Publisher’s Page—Business Will “Carry On”—If Allowed To
by Samuel O. Dunn

Editorial

Homes the People Desire

1939 Building Outlook and Review of 1938

“Best Year Since 1929” Forecast for Home Builders; Outlook Bright As Statistical Studies Indicate 30 to 40% Increase in New Homes; Totals May Pass 1929; Small Speculative Homes on Increase; Non-Farm Homes Built in 1938 Estimated at 345,000.

A Double Portfolio of Homes for 1939

A Collection of 22 Designs Featuring Practical, Salable Homes of the Type Which Will Be Popular in the 1939 Market. Covering a wide range of size, style and location, this selection includes the following: Rambling Colonial in Rural Connecticut Michigan Exhibit Home Styled for Modern Living Interiors and Details of Nurmi Exhibit Home Attractive Real Estate Office Inspires the Building of Small Homes Hartford Home with Breezeway “Picture Home” 5 Rooms and Bath; Attached Garage Stone and Old Brick in Virginia Home A Gem from the Old South Graceful Interiors Broadway Model Home in Los Angeles 6-Room Dutch Colonial, 25x27 Ft., Attached Garage Monterey Style at Blue Ridge, Wash. 6-Room Attractively Styled Brick Front Colonial Two 6-Room Colonial Homes in Evanston, Ill. Concrete Walls, Floors Planned and Built for Comfort Living Corner Lot Colonial from the Midwest 4 Bedrooms, Good Plan Modern Chicago Home Features Excellent Design 7-Room “Orchard House” Beans Mississippi Honors 5-Level House in Illinois Contains 8 Rooms, 1 1/2 Baths Light and Air Abounds in These Kansas Apartments

Index to 1938 Home Designs and Plans

Annual Index to Designs Published in American Builder During the Past Year

TruCost Figures for American Builder Home Designs

Architectural Detail Plate Series

Second in This Series Presents Plywood Treatment of Basement Recreation Room and Attic Space

Only 16 Years Old—$2,000,000 Apartment Building Is Remodeled

Shoprafter’s Corner

Practical Job Pointers

New Year Brings Better Building Materials

News of the Month

Book Reviews

Letters from Readers

Catalogs Reviewed

Advertisers’ Index

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Kawneer—pioneer in the field of Rustless Metal Building Products—offers the most advanced types of Store Fronts, Windows and Doors on the market today. Years of experience and development in design, fabrication and finishes bring notable improvements which may well affect your specifications for 1939.

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KAWNEER STORE FRONT CONSTRUCTION is up-to-date and attractive. Fully resilient sash and bars reduce possibility of plate glass breakage to a minimum. Resilient extruded or rolled construction in aluminum or bronze. The Kawneer line also includes latest types of awning bars, and metal work for the entire front.

Information on any Kawneer product will be sent on request. Write today for details.
Business Will “Carry On”—If Allowed To

The improvement in general business that began last May has continued. In May, 1937, the total volume of all business had recovered to about 90 per cent of the pre-depression volume. In May, 1938, it had declined to about 62 per cent of it—the greatest decline that ever occurred in a year. In December, 1938, it had again recovered to 77 per cent. This was an increase over May, 1938, when the bottom of the “recession” was reached, of 25 per cent. But it left business only as large as in May, 1936, and 23 percent smaller than in the five years ending with 1929—although the country’s population has increased ten million, or about 8 per cent, since then.

The improvement that occurred in the last seven and a half months of 1938 began and continued some weeks before the government’s new spending campaign commenced. Therefore, it was not started by government spending. Perhaps government spending has contributed to it, but nobody knows how much.

Some things are certain, however. Previous government spending never caused full recovery—because full recovery never occurred—although government spending to cause it was unprecedentedly huge. And all this government spending did not prevent the “recession”—because the “recession” did occur and was the sharpest ever known. And government spending cannot much longer be maintained without a large increase in taxes that would make receipts from them equal government expenditures—because a continuance of such great deficits as those of recent years would soon bankrupt the government.

Therefore, unless taxes are soon to be greatly increased, government spending must soon be greatly reduced. But who is to provide employment and support for those now depending on government spending? Private business, of course— if anybody.

But can private business do it?

It is very significant that never until recently did any intelligent person seriously raise the question as to whether private business could provide employment and a living for this country’s entire population. It is raised now because for some years private business apparently has been unable to provide enough employment. But has it actually been unable to? Nobody knows—because for over five years private business has been prevented from showing what it can do by unprecedented government spending and taxing, and by numerous other government policies that have prevented the normal, efficient and progressive operation of private business.

How, then, make it possible for private business to take over the load of employment and relief now being borne by government spending?

First, reduce every form of government spending, whether local, state or federal. Second, reduce every form of government competition with private business, direct or indirect—including government subsidizing (with the taxpayer’s money) of some kinds of private business competing with other kinds of business.

Third, reduce all government regulation of naturally competitive industries excepting regulation to enforce publicity, honesty and competition in the conduct of their business.

Every such reduction of government spending and interference, tending toward reestablishment of the true American system of free private enterprise, will stimulate production and commerce, and thus help private business to provide full employment and a better and better living for the American people.
CONCRETED AT SUB-ZERO
JUST 10 YEARS AGO

'INCOR' CUT
HEAT-PROTECTION
COSTS 80%

CONDITION TODAY,
"GOOD AS NEW"

RECALLS to mind the old saying about the
"proof of the pudding," this bridge job (left)
at Middlesex, Vermont.

Temperatures fell below zero, when 'Incor' concrete was placed, in mid-Winter 1928-29, just TEN YEARS AGO. Recent examination shows all concrete in first-class condition.

Yes, 'Incor' cut heat-protection costs 80%; but, above all, it produced strong, dense, long-lasting concrete. Sound reasons, these, for using 'Incor' 24-Hour Cement on work now under way.

Write for copy of "Cold-Weather Concreting;" tells how to figure 'Incor' savings. Lone Star Cement Corporation, Room 2229, 342 Madison Avenue, New York.

LONE STAR CEMENT CORPORATION
MAKERS OF LONE STAR CEMENT... 'INCOR' 24-HOUR CEMENT
Homes the People Desire

THE building industry has a great advantage in selling its goods and services. Homes are both needed and desired. Shelter, one of the three prime necessities for human existence in the North American climate, is also one of the basic sentimental urges of the human heart. To possess and occupy a home is a dominant motive with almost everyone.

As the nation's population grows and as it shifts from country to town, as new marriages and new families are formed, as old houses become dilapidated and are torn down, as styles and modes of life change and new types of houses in new locations are called for, a great "potential" of home building demand is created. Statistical experts agree that today this piled up need for new homes is the greatest in history. It is estimated at from two million to four million family units—enough to keep the building industry operating at top speed and volume for a number of years.

And on top of this stark need for shelter or "housing" there is also this deep and fundamental urge to home ownership which drives both young men and families on to buy or build, making the biggest and most important financial commitment of their lives, in the majority of cases.

A Boundless Market

And so the business men of the great home building industry have the benefit of these two prime market facts, an unlimited potential of building need and a strong human urge toward satisfying that need. The people want homes—good homes, small homes, low-cost homes. They have quite definite ideas about the type and style of home they want. They have, most of them, been building up in their mind's eye—or in a scrap book—the composite picture of what that new home is to look like and what it is to contain. When they get around to invest their savings that is what they want.

Now these facts have a lot of meaning to those builders who are building homes for sale and for all others in the industry who are concerned with promoting home building or with increasing the volume of sales of home building materials and equipment. Sound promotion and sales work obviously should be in line with what the people want and can pay for.

Recently a good many of the business men concerned with home building have been startled and nonplussed by the advent on the home building scene of certain home designs, aggressively promoted, that are so strange and radical in appearance as to upset all accepted ideas of what an American home should look like. On this page this publication in the last two issues has warned against the use of anything of such a sensational and upsetting nature if confidence in home building and home ownership is to be strengthened among the people.

Evidently we are not standing alone on this; the editor's mail shows it to be a live subject with building industry leaders.

Table Cloth Home Planning

Phil Runion, secretary of the Nebraska Lumber Merchants' Association, in casting his vote for the people's ticket in home designs, has this to add:

"I think that in a great many instances the architect and builder have gone to the extreme in some of their designs. Practically every community, in which a number of homes have been erected in the past year or two, has one or two monstrosities which are no credit to home ownership. They are fantastic, to say the least. I recently had the opportunity to see one of the so-called streamlined homes which had the appearance of being designed on a tablecloth in a night club about four o'clock in the morning. I can't imagine anyone ever wanting to own such a place."

An interesting slant on this subject of extremes in home design has also been contributed by W. E. Difford, managing director of the Douglas Fir Plywood Association. He recalls that during the last building boom in the 20's, every kind of a house under the sun was built. Many of them were atrocities. When the depression hit the country, every loan institution became a big real estate owner, due to the tremendous volume of foreclosures. If anyone watched the sales of this distressed property at the Court House doors of the country, he could not help but have one object lesson—that the house of conventional design was sold quickly and at a fair price while the abortive architecture was a drug on the market; no one wanted them at any price.

The summary of home building figures for 1938 and the forecast for 1939 presented in this issue clearly show that the big present-day market is for the low-cost to medium-cost home. That's where the volume is and that's where the sales promotion should be. It doesn't help to picture $10,000 houses and blithely state that the cost is half that, as many publications have been doing. Logical prospects are misled and deterred by such tactics. And it doesn't help to picture and praise extremes of modernistic design, at the same time belittling conventional architecture. Give the people what they want and can afford and the home building industry will prosper greatly in 1939.
The men of the building industry are faced with the best prospects for a prosperous year in almost a decade. Residential construction in particular is predicted by practically all analysts of the field to be in a strong position, with the very real possibility that the total number of homes built will approach or may possibly exceed 1929 levels.

The prospects for 1939 have been concisely summarized by Standard Statistics Company with the phrase, "The impressive level of current contract awards suggests that 1939 will in fact see greater building activity than any of the last ten years." American Builder, after comparing its findings with the trustworthy analytical and statistical organizations in this field, concludes that 1939 will prove to be the best building year since 1929, and as far as the number of new residential units is concerned, may exceed 1929.

Here is what the man says who American Builder believes is the foremost authority on construction data in the U. S.—Herman B. Byer, chief of the Construction Division of the Bureau of Labor Statistics. Mr. Byer's tabulators gather building permit data from more than 2,100 towns and cities; he is the man who originated and set up this efficient service and, through the medium of special local surveys, is in close touch with construction activities. He says: "We are a reporting, not a forecasting agency, but on the basis of the sharp increase in the estimates of new homes for 1937 and 1938, I think we can safely say that 1939 will see a further increase."

New Homes Built in U. S. in 1937 and 1938

<table>
<thead>
<tr>
<th>Where Built</th>
<th>No. of Cities and Places</th>
<th>Population (1930 Census)</th>
<th>Number of New Dwelling Units Provided in—</th>
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<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>All types</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>1938</td>
</tr>
<tr>
<td>1. Cities 500,000 and over</td>
<td>14</td>
<td>21,315,411</td>
<td>84,237</td>
</tr>
<tr>
<td>2. Cities 500,000 to 100,000</td>
<td>79</td>
<td>15,010,325</td>
<td>42,817</td>
</tr>
<tr>
<td>3. Cities 100,000 to 50,000</td>
<td>96</td>
<td>6,491,448</td>
<td>18,552</td>
</tr>
<tr>
<td>4. Cities 50,000 to 25,000</td>
<td>185</td>
<td>6,425,693</td>
<td>19,992</td>
</tr>
<tr>
<td>5. Towns 25,000 to 10,000</td>
<td>606</td>
<td>9,097,200</td>
<td>35,395</td>
</tr>
<tr>
<td>6. Towns 10,000 to 5,000</td>
<td>851</td>
<td>5,897,156</td>
<td>24,755</td>
</tr>
<tr>
<td>7. Villages 5,000 to 2,500</td>
<td>1,332</td>
<td>4,717,990</td>
<td>20,766</td>
</tr>
<tr>
<td>Total URBAN</td>
<td>3,165</td>
<td>68,954,823</td>
<td>246,514</td>
</tr>
<tr>
<td>8. Incorporated Places of Less than 2,200 Population</td>
<td>13,433</td>
<td>9,183,453</td>
<td>98,500</td>
</tr>
<tr>
<td>9. Rural Population Not on Farms or in Incorporated Places</td>
<td>14,191,420</td>
<td>14,191,420</td>
<td>**</td>
</tr>
<tr>
<td>Total NON-FARM</td>
<td>92,329,696</td>
<td>345,014</td>
<td>294,165</td>
</tr>
<tr>
<td>10. Farm Population</td>
<td>30,445,350</td>
<td>**</td>
<td>**</td>
</tr>
<tr>
<td>TOTAL U. S.</td>
<td>122,775,046</td>
<td>**</td>
<td>**</td>
</tr>
</tbody>
</table>

NO. II—A COMPLETE PICTURE OF HOW AND WHERE U. S. homes were built in 1937 and '38. The urban figures (Items 1 to 7) are estimates by the U. S. Bureau of Labor Statistics based on building permits in more than 2,100 cities, representing 88% of entire urban population. The non-farm rural figures (Items 8 and 9) are American Builder estimates after consulting with Federal officials. An important part of this group consists of small "satellite" communities adjoining cities. **Farm home building—no adequate estimates on farm homes are available. At the rate of 1 farm home per 1,000 population (1/3 the per capita rate in the rural sections above) some 30,000 farm homes would have been built.
1929" Forecast for Home Builders

building permits in the last half of 1938 and other supporting data, we believe an increase in private residential construction in 1939 of from 30 to 40 percent is entirely possible. In addition, there will be a sizeable volume of public housing, which, in my opinion, will not to any extent affect the volume of private building.”

In the last half, and especially in the last quarter, of 1938, residential building permits, contracts and contemplated work, as indicated by FHA mortgages selected for appraisal, showed such unexpectedly large increases that most estimates for both 1938 and '39 had to be revised upward. The Bureau of Labor Statistics, the FHA Department of Economics and Statistics, and the Department of Commerce building analysts are in agreement that the total number of non-farm homes, public and private, built in 1938 was between 325,000 and 350,000 units.

The total value of private non-farm residential construction activity in 1938 is estimated by the Department of Commerce at $1,285,000,000.

Most striking of the statistical data concerning 1939 is the manner in which the FHA mortgages selected for appraisal continue at extremely high levels. A most significant chart, showing the relationship between the number of these mortgages and the number of one and two-family houses reported by the Bureau of Labor Statistics is shown in Chart V. There is a direct relationship between these mortgages and the number of one and two-family houses reported by the Bureau of Labor Statistics, the FHA, the Department of Commerce at $1,285,000,000.

The Bureau of Labor Statistics estimates are based on building permits from more than 2,100 cities, representing 88 percent of the U. S. urban population.

Where Homes Were Built

<table>
<thead>
<tr>
<th>Geographic division and State</th>
<th>First 9 months of</th>
<th>1938</th>
<th>1937</th>
</tr>
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<tr>
<td>TOTAL U. S. URBAN</td>
<td>197,433</td>
<td>167,417</td>
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<tr>
<td>NEW ENGLAND</td>
<td></td>
<td></td>
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<tr>
<td>Connecticut</td>
<td>7,895</td>
<td>8,264</td>
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<tr>
<td>Maine</td>
<td>2,054</td>
<td>2,170</td>
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<tr>
<td>Massachusetts</td>
<td>4,476</td>
<td>4,466</td>
<td></td>
</tr>
<tr>
<td>District of Columbia</td>
<td>3,795</td>
<td>4,359</td>
<td></td>
</tr>
<tr>
<td>New Hampshire</td>
<td>374</td>
<td>378</td>
<td></td>
</tr>
<tr>
<td>Rhode Island</td>
<td>805</td>
<td>908</td>
<td></td>
</tr>
<tr>
<td>Vermont</td>
<td>140</td>
<td>123</td>
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<tr>
<td>MIDDLE ATLANTIC</td>
<td>69,749</td>
<td>42,201</td>
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<tr>
<td>New Jersey</td>
<td>4,605</td>
<td>4,170</td>
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<tr>
<td>New York</td>
<td>58,430</td>
<td>30,564</td>
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<tr>
<td>Pennsylvania</td>
<td>6,714</td>
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<td>Wisconsin</td>
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<td>WEST NORTH CENTRAL</td>
<td>20,919</td>
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<td>Kansas</td>
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<td>3,107</td>
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<td>406</td>
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<td>SOUTH ATLANTIC</td>
<td>21,988</td>
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<td>Delaware</td>
<td>161</td>
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<td></td>
</tr>
<tr>
<td>Oregon</td>
<td>1,309</td>
<td>1,542</td>
<td></td>
</tr>
<tr>
<td>Washington</td>
<td>2,537</td>
<td>2,054</td>
<td></td>
</tr>
</tbody>
</table>

NO. III—A STRONG TREND toward lower priced homes is indicated in the above chart showing valuation of residential properties by FHA, including house and lot. Approximately 90% of new FHA insured homes in 1938 cost less than $8,000.

NO. IV—HOW INDIVIDUAL STATES PERFORMED in the home building picture in the first 9 months of 1937 and 1938 is interestingly shown above. These Bureau of Labor Statistics estimates are based on building permits from more than 2,100 cities, representing 88 percent of the U. S. urban population.
in the latter part of 1938 were largely in privately built small homes and apartments. Sixty-three percent consisted of one-family dwellings, 6 percent two-family dwellings, and 31 percent apartment houses. A large part—probably 75 percent—of the apartment house construction was concentrated in the New York City area.

Very little of the public housing program of the USHA got into the construction stage in 1938, but will undoubtedly show up in large totals in 1939. The program of the USHA is advancing rapidly and estimates from a number of competent sources indicate that public housing will proceed under its program in 1939 at about 5,000 units per month, or with the total for the year falling somewhere between 50,000 and 75,000 units. This will be a definite addition to private residential construction, and in the opinion of most observers will have little effect on private operations.

The outlook for private residential construction has improved so rapidly in the past few months that American Builder has been forced to revise its preliminary estimates upward. These estimates are so high in relation to past years that they were questioned and then rechecked with great care with the Bureau of Labor Statistics, FHA, Department of Commerce and other qualified agencies.

NO. V—MORTGAGES

selected for appraisal by FHA have proved an excellent advance indicator of home building volume. As the chart at left shows, they have been running more than 100% above 1937 in recent months. Dotted line shows total monthly number of one and two-family dwellings in urban areas of U.S. as estimated by the Bureau of Labor Statistics.

FHA Mortgages Forecast Sharp Increase

Heavy Line—FHA Mortgages Selected for Appraisal and Fees Paid, By Months
Dotted Line—Number of 1 & 2 Family Dwellings, Urban Areas of U.S., By Months

American Builder, January 1939.
What this large volume of residential building means to America can be readily grasped. It means that home building will lead the nation back to a sound recovery. American Builder has estimated, on the basis of special studies by Herman Byer, that an increase of 155,000 residential units next year will create 310,000,000 man hours of work at the building sites. It will also create an additional 465,000,000 man hours of work in factories, forests, mines and transportation. These 775,000,000 man hours of new work for the employees of building contractors and the employees of building material producers are equivalent to 425,000 man years of additional employment.

How Many Builders?

The number of contractors and operative builders required to perform this building and buy the materials and equipment that go into these structures is a large one. Of the estimated 100,000 to 150,000 contractors in the U. S., probably 40,000 will perform the principal part of the new home work next year, which would be an average of 12½ residential units per builder. However, since many contractors specialize in commercial or industrial work or modernizing, many will construct a smaller number of homes and others a much larger number.

The undoubted trend revealed by the 1938 building statistics is toward smaller homes and more homes built on a speculative or for sale basis. The FHA program has given impetus to the building of homes in the lower price ranges and has greatly stimulated their construction in better planned developments, both large and small. The trend towards lower priced homes is shown in Table III, which shows that 63.7 percent of the FHA insured homes in 1938 were on properties having a valuation of $6,000 or less as compared with 59.3 percent in 1937. This table also shows that 81.6 percent cost less than $7,000, which compares with 73.7 percent in '37 and 65 percent in 1936.

Another important development in 1938 was the expansion of rental housing construction, consisting largely of apartments and row houses built under Section 207 of the amended National Housing Act, Limited Dividend Division. This activity is reflected in Table II, where an increase in multi-family dwellings of more than 15,000 units is recorded. A further increase in this type of apartment and row house construction is anticipated in 1939.

Where Homes are Built

To the average builder, national construction figures are of use only as they indicate a trend which he can apply to his local town. A study of Table II and the underlying data shows that construction is widely diversified and spread out through the nation's 16,598 cities, towns and villages. The per capita rate of construction is highest in the smaller towns and cities. The most active residential areas are small towns and villages adjacent to the large cities. Many such communities are not even incorporated places, and residential construction in such areas is frequently not reported. The Bureau of Labor Statistics has made a series of studies in recent years of construction in these so-called rural areas and has found

Value of Modernizing and Maintenance, 1925-38

<table>
<thead>
<tr>
<th>Year</th>
<th>Residential Building</th>
<th>Non-Residential Building</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Taxed</td>
</tr>
<tr>
<td>1925</td>
<td>$610,000,000</td>
<td>$210,000,000</td>
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<tr>
<td>1926</td>
<td>$620,000,000</td>
<td>$220,000,000</td>
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<td>1927</td>
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<tr>
<td>1928</td>
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<td>1929</td>
<td>$820,000,000</td>
<td>$420,000,000</td>
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<tr>
<td>1930</td>
<td>$840,000,000</td>
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<td>1931</td>
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<td>$600,000,000</td>
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<tr>
<td>1932</td>
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<tr>
<td>1938</td>
<td>$900,000,000</td>
<td>$960,000,000</td>
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</tbody>
</table>

NO. VII—THE TABLE ABOVE shows the value of modernizing and maintenance of residential and non-residential building from 1925 through 1938, as estimated by the U. S. Bureau of Foreign and Domestic Commerce.

Value of Construction Contracts (37 Eastern States) F. W. Dodge Corp.

<table>
<thead>
<tr>
<th>Classification</th>
<th>1937 Actual</th>
<th>1938 Estimate</th>
<th>% Change From 1937</th>
<th>1939 Estimate</th>
<th>% Change From 1938</th>
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</thead>
<tbody>
<tr>
<td>Commercial Buildings</td>
<td>297,043,000</td>
<td>225,000,000</td>
<td>-24</td>
<td>300,000,000</td>
<td>+33</td>
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<tr>
<td>Industrial Buildings</td>
<td>313,689,000</td>
<td>230,000,000</td>
<td>-37</td>
<td>250,000,000</td>
<td>+85</td>
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<tr>
<td>Educational and Science</td>
<td>223,208,000</td>
<td>155,000,000</td>
<td>-30</td>
<td>200,000,000</td>
<td>-14</td>
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<tr>
<td>Hospital and Institutional</td>
<td>81,845,000</td>
<td>115,000,000</td>
<td>+44</td>
<td>135,000,000</td>
<td>+29</td>
</tr>
<tr>
<td>Public Buildings</td>
<td>104,901,000</td>
<td>140,000,000</td>
<td>+30</td>
<td>175,000,000</td>
<td>+25</td>
</tr>
<tr>
<td>Religious Buildings</td>
<td>36,867,000</td>
<td>40,000,000</td>
<td>+8</td>
<td>40,000,000</td>
<td>0</td>
</tr>
<tr>
<td>Social and Recreational</td>
<td>83,860,000</td>
<td>115,000,000</td>
<td>+37</td>
<td>100,000,000</td>
<td>+13</td>
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<tr>
<td>Misc. Non-Residential</td>
<td>14,782,000</td>
<td>25,000,000</td>
<td>+69</td>
<td>25,000,000</td>
<td>0</td>
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<tr>
<td>TOTAL NON-RESIDENTIAL</td>
<td>1,156,161,000</td>
<td>1,065,000,000</td>
<td>-8</td>
<td>1,150,000,000</td>
<td>+8</td>
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<tr>
<td>Apartments and Hotels</td>
<td>223,857,000</td>
<td>269,000,000</td>
<td>+20</td>
<td>500,000,000</td>
<td>+86</td>
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<tr>
<td>1 and 2 Family Houses</td>
<td>681,436,000</td>
<td>716,000,000</td>
<td>+5</td>
<td>800,000,000</td>
<td>+12</td>
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<tr>
<td>TOTAL RESIDENTIAL</td>
<td>905,293,000</td>
<td>985,000,000</td>
<td>+9</td>
<td>1,300,000,000</td>
<td>+32</td>
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<tr>
<td>TOTAL BUILDING</td>
<td>2,061,454,000</td>
<td>2,050,000,000</td>
<td>-1</td>
<td>2,450,000,000</td>
<td>+20</td>
</tr>
<tr>
<td>Public Works and Utilities</td>
<td>851,606,000</td>
<td>1,190,000,000</td>
<td>+40</td>
<td>1,050,000,000</td>
<td>-12</td>
</tr>
<tr>
<td>TOTAL CONSTRUCTION</td>
<td>2,913,060,000</td>
<td>2,240,000,000</td>
<td>+11</td>
<td>3,500,000,000</td>
<td>+8</td>
</tr>
</tbody>
</table>

*Based on ten months data.
a large per capita construction taking place there. Preliminary estimates by the Bureau for these areas, shown under Sections 8 and 9 of Table II, indicate an increase of from 82,900 units in 1937 to 98,500 in 1938. The fact that home building is carried on in many thousands of small communities in widely separated spots provides a definite answer to the dreamers and theorists who have been claiming that all the building industry in the U. S. can be consolidated in the hands of a few large building corporations.

One of the trends of the year has been the great interest shown by architects in the low-priced houses. A growing number of architects have entered into agreements with operative builders whereby they supply architectural drawings only. In fact, the successful operative builders have become the best clients of the members of the architectural profession who are interested in home building. A lower fee for this type of work is possible because no supervision nor, in fact, any direct contact with the construction work is involved. Because of the number of houses involved the income to the architect is sufficient to provide a reasonable return for his services.

One effect the FHA has had on residential construction is that more complete plans are now drawn in advance because they must be filed with FHA in order to secure a loan. The builder may file a set of plans drawn by an architect in his employ or a set purchased from a local architect, or the plans of one of the well-known plan services. The result is that practically all houses today may truthfully be said to be "architecturally planned." Architectural supervision, however, is a different matter. Less than 7 percent of the nation's single-family homes are built with architectural supervision.

Modernization Outlook Good

While new home construction gets the spotlight for 1939, builders should not ignore the extensive possibilities of the modernization and repair market. This tends to increase at almost the same rate as general building construction and general economic improvement. The FHA Property Improvement Plan had a definite effect on modernizing in 1938. Some 312,600 notes amounting to $144,000,000 were insured by FHA following the passage of the amendments to the Housing Act in February and up to November 19. FHA reports that 87 percent of the number of loans and 75 percent of the amount were for new structures or for improvements to small residential dwellings. Additions, alterations and roofing accounted for 31 percent of the loans, and exterior painting and interior finishing 26.5 percent. Heating and plumbing were major items accounting for 23.9 percent.

Prospects for a considerable improvement in residential modernizing in 1939 are good, and a similar improvement is foreseen in commercial repairs and improvements, including such improvements as air conditioning and new store and shop fronts.

Commercial and Industrial

The F. W. Dodge Corporation in its analysis of the construction outlook for 1939 foresees a pronounced expansion in commercial and industrial buildings. "Revival of business confidence," it is stated, "tends to stimulate commercial building; increases are more likely in small new projects and modernization work than in large structures." A 33 percent increase in this type is forecast.

The Dodge organization points out that many plant extension programs, deferred in 1938, are likely to be encouraged by renewed business optimism. The government's defense program is likely to stimulate plant extension, modernization and new factories. An increase in this classification of 85 percent is forecast.
Invites Attention

FROM THE living room, three French doors open out into this charming outdoor spot which has been planned with as much skill and attention as the inside of this Connecticut home designed by Architect Chester A. Patterson and built by Peter A. Cameron. An entrance view of this house appears on the cover; plans and further details on the next page.

A Double Portfolio of Homes for 1939

AT THE OPENING of what promises to be the best home building year in a decade, AMERICAN BUILDER here presents a double portfolio of homes selected for the 1939 market. These houses are not the theoretical imaginings of some magazine staff artist, nor are they the visionary dreams of some draftsman drawing pictures for an architectural competition. These are practical, salable homes designed by practical practising architects and built by builders for real-life customers. AMERICAN BUILDER believes that the successful homes of today point the way to the successful homes of tomorrow and believes that the following selection is worthy of careful study in laying building plans for an active year in 1939.
RAMBLING COLONIAL IN
RURAL CONNECTICUT

Chester A. Patterson, Architect
Peter A. Cameron, Builder

ALL OF THE ROOMS of this country house in Connecticut are on one floor except a maid's room and bath over the garage, the floor of which has been dropped. There is good circulation between rooms and plenty of light and air. The hand-split exterior wall shingles are painted white, and the roof a tobacco brown. Blinds are blue-green. The front entrance detail with picket fence around flagstone stoop and Colonial hardware as shown on the cover and the rear living terrace as on the preceding page are refined details approved by today's buyers. Cubage is 30,000 ft. House is insulated with mineral wool; has winter air conditioning.
MICHIGAN EXHIBIT HOME STYLED FOR MODERN LIVING

Displayed at Bay City, Mich., by Nurmi Builders, Inc., Architects, Contractors and Home Designers

BUILT to create an appreciation of today's professional home design service and construction as offered by the complete staff of Nurmi Builders, Inc., this house of contemporary design was planned as the home of Mr. and Mrs. Nurmi, to be occupied after being exhibited. Formal invitations to a select group of prospects for homes in the upper price range drew 7,000 visitors within a two-weeks period. After showing the house to special groups, it was finally opened to the general public. There were no signs used which would mar the decorative exterior.

Mrs. Nurmi, the creative member of the firm, believes in careful study of the problems of efficiency, architectural design and selection of materials to meet the specific requirements of a family according to the needs of modern living. The clean-cut styling in the exterior above and the many unusual features of plan indicate a complete thoroughness of approach. Interior views on the following two pages show some of these modern and novel plan ideas.
INTERIORS AND DETAILS OF NURMI EXHIBIT HOME

The interiors, details and equipment of this modern home built by Nurmi Builders, Inc., Bay City, Mich., are as carefully planned and selected as the features of exterior and plan shown on the preceding page. The house throughout is arranged for comfort, efficiency and permanence according to today's highest standards of home building.

LEFT: The "indoor playground" or game room is located on the first floor next to the library. A large group of windows occupies most of the outside wall and assures plenty of light. Walls are finished with avodire Celotex Texbord. Mouldings, cabinets and doors are birch bleached and stained to match. Lockwood hardware was selected to harmonize with styling. Door ornaments and mouldings around recessed ceiling lights are lacquered Chinese red. A small door above the built-in cabinet opens to the kitchen for food passage. The door on the inside corner gives access to the first floor utility room used for the winter conditioning plant and storage space.
ABOVE, on opposite page: A good sized roof terrace with access from two of the bedrooms gives a pleasant spot for outdoor living while more formal indoor living can be arranged in the well lighted living room of Neo-Classic styling. A liberal use of mirrors adds further to the modern spacious effect.

RIGHT: In the garden dining room, the out-of-doors view is brought into the house with a large picture window which extends practically to the floor and is divided with horizontal muntins. The dome ceiling is cove lighted and has a system whereby the intensity can be controlled. Door opens to porch.

A WALL in one of the bedrooms is paneled and stained dark to contrast with the murals above the light wainscot on the other walls. Ceilings of second floor rooms are plastered over 1-inch Celotex Vapor-seal lath. Other features of this house are as follows: Cement block foundation, frame construction with Vapor-seal sheathing on outside and ½-inch Vapor-seal lath on inside. Brick veneer exterior, red cedar shingle roof, Traffic Top roof deck, Hope metal windows glazed with L-O-F glass, Tiletex asphalt floors in recreation and service rooms, Crane plumbing fixtures, Anaconda copper piping, G-E gas-fired winter conditioning.

THE labor-saving convenience of the General Electric kitchen, including range, refrigerator, and dishwasher appealed greatly to the women who inspected the Nurmi exhibit home. Modern lighting fixtures, electric clocks and kitchen ventilating fan are other items which attracted attention. Breakfast nook adjoins the kitchen on the other side of filled counter top. A door from the kitchen opens into the handy first floor laundry.
WHEN Lewis T. Dodds opened his real estate business in the attractive Colonial office pictured above at right, which he had built last year in Northfield, Ill., he did not then realize what a fine advertisement the building would prove to be. It is located at a busy intersection on route U.S. 41, and commands the attention of many passing motorists. Since occupying the building, Dodds has had people come in to try to buy this office as a place to live or to see if it could be duplicated elsewhere. In fact, he has even received inquiries from out of state regarding the availability of plans, price, etc.

SINCE the public reacted so favorably to the style and price of his office building, the Cee and Eee Construction Co., Chicago, has recently designed and built two small houses of about the same style and size for Dodds on nearby lots. The smaller of these, a compact threeroom basementless house which he calls "The Newlywed," is shown below with floor plan at the right. This one more nearly follows the exterior and layout of the office. The other one, as it appears on the opposite page, has four rooms including a second bedroom. The entrance has been moved to the main wing on that house which does not as closely duplicate the original building as the other.

THE small three-room house at the left with floor plan above is about the last word in compactness. At the same time, however, it retains plenty of livability for one or two people. The living room has a Colonial wood-burning fireplace. Heater room directly to the rear uses a flue in the chimney for the gas-fired air conditioning system, and this same room also houses a laundry tray. Dining space is provided in the kitchen. The good sized bedroom has three exposures and twin closets at one end.
THE four-room small house at right with plan and elevations below is the larger of the two Lewis T. Dodds homes. It offers the same compactness and good design, but as extra features it was given an entry, small dinette and second bedroom. Closets are unusually good-sized for such a small house. Utility room contains gas-fired winter conditioner and laundry trays. Designed and built by Cee and Eee Construction Co., Chicago.

CONSTRUCTION OUTLINE

FOUNDATION: Poured concrete footing and foundation extending below frost line.
EXTERIOR: Celotex Vapor-seal sheathing on frame with red cedar siding painted white on exterior walls.
ROOF: Red cedar shingles.
INTERIOR FINISH: Three-coat plaster over U.S.G. Rocklath, reflective type.
FLOORS: Oak, except Armstrong linoleum in kitchen and bath.
PLUMBING FIXTURES: Kohler, in kitchen and bath.
HEATING: Janitrol gas-fired winter air conditioning.
HARDWARE: Yale & Towne.
LIGHTING FIXTURES: Framberg fixtures in Colonial designs.
THIS IS a popular and proven type of Colonial home in Hartford, Conn., one of the interesting features of which is the "breezeway" connecting kitchen with garage. With a cubage of 24,500, this little house provides a lot of living comfort. It has a pecky cypress recreation room in basement, brass pipe throughout, Schlage hardware, Briggs Beautyware fixtures, winter air conditioning.

HARTFORD HOME WITH BREEZEWAY

Fred Kenyon, Builder
Norris F. Prentice, Architect

PLAN AFFORDS good circulation of rooms and all have cross ventilation. Front door is accessible from kitchen without person passing through other rooms. The study also serves as guest room.
FIVE ROOMS, bath, garage and porch are provided by Homecraft Associates of White Plains, N. Y., in this attractive small "picture home." Two additional rooms can be added at any time in the attic space. The floor plan is compact and livable, with a large living room dominated by the bay window. It is fully insulated with mineral wool and heated by an oil-fired steam boiler.

"PICTURE HOME"
5 ROOMS AND BATH:
ATTACHED GARAGE

A VERY livable and practical arrangement of rooms. Hall, stairs and fireplace are economically grouped, and the bathroom is in a convenient location accessible from both bedrooms and the living room. The attached garage and open porch are good features.
STONE AND OLD BRICK IN VIRGINIA HOME

MATT. P. WILL of Richmond, Va., built this Southern home in Glenburnie subdivision at Richmond, Va. It was designed by Architect A. L. Kidwell. In describing the house Matt, Will says it is “complete in every detail for comfortable living.” It has ample closets, southern exposure in the living room, 2 good baths, well placed attached garage. The exterior uses a combination of old brick, vari-colored stone, wide beaded joint siding, an attractive slate roof.

INCLUDED IN THE EQUIPMENT are an electric range and refrigerator, shades, screens, wide oak floors, complete interior decoration including wallpaper. With overall dimensions of 32' x 22½' and a cubage of 26,300, it provides a most livable, comfortable home.
IN GOOD COLONIAL STYLE, the large chimney and fireplace is the center of attraction in this fine Richmond home built by Matt. P. Will in Glenburnie subdivision.

A GEM FROM THE OLD SOUTH

THIS CHARMING SOUTHERN HOME fits into its environment in Richmond, Va., in a way that shows it was designed and built by men who know their business. Old Virginia brick is used for the exterior. The roof shingles are of asbestos and cement simulating old, weather-worn wood shingles. It was built by Matt. P. Will, who describes himself as "master builder," and has well earned that reputation. The architect was A. L. Kidwell.

HEATING consists of a water heater system with oil burner, and equipment includes an electric range and electric refrigerator. The floor plan is unusually compact and livable, with large well lighted rooms, good closets, no waste space. The open porch and attached garage are desirable features. Basement dimensions are 31½' x 22½', and the cuage 23,000 cu. ft.
GRACEFUL INTERIORS

in Model Home Sponsored by The Lancaster, Pa., Real Estate Board

BELOW: Colonial Dining Room; Right: Colorful Bath Room.
BROADWAY MODEL HOME IN LOS ANGELES

A Modified Cape Cod Design Adapted to California

William T. Richardson, Los Angeles, Builder

COLONIAL type of design continues its nation-wide popularity extending as far from its origin as southern California. This 6-room Los Angeles model home is an adaptation in plan and style to local conditions. The exterior is of redwood siding and white stucco, the front mainly being of redwood. No. 1 grade marked lumber is used throughout. The cedar shingle roof is painted black, the shutters blue. The pine picket fence is attached to turned redwood posts. Flagstone veneer is used under the bay of the living room. Front steps also are of flagstone. Windows have steel sash.

THE interior trim, including all doors, is of Oregon pine, painted white. The entrance door, a six-panel Colonial, is marked at each side by fluted casings. Louvre doors connect living room with dining room and hall. In the living room, hard wall textures are given three coats of paint. The wood-burning fireplace in this room presents a white stucco face with a white pine mantel. The hearth is of black tile, the fire-box of white fire-brick. A 2 foot 6 white pine wainscoting in paneled effect extends around the dining room, with wallpaper above. Washable wallpaper is used in the two bedrooms, breakfast room and bathroom.

FLOORS throughout are of 1/2 x 2 inch clear red oak. A 4-inch band of tile is applied below the wallpaper in the bathroom. An unusual feature of this room is the glassed-in tub and shower combined, fitted with Standard plumbing fixtures. The breakfast room has an interesting built-in corner buffet with glass shelves above and white pine cupboard below. Gladding McBean Hermosa tile is laid from floor to ceiling in the kitchen, which also has indirect lighting at each side of the sink. Heating is provided by two dual Ward floor furnaces, located in hall and living room.
COMPACT, livable, economical are the best words to describe this little Dutch Colonial built in Cheelcroft subdivision at Ho-Ho-Kus, N.J.

6-ROOM DUTCH COLONIAL, 25x27 FT., ATTACHED GARAGE

J. Norman Hunter, Architect; Harold W. Cheel, Builder
ARCHITECT HUNTER and Builder Cheel have here produced a house with practical built-in sales appeal. The main part of house is only 25' x 27', but by putting every inch of space to work and placing a small bedroom over the attached garage, it has been possible to make it a 6-room house with 2 baths, a fair-sized dining room and a living room 21' 8" x 13' 8". The house is of attractive Dutch Colonial design, with a trellised open porch at rear. Concrete apron of garage serves as porch.
MONTEREY STYLE AT BLUE RIDGE, WASH.

Built by Hugh Russell, Seattle, Wash.
W. E. McKinney, Seattle, Architect

THIS 8-room Monterey style house, designed by W. E. McKinney, Seattle, Wash., architect, is finished with hollow tile, brick facing and lapped cedar siding trim. Den, entrance hall and kitchen are placed at the front of the house, and living room, dining room and breakfast room at the rear, which overlooks the wide expanse of Puget Sound.

The entire left side of the upstairs is given over to the owner’s quarters, which include bedroom, dressing room and bathroom. An additional bathroom is provided for the other two bedrooms. A long recreation room, laundry, heater room and storage space are located in the basement. Other features are Montaş air conditioning plant; National Steel Construction Co. storage water heater; Standard Sanitary plumbing fixtures; Armco iron gutters and downspouts; Bondex waterproofing cement paint; Masonite stair treads and panel work; Reardon’s washable calsomine; Imperial wallpapers.

REAR of this Blue Ridge house built by Hugh Russell overlooks Puget Sound; living and dining rooms open onto a paved terrace with protecting awning; covered balcony connects the bedrooms.
WITH A FLOOR AREA of approximately 30' x 23', Architect Prentice and Builder Goodwin have here secured a good-looking little Hartford, Conn., house with a cubicage of slightly over 17,000 cu. ft. The sweep of the roof makes the house hug the ground and fit its site in a pleasant way. The 2 bay windows give a nice decorative effect to the front and increase the size and pleasantness of the rooms. The stairs, front-hall closet and fireplace are compactly handled, and the study between living room and kitchen is a very desirable feature.

BUILDER GOODWIN uses Morgan Colonial trim, metal kitchen cabinets; Balsam Wool blanket-type insulation; Richvar radiators, with a warm water system operated by an oil burner. The manner in which the garage is attached to the house, leaving space for the kitchen door, is interesting.
THE Blietz house shown at the left is styled after the Connecticut Colonial type of design having a veneer of Brier Hill sandstone on the first floor, with wide beveled siding painted white above. The white picket fence encloses a trim dooryard. Living room bay is nicely placed below the overhanging second floor. In plan, circulation through the entrance hall to the rear is good, with easy access to the basement.

THE two distinctive Colonial designs on these pages are unusually attractive in exterior appearance and carefully planned in interior arrangement. Both have six rooms, attached garage and airing porch above. Rooms throughout are well proportioned and arranged for good ventilation. The living rooms feature natural wood-burning fireplaces with marble mantels. Kitchens are efficient, with double drainboard sinks, hose dish sprays, and abundant cabinet space. Both houses have ample closet space, there being six closets in one and seven in the other, all are papered to match the adjoining rooms. Floors and walls to a height of 3 feet 6 inches in the baths and higher over tubs are finished in colored tile. An extra toilet and lavatory are located on the first floor of each.

CONSTRUCTION features and equipment used in these two houses are as follows: Concrete foundation water-proofed with asphalt emulsion and protected with drain tile around footing; kiln-dried precision lumber used for framing; asphalt shingle roofs; all exterior openings weatherstripped and caulked; copper screens throughout; linoleum floors in kitchens; mirrored doors in baths; clothes chutes from first and second floors; gas-fired winter air conditioning systems; electric outlets and switches generously supplied in all main rooms.

TWO 6-ROOM COLONIAL HOMES IN EVANSTON, ILL

Irvin A. Blietz, Wilmette, Ill.
Designer and Builder

CONSTRUCTION features and equipment used in these two houses are as follows: Concrete foundation water-proofed with asphalt emulsion and protected with drain tile around footing; kiln-dried precision lumber used for framing; asphalt shingle roofs; all exterior openings weatherstripped and caulked; copper screens throughout; linoleum floors in kitchens; mirrored doors in baths; clothes chutes from first and second floors; gas-fired winter air conditioning systems; electric outlets and switches generously supplied in all main rooms.
THE weather-vaned cupola on the living room wing of this Nantucket Colonial designed and built by Irvin A. Blietz in Evanston, Ill., gives an authentic air to its trim lines. The preliminary perspective sketch at the left indicates fine accuracy in planning and building. Although it has a snug appearance, room sizes are generous. A library off the entrance hall on the first floor can be used as a bedroom; there is easy access to lavatory.

**FIRST FLOOR PLAN**

**SECOND FLOOR PLAN**

**DIMENSIONS:**
- **DINING ROOM:** 13'-0" X 11'-0"
- **KITCHEN:** 9'-6" X 10'-0"
- **LIBRARY:** 10'-0" X 12'-0"
- **GARAGE:** 9'-0" X 20'-0"
- **LIVING ROOM:** 15'-0" X 13'-0"
- **BED ROOM #1:** 12'-6" X 10'-0"
- **BED ROOM #2:** 11'-0" X 12'-0"
- **DECK:**
- **HALF BATH:**
- **LAVATORY:**
CINDER BLOCK CONCRETE walls with a cement wash exterior are used in this attractive little low-cost, firesafe home in White Plains, N.Y., built by William Reinhardt. The house also has precast joist and concrete slab subfloors. The architect is John T. Simpson of Newark, N.J.

FLOOR PLANS of this economical concrete home show how the entire space is used with a maximum economy. With an overall dimension of approximately 29'/2" x 22'/2", Builder Reinhardt has worked in a 12' x 18' living room, 2 fair-sized bedrooms and bath, a kitchen with dining alcove, and basement and first floor stairs. There is room in the upper portion for 1 large or 2 small bedrooms.

AT LEFT—View of dining room in concrete home at Alden Estates in Portchester, N.Y., showing use of precast concrete second-floor joists.
PLANNED AND BUILT FOR COMFORT LIVING

ARCHITECT THEODORE RICHARDS of White Plains, N. Y., has here produced a house with maximum comforts and conveniences—a luxurious house, yet not beyond the reach of the upper middle-class income group. The living room is large and well proportioned, with a southern exposure; pine paneling around fireplace. The study may be used as maid's room and bath. Upstairs is well laid out, spacious.

ONE OF THE FINE FEATURES is the fashion in which the garage has been handled architecturally and the detailing of the picket fence, lamppost and entrance way worked out to lend charm to the approach. House has 4 inches of mineral wool insulation, a 2-pipe vapor system with oil burning furnace.
CORNERT LOT COLONIAL FROM THE MIDWEST

Designed and Built by McKay Construction Co., Cedar Rapids, Ia.

PLANNED to fit well on a corner site, this design offers two very attractive elevations facing the street. Living room fireplace chimney on one side balances the extending wing of the front bedroom on the other. Large divided sash in the living and dining room windows flank the front entrance. White siding and red cedar shingles with contrasting blinds are ideally suited to the low lines of the house. A neat cornice with wide facia and dentil course gives an added note of distinction.

GENERous room sizes are found throughout the plan which has a practical first floor layout of five rooms and good provision for storage. Living room is located for plenty of light across one end of house. Hall areas are kept to a minimum, the dining room serving as a traffic avenue to kitchen, bedrooms and second floor where a home office, bedroom and lavatory are finished; balance of second floor is storage area but could be used for another bedroom.

MATERIALS used include Elaterite waterproofing on foundation walls, Northwestern States portland cement, Celotex Mineral wool batts all over, U.S.G. Rocklath for plaster base, Benj. Moore interior paint, National Lead outside paint, Sisal-kraft paper on side walls, Bruce hardwood oak flooring, Torrid-Zone furnace, Kohler plumbing fixtures, Overhead garage doors, Corbin hardware.
4 BEDROOMS; GOOD PLAN

SOMewhat similar to the one opposite, this 7-room Colonial home was built in Cleveland, Ohio, by F. J. Welz and designed by Architect E. Milton MacMillin. It presents another version of a plan which is very popular today—five rooms on first floor and space for two additional rooms and bath above, either completed or to be finished later. Center entrance hall of this well planned house connects with stairs to second floor and all main rooms except compact kitchen which is pictured at right. Construction features include 12” brick and tile foundation walls, yellow pine frame, 10” red cedar siding, variegated asphalt shingle roof, white pine interior trim, select white oak floors throughout, plaster on Rocklath, 4” mineral wool in roof, 24” Moncrief hot-air furnace, Standard plumbing fixtures, copper pipes, rubber floor and linoleum wainscot in bath, rubber-covered counters in kitchen.

FIRST FLOOR PLAN

SECOND FLOOR PLAN
MODERN CHICAGO HOME FEATURES EXCELLENT DESIGN

Designed and Built by Rice and Rice of Chicago

A GOOD deal of contemporary design leaves much to be desired in styling and interior efficiency; this example, however, is excellent in both these considerations. The large expanse of corner windows breaks up the exterior in an interesting pattern; other windows and glass block areas add to the clean, modern effect which is furthered by the decorative horizontal courses worked into the buff face brick. The plan having 6 rooms, built-in garage and 2½ baths as shown on opposite page is arranged for economy, convenience and comfortable living.

THE soft shades of brick coloring add much of the appeal of this house when it is viewed as at the right; the dark spots over the long Fenestra sash window are red tile inserts. The area of P-C glass block lights the vestibule. Other items of construction are J-M built-up asphalt roof, 3-coat plaster on Rocklath over furring, Balsam-Wool over ceilings, oak floors except Armstrong linoleum in kitchen and baths, A.G.P. gas-fired winter conditioning, Standard plumbing fixtures, Midwest chimes and kitchen ventilating fan, and Lightolier lighting fixtures.

THE garage is nicely designed as a part of the house itself. A rear entrance porch and enclosed solarium located behind it and the deck above, partly covered and overlooking the rear yard, provide spots for summer relaxation.
PLANS AND DETAILS of this Rice and Rice modern home in Chicago show numerous planning and construction highlights. The basement recreation area has a wood-burning fireplace; service equipment is grouped on the other side. Living room is flooded with light from the large corner window, a detail of which is shown. Fireplace wall is also detailed to indicate modern treatment of V-cut, flesh tinted mantel mirror and the adjoining cases; note simple trim and moulds. Economy is found in hall sizes, bath and plumbing placement, and efficient space use.
7-ROOM "ORCHARD HOUSE" BEARS MISSISSIPPI HONORS

BESIDES being well planned and built, this home in Jackson, Miss., bears the added distinction of being the first in its state and among the first in the country to be granted a 90 per cent FHA insured mortgage. Architect-Owner Henry G. Markel decided to built his new home as a demonstration house to stimulate the erection of better homes.

The dwelling, named "Orchard House" because of its site location in a pecan orchard, utilizes the greatest proportion of usable floor area in relation to the gross area. In plan, conservative modern design, and use of materials, the architect-owner has kept in mind the four essentials—durability, livability, functional efficiency, and architectural attractiveness.

This 7-room house has a semi-detached garage connected to the main building by an attractive arcade used as a service area and laundry. The living room has corner windows and a flower shelf with magazine racks under it. A cast stone fireplace is surrounded by a wall finished in Flexwood and mirror directly over the mantel, as seen below. The dining room and kitchen form a single, compact unit. Bedrooms are planned with particular reference to placing of furniture, natural lighting and ventilation, and are provided with roomy closets.

Construction and equipment features include: Concrete footings; brick veneer over Vapor-seal covered framing; N.O. 1 common yellow pine sills and joists creosoted against termites; cypress sills and sash; living room and den floors Bruce block floors No. 1 clear red oak; Sealex linoleum in kitchen; Ludowici-Celadon interlocking shingle tile; Standard plumbing fixtures; gas-fired winter air conditioning; Weis shower stall; Fenestra steel sash; Acme Metal kitchen cabinets; plastering on perforated Rocklath; Sherwin-Williams paint; Corbin hardware; Marlite wainscot and tile wainscot and floors in baths; numerous outlets for electricity, radio and telephone.

56
THE English type exterior of this 5-level design as built in Park Ridge, Ill., is done in hard burned clinker brick with stone ashlar entrance and trim. Roof is Bird's Weathermax asphalt shingles. Precision kiln-dried lumber, metal-lated rock lath plaster base and Balsam-Wool insulation were used. Equipment included U. S. Radiator one-pipe, forced-circulation hot water system with recessed convector type radiators, Weil-McLain plumbing fixtures, Schlage hardware, St. Charles metal cases and Congoleum linoleum floor and walls in kitchen.

5-LEVEL HOUSE IN ILLINOIS CONTAINS 8 ROOMS, 1 1/2 BATHS

THE PRACTICAL advantages and convenience of staggered, multi-level house plans are again appealing to the public. During the past year, the economy of excavation and space utilization have proven added factors in this increased popularity. The 5-level plan of the house shown above which was built by Fred J. Walsh, Chicago, and designed by that firm's staff architect, Martin H. Braun, offers a good layout of 8 rooms and 1 1/2 baths. Compactness and economy are evident when this roomy plan is compared to the exterior pictured above. The possibility of adapting this type of plan to a wide range of individual needs is also to be considered—maid and play room level could be used instead as a single, large recreation area; lower basement level could be omitted and a garage and utility room placed on the grade level; upper bedroom level might be left for later finishing. Because of the irregularity of window placement, several of the more picturesque exterior styles of architecture can be used.

PLANS at right show laundry and heating system on basement level a half-flight of stairs below the grade level on which maid's room, lavatory and play room are located. Living room, dining room and efficient U-shaped kitchen are at front entrance level. An 8-riser stair out of living room leads to the bath and two bedrooms; third bedroom is on top level.
The Colonial Terrace Apartment House in Wichita, Kans., is an L-shaped building designed and constructed by A. N. Bontz & Son, Wichita building contractors, to house eight families. It is located on the lots so that there is a large lawn with shrubbery in front of the apartments to give a large open court with a homelike atmosphere and space to assure sunlight and ventilation for all of the apartment units.

There are four different layouts for these apartments with only two apartments of each design. Each apartment has a living room, a bedroom, kitchen and dinette. Living rooms have wood and tile mantels and fireplaces. Kitchens are equipped with gas range, electric refrigerator, built-in cabinets and sinks. Sealex linoleum is used on the floors and cabinet tops. There are hardwood floors throughout. Walls are covered with Imperial washable wallpapers.

The basement extends the length and breadth of the center apartment plus a small portion under and adjoining unit. The laundry room and storage rooms take up the space in the basement. The building is veneered with face brick of Colonial type. Truscon steel beams were used throughout for reinforcing. Insul-Wool insulation and Gold Bond plaster and plaster base were used in the walls. The door and window openings are thoroughly weatherstripped and caulked.

All plumbing fixtures in the building are from the Crane Company. A fire wall in the center of the building between apartments four and five and a fire coping on the roof were required by the city code. Each apartment has a Coleman gas floor furnace made by the Coleman Lamp and Stove Company of Wichita. All wiring of the building was done according to the adequate wiring code of the General Electric Company. Corbin hardware was used throughout the building.

At the back of the apartments there are eight garages finished with drop siding walls and sliding doors. Inside, the floors and ceilings are unfinished and the floors are of gravel. Red cedar shingles were used for roofing of the garages as well as the apartment house.
# INDEX TO 1938 HOUSE DESIGNS AND PLANS

All house designs and floor plans published in the American Builder during the year 1938 and in Jan. '39 are listed and classified in this index. Date and page number on which each house appears are given opposite name of type, such as Colonial, English, Spanish, etc.

## 1 STORY HOUSES——

<table>
<thead>
<tr>
<th>Rooms</th>
<th>Style</th>
<th>Issues</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 Room</td>
<td>Colonial</td>
<td>Jan. '39, p. 36</td>
</tr>
<tr>
<td>LOW COST</td>
<td>Aug., p. 32</td>
<td></td>
</tr>
<tr>
<td>COTTAGE</td>
<td>June, p. 60</td>
<td></td>
</tr>
<tr>
<td>Colonial</td>
<td>Feb., p. 63; May, pp. 42, 43, 44; Jan. '39, p. 37</td>
<td></td>
</tr>
<tr>
<td>LOW COST</td>
<td>May, pp. 42, 43, 44; Aug., pp. 32, 33, 35; Jan. '39, p. 50</td>
<td></td>
</tr>
<tr>
<td>COTTAGE</td>
<td>Mar., p. 71; June, p. 58; July, p. 45; Nov., p. 51</td>
<td></td>
</tr>
<tr>
<td>Colonial</td>
<td>Feb., p. 66; May, p. 50; Sept., p. 55; Jan. '39, pp. 32, 39</td>
<td></td>
</tr>
<tr>
<td>CALIFORNIA</td>
<td>Sept., p. 48</td>
<td></td>
</tr>
<tr>
<td>MODERN</td>
<td>May, p. 50; June, p. 64; July, p. 39</td>
<td></td>
</tr>
<tr>
<td>LOW COST</td>
<td>May, p. 65; June, p. 63; July, p. 61; Sept., p. 47; Oct., pp. 17, 22, 23, 25</td>
<td></td>
</tr>
<tr>
<td>CALIFORNIA</td>
<td>Oct., p. 18; Jan. '39, p. 43</td>
<td></td>
</tr>
<tr>
<td>SPANISH</td>
<td>May, p. 47</td>
<td></td>
</tr>
<tr>
<td>LOW COST</td>
<td>Aug., p. 53</td>
<td></td>
</tr>
<tr>
<td>Colonial</td>
<td>Jan. '39, p. 56</td>
<td></td>
</tr>
<tr>
<td>CALIFORNIA</td>
<td>June, p. 65</td>
<td></td>
</tr>
<tr>
<td>8 OR MORE ROOMS——</td>
<td>CALIFORNIA</td>
<td>July, p. 44</td>
</tr>
<tr>
<td>COTTAGE</td>
<td>Mar., p. 71; June, pp. 52, 61</td>
<td></td>
</tr>
<tr>
<td>Colonial</td>
<td>May, p. 49; June, p. 70; July, pp. 45, 51; Aug., pp. 41, 45; Sept., pp. 42, 57; Nov., pp. 40, 47, 48</td>
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</tr>
<tr>
<td>LOW COST</td>
<td>May, p. 54; Dec., p. 73</td>
<td></td>
</tr>
<tr>
<td>COTTAGE</td>
<td>June, p. 59</td>
<td></td>
</tr>
<tr>
<td>Colonial</td>
<td>Feb., pp. 55, 58, 67; May, p. 57; June, p. 54; Aug., pp. 38, 42; Sept., pp. 42, 43, 45; Dec., p. 41; Jan. '39, pp. 38, 40, 41, 44, 47, 49</td>
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<tr>
<td>FRENCH</td>
<td>June, p. 57</td>
<td></td>
</tr>
<tr>
<td>ENGLISH</td>
<td>Aug., p. 43</td>
<td></td>
</tr>
<tr>
<td>7 ROOM——</td>
<td>English</td>
<td>May, p. 52</td>
</tr>
<tr>
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<td>Feb., p. 61; July, p. 43; Sept., p. 46; Dec., p. 38</td>
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</tr>
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<td>Jan. '39, p. 57</td>
</tr>
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<td>Colonial</td>
<td>Apr., p. 65; Dec., p. 40; Jan. '39, pp. 52, 53</td>
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<td>Apr., p. 62; July, p. 47</td>
</tr>
<tr>
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<td>Apr., p. 63</td>
<td></td>
</tr>
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<td>Aug., p. 34</td>
<td></td>
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<tr>
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<td>Feb, pp. 62, 64, 68; Apr., pp. 60, 68, 71; June, p. 66; July, p. 48; Aug., pp. 31, 40; Sept., pp. 52, 54; Oct., pp. 15, 27, 104; Nov., pp. 36, 43, 44, 49; Dec., p. 36; Jan. '39, p. 48</td>
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<td>Apr., p. 67; Oct., p. 21; Jan. '39, p. 55</td>
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<td>Aug., pp. 34, 35</td>
<td></td>
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<td>Feb., pp. 69, 73; May, p. 51; July, p. 38; Sept., pp. 50, 55; Nov., pp. 37, 38, 42</td>
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<td>English</td>
<td>Sept., p. 51; Nov., p. 39</td>
</tr>
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<td>June, p. 57; Sept., p. 49; Dec., p. 37</td>
<td></td>
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<td>Apr., p. 72; Nov., p. 41</td>
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<td>Colonial</td>
<td>Feb., p. 60; Oct., p. 111; Dec., p. 60; Jan. '39, pp. 46, 51</td>
</tr>
<tr>
<td>English</td>
<td>May, p. 46</td>
<td></td>
</tr>
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<td>Jan. '39, p. 33</td>
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</tr>
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</table>

## 2 STORY HOUSES——

<table>
<thead>
<tr>
<th>Rooms</th>
<th>Style</th>
<th>Issues</th>
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<tbody>
<tr>
<td>Apartments</td>
<td>Feb., pp. 48, 49, 70, 71; Apr., pp. 73, 75; May, p. 69; June, pp. 49, 50; Aug., p. 57; Nov., p. 54; Jan. '39, p. 58; Bank-Feb., p. 52; Officers-June, pp. 72, 73; Sept., p. 64; Recreation House—June, p. 53; Row House—July, p. 54; Service Station—June, p. 75; Tourist Cottages—Feb., p. 80; Two-Family Houses—May, p. 58; Aug., p. 47</td>
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<td>Aug., p. 34</td>
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<td>Jan. '39, p. 33</td>
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## MISCELLANEOUS DESIGN——

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<th>Rooms</th>
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## Figures for American Builder Homes

**HOME DESIGNS FOR PAGES AS NUMBERED**

<table>
<thead>
<tr>
<th></th>
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<td>306</td>
<td>1 012</td>
<td>1 494</td>
<td>1 420</td>
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<td>0&quot;</td>
<td>6&quot;</td>
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<td>Porch, sq. ft.</td>
<td>...</td>
<td>50</td>
<td>184</td>
<td>22</td>
<td>20</td>
<td>10</td>
</tr>
<tr>
<td>Cornices, type and lin. ft.</td>
<td>...</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Cornices, type and lin. ft.</td>
<td>...</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Partitions, sq. ft.</td>
<td>...</td>
<td>204</td>
<td>303</td>
<td>78</td>
<td>125</td>
<td>174</td>
</tr>
<tr>
<td>Inside Finish Oil Walls, lin. ft.</td>
<td>...</td>
<td>277</td>
<td>640</td>
<td>124</td>
<td>138</td>
<td>190</td>
</tr>
<tr>
<td>Front and OS French Doors, sq. ft.</td>
<td>...</td>
<td>4</td>
<td>7</td>
<td>1</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Garage Doors 8' wide</td>
<td>...</td>
<td>2</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>(0)</td>
</tr>
<tr>
<td>Inside Doors and Cased Openings, sq. ft.</td>
<td>...</td>
<td>22</td>
<td>35</td>
<td>6</td>
<td>11</td>
<td>17</td>
</tr>
<tr>
<td>Windows and Casements, sq. ft.</td>
<td>...</td>
<td>20</td>
<td>35</td>
<td>11</td>
<td>13</td>
<td>21</td>
</tr>
<tr>
<td>Gable Sash and Louvers, sq. ft.</td>
<td>...</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Main Stairs</td>
<td>...</td>
<td>24</td>
<td>30</td>
<td>23</td>
<td>24</td>
<td>30</td>
</tr>
<tr>
<td>Porch Floor, sq. ft.</td>
<td>...</td>
<td>16</td>
<td>23</td>
<td>0</td>
<td>0</td>
<td>48</td>
</tr>
<tr>
<td>Porch Ceiling, sq. ft.</td>
<td>...</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Porch Roof, sq. ft.</td>
<td>...</td>
<td>7</td>
<td>1.6</td>
<td>0</td>
<td>0</td>
<td>2.5</td>
</tr>
<tr>
<td>Porch Cornices, lin. ft.</td>
<td>...</td>
<td>12</td>
<td>26</td>
<td>0</td>
<td>0</td>
<td>25</td>
</tr>
<tr>
<td>Porch and Deck Rail, lin. ft.</td>
<td>...</td>
<td>8</td>
<td>60</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

---

**HOME DESIGNS FOR PAGES AS NUMBERED**

<table>
<thead>
<tr>
<th>Unit of Construction</th>
<th>Jan. 40</th>
<th>Jan. 41</th>
<th>Jan. 43</th>
<th>Jan. 44</th>
<th>Jan. 45</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basement Walls, lin. ft.</td>
<td>109</td>
<td>109</td>
<td>173</td>
<td>104</td>
<td>157</td>
</tr>
<tr>
<td>Trench Walls, lin. ft.</td>
<td>58</td>
<td>50</td>
<td>66</td>
<td>42</td>
<td></td>
</tr>
<tr>
<td>Garage Floor, sq. ft.</td>
<td>720</td>
<td>710</td>
<td>875</td>
<td>705</td>
<td>940</td>
</tr>
<tr>
<td>Excavation per ft. deep, cu. yds.</td>
<td>180</td>
<td>180</td>
<td>0</td>
<td>190</td>
<td>400</td>
</tr>
<tr>
<td>Hall on followin</td>
<td>36</td>
<td>36</td>
<td>0</td>
<td>55</td>
<td>44</td>
</tr>
<tr>
<td>Outside walls, square ft.</td>
<td>20.8</td>
<td>23.5</td>
<td>19.3</td>
<td>15.6</td>
<td>27.5</td>
</tr>
<tr>
<td>First Floor, squares</td>
<td>7.2</td>
<td>13</td>
<td>13.6</td>
<td>6.8</td>
<td>9.4</td>
</tr>
<tr>
<td>Second Floor, with Fin. Fig., sq. ft.</td>
<td>7.3</td>
<td>7.1</td>
<td>6.3</td>
<td>8.4</td>
<td></td>
</tr>
<tr>
<td>Second Floor, without Fin. Fig., sq. ft.</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>2.4</td>
<td></td>
</tr>
<tr>
<td>Roof Pitch, inches rise per ft. run.</td>
<td>9.1</td>
<td>9.3</td>
<td>13.6</td>
<td>8.7</td>
<td>13.4</td>
</tr>
<tr>
<td>Roof, sq. ft.</td>
<td>14&quot;</td>
<td>14&quot;</td>
<td>13&quot;</td>
<td>13&quot;</td>
<td></td>
</tr>
<tr>
<td>Porch, sq. ft.</td>
<td>17.1</td>
<td>16.1</td>
<td>17.2</td>
<td>18.0</td>
<td></td>
</tr>
<tr>
<td>Inside Finish Oil Walls, lin. ft.</td>
<td>48</td>
<td>23</td>
<td>24</td>
<td>30</td>
<td></td>
</tr>
<tr>
<td>Front and OS French Doors, sq. ft.</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Garage Doors 8' wide</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Inside Doors and Cased Openings, sq. ft.</td>
<td>7</td>
<td>0</td>
<td>2</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Windows and Casements, sq. ft.</td>
<td>15</td>
<td>15</td>
<td>14</td>
<td>14</td>
<td></td>
</tr>
<tr>
<td>Gable Sash and Louvers, sq. ft.</td>
<td>15</td>
<td>15</td>
<td>22</td>
<td>17</td>
<td></td>
</tr>
<tr>
<td>Main Stairs</td>
<td>34</td>
<td>33</td>
<td>28</td>
<td>34</td>
<td></td>
</tr>
<tr>
<td>Porch Floor, sq. ft.</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Porch Ceiling, sq. ft.</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Porch Beam, lin. ft.</td>
<td>30</td>
<td>20</td>
<td>26</td>
<td>27</td>
<td></td>
</tr>
<tr>
<td>Porch Sash and Casements, sq. ft.</td>
<td>4</td>
<td>3</td>
<td>4</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Porch Roof, sq. ft.</td>
<td>(a)</td>
<td>(a)</td>
<td>(a)</td>
<td>1.0</td>
<td></td>
</tr>
<tr>
<td>Porch Cornices, lin. ft.</td>
<td>(a)</td>
<td>(a)</td>
<td>(a)</td>
<td>31</td>
<td></td>
</tr>
<tr>
<td>Porch and Deck Rail, lin. ft.</td>
<td>(a)</td>
<td>(a)</td>
<td>(a)</td>
<td>22</td>
<td></td>
</tr>
</tbody>
</table>

(a)—Included with main roof and cornice.  
(c)—Not including garage and pergola leading thereto.  
(d)—Garage unfinished inside.

### Necessary Home Equipment, Fixtures, Accessories, Extras

Since the above surveyed items cover only the actual superstructure of the house, you should figure and add the following items as specified or wanted (and don’t forget Overhead and Profit):

- Areaways, Cellar Sash, Coal Chute, Basement Partitions & Doors, Attic Flooring, Attic Stairs, Blinds, Gutters & Downspouts, Fireplaces, Built-in Cabinets, Rail & Newels for Stairs and Stair Well, Beamed Ceiling, Weatherstrips, Tile Work, Plumbing, Heating & Air Conditioning, Lighting, Terraces, Patio Walls or Fences, Sidewalks including Porch Steps, Driveways, Unattached Garages. Also add for painting and decorating if not included in Unit Costs.

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*American Builder, January 1939.*
Figures for American Builder Homes

HOME DESIGNS ON PAGES AS NUMBERED

### Necessary Home Equipment, Fixtures, Accessories, Extras

Since the above surveyed items cover only the actual superstructure of the house, you should figure and add the following items as specified or wanted (and don't forget Overhead and Profit):

- Built-in Cabinets, Rail & Newels for Stairs and Stair Well, Beamed Ceiling, Weatherstrips, Tile Work, Plumbing, Heating & Air Conditioning, Lighting, Terraces, Patio Walls or Fences, Sidewalls including Porch Steps, Driveways, Unattached Garages. Also add for painting and decorating if not included in Unit Costs.

- Artenways, Ceiling Sash, Coal Chute, Basement Partitions & Doors, Attic Flooring, Attic Stairs, Blinds, Gutters & Downspouts, Fireplaces, Built-in Cabinets, Rail & Newels for Stairs and Stair Well, Beamed Ceiling, Weatherstrips, Tile Work, Plumbing, Heating & Air Conditioning, Lighting, Terraces, Patio Walls or Fences, Sidewalls including Porch Steps, Driveways, Unattached Garages. Also add for painting and decorating if not included in Unit Costs.
Portfolio of Architectural Plates of
DOUGLAS FIR PLYWOOD PANELING

PREPARED BY CARL F. GOULD, F.A.I.A.

The second of a series intended as suggestions to the builder and architect as possible ways of applying Douglas Fir Plywood as decorative panels in modern home and shop design.

The drawings on these two pages indicate a simple form of effective treatment for a recreation room, and a finished attic room. In the recreation room, the Douglas fir plywood panels are shown installed vertically, and exactly spaced on sized and surfaced studding, to give the effect of wide shallow recessed joints. The details below exhibit a method of boxing in a steel floor beam to avoid any apparent incongruities. The plywood installation in the attic demonstrates the adaptability of plywood in making the various intersections of sloping roofs and dormers. Both of these rooms would appear to advantage if finished with a silver gray penetrating oil stain.

MATERIALS: The panels are a wallboard grade of Douglas fir plywood, 1/4" or 3/8" thick. For basement rooms, it may be advisable to use an asphalt paint on the back of the plywood, if the masonry walls are damp. Furring strips are desirable, except for stud walls. In the attic, if condensation may be a factor in walls and roofs, the Douglas fir plywood can be made to serve as an effective moisture or vapor barrier by painting the backs of the panels with 2 coats of asphalt paint. Numbers in details refer to Standard Wood Mouldings, 7000 Series.
Only 16 Years Old — —

$2,000,000 Apartment Building Remodeled

DRAMATIC proof of the rapid advance in residential living standards is given by the recent complete remodeling of the Theodore Roosevelt Apartments in New York City. This $2,000,000 ornate Spanish structure was the last word in 1922. By 1938, John D. Butt of Butt, Gilliam & McVay, Inc., renting and management firm, decided that a gigantic “face-lifting” operation was needed to put the structure on a paying basis. The old Magnesite exterior was removed and replaced with 23,000 square yards of Artstone portland cement stucco—one of the largest stucco jobs on record. Fourteen new Watson automatic elevators were installed, United Metal Box clothes driers, new Kohler bathroom fixtures, new quality gas ranges, Servel electric refrigerators, Crane slender radiators, a built-in radio aerial system, added shower closets and electrical outlets.

The new structure is Neo-classic in design. Apartments were rearranged to produce more small units and eliminate waste space. Additional kitchen cabinets were supplied, and the interiors modernized and decorated throughout. The floor plans below show typical new room arrangements which bring the units up-to-date.

TYPICAL FLOOR PLANS of two of the remodeled apartment units.
ALL TYPES OF HOMES ARE ELIGIBLE... NEW HOMES...MODERNIZED HOMES... SEMI-DETACHED OR ROW HOUSES

You may have already built a home that could win a big prize and national publicity! But you can’t win unless you enter!

Any home built or modernized during the period from July 31, 1937, to July 31, 1939, is eligible, provided gas equipment does the cooking, water heating, refrigeration, and house heating. No limitations as to size, style, cost, or location of houses entered.

But now’s the time to get started—competition closes midnight, July 31, 1939. So mail the coupon for the booklet which contains all the information you need.

AMERICAN GAS ASSOCIATION

READ THESE SIMPLE REQUIREMENTS AND ENTER NOW!

1 A clear exterior photograph of house.
2 Interior photographs, showing gas equipment.
3 Floor plans—blueprints or new drawings.
4 List of gas appliances installed, giving manufacturer’s name.
5 Description of special features of plan and construction.

MAIL ENTRY COUPON NOW!

Competition Director,
AMERICAN GAS ASSOCIATION, 420 Lexington Ave., N. Y. C.

Date____________________

Last Name________________ First_________ State________________

Address____________________ (Please print) City________________

I wish to enter A.G.A. Builders’ Competition. I am a builder ______

Note: Architects or designers may enter homes in this contest with the written permission of the builder. 1 Architect ______ 1 Designer ______

Kindly forward complete details.

Signature____________________
**SHOPCRAFTER'S Corner**

**Things To Build for Profit or Pleasure**

**How to Make a Modern Writing Desk**

Cut all large panels for sides, top and bottom of case and writing surface, first, and apply fancy veneers to top and slides. (Or build up panels.) Set case together temporarily with clamps. Then lay out location of all slides for writing surface and drawers, levels of shelves, and location of bottom board of pigeonhole unit. Cut grooves in sides and top for pigeon-hole dividers. Cut all rails, stiles, and the bottom board of pigeonholes, and fit into place temporarily. Then lay out pigeonhole dividers. Cut and fit into place.

Then take desk apart, and glue, leaving back off. Be sure it is square. Measure for tray drawers, small drawer in pigeonhole, and for shelf, and do last fitting on writing surface. Cut all drawers and set together to make sure of fit. Take apart and glue. Edge veneer front edges of case. Then make door panels slightly oversize and fit. Make door and drawer pulls and attach.

**American Builder, January 1939,**

[Diagram and plans]
One of the simplest ways to increase your profit is to use "Century" Linabestos in new construction or remodeling. It is a highly economical, unburnable sheathing for both exterior and interior use. Because it is a durable, practical wallboard, it goes a long way to make satisfied customers while bringing real profit to you.

In a hospital attic, "Century" Linabestos provides an effective fire-stop.

A complete exterior application of "Century" Linabestos.

Send for data on K&M Building Products

Asbestos Roofing & Siding Shingles
Asbestos Flexible Wallboard (Sheetflexos)
Asbestos-Cement Structural Board and Sheathing (Linabestos)
Asbestos Decorative Walltie
K & M Mineral Wool Insulations for the home

Underline the products listed at the left on which you want data, and mail this coupon today.

NAME
NAME OF FIRM
ADDRESS
Laying Out Figures with Steel Square

THIS Job Pointer is offered for the benefit of those who may have forgotten how to lay out a regular pentagon or 5-sided polygon with the aid of a steel square. In the diagram, figure ABCDE represents the outside of a pentagon. To construct the pentagon, draw a line AB, and place the square on the line as shown, with 11" on the body and 8" on the tongue. Mark along the tongue AE; then reverse the position of the square as shown at ABb, and mark along the tongue AB. The two sides of the pentagon, or at least the direction of the two sides, will then be determined. To find the direction of the side BC, erect a perpendicular to the line AE at 4, or the center of the line AE; then place the square as shown by the dotted lines. In the same manner, the directions of the other sides may be found.

To find the directions of the sides of hexagon use the figures 12" and 6.93," the latter giving the directions of sides.—FRED R. MINCKLER, Carpenter, Montesano, Wash.

Mounting for Sheet Metal Piping

THE illustration shows a form of lug with which sheet metal piping, either of furnace, downspout, ventilating or general air conditioning type may be easily fitted, and which will allow very easy mounting of the piping in different manners. One simply steps down an inch or an inch and a half on the uncrimped end of the joint of pipe, as at A, and makes a cut around almost half-way each way from the seam C. Leave about one and a half or two inches stand uncult, as at B, and flatten out the strip to form a lug as shown. At the side indicated the way a string of joints will go together and will be fitted with integral lugs which can be nailed or screwed directly to a surface. But this is not the only advantage. These lugs can be bent back at right angles at any desired point, making them adaptable for insertion into brick mortar joints, either at the time a wall is being laid, or by raking the joints to make room for cementing them into place afterward.—JOHN E. HYLER, Peoria, Ill.

Tool for Removing Siding

HANDY tool for removing siding when it is necessary to replace some of the pieces, is shown in the sketch. This time saver more than pays for itself the first day. Sizes are given for making it out of a piece of 5/8" rod.—GEO. L. SPLITT, Builder, Hammond, Ind.

Circulating Hot Water for the Home

IT is well known that in homes where water for domestic use is heated by a furnace coil and stored in a tank in the basement, it is necessary to run off a considerable amount of cold water before hot water reaches the faucets.

Having an arrangement of this kind in my house, I designed a circulating system in this manner. At a point in the hot water pipe the greatest possible distance from the tank, in this case about 30 feet, put in a tee and run a 3/4-inch line of pipe back to the cold line going into the furnace coil. A globe valve is to be installed in this 3/4-inch line which permits throttling down so that the water will barely circulate and also when hot water is drawn, no great amount of cold water can be drawn with it.—W. E. MOREY, St. Charles, Mo.
RETURN COUPON TO
W. E. Dunn Manufacturing Co.
450 West 24th St. Holland, Michigan

THESE HOME OWNERS WANTED UTMOST VALUE in beauty, permanence and low cost. Elliot & Kranz, progressive home builders, were quick to realize the extra sales value of DUNBRIK, and profited by fully meeting this preference for it among these buyers. Thus, by following the policy of supplying the biggest per dollar value, their success exceeded expectations.

IN DUNBRIK, ELLIOT & KRANZ too found their ideal requirements,—extra quality, lighter weight, greater strength, lower absorption and precision accuracy. This, coupled with DUNBRIK'S new standard of beauty—its wide range of shades and textures, enabled it to meet any architectural requirement or individual taste. All this extra value proved a big asset to Elliot & Kranz because the product was made available without delay and at lowest cost, through local DUNBRIK manufacturers.

NEW AND REVOLUTIONARY PROCESSES OF MANUFACTURE in a straight-line, powerful tamping and troweling production machine, delivering 600 impacts per minute, with 36 troweling strokes, build superiorities into DUNBRIK-DUNSTONE that have set a new high standard for masonry construction, and have made them the preferred units wherever manufactured.

BIG MANUFACTURING OPPORTUNITIES—We equip you with line production machinery. Large daily output—one or two men. Equipment costs but a fraction of other processes of equal capacity. Franchise granted—protecting your market, business and future. Many territories available, offering profitable local manufacturing businesses. Independent manufacturers already established have made real progress right from the start. They have been successful beyond anticipation, and have made billions of DUNBRIK.

IF YOU ARE INTERESTED IN BUILDING BETTER BUILDINGS AT LOWER COST, OR A PROFITABLE BUSINESS OF YOUR OWN, MAIL COUPON TODAY.


☐ Show me how I can build better buildings at lower cost, and how I can make more money as a contractor by using DUNBRIK-DUNSTONE through your free new books.

☐ Show me how average ability and some capital win manufacturing independence in supplying DUNBRIK-DUNSTONE — the earning power of an exclusive plant in my territory, — through book "4 Keys to Success".

Name.................................................................
Address............................................................
City.................................................................State......................................
1939 Brings Improved Building Materials

Manufacturers Announce New, Better Materials and Equipment for Active Building Market Expected This Year

Automatic Safety Device for Doors

An ingenious, automatic safety control for Kinnear motor-operated rolling doors as well as other types of Kinnear upward-acting doors has been announced by the Kinnear Manufacturing Co., Columbus, O. Through its application on the door, it practically eliminates the possibility of injury to persons or damage to cars, in case doors are carelessly closed by attendants who fail to note whether or not the opening is completely cleared when they push the control button. This has been a hazard in the past, in situations where operating control stations are remote or out of direct view of the doorway.

This device works through a compressible, air containing weatherstrip which is placed along the entire length of the bottom edge of the door. In case the door contacts an obstruction upon closing, it compresses this weatherstrip, which thereby forces air through an impulse switch, causing the door to either stop its closing travel or immediately revert to its fully open position, depending upon the method of connection to the door control circuit. The slightest pressure on the weatherstrip insures positive action.

Complete Basement Window Unit

A completely factory-assembled basement sash unit has been added to the Embassy line of Roach & Musser, Muscatine, Iowa. It comes ready to install in wall and features the Slender-Line design for improved appearance and more light. The unit is of western Ponderosa pine, toxic treated and aluminum primed, completely weatherstripped with all hardware attached, and glazed with S.S.B. glass. The screen is 1-1/16 inches thick, western Ponderosa pine, with 16 mesh Galvanoid or copper bronze wire. Rust-resisting hinges hold sash in two positions.

New Type of Air-Met Insulation

The Ruberoid Co., 500 Fifth Ave., New York, has developed a new form of aluminum foil insulation for houses as a companion product to their Type 4 Air-Met.

The new product, known as Type 2 Air-Met, uses one sheet of aluminum foil combined with one parallel sheet of vapor-resistant paper, and was developed to embody the basic Air-Met principles at a lower price than Type 4. It provides effective insulation in situations where the high insulating efficiency of Type 4 is not required, such as in the side walls of houses which, unlike roofs and ceilings, are not subjected to the direct downward rays of the sun in summer, and are required to throw back but little of the upward flow of heat from the interior of the house in winter.

Type 2 can be tacked to the faces of studs and joists, instead of having to be applied between them. A protective layer of building paper is not required with Type 2 Air-Met.

Blanket Type Insulation

A highly efficient and economical insulating blanket, Forest Fleece, now being placed on the market, is composed of fine cotton fibers, treated to make them fire retardant, and felted together to form a thick layer of blanket which is sealed between a layer of waterproof paper on one side and aluminum sized kraft paper on the other side.

The sealed edges form a selvage about 1 1/4 inches wide for tacking, tucking in or otherwise fastening the insulation into place.

Forest Fleece is put up in eight-foot lengths, 18 inches wide for use between studs, and in 36-inch widths for nailing directly to face of rafting or studs in unfinished attics and for sound deadening in floors, or wall partitions.

Features claimed for the product are high insulating value and extremely moderate cost, by J. J. Doheny Co., 326 Lake St, Belmont, Mass.

Adjustable All Metal Window Screens

A new adjustable, all-metal window screen, placed on the market by the Haskel Company, Birmingham, Mich., is called the "Extenda" window screen and consists of a metal framed bronze screen cloth filler, which is inserted in an adjustable metal frame.

The frame may be extended two inches, both horizontally and vertically, without interfering with the insect-proof qualities of the screen. The adjustments are made without tools, in the same manner as curtain rods are adjusted.

The advantages to the contractor, building supply dealer and home owner are:

By carrying only seven sizes in stock, 28 standard openings may be accommodated. Furthermore, the slight variations in openings (Continued to page 72)
You don’t have to wait until next fall to sell storm sash. You can sell it right now—profitably.

All about you, home owners are experiencing the discomforts of winter—paying big fuel bills. And winter has a long way to go. All about you, people are learning that L-O-F “Window Conditioning” with storm sash and storm doors can relieve that discomfort, Now.

Continued, forceful L-O-F advertisements in leading national publications reaching ten million homes... nationwide publicity... feature articles in widely read publications... are presenting the outstanding features and advantages of “Window Conditioning” to millions.

You have an impressive story to tell... the comforts that “Window Conditioning” provides... the savings in fuel effected... the low cost... the ease of installation. Tell this story to the thousands about you who have an urge to buy. Convert that urge into orders, Now.

Over 5000 lumber dealers are telling the story of “Window Conditioning”—using the effective promotional and merchandising material available. If you are not participating in the comprehensive tested L-O-F selling plan, write for complete details today. Libbey-Owens-Ford Glass Company... Toledo, Ohio.

SELL L-O-F “WINDOW CONDITIONING” NOW

(DOUBLE-GLASS INSULATION)

LIBBEY • OWENS • FORD

QUALITY GLASS
of the same size, due to swelling or warping, no longer require the time consuming fitting and trimming which is necessary on wood framed type screens. These screens because of their compactness take less space to store. They are finished by the Haskelite process, that gives them a handsome, rust-resistant surface similar to the finish of the barrel of a fine gun. They may be cleaned easily, by hosing, drying and wiping with an oily cloth. They require no painting or maintenance costs.

Should the screen be broken by accidental means, a new screen filler can be inserted in a few moments. They may be mounted from the inside, without tools.

Small Home Oil-Fired Winter Conditioner

FOR 1939 the Round Oak Company, Dowagiac, Mich., has announced the introduction of a new single package, oil-fired winter air conditioner for small and medium sized homes. Designed as the XA-100 it is a companion model to a smaller one announced last year. It uses Round Oak's own "Contraflow Burner," capable of producing 110,000 B.t.u.'s per hour at the hood, it will meet the heating requirements of houses of seven and eight rooms.

Regular equipment includes the specially designed oil burning furnace of steel, spun glass filters, multi-blade blower, automatic humidifier, burner and controls. Standard controls consist of a heat anticipating thermostat, combination fan switch and high limit control and combustion safety control for intermittent ignition.

Humidifier is of the evaporating type, finished complete with separate throat valve tank and cover, and accessory fittings. The various heating and air conditioning units comprising the XA-100 are compactly arranged in a surprisingly small cabinet with attractive blue Hammerloid steel finish. Removable doors, front and back, provide easy access to units.

New Airtemp Winter Air Conditioners

AIRTÉMP, a division of Chrysler Corporation, Dayton, O., has introduced a complete new line of residential winter air conditioners. In presenting this new line of automatic heating and air conditioning equipment, low first cost, economical operation, greater compactness, and highest efficiency are desirable features which have resulted from a number of improvements in design and production.

Another feature of this new equipment is that the cabinets are bonderized—a protective coating on metal applied beneath the decorative lacquered finish to minimize rust. Cabinets are insulated with thick sheet asbestos surfaced with aluminum foil.

This new equipment is available in both oil and gas-burning models. On the oil-burning model the stainless steel combustion chamber is suspended within the fire box to which is fitted a matched Airtemp oil burner. The gas-burning models are equipped with the new Airtemp Silent-flame gas burner. This new burner employs grid mesh strips of chrome stainless steel instead of the conventional drilled ports. The stainless steel strips are arranged to give an even blue flame across the entire burner.

The gas-burning models are available in six different sizes—in capacities of 50,000 to 200,000 B.t.u. per hour output. The first size is designed especially for small homes and apartments, and is compact enough to be placed in the cramped quarters of a small closet, if need be. The oil-burning models are available in five different sizes; in capacities of 70,000 to 200,000 B.t.u. per hour output.

Food Waste Disposed Through Kitchen Sink

THE In-Sink-Erator Co., Racine, Wis., has designed a device to dispose of all kitchen food waste with the exception of metal and crockery.

To use the In-Sink-Erator the cover is first removed and kitchen food waste placed into the chamber through the feed spout. The cold water faucet is opened to a moderate stream, then the switch is turned on to start into operation. One may then continue feeding the waste material slowly into the chamber until entirely discharged.

The In-Sink-Erator is equipped with a safety switch, which automatically turns off the electric current to the motor and eliminates any possible damage to the unit in the event the container is overloaded while in operation.
"THEY MAKE A WARM AND FRIENDLY BACKGROUND"
says Joseph Chapdelain

"I USE all three of the Western Pines," says Mr. Chapdelain, contractor-builder of Springfield, Mass. "In the homes I build you'll find the Western Pines used in sashes, doors, window and door frames, interior and exterior trim, mouldings, built-in fixtures, mantels, panelling—and in many other ways.

"There are several good reasons why I like Western Pines—one of the most important being that they are readily adaptable to many exacting uses. They're well seasoned and nicely milled.

"In recent years knotty pine panelling is more and more in demand for libraries, dens, recreation rooms, etc. I find the Western Pines workable, durable and beautiful."

*THESE ARE THE WESTERN PINES

Mr. Chapdelain in the knotty pine paneled recreation room of a Longmeadow, Mass., home recently built by him.

Visit the Western Pines Exhibit at the GOLDEN GATE INTERNATIONAL EXPOSITION and the NEW YORK WORLD'S FAIR.

The Western Pines Will Do Your Next Job Better — Try Them

Specify Western Pines From Association Mills

Western Pine Association, Yeon Building, Portland, Oregon
* Ponderosa Pine
* Idaho White Pine
* Sugar Pine
Three Reasons Why:

1—provides a metal form for the masonry.
2—firebox, damper, smoke - dome and down-draft shelf are all built-in parts.
3—all parts correctly proportioned at the factory.

The Heatilator Fireplace is easier to build because a double-walled steel heating chamber—included in the masonry—serves as a metal form for the masonry. Complete from floor to flame, it replaces firebrick, damper and other materials. It does not limit either the mantel design or the type of masonry used.

WILL NOT SMOKE

The Heatilator Fireplace has been proved in homes and camps all over America. Thousands of owners recommend it. Builders find it a real selling feature. Heatilators are stocked by leading building-supply and lumber dealers. Mail the coupon today for complete details, including installation data.

HEATILATOR COMPANY
821 E. Brighton Avenue, Syracuse, N. Y.

HEATILATOR
Fireplace

New Undercoater for Outside Priming

FROM Sherwin-Williams Co., Cleveland, O., comes the announcement of a new scientifically developed outside primer known as SWP Undercoater No. 450.

The following features are listed for the product:
Seals new and unpainted lumber, or surfaces badly weathered; uniform surfaces, often saving special treatment of porous or rough surfaces; has exceptional hiding power, overcoming fears of streaking shadows, and making a 2 coat job satisfactory in most cases; shows excellent penetration and adhesion; overcomes crawling on unweathered hard, glossy paint in protected areas.

SWP Undercoater is high in pigment concentration, yet does not pile up or form laps, and it has unusual slip under the brush, an important time and labor-saving feature. It dries to a uniform dull sheen, giving proper “tooth” for the second coat; comes prepared, ready to use, eliminating the problem of getting primers mixed just right for a given surface; may be tinted a suitable shade for a ground color.

Outside Paint for Masonry

A PAINT relatively new to builders is being marketed by the National Chemical & Mfg. Company, Chicago, and is known as Outside Luminall. This paint has a synthetic resin and casein binder which gives as secure a bond over the mortar joint as over the face of the masonry. Walls do not have to be primed or wetted before application.

IN the upper view of a Detroit residence in the low-cost housing field, cinder block walls are seen unpainted. In the lower view two coats of Outside Luminall have given the job an intense white covering.

One-Piece Rubber Shower Base

THE new Brunswick Rubberceptor, a one-piece prefabricated shower base with drain, has been announced by The Brunswick-Balke-Collender Company, Chicago. It is claimed to be 100 per cent sanitary due to its rubber composition, and easy to clean because it has no crevices or corners to hold dirt and germs. The whole receptor is molded from one piece of seamless non-oxidizing rubber, hence is both impervious and free from joints.

Because of its permanent flexibility, it will not leak or crack. The waterproof gasket joint is not affected by settling of pipes because the drain, being made up to a flexible rubber floor, forms a perfect compression joint.

The Rubberceptor can be used with marble, glass, asbestos or any other type of wainscoting. This compatibility of the Rubberceptor with any type of shower wall material gives the builder or architect a range of decorative effects and a free hand in planning his shower stall material.

THE manner in which one-piece rubber shower base fits below enclosing walls is shown at left.
ONE look at a colorful, modern bathroom, with resilient Tile-Tex floor and decorative Tile-Tex walls will convince your home-buying prospect of the plus value you build into a home.

Simple and easy to install, inexpensive to maintain, Tile-Tex walls and floors become a positive and active sales aid. They add real live color and up-to-the-minute modern designs to the key rooms of a house. They can make the homes you build possess that added "something" that closes the sale.

Baths, kitchens, laundries, recreation rooms—these are the rooms that do much to sell a home—women in particular are fussy about these areas. Build these rooms better with Tile-Tex—make them different from your competitors, and watch your sales grow.

For new jobs or for modernization work, Tile-Tex walls and floors mean low first cost and high sales appeal. Our nearest approved contractor has a real fact story for you. Ask for his name and copies of the new Tile-Tex folders on floors and walls.

---

MASONITE IN Color!

BEAUTIFUL SATIN FINISH IS WASHABLE

- COLOR — beautiful, durable, washable — is MASONITE'S newest contribution to the insulation field.
- MASONITE INSULATION, TILE AND PLANK, QUARTZBOARD and PATTERNED CEILINGS are now available in today's most popular home colors — oyster white, ivory, green and buff.

NOW, in one board, with one application, you not only get the valuable insulating properties of these MASONITE Products, but you also get a finished color surface that will last . . . and last . . . and last. Here is the truly modern, practical wall and ceiling surface.

The smooth, satin-like color coating can be washed with a neutral soap and a damp cloth or sponge. It is odorless and gives a high degree of light reflection. It is an exclusive color treatment, developed by MASONITE for use only on MASONITE Products.

Illustrated are MASONITE colored walls in plank effect, and one of the smart MASONITE PATTERNED CEILINGS.

Naturally, you want full information about this latest MASONITE advancement. Mark and mail the coupon today for FREE samples and complete details.

---

MASONITE
THE WONDER WOOD OF A THOUSAND USES
A Mississippi Product
SOLD BY LUMBER DEALERS EVERYWHERE

Copyright 1939, Masonite Corporation

NAME__________________________
ADDRESS________________________
CITY__________________________STATE________________________

MASONITE CORPORATION, Dept. 48-12
111 W. Washington St., Chicago, Ill.

Please send FREE samples and the complete story about MASONITE COLORED BOARDS.
That's how one prominent builder describes Mesker Steel Casements. Mr. W. H. Wagner, President of Hunzinger-Wagner Company, prominent Iowa builders, selected these windows of tomorrow for the O'Brien apartment group at Iowa City.

**Tomorrow's WINDOWS**

are graceful, daylight-giving windows, sturdy and long lasting.

**Tomorrow's WINDOWS**

are easy to open, easy to wash and easy to screen.

MESKER STEEL CASEMENTS are **Tomorrow's WINDOWS**

Write Today for the big, free Mesker Handbook of Steel Sash that makes it easy to buy and sell steel windows. State whether you are a dealer or a contractor.

**Builder's Hardware with 1939 Features**

The National Brass Co., Grand Rapids, Mich., is featuring an entirely new line of interior door trim for 1939, which was brought out recently under the trade name "Duralin." Having the new colorful plastic trims, the latch is a composite of the many popular features found in this company's other lines.

In the numbered illustration below, the latch is shown semi-assembled that each of the features may be presented:

1. Tubular latch is of cylindrical design, installation of which requires the boring of only round holes and eliminates the need of deep mortising.
2. Treatment of the trim of each door may be handled individually with a selection in "Duralin" of eight colors or metal in any standard finish.
3. "Duralin" knob bodies are molded on threaded steel cores and equipped with positive locking set screws.
4. Knob insert tops are interchangeable with a range of tops in "Duralin" of eight colors or metal in any standard finish.
5. "Duralin" is a durable plastic composition of the same material and of the same color through and through.
6. Individual springs apply against the latch bolt and knob spindle which, together with the die-cut parts, provide an easy latch action and positive knob action.
7. Locking device is distinctive in that it applies directly against the spindle and is totally independent of the latch—operates with thumb-turn inside and emergency key outside.

**Combination Electric Circuit Breaker**

To facilitate wiring and conserve space when it is necessary to meter a range or water heater separately from the other circuits in a home, the Square D Company, Detroit, Mich., has introduced a new multi-breaker combination known as Type MBM.

Besides providing for the lighting and device circuits (on one meter) the enclosure also provides space for a Type M double pole multi-breaker unit which is not connected to the other circuits, and thus may be wired directly to another meter without changing the wiring within the box. Circuit capacities are 15, 20, 25, 35 and 50 ampere, 115 and 115/230 volts A.C.

**New, Resilient Non-Slip Flooring**

A NEW, resilient safety flooring material is being made by The Ohio Rubber Co., Willoughby, O. The new, non-slip flooring is composed of aluminum-oxide abrasive aggregates securely bonded into the surface of resilient rubber. Whether wet, dry or smeared with oil, the new flooring provides exceptionally effective non-slip efficiency. It is sound-absorbent and comfortable to stand or walk upon.

Available in either tile or sheet form and various popular colors, the new safety flooring has a wide scope of application on new or old floors of wood, concrete, terrazzo, marble, steel and other materials. Installation is made both easy and economical.
HOME BUYERS KNOW WEISWAY CABINET SHOWERS

Consistent advertising, year after year, in leading national magazines, has built nationwide public acceptance for Weisway Cabinet Showers. Weisway's powerful story of "an extra bath in a three-foot square" helps builder's sell more homes—has created countless remodeling jobs for contractors. This year this business-creating advertising goes on—in such important publications as Time, the Weekly News Magazine, American Home, Better Homes and Gardens, Sunset Magazine and others.

WEISWAY CABINET SHOWERS

COMPLETE RANGE OF MODELS

Styles and sizes for Master Baths - Extra Bath - Guest Room - Servants' Quarters - Recreation Room - Basements - Apartments - Hotels - Clubs - Schools - Gymnasiums - Institutions - Private Offices - Boats - Summer Cottages, Camps - Tourist Cottages - Construction Camps - Industrial Use

Wyteface mean more saleable homes. Guaranteed leakproof construction assures satisfaction, dependability. Vitreous ceramic armor with exclusive foot-grip, slip floor is safe, sanitary, permanent.

AIR COUPON now or write for full story of how builders using Weisways as a selling feature in both new and remodeling jobs. No obligation at once!

HENRY WEIS MFG. CO. (Est. 1876)
180 Oak Street, Elkhart, Indiana

WEISWAY CABINET SHOWERS

Black-on-White for easy reading

Now you take your readings at a glance—without fear of error—even when the light is poor. You save time! The crack-proof white surface is bonded to the steel—protection against rust and corrosion. Favorite Wyteface is hard to kink, hard to curl—good for a long, useful life.

This new member of a famous family offers all the Wyteface advantages, at a new, popular price. 25, 50, 75 and 100 foot lengths; sturdy leatherite case; all mountings heavily nickel plated; sold by building material and hardware dealers. Mail the coupon for illustrated folder and complete prices.

EST. 1867
KEUFFEL & ESSER CO.
NEW YORK - HOBOKEN, N.J.
CHICAGO - ST. LOUIS - SAN FRANCISCO - DALLAS - MONTREAL

K & E FAVORITE WYTEFACE

STEEL MEASURING TAPES

LOOK FOR THIS DISPLAY

Send folder and prices on Favorite Wyteface.

Name: ..................................................
Address: ..........................................

K & E FAVORITE WYTEFACE

Est. 1867
News of the Month
Building Activities and Meetings

November Totals of Private and Public Construction Ahead of Last Year; December Residential Volume Indicates Continued Advance

The November total of construction contracts awarded in the 37 eastern states, amounting to $301,679,000, was the highest November total since 1929, according to F. W. Dodge Corporation. Last month's figure was 52 per cent ahead of the November, 1937, total. The accumulated total for the first eleven months of 1938 is $2,807,489,000, compared with $2,703,609,000 for the first eleven months of last year.

Both private and public work have been responsible for recent construction increases. November was the third successive month in which private building and engineering contracts have run ahead of the corresponding month of 1937. Last month's total of private contracts amounted to $122,731,000, compared with $105,512,000 in the corresponding month of last year. While private work ran behind last year through August, the record since then has been as follows: September, 10 per cent ahead of the preceding September; October, 24 per cent ahead of October, 1937; November, 16 per cent ahead of the preceding November. As a consequence of these recent increases, private construction, which was 24 per cent behind last year at the end of August, was only 17 per cent behind at the end of the eleventh month.

Public building and engineering work has run ahead of 1937 in dollar volume of contracts every month of this year except February, June and July. During the past three months, public construction contracts have more than doubled the volume reported in the corresponding months of last year.

During the first eleven months of 1938, the dollar total of public construction contracts was $1,425,317,000 compared with $1,036,890,000 in the first eleven months of last year. This year's volume of public construction expenditures has been divided as follows: $528,764,000, or 37 per cent for buildings, and $896,553,000, or 63 per cent for engineering structures.

Figures for the period Dec. 1 to 15 indicate that December residential volume may double that for the same month last year, as shown in the following table:

<table>
<thead>
<tr>
<th>Industry</th>
<th>December 1-15, '38</th>
<th>December 1-15, '37</th>
<th>December, '37</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residential</td>
<td>$41,571,000</td>
<td>$22,664,000</td>
<td>$43,480,000</td>
</tr>
<tr>
<td>Non-Residential</td>
<td>49,794,000</td>
<td>52,518,000</td>
<td>101,207,000</td>
</tr>
<tr>
<td>Public Works</td>
<td>53,254,000</td>
<td>20,891,000</td>
<td>47,082,000</td>
</tr>
<tr>
<td>Utilities</td>
<td>23,001,000</td>
<td>10,964,000</td>
<td>17,681,000</td>
</tr>
<tr>
<td>Totals</td>
<td>$167,620,000</td>
<td>$107,037,000</td>
<td>$209,450,000</td>
</tr>
</tbody>
</table>

** **

John D. Biggers (right), president of the Libbey-Owens-Ford Glass Co., congratulates G. P. MacNichol, Jr., vice-president of the company in charge of sales, after the National Glass Distributors Association had presented the first annual "award of merit for outstanding industrial accomplishment in 1938" to the Toledo company. L-O-F earned it for their comprehensive manual on modern storefront construction using structural glass, and their successful "window-conditioning" campaign.
in the New Ro-WAY Model “J”

That’s the secret of the “always-balanced” lifting power in this popular residence garage door. If you haven’t seen one of them in operation, you can hardly picture its coasting smoothness in operation, because with exactly the same amount of lifting power applied at exactly the same time to both sides of the door, all side binding is eliminated. There is absolutely no side-drift. But these are only a few of the many advantages this sensational new door offers. It is much simpler to install, in old or new buildings, and there are no adjustments to make at any time. All these advantages are made possible only in this Ro-Way Model “J” Door at popular prices, because it has this exclusive feature...

Rō-To Live Spring (Patented)

Instead of two springs to supply lifting power to the two sides of the door, we use one Rō-To Live Spring... a single, powerful, full-floating coil which gives a smooth, evenly-balanced lift to both sides of the door at the same time... always. The Rō-To Live Spring (Patented) uses each end of the tension spring for lifting power... no dead ends. Energy from each end of the live-floating spring is applied to each cable drum. One drum revolves clockwise... the other counter-clockwise...

NO OFFSET BRACKETS

Track Always Protected

Vertical tracks attach directly to the door jamb. No track brackets used. Ball bearing steel track rollers built in rubber tires... will not stretch nor become loose. Cast steel pre-formed lifting cables are used. These features insure quieter operation. Headroom requirement, 9” to 14”. Sidewall requirement, only 3½”.

Write for descriptive Folder and Price List

ROWE MANUFACTURING CO.

775 Holton St.
Galesburg, Ill., U.S.A.

BUILDERS SAY: “It Gives Me A Big Advantage”

A WALKER-TURNER 10” BENCH SAW GETS WORK DONE FASTER... SAVES LABOR... BOOSTS PROFIT ON JOBS

Think how much faster, easier, cheaper you could do a large part of your work if you had this tool. Certainly it would pay for itself in a hurry!

Compare its features and we think you’ll agree it’s the best, most serviceable portable saw for general use. Has full 3” capacity... broad table with extra extension for handling large pieces... worm gear controlled blade and tilting table... ball bearings... many other quality points detailed in NEW 1939 CATALOG. SEND COUPON FOR IT.

WOODWORKING POWER TOOLS FOR ALL BUILDING JOBS—Saws, Jointers, Tilting Arbor Saws, Belt and Disc Sanders, Shapers, Lathes, Drill Presses, Flexible Shafts, Motor Grinders. See New Catalog.

FIRESAFE CONCRETE
helped builder and realtor
enjoy a big, profitable year
at Oreland, Pennsylvania

THESE two men worked out a plan that really sells homes! They picked a good Cape Cod design, and figured an attractive price with lot. Then they built a concrete demonstration home and based their advertising and merchandising plans on the advantages of concrete construction!

Did the public go for it? They bought 89 houses, over 50 of which have been completed. For concrete gives these appealing sales features:
- Protection from fire, storm and decay.
- Beauty, any architectural style.
- Year 'round comfort.
- Freedom from sagging walls, creaking floors, sticking doors and windows.
- And LOW PRICE plus upkeep thrift and high resale value.

35,000 Concrete Homes in 3 Years

Concrete is the fastest growing kind of home construction. It will pay you to feature firesafe concrete. Write us if you are interested in more information on the sales advantages of concrete.

PORTLAND CEMENT ASSOCIATION

Red Cedar Shingle Bureau Plans Larger, More Ambitious 1939 Program

BY ADDING two new well qualified men to its effective field staff and by expanding its national advertising campaign, the Red Cedar Shingle Bureau has disclosed a program for 1939 that will give further support and co-operation to the retail lumber trade in the sale of Certigrade red cedar shingles. The two additional field representatives are R. L. Hawkins of Little Rock, Ark. and Sam Olsen of Seattle, Wash. Mr. Hawkins will be stationed in the Missouri Valley region with headquarters at Kansas City. Mr. Olsen will cover the New England territory, supplementing the work in that region of the Bureau's veteran representative W. D. Richardson. Both men will concentrate on service contact with the retail lumber trade.

The Bureau will take again a very active part in the retail lumber dealer association annual meetings. An attractive exhibit of unusual design will be displayed at all the leading conventions and in each case will be attended by experienced field men ready to assist dealers and others with information about red cedar shingles.

Metropolitan Life Housing Project Awards Largest Window and Flooring Orders

ON THE $50,000,000 community housing project of the Metropolitan Life Insurance Co., located in the Bronx, New York City, and being constructed by Starrett Bros. & Eken, Inc., who is reported to be the largest single order for windows in the history of residential construction, the contract for 65,800 Fenestra bonderized steel windows and steel casings, has been awarded to Detroit Steel Products Co. The largest flooring order ever placed, calling for 7,000,000 square feet of hardwood block flooring, has been awarded to E. L. Bruce Co. of Memphis, Tenn.

New U. S. G. Research at Mellon Institute

Dr. Edward R. Weidlein, director, Mellon Institute, Pittsburgh, has announced the establishment of an Industrial Fellowship in that institution by the United States Gypsum Co. of Chicago, Ill. This Fellowship will conduct fundamental research on various products manufactured by the donor company, with the objective of developing new processes and technics which will have broad application in the field of building materials. This investigative work will augment the regular research activities of U.S.G.

DEDICATING JOHNS-MANVILLE BUILDING at New York World's Fair, Grover Whalen, New York World's Fair president, and other officials inspect the giant figure of an asbestos-clad man which will be the theme for the Johns-Manville building, first private exhibit structure completed at the Fair. Left to right are: F. P. Byington, vice president of Johns-Manville; L. J. Towne, president of the A. L. Hartridge Company, contractors; William F. Lamb of Shreve, Lamb & Harmon, architects; Mr. Whalen and Mr. Brown.
The "OVERHEAD DOOR"

Manufactured by
Overhead Door Corporation, Hartford City, Ind.

THE DOOR WITH THE
MIRACLE WEDGE

-ADAPTABLE-

HOME GARAGE FACTORIES
GREASING STATIONS
WAREHOUSES
BOAT WELLS
SIMILAR BUILDINGS

Salt Spray Steel

TRACKS AND HARDWARE

BACKED BY OUR NATION WIDE SALES INSTALLATION SERVICE

OVERHEAD DOOR CORPORATION
HARTFORD CITY, INDIANA, U. S. A.

ONE PANE WINDOWS

For the best light transmission the advantages of one pane windows explain why the trend is to the undivided window.

This type of window permits the maximum light transmission and eliminates eye strain. In a test conducted by the Pittsburgh Testing Laboratories, it was found that the undivided window transmits from 8% to 30% more light than the divided window.

Consider these advantages and specify one pane windows glazed with Clearlite Quality Glass.
Now build HARDWOOD WALLS at low-cost wallboard prices!

Build stronger, harder, smoother walls...fine enough for high-cost homes—but economical enough for low-cost housing!

Here’s how WELDBORD cuts building costs three ways:

1. **LOW RETAIL PRICE.** WELDBORD sells for only 7¢ per square foot.* Mass production methods make possible this low price—only ½ the former cost of panels of equal quality.

2. **SAVES CONSTRUCTION TIME.** WELDBORD comes in light, large ½”-thick panels (4’ x 8’, 4’ x 7’ and 4’ x 6’). Easy to handle, WELDBORD eliminates waste, speeds up erection.

3. **SAVES FINISHING COSTS.** WELDBORD has no grain raise, therefore no special treatment, no lining necessary for papering. Just size and paste as on plaster, direct to WELDBORD panel.

---

**STRONGER**—Dramatic iron ball experiment and scientific laboratory tests prove WELDBORD has the highest structural strength of any wallboard.

**SMOOTHER**—No grain raise, therefore no special treatment, no lining necessary for papered. Just size and paste as on plaster, direct to WELDBORD panel.

---

**Schedule of Association Meetings for Winter and Spring of 1939**

The following groups in the building industry have made arrangements for meetings and conventions to be held on the dates and at the places listed below.

<table>
<thead>
<tr>
<th>Date</th>
<th>Association Name</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jan. 17-19</td>
<td>Northwestern Lumbermen’s Assn., Civic Auditorium</td>
<td>Minneapolis, Minn.</td>
</tr>
<tr>
<td>Jan. 17-20</td>
<td>Ohio Assn. of Retail Lumber Dealers, Deshler-Wellick</td>
<td>Columbus, O.</td>
</tr>
<tr>
<td>Jan. 24-26</td>
<td>Northeastern Retail Lumbermen’s Assn., New York City.</td>
<td></td>
</tr>
<tr>
<td>Jan. 25-27</td>
<td>Southwestern Lumbermen’s Assn., Auditorium, Oklahoma City, Okla.</td>
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</tr>
<tr>
<td>Feb. 7-9</td>
<td>Concrete Industries Exposition and Conventions, Sherman Hotel, Chicago, Ill.</td>
<td></td>
</tr>
<tr>
<td>Feb. 8-10</td>
<td>Lumber Dealers’ Assn. of Western Pennsylvania, William Penn Hotel, Pittsburgh, Pa.</td>
<td></td>
</tr>
<tr>
<td>Feb. 14-16</td>
<td>Wisconsin Retail Lumbermen’s Assn., Milwaukee Auditorium, Milwaukee, Wis.</td>
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</tr>
<tr>
<td>Feb. 16-17</td>
<td>Virginia Building Material Assn., to be announced.</td>
<td></td>
</tr>
<tr>
<td>Feb. 22-24</td>
<td>Nebraska Lumber Merchants’ Assn., Municipal Auditorium, Omaha, Nebr.</td>
<td></td>
</tr>
<tr>
<td>Feb. 23-25</td>
<td>Western Retail Lumbermen’s Assn., to be announced.</td>
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</tr>
<tr>
<td>Mar. 1-3</td>
<td>American Concrete Institute, Roosevelt Hotel, New York City.</td>
<td></td>
</tr>
<tr>
<td>Mar. 8-9, 1939</td>
<td>Conference on Air Conditioning, University of Illinois, Urbana, Ill.</td>
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</tr>
<tr>
<td>Apr. 10-13</td>
<td>Lumbermen’s Assn. of Texas, Beaumont, Tex.</td>
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</tr>
<tr>
<td>May 25-26</td>
<td>National Assn. of Commission Lumber Salesmen, Peabody Hotel, Memphis, Tenn.</td>
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</tbody>
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**Plan More Anthracite Industries Schools**

**ANTHRACITE Industries, Inc., has established eight additional merchandising schools for coal dealers to be held at night as follows:**


---

**ADDITION TO GENERAL OFFICES OF THE BARBER ASPHALT CORP. doubles capacity and provides space for administrative staff removed from Philadelphia to Barber, N. J. The building fronts 259 feet on State Street in northern section of Perth Amboy, N. J.**
The Building Estimator's Reference Book

CONTAINING 1700 PAGES OF BRAND-NEW ESTIMATING AND COST DATA ON ALL THE NEW BUILDING MATERIALS AND METHODS DEVELOPED DURING THE PAST 6 YEARS. HERE IS INFORMATION THAT EVERY CONTRACTOR NEEDS TO KEEP ABRASE OF MODERN TIMES AND COMPETE FOR PRESENT DAY CONTRACTS.

Use American Builder "TruCost" estimates for accurate quantities, and Walker's "Building Estimator's Reference Book" for accurate labor costs and material prices. It contains complete detailed estimates on all classes of building construction, including everything from Excavating to Painters' Finish.

COVERS
Excavating
Concrete Foundations
Reinforced Concrete
Rough Carpentry and Timber Framing
Millwork and Interior Finish
Lathing and Plastering
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BOOKS on BUILDING

A REVIEW of current publications in the building field. For information about these books, write American Builder, Book Service Dept., 30 Church Street, New York City or the publishers.


This bulletin has been prepared to answer the need for authentic information on the manufacture of hardwood flooring, the various types available, its application and finishes. Some of the subjects covered are: flooring requirements; principal American hardwoods used for flooring; hardwood flooring grades and sizes; methods of laying hardwood floors, with recommended practices; method of estimating quantity of strip flooring needed; precautions in handling hardwood flooring; finishes for hardwood floors; and, refinishing used hardwood floors.

TEN LITTLE COTTAGES—by R. C. Hunter, Architect, 501 Fifth Ave., New York City. 10 pages, 10 illus., $5/2 x 51/2, paper, 25 cents.

Pen sketches of ten small frame houses in the $6,000 range designed to meet the popular demand for a low, spready one and one-half story type of house with simplified provision for expansion. Included are perspective drawing, block floor plan, construction details, color scheme and description of special features.


In this book the use of facts and formulas needed in designing the structural steel framework for buildings is shown by actual examples of a practical nature, which serve not only to teach the proper application but to illustrate current practice. It is also of interest to designers, as it brings together the necessary data for the complete design of structural steel work for business buildings. This revised edition is written in a "how-to-do-it" style, and the material has been rearranged into chapter form to make it more convenient for use.

PLAN YOUR HOUSE TO SUIT YOURSELF—by Tyler Stewart Rogers. 1938. 282 pages, illus., 71/4 x 91/4, cloth. Charles Scribner's Sons, 597 Fifth Ave., New York City. $3.50.

Although this book is written in simple, non-technical language for the layman and homeowner, it contains interesting and valuable information for building industry men and should be a good book to which prospective clients might be referred. Starting with an inventory of the family and its habits of life the author helps the reader to determine, room by room, what he needs to accommodate people, furniture and equipment. Each chapter relating to a part of the house closes with a record form in which may be entered the family's carefully considered requirements and desires.

NATIONAL HANDBOOK—by Martin F. White and Frank Z. Smith. 1939. 160 pages, illus., tables, 51/2 x 81/2, cloth. National Plan Service, Inc., 1315 W. Congress St., Chicago. $5.00.

This is a comprehensive handbook on plan reading, material listing and estimating, written in a clear and easily understood style and profusely illustrated. The pertinent data and practical information will prove unusually helpful to those interested in home construction, and safeguard against hit-or-miss figuring and estimating; a dependable guide for the lumber dealer and his contractor customers.
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Precision ball spindles, and 10,000 R.P.M. speed allow quantity and quality production with highest efficiency.

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Public Interested in Sensible Homes

To the Editor:

After reading "Sensationalism Does Not Encourage Home Building" in the November American Builder, I am prompted to send you the enclosed folders, which describe the home promotion we have been sponsoring at the Journal during the past year. (A winsome Early American home is exhibited.—Ed.)

Its purpose, as you can judge, is to encourage sound building and affordable home buyers a basis for evaluating homes offered for sale.

This particular leaflet is distributed to people visiting the Certified Homes, six of which have been open to the public during the last year.

Apparent is the idea works! The public still flocks to each new home we open; builders are increasingly aware of the prestige within their reach through the program. We think it is good stuff and plan to continue the idea indefinitely.

THE PROVIDENCE JOURNAL,
By Franklin Hurd, Jr.,
Certified Home Department.

To Put Builders Back to Work

To the Editor:

The carnival is over. The Democrats are on their way out. The bruising they took at the recent election is just a warmup for the slaughter that awaits them in '40. The end was inevitable. Sooner or later the thing that made them was certain to break them, namely the depression.

Fireside chats, to some, are a ducky pastime, but the multitude knows that they fail a long way short of putting steaks on the table. Temporary measures are acceptable in times of emergency, but the life of an emergency just doesn't last six years.

The American people are a gullible lot. Yet there is a limit to the amount of punishment they will assimilate. The Democrats have just found it out. In the history of this nation there was never a President, who promised the people more and delivered less, than Franklin D. Roosevelt. In his charming addresses he has repeatedly said "To judge an individual, not by his words, but by his accomplishments." Latest returns indicate a trend by the voters towards the adoption of our President's philosophy.

It is bad enough to fail miserably in producing any semblance of a business revival during six long years with all governmental agencies and with billions of dollars at your finger tips. But it is unforgivable when an unquenchable passion for "I am it" glory permits that administration to be heavily spotted with graft, wastefulness, scandals, etc.

Bad as conditions are today, they could be worse. The blessing is that the people caught up with the nation wreckers in 1932. Under the present set-up there is no more chance of a business revival during six long years with all governmental agencies and with billions of dollars at your finger tips. But it is unforgivable when an unquenchable passion for "I am it" glory permits that administration to be heavily spotted with graft, wastefulness, scandals, etc.

The Republicans are coming back. That's news. But in the June issue of the American Builder, the question "Are they going to continue on where the Democrats left off, or are they going to practice economy by drastically reducing costs?" is answered.

(Continued to page 88)
EDWARDS METAL SPANISH TILE

JUST what you need for those particular customers who want the beauty and distinction of clay tile without the expensive roof framing necessary to carry the extra weight. Edwards Metal Spanish Tile have everything: looks, strength, lifetime service, moderate cost. They are light in weight, fire-, wind- and lightning-proof. Can't chip, crack or slide out of place.

Write today for Catalog 72. Send roof measurements with pitch and shape for estimate.

THE EDWARDS MANUFACTURING CO.
542-562 EGGLESTON AVENUE
CINCINNATI, OHIO

American Builder, January 1939.
Payne Unit Heat Is "Custom-Made" For Every Home You Build

A 5-room bungalow or a 14-room mansion—either can be heated to perfection with the new Model "A" Payne Unit Furnace. Every home you build—large or small—can be equipped with just as many or as few Units as are necessary for luxurious comfort—and economy.

Combine the Payne Unit Furnace with the new Payne Modernair (as pictured above) and your prospective buyers are assured of the last word in winter air-conditioning—summer ventilation. Smaller installations for fewer rooms afford the same luxury. Write today.

FURNACE & SUPPLY CO., INC.
BEVERLY HILLS - CALIFORNIA

Builder House Wins Prize

Joliet, Ill.

To the Editor:

My house of insulated stone which you illustrated on pages 56 and 57 of the May, 1938, American Builder was among the prize winners of the Home Building and Modernization Contest sponsored by the Public Service Company of Northern Illinois.

Ten basic specifications were considered in judging the homes: (1) Good location and architecture; (2) sound construction and skilled labor; (3) quality materials and equipment; (4) landscaping and interior decoration; (5) sound financing; (6) new materials; (7) plumbing and sanitation; (8) heating and air conditioning; (9) insulation and sound deadening; and (10) electric or gas services, or both.

R. A. POWERS, President,
Joliet Material Company.

Uses Telephone Directories

New York City.

To the Editor:

I thought your readers would be interested in the following report that was received from the Operating Telephone Company in Texas. Mr. N. H. Banister, Deputy Procurement Office of the Treasury Department, Amarillo, Tex., writes the following which I consider very pertinent to the industry:

"I have secured quite a few telephone directories to use in advertising bids for materials which my office purchases. Most of the men with the same job that I have all over the United States rely on the list of business firms shown in the classified telephone directories to submit bids, just as I do. In the past few months, I have made quite a few purchases from Fort Worth firms which I selected from the Fort Worth classified directory. Some of the things that I have bought that I recall are: concrete wall ties, bar bending machines, steel bars, construction machinery, engineers' supplies, lumber, builders' hardware, and miscellaneous hardware for recreation areas, sand and gravel, and pumps.

"I recall buying a pump from Axtell Co. after advertising for bids from all the firms listed in the Fort Worth classified directory. Some of the things that I have bought that I recall are: concrete wall ties, bar bending machines, steel bars, construction machinery, engineers' supplies, lumber, builders' hardware, and miscellaneous hardware for recreation areas, sand and gravel, and pumps.

"In your Pampa directory, I selected two machine shops, Jones-Everett and Cabot shops, and have awarded both of them jobs. I have also made some awards to lumber companies listed in the classified Pampa book. I recall two firms who received business from me were Fix Rig and Whitehouse Lumber."
The practice paid off, and hit the need—sawdust, same sawdust.

III.

Economy, Health, Endurance, Insulation.

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ROBERT McNAIR
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To add comfort and promote health by eliminating that chilly feeling in bathrooms, children's bedrooms, dressing rooms, etc. — on days when it doesn't pay to have the regular heating plant in operation — install the Quikheter, flush type. It furnishes quick, safe, clean, economical heat by taking cool air from the floor and moving it up through and out of the heating chamber with a velocity necessary to circulate the warmed air throughout the room.

Furnished in small sizes of 1000, 1250, and 1500 watts, and large sizes of 1500, 2000, and 3000 watts capacity.

Frank Adam
ELECTRIC COMPANY
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The price makes it today’s best buy in the
3½/3 Mixer field. Write.

CONSTRUCTION MACHINERY COMPANY
WATERLOO, IOWA

The Editor:
I feel that I have gotten right much good from this maga-
zine, and will probably continue to do so.

I have built ninety-three houses costing from $3,000 to $3,500
during the past twelve months, and I have space on the tract
that I am developing for twenty more, hence I am looking for-
ward to getting some ideas of new designs.

R. O. TATE,
Builder of Low-Cost Homes.

To the Editor:
I subscribed for the Builder and asked for the book of plans
for homes as your records will show. However I wish to regis-
ter a heartfelt complaint which I hope will prove constructive
and that you can do something about.

One book of plans like yours and others from all kinds
of architectural services have the same basic faults from the
standpoint of one like myself who develops lands and has to
build or help clients build economical houses within their means
of payment and suited to the actual climatic conditions. The
architects apparently plan totally without knowledge of recent
fundamental advances that modify the design. For this section
of the country, and I will warrant for pretty nearly all the rest
of the United States, it is desirable to have a fireplace and then
turn it from a mere ornament (that practically all architects
think it is apparently) into a heating unit to heat the house
instead of the outdoors and chimney flue. The way to do this
has been opened by the various types of steel circulating fire-
places of which I have already used three and found them so
effective that in two cases the owners of the houses have done
away with all other heating. But to do this the fireplaces have
to be intelligently located on the inside wall of the living room
so that heat can be led out through ducts to halls, bedrooms,
etc. If you have any intelligent architects on your staff, for
the love of Mike, let them figure this out the way I am com-
pelled to do. This together with a properly placed flue so that
it is supposed to heat. Try and put it on an inside wall and
place it so that the house (not in the living room) does away with furnaces, base-
ments, and all kinds of expensive additions to a house up to
seven or eight rooms, besides cutting heating expenses greatly.

That in turn changes the design of the house fundamentally
and I am tired of trying to make over plans that were evidently
based on making the exterior attractive primarily.

Next, the living room. At least 90% of all plans have light
in the living room on two sides only; sometimes on one; so it
is like a dark cave. Some have fireplaces nicely placed on the
outside wall as far as possible from the main body of the house
it is supposed to heat. Try and put it on an inside wall and
you will find the doors will be on each side of the hearth, a
most uncomfortable place to sit.

Finally, in spite of all the talk in the Builder about low priced
houses, the plans instead of utilizing any of these ideas that
would make a good inexpensive house simply show cheap in-
adequate sheds that would have no heating equipment and are
too small to be good investments for resale. Let’s have some
plans that can be built for $2500 or less, that have heating plants,
light rooms, attractive inside finish, and at least two bedrooms.
A story and a half house is better in appearance than a cot-
tage of one story often, so if you have anything that corre-
sponds to these fundamentals, let’s hear from you or from any
other service you know of that have architects and practical
builders on the staff and not free hand artists.

R. W. THOMPSON, President,
Lakewood Lands Co.

American Builder, January 1939.

(Continued from page 88)
Every 3 people

LUCKE LEAK PROOF TUB HANGER

Years of dependable Leakproof service have firmly established Lucke Tub Hangers as the supreme method of Bath Tub installation among architects, builders, owners. Lucke Hangers lead the field because of proven design and performance. Lucke Hangers are guaranteed LEAK PROOF for the life of the building.

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American Builder, January 1939.
A Superb "Omni-Guide"

For the Planners and Builders of 1939 Homes

2-story California-Monterey, with overhanging balconies on both sides. . . . Hardwood Model Home in Memphis. . . . 9-room English Cottage type in Wichita, designed for entertaining.


Front cover home nestling in the New Jersey hillside. . . . Charming Georgian Home on wooded site. . . . New style Ohio home, with 3 pages of views, plans and details. . . .


Presents the WHOLE Story from A to Z,

and a most fascinating story it is, too, of the increased charm, livability and savings possible in the use of today's improved home design, construction and equipment technique.

The ninety homes detailed in "American Builder Big-Value Homes" are truly "Homes of Tomorrow," far in advance of their day and generation. Hence all through 1939 the book will be in evidence around countless conference tables where home building projects are discussed, details decided upon, and starting points and new ideas and suggestions given the most hearty welcome.

To the right and to the left and on the following page are partially listed the homes presented in this matchless "Omni-Guide" to what's best in homes for 1939, with the wealth of other information given to complete the story of "More House for the Money Today."

Compact, inexpensive Modernistic Manor in Oklahoma. . . . Apartment Cottage, ideal for young couple or two elderly people. . . . Little but Livable 4- and 5-room Cottages that make every inch of floor space count.

Mayfair Acres Colonial, with good proportions and careful detailing. . . . Low Cost New England Home so well insulated that it costs only $5 per month to heat.

Period Styled Homes in Broadview Development that are perfect gems. . . . Hospitable Home in Old Virginia, with center hall entrance and huge fireplace. 

"Master Built" Plywood House in Detroit. . . . A Pittsburgh Home "that grows," for folks of moderate income. . . . Two No Less than Amazing Basement Transformations. (Continued 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,

(Continued from preceding page)

Good News for Today's Home Builders

is sandwiched in between the Home Designs in "American Builder Big-Value Homes" in a number of dramatically framed articles demonstrating in impressive arrays of facts, figures, graphs and diagrams that never before has the industry delivered so much for the home dollar as it is doing today. This is vital information that can be easily passed along to those who are hesitating to build now. These articles are on such subjects as:

"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"
"Picturegraph Analysis Shows Impressive Increase in Home Values"
"Scientific Methods Reduce Home Costs"

Helpful Hows

Other articles present practical methods for securing uncommonly efficient and economical results in today's home building. Such as:

"How to Build to Save Fuel"
"Common Sense in Kitchen Planning"
"50% More Outlets in the Home of Today"
"A Camera Study of One of the Nation's Most Successful Builders"
"How to Build Modern Coal Bins and Double Bunks"
"New Style for Old Apartments"
"New Homes Inspire Old-Home Remodeling"
"Group Home Planning Cuts Costs and Increases Values"

Still More Home Designs


Cubist Creation at Glen Ellyn embodying some capital new ideas. . . . Modern St. Louis Home featuring an entirely new type of heating system. . . . Modern Row Houses in Chicago and Philadelphia.

Concrete Masonry Home in Delightful French Style. . . . Studio Type California Cottage with outdoor fireplace and bewitching lounging terrace. . . . 6-room Colonials with distinctive architectural charm.

The Six Chapters

I—"Value in Today's Home"
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"

Connecticut Country Home with arched opening garage. . . . Three homes showing successive steps in perfecting a home from year to year to meet changing trends and secure more salability. . . . White Brick 5-room Bungalow—California Farm House Style.

Windsor House at Brentwood Highlands with entrancing views of living and breakfast rooms. . . . Compact 25'x25' English Home on Long Island, with a cheerful, well equipped kitchen.
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 the publication. Either the titles or the numbers may be used in ordering. This list is an editorial feature for convenience of our readers.

**SELECTED CATALOGS**

For the Service of Builders, Contractors, Architects, Dealers

1—Hair and Felt Insulating Materials—A de luxe 28-page illustrated brochure presents the extensive Ozite line of insulating and cushioning materials—a complete catalog of hair felt products for thermal insulation, sound absorption and general cushioning. This is Catalog No. 38, copyrighted 1938. The index shows data on insulating felts, insulating blankets, railroad and car insulation, acoustical felts, duct insulation, cushioning felts, interior decoration products and miscellaneous specialties.—AMERICAN HAIR & FELT CO., Merchandise Mart, Chicago.

2—"Outside" Luminall—Specifications for using "Outside" Luminall, a synthetic resin and casein paint for exterior masonry, and available.—NATIONAL CHEMICAL & MFG. CO., 3617 S. May St., Chicago, Ill.

3—Airtemp Heating Equipment—Two new engineering folders give information regarding the Airtemp air conditioning gas-burning heater for homes; also the Airtemp gas-burning boiler for radiator heat. These occupy "30 per cent less floor space" and are backed by years of engineering experience.—AIRTEMP, Div. of Chrysler Corp., Dayton, Ohio.

4—Coleman Gas-Burning Furnaces—A new 36-page handbook tells all about this economy type heating plant for small homes; ask for Catalog No. 5.—THE COLEMAN LAMP AND STOVE CO., Wichita, Kans.

5—Universal Type Trol-E-Duct—Catalog No. 386 devotes 36 pages to describing this flexible and convenient wiring method providing movable outlets. With this new system, convenience outlets are placed anywhere and are readily moved at any time. Industrial buildings, office buildings and residences are making use of this new convenient system.—BULLDOG ELECTRIC PRODUCTS CO., 7610 Jos. Campau Ave., Detroit, Mich.


7—New Wheeler Osgood Door Catalog—Over 200 design illustrations and layouts are featured in the new Woco-Laminex door catalog. Both special and standard doors are shown in a variety of types. A unique feature of this catalog is the color swatch section. Typical finish treatments are illustrated. The color swatches indicate the shades, tones and numerous colors which may be obtained by painting, enameling, staining or varnishing the Douglas fir and Philippine mahogany doors. Slab doors with hickory and poplar surface panels are shown in the catalog.—WHEELER OSGOOD SALES CORP., 122 S. Michigan Ave., Chicago.

8—Contractor's Time Book—A new 48-page Time Book gives space for all the information a contractor needs to keep his time and wage record and Social Security data as to taxes, tax deductions and tax exemptions. It is good for field or office use. This book has been developed in co-operation with timekeepers, auditors, contractors and Social Security officials. Contractors may obtain free copies.—UNIVERSAL ATLAS CEMENT CO., 135 E. 42nd St., New York City.

9—"Thrift Homes with Bryant Personalized Heating"—A 16-page de luxe portfolio illustrates "Homes That Say 'Come In'", small homes, well designed and well heated with the new small economical Bryant gas heaters. The eight demonstration homes of the Lumber Association's Laboratory Community are included; also the Red Cedar Shingle Bureau's Certigrade Home. Other interesting new Bryant literature presents "Advertising and Selling Aids" and an apartment building study, "Designed for Better Living."—THE BRYANT HEATER CO., Cleveland, Ohio.

10—"Wire Rope for Mining and Contracting"—A 96-page handbook presents valuable data on stresses in suspended cables, stresses in hoist and incline ropes, and specific recommendations as to grade and constructions of ropes for various types of power shovels, cranes and other equipment. Various types of wire rope and cable are diagrammed, and sizes and prices are given.—BRODERICK & BASCOM ROPE CO., 4203 N. Union Blvd. St. Louis, Mo.

11—"Monowall" Wall Finish—A new illustrated booklet showing in full color 2 patterns of Monowall, modern one-piece wall finish for residential and commercial interiors is available for distribution. The booklet answers questions most frequently asked about the material, and contains instructions for installing and cleaning it, as well as descriptions of recommended mouldings and their applications. Patterns of Monowall run from plain color to tile designs to rare wood and marble effects reproduced with photographic accuracy.—Building Materials Div. ARMSTRONG CORK CO., Lancaster, Pa.

12—Bestwall for Better Walls—A 16-page de luxe photographic catalog showing how to handle Bestwall gypsum basement installations. The new Bestwall paper reinforcing joint system is illustrated and described. Full color illustrations of Bestwall knotty pine and American walnut panels are included.—CERTAINTEED PRODUCTS CORP., 100 E. 42nd St., New York City.

13—Eleven New S-W Interior Colors—The Decorative Studios of the Sherwin-Williams Co., announces the introduction of five new colors in their Enameloid line—pearl gray, cream, sunny yellow, peach and flame red. In their semi-lustrine line, they are offering six new shades—mint blue, peach, mile green, vague blue, cocoa beige and French green. New color cards are available on request showing these new colors which have been picked to meet the latest decorative trends.—SHERWIN-WILLIAMS CO., Cleveland, Ohio.

14—Kees 1939 Catalog—A new 24-page illustrated catalog shows all kinds of builders' hardware specialties for which F. D. Kees, now in the 60th year, is famous.—F. D. KEES MANUFACTURING CO., Beatrice, Nebr.
Any Handy Man Can Install

Metal weatherstrip is a necessity in all buildings. Stops drafts. Saves fuel. Build your own profitable business with Accurate, the 35 year leader. No special experience required. Write for proposition.—ACCURATE—

METAL WEATHER STRIP CO.
218 East 26th St., New York

COMPLETE CATALOG
IN SWEET'S

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With Colorcrete spraying machine you can supply a permanent decorative surface in any shade at amazingly low cost. Operating expert costs of 2c and up per sq. ft. and sell up to Yc. Some have paid for their equipment from first few sales.

Get the facts. Learn about Colorcrete and its big money making possibilities. Two Colorcrete books tell the whole story. Write today.

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500 Ottawa Ave. Holland, Michigan

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the standard of comparison
in HARDWOOD FLOORING
OAK — — — BEECH

ALSO
GUM + OAK TRIM AND MOULDINGS
AT YOUR DEALERS
BRADLEY LUMBER COMPANY
OF ARKANSAS
WARREN, ARKANSAS

Precision Built
FOR SANDING FLOORS

Resolve today to get into BIG PAY for 1939 as a Floor-Conditioning expert, with the improved Schlueter floor surfacer. It leaves no chatter marks. Surfaces close to baseboards. Ball bearing....on 110 or 220 volts at turn of voltage switch.

NO RISK—Your Machine Will be Sent on Free Trial

Write today for descriptive literature on complete line and details of this liberal offer!
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

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X-CUTTING
MITERING
RIPTING
SHAPING
ROUTING
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Write today for full facts about how other contractors are saving money with this portable and powerful tool.
J. D. WALLACE & CO.
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AND CONCRETE CARTS
...a complete line
WAREHOUSE AND DISTRIBUTOR
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MILWAUKEE, WISCONSIN

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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.
# INDEX TO ADVERTISERS

**JANUARY, 1939**

<table>
<thead>
<tr>
<th>INDEX</th>
<th>Advertiser</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Accurate Metal Weather Strip Co.</td>
<td>95</td>
</tr>
<tr>
<td></td>
<td>Adam Electric Company, Frank</td>
<td>89</td>
</tr>
<tr>
<td></td>
<td>Allmetal Weatherstrip Co.</td>
<td>96</td>
</tr>
<tr>
<td></td>
<td>Aluminum Company of America</td>
<td>3rd Cover</td>
</tr>
<tr>
<td></td>
<td>American Builder</td>
<td>6-14-83-91-92-93-96</td>
</tr>
<tr>
<td></td>
<td>American Floor Surfacing Machine Company, The</td>
<td>84</td>
</tr>
<tr>
<td></td>
<td>American Gas Association</td>
<td>65</td>
</tr>
<tr>
<td></td>
<td>American Saw Mill Machinery Co.</td>
<td>85</td>
</tr>
<tr>
<td></td>
<td>American Telephone &amp; Telegraph Co.</td>
<td>98</td>
</tr>
<tr>
<td></td>
<td>Anthracite Industries, Inc.</td>
<td>7</td>
</tr>
<tr>
<td>B</td>
<td>Bradley Lumber Company of Arkansas</td>
<td>95</td>
</tr>
<tr>
<td></td>
<td>Bruce Co., E. L.</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>Buffelen Lumber &amp; Mfg. Co.</td>
<td>96</td>
</tr>
<tr>
<td></td>
<td>Carey Co., The Philip</td>
<td>16</td>
</tr>
<tr>
<td></td>
<td>Celotex Corporation, The</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Chevrolet Motor Division</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td>Chicago Technical College</td>
<td>96</td>
</tr>
<tr>
<td></td>
<td>Cincinnati Iron Fence Co., Inc.</td>
<td>95</td>
</tr>
<tr>
<td></td>
<td>Colorcrete Industries, Inc.</td>
<td>95</td>
</tr>
<tr>
<td></td>
<td>Construction Machinery Company</td>
<td>90</td>
</tr>
<tr>
<td></td>
<td>Crane Co.</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Curtis Companies Service Bureau</td>
<td>95</td>
</tr>
<tr>
<td>D</td>
<td>De Walt Products Corporation</td>
<td>87</td>
</tr>
<tr>
<td></td>
<td>Douglas Fir Plywood Association</td>
<td>11</td>
</tr>
<tr>
<td></td>
<td>Dunn Mfg. Co., W. E.</td>
<td>69</td>
</tr>
<tr>
<td></td>
<td>Edwards Manufacturing Co., The</td>
<td>87</td>
</tr>
<tr>
<td></td>
<td>Forco Glass Company</td>
<td>81</td>
</tr>
<tr>
<td>H</td>
<td>Harbor Plywood Corporation</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>Haskel Co., The</td>
<td>84</td>
</tr>
<tr>
<td></td>
<td>Heatilator Co.</td>
<td>74</td>
</tr>
<tr>
<td></td>
<td>Holt Publishing Co.</td>
<td>86</td>
</tr>
<tr>
<td>J</td>
<td>Jaeger Machine Co., The</td>
<td>86</td>
</tr>
<tr>
<td></td>
<td>Johns-Manville</td>
<td>18</td>
</tr>
<tr>
<td>K</td>
<td>Kawneer Company, The</td>
<td>22</td>
</tr>
<tr>
<td></td>
<td>Keshey &amp; Mattison Company</td>
<td>67</td>
</tr>
<tr>
<td></td>
<td>Kees Mfg. Co., F. D.</td>
<td>95</td>
</tr>
<tr>
<td></td>
<td>Keuffel &amp; Esser Co.</td>
<td>77</td>
</tr>
<tr>
<td></td>
<td>Kimball Bros. Co.</td>
<td>96</td>
</tr>
<tr>
<td></td>
<td>Kimberly-Clark Corporation</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>Kinney Mfg. Co., The</td>
<td>95</td>
</tr>
<tr>
<td></td>
<td>Kwik-Mix Concrete Mixer Co.</td>
<td>85</td>
</tr>
<tr>
<td>L</td>
<td>Laucks, Inc., I. F.</td>
<td>96</td>
</tr>
<tr>
<td></td>
<td>Lehigh Portland Cement Company</td>
<td>17</td>
</tr>
<tr>
<td></td>
<td>Libbey-Owens-Ford Glass Company</td>
<td>71</td>
</tr>
<tr>
<td></td>
<td>Lincoln-Schlueter Floor Machinery Co.</td>
<td>95</td>
</tr>
<tr>
<td></td>
<td>Lone Star Cement Corporation</td>
<td>24</td>
</tr>
<tr>
<td></td>
<td>Lucke, William B.</td>
<td>91</td>
</tr>
<tr>
<td>M</td>
<td>Majestic Co., The</td>
<td>88</td>
</tr>
<tr>
<td></td>
<td>Mall Tool Company</td>
<td>91</td>
</tr>
<tr>
<td></td>
<td>Masonite Corporation</td>
<td>75</td>
</tr>
<tr>
<td></td>
<td>McNair Shingle Co., Robert</td>
<td>89</td>
</tr>
<tr>
<td></td>
<td>Mesker Bros.</td>
<td>76</td>
</tr>
<tr>
<td>N</td>
<td>National Coal Association</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td>National Manufacturing Company</td>
<td>4th Cover</td>
</tr>
<tr>
<td>O</td>
<td>Overhead Door Corporation</td>
<td>81</td>
</tr>
<tr>
<td>P</td>
<td>Parks Woodworking Machine Co., The</td>
<td>89</td>
</tr>
<tr>
<td></td>
<td>Payne Furnace &amp; Supply Co., Inc.</td>
<td>88</td>
</tr>
<tr>
<td></td>
<td>Peerless Manufacturing Corp.</td>
<td>85</td>
</tr>
<tr>
<td></td>
<td>Pittsburgh Plate Glass Company</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>Porter-Cable Machine Co., The</td>
<td>90</td>
</tr>
<tr>
<td></td>
<td>Portland Cement Association</td>
<td>80</td>
</tr>
<tr>
<td>R</td>
<td>Rowe Mfg. Co.</td>
<td>79</td>
</tr>
<tr>
<td></td>
<td>Ryerson &amp; Son, Inc., Joseph T.</td>
<td>91</td>
</tr>
<tr>
<td>S</td>
<td>Skilsaw, Inc.</td>
<td>78</td>
</tr>
<tr>
<td></td>
<td>Smith Company, The T. L.</td>
<td>89</td>
</tr>
<tr>
<td></td>
<td>Stanley Works, The</td>
<td>19</td>
</tr>
<tr>
<td></td>
<td>Sterling Wheelbarrow Co.</td>
<td>96</td>
</tr>
<tr>
<td>T</td>
<td>Tile-Tex Company, The</td>
<td>75</td>
</tr>
<tr>
<td></td>
<td>Truscon Steel Company</td>
<td>3</td>
</tr>
<tr>
<td>U</td>
<td>United States Building &amp; Loan League</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>United States Gypsum Company</td>
<td>13</td>
</tr>
<tr>
<td></td>
<td>United States Plywood Corp.</td>
<td>82</td>
</tr>
<tr>
<td>V</td>
<td>Victor Electric Products, Inc.</td>
<td>87</td>
</tr>
<tr>
<td>W</td>
<td>Walker-Turner Co., Inc.</td>
<td>79</td>
</tr>
<tr>
<td></td>
<td>Wallace &amp; Co., J. D.</td>
<td>96</td>
</tr>
<tr>
<td></td>
<td>Weis Mfg. Co., Inc., Henry</td>
<td>77</td>
</tr>
<tr>
<td></td>
<td>Western Pine Association</td>
<td>73</td>
</tr>
<tr>
<td></td>
<td>Wheeler Osgood Sales Corp.</td>
<td>87</td>
</tr>
</tbody>
</table>

**NOTICE TO ADVERTISERS**—Forms for the February number of the American Builder and Building Age will close promptly on January 16. No change, order for omission of advertisements must reach our business office, 165 West Adams St., Chicago, not later than the above date. If new copy is not received by the 24th of the month preceding date of publication the publishers reserve the right to repeat last advertisement on all unexpired contracts.
Suppose we want an upstairs telephone some day?

That's a question that more and more home buyers are asking. The answer is a low-cost "extra" that often clinches the sale: built-in conduit to locations for both present and possible future telephones. Such provision for the future impresses prospects—and is practical too—for conduit is the one way to overcome the complications created by many of today's building methods.

Wall insulation, fire-stops, duct-work and concrete effectively prohibit "fishing" wires through finished walls and floors. But conduit, built in during construction, is always ready to carry wiring through. This means that extra telephones may be added without exposed wiring, without piercing walls and floors.

Built-in telephone conduit costs little. One or two lengths of small pipe are enough for the average small home. Call the telephone company's "Builders' Service" for help in planning economical conduit layouts. No charge.
A new BAKED-ON FINISH is Smooth and Tough and Durable. Priming Coat Lasts Three to Five Times Longer.

Again TRUSCON, world’s largest manufacturer of steel building products, moves forward with American Industry in the scientific war against metal corrosion and in protection of painted metal surfaces. ● TRUSCON has installed complete equipment for BONDERIZING...the well-known rust-resisting process used by automobile manufacturers and others to hold paint to steel and make steel resistant to the initiation and progress of rust. ● Notably, in the automobile industry, BONDERIZING has proved its ability to help protect automobile paint finishes against the terrific abuse of flying gravel and stones, splashing mud, oils, destructive chemicals, salt-saturated air and extremes of temperature. ● In the building industry, products of steel are subject to similar but less violent forces of destruction. It is evident that the automobile proved process, BONDERIZING, plus the baking process, provide highly efficient protection for the priming coat on Truscon Steel Windows. TRUSCON'S new BONDERIZING equipment incorporates the latest developments in this rust-proofing process.

You can specify TRUSCON BONDERIZED STEEL windows with assurance that the priming coat of paint as well as the steel itself is given the greatest practical protection for long life and low maintenance cost.

BONDERIZED Truscon Steel Windows are now available for immediate shipment from our factory in Youngstown, Ohio.

Now available—a new illustrated booklet explaining Truscon’s BONDERIZING facilities and what they mean to you. Sent promptly upon request. Write for it today.
1. GREATEST NEW HOUSE VALUES OF THE AGE IN 4-SQUARE DEMONSTRATION HOMES...

The cost of modern conveniences demanded in America's new houses needs special economy in construction and upkeep of the house itself so that the total house budget will be reasonable.

Now Weyerhaeuser has developed a pattern from which comfortable, substantial houses can be built at low cost. Competent designing has been co-ordinated with standard sizes of modern, labor-saving lumber. Architects of nationwide prominence have co-operated. 4-Square Demonstration Homes of 1938 are the result!

They are specific houses, planned to furnish practical, modern convenience without sacrifice to structural accuracy or soundness. In fact, they are examples of better houses that actually cost less!

Here is your chance to offer your prospects today's finest housing value! See your 4-Square Dealer for details.

2. AN ORGANIZED, HARD-HITTING PLAN TO SELL BETTER BUILDINGS TO FARMERS...

Again Weyerhaeuser takes the lead in directing sales effort in your farm market.

Built on two sound premises, this program is easy to work—it is a positive plan.

First, modern lumber is the most economical, most practical material for efficient farm buildings.

Second, proper planning and modern lumber together provide stronger, tighter, more productive buildings that cost less to build and maintain.

Experts in planning, in building, in farming, put this plan together. Experience says it will work to your profit! See your 4-Square Dealer for details!
NO OTHER lumber manufacturer offers contractors such an intelligent array of sales-producing items. Every product is keyed to the demands of today's lumber users. Each service is timely, hard-hitting—well equipped to be the spearhead of your aggressive, profitable selling during 1938.

Weyerhaeuser furnishes these services and products to builders through 4-Square Dealers. Your 4-Square Dealer can help you sell and furnish you with better, more efficient lumber products. See him now for facts on 4-Square Lumber and on these business-building plans for 1938.

WEYERHAEUSER SALES COMPANY • ST. PAUL, MINNESOTA
On to Another Record Year for Builders of CONCRETE Houses!

In modern mansion or conservative cottage

CONCRETE
GIVES BEAUTY, COMFORT, DURABILITY AND SAFETY

Striking Ads Like This in Saturday Evening Post, Better Homes & Gardens and Holland's will continue telling your community about the advantages of building new homes with concrete walls and floors—and direct them to get in touch with architects, builders and realtors who know and believe in this fast growing type of construction.

The concrete home idea has caught on. 1935, 1936 and 1937 successively set new all-time high records for the number of concrete homes built. In these three years alone, more than 40,000 families began enjoying the protection, comfort and satisfaction of a concrete home.

Why not take steps now to build a concrete home this spring, or to standardize on this type of construction as a means of lifting yourself out of the ordinary run of competition and winning community leadership, bigger profits.

Mail Coupon Today for Helpful Information

PORTLAND CEMENT ASSOCIATION
Dept. A2-3, 33 W. Grand Ave., Chicago, Ill.

Yes, I am interested in the profit possibilities of featuring concrete home construction.

Please send booklet suitable for showing prospects entitled “Why People Like Concrete Homes.”

Want literature on construction details.

Tell me about your national inquiry follow-up plan.

Name: _______________________

Firm: _______________________

Address: ____________________

City: ________________________ State: __________
Fits any plan—any budget!

THE NEW G-E UNIT KITCHEN

General Electric Units are completely modern, all-electric kitchens... with G-E Range, G-E Triple-Thrift Refrigerator, G-E Electric Sink with Disposall and Dishwasher, and including wall and base cabinets, work surfaces, wall splasher, luminine lighting—even chrome trim! Low in cost and easily installed. Built of assembled, standardized, interchangeable sections, it is only necessary to attach the units to the wall. Extremely flexible, they fit any plan, any space—one-wall, L-shaped or U-shaped kitchens. Guard home and apartment house investment against obsolescence and depreciation with G-E Unit Kitchens—the kitchens that will be still modern tomorrow. Get the full facts. General Electric Company, Section CW2, Nela Park, Cleveland, Ohio.

GENERAL ELECTRIC
All Electric Kitchens
K&M

ASPHALT
ROOFING
PRODUCTS

ARE HERE NOW!
The Keasbey & Mattison Company offers a line of Asphalt Roofing Products that takes its place right with the other K & M leaders . . . complementing the well-known line of K & M Asbestos-Cement Shingles and Building Products.

Whether you require asbestos-cement siding and roofing shingles, or asphalt roofing products, you can be assured of lasting qualities in either of these K & M materials.

**K & M ASPHALT ROOFING PRODUCTS**

- **GIANT INDIVIDUAL SHINGLE** 12 x 16" available in 5 pleasing colors can be used for American Method or Side Lap application.
- **PLASTIC ASBESTOS ROOF CEMENT** also Asbestos Fibre Roof Coating and Liquid Asphalt Roof Coating.
- **HY-GRADE SMOOTH-SURF ROOFING** available in 55 lbs., 65 lbs. and 75 lbs. Also furnished in Stan-Grade and Med-Grade, in 35, 45 and 55 lbs.
- **HY-GRADE MIN-SURF ROOFING** 90 lbs. Available in 5 pleasing colors. Also in Med-Grade, 75 lbs., furnished in 4 pleasing colors.
- **STANDARD INDIVIDUAL SHINGLE** 9 x 12 1/4" available in 5 pleasing colors.
- **HY-GRADE MIN-SURF ROOFING** 90 lbs. Available in 5 pleasing colors. Also in Med-Grade, 75 lbs., furnished in 4 pleasing colors.
- **2 TAB HEXAGONAL STRIP SHINGLE** available in 3 sizes: 11 1/2" x 36"—12 1/2" x 36"—12 1/2" x 36"—in 5 pleasing colors.
- **4 TAB SQUARE BUTT STRIP SHINGLE** available in 2 sizes: 10 x 36"—13 1/2" x 36"—in 5 pleasing colors.
- **ASPHALT SATURATED FELT** available in 15 lb. and 30 lb. weights.
The "High Sign" of Quality in the Houses You Sell

It's a simple sign, but how it can work and sell for you!
First—it indicates an eye-catching paint job...rich-looking, beautiful—a sure prospect-pleaser!
Second—it inspires confidence...infers "quality throughout" your houses. For it's the sign of a Sherwin-Williams paint job...the best that money can buy. And your prospects know it!
Builders everywhere...sponsors of noted model homes and famous housing projects...are painting their houses outside with famous SWP House Paint and inside with S-W Flat-Tone Wall Finish, S-W Semi-Lustre, S-W Enameloid. And they're showing the "Painted with Sherwin-Williams" sign on every job—keeping it at work helping them advertise and sell more houses. Put it to work for you, too!

Write for facts to The Sherwin-Williams Co., Cleveland, Ohio, and principal cities.
See our catalog in Sweet's.

SHERWIN-WILLIAMS PAINTS
WOOD BASEMENT WINDOWS
are complete and ready to install

Set up and packaged at the factory

Complete Window Unit includes glazed sash and screen fitted into set up frame. All hardware is applied. Screen has 16 mesh bronze wire cloth

All the advantages of wood plus large glass area and minimum installation costs!

One design for any wall construction in standard sizes for every requirement.

Andersen Wood Basement Windows are complete Units and save time and labor in reduced installation costs. They are reasonably priced... often cost less than other Basement Windows, either wood or steel.

The wood frame and sash are non-conductors of cold and heat. They are not subject to condensation and frosting, and cannot rust out. They are protected against decay, moisture and termites by Andersen Preservative and Moisture Proofing treatment.

Narrow sash and frame members are important features of Andersen Wood Basement Windows that allow for more light area! See your lumber dealer for a demonstration and prices, or write Andersen Corporation, Bayport, Minn.

Andersen WOOD BASEMENT WINDOWS
Srucco big factor in construction of Mott Brothers Community...

- Mott Brothers have built and sold nearly 300 homes in their Garden City, Long Island, development. And more than half of these houses are either partly or entirely finished with Mohawk Stucco, manufactured by C. A. DeLevante, Inc., Rockville Centre, Long Island. Mohawk Stucco is made with Atlas White portland cement.

One big advantage in using white portland cement in stucco is that you get exactly the color you want—from pure white, through delicate pastel tints—to warm, rich yellows, browns, greens and other shades.

Stucco made with Atlas White is economical to apply on old buildings as well as new. Moreover, it is permanent, firesafe, weatherproof. And little or no upkeep is required. Universal Atlas Cement Co. (United States Steel Corporation Subsidiary), 208 South LaSalle Street, Chicago.

A FACTORY-PREPARED STUCCO IS PREFERABLE
This neat hook-up for radio connections provides for Aerial, Ground and Power connections from a one-gang outlet. Or in 2-gang type (first above) with extra opening for appliances. As easily installed as any convenience outlet; fits any standard-depth wall box. Gets rid of straggling surface wires; serves equally well for old buildings or new work; completes the electrical conveniences.

Aerial, Ground and Power connections are plainly indicated on receptacle. The aerial and ground plug has blades set at angle to prevent insertion in the power slots. Receptacles and plates come in brown Bakelite and cream-tinted white IVORYLITE. (These units are designed for separate aerials. For 2-to-20 outlets from one aerial, use the Multicoupler Antenna System — instruction-sheets on request).
An Important Development Cuts
Insulation Costs to a Minimum

At the time of manufacturing, KIMSUL is compressed, or creped, to one-fifth its normal installed length. At time of installing it is quickly and easily expanded to fill the entire length of openings between studs. By thus simplifying and speeding up work of installing, costs are lowered noticeably... making KIMSUL a most practical and most economical insulating material.

Choosing insulation for buildings is, in one respect, like choosing warm bedding. The most efficient materials are those which contain the greatest number of air cells. And KIMSUL, like feathers or down, meets this requirement to an unusual degree.

KIMSUL is manufactured of light, hollow, hair-like wood fibers; spun into a continuous creped web; bound together by asphalt and chemically treated to resist fire, moisture and vermin. Of all man-made insulating materials its "K" factor of 0.25 marks it as one of the most effective in stopping the passage of heat.

KIMSUL

KIMBERLY-CLARK CORPORATION (Kimsul Division), Neenah, Wisconsin
Established 1872
NEW YORK, 122 East 42nd Street   CHICAGO, 8 South Michigan Ave
Mail me, without obligation, copy of your NEW booklet, "Year 'Round Insulation Costs You Nothing"; also a full sized sample of Kimsul.

It's a fact that year 'round insulation costs the owner nothing.
THE STANDARD OF COMPARISON

BRAND

BRADING LUMBER CO.-ARKANSAS

FINISHED HARDWOOD

B R A N D L E

TRADE MARK REGISTERED

FINISHED HARDWOOD

B R A N D L E

OAK PLANK FLOORING

HARDWOOD TRIM & MOULDINGS

Uni-Trim®, Pak-Trim® and standard lineal in OAK and GUM

OAK THRESHOLDS . . . STAIR TREADS . . . RISERS

GLUED-UP STOCK

Also manufacturers of Arkansas Soft Pine Satin-like Interior Trim, finish and yard stock.

*TrimPak Pat. Local Distributors Everywhere

SOUTHERN HARDWOOD PRODUCTS

TO MEET EVERY SPECIFICATION!

HARDWOOD FLOORING

"Bradley Brand" in all standard grades and sizes, guaranteed for grade by the NOFMA copyrighted label

OAK PLANK FLOORING

HARDWOOD TRIM & MOULDINGS

Uni-Trim®, Pak-Trim® and standard lineal in OAK and GUM

OAK THRESHOLDS . . . STAIR TREADS . . . RISERS

GLUED-UP STOCK

Also manufacturers of Arkansas Soft Pine Satin-like Interior Trim, finish and yard stock.

*TrimPak Pat. Local Distributors Everywhere

BRADLEY LUMBER SALES COMPANY

WARREN, ARKANSAS

NOFMA

CERTIFIED OAK FLOORS

NOFMA

RECOMMENDED

FLOORS
A QUALITY PRODUCT

LOW IN FIRST COST
NO REPAIR BILLS

STREAMLINE Copper Pipe and Fittings

- STREAMLINE Copper Pipe and Fittings are not expensive, even in first cost. This revolutionary and modern STREAMLINE Fitting has made possible a non-rusting, non-clogging system that can be installed at little, if any more than corrodable materials. There will be no future repair bills — no constant care — no replacements.

A few years ago, plumbing to the ordinary renter or buyer meant simply a collection of pipes that delivered water to the different outlets in and outside the house. Although one of the most important items in the home, it was often given the least thought — but times have changed. The informed buyer or tenant of today asks a lot of questions about the plumbing and heating piping systems. He has become "rust-conscious". He demands piping that won't corrode, clog or leak at the connections.

So important has this matter become that many leading realtors throughout the country have recognized it and made of it an effective sales argument to sell or rent property.

Many properties now carry a sign which reads — "THIS HOME IS INSTALLED WITH NON-RUSTING STREAMLINE COPPER PIPE FOR PLUMBING AND HEATING."
ADD A
WEISWAY BATH*
AND SELL THE
HOME QUICKER

To the home buyer an extra bath is one of the strongest proofs of extra value. The added livability is a sales factor which far outweighs the small investment required for a Weisway Cabinet Shower. Wise builders everywhere are proving the sale-closing worth of added Weisway baths, in homes of every size.

PERMANENTLY LEAKPROOF
Weisways require no special treatment of building walls or floor. Being independent units Weisways are not affected by settling of structure or shrinkage of materials—are guaranteed permanently leakproof.

FIT IN 3-FOOT SQUARE OR LESS
Complete, self-contained baths— with shower head, valves and drain— Weisways are easily, quickly installed in new or old homes, in the space of an ordinary clothes closet. When space is scarce, Weisways in odd corners or little-used floor areas, become real factors in closing the sale.

VITREOUS PORCELAIN NON-SLIP FLOOR
Permanent, sanitary, easily cleaned and equally safe wet or dry, this patented Weisway feature adds luxury to the shower, increasingly popular with all members of the family, as the modern way to bathe.

Listed at the left are a few of the ways in which builders are using Weisways in homes of every size and cost. There are also suitable models for schools, hotels, institutions and commercial buildings.

MAIL COUPON NOW for detailed information; no obligation.

HENRY WEIS MANUFACTURING CO.,
201 Oak Street, Elkhart, Indiana

Gentlemen: Without obligation please send detailed information and specifications on Weisway Cabinet Showers.

Name:
Street:
City: State: 

MORE LIVABILITY PER BUILDING DOLLAR SELLS NEW HOMES
...and for Buckingham Community kitchens,
modern, money-saving Sealex Linoleum

High in tenant appeal—low in cost and maintenance! Sealex Veltone Linoleum was a logical choice for kitchen floors in Buckingham Community homes.

The universal appeal of its rich marbleized design ... its perfectly smooth sanitary surface which is so easy to clean ... its quietness and resilience underfoot ... no wonder Sealex Veltone Linoleum helps get leases signed quickly! And owners certainly appreciate the economy of Sealex Linoleum. Moderate in first cost, it never needs refinishing!

Installed by authorized contractors, Sealex Floors are backed by a guaranty bond fully covering your investment. Write for details.

CONGOLEUM-NAIRN INC., KEARNY, NEW JERSEY

"Buckingham Community" in Arlington, Virginia—in this modern community development the kitchen floors are Sealex Veltone Linoleum.

SEALEX LINOLEUM
Floors and Walls

TRADEMARK REGISTERED
HAVE YOU TIME FOR SIX MORE JOBS?

CONCRETE MADE WITH MARQUETTE HIGH EARLY STRENGTH CEMENT — READY IN 1/7TH THE USUAL TIME — GIVES YOU TIME AND USE OF EQUIPMENT FOR SIX MORE JOBS

MARQUETTE HIGH EARLY STRENGTH PORTLAND CEMENT

Many examples of how time and money can be saved contained in an illustrated 72-page "User's Manual" sent free on request.

MARQUETTE CEMENT MFG. CO.
CHICAGO * MEMPHIS
Pittco Store Front Metal bars, moldings and sash display a rare harmony and unity of design. They are meant to be used together... to bear a pleasing relationship to each other on the finished job. And they are available in the smartest of modern finishes... Alumilite (anodized aluminum) and bronze, polished or satin finish. Consequently, they afford a new kind of beauty in the store front construction field. They add immeasurably to a store front’s good looks and sales appeal.

Pittco Metal Sash is beautiful and practical. All setting operations are performed from the outside.

Further, all Pittco members are sturdy, strong and tough, though unusually graceful in design. This means that they have the durability to last... even under severe usage.

The contractor will find installation a simple matter, too. For all Pittco Metal setting operations take place on the outside of the show window. Both sash and glass are installed in this manner, without complications or delays. No special keys or tools are required. A screwdriver, plus ordinary wood or machine screws, does the job.

Investigate this store front metal that has everything. Send the coupon for our file folder containing complete information and detail drawings of various applications.

Pittsburgh Plate Glass Company
2103A Grant Bldg., Pittsburgh, Pa.

Please send me, without obligation, your folder containing full information on Pittco Store Front Metal and detail drawings.

Name ____________________________
Street __________________________
City ____________________________ State ________
How to Over-Roof and Over-Wall with

CERTIGRADE Red Cedar Shingles

Certigrades pass official inspection for grade and quality.

For sale only by established lumber dealers.

...DETAILED ON SUCCEEDING PAGES
THE FIRST STEP in over-roofing with CERTIGRADE Red Cedar Shingles consists in cutting away the first course of the old shingles at the eaves, using a hatchet.

THE SECOND STEP is just as simple, and consists merely in replacing the shingles that were removed with a strip of lumber three or four inches wide, nailed flush with the eave line. Easy, isn't it?

THE FOURTH STEP merely involves nailing a narrow strip of lumber, approximately the same width as the shingles that were removed, along the gable edge. This can be done as shingling progresses.

THE FIFTH STEP. Place a strip of lumber in each valley to separate old metal from new. Renew all other flashings. Remove old ridge and replace with beveled siding, thin edge down.
These simple operations assure a perfect job. Double roof provides double insulation and effects substantial fuel savings. Litter and dirt from the old roof and consequent damage to lawn and shrubbery are eliminated. The home and its furnishings are protected during the process of reshingling. Over-roofing with CERTIGRADE Red Cedar Shingles is Economical, Durable and Beautiful.

THE THIRD STEP consists in cutting back the old shingles from the gable edges for a distance of two or three inches, so that the old shingles to be covered will be completely concealed.

THE SIXTH AND FINAL STEP consists in the application of the new CERTIGRADE shingles right over the old shingles, using hot-dipped zinc coated box or special over-roofing nails, and the final application of new combs or ridges.

OVER THE OLD ROOF IS BEST!
Do Not Remove Old Wood Shingles

In applying a new roof, it is wasteful and unnecessary practice to strip off the old shingles. These should be left in place and covered with the new shingles. Moreover, the double roof is considerably stronger than the old single roof. Cedar shingles constitute the only form of roof covering that actually adds to the strength of the roof. All other roofing materials are surfacing materials only, and impose a dead load on the roof with no compensating increase in strength.

WHAT NAILS TO USE
Use HOT DIPPED ZINC COATED or other guaranteed rust-proof nails. For an additional cost of only $1.50 for an average home roof, the right nail will double the life of the roof. For over-roofing with 16” or 18” shingles, use 5-penny, 14-gauge Box or special over-roofing nails.

Nails should be set ¾” to 1 ½” from the edge of the shingle and placed 1” to 2” above the butt line of the following course. Do not use more than 2 nails to each shingle. This is important.

VALLEYS AND FLASHINGS
Best quality galvanized iron not lighter than 26-gauge, or tin 30 per cent coating or better, should be used. On half pitch, and steeper roof, use 14” valleys; on flatter roof use 16”.

LAYING SHINGLES
All shingles must be spaced about ¾”. Break all joints 1 ½” side lap or more so that no joint comes directly over another on three consecutive courses.

Covering Capacities of CERTIGRADE Shingles
Including the Number of Square Feet Covered by Four-Bundle Squares, Three-Bundle Squares and Single Bundles for Exposures Given.

<table>
<thead>
<tr>
<th>Exposure</th>
<th>Sixteen-inch Shingles</th>
<th>Eighteen-inch Shingles</th>
<th>Twenty-four-inch Shingles</th>
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<tbody>
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<td>6</td>
<td>78 84 10 83</td>
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<td>78 84 10 83</td>
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<td>100 106 17 105</td>
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<td>301 307 115 302</td>
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<td>18</td>
<td>321 327 125 322</td>
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</tbody>
</table>

* Maximum exposure recommended for roofs.
+ Maximum exposure recommended for single courting on side walls.
- Maximum exposure recommended for double courting on side walls.

Figures in italics are inserted for convenience in estimating number of shingles needed for wide exposures on double courting, with butt nailing. In double courting, with any exposure chosen, the figures indicate the number of shingles for the minor courses. Order an equivalent number of squares or bundles of No. 8 or No. 9 shingles for the concealed courses.
OVER-WALLING with CERTIGRADE

Certigrade shingles may be used to unusual advantage in over-walling and re-styling old houses, regardless of the nature of the existing outer walls. In beginning an over-wall, it is best practice to run a spirit-level line around the building, starting at the highest point of the foundation. This will insure the proper running and spacing of all courses above and below this starting line.

OVER OLD WOOD SIDING

On old wood walls, regardless of their types (bevel siding, novelty siding or wide clap boards) the shingles can be applied directly as on new sheathing, using 6d hot dipped zinc coated nails when "butt nailing" in double-coursing. Various combinations of single and double-coursing can often be used to great advantage in giving new lines to an otherwise outmoded structure.

OVER STUCCO

The application of shingles to old, cracked, leaky and unsightly stucco walls is a simple matter. Here the nailing strips should be attached with nails long enough to penetrate the stucco and the underlying sheathing. It is not desirable practice to apply shingles directly to the old stucco, as this material is too weak to provide the proper support for the nails used in shingling. Stucco can often be easily and inexpensively removed. New paper can then be applied to the walls and the shingling can proceed as in new construction.

NOTE:—Formula for figuring cost of double-coursing. Add price of upper and under courses, multiply by *standard weather exposure and divide by *exposure to be used. For example:

<table>
<thead>
<tr>
<th>Shingle</th>
<th>Price per square</th>
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<tbody>
<tr>
<td>No. 1</td>
<td>$5.50</td>
</tr>
<tr>
<td>No. 2 or No. 3</td>
<td>4.00 per square</td>
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</table>

Multiply $9.50 by *5, equaling $47.50; then divide this $47.50 by *11, equaling $4.32. This $4.32 is the total price per 100 square feet.

OVER BRICK

Brick walls, which are often troubled some due to water absorption and filtration through the brick, are easily covered by framing the walls as applying span shingle lath or nailing strips to the vertical furring strips. The latter should be fastened to the window frames and to the wall through the use of anchors and special nails made for this purpose driven between the bricks, so that the outer shingled wall will be well attached. The cost of such over-walling using double-coursing can be brought to a remarkable low figure.

Double-Coursing of Side Walls

Double-coursing gives beautiful appearance, deep shadow line and insulates to a high degree against heat loss. By the utilization of No. 2 or 3 Certigrades under the No. 1 Shingles, wide weather exposure makes it possible to double-course a side wall at no greater expense than the old-fashioned single-course with the lesser exposure. Many homes of the more economic type are double-coursed with No. 2 Certigrades applied over No. 3 with the most satisfactory results. A wall double-coursed will last as long as the home itself—long life is assured.

<table>
<thead>
<tr>
<th>Weather Exposures</th>
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<tbody>
<tr>
<td>12&quot; for 16&quot; Shingles</td>
</tr>
<tr>
<td>16&quot; for 18&quot; Shingles</td>
</tr>
<tr>
<td>16&quot; for 24&quot; Shingles</td>
</tr>
<tr>
<td>Two Nails to a Shingle, nailed 2&quot; above Butt-line and ¾&quot; from edge</td>
</tr>
<tr>
<td>Building Paper</td>
</tr>
<tr>
<td>Outer-Course ½&quot; lower than Under-Course</td>
</tr>
</tbody>
</table>

Red Cedar Shingle Bureau, Seattle, Wash., U. S. A.
Vancouver, B. C., Canada
THE THRIFT CARRIERS FOR THE NATION

NEW 1938 CHEVROLET TRUCKS

FOUR GREAT LINES

of half-ton, 3/4-ton, 1-ton and 11/2-ton trucks...5 wheelbase lengths...with a wide variety of models to suit your haulage needs...all of them big, rugged, dependable truck units with Valve-in-Head Engines, Perfected Hydraulic Brakes and Extra Sturdy Frames...designed and built to give you more miles of service at lowest cost per mile.

CHEVROLET MOTOR DIVISION, General Motors Sales Corporation, DETROIT, MICH.

NOW ON DISPLAY—ASK FOR A DEMONSTRATION
SEE YOUR CHEVROLET DEALER
Today
Your Clients KNOW Carrara Glass
—and want it!

WALLS of Carrara Structural Glass in bathrooms and kitchens have made a name for themselves among American home owners. Their polished, reflective beauty is generally recognized and admired. Their easy cleaning is a by-word among women. Their permanence and practical qualities are famous. People know Carrara today... and want it. That's why your clients will be unusually well satisfied with any bathroom or kitchen you may build for them employing this modern material.

Carrara will contribute to your reputation for quality work, too. For a Carrara job speaks eloquently of quality. This fine material, properly installed, can't help but result in jobs you and your clients can be proud of.

Incidentally, home owners' preference for Carrara is reflected in their willingness to pay the slight extra cost involved in its use. So take advantage of Carrara Glass in your residential work for bathroom and kitchen walls, for niche linings, shelves, table tops, sill covers. There's good advertising, customer satisfaction and profits in it for you. We urge you to write for our booklet of complete facts about Carrara. Ask for “Carrara Modern Structural Glass.” Pittsburgh Corning Corporation, 21714 Grant Building, Pittsburgh, Pa.

A study in bathroom beauty... beauty that helps to advertise your quality work... is a Carrara bathroom like this one in the home of Mr. and Mrs. Frank H. Stephens in 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
Summer Air Conditioning

People who contemplate building are more and more interested in air conditioning. The market for installations of this sort is becoming increasingly important. Where cool well water is available, it is often possible to use it for lowering air temperatures at a distinct saving in cost over other cooling methods. MYERS engineers have collected extensive data on this subject which is at your service. You are invited to write either for general information or for actual assistance in working out specific problems.

No Need to Wait for Electricity

Where electric high lines have not yet reached a building location but may reasonably be expected to arrive eventually, MYERS Gasoline Powered Water Systems offer special advantages. These water systems afford excellent service with a minimum of attention to the engine. When electric power arrives, they may be economically converted to completely automatic operation by simply mounting an electric motor in place of the engine. There is always high salvage value in the well built gasoline engine because it is of a universal type which may be applied to many uses besides that of operating the water system. The MYERS dealer can give you full information.

The F. E. Myers & Bro. Co.

"Pump Builders Since 1870"

50 Fourth Street
Ashland, Ohio

SUMP PUMP for cellar drainage. An economical compact unit, easily installed in either old or new construction. Entirely automatic in action. Silent centrifugal pump, operated by electric motor. Starts when water enters drain pit; stops when water has been pumped out. Circular on request.

RUNNING water is today expected as a matter of course in every modern home and business structure. When you are required to arrange for an individual water supply in country and suburban locations, your reputation as a builder is strongly involved. No service unit is in more constant usage than the water system. None carries greater responsibility for the comfort, convenience and protection of its users.

You are always safe in installing a reliable MYERS Water System because you can be sure that it will give an absolutely satisfactory account of itself. MYERS have been specialists in the manufacture of water service equipment for nearly seventy years. Thousands of individual owners have proved the smooth, trouble-free performance and remarkably low operating costs of these well built MYERS Water Systems. And you will find also that the MYERS reputation, backed by years of constant advertising, has gone far in preparing a tremendous field of customer acceptance for you.

MYERS Electric Water Systems are silent, efficient and completely automatic — self-starting, self-stopping, self-oiling. Other models for operation by gasoline engine, windmill and hand power. Styles and sizes to suit all needs; for deep or shallow wells. The local MYERS dealer will gladly serve as your consultant on all water supply problems. The latest MYERS catalog should be in your files. Send for it TODAY.

The MYERS PUMP certainly makes a DIFFERENCE...

Fig. 1938

Fig. 2700

Fig. 3012

RUNNING WATER

YOUR FAMILY DESERVES IT

THE F. E. MYERS & BRO. CO.
50 Fourth Street, Ashland, Ohio
Send free information on items marked and the name of your nearest dealer.

<table>
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<td>Address</td>
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(WBS-10)
BUILDING SPECIALTIES
ARE REAL PROFIT BUILDERS

CAREYSTONE
SIDING AND SHINGLES
Made of asbestos and cement. Careystone is fireproof, rot-proof and wear-proof. Never needs painting or other upkeep. Now available in the new Thatch Butt and Wave Line units, in random widths, duplicating the most costly construction.

CAREY
CORK-INSULATED SHINGLES
THE Shingle with outside mineral surface for weather protection; cork underside for insulation. Provides roof and roof insulation for roof cost. Makes the home warmer in winter, cooler in summer; saves fuel. A boon to the builder who desires to put extra value into his homes without extra cost.

CAREY
ROCKTEX HOME INSULATION
Provides maximum control of room temperatures the year round. Will not shrink, bulge, rot or burn. Vermin and termite proof. Effects fuel savings that normally return its cost in a few years. Produced in Bat, Wool and Granulated form, to meet all installation conditions in old or new homes.

Give your customers what they want—modern products—packed with plus values.

Because Carey Dealers everywhere are able to supply the demand for these modern specialties, they can meet competition without sacrificing profits.

FOR NEW HOMES AND MODERNIZATION OF OLD HOMES

Everywhere people are keenly interested in modern building products that offer new advantages — products that give extra service and better performance. Carey research has developed these products, in which modern requirements have been anticipated.

BACKED BY AN UNUSUAL ADVERTISING PLAN

Carey advertising, to new home builders and to modernizers of old homes, is developing great numbers of live prospects. This advertising is a home building service that is unusually helpful and effective. Write today for broadside showing how you can localize its benefits in your territory.

THE PHILIP CAREY COMPANY • Lockland, Cincinnati, Ohio
Dependable Products Since 1873
BRANCHES IN PRINCIPAL CITIES
Insulux helps to create attractive design in the dining rooms of the Hilton Hotel, El Paso, Texas. Backlighting of columns creates interesting effects pleasing to the eye.

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THE VITAL ELEMENT
(Trinidad Native Lake Asphalt)
—the Asphalt news of 1595—is making roofing history in 1938!

HERE’S THE STORY OF TRINIDAD NATIVE LAKE ASPHALT IN PICTURES

It was news in 1595 when Sir Walter Raleigh discovered the huge lake of native asphalt on the southern Caribbean Island of Trinidad.

And this same asphalt is making roofing history today—history of primary importance to you. Because Trinidad Native Lake Asphalt is The Vital Element responsible for the longer and better protection afforded by Barber Genasco Roofings.

Trinidad Native Lake Asphalt has a natural vitality that definitely resists the parching rays of the sun, the destructive forces of rain, snow and ice. It has an inherent mineral filler that forms a particularly important contribution to the longer life and weather resistance of Barber Genasco Roofings. And — The Vital Element is an exclusive Barber feature.

You can recommend and use Barber Genasco Roofings with complete confidence, for they—and only they — contain genuine Trinidad Native Lake Asphalt. And when questions regarding roofings and other asphalt uses arise, Barber will welcome your inquiries without cost or obligation.


BARBER Genasco ROOFINGS
SHINGLES • SIDINGS • ROLL ROOFINGS • BUILT-UP ROOFINGS
That's Why Crane-Equipped Homes Are Easier to Sell

When you show prospects a house, they mentally "start living" in it. If it meets their ideas of convenience and comfort... if it has advantages which they can picture themselves using... with pleasure... your sale is easily made.

That is one big reason why Crane-Equipped homes sell faster.

The Crane-Equipped bathroom, for instance, has more of the beauty and convenience that prospects want. The Crane-Equipped kitchen, with its gleaming Crane Sink and step-saving arrangement of cabinets, immediately attracts the housewife. And Crane Automatic Heating speaks clearly of carefree comfort to the "man of the house."

No matter what price your houses are built to sell for, they can be Crane-Equipped, for Crane-Equipment is available at every price level. Crane stocks are conveniently near you, and Crane-Equipment is on display at 110 display rooms. Consult a Crane Plumbing Contractor.
"This year I'm more sure than ever that I'll recommend Curtis Woodwork to my customers. For no other woodwork line is so complete, so well designed, or so easy to sell.

"There's the Silentite Double-Hung Window, Sectional Kitchen Cabinets, the new Silentite Casement last year, and now, THESE EXQUISITE NEW MANTELS, ENTRANCES, CABINETS AND STAIRS!"

Dwight James Baum, the famous New York architect-designer, and Curtis developed these new designs for 1938. They satisfy every pocketbook and every taste. They're true architectural styles, the kind that help houses retain their value year after year.

If you haven't met your Curtis Dealer, there's no better time than now. Use this coupon to get complete information on these Curtis products, and the name of the nearest dealer who can serve you.

Curtis Products — Silentite Double-Hung and Casement Windows • Exterior and Interior Doors • Frames • Trim • Molding Panel Work • Kitchen Cabinets • Cabinet Work • Stairways • Shutters • Screens Storm Doors and Windows • Garage Doors • Silentite Door and Window Trim.

GOLD THROUGHOUT THE COUNTRY BY RELIABLE DEALERS.
Six exclusive features...

OF L·O·F QUALITY GLASS

EASIER TO CUT...
LESS BRITTLE...
UNIFORM QUALITY...

CLEARER...
BRIGHTER...
FLATTER...

The exclusive L·O·F Flat Drawing process that produces Libbey-Owens-Ford Quality Glass accounts for its many exclusive features—features that provide practical advantages. And continuous national advertising has brought these outstanding characteristics to the attention of millions of prospective home builders and home owners—familiarized the L·O·F label as a symbol of highest quality. There is every reason to standardize on L·O·F Quality Glass—and leave the label on. It is the best-known trademark of the industry.

Libbey-Owens-Ford Glass Company, Toledo, Ohio.

LIBBEY·OWENS·FORD
QUALITY GLASS

LOOK FOR THE LABEL
Today, you can do a better insulating job with Balsam-Wool for less money than ever before—and with less labor! New improvements in the application of Balsam-Wool cut application costs as much as 50%! These improvements are due to the new Balsam-Wool Spacer Flange*, which not only speeds application, but also increases efficiency because it is a positive means of assuring the double air spaces so vital to insulation efficiency.

Balsam-Wool Sealed Insulation has always been a leader—but the makers of Balsam-Wool have never been content to rest on their laurels. That is why Balsam-Wool has constantly been improved as new methods are developed by research. And that is why Balsam-Wool is the sure way to insulate—the sure way of protecting your buildings from extremes of heat and cold and from high fuel bills. Fully sealed against moisture, highly fire-resistant and non-settling, Balsam-Wool means lasting protection on the job. Let us give you the complete facts about Balsam-Wool—now faster, easier, more economical and more efficient in application than ever before. Those facts are yours for the asking.

WOOD CONVERSION COMPANY
119 First National Bank Building, St. Paul, Minnesota

*Patent Pending

Now...a better, more efficient BALSAM-WOOL

At Savings up to 50% in Application Cost!
Clay Center, Kansas, built its new reinforced concrete City Hall in the winter. The usual cold weather handicap of slower curing concrete and mortar with long expensive heat protection was overcome by using Lehigh Early Strength Cement. Both contractor and engineer were enthusiastic about the time savings during inclement winter weather. In two-thirds of the normal portland cement curing time, the concrete and mortar hardened quickly to service strength—watertightness was also a feature. Quick use of floors and stairs after pouring facilitated the rapid completion of the entire building. By labor saving, reduced heat protection costs and lower overhead, construction costs were several hundred dollars less than had been expected. And Clay Center was delighted to occupy the new municipal building in record time.

LEHIGH PORTLAND CEMENT COMPANY
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. Having a copy handy will help explain a piece of work.

Chapter Headings


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
Attractive and durable sheet materials

K & M LINABESTOS and DECORATIVE SHEETFLEXTOS

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