a coat of paint, cuts finishing cost, gives a perfect finish. Many other uses. REMEMBER, there's nothing else like REZ, because nothing else stops grain raise like REZ.

I. F. LAUCKS, Inc.  
Seattle, Wash. Lockport, N. Y.

For large jobs order fir plywood "Rezited-at-mill"

## ADD A ROOM TO YOUR HOME

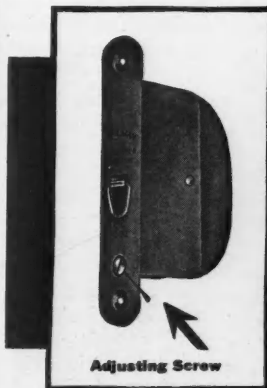
GET THE GOOD OUT OF YOUR ATTIC BY USING OUR IMPROVED FOLDING STAIRWAY

NO RAFTER CLEARANCE NEEDED  
NO OBSTRUCTION TO ATTIC FLOOR NO CABLES OR PULLEYS

CONVENIENT - ATTRACTIVE - MAKES ANY HOME WORTH \$500 MORE

Write for free Folder A-48

**THE MARSCHKE CO.,**  
551 University Ave.,  
St. Paul, Minnesota



Adjusting Screw

## PULLMAN UNIT SASH BALANCES

### New Pullman Adjustable UNIT Sash Balances

can be installed in double-hung windows in 10 to 15 minutes—and are guaranteed for the life of the building against imperfect workmanship or material. The spring tension can be changed at will, with an ordinary screw driver, giving perfect window control at all times—practical and fool-proof and the only Sash Balance with this type of adjustment.

With Pullman you eliminate costly box frames—pulleys—weights and cords. Modern, attractive window openings with narrow mullions are easily obtained when you use Pullman Sash Balances.

They are made of pressed steel, light in weight, non-breakable and all working parts encased insuring free action of moving parts—exclusive Pullman features. Can be installed or removed while the sash remain in place—a trial will convince you of their superior merits and advantages.

Send for literature and blueprint showing complete specifications and architectural details.

## PULLMAN MFG. CORPORATION

Established in 1886

A Half Century of Progress

1180 University Avenue

Rochester, N. Y.

# SELECTED CATALOGS

**For the Service of Builders,  
Contractors, Architects, Dealers**

The publications listed below may be obtained without charge either by using the coupon, listing the numbers desired and mailing to American Builder, 105 West Adams Street, Chicago, or by applying on your business stationery to the manufacturers direct, in which case kindly mention this publication. Either the titles or the numbers may be used in ordering. This list is an editorial feature for convenience of our readers.

## BUILDING EQUIPMENT

**71—School, Gymnasium and Plant Lockers**—“Durabilt Steel Lockers and Cabinets” is a very informative 16-page handbook presenting the 20 new and exclusive construction features of merit of the Durabilt line and illustrating dozens of types of steel cabinets and lockers, cupboards and wardrobes for many different needs. Dimensions and specifications are included and working drawings in detail show recommended methods of installation.—DURABILT STEEL LOCKER CO., Aurora, Ill.

**72—Kitchen Cabinets**—“Kitchen Planning Simplified,” a new 16-page portfolio in full color illustrating the three types of model kitchens, namely, the L-shaped kitchen, the U-shaped kitchen, and the “broken” kitchen, together with all the standard “Kitchen Maid” units, of which there is said to be a size and type for every kitchen need. Drawings show dimensions with specifications of hardware, finish, etc. The 12 standard colors, each with its corresponding trim color are shown in true color samples.—THE KITCHEN MAID CORP., Andrews, Ind.

**73—Steel Kitchen Cabinets**—“Freedom from Kitchen Worries” is a striking brochure of 20 pages illustrating the convenience, simplicity and construction features of the Elgin steel kitchen units which offer a wide variety of sizes and styles. Model kitchen plans and photographs are included.—ELGIN STOVE & OVEN CO., Elgin, Ill.

**74—Automatic Water Heaters**—Full information regarding the Ruud automatic storage water heater offered in several sizes and models is presented in new data sheets giving mechanical specifications, capacities, etc.—RUUD MFG. CO., Pittsburgh, Pa.

**75—Modern Radiators**—“Crane Radiation Assures Home Comfort” is a new 8-page data sheet in blue and black. It gives ratings and general dimensions of Crane direct radiators, and also presents the Crane line of shielded radiators, convectors and enclosures. Radiator valves, fittings and accessories are also covered.—CRANE CO., 836 S. Michigan Ave., Chicago.

**76—Weisway Cabinet Showers**—The 1938 Catalog, a 20-page illustrated presentation giving detailed information and suggested applications and layouts for all types of buildings on 7 cabinet shower models featuring Foot-Grip, No-Slip vitreous porcelain receptors, is now ready for distribution to builders, architects and dealers.—HENRY WEIS MFG. CO., Inc., Elkhart, Ind.

**77—Miami Bathroom Cabinets**—“Glorifying the American Bathroom” is a 32-page beautifully illustrated catalog of bathroom mirrors, cabinets and accessories which “glorify your bathrooms,” making them really complete. A dash of human interest here and there in the illustrations no doubt will add to the popularity of this book.—MIAMI CABINET DIV., The Philip Carey Co., Middletown, O.

**78—New Overhead Door Literature**—The electrically operated Overhead Door, the “Miracle-Wedge” feature of the improved Overhead Door for private garages, and the Overhead Door for greasing stations, warehouses, etc., are important points covered in the new series of 4-page data sheets being distributed by the pioneer upward-acting door people.—OVERHEAD DOOR CORP., Hartford City, Ind.

**79—Majestic House Organ**—Vol. 1, No. 1 of “Building Necessities News” has been issued—a 4-page newspaper illustrating many items of the Majestic line including coal chutes, fireplace hardware, package receivers, furnaces, garage doors, etc. This newspaper is to be issued periodically.—THE MAJESTIC CO., Huntington, Ind.

**80—Richards-Wilcox Folding Partitions**—“Folder-Way Partitions,” catalog A-69, is a 64-page handbook of particular interest to architects and builders of schools, churches, clubs, etc., where folding and disappearing partitions are required. Some radically new ideas have been developed by this pioneer in the field, and these are fully presented through the medium of photographs, working details and complete specifications. Partitions illustrated include those manually operated, crank operated, and fully automatic electrically operated.—RICHARDS-WILCOX MFG. CO., Aurora, Ill.

**81—Barn Plans and Barn Equipment**—“Proved Plans for Improving Barns with Starline Barn Equipment” is a 64-page plan book and barn construction manual. Architects, builders and lumber dealers operating in rural communities or serving farm trade will get many helpful ideas from this book. A chapter of particular interest details the trussed roof barn, the braced rafter barn and the Gothic rafter barn. How to design and construct modern concrete dairy stable floors is also covered.—STARLINE, INC., (Formerly Hunt, Helm, Ferris & Co.), Harvard, Ill.

**82—Metal Strip Service**—An elaborate catalog and data book, loose-leaf, in fabrikoid covers, containing more than 60 pages of helpful details, specifications

and tabular matter, is offered to those interested in building a business in metal weatherstrips, thresholds, stair nosings, modernistic mouldings in stainless steel and allied products. Special tools for installing weatherstrips, together with special model case for soliciting orders, are shown in this handbook.—MASTER METAL STRIP SERVICE, 1716 N. Kilbourn Ave., Chicago.

**83—Victor In-Bilt Ventilator**—“Now! Complete Air Conditioning—the Natural Way!” is a new 8-page folder showing where and how to build in electric fans to assure fresh air in kitchens, basements, bathrooms, bedrooms, living rooms, laundries and dining rooms. Some novel ideas here that are bound to have a new sales appeal.—VICTOR ELECTRIC PRODUCTS, Inc., Cincinnati, O.

**84—Wesix Electric Heat**—“Here’s Instant Comfort,” a small folder, large with good ideas, for making bathrooms more salable by building in electric wall heaters. Both the Wesix automatic and non-automatic electric wall type heater are presented.—WESIX ELECTRIC HEATER CO., 390 First St., San Francisco, Calif.

**85—Indirect Lighting Fixtures**—A new 12-page catalog of “Sight-Craft” indirect lighting fixtures for offices, stores and schools present many illustrations of fixtures and installations, and includes complete technical data. The fixtures were designed by a well known architectural designer and developed by lighting engineers.—SMOOT-HOLMAN CO., 33 Dore St., San Francisco, Calif.

**86—Curtis Lighting Fixtures**—Five classes of indirect lighting equipment are featured in the recently published Handbook “J” of Curtis Lighting, Inc. More than 100 illustrations of various styles of luminaires and photographs of some of their most outstanding installations are contained in the handbook, a 2-color presentation of 48 pages. The luminaires illustrated include indirect units for use in offices, stores, schools, shops, restaurants, etc. Additional sections are devoted to general lighting information, construction data and the planning of indirect lighting.—CURTIS LIGHTING, Inc., 1123 W. Jackson Blvd., Chicago.

**87—Non-Stick Windows**—“Prefabricated, Weatherstripped, No Weight Pockets” is the heading of a new full-color folder presenting the details of the Non-Stick window, “a luxury window but low priced.” This is a double-hung wood window adaptable to all priced homes.—N. S. W. CO., 2137 Gratiot Ave., Detroit, Mich.



**88—Oil Burner Data**—“The Oil-O-Matic Primer” is a new 32-page booklet for consumer use presenting in a non-technical way “interesting dollar-saving facts everyone should know about oil heat.”—WILLIAMS OIL-O-MATIC HEATING CORP., Bloomington, Ill.

**89—Fairbanks, Morse Stokers**—“Automatic Coal Burners” is a 24-page booklet discussing stokers and presenting the complete Fairbanks, Morse line. It is well illustrated and informative.—FAIRBANKS, MORSE & CO., Chicago.

**90—Cooling Coils**—“Young Cooling Coils for Use with Water or Brine” is the title of new Catalog No. 5537, a 12-page data sheet on cooling coils for air conditioning and refrigeration use.—YOUNG RADIATOR CO., Racine, Wis.

**CONTRACTORS' EQUIPMENT**

**91—Concrete Products Machinery**—“4 Keys to Success”; 24 pages, with outside covers and center insert in full color direct color photography from colored Dunbrik samples, panels and buildings constructed from these high class building units. The tested profit opportunities in the manufacture and sale of Dunbrik and Dunstone are demonstrated.—W. E. DUNN MFG. CO., Holland, Mich.

**92—Kwik-Mix Mixers**—A new 12-page catalog in 2 colors illustrates the new Kwik-Mix mixer line which includes concrete, plaster and bituminous mixers offered in all the popular sizes. Large illustrations and complete mechanical equipment presented.—KWIK-MIX CONCRETE MIXER CO., Port Washington, Wis.

**93—Truck Mixers and Agitators**—A new bulletin, No. 147, covering Ransome truck mixers and agitators, is a handbook of 24 pages, 2 colors, profusely illustrated with charts, diagrams, sectional views, and on-the-job photographs.—RANSOME CONCRETE MACHINERY CO., Dunellen, N.J.

**94—Centrifugal Pumps**—The Deming self-priming centrifugal pumps are featured in a 4-page data sheet just released. One is a portable engine-driven model on pneumatic-tired wheels. Other models are electrically driven for fixed installation. One gas engine model weighs only 55 lbs. and is equipped with a carrying handle.—THE DEMING CO., Salem, Ohio.

**BUILDING MATERIALS**

**95—Sisalkraft As a Moisture Barrier**—A timely data sheet indicating a practical solution to the wall condensation problem is ready for mailing. It shows cross sections of insulated and non-insulated walls, and shows how the Sisalkraft moisture barrier can be installed in a practical way.—THE SISALKRAFT CO., 205 W. Wacker Drive, Chicago.

**96—Medusa Paints**—“How to Paint Concrete, Stucco, Masonry and Other Surfaces” is an illustrated handbook of 24 pages discussing frequently encountered problems involving the waterproofing and painting of concrete and brick masonry. Much of the information is presented in very readable question-and-answer form.—MEDUSA PRODUCTS CO., 1000 Midland Bldg., Cleveland, Ohio.

**97—Plenty of Electric Outlets**—“671 Electric Outlets in This Home” is the astonishing title of a new 8-page brochure featuring the “Plug-In” strip, or continuous baseboard electrical receptacle. A companion sheet of details shows several recommended methods of installing this modern electrical outlet.—NATIONAL ELECTRIC PRODUCTS CORP., Pittsburgh, Pa.

**98—For Wood Craftsmen**—“Idaho White Pine Ideal for Wood Patterns” is a new 20-page booklet, beautifully illustrated with over 50 examples of Idaho White Pine patterns ranging from small bearing patterns to large gears. This publication also contains valuable information on Idaho White Pine and its specific use in pattern shops.—WESTERN PINE ASSN., Yeon Bldg., Portland, Ore.

**99—Disappearing Stairs**—“Use Your Attic”; two new folders illustrating the Marco stairways are available, one of which discusses “floor space in dollars and cents” with emphasis on the profitable use of attic space. The other illustrates the details of the Marco foldaway stairs.—THE MARSCHKE CO., 551 University Ave., St. Paul, Minn.

**100—Plywood in Fancy Woods**—“The Plywood Catalog” from the United States Plywood Corp. is a 24-page handbook of rare and beautiful imported and domestic woods used as surface veneer for rugged, built-up plywood panels. This is a valuable reference book for architects, dealers, builders, decorators and interior modernizers. Stock sizes and list prices of each type are stated.—UNITED STATES PLYWOOD CORP., 616 W. 46th St., New York City.

**101—Helyx Drive Screw Nails**—A new folder gives much valuable information regarding drive screw nails for fastening wood to wood, wood to steel, wood to concrete, and wood to brickwork. The use of the Helyx floor screw nails for laying maple or oak hardwood flooring is also covered. This folder lists several sizes and types, and carries a coupon good for samples.—THE HILLWOOD MFG. CO., 21715 St. Clair Ave., Cleveland, O.

**102—Machining Aluminum**—A new 32-page handbook under this title has been prepared and is of particular interest to manufacturers utilizing aluminum in their production schedules. Part I covers general machining practice, and Part II automatic screw-machine practice. Tables are included giving physical and mechanical properties.—ALUMINUM COMPANY OF AMERICA, Pittsburgh, Pa.

**103—Briar Hill Golden Tone Ashlar**—“Distinctive American Homes” is the title of new 16-page brochure illustrating many examples of beautiful homes faced with Briar Hill ashlar wall facing. Many of the illustrations are in full color from direct color photographs.—THE BRIAR HILL STONE CO., Glenmont, O.

**104—Architectural Concrete for Small Buildings**—36-pages of well illustrated information on this subject has been compiled by the Portland Cement Assn. A supplement of plates gives clear working details of form construction for ornamental concrete work in numerous buildings such as schools, libraries, jails, fire stations, gas and oil service stations, park structures, etc. This is both an art manual and a practical how-to-do-it text book which should be very interesting to architects, engineers and builders.—PORTLAND CEMENT ASSN., 33 W. Grand Ave., Chicago.

**104A—Where to Use Treated Lumber**—“Recommended Practice—Wolmanized Lumber for Protection Against Wood Destroying Fungi and Termites” is the first detailed specification with clearly drawn working plans so far available on this important subject. A 6-page data sheet in 2 colors giving much valuable information.—AMERICAN LUMBER & TREATING CO., 37 W. Van Buren St., Chicago.

American Builder,  
105 W. Adams St.,  
Chicago, Ill.

(April, 1938)

Please have the following Catalogs listed in this issue sent me—

Numbers .....

Name .....

Street .....

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

OCCUPATION\* .....

\*Please note that occupation must be stated if full service is to be given.

**You have been waiting years for this**



This NEW device for closing cabinet and cupboard doors actually reaches out 1/2" beyond the door jamb and pulls even warped doors shut tightly and snugly.

Nothing else on the market like it. A quality product that fits all doors and never gets out of order.

Requires no mortising, no fitting, and can be installed with a screw driver on the inside of the door at the top, bottom, on a shelf or vertically on the side.

Eliminates surface latch.

Doors will not rebound after closing.

Has 4 lb. pull and will close all cabinet and cupboard doors and light screen and closet doors.

**WIN-DOR Snugger**  
PULLS DOORS SHUT!

**FREE:** Send us the name of the dealer from whom you buy your builders hardware and we will mail you a free sample of Snugger.

The Casement Hardware Co., 406 N. Wood St., Chicago, Illinois

**QUICK CHANGE** Try it FREE  
*from Level to Transit*

Two motions shift it from level to transit. One-piece standard casting gives great rigidity and strength. Built especially for contractors.

**Try the Universal Avoid Costly Errors**

\$10 brings you the "Universal" Level-Transit. One hour teaches you how to accurately check up surveys, avoid costly errors. Money-back guarantee.

Easy Payments. Use instrument. If not satisfied, return and your money is refunded. Or keep on easy monthly payments. Particulars on request.

Ask for FREE booklet "How to lay out building lots"

**DAVID WHITE CO.**  
311 W. Court Street, Milwaukee, Wis.

**We Do Expert Repairing** **Tapes Rods Supplies**



Only \$10 Down

**YOUR OPPORTUNITY TO DEVELOP AN EXCLUSIVE BUSINESS—**

**LEASE MORTARLESS CONCRETE BLOCK MACHINES**

with exclusive territory rights

Mortarless Concrete Blocks are the answer to the increasing public demand for better construction at a lower cost. *Build for a century, not for a decade.* Machine Capacity—4 Blocks per minute. Write for particulars.

**MORTARLESS TILE MACHINE CO., INC.**  
3328 SAN FERNANDO RD.  
LOS ANGELES CALIFORNIA



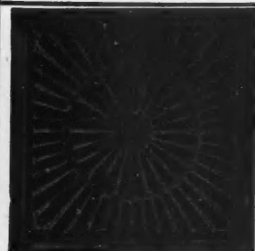

**Sensationally Low-Priced Electric Ventilator**

The Electrovent! The favorite with builders from coast to coast because of its beauty, mechanical excellence and moderate price. Shutters open and close automatically as motor is turned on and off. All-metal construction, completely rustproof. Aluminum blades. Beautiful chrome-plated grills. One and two speed motors. No radio interference. Exceptionally easy to install.

Write for Circular and Prices

Write for Builders' Prices

**Electrovent Corporation**  
5240 Western Ave. Detroit, Mich.


**Sedgwick** **DUMB WAITERS AND ELEVATORS**

Every Sedgwick lift is designed and manufactured to give the best performance that money can buy. For 45 years, leading builders have found it profitable to install this superior equipment. Write today for full information.

HAND POWER AND ELECTRIC  
DUMB WAITERS : RESIDENCE ELEVATORS  
FREIGHT AND SIDEWALK ELEVATORS  
FUEL LIFTS : TRUNK LIFTS  
CORRESPONDENCE LIFTS : ASH HOISTS, ETC.

Established 1893

Write for Catalog **SEDGWICK MACHINE WORKS**  
154 WEST 15th STREET, NEW YORK



**KINNEAR ALL-STEEL ROL-TOP**  
*Better for All Service Doorways*  
In Residential Garages, Factories or Commercial Buildings!

Here's a more durable door! With sections of heavy, galvanized steel it can't sag, warp, split or pull apart. The all-steel Rol-Top is weather proof, burglar proof, vermin proof and fire repellent. Perfectly counterbalanced and opening upward over ice, snow, swollen ground and obstructions, it's convenient and effortless in operation the year around. Made in any size, for motor or manual operation and for easy installation in any building, old or new. Write for details.

**The KINNEAR Manufacturing Company**  
1560-90 Fields Ave., Columbus, Ohio



**WAGNER**  
**LATCHES**

Popular sellers everywhere. No. 842 swinging door latch can be installed right or left hand—operated up or down. The latch that can be locked. Write for Ready Reference catalog showing complete line of Latches, Hangers, Track and Builders Hardware Specialties.



**WAGNER MFG. CO., Dept. AB-438, Cedar Falls, Iowa**

**ROBERT McNAIR**  
**Cedar Shingles**

Finest Roof and Side Wall Materials  
400 DEALERS TO SERVE YOU

See your local dealer today

**ROBERT McNAIR SHINGLE CO., Ltd.**  
Province Building Vancouver, Canada



# INDEX TO ADVERTISERS

APRIL, 1938

<b>A</b>		Lone Star Cement Corporation.....	44
Accurate Metal Weather Strip Co.....	140	Long Lake Lumber Company.....	117
Allith-Prouty, Inc.....	131	Lucke, Inc., William B.....	139
Allmetal Weatherstrip Co.....	142	<b>M</b>	
Aluminum Company of America.....	3rd Cover	M & M Woodworking Co.....	136
American Builder.....	90-94-95-124-125-136-138-140	Majestic Co., The.....	88-134
American Floor Surfacing Machine Company, The.....	110	Mall Tool Company.....	137
American Gas Association.....	83-84-85	Maple Flooring Manufacturers Association.....	30
American Lumber & Treating Co.....	133	Marquette Cement Mfg. Co.....	19
American Radiator Company.....	121	Marschke Co., The.....	143
American Radiator & Standard Sanitary Corporation.....	87-121	Marsh Wall Products, Inc.....	100
American Rolling Mill Company, The.....	108	Masonite Corporation.....	123
American Saw Mill Machinery Co.....	140	Master Metal Strip Service.....	135
Andersen Corp.....	36	Master Woodworker Mfg. Co., The.....	142
Anthracite Industries, Inc.....	15	McKinney Manufacturing Company.....	127
Arkansas Oak Flooring Company.....	135	McNair Shingle Co., Robert.....	146
Armstrong Cork Products Company.....	88	Miami Cabinet Division.....	28
Arrow-Hart & Hegeman Electric Co., The.....	103	Milcor Steel Company.....	148
<b>B</b>		Minwax Co., Inc.....	126
Barber Company, Inc., The.....	113	Mortarless Tile Machine Co.....	146
Barber-Colman Company.....	98	Mueller Furnace Co., L. J.....	91
Bilco Mfg. Co.....	134	<b>N</b>	
Bradley Lumber Sales Co.....	9	N. S. W. Company.....	132
Brecher Company, Inc., The.....	140	National Coal Association.....	37
Bruce Co., E. L.....	40	National Manufacturing Company.....	4th Cover
Buffalo Forge Company.....	135	<b>O</b>	
Burnham Boiler Corporation.....	112	Ohio Hydrate & Supply Company, The.....	130
<b>C</b>		Overhead Door Corporation.....	6
Calbar Paint & Varnish Co.....	140	Owens-Illinois Glass Company.....	27
Caldwell Manufacturing Co.....	138	<b>P</b>	
Carey Company, The Philip.....	28	Paine Lumber Co., Ltd.....	93
Carter Division, R. L.....	14	Parks Woodworking Machine Co., The.....	139
Casement Hardware Co., The.....	146	Payne Furnace & Supply Co., Inc.....	88
Celotex Corporation, The.....	2	Peerless Manufacturing Corp.....	127
Chevrolet Motor Division.....	39	Pittsburgh Plate Glass Company.....	16-17
Cincinnati Iron Fence Co., Inc.....	142	Porter-Cable Machine Company, The.....	128
Colorcrete Industries, Inc.....	141	Portland Cement Association.....	129
Congoleum-Nairn, Inc.....	20	Power King Tool Corp.....	142
Construction Machinery Company.....	115	Pullman Mfg. Corp.....	143
Crane Co.....	105	<b>R</b>	
Curtis Companies Service Bureau.....	8	Reardon Co., The.....	26
<b>D</b>		Red Cedar Shingle Bureau.....	38
Dant & Russell, Inc.....	42	Reid-Way Corporation, The.....	142
Delta Manufacturing Company.....	132	Reliable Jack Company.....	141
Dennis & Co., W. J.....	137	Republic Steel Corporation.....	3
De Walt Products Corporation.....	143	Rittenhouse Co., Inc., The A. E.....	104
Douglas Fir Plywood Assn.....	97	Rowe Mfg. Co.....	21
Dunn Mfg. Co., W. E.....	131	Russell Co., Frank.....	122
<b>E</b>		Ryerson & Son, Inc., Joseph T.....	141
Edwards Manufacturing Co., The.....	137	<b>S</b>	
Electrovent Corporation.....	146	Samson Cordage Works.....	137
<b>F</b>		Sedgwick Machine Works.....	146
Farley & Loetscher Mfg. Co.....	142	Shepler Stove Co., F. W.....	143
Fir-Tex Insulating Board Co.....	42	Skilsaw, Inc.....	13
Ford Motor Company.....	35	Smith Company, The T. L.....	120
Fourco Glass Company.....	141	Spokane Pine Products Company.....	117
Frantz Manufacturing Co.....	134	Stanley Works, The.....	14-33-129
<b>G</b>		Steel Scaffolding Co., Inc., The.....	140
General Electric Company.....	7-34	Sterling Wheelbarrow Co.....	138
General Motors Sales Corporation.....	39	Stevens Hotel, The.....	132
Gibbs Boardtile Corp.....	138	<b>T</b>	
<b>H</b>		Tile-Tex Company, The.....	139
Harbor Plywood Corporation.....	10-11	Trimpak Corporation.....	109
Heatilator Company.....	106	Truscon Steel Company.....	3
Holland Furnace Company.....	89	<b>U</b>	
Homasote Company.....	114	United States Steel Corporation Subsidiary.....	25
Hopes Windows, Inc.....	102	Universal Atlas Cement Co.....	25
Huttig Mfg. Co.....	107	<b>V</b>	
<b>I</b>		Victor Electric Products, Inc.....	116
Ilg Electric Ventilating Co.....	133	<b>W</b>	
Insulte Company, The.....	111	Wagner Mfg. Co.....	146
International Nickel Company, Inc., The.....	86	Wallace & Company, J. D.....	135
<b>J</b>		Warren-Knight Co.....	142
Jaeger Machine Co., The.....	14	Washington Veneer Co.....	142
Johns-Manville.....	22-23	Weis Manufacturing Co., Henry.....	118
<b>K</b>		Western Pine Association.....	119
Keesbey & Mattison Company.....	31	Westinghouse Elec. & Mfg. Co.....	24
Kees Mfg. Co., F. D.....	18	Weyerhaeuser Sales Company.....	4-5
Kimball Bros. Co.....	140	Wheeling Corrugating Company.....	101
Kimberly-Clark Corporation.....	29	White Co., David.....	146
Kincaid Manufacturing Company, The.....	146	Wodack Electric Tool Corp.....	140
Kitchen Maid Corp., The.....	139	Wood Conversion Company.....	12
Kwik-Mix Concrete Mixer Co.....	136	Wright Rubber Products Co.....	134
<b>L</b>		<b>Z</b>	
Laucks, Inc., I. F.....	143	Zouri Stove Fronts.....	99
Lehigh Portland Cement Company.....	32		
Libbey-Owens-Ford Glass Company.....	95		
Lincoln-Schlueter Floor Machinery Co., Inc.....	123		

NOTICE TO ADVERTISERS—Forms for the May number of the American Builder and Building Age will close promptly on April 15. New copy changes, order for omissions of advertisements must reach our business office, 105 West Adams St., Chicago, not later than the above date. If new copy is not received by the 20th of the month preceding date of publication the publishers reserve the right to repeat last advertisement on all unexpired contracts. AMERICAN BUILDER AND BUILDING AGE.



You know your customer will stay satisfied—when you specify **MILCOR** Expansion Corner Bead. It's patented — there's NO "or equal"

**MILCOR** makes every type of Corner Bead you ever need to specify » » »

You take no chances with your plaster interiors when you reinforce the corners with Milcor Expansion Corner Bead. The book of experience is an open record on thousands of installations. You know that Milcor construction stands up — that years from now, the plaster will still retain a straight, true-edge beauty, free from chipping and cracks.

With Milcor Corner Bead you are certain that the owner will realize lasting satisfaction with your plaster interiors, that even in the far future he will be ready and willing to boost you to friends who are "in the market."

Milcor Expansion Corner Bead — originated and patented by Milcor — is one of the complete line of Milcor Beads. Milcor makes every type of Corner Bead you ever need to use. Five great Milcor plants are organized to give your dealer quick service from one source, on everything you need in fireproof steel building products. Write today, for attractive descriptive literature.



**Unit of the MILCOR SYSTEM of fireproof construction**

Milcor here uses the word "system" in its true sense — not to signify a limited, inflexible set-up applicable only under certain conditions, but to represent so great a range of individual products, types, weights, metals, etc., that a complete, coordinated metal backbone can be designed to suit any condition of fireproof construction — all with Milcor products engineered to work together.

F-7A

**MILCOR STEEL COMPANY**  
MILWAUKEE, WISCONSIN CANTON, OHIO  
Chicago, Ill. Kansas City, Mo. La Crosse, Wis.





# ELECTRIC KITCHENS COMPLETE FROM ONE SOURCE!



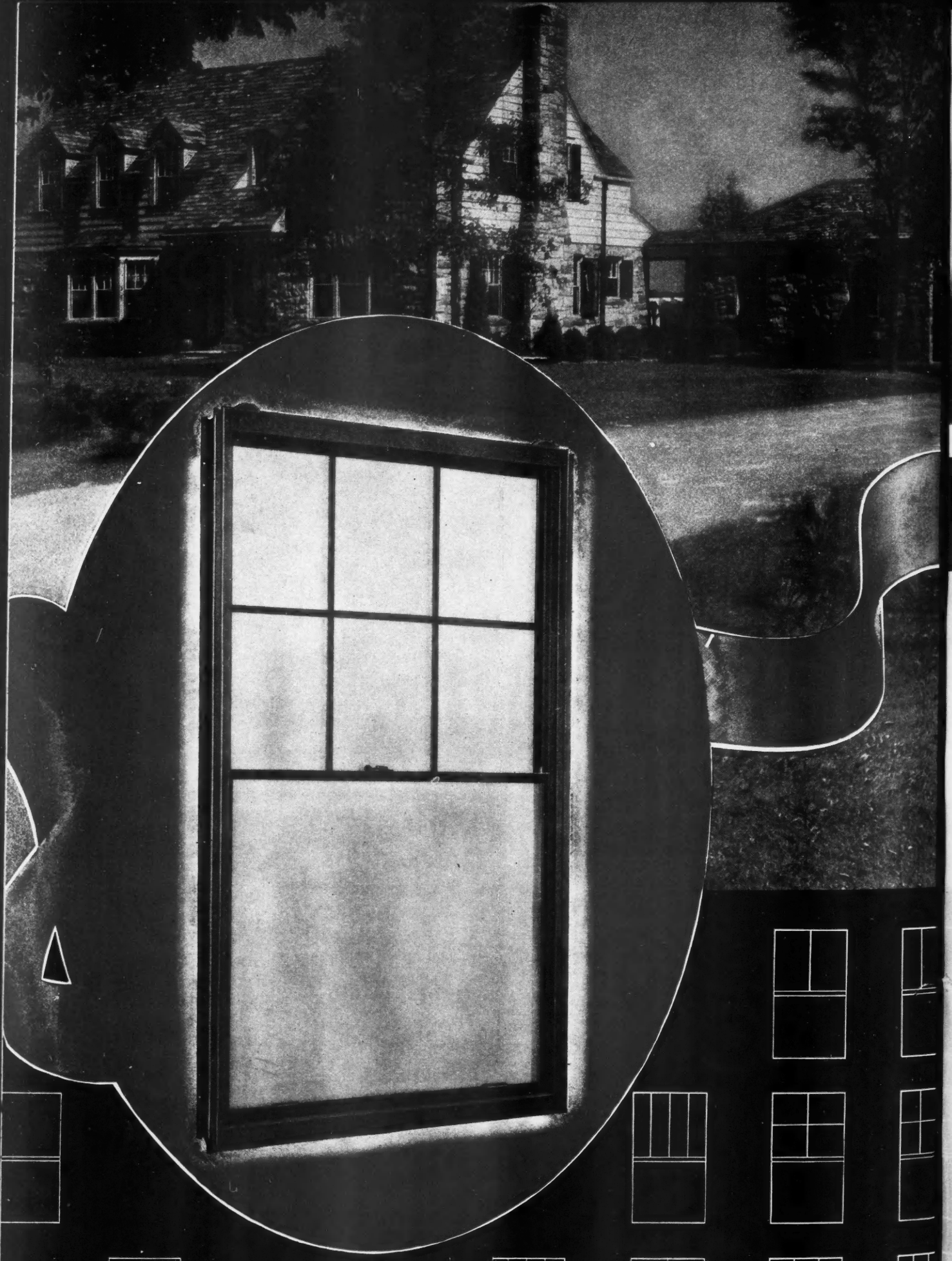
**G**ENERAL ELECTRIC UNIT KITCHENS are complete kitchens—with major electrical appliances, top and base cabinets, lights, moldings, wall panels, chrome trim—complete in every detail, even to nuts and bolts! General Electric Kitchens are packaged articles... made and guaranteed by one manufacturer. This means single responsibility—General Electric's responsibility—for everything. Specify size and style of the kitchen you want... and it is ordered, delivered, installed and financed as a single transaction. For architect, builder and property owner, it saves time, trouble and expense... in remodeling old apartments and homes or in new construction.

Complete General Electric Unit Kitchens include Electric Refrigerator, Electric Range, and Electric Sink—which combines Electric Dishwasher and Electric Disposall—all bearing the world-famous G-E monogram. Ask us for full details about low-cost G-E Unit Kitchens. Address General Electric Company, Specialty Appliance Division, Sec. CW-5, Nela Park, Cleveland, O.

**GENERAL  ELECTRIC**  
*All-Electric Kitchens*

## 5 OUTSTANDING FEATURES OF G-E UNIT KITCHENS

- \* **Single Responsibility.** Through its sales outlets, General Electric is the one source of supply for every necessary part.
- \* **Harmony of Design.** In size, shape, color and design, each section is made to match every other section.
- \* **Rapid Installation.** It is only necessary to attach each unit to the wall in the location desired.
- \* **Flexibility.** Sections are interchangeable, permitting kitchens of almost any size, to fit any plan—large or small.
- \* **Low Cost.** Every section is a standardized production item, making for low cost.



The wide range of types and sizes and the attractive design of the new Truscon Series 138 Double Hung Steel Windows meet practically every

T  
w  
Co  
Re  
na  
gr  
  
Bo  
Th  
Bo  
TI  
to  
Tu  
ad  
of  
  
Sp  
fe  
  
Sp  
by  
St  
pu  
du  
  
Fl



# Perfected by Truscon



## NEW RESIDENTIAL DOUBLE-HUNG STEEL WINDOWS

*Series 138*

### PRICED NO HIGHER THAN ORDINARY WINDOWS

**T**HIS timely Truscon achievement brings to the building industry a perfected double-hung steel window at prices which do not increase building costs. Compare the following advantages of the new Truscon Residential Double-Hung Steel Windows with ordinary types and judge for yourself which offers the greater values to property owners.

**Bonderized Steel . . . Baked-On Priming Coat of Paint.** Truscon Residential Double-Hung Steel Windows are Bonderized to resist the formation and progress of rust. The baked-on priming coat of paint lasts from three to five times longer.

**Tubular Construction of Sash.** This distinctive feature adds greatly to the appearance, strength and durability of the windows.

**Spring Bronze Weatherstripping.** This factory-installed feature assures weather-tight windows.

**Spring-Balanced Construction.** Operation is controlled by spring balances equipped with tapes of Enduro Stainless Steel. There are no sash cords, weights or pulleys. Quiet, positive, smooth action and maximum durability are assured.

**Flush Installation of Truscon Screens and Tempryte**

**Storm Windows.** Assured by the rebate on the exterior of the frame. Three types of screening are available.

**Attractive Hardware.** Standard hardware is steel with brushed cadmium finish. Enduro Stainless Steel or solid bronze hardware available at slight extra cost.

**Windows are Packaged.** Truscon Residential Double-Hung Steel Windows are packaged in strong, durable cartons for maximum protection right up to the time of installation. No field assembly is required. These windows are ready for quick, easy installation in any type of construction.

**Five Types and Twenty-four Sizes.** The wide range of types and sizes and the attractive design of these windows meet practically every standard construction requirement.

**Complete, New Catalog Available.** Explains all details, features and advantages of Truscon Residential Double-Hung Steel Windows. Your copy will be sent promptly upon request.

### TRUSCON STEEL COMPANY

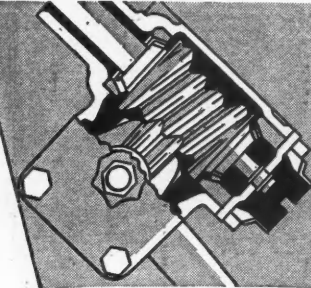
YOUNGSTOWN, OHIO

57 Sales-Engineering Offices

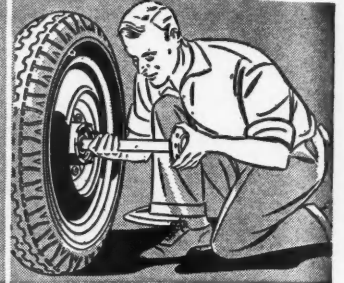
Subsidiary: REPUBLIC STEEL CORPORATION



**A FORD TRUCK  
IS GREATER THAN  
THE SUM OF  
ITS PARTS**

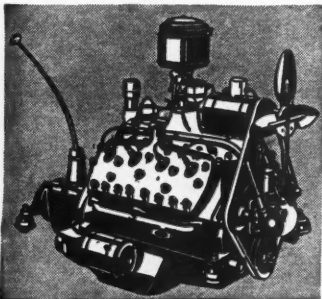


For easier driving and parking—worm and roller type steering.



Full-floating rear axle relieves the axle shafts of supporting the weight of chassis and body.

**— BUT LOOK AT  
SOME OF ITS PARTS!**

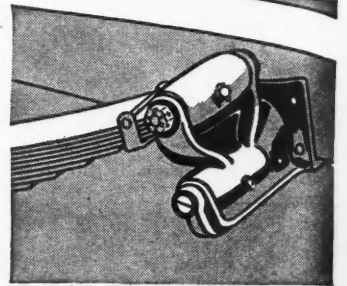


V-type 8-cylinder engine—still rolling up records for performance and economy.

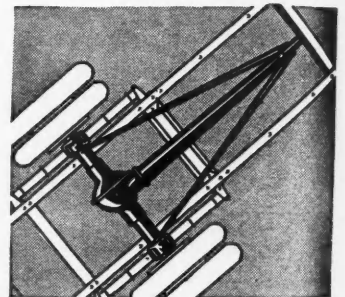
Some truck buyers like to go over a unit part by part, and judge it on "points." A few of the features of the 1938 Ford V-8 Truck are shown here. Some are interesting because they are new improvements. Some are time-proved features which continue to be newsworthy because they represent the type of expensive design and construction which Ford is able to offer at low cost.

But—a Ford Truck is *greater* than the sum of all its parts. Into each truck goes the experience gained in 21 years of truck-building leadership. Back of each truck is the constant Ford ideal—to build strong, *lightweight* trucks that put **MORE PAY IN EVERY PAYLOAD**. And with each truck go the time-and-money-saving advantages of the Ford Engine and Parts Exchange Plan.

You get value *far beyond* its price when you get a Ford V-8.



Rear springs are free-shackled at both ends. An earmark of top-quality truck construction.

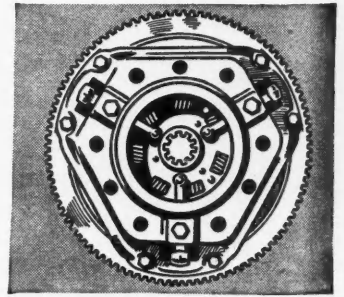


Full torque-tube drive relieves springs of driving and braking stresses.

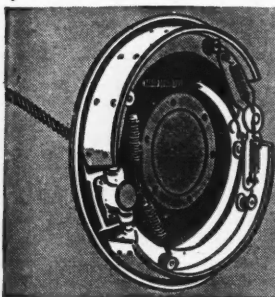


New welded all-steel cab gives extra strength, safety, comfort. 3 inches more head room.

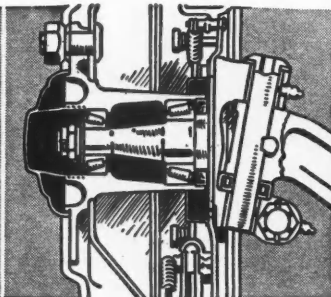
**FORD V-8  
TRUCKS AND COMMERCIAL CARS**



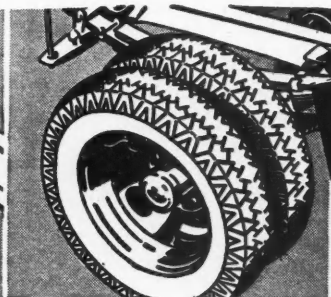
Centri-force Clutch. One of the most efficient, most reliable truck clutches ever built.



New bigger brakes—less pedal pressure—safety of steel from pedal to wheel.



Larger spindles equipped with larger spindle bolts increase the safety factor.



7.50-20 dual tire and wheel equipment is now available at slight extra cost.

**ARRANGE  
FOR AN  
"ON-THE-JOB"  
TEST**



# CONCEALED JOINTS

## SHEETROCK with Perf-A-Tape

THE FIREPROOF WALLBOARD

builds walls in which joints are actually concealed



### HERE'S HOW IT'S DONE

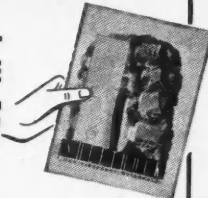
- 1 When sheets are nailed in place the recessed edge forms a channel at joints.
- 2 This channel is filled with a special cement, which is easily applied.
- 3 Perf-A-Tape, a patented, strong, perforated fiber tape with chamfered edges, is embedded in the cement.
- 4 Cement is applied over Perf-A-Tape, leveled and sandpapered evenly, completely concealing the joint and assuring a smooth surface for decoration.

*That's why Recessed Edge Sheetrock and Perf-A-Tape are such ideal materials for remodeling*

**W**hether you're making a new room out of waste space in attic or basement or whether you're covering old walls or ceilings, Recessed Edge Sheetrock\* the fireproof wallboard, and Perf-A-Tape\* will give you a *real* job of joint concealment without using panel strips—and at surprisingly low cost.

You can apply any sort of decoration your customer wishes—paint, wallpaper, or attractive texture over walls built of the NEW Recessed Edge Sheetrock and Perf-A-Tape.

**SHEETROCK IS THE  
FIREPROOF  
WALLBOARD**

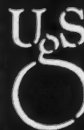


UNITED STATES GYPSUM CO.  
300 West Adams St., Chicago, Ill.  
Please send me the new Sheetrock Book that tells the complete story of Recessed Edge Sheetrock and which contains suggestions for its use in remodeling.

Name.....  
Address.....  
City.....State.....

**United States Gypsum Company**  
300 WEST ADAMS ST. CHICAGO, ILLINOIS

PLASTERS..ROCKLATH\*..METAL LATH.. SHEETROCK\*.. FIBER WALLBOARD .. SHEATHING .. INSULATING BOARD .. INSULATING



WOOL..ACOUSTICAL MATERIALS.. PAINT PRODUCTS .. STEEL PRODUCTS.. ROOFING PRODUCTS.. SIDING PRODUCTS..LIME PRODUCTS.

\*Registered trade-marks

**ECONOMIZE**  
**AS YOU MODERNIZE YOUR TRUCK EQUIPMENT**



**SAVINGS**  
 begin with  
**CHEVROLET'S**  
**LOW**  
**FIRST COST**

### **CHEVROLET TRUCKS**

**give the power and performance  
 you need . . . and with low operating  
 and maintenance costs**

**M**ANY savings in your haulage or delivery costs may be made by modernizing now with 1938 Chevrolet trucks. Save by taking advantage of Chevrolet's low truck prices. Save on gas and oil, on daily maintenance expense—and on month-after-month upkeep costs. Chevrolet trucks lead in economy—in durability and dependability. But first, get the facts that will convince you that, regardless of the job to be done, ruggedly-built new 1938 Chevrolet trucks are the trucks for your job. Call your Chevrolet dealer today.

*General Motors Instalment Plan—Convenient, Economical Monthly Payments. A General Motors Value.*

**CHEVROLET MOTOR DIVISION**  
 General Motors Sales Corporation  
 DETROIT, MICHIGAN

**CHEVROLET "THE THRIFT-CARRIERS FOR THE NATION"**

Six Chassis Models—Light Delivery, ½, ¾, 1, 1½ Tons (131½- and 157-inch wheelbases) • Five Wheelbase Lengths—112-inch to 157-inch • Famous Valve-in-Head Truck Engine • Perfected Hydraulic Truck Brakes • \*Full-Floating Rear Axle • Extra-Strength Frame • \*Four-Speed Transmission • Modern Styling • \*On 1½-Ton Models.



THE "OVERHEAD DOOR" IS SOLD INSTALLED  
*Satisfaction!*

A MILLION USERS—THE BEST RECOMMENDATION  
*Care!*

BACKED BY A NATION-WIDE SALES AND INSTALLATION SERVICE  
*Product!*

The



THE DOOR WITH THE

# MIRACLE WEDGE

*Wedges Tightly YET Opens Easily!*

EVEN A CHILD CAN OPERATE IT

TRACKS AND HARDWARE OF

*Salt Spray Steel*

*Adaptable!*

Home Garages  
Public Garages

Factories  
Fire Stations

Boat Wells  
Warehouses

Greasing Stations  
Similar Buildings

*Appearance!*

BLENDS WITH EVERY TYPE OF CONSTRUCTION

**CLIP THIS COUPON *Today!***

For further  
information--  
See coupon.

MADE IN ANY SIZE FOR ANY OPENING, ELECTRIC OR HAND OPERATION

Please send me literature and full information regarding your product. I am interested in doors for the particular purpose as checked.

Name.....

Address.....

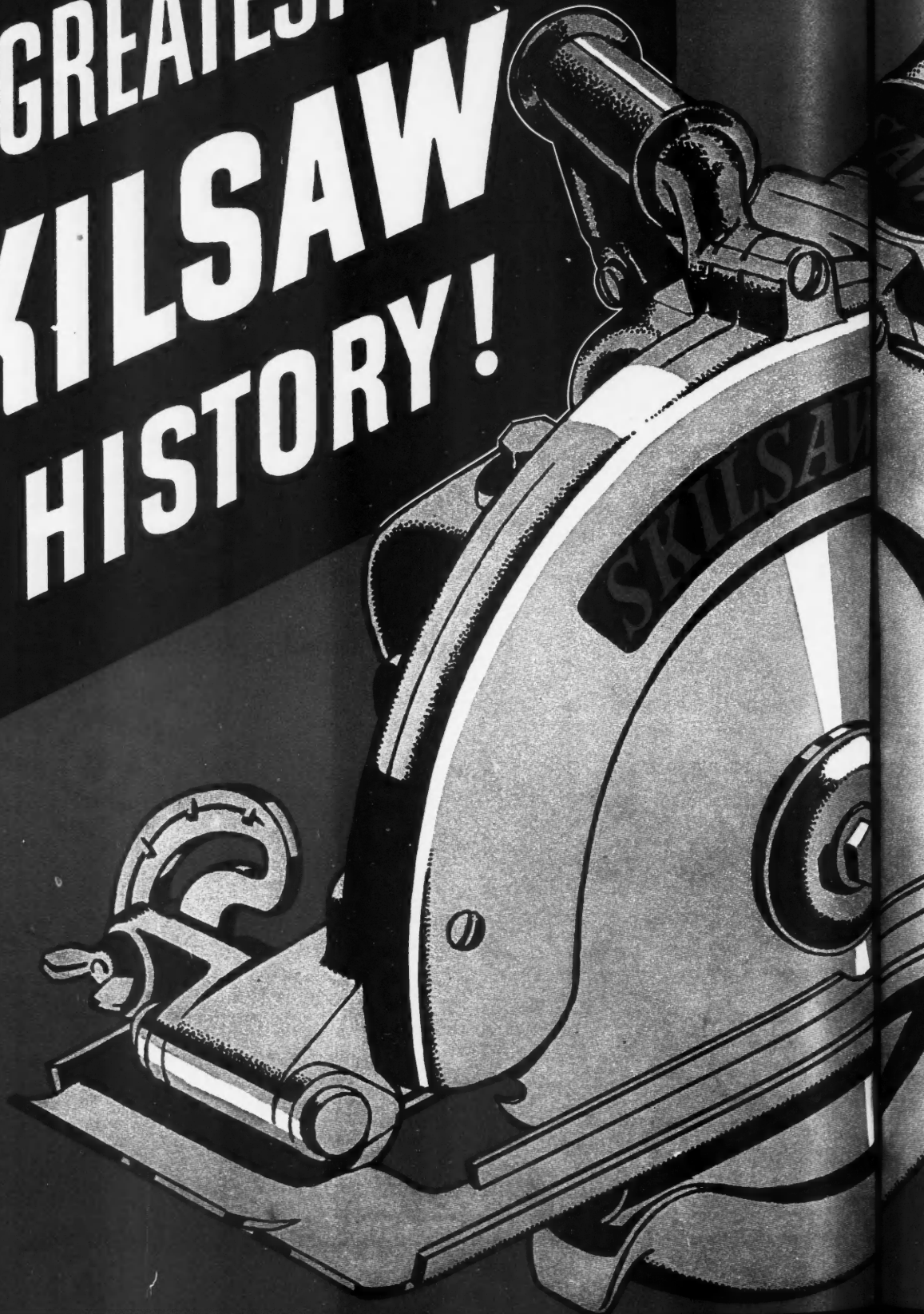
City..... State.....

- Private Garage.....
- Public Garage.....
- Warehouse.....
- Filling Station.....
- Wood Doors.....
- Steel Doors.....
- Factory Doors.....
- Other Buildings.....
- Electric Controls.....

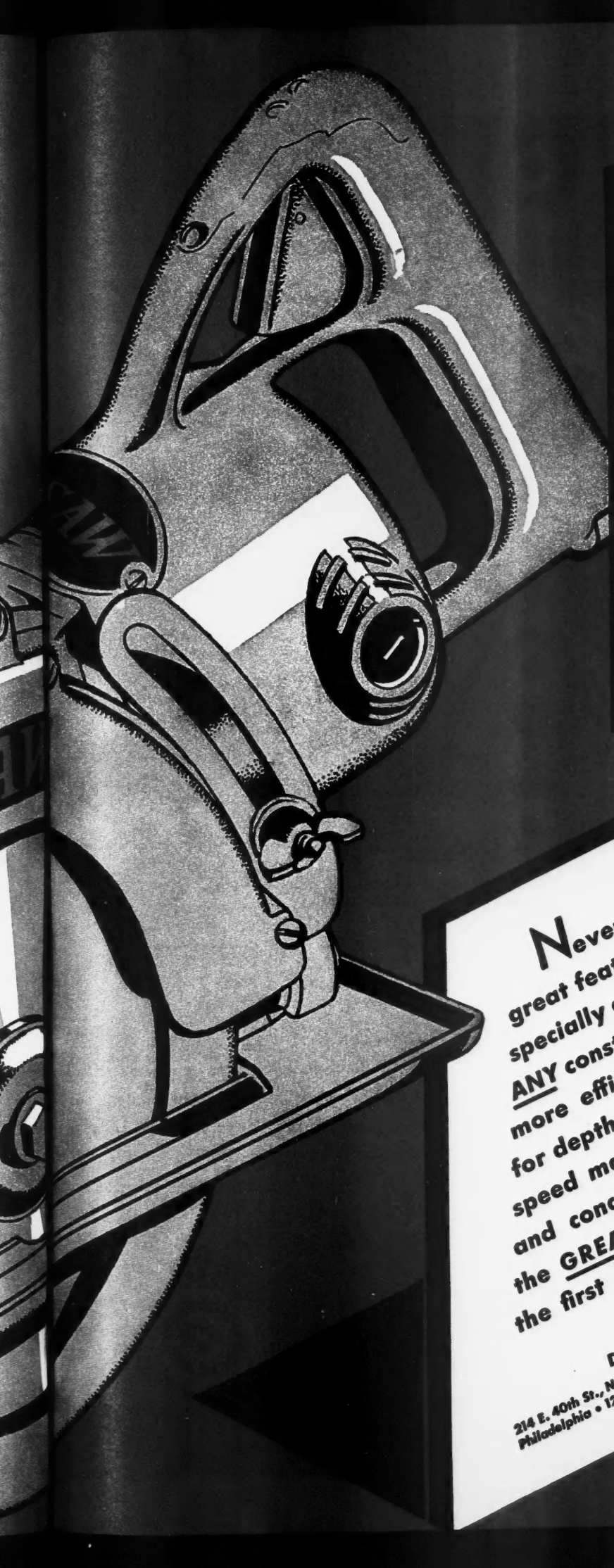
AB-538

**OVERHEAD DOOR CORPORATION • HARTFORD CITY, INDIANA U.S.A.**

New!  
THE GREATEST BUY IN  
**SKILSAW**  
HISTORY!







## NEW SKILSAW MODEL "87"

MORE POWER!  
NEW SAFETY FEATURES!  
GREATER PERFORMANCE!

- 9-in. blade
- Cuts to a depth of  $2\frac{7}{8}$  in.
- Bevel-cuts lumber  $2\frac{3}{8}$  in. thick at  $45^\circ$
- Only 19 in. long. Weighs only 22 lbs.

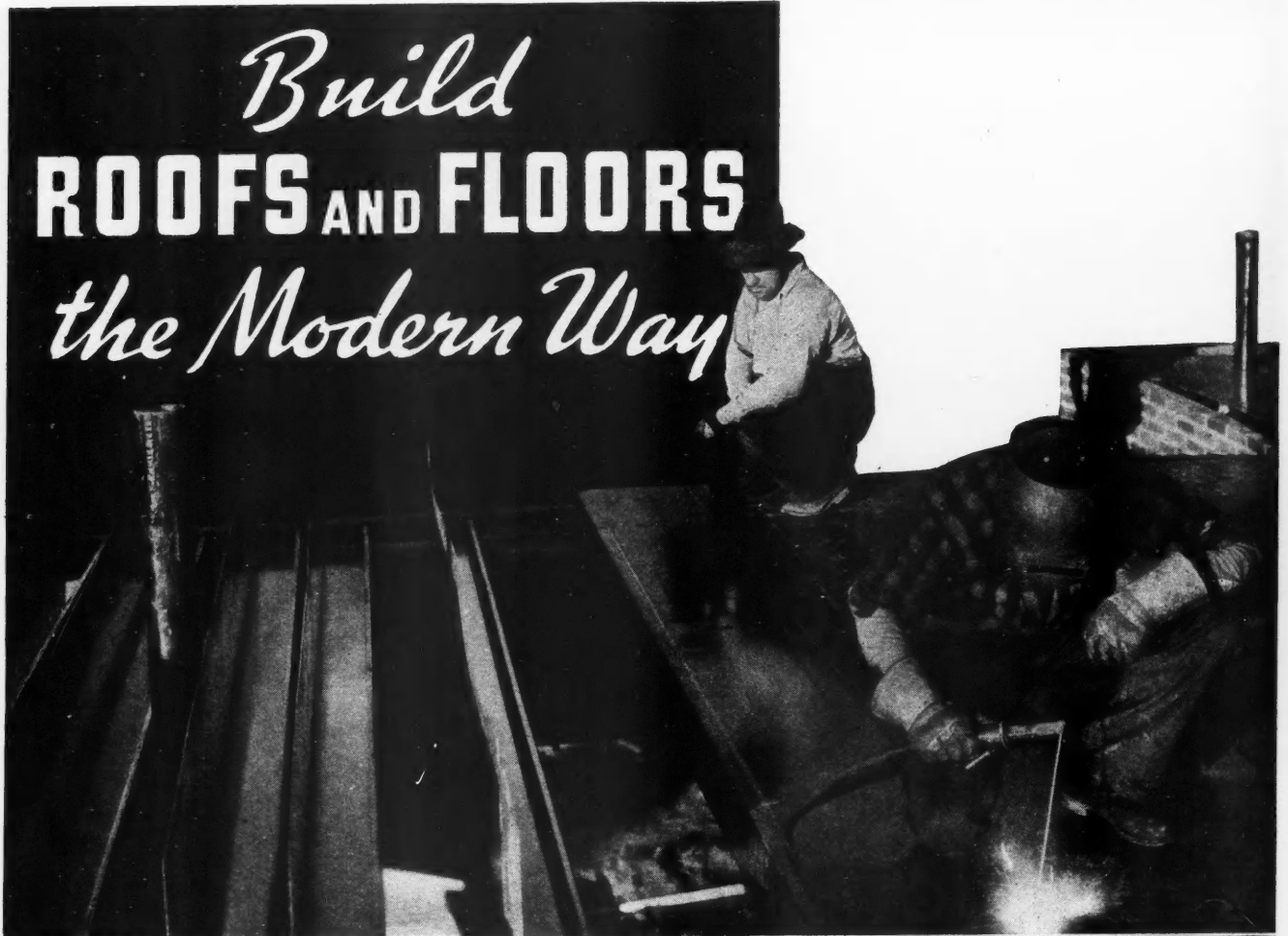
# \$135

Never before such a combination of great features in an electric handsaw... specially designed to cut sawing costs on ANY construction project! More powerful, more efficient, more quickly adjustable for depth and bevel cutting! Fast spindle speed makes it ideal also for stone, tile and concrete. SKILSAW Model "87" is the GREATEST BUY since we introduced the first electric handsaw 18 years ago!

**SKILSAW, INC.**

Dept. A, 3314 Elston Ave., Chicago  
214 E. 40th St., New York • 52 Brookline Ave., Boston • 1429 Spring Garden,  
Philadelphia • 1253 S. Flower St., Los Angeles • 2065 Webster St., Oakland.

# Build ROOFS AND FLOORS the Modern Way



There is no waiting for materials to cure—there is no debris to clean up when you build floors and roofs with Wheeling Long Span Steel Joists. This modern system also saves the cost of extra scaffolding; as exterior masonry work can be done directly from the floor deck.

## Use WHEELING LONG-SPAN STEEL JOIST SYSTEMS

Rigid, light weight floors and roofs of great strength can be built with Wheeling Long Span Steel Joist System at a substantial saving in construction costs. The basic unit is a channel shaped joist whose top flange is considerably wider than the bottom flange. These joists are available in depths of 5", 6" and 8" and are 12 or 14 gauge COP-R-LOY. When these units are welded together in overlapping position, they form a smooth, level surface of solid steel which can be used immediately for storing supplies of masons, steamfitters, electricians, plasterers and other tradesmen. The Wheeling Long Span System permits any finish for the floor or roof. It will speed up your job and increase your profits. Ask about it today!



NEW YORK      ST. LOUIS  
CHICAGO      PHILADELPHIA  
BUFFALO      LOUISVILLE

**WHEELING CORRUGATING CO.**  
WHEELING, WEST VIRGINIA

KANSAS CITY      MINNEAPOLIS  
ATLANTA      RICHMOND  
COLUMBUS, O.      DETROIT

W  
Fir  
you  
save  
give  
com  
grai  
low  
tage  
D  
for  
For  
give  
hand  
on  
them  
F  
wood  
hand  
area  
joist  
and  
over  
T  
Doug  
ish



GOOD BUILDERS  
WILL TELL YOU...



Inside and  
Outside  
...for scores of uses  
**DOUGLAS FIR  
PLYWOOD**  
means money  
saved  
and a better  
house



**WHEN** you figure your next bill of materials, check up on Douglas Fir Plywood. From foundation to attic you'll find scores of uses where it will save you time, labor and money, yet give a better job. Douglas Fir Plywood combines the sturdy strength of cross-grained lamination—light weight—low cost—and the labor saving advantages of large panels.

Douglas Fir Plywood is practical for both exterior and interior work. For foundation forms the large panels give a smooth finish—are easy to handle and strip. You can use them on job after job and finally utilize them for sub-flooring or similar use.

Follow up with Douglas Fir Plywood sheathing. Panels are easily handled by one man—cover large areas quickly—fit standard stud and joist spacing without wasteful sawing and fitting. Many contractors report over 50% saving in man hours.

Take advantage of economical Douglas Fir Plywood to completely finish the interior of the house. For only

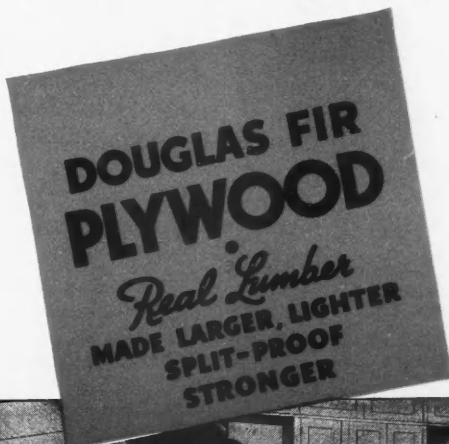
few dollars you can finish an attractive utility room upstairs, a pleasant game room in the basement—and add to the saleability of your house. Use Douglas Fir Plywood for built-ins, cabinet work—in fact there isn't a room in the house to which Plywood will not add materially in attractiveness and utility.

Every panel has straight, square, clean edges, and surfaces that are already sanded to a silky finish. By

using wax or shellac you can hold the lovely natural finish of Douglas Fir Plywood, or you can stain, paint, lacquer or enamel Plywood, or cover it with plastic paint.

Your lumber dealer can supply you with standard grades of Douglas Fir Plywood—Wallboard, Standard Panel, Sheathing and Concrete Form. Stock panels (3, 5, and 7 ply) are manufactured in various thicknesses—as large as 4x8 feet and larger on special order.

Douglas Fir Plywood can also be had in special grades for any construction need, including hot-pressed resin-bonded Plywood developed for permanent exterior exposures.



**INFORMATION**

A well equipped Technical Division offers cooperation in adapting Douglas Fir Plywood to your problems, and recommending the proper types and grades to produce the utmost serviceability and economy. Technical data and handbooks are available to contractors, builders and architects. Address DOUGLAS FIR PLYWOOD ASSOCIATION, Tacoma Building, Tacoma, Washington.

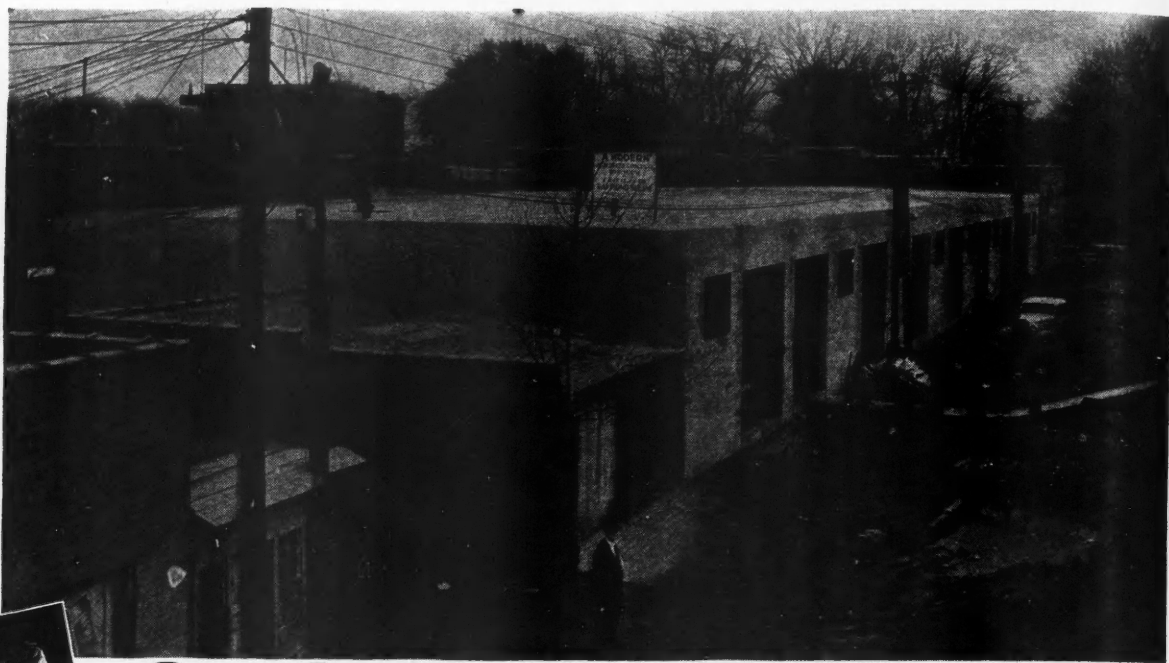


SUB-FLOORS

WALLS AND CEILING

BUILT-INS

CONCRETE FORMS



## Quick Service Concrete

*the key that speeded up the entire job*

### saving time and money

324 pre-cast concrete joists, with a combined length of a mile and a quarter, had to be made on the job and put in place when the wall columns, beams and girders, poured with normal Lehigh Cement, were ready. As the key to coordinate the construction schedule, the contractor used Lehigh Early Strength Cement to get quick service concrete for the joists. Joists cast one afternoon were stripped and moved off the pallets the next morning. This speed permitted continuous repetition of the operation, with minimum forms—only twenty were needed. In seven days, exactly when the construction schedule called for them, the joists were put in place. Mr. Sperr, the contracting engineer, said:

"We also found that Lehigh Early Strength Cement made a more workable concrete, which is an important factor in pouring sections as small as precast joists. We also used Lehigh Early Strength Cement in the floor of a portion of the warehouse. As this floor was poured in cold weather there was considerable saving in both time and money for us, earlier occupancy for the tenant and earlier income for the owner."

You can apply the dependability of normal Lehigh Cement and the time and money saving advantages of quick curing Lehigh Early Strength Cement to any job. Informative 32-page book will be sent on request.

LEHIGH PORTLAND CEMENT COMPANY  
Allentown, Pa. Chicago, Ill. Spokane, Wash.

WAREHOUSE, Marked Tree,  
Arkansas  
Owner: E. Ritter & Company  
Contracting Engineer: Raymond  
Sperr, Memphis, Tenn.

"We used normal Lehigh Cement for walls, columns, girders, and roof slab. We used Lehigh Early Strength Cement for the precast joists, because of the saving in time in developing full strength so that the joists would be ready for use as soon as the walls were completed. We found another distinct saving in the use of forms. We would have lost much valuable time if we had not benefited from early release of joistforms for re-use."—  
Raymond Sperr



# LEHIGH EARLY STRENGTH CEMENT



# Important news to builders:— FOR 30% LESS than in 1934 you can use the best known insulation on the market **J-M ROCK WOOL BATT**

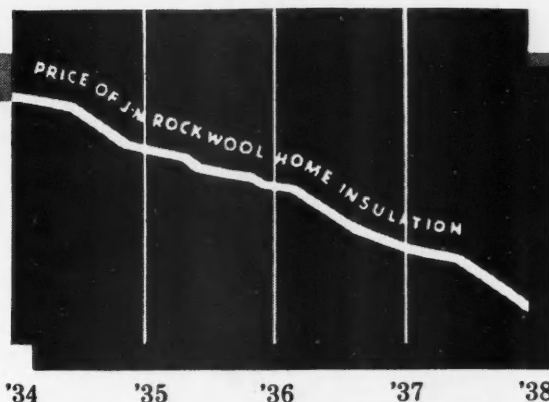
**This famous insulation makes homes easier to sell ... yet it costs no more than many less effective materials**

WHEREVER houses are being built, you will find J-M Rock Wool Batts on the job. Builders know this effective insulation helps sell houses . . . that it costs no more than many unknown, less effective insulating materials.

The J-M Rock Wool Home Insulation Batt is a better product today than ever before. It has been greatly improved in design and manufacture. New and more convenient sizes—Super Batts and Junior Batts—have been introduced. Semi-Thick Batts have been developed especially for use in sidewalls. These and other improvements make J-M Rock Wool Home Insulation fit every building budget.

J-M Rock Wool Home Insulation makes any house a better house . . . cooler in summer, warmer in winter . . . less expensive to heat. It is a sure way to satisfy home owners . . . bring you additional business.

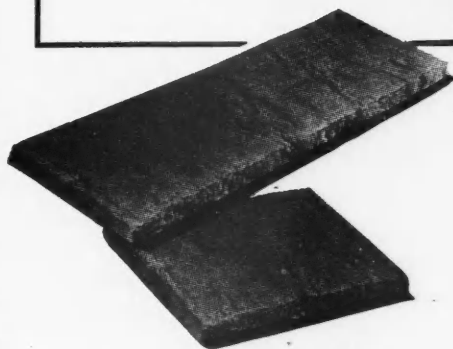
Check all the facts. The low cost of insulating with J-M Rock Wool Batts will surprise you. For full information, write Johns-Manville, 22 East 40th St., New York, N. Y.



FOR THE LAST 4 YEARS the price of J-M Rock Wool Batts has gone against the general trend of prices. Today, J-M Rock Wool Batts cost no more than many less effective materials.

### ECONOMIES OF INSTALLATION

are made possible by improvements in design and manufacture. The waterproof paper backing, for instance, provides a tacking flange that speeds up overhead work. Units are easy to handle . . . retain their shape . . . rapidly installed without voids or thin spots.



### DESIGNED FOR SIDEWALLS

J-M Semi-Thick Batts provide adequate insulating protection in sidewalls at moderate cost. Made of exactly the same material as J-M Full-Thick Batts . . . these Batts offer high resistance to the passage of heat. The tacking flange permits rapid installation . . . assures snug fit.



### THIS PLAQUE HELPS SELL HOUSES

Displayed in your houses, this attractive framed plaque, which J-M furnishes free, shows that you use quality products. It works as a silent salesman . . . draws immediate attention . . . helps you capitalize on the best known name in the building-material field. Ask for details.

# JOHNS-MANVILLE BUILDING MATERIALS

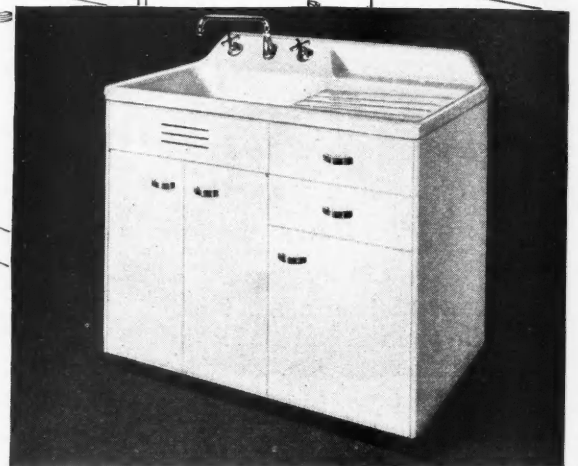


## BUT THE KITCHEN MADE THE SALE

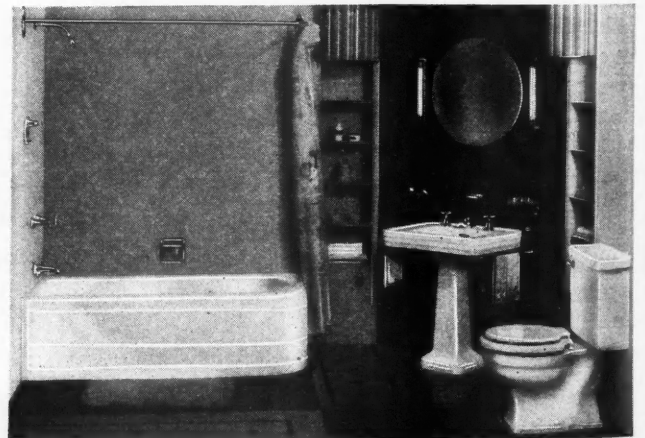
YOU can talk about foundations and studding to the man—but it's the conveniences that sell the house to Mrs. Housewife. And no woman can look at this Crane *Homemaker Sink* in the kitchen without a thrill of pleasure. It has eye appeal but more than that it has so many time-saving, labor-saving conveniences, from the swinging spout that gives tempered water, clear through to the cabinet that's so easily cleaned and roomy and that keeps soaps and pots and pans right at the finger tips—saving countless steps.

What's true of the Crane Sink in the kitchen is true of Crane-Equipment throughout the home; for example, the airy, modern bathroom, the efficient heating plant—all equipment that any prospect will immediately recognize as the finest because it carries the name Crane—a name that is literally a "seal of approval" on the house you have to sell.

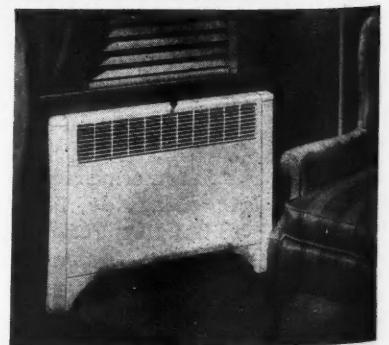
And yet Crane quality may be had at surprisingly low cost, for Crane makes equipment in every price level for every type and size of house. Call on a Crane plumbing contractor or visit a Crane Display Room—see for yourself why Crane-Equipment offers more for your money.



*A midget in size—a giant in service—the Crane Homemaker Sink will fit below a window, make the small kitchen compact and efficient.*



*Such sparkling beauty means easier sales. Your prospects will rave about the bathroom when it is Crane-Equipped.*



*The most modern and efficient form of heating is with the new Crane Convectors. Attractive enclosure design harmonizes with any decorative scheme.*

**CRANE** VALVES • FITTINGS  
PIPE • PLUMBING  
HEATING • PUMPS

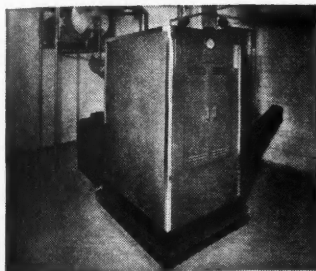
CRANE CO., GENERAL OFFICES: 836 SOUTH MICHIGAN AVENUE, CHICAGO

**NATION-WIDE SERVICE THROUGH 134 BRANCHES AND MORE THAN 500 WHOLESALERS**



# Now you can give your client—

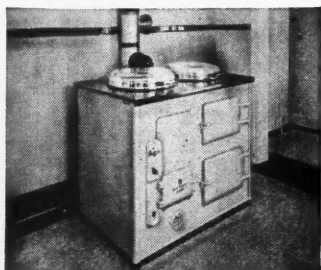
# THE LUXURY OF AUTOMATIC HEAT WITH THE ECONOMY OF ANTHRACITE



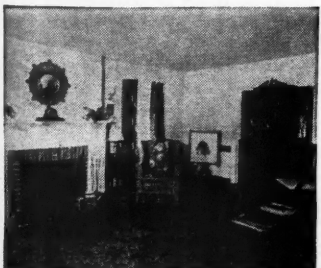
**AUTOMATIC HEAT** with Anthracite stoker-fired hot water boiler. Year 'round hot water supply. Filtered, humidified air is circulated in winter, fresh air in summer. Automatic temperature control.



**BASEMENT PLAN** includes dust-proof Anthracite bin holding year's supply. Ashes are automatically removed to air tight bin for once-a-season removal. Recreation room is panelled in natural finish Georgia cypress, with colored, rubberized tile floor.



**ANTHRACITE KITCHEN RANGE**, insulated to prevent excessive heat in the room, requires only 8 lbs. of Anthracite for a day's cooking.



**FIREPLACE** in living room provides circulation of heated air, from a clean, long-burning, glowing Anthracite fire.



Albany, N. Y. Modern Home. Architect: Alexander Selkirk—Builder: Harry C. Witte Heating Contractor: Brodbeck Bros.—Owner: Wm. McEwan and Son.

**I**T is not necessary for the owner of this home to go near the heating plant all winter long—yet economical Anthracite is the only fuel he uses.

This modern home incorporates every modern heating convenience—air conditioning, automatic temperature control, automatic fuel feeding, automatic ash removal, automatic hot water supply—all year long.

Any home with this modern Anthracite equipment can enjoy low fuel cost—odorless, silent, safe heat and air conditioning—plus the healthful, even heat that only Anthracite can provide.

For details about the types of modern Anthracite equipment used in this home, write for booklet, "Automatic Anthracite Equipment."

**ANTHRACITE INDUSTRIES, INC.**  
**CHRYSLER BUILDING, NEW YORK**

# Pennsylvania ANTHRACITE COAL



*This Seal of Approval appears on Anthracite Equipment only after it has passed the most rigid tests in the heating field.*

**THE SOLID FUEL FOR SOLID COMFORT**

# Do you provide "Fuel Insurance" for your Clientele?



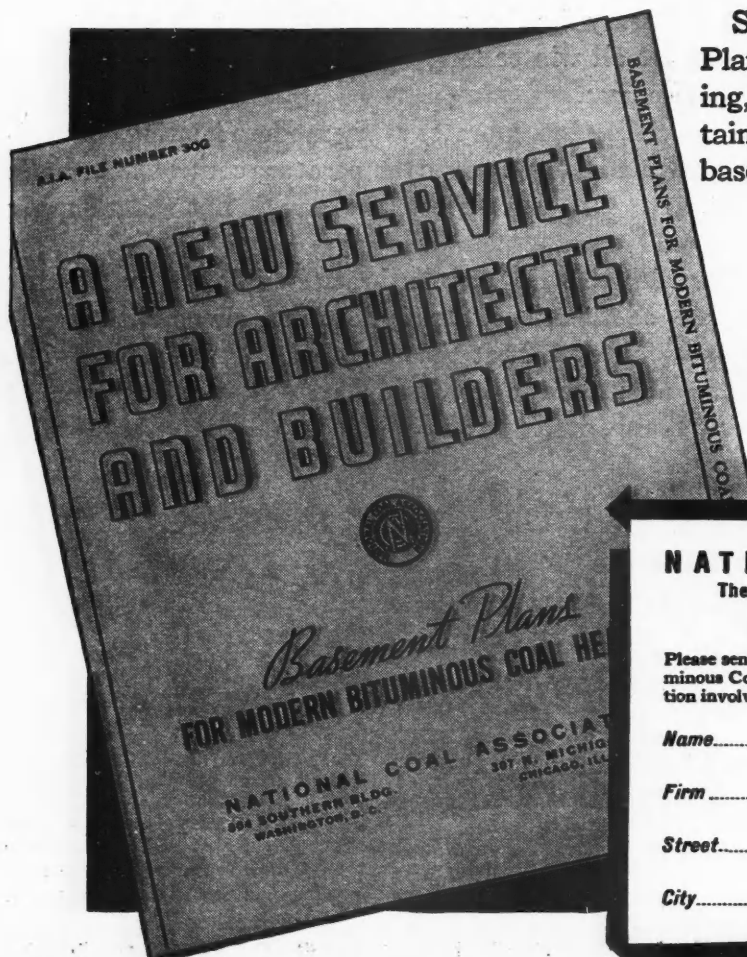
● A house is built for many years of use. Generations will enter its portals and be carried from them. To design so permanent a structure without providing room for a coal bin may be a concession to present fuel fads, but it leaves the owner without insurance against desirable or possible necessary changes of fuel.

Prices of certain fuels may rise considerably, until economy dictates a change in fuel. Dwindling supplies of certain fuels may compel the use of

other means of providing heat, protecting health and assuring comfort.

It is easy and economical to provide space for solid fuel heating when a house is built—much more costly to remodel when the owner decides or is forced to turn to the lower cost and greater comfort of bituminous coal heat. Architects and builders who provide for solid fuel storage when the house is built, are providing "fuel" insurance as long as the house will stand.

Send for our free booklet "Basement Plans for Modern Bituminous Coal Heating," A. I. A. File No. 30-G, which contains detailed drawings of wisely planned basements.



## NATIONAL COAL ASSOCIATION

Copyright—National Coal Association, 1938.

### NATIONAL COAL ASSOCIATION

The National Organization of Bituminous Coal Operators

804 Southern Bldg.  
WASHINGTON, D. C.

307 N. Michigan Ave.  
CHICAGO, ILLINOIS

Please send me a set of "Six Typical Basement Designs for Modern Bituminous Coal Heating," A. I. A. File 30-G. I understand there is no obligation involved.

Name.....

Firm.....

Street.....

City..... State..... AB-5





**WHEN YOU PUT THIS BAG ON THE JOB**

**YOU PUT THE BEST INTO THE JOB**

because all tests prove it superior. Works slicker and sticks better to bricks and masonry. This reduces waste so more units are laid with a given quantity . . . this cuts costs.

Stands longer without retempering and retempers readily even after standing over night.

Use Marquette Masonry Cement . . .

**AND GET THE UTMOST OUT OF THE JOB**

SCALE 1/4"

DRAWN BY *R.M.*  
TRACED BY *D.W.*  
CHECKED BY *C.C.*  
DRG. NO. 4104

*High Test!*

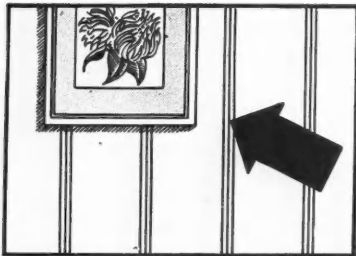
**Marquette  
CEMENT**

**MARQUETTE  
HIGH EARLY  
STRENGTH  
PORTLAND CEMENT**

**MARQUETTE CEMENT  
MANUFACTURING COMPANY  
CHICAGO MEMPHIS**

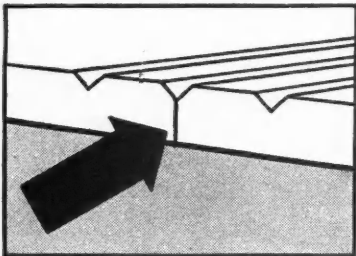
# Kraftwood

## SENSATIONAL NEW 3-PLY WOOD PANELING



### No Battens

The 48 inch Kraftwood panels are tooled in grooved designs so arranged that when one panel is butted against another, the joint becomes part of the tooled design!



### No Strips

All Kraftwood panels have beveled edges. When two panels are butted together the two edges form a single groove resembling the tooled grooves of the panel designs.



### Nailed Joints

To install, Kraftwood panels are butted tightly together and nailed through the tooled groove to proper backing. Directly to old plaster walls on remodeling jobs. The grooves are sufficiently deep to conceal the nail heads.



● **KRAFTWOOD** is a beautiful new wall board. It is natural wood—durable three-ply paneling, but far more attractive and distinctive.

Kraftwood has a refined, beautiful Tudor-grain which is processed into the wood—and is as permanent as wood itself. It can not be rubbed off, it will never fade. Also, all Kraftwood panels are grooved in attractive tooled designs to achieve at a fraction of the cost the effect of a plank paneled room.

Kraftwood graining also tends to equalize the natural expansion and contraction of the wood—it practically eliminates grain-raising and face-checking.

Three years were spent developing, testing, perfecting Kraftwood. It has been used on the Pacific coast and praised most enthusiastically for its beauty, the ease and inexpensiveness with which it is installed and finished, and its extreme low cost.

### Resin-sealed, easy to finish

Kraftwood panels are resin-sealed on all sides to check warping and twisting. The sealer also acts as the first finishing coat; two coats of paint on Kraftwood give a permanently beautiful effect.

### Precision sawed, easy to install

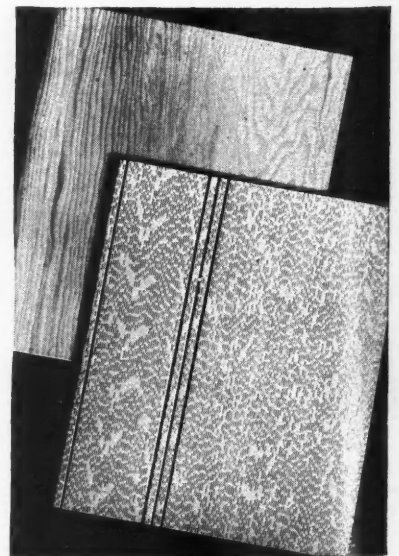
All Kraftwood panels are retrimmed by a set of straight edge precision saws. This retrimming assures true edges that fit evenly and tightly.

### Brings distinguished beauty to low cost walls and ceilings

Kraftwood is the ideal where handsome wood paneling is desired: entrance ways, living rooms, dining rooms, game rooms, bedrooms, utility rooms, specialty shops, beauty salons, dress shops, display rooms, reception rooms, restaurants, tea rooms, beer parlors, bars, offices, lobbies, store interiors and fixtures.



Kraftwood is priced by zones at central distributing points. 4-foot wide panels are available in lengths up to 12 feet. Ceiling panels are 4 foot by 4 foot. For quotations write the Kraftwood Division, M and M Woodworking Company, Portland, Oregon.

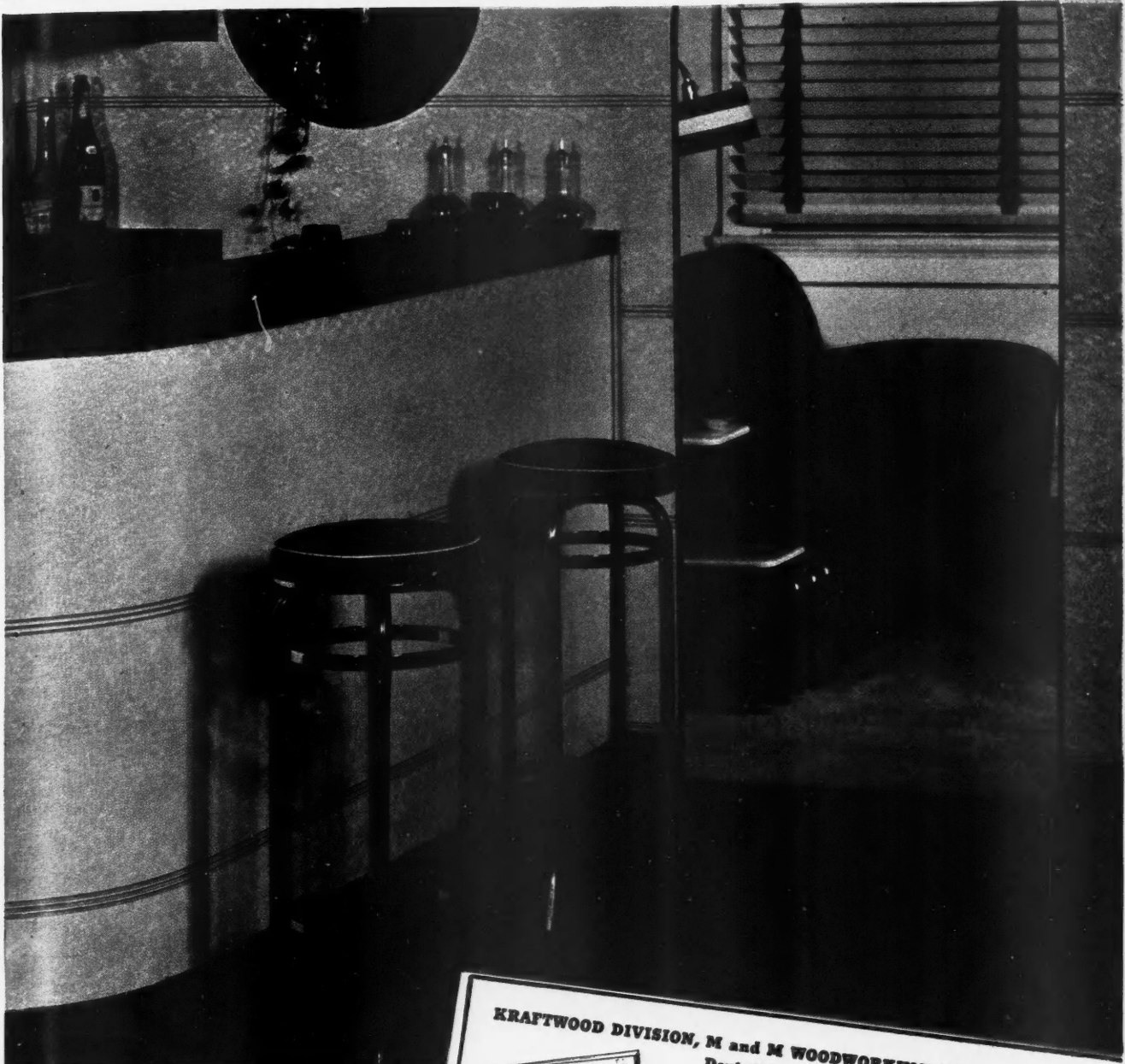


Close-up, Kraftwood panel. Note its refined even Tudor-grain—processed into the wood. It can not be rubbed off; it will never fade. Compare it to the piece of fir plywood.

M and M WOODWORKING CO.,



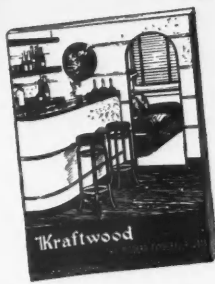
# HANDSOMELY TUDOR-GRAINED



## KRAFTWOOD BAR \$19.34

Kraftwood is used throughout this 8-foot by 8-foot bar room in Portland, Oregon. Material for all walls, counter, top, shelves and trim amounted to \$19.34. Two coats of paint give the walls their handsome two-tone effect. Counter and shelves are finished with two coats of lacquer.

**KRAFTWOOD DIVISION, M and M WOODWORKING COMPANY**  
Dept. 101, PORTLAND, OREGON



I'm interested in Kraftwood. Please send me full information on patterns, installation and finishing. Also name of nearest dealer or distributor.

Name.....

Firm Name.....

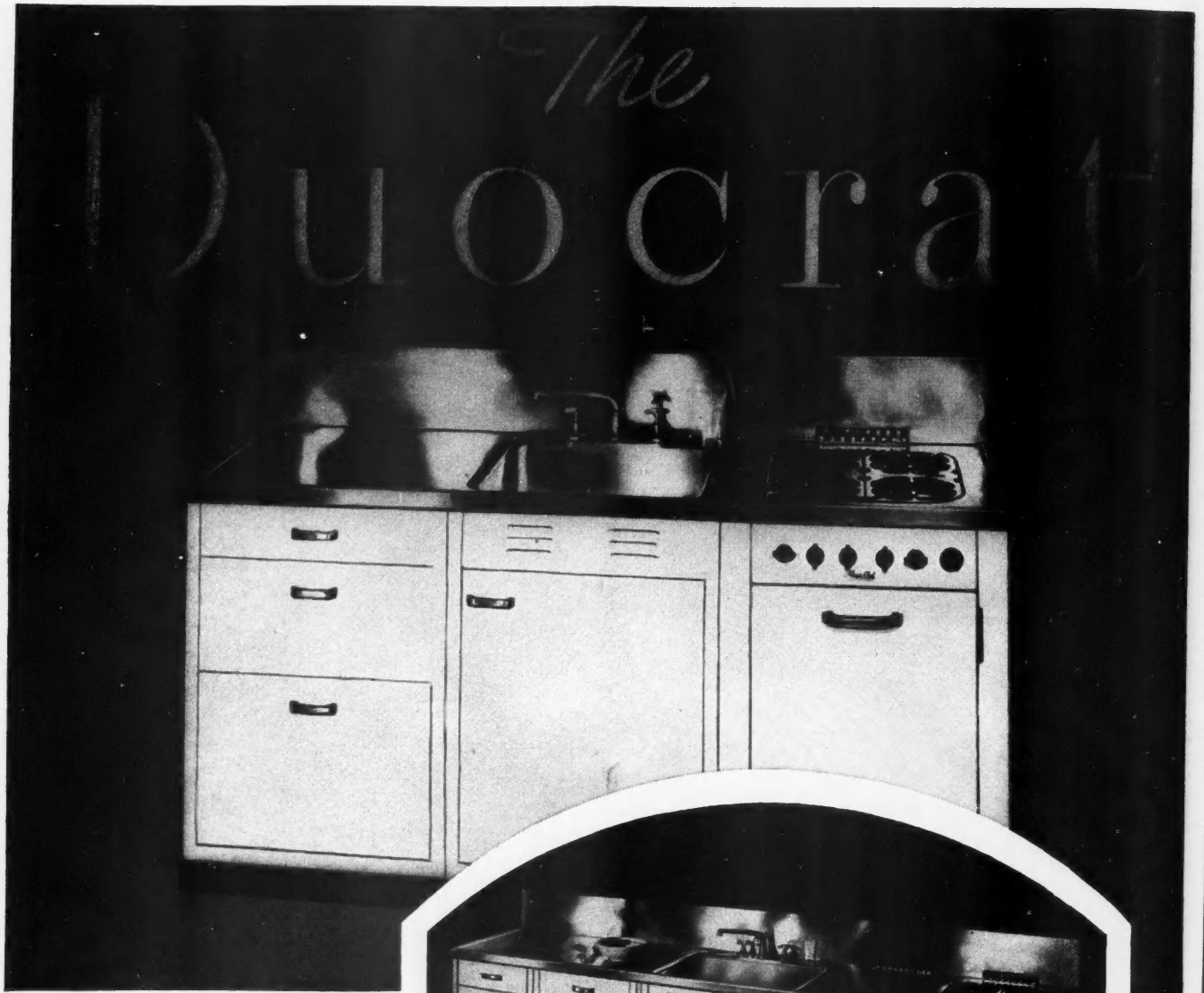
Business Address.....

City.....

State.....

**MAIL THIS COUPON TODAY**

# PORTLAND, OREGON



*... a new compact  
Monel sink and  
range combination*



**T**O the kitchens of apartments and small and large homes the Duocrat\* brings a new standard of quality, convenience and saving in space. It is furnished in two standard sizes:

72" size . . . equipped with 21" Magic Chef range with full size oven and heat control.

108" size . . . has regulation size Magic Chef range, with heat

control, and the famous swing-out broiler.

The Duocrat can also be furnished in intermediate sizes up to 168" with one-piece Monel top and backsplash and steel base cabinets standard throughout.

\*TRADE MARK  
(Pat. Pending)

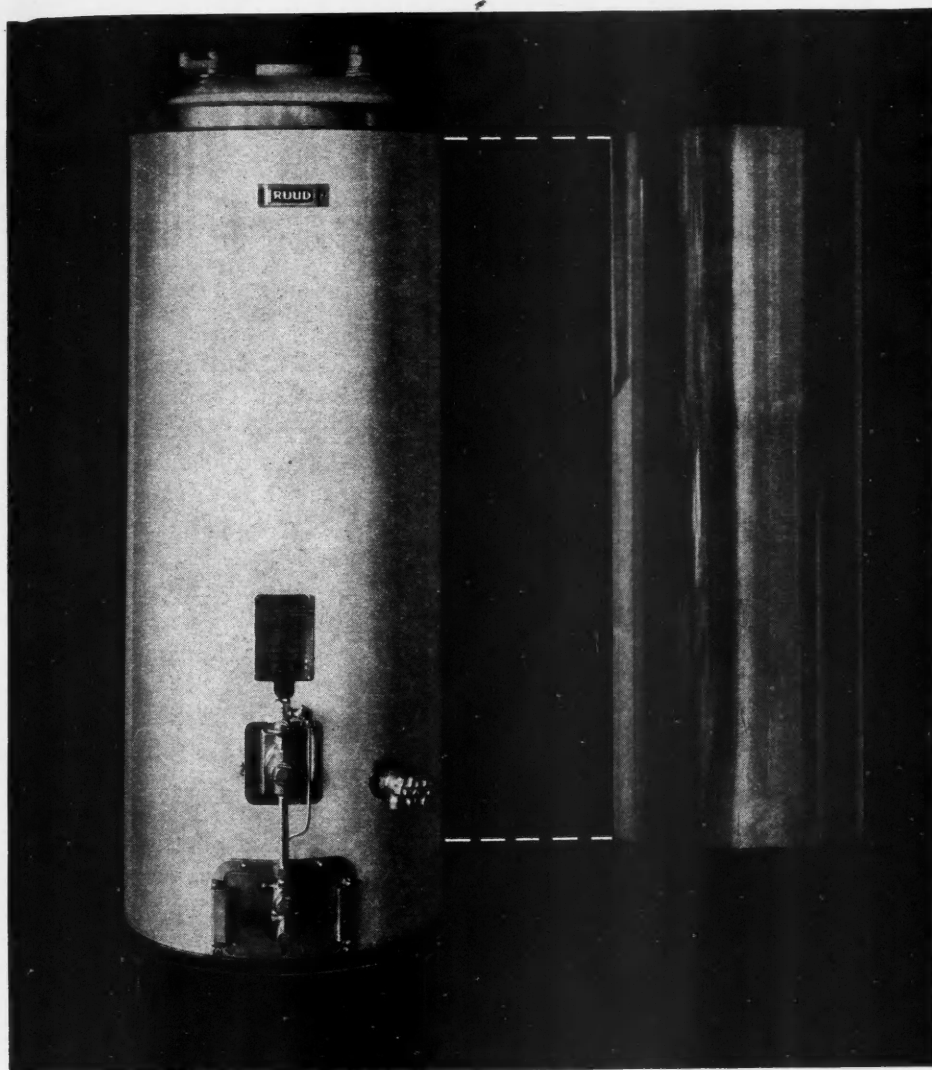
Detailed information covering the new Duocrat, and the full line of Whitehead Monel sinks and steel cabinets, are available on request. Ask also for 20-page catalog "Whitehead Work Saving Kitchens." Write to:

# Whitehead

METAL PRODUCTS COMPANY,  
INC.  
303 W. 10th St., New York, N. Y.



# RUUD GAS WATER HEATERS FITTED WITH TANKS OF MONEL<sup>★</sup>



## 20 YEAR GUARANTEE

Monel tanks used in the RUUD Automatic Gas Water Heater are guaranteed for 20 years. Their life expectancy is virtually without limit.

### SPECIFICATIONS

**SIZES . . .** Three—20, 30 and 45 gallons—suitable for a majority of homes and for many commercial requirements.

**THERMOSTAT . . .** Main gas flow is automatically governed by the thermostat which in turn is controlled by the temperature of the stored water.

**INSULATION . . .** Thick insulation surrounds the tank, holding heat a captive and avoiding radiation loss.

**CUT-OFF . . .** This functions automatically to close all gas lines if the pilot flame goes out.

**TANK . . .** Tank is solid MONEL, completely rust-proof and guaranteed for 20 years.

**CLEAN-OUT . . .** Special models in all three sizes are made with two-inch cleanout for removal of hard water deposits.

**ACCESSORIES . . .** Copper dip-pipe . . . cold water inlet and twin hot water outlet are brass . . . brass drain valve . . . all fittings aluminized.

**BURNER . . .** Quick-speed, full burn burner with needle-valve adjustment.

**APPEARANCE . . .** Smartly styled and handsomely finished in black and white porcelite. Chrome band. Full-front mechanism.

## CLEAN—CLEAR HOT WATER

Ruud gas water heaters and Monel tanks—there's a combination that means "tops" in hot water service. No rust! Always clear, clean hot water! Longer Lifel Because a Monel tank *cannot* rust—ever. And there's a written guarantee for twenty years of rust-free hot water service.

Send the coupon below for full details about the new RUUD automatic gas water heaters with MONEL TANKS.

<sup>★</sup>MONEL is a registered trademark applied to an alloy containing approximately two-thirds nickel and one-third copper.

**RUUD MANUFACTURING COMPANY  
PITTSBURGH, PA.**

*For full information on the complete Ruud line, see Sweet's Architectural Catalog, Section 27, Catalog 48.*



AB

Ruud Manufacturing Co., Pittsburgh, Pa.

Gentlemen: Send me complete information about the new RUUD automatic gas water heaters with MONEL Tanks.

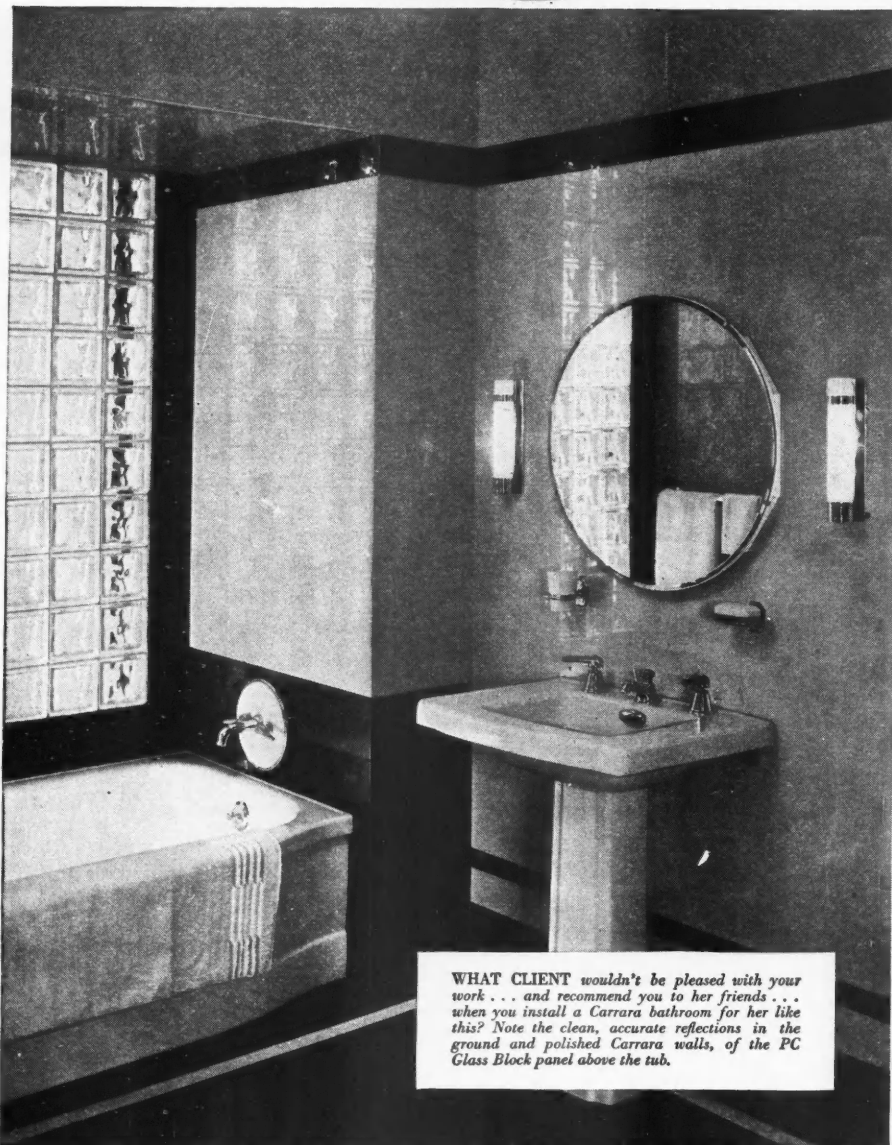
Name \_\_\_\_\_

Address \_\_\_\_\_

ring  
full  
inks  
able  
page  
ving

ANY,  
N. Y.

# A Carrara Bathroom job puts a Feather in your Cap and a Profit in your Pocket



WHAT CLIENT wouldn't be pleased with your work . . . and recommend you to her friends . . . when you install a Carrara bathroom for her like this? Note the clean, accurate reflections in the ground and polished Carrara walls, of the PC Glass Block panel above the tub.

**H**UNDREDS of contractors have found Carrara Structural Glass a powerful ally in doing bathroom and kitchen jobs they can be proud of. Jobs that their clients are proud of, too. And jobs that are profitable, satisfactory, pleasantly free from subsequent complaints and kick-backs.

In building new bathrooms and kitchens, or remodeling old ones, walls of Carrara insure exceptional beauty, permanence and practical utility. Their polished, brilliant surfaces have mirror-like reflective properties which only a mechanically ground and polished glass can provide. Their mellow color-tones are eye-catching and attractive. Their easy-cleaning qualities (just an occasional wiping with a damp cloth) are welcome to women. And Carrara walls will never check, craze, stain, fade, or absorb odors.

Use Carrara on your bathroom and kitchen jobs. It will put a feather in your cap, and a profit in your pocket. Use it, too, for niche linings, partitions, sill and radiator covers, shelves and a score of other things. And write . . . today . . . for our booklet of helpful information entitled "Carrara, the Modern Structural Glass." It's yours for the asking. Address Pittsburgh Corning Corporation, 2277A Grant Building, Pittsburgh, Pa.

Distributed by

**PITTSBURGH PLATE GLASS COMPANY**

and by W. P. Fuller & Co. on the Pacific Coast

Manufactured by

**PITTSBURGH CORNING CORPORATION**

Also Makers of PC Glass Blocks



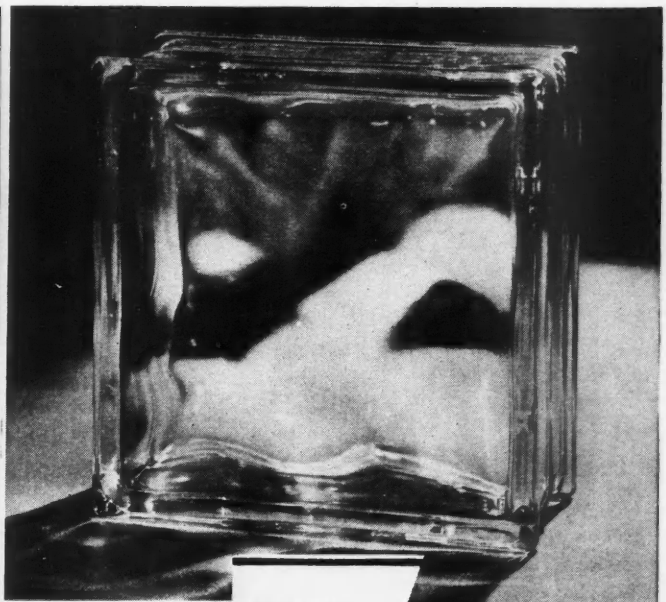
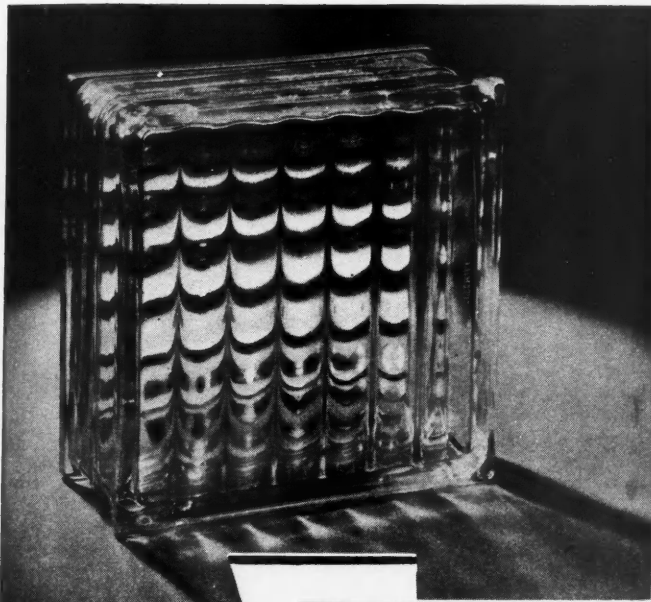
*Carrara*  
THE MODERN STRUCTURAL  
GLASS



# ANNOUNCING...

# PC Glass Blocks

New Blocks combine exceptional good looks with high light transmission properties and effective sound and heat insulation



ARGUS PATTERN, PC GLASS BLOCK    DECORA PATTERN, PC GLASS BLOCK

5 3/4" x 5 3/4" x 3 7/8"  
7 3/4" x 7 3/4" x 3 7/8"

5 3/4" x 5 3/4" x 3 7/8"  
7 3/4" x 7 3/4" x 3 7/8"

For use at corners, a radius block is available in both Argus and Decora Patterns.

WITH the introduction of PC Glass Blocks, a medium is presented for the contractor's use which is peculiarly well suited for all types of construction.

These blocks, available in two modern and attractive patterns (see illustrations) transmit 78% of the light incident on them... but insure, at the same time, a welcome privacy. They effectively insulate against sound, making rooms in which they are employed quieter and more restful. And their heat insulation properties are such that a PC Glass Block

panel permits only one-half as much heat loss as a like area glazed in the usual fashion with ordinary glass.

PC Glass Blocks are strong. They are easy to clean. They are non-absorbent. They require little or no maintenance expenditure. And they are backed by the prestige and the facilities of two of the world's greatest glass companies... Pittsburgh Plate Glass Company and Corning Glass Works.

We invite you to send for complete information on PC Glass Blocks. The coupon below will bring you, with-

out charge, our booklet "The Glass Age Arrives." And should you desire information concerning the application of structural glass of any type to building construction, the Pittsburgh Corning Corporation will gladly supply it upon request.

Distributed by

**PITTSBURGH PLATE GLASS COMPANY**

and by W. P. Fuller & Co. on the Pacific Coast

Manufactured by

**PITTSBURGH CORNING CORPORATION**

Also Makers of Carrara Structural Glass



## Glass Blocks

Pittsburgh Corning Corporation,  
2270A Grant Bldg., Pittsburgh, Pa

Please send me, without obligation, your new book of facts about PC Glass Blocks entitled "The Glass Age Arrives."

Name \_\_\_\_\_

Street \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_



LET THIS SELLING FEATURE  
HELP CLOSE *Your* SALES FASTER

## ... STANLEY "SWING-UP" GARAGE DOOR HARDWARE

Regardless of budget — or whether you are building houses for resale or to owners' specifications, you'll find Stanley "Swing-Up" Garage Door Hardware a definite sales help — customers are attracted to the modern convenience of Stanley "Swing-Up" Garage Doors. You can guarantee good

appearance and trouble-free operation.

Easy to install on new or old garage doors — Stanley "Swing-Up" Garage Door Hardware *floats* the doors up to open position with a slight starting pull, even when snow-banked . . . lowers them easily. Prevents binding, sagging, banging in the wind . . . and

they *remain* that way for the life of the building.

Visit your Stanley dealer—learn how inexpensive it is to put this sales feature on every garage you build or repair. He can supply you promptly. Write for catalog giving data. The Stanley Works, 133 Elm Street, New Britain, Conn.

# STANLEY

HARDWARE FOR CAREFREE DOORS





# Orchids to GENERAL ELECTRIC

*From Orchid Grower*

"... we thought you would be interested in knowing of our experience with the five General Electric Oil Furnaces we bought ... to replace equipment we had been using for seven years.

"Operating costs have been close to your estimate. Our total operating costs for 1936 were \$1830 ... this represents a saving of \$800 over our former costs. So far this present heating season, we have used 3,000 gallons less than last season. We expect to pay for the entire cost of equipment in about six years from date of installation."

Excerpts from letter written by an executive of Wheeler & Company ... Orchid Growers ... Waban, Mass.



Five G-E Oil Furnaces heat five greenhouses which shelter orchids worth their weight in gold. Wheeler & Company, Waban, Massachusetts.

## GENERAL ELECTRIC OIL FURNACE IS THE FINEST HEATING SYSTEM MONEY CAN BUY

LIKE these growers of orchids, your client will be glad he chose General Electric Oil Furnace. For whether you have specified a single unit or a multiple installation ... this amazing heating system can pay for itself, due to savings over ordinary fuel bills.

And like thousands of other thoroughly satisfied users, your client will enjoy the many other advantages of the G-E Oil Furnace. Fully-automatic ... dependable ... safe and efficient

... it comes complete in a coordinated unit. It will provide carefree heating comfort for years to come.

Telephone your General Electric Distributor TODAY. Have him explain why the G-E Oil Furnace is recognized as the finest heating system money can buy ... why it costs less to operate. Or write General Electric, Division 3111, Bloomfield, New Jersey.

**GENERAL  ELECTRIC**

*Automatic Heating and Air Conditioning*

**OIL FURNACES...GAS FURNACES...WINTER AND SUMMER AIR CONDITIONING**

# ESTIMATING FORMS

## The Old Builder's Estimator

Complete estimating forms for one residential job, with a 300 item check list, 7 pages of estimating data, and memo sheets for use on the job. Facilitates the preparation of a complete, itemized, accurate estimate. Three columns are provided for checking every line of the detailed estimate and the forms follow the order in which a residential job progresses.

48 pages, 4 x 7½, paper.....\$ .25  
12 for ..... 2.50

## Contractor's Estimating Records

A complete estimating record for a single job. A 2-page ruled estimating form is followed by a check list for a frame, brick or stone dwelling or apartment house. There are 2 pages for material lists and 2 for millwork lists, with detachable duplicate sheets. On the backs of listing pages are tables and short cut rules for estimating materials.

24 pages, 8½ x 11, paper.....\$ .30  
12 for ..... 3.00

## "Practical" Carpenter's Guide

Contains 11 pages of estimating tables and 54 pages of estimating sheets for figuring any kind of a carpentry job. Forty divisions of work are listed. Space is allowed for writing in the amount opposite each trade.

64 pages, 4 x 7, paper.....\$ .25

## "Practical" Estimate Sheets, Form 514

An excellent sheet for listing all classes of work from the plans. Provides ample space for a full and accurate description of all work estimated, dimensions, quantities, unit and total material and labor costs. Lithographed in green ink on white bond paper.

100-sheet tablet, 8½ x 11 inches..\$ .75

## "Practical" Summary of Estimate Sheets, Form 515

The front of this sheet contains a complete list of the different classes of work encountered in residential construction, while on the back is a detailed list of practically every operation encountered in the different branches of work. This sheet prevents overlooking an item when making up an estimate. These sheets are particularly convenient when requesting building loans from mortgage houses.

50-sheet tablet, 8½ x 11 inches...\$ .75

## Quantity Survey and Cost Sheets for Residence Work, Schedule "A"

Three sheets are required to list all the materials that may be required in the construction of a residence and garage. Spaces are provided for describing the materials and telling where they are to be used. Other columns are for price quotations on all items required. Provides for 25 jobs with duplicate sheets, or 50 jobs without.

150 sheets, 12 x 18, cardboard,  
spiral binding .....\$3.00

## Schedule "B"

Requires one page to list materials required for the construction of a barn or other farm building. Sufficient sheets for figuring 50 jobs with duplicates or 100 jobs without duplicates.

100 sheets .....\$2.50

## Today's Building Estimator

Contains 12 sets of blank forms for taking off quantities so that a complete bill of materials can be made up. The book also contains handy estimating tables.

96 pages, 5½ x 8½, cloth.....\$1.25

## BOOK SERVICE DEPARTMENT

SEND FOR OUR FREE BOOK GUIDE

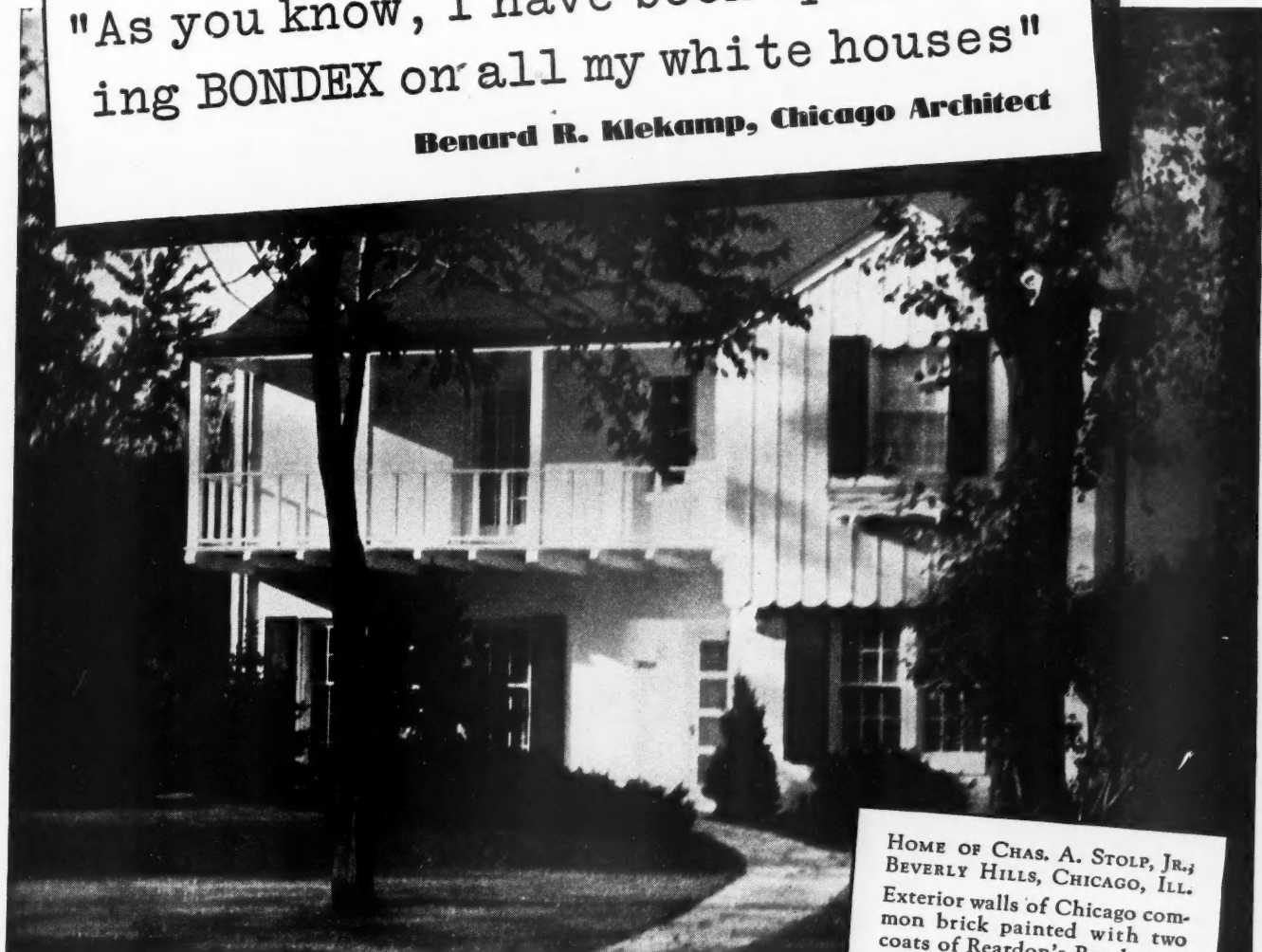
# American Builder and Building Age

30 Church St., New York, N. Y.



"As you know, I have been specifying  
 ing BONDEX on all my white houses"

**Benard R. Klekamp, Chicago Architect**



HOME OF CHAS. A. STOLP, JR.,  
 BEVERLY HILLS, CHICAGO, ILL.  
 Exterior walls of Chicago com-  
 mon brick painted with two  
 coats of Reardon's Bondex.

## Another Prominent Architect Trusts His Reputation to BONDEX

*...The World's Standard Waterproof Cement Paint*

Only one thing can explain the overwhelming preference for Bondex among architects the world over—its long record of superior performance.

The test of time has created complete confidence and a firm conviction that "the paint eternal" will stand up and give complete

satisfaction—in any weather and in any climate.

Whenever there's a stucco, cement or brick building to be waterproofed, weatherproofed and beautified you can trust your reputation to Bondex—a single treatment does all three jobs permanently and economically.

**BONDEX, MODEX and R·W·K (Reardon's Washable Kalsomine)**  
*are Made Only by*

**THE REARDON COMPANY**

St. Louis • Chicago • Los Angeles • Montreal, Canada

Send for  
 Illustrated  
**BONDEX**  
 Folder



THE REARDON COMPANY  
 2204 N. Second St., St. Louis, Mo.

Please send me your new BONDEX folder  
 for "Waterproofing and Weatherproofing  
 the World."

Name \_\_\_\_\_  
 Address \_\_\_\_\_  
 City \_\_\_\_\_ State \_\_\_\_\_

# "Hold Everything" in the way of Residence Garage Door Sales

*until*

you get our prices and the facts about this amazing new Ro-Way Model "J" Door, with the simplest operating mechanism ever devised!

**Rō-Tō Live Spring**

Here is a patented improvement so revolutionizing in its effect on the entire industry that you will want to have all the details at once. Write today for the new Ro-Way Model "J" Folder. See what Ro-To Live Spring really means . . . in building a Garage Door with fewer working parts, together with a convenience and ease of installation as never before possible . . . and above all, an entirely new smooth-coasting, non-binding operation with lasting freedom from service calls.

The secret of the performance of this new Ro-To Live Spring is that . . .

## BOTH ENDS WORK "No Dead Ends"

When you open or close the new Ro-Way Model "J" Door, you get the sensation of "coasting," because both ends of the spring work at exactly the same time, with exactly the same power and exactly the same efficiency. The Ro-To Live Spring puts a straight balanced lift on both sides of the door, ending all side drift, which causes other doors to bind.

## "OK" say Thousands of Owners

The enthusiastic reception this new type door has already received from users in more than 3,000 residence garages, is the best evidence of the value of this Ro-To Live Spring improvement.

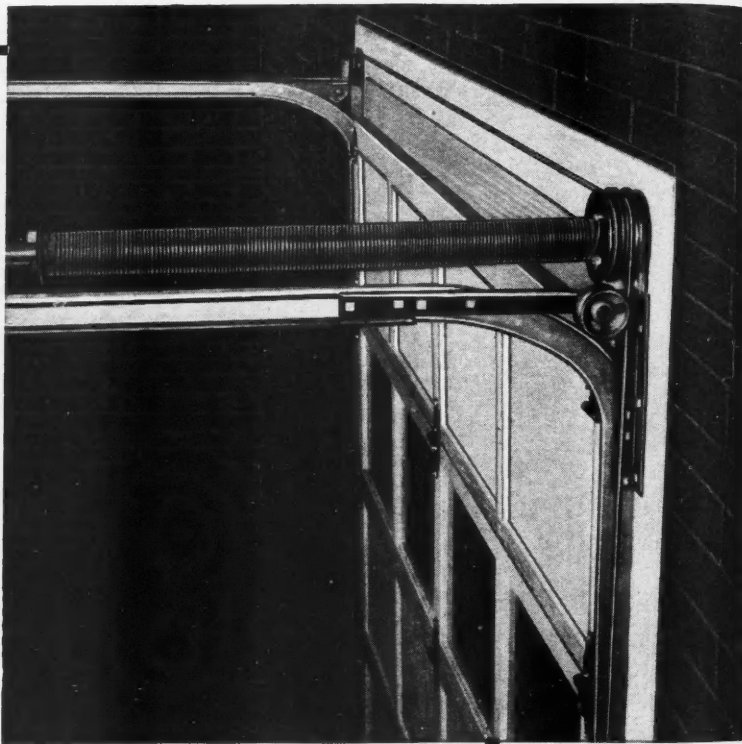
## "OK" say Contractors ... Everywhere

No other door matches the Ro-Way Model "J" in exclusive features, ease of installation, value and freedom from service calls. Its simplicity appeals instantly to the garage owner, and its smooth, quiet coasting action clinches sales.

Write today for Folder and Prices

Ask for special folder on the new Ro-Way Model "J" Door . . . the only door made with the patented Ro-To Live Spring.

**ROWE MANUFACTURING CO.**  
766 Holton St. Galesburg, Ill., U.S.A.

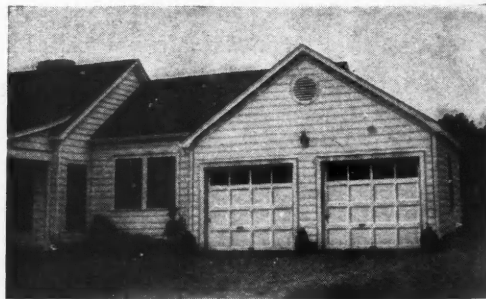


## See how simply it works

Only one spring is used in the construction of the Ro-Way Model "J" Door . . . and this is the Patented Ro-To Live Spring, which is placed above one of the horizontal tracks. This spring is full-floating. One end of it is attached to the rotating ball bearing shaft which carries the far sheave, or pulley. The other end of the spring is attached to the near sheave, or pulley, as shown in the above illustration. Closing the door immediately starts both ends of the Ro-To Live Spring into operation. One pulley turning one way and the other pulley another way results in double-quick coiling of the spring, and double storage of lifting power. Now, when the door is opened, immediately this stored double power is transmitted, smoothly, evenly, quietly, to both sides of the door in a powerful, balanced lift, which is always absolutely vertical . . . always free from side drift, binding and sticking.

### Other Advantages of the Ro-Way Model "J" Door

- "Tracks attach directly to door jamb" . . . "No off-set brackets" . . .
- "Lower headroom requirement" . . . "Only 3 1/2" sideroom requirement" . . . "Impossible to jump track" . . . and many others.



Typical installation of Ro-Way Model "J" Residence Garage Door

Other models of Ro-Way Overhead Type Doors are available for all sizes . . . all buildings . . . electrically operated if desired.

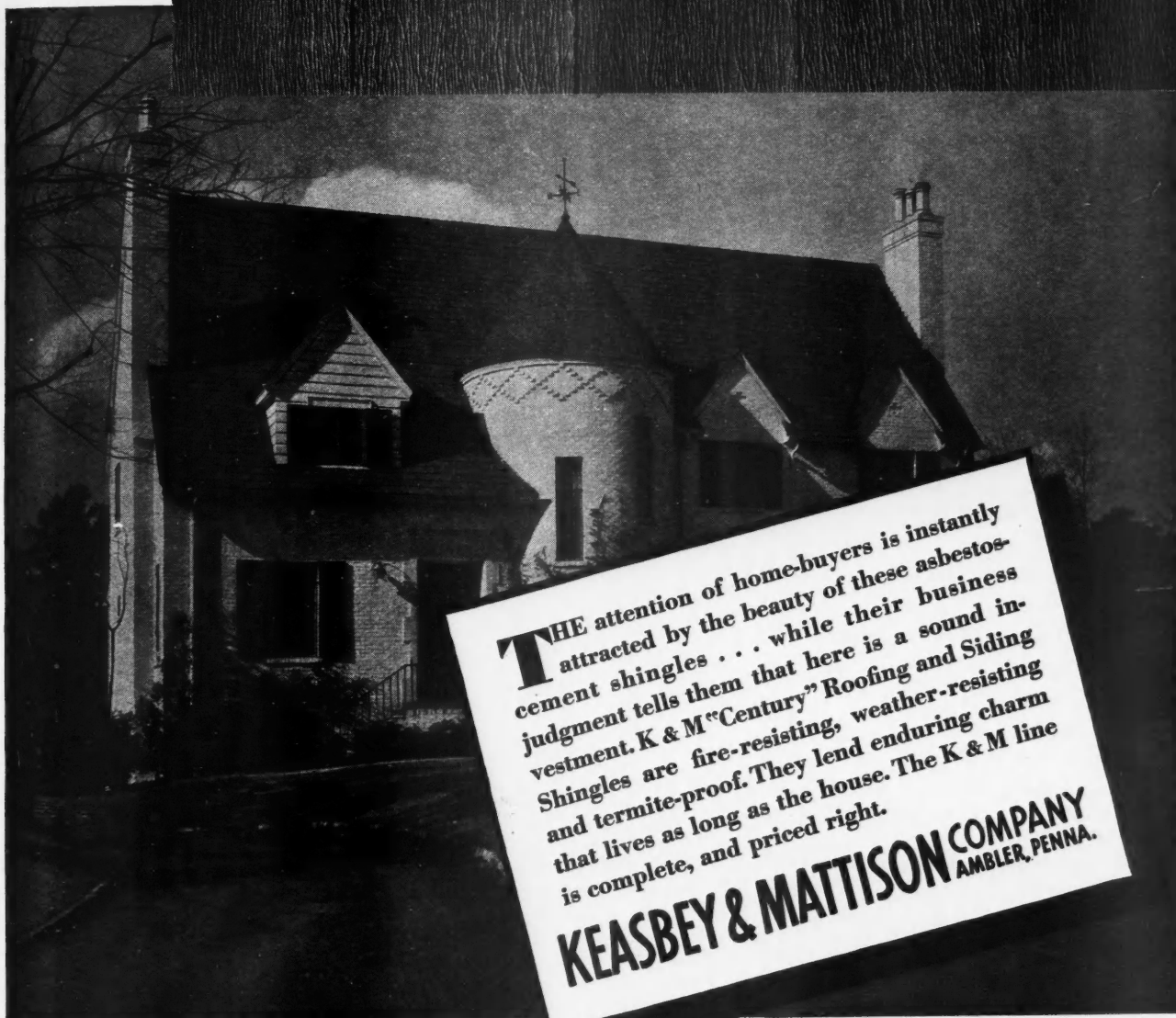
# Rō-WAY "J" OVERHEAD DOOR

—type—

SEND  
Asbest  
Asbest  
Asphal  
Asbest  
Asbest  
K & M



# ROOFING SHINGLES



**T**HE attention of home-buyers is instantly attracted by the beauty of these asbestos-cement shingles . . . while their business judgment tells them that here is a sound investment. K & M "Century" Roofing and Siding Shingles are fire-resisting, weather-resisting and termite-proof. They lend enduring charm that lives as long as the house. The K & M line is complete, and priced right.

**KEASBEY & MATTISON COMPANY**  
 AMBLER, PENNA.

### SEND FOR DATA ON K&M BUILDING PRODUCTS

- Asbestos Roofing & Siding Shingles
- Asbestos Flexible Wallboard (Sheetflextos)
- Asphalt Roofing Products
- Asbestos-Cement Structural Board and Sheathing (Linabestos)
- Asbestos Decorative Walltile
- K & M Mineral Wool Insulations for the home

Underline the products on which you want data and mail this coupon today.

NAME \_\_\_\_\_

NAME OF FIRM \_\_\_\_\_

ADDRESS \_\_\_\_\_

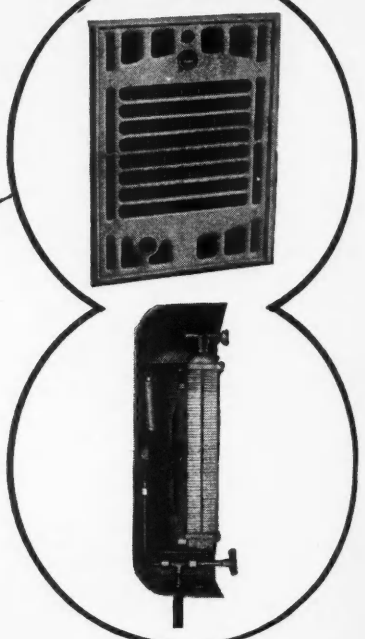
# Air Circulation Without Ducts

— BUT NOT RECIRCULATED FROM ROOM TO ROOM



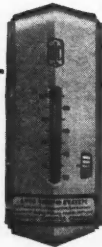
# ARCO THERMO SYSTEM HEATS LIKE LIGHTNING

American Radiator Company, after years of field and laboratory work, offers its latest development — the ARCO THERMO SYSTEM — with all the advantages of the smooth, even flow of heat derived from Hot Water Systems.



## BUILDERS! CONTRACTORS!

Use the American Radiator Company's "New" ARCO THERMO SYSTEM to arouse interest — create enthusiasm — bring profitable inquiries. IT'S NEW — IT'S INDIVIDUAL — IT'S AMERICAN RADIATOR COMPANY'S CONTRIBUTION TO THE HEATING TRADE. Write today for full information including complete piping and installation instructions so you can take full advantage of this opportunity to sell the latest in automatic, fully controlled, air circulating systems — WITHOUT DUCTS!!!



## CONSIDER ITS PRINCIPAL POINTS

1. **AIR CIRCULATION** — But no recirculation from room to room.
2. **NEEDS NO DUCTS** — No headroom sacrificed in basement — No jogs in walls — No cut up closets — Saves floor space — Blends with decorations.
3. **NEAT AND COMPACT** — Requires no more space than ordinary outlet grilles — Room Units are installed flush in walls — easily painted to match any color scheme.
4. **REQUIRES NO NEW TECHNIQUE FOR INSTALLATION** — Standard copper tubing and accepted principles of piping installation, understood by the steamfitter, assures satisfactory results.
5. **APPEALS TO BUILDER AND HEATING CONTRACTOR ALIKE** — No special, expensive enclosure studding is required — Unit is installed complete without insulation or other annoying installation requirements.
6. **DOMESTIC HOT WATER** — From indirect heater built-in or attached to boiler.
7. **100% AUTOMATIC** — Oil, gas or stoker.

*Package unit supplies everything needed for complete installation*

INSTALLED COST COMPARES WITH OTHER LOW COST HEATING SYSTEMS THAT CANNOT OFFER COMPARABLE ADVANTAGES

**AMERICAN RADIATOR COMPANY**  
DIVISION OF **AMERICAN RADIATOR & STANDARD SANITARY CORPORATION**

40 West 40th Street, New York, N. Y.

## HOW IT WORKS

Compressed air driven fan blows air through special radiators through which hot water circulates — Eliminates stratification and maintains even temperature — Reduces temperature difference between floor and ceiling.

Now  
Wai  
finis  
are  
is d  
colo  
have  
cien  
famo  
mate  
from  
does



# ANNOUNCING: 2 New NU-WOOD Products

... assuring complete color harmony ... new decorative beauty ... greater economy and usefulness



## KOLOR-TRIM Moldings

*Designed by a famous architectural authority—predecorated in a full range of beautiful colors—available in interesting patterns.*

Kolor-Trim moldings strike a new and entirely different note in interior decoration! These predecorated wood moldings assure complete color harmony in interior decoration. Reversible Cove Pattern available in three colors; Chair-Rail in four colors; Bead-Molding in five colors—all harmonizing with the rich shades of Nu-Wood.

## NU-WOOD Wainscot

*New, appealing texture—richer, warmer color—scuff-proof surface.*

Nu-Wood Wainscot provides even greater usefulness for Nu-Wood interior finish! It has a new textured surface of outstanding charm... rich, warm color that combines harmoniously with the colors of Nu-Wood Plank, Tile and Kolor-Trim... plus a hard, scuff-proof surface for maximum durability.

Now with the new Kolor-Trim and Nu-Wood Wainscot you can have a complete interior finish job at *one low cost!* No extra materials are needed for the work—and when the job is done, you are sure that it is in complete color harmony... and that walls and ceiling have the insulating and noise-quieting efficiency for which Nu-Wood has always been famous. You can obtain all the Nu-Wood material necessary for the entire finish job from the lumber dealer—and a carpenter does the work! For better interiors, investi-

gate the complete Nu-Wood line, including Wainscot and Kolor-Trim. WOOD CONVERSION COMPANY, Room 119-5, First National Bank Bldg., St. Paul, Minn.

# NU-WOOD

THE INSULATING  
INTERIOR FINISH



Nu-Wood... Products of Weyerhaeuser... Balsam-Wool



*With Bruce  
Finished Hardwood Blocks  
YOU SELL A NEW WAY  
TO SAVE HOUSEWORK!*



● When you suggest Bruce Finished Blocks to an owner, you are selling both lasting beauty and easy, economical floor maintenance. Owners say "Patterned Hardwood Floors stay lovely, year after year, with hardly any attention!" That's an all-important feature to housewives.

This modern parquet-type flooring is finished at the factory, even to waxing and polishing. Its finish is enduring and beautiful—the finest hardwood has ever had. And the floor is ready to use as soon as it's laid.

No flooring is easier to install. Bruce Blocks are nailed over wooden subfloors like regular strip flooring. Or they can be laid in mastic over concrete. They are adapted to almost any type of new construction or remodeling work.

National advertising is developing new prospects in your community every day. Ask your Bruce dealer to give you leads on Bruce Block jobs. Return the coupon for full details and a free copy of "Patterned Hardwood Floors for Distinctive Decoration and Lasting Beauty." It's the most complete book ever issued on any type of hardwood flooring.

**E. L. BRUCE CO.,** *Flooring Division, Memphis, Tenn.*



**OTHER BRUCE PRODUCTS**

- HARDWOOD STRIP FLOORING
- SOLID OAK FLOOR PLANKS • BRUCE FLOOR FINISHES
- MOULDING AND TRIM • YELLOW PINE
- SOUTHERN HARDWOODS • HARDWOOD DIMENSION
- CEDA' LINE • BRUCE PRESERVATIVES
- TERMINIX

**THERE IS NO SUBSTITUTE FOR HARDWOOD FLOORS**

**E. L. BRUCE CO.**  
Dept. AB-5, Memphis, Tenn.

Please send me "PATTERNED HARDWOOD FLOORS — for Distinctive Decoration and Lasting Beauty" and other details.

Name.....  
 Address.....  
 City..... State.....  
 My lumber dealer is.....

Samuel  
Lee, P.  
H. M.  
Clemen  
Secreta  
Secreta

Subscri  
Possess  
years, 1  
\$10.00.  
H. E.  
30 Chu

Member  
(A. B.  
Circulat