The Honeywell Plug-In Heat Regulator Package....

NEW PERFORMANCE

NEW LOW COST

EASIER TO INSTALL

ONLY $22.90

Plug-in motor for quick, easy installation.

Hydraulic action impulse pump; quiet in operation, sturdily built for long life.

Built-in transformer means fewer parts to handle.

Fire protection: the motor automatically returns to closed position on power failure.

No external spring for simplified, tamper-proof protection.

New thermostat: extremely accurate, designed for short regulated, fuel saving operations.

Standard "series 40" limit controls can be used with this regulator, whether for warm air, hot water or steam.

For all hand fired heating plants... here's a superior product priced to meet all competition! You gain seven important advantages—seven reasons why the new Honeywell Heat Regulator Package is your best answer to accurate, dependable temperature control for low-cost homes with hand fired heating plants. Get all the details at once. Phone the Honeywell office in your city or address a card to Minneapolis-Honeywell, Minneapolis 8, Minnesota... In Canada: Leaside, Toronto 17, Ontario.
See The Amazing New Window Development at the...

N.A.H.B.
SHOW
Chicago Feb. 19-23
FENESTRA'S BOOTHS
22 and 23

You'll see the most complete window unit ever made . . . the greatest improvement in years!

IT SAVES YOU MONEY
. . . First cost and on the site!

IT SAVES YOU TIME
. . . Amazing simplicity of installation!

IT SAVES YOU TROUBLE
. . . Stops annoying call-backs!

Another Fenestra First!

Available for Spring Delivery—place your order at the show, or call your Fenestra® representative (see yellow pages of your phone book). Or write to Detroit Steel Products Company, Dept. AB-2, 2260 E. Grand Blvd., Detroit 11, Michigan.

Fenestra
WINDOWS • PANELS • DOORS
Why STRAND Saves Installation Time!

STRAND Garage Door
Is Easier to Install
and Easier to Paint!

CUT INSTALLATION TIME . . . one-piece construction of this all-steel door, and factory assembled hardware, make installation simple and easy for anyone.

RUGGED . . . Strand door, with the sturdy strength of steel, withstands shipping and handling from factory to completed job, without marring or denting.

HEAVILY PROTECTED . . . galvannealing protects against rust, even when the door is exposed to weather for weeks before painting. Galvannealing consists of a heavy galvanized zinc coat, oxidized to provide an excellent base for paint without special priming coat.

EASY OPERATING . . . ALWAYS . . . steel can't warp, shrink, rot or stick; hardware is dependable. Steel does not absorb moisture—weight of the door remains the same in hot or cold weather, for uniformly easy operation.

LOW FIRST COST . . . Only standardization on 3 models—and large scale production in one plant—make Strand value possible!

Strand Doors are available in Canopy and Receding (track) types for 8' x 7' openings; and in a Double-Garage-Door (receding type) for 10' x 7' opening, unobstructed by center post. Order from your dealer, or mail the coupon for information and dealer's name.

ALL-STEEL • GALVANNEALED • OVERHEAD
STRAND GARAGE DOORS
FOR SINGLE AND DOUBLE GARAGES

STANDARD GARAGE DOOR DIVISION
Strand Steel Products Company
Dept. AB-2, 2250 S. Grand Blvd.,
Detroit 12, Michigan

Please mail detailed description of Strand all-steel Garage Doors,
for 8' x 7' and 10' x 7' garage openings.
I am a 0 Builder 0 Dealer 0 Prospective Owner 0 Other

Name: ____________________________
Address: __________________________
City: __________________ State: _____________

American Builder, February 1950.
In This Issue

FEATURES

A New Milepost in Home Building Accomplishment
A review of the 1950 program of the annual NAHB convention

Building Products on Review
Over 400 new products featured in this annual "Exposition in Print"

Bow-Mar
How one of Denver’s exclusive suburban developments came into being

Mass Production—Individual Results
How plans in 200-home development is varied to let buyers select details

Power Tools and Teamwork Speed Rough Framing
By revamping conventional procedures, Detroit subcontractor increased production

Warm Air Distribution System Provides Even Heat
A heating engineer incorporates results of his research into low-cost home

A Heating Man Looks at the Chimney
By Gray A. Yorke, Technical Secretary, National Warm Air Heating and Air Conditioning Association

BOCA Performance Code
Building Officials Conference of America offers solution to building code problems

Volume Achieved in Panelized Shell Houses
Large blocks of successfully merchandised, insulated units

Engineered Conveniences for 20th Century Living
Convenience features increase efficiency of ranch-type home

Motels—A Big Opportunity for Builders
By James V. Malone of American Motel magazine

Sunshine for Sale
Martin C. Hugger reports on home building in Florida

Economy House with an Alternate Plan
Blueprint House of the Month

High Cost Homes Find Ready Sale
Interlocking design, quality workmanship and service sell luxury homes

Benewville Homes

Cabinet Wall Homes
Builder finds cabinet walls cut costs, enhance appeal of homes

Saved Methods and Materials Speed Sales of Low-Cost Homes
Practical built-in-the-structure features increase sales appeal of homes

Keeping One Step Ahead of Builder Needs

Special Features Add to Appeal of Modern Home
Small architectural details and bright colors make house attractive

Advertising and the Home Builder
By William G. Irving and Samuel S. Griswold, advertising consultants

Low-Cost Homes in Reinforced Stucco
Detroit builder finds stucco exterior walls an aid to low-cost building

Modern Office at $8.78 per Square Foot
Through unusual use of materials building is constructed at low cost

From Rendering to Finished Product
Arlington, Va., couple selects an American Builder house for corner lot

The Personal Touch
R. E. Sabaison comments on sales techniques

DEPARTMENTS

Trends
On and Off the Record
Editors’ Round Table
Technical Guide, How-To-Do-It and Better Detail Plate
Catalogs
Index to Advertisers
Success Story!

No new hardwood floor has ever made such an immediate hit as the Bruce Ranch Plank Floor... with its alternate widths, walnut pegs and superb factory finish. Builders report that homes in which they have used this distinctive hardwood floor are selling faster than their other homes with regular strip floors. The added cost for Ranch Plank Floors is surprisingly little—and there’s a valuable saving in time on the job because this flooring is pegged and finished at the factory. Whether you’re building homes for sale, or on contract, you’ll want the whole story on popular Bruce Ranch Plank Floors. Just fill in and mail the coupon below.

Bruce Ranch Plank Floor
Solid oak with walnut pegs • Alternate 2½” and 3½” widths • New "Decorator" Finish

Architects and interior decorators praise this distinctive new floor

Bertram A. Weber, Chicago Architect, says: "The new Bruce Ranch Plank Floor impresses me as being very beautiful and practical. I consider it suitable for both traditional and modern architectural types. The interesting informality of this floor, with its random widths and walnut pegs, is particularly good for ranch-type homes."

Elizabeth Whitney, Chicago Decorator, says: "Decoratively speaking, the Ranch Plank Floor is a real "hit" for both traditional and modern interiors. The random widths make it especially suitable for all Colonial and Provincial styles. In modern rooms, the oak grain and walnut pegs contrast delightfully with contemporary furnishings."

Mail for new color booklet

E. L. BRUCE CO.
MEMPHIS 1, TENN.

Send complete information on the new Bruce Ranch Plank Floor to:

Name: ____________________________
Address: __________________________
City & State: ______________________

Bruce Ranch Plank Floor
"Welfare State" Losing Its Glamour

LL REPORTS show that most members of Congress returned to Washington favoring reductions in government expenditures and were not only opposed to increases in taxes, but for reductions. After having conferred with his leaders in Congress, President Truman's messages have been less in favor of increases in taxes to balance the budget than they were a year ago.

This is significant and important. It is the effect of members of Congress visiting their constituents. It shows the people are learning the hard way — by experience — that they cannot have the supposed benefits of big government spending without everybody having to pay for them, directly or indirectly, in taxes. It indicates also that an increasing number are beginning to realize that the benefits they derive from government spending are less than they have to pay for them.

The most dangerous threat to the American political and economic system for almost 20 years has been widespread acceptance of the theory first, during the depression that the government could spend us back to prosperity, and, second, that after prosperity had been attained huge government spending was necessary to maintain it.

The previous history of the country was disregarded by the New Deal when it adopted this theory seventeen years ago. The nation had then prospered and progressed, with some setbacks, for almost a century and a half, as no other nation ever did, without anybody ever seriously advocating government spending excepting to provide services which it was assumed could not and would not be provided by private enterprise. Then during the depression the policy of largely increased government spending was advocated and adopted to "prime the pump" and start a revival of production, distribution and employment by private enterprise. The theory did not work. After it had been tried seven years, business and employment in 1940 still showed little improvement.

Then came preparations for and actual participation in war involving wholly unprecedented government expenditures. This created the appearance of prosperity, and the believers in huge government spending predicted a severe depression when spending was enormously reduced after the war. Their prediction failed of fulfillment. During the war there had accumulated, on the one hand, huge shortages of civilian goods, and, on the other hand, large buying power in the hands of both consumers and business; and prosperity has been maintained in peacetime by the use of this accumulated buying power to remedy the shortages.

Government expenditures since the war, although greatly reduced, have been larger than ever before in peacetime, and are again increasing, causing the threat of increases in taxes to pay them. Many who thought big government expenditures would benefit them in the belief that taxes to defray them would have to be paid by corporations and the rich, are beginning to realize that they cannot evade their share of taxes and that the taxes they pay indirectly in prices, rents and so on, are just as certainly deductions from their incomes as those they pay directly. Hence the theory of the socialistic "welfare state" involving government spending to benefit the many at the expense of the few is losing its glamour.

Winston Churchill once stated the case against both capitalism and socialism in a single sentence. He said: "The trouble with capitalism is that it causes inequality of wealth; the trouble with socialism is that it causes equality of poverty." Huge taxing and spending do not create a "welfare state" but a poorhouse state.

An increasing number of American voters are learning this.
The Communist trials in our country have been most revealing. Every day the press and radio tell us of new infiltration into high places. Nor have the ranks of labor escaped.

What about the inside?

That can easily be answered by another question. Do the American people have as much freedom of use of the money they earn as they did ten years ago? They do not! More people surrender a larger part of their money for tax use than ever before in history. More restrictions curb more people than ever before. More compulsion over the entire populace is advocated. It is a mounting trend becoming more inclusive every year. All of this is offered under the glib promise of liberating man from economic servitude—a planned life—a total welfare.

So, we have the two threats... one from the outside and one from within.

It is doubtful that the American people are fearful that Communism will take over our country in the foreseeable future. It is doubtful too that they are unduly alarmed that Socialism as a method of government will replace our government.

But what they do not understand is that a creeping Socialist pattern is spreading itself from within—that it can advance to a point from which there can be no retreat. Because this Socialist pattern moves forward a little at a time, it is not spectacular enough to be recognized for the dangerous thing it is. It is so easy to accept glittering promises—broad generalities, that mask the eventual result.

So, what is to be done about it?

We believe the state of the nation calls for a Command Performance from Business—a performance to stop this creeping Socialist pattern which threatens the freedom of all.

Why does business get the call? There are two reasons.

First, business should do this job because of its obligation to people. That is not a new contention at Ceco. For three years, Ceco has been advancing the thought that the prosperity and security of our nation are tied unremittingly to a four letter word—W-C-R-K. Ceco has said and still says management must work more at managing. We believe this job is the most important task in the over-all concept of management. It is...
up to alert management to provide real security
in the present, as well as the future, to prove that
responsibility for economic welfare belongs in
private, not in public hands.

The second reason is that business—business
men—are the best qualified for the job because
American business knows most about selling.
Businesses grow because business men sell their
product. Is merchandise more important than
the system which produced it? Isn't the system
worthy of our best selling talents too? Yes... Business must and should sell the idea that real
security and freedom for all are possible only
under a virile free enterprise system.

Business must expose the alluring misrepresentations that spawn the myth "you can get
something for nothing." It must boldly proclaim
the simple truism that welfare projects cost
money—not the people their own money. For
government has no money except that which is
given to it by the people through taxes. It must
show that excessive taxation is creating a com-
petition to industry which is challenging its
right to lead—its right to guarantee economic
freedom to people. It must question the cost
which could be more than money. Unchecked,
taxes can bankrupt the people, bankrupt busi-
ness, thus making it impossible for individuals
acting in private capacities—for business, through
free enterprise management—to provide jobs,
secure working conditions, assure real security.

It was protest against excessive taxation that
occasioned the midnight ride 175 years ago.
Now, as then, the same danger threatens.
Yes, freedom is at stake!
Business must create a crusading attitude to-
ward free enterprise. Here the problem is not
simple. For lately, the people are taking lightly
our system of private endeavor which has had a
moving influence on life around the world and
given us the highest living standards ever. They
are "going along" thinking little of where it
leads. They are not yet alarmed. Therefore, ac-
quired belief in that which we so casually call
the American Way of Life must practically be
revived. New vigor must fire appreciation of the
system of individual effort and reward. There
must be reaffirmation of faith in the dignity of
man, in the real security to be found only in the
individual acting in self-interest guided by con-
science and a sense of fair play. All the people
must be awakened. There must be 130 million
individual crusades in this country, acting in
concert, to keep the American Way of Life vital.

Business men must light the fire of a passion-
ate belief within all the people—a belief in our
way of life that burns brighter than any fanatical
faith in the destiny of any other system.

Once the people know the danger, once their
enthusiasm for incentive living reaches crusad-
ing fervor, they will know how to act. They will
see through the will-o'-the-wisp promises of an
inexhaustible public purse. They will recognize
the fallacy of "something for nothing." Their
"horse-sense" will renounce it. But to bring all
this about, business men must become vocal.
Each must inform his own people. From
little companies employing only a few, to big
corporations employing many thousands. This
program can succeed. The drift toward public
dependency can be stopped but business men
must be articulate and act decisively.

Mr. Chairman of the Board, Mr. President of
Industry, Vice Presidents, Managers, yes—all of
us—must get off of our paws and into the plans.
We must meet with the people...talk with the
people...work with the people. We can't
something that can be done by writing a check!
Let's accept this call for a Command Perform-
ance now! Today!! This very minute!!
Nie (Aun)

SPEED LOAD
AND
SPEED LOADER

The famous SPEED LOAD and its handy partner, the SPEED LOADER calking gun gives you the most efficient sales team on the market. It's popular! It's practical! It sells! Packed 10 loads to carton — 4 cartons to case.

This handy CG-4 Speed Loader is priced so low it will pave the way to more calking sales.

Nu-Calk
CALKING COMPOUND

Nothing can compare with Nu-Calk! It's the “standard of calking compound quality.” Available in ½ pint, pint, quart, gallon, 5-gallon cans. Also 55 gallon drums. You can recommend Nu-Calk fully confident it will never let you down. A best seller for many years.

Nu-Glaze
GLAZING COMPOUND

When you sell Nu-Glaze instead of putty you make satisfied customers because Nu-Glaze really stays put! What's more you make bigger profits! Sells because it does the job better. Nationally advertised, nationally known and nationally used. Stock up on Nu-Glaze today!

Numetal WEATHERSTRIP
FOR DOORS AND WINDOWS

An old friend, and a leader in weather strip sales for nearly 30 years. Conveniently packaged in sets for windows or doors in individual cartons. A perfect over-the-counter sales item. Place your order today for your Numetal requirements.

BRASS & FELT DOOR BOTTOM WEATHERSTRIP

Numetal Door Bottoms are the largest selling weatherproof item because they're absolutely tops in the field. Wool felt— heavy gauge brass. More sales — more profits — better satisfied customers—you should have a stock now. Order today.

NATIONALLY ADVERTISED

Every month millions of people are being told they can buy these famous products from you! There's no reason for you to miss any of these sales. Order a good stock of each of these fast-selling weatherproof items and keep well supplied all season long!
for WEATHERPROOF ITEMS that “fill the till”

Order your supply of these famous profit makers now!

Nu-GARD AUTOMATIC
DOOR BOTTOM AND DRAFT ELIMINATOR

The new, improved Nu-GARD Automatic Door Bottom is the most efficient, most practical door bottom of them all! A simple demonstration makes the sale every time. So show ‘em and you’ll sell ‘em. Homeowners need them on practically every door in the house both inside or outside.

Nu-WAY WEATHER STRIP

The easiest strip to sell because it’s the easiest strip to put on. Any ranch can sell it! Any customer can install it. Can be used on most any type window, storm sash or door. Nu-WAY Weather Strip is really a fast seller — so keep well supplied! Order today!

Nu-ART THRESHOLDS

These attractive thresholds can play a big part in your weatherproofing sales. While Nu-ART Thresholds are available in a wide variety of types and sizes, we picture above three popular types. Furnished in either brass or Alcrome, with holes drilled, screws furnished — each threshold individually wrapped and labeled.

DRIP CAPS FOR DOORS AND CASEMENT WINDOWS

These drip caps in both styles illustrated are very effective in keeping rain from dripping or running under doors and wood casement windows. Furnished in either brass or aluminum in any lengths desired. You need these practical items to have a really complete weatherproof stock!

MACKLANBURG-DUNCAN CO.
OKLAHOMA CITY 1, OKLAHOMA
From the complete line of Oliver "Cletrac" Crawler Tractors and Oliver Industrial Wheel Tractors you can pick exactly the tractor you need and be assured of performance in advance.

The finest in industrial machinery is more than a slogan to Oliver. It is an accomplished fact that has been proved in year after year of outstanding performance. Design, materials, workmanship, and plant equipment are all based on one standard: the built-in dependability that adds up to more years of service in the field . . . lower operating and maintenance costs to you.

Combine this unsurpassed dependability with the extra service offered by your Oliver "Cletrac" Distributor . . . a complete line of industrial crawler and wheel tractors . . . a full line of allied equipment . . . complete service facilities and adequate stocks of genuine Oliver "Cletrac" repair parts . . . plus a broad background of field experience . . . and you'll see why you can take your pick of performance.

The OLIVER Corporation
Industrial Division, 19300 Buildid Avenue, Cleveland 17, Ohio
A Complete Line of Crawler and Industrial Wheel Tractors

American Builder, February 1950.
These points sell
Armstrong's Temlok Tile

There are good reasons why Armstrong's Temlok Tile is a fast-selling interior finish material. This fiberboard ceiling tile is low in cost—attractive in appearance—light in weight—and quick and economical to install. In addition, it has high thermal insulation value, is a good reflector of light, and helps to absorb sound.

Armstrong's Temlok® Tile is made from lobolly pine wood fibers, cut to controlled lengths by a special process. Pressed into boards one-half inch thick, these fibers tightly interlace to give Temlok unusual strength and make it easy to handle both in the yard and on the job. Two coats of Warm White paint are applied to the tile surface. The second coat is ironed on for extra smoothness, ease of cleaning, and wearability. The low-density composition of Temlok Tile gives it excellent insulating properties—an important factor when the material is used in attics or in single-story buildings.

An outstanding feature of Temlok Tile is its unique Lok-Bevel joint. This tongue-and-groove type joint is designed so that tiles can expand or contract without buckling or sagging. It speeds installation and completely hides nail-heads or staples from view.

The market for Temlok Tile is a broad one—for both new construction and remodeling. Commercial interiors—stores, shops, recreation centers, offices—are all good prospects for Temlok. It's used extensively, too, in residential attics and basements, as well as in living rooms and dining rooms. Get samples and full details about Armstrong's Temlok Tile from your Armstrong wholesaler or write Armstrong Cork Co., 1602 Ross St., Lancaster, Pa.

1. Appearance. Temlok Tile has a two-coat casein paint finish, in Warm White. This smooth, ironed-on finish is attractive and durable—and doesn't require extreme care in handling on the job. It offers good light reflection, without causing glare, and can be repainted with either oil paint or cold water paint.

2. Lok-Bevel joint. This cross-section photograph shows how extra space at either end of the Lok-Bevel joint allows for expansion. This feature of the Lok-Bevel joint assures level surface-alignment of tiles and helps to prevent sagging or buckling. Note how staple is hidden from view by the tile at left.

3. Quick, easy installation. Temlok Tile comes in three convenient sizes: 12" x 12", 16" x 16", and 16" x 22". Tiles are simply nailed or stapled along furring strips spaced 12" or 16" on centers over ceiling joints. Lok-Bevel joint provides extra-wide nailing flange which speeds nailing or stapling on the job.
"Those midgets haven't lost a game since I showed 'em how...

Everything Hinges on Hager!"
Everyone wants the best hardware in his home at the lowest cost. WESLOCK Cylindrical Locks offer economy without compromising quality and style to keep costs down. They have the durability, convenience features, and appearance generally found only in lock sets costing up to 100% more!

It's easy to standardize on WESLOCKS because the line contains a proper unit for every door in the house—and they are sure to please your most exacting customers.

Send today for the latest catalog.

WESLOCK MANUFACTURING CO.
1420 So. Evergreen Avenue
Los Angeles 21, California

WESTWOOD MANUFACTURING CO.
1420 So. Evergreen Avenue
Los Angeles 21, California
Old hands at building and selling houses know that one of the features of a house most likely to influence its sale is the quality of the floors.

This is worth remembering—worth acting upon!

Next house you build, invest a few extra dollars in the finest floors money can buy. Install floors of Wright Rubber Tile in the kitchen and breakfast room. You will be surprised to find how quickly you get those dollars back . . . with interest.

Your house with floors of Wright Rubber Tile will sell faster and more easily, at a much better price than you can command with ordinary floors.

There's real sales magic in Wright Rubber Tile. Its outstanding beauty instantly catches your prospect's eye. You can assure him that there is no other floor covering so easy and economical to maintain as Wright Rubber Tile. Its unrivalled serviceability — backed by 29 years of proof — appeals to his sense of practical values. Its quiet comfort and non-slip safety underfoot, its resistance to stain and damage of all kinds, make Wright Rubber Tile a compelling sales asset in any house.

Your investment in floors of Wright Rubber Tile will assure you of faster sales at better prices — will put extra profits in your pocket.

You're betting on a sure thing when you install floors of Wright Rubber Tile in the house you want to sell more quickly, easily and profitably.

WRIGHT MANUFACTURING CO.
5202 Post Oak Road • Houston 5, Texas

WRIGHT RUBBER TILE

FLOORS OF DISTINCTION

• WRIGHTEX—Soft Rubber Tile
• WRIGHTFLOR—Hard Surface Rubber Tile
• WRIGHT-ON-TOP Compression Cove Base

American Builder, February 1950.
Only DeWALT offers you all these features!

1. Finest motor possible combining: Fiber glass & Formex insulation, highest grade magnetic steel. Sealed for life bearings. Relatively small in size, concentrating power at low temperatures. Highest ratings according to A.I.E.E. standards, with the highest possible pull out torque. Totally enclosed or protected type motors—eliminating dirt and moisture.


3. Maximum ripping capacity — up to 38". Rips to center of 6-foot panel.

4. Full work table top—both in front and behind the guide strip.

5. Latches for locating every 0° and 45° position—and cross-cut and rip positions.

6. Adjustments for different widths of ripping—an accurate, pre-loaded ball bearings.

DeWALT—The Saw That's First With Builders
Thousands of installations in one year

The heating system that helps sell homes

2 types of heat in 1
Forced Warm Air Heat plus Radiant Heat

G-E AIR-WALL HEATING in the homes you build gives you an important competitive advantage over other builders. Home buyers know the greater heating comfort of this new system is more than just another selling phrase. It's an obvious conclusion once you explain how home owners can now enjoy both the advantages of radiant heating and the recognized comfort of G-E's warm air heating. Smaller ducts and standard fittings account for sizeable installation savings, and you can figure costs more quickly and exactly.

ONLY G. E. OFFERS SUCH AN ENGINEERED AND COORDINATED HEATING SYSTEM
You get benefits of 2 types of heat!
The amazing new G-E Air-Wall Register, a product of G-E research and engineering, is generally placed just above the baseboard. It directs air up and out in front of the wall... warming the cold surface so it radiates heat. You get better forced warm air heat, too. The air pattern cuts down natural cold drafts which normally creep down cold walls.

Freedom of furniture placement!
You can set directly in front of the Air-Wall Register and feel no draft...no uncomfortable hot blast. In the morning, when the system goes on automatically, you feel no cold air that has settled overnight in the ducts.

Balanced heat in all rooms!
You can accurately adjust heat flow to each room in the home by simple adjustment of the damper on each duct, with minimum disturbance to the "balance" of heat to other rooms.

Even floor-to-ceiling temperatures!
The wall of warmed air diffuses quickly throughout the room. Warmer floors, too!

Quiet!
Small Air-Wall ducts dampen furnace noise more readily than large ducts. Register design also helps to reduce noise.

Automatic Heating Equipment
For economy, comfort, quality...

use these efficient, low-cost units for forced warm air heat

- General Electric Gas-Fired Warm Air Furnaces come in four compact sizes on the average of which takes up little more space than an average-size refrigerator. You'll like their clean, quiet operation, their quick heat, their high efficiency, their filtering which cuts down dust and dirt. All units circulate and humidity the air. Designed for use with the new G-E "Air-Wall" system of heat distribution.

- General Electric Oil-Fired Warm Air Furnaces...come in four models...all of them low-cost, compact, easily installed, quiet and long-lasting. They are designed to save you money on fuel bills because of the conventional oil-air impact method of atomization of each drop of oil. All four models circulate, filter and humidify the air. Designed for use with the new G-E "Air-Wall" system of heat distribution.

for steam or hot water heat, use these famous G-E Boilers

- General Electric Gas-Fired Boilers...turn gas fuel into low-cost comfort. Three to five minutes after the flame goes on, steam is in the radiators, or hot water is pouring out its warmth. Clean, complete and efficient combustion is accomplished through the use of raised port atmosphere burners. All models approved by American Gas Associations. Heavily insulated, with jacket construction of heavy steel.

- General Electric Oil-Fired Boilers...give quick comfort, at low cost. These are the compact, efficient furnaces upon which General Electric has built its heating reputation. The way the oil is burned assures you the most heat from every gallon because (1) the oil is mixed with air into a frothy, bubbly foam; (2) each single bubble is then shattered into millions of particles, and (3) these particles burn completely. Five models.

Where is G-E Air-Wall available?
It is available now at your local General Electric Heating Distributor. He is listed in your classified telephone directory.
TRUSCON

"O-T"

STEEL JOISTS

light and strong

... conducive to economy

Assure your buildings the
welcome freedom from excessive weight.

Protect them against the aches and pains of undue
physical stresses. Plan with Truscon "O-T" to get Optimum
Trajectory—the most efficient carrying ability ever designed into
load-bearing units! Note the distinctive construction of the Truscon
"O-T" Open Truss Steel Joist. Features: Great rigidity through integral
welding of wide tee-shaped top and bottom chords and a strong, round
continuous web member. High fire resistance. Simple to install, being
completely shop fabricated and reaching the job ready for placing.

Each joist is "place-marked", greatly simplifying and speed-
construction. Write for illustrated litera-
ture giving complete details.

FREE Book on Truscon Steel Windows. Write for it. The Truscon
Steel Company Manufactures a Complete Line of Residential
Double Hung Windows... Residential Casements... Security
and Basement Windows... Screens and Storm Sash... Metal
Lath Products... Industrial Steel Doors... Coal Chute Doors
... SteelLintels... ConcreteBars... WeldedSteelFabric.

TRUSCON STEEL COMPANY

YOUNGSTOWN I, OHIO

American Builder, February 1950.
is as Simple as A B C

Factory mounted spring on door panel adjusted for correct tension before shipment. Tension maintained by lock pin, which is removed after installation.

Vertical rails, installed on jamb with 4 wood screws, are the only attachments to garage.

Rigid, heavy gauge aluminum panels reinforced and riveted for lifetime, trouble-free service.

FEATHER TOUCH OPERATION  FIRE RESISTANT
SIMPLE CONSTRUCTION  18 GAUGE ALUMINUM
SIMPLE INSTALLATION  SINGLE CARTON PACKAGE

L. S. TAYLOR MANUFACTURING CO.
847 Marietta Street, N. W.
Atlanta, Georgia

Gentlemen:
Please send full information and prices to:

NAME
ADDRESS
CITY

☐ Wholesaler  ☐ Dealer  ☐ Builder

American Builder, February 1950.
Here's why so many builders look forward to bigger profits in '50...with P&H Economy Homes:

**THE TIME ELEMENT**... P&H Economy Homes save months on the job...simplify your problems of erection, financing and selling.

**THE COST FACTOR**...you get the most accurate cost control the building industry has ever known!

**THE PROFIT OPPORTUNITY**...you can meet the price demands of the market and still realize a reasonable profit — a profit you earn on a larger number of units. For a profitable building year in 1950, get in touch with us immediately.

**LOOK AT THESE PROFIT FEATURES**
- Full size — 24 ft. wide x 32 ft. long
- Large living room — 11'7" x 11'7"
- Joint-free, crack-proof walls
- Choice of two or three bedrooms
- Flush doors throughout
- Built with or without basement
- Choice of heating equipment
- Highly rated for F.M.A. financing

**see our exhibit**
at The Home Builders Exposition
in Chicago, February 19-23
Booth 89.
THE BENNETT LINE
OF SALES PROVEN
FIREPLACE SUPPLIES

The Bennett Fireplace line is complete—and profitable. And Bennett dealers enjoy a steady demand, thanks to our continuous national advertising. It pays to feature Bennett.

SIMPLIFIED and STANDARDIZED
This simplified Bennett fireplace is sized for standard brick, with no cutting or fitting. It lessens every customer "The Perfect Fireplace." Quicker and easier to build—it's priced within the reach of all. It's a big-volume, high-margin unit—a real profit-builder for you. Count on this Bennett—the recirculating unit with most sales appeal.

BENNETT "DEEP-SEAT" ASH DUMP
100% Heavier for Permanent, trouble-free service—9 1/2 x 4 3/4 inches.
Cat. No. C-205.

CAST-IRON CLEANOUT DOOR
Air-tight closure...convenient hinge-type door.
Cramped masonry wires.
Sizes 8x8, 12x8 inches.
Cat. No. C-215.

BENNETT GRATES & LOG DOGS
Cat. No. A-503 Cradle Grate, Sturdy Coal or Wood Basket.

BENNETT EXPANSION THROAT DAMPERS

BENNETT CAST-IRON DAMPER
A quality damper at competitive prices. Superior casting facilities in our own foundry enable us to produce this steep slope 50° Damper, with interchangeable Rotary or Ratchet Control feature. With guaranteed steel valve (No. C-105) or cast iron valve (No. C-104).

FLEXSCREEN
SAFETY FIREPLACE CURTAINS
The only Nationally Advertised curtain screen. Every fireplace owner is a prospect for Flexscreen. Its own best salesman, a display on your floor will increase your volume on this "quality" product. This year, the Flexscreen line includes a perfectly balanced line of Fireplace Accessories, too.

Write now to 250 Market St. for Catalog and Full Information on the COMPLETE POST-WAR BENNETT LINE.

BENNETT-IRLAND INC.
Chartered in 1901
NORWICH, NEW YORK

American Builder, February 1950.
Here's how Kimsul® advertising helps you sell better homes!

Ads like this—month after month—in Better Homes & Gardens and American Home magazines, plus Small Homes Guide, will tell the exciting story of new Reflective KIMSUL to 6,000,000 prospective buyers this year!

This advertising is pitched to help you sell houses. It's aimed to create a greater-than-ever demand for KIMSUL—so that you can benefit by making it an important selling feature of every house you build.

Each advertisement tells about the aluminum foil vaporseal cover, the double barrier against heat loss, the way KIMSUL helps keep humidity at the comfort level. It tells about fuel savings up to 44%, summer heat reduction, resistance to fire, insects and mold. It tells convincingly of the value of good insulation—and shows why new Reflective KIMSUL is now America's finest, most complete insulation.

Once you've seen this new KIMSUL, you'll agree—it can be a mighty important selling feature of the homes you build. Especially with 6,000,000 prospective buyers knowing about it—by name!

For further information about new Reflective KIMSUL Insulation, contact nearest KIMSUL dealer, or see literature in Sweet's Architectural and Builder Catalogs, or write directly to Kimberly-Clark.

KIMBERLY-CLARK CORPORATION
NEENAH, WISCONSIN

New Reflective Blanket
Gives Amazing 3-Way Protection!

1. Stops escape of both radiated and conducted heat.
2. Prevents drying-out of air.
3. Ends collection of moisture in walls (condensation).

KIMSUL INSULATION
WITH REFLECTIVE VAPORSEAL

*F. B. 26X 6.5, OCT. 9, 1949.

American Builder, February 1950.
SKIL Saw keeps going where going is toughest

It takes a good, tough saw to stand the gaff on rip-sawing. That's one reason carpenters everywhere prefer hi-torque, powerful SKIL Saws. SKIL Saws keep going where others bind and stall. SKIL Saws withstand the roughest use because of extra strong gears. SKIL Saws stay out of the shop, stay on the job.

Try SKIL Saw yourself. See how it speeds all kinds of sawing. Feel how perfect balance and scientifically placed handles for both hands make it easier to handle. Try SKIL Saws today. Ask your SKIL Tools Distributor for a demonstration.

SKIL Tools are made only by SKILSAW, INC.

5033 Elston Ave. - Chicago 30, Ill.

Factory Branches in Principal Cities

In Canada: SKILTOOLS, LTD., 66 Portland St., Toronto, Ont.
American-Standard plumbing fixtures
worth of homes

LIBERTY BUILDING COMPANY
1320 WEST NINTH STREET
LOS ANGELES 15, CALIFORNIA

November 3, 1948

American Builder & Standard Sanitary Corp.
P. O. Box 1288
Pittsburgh 31, Pennsylvania

Gentlemen:

It is our pleasure to write to you and tell you of the favorable reaction we have received from the use of your Plumbing Fixtures and Fittings in our subdivisions.

In 1947 we constructed 107 single family dwellings and 97 two and three bedroom homes, all equipped with American-Standard Plumbing Fixtures and Fittings. The use of these fixtures and fittings in this tract was made a feature in our advertising. In the time we put up the last 100 houses we sold every single one in one day, with sales amounting to over $1,500,000.00. The last unit of 31 homes on this same tract was completely sold out in less than six hours.

In 1948 we started developing an area known as "Manchester Square", comprising over 300 dwellings. Our first unit consisted of 107 single family dwellings. These homes went on sale on a day and we sold out every single one, with sales amounting to over $1,500,000.00. On July 3rd we put up for sale the second unit of this tract, consisting of 107 two bedroom homes, and every one of these homes was sold out on that day, with sales amounting to over $1,500,000.00.

Since then sales of Liberty Homes have continued at a rapid pace. During 1948 we have already sold 75 units, amounting to over $1,500,000.00.

The use of American-Standard Plumbing Fixtures and Fittings is a source of constant pride to this company and has always received the highest praise from prospective buyers and actual purchasers of Liberty Homes. It has been our endeavor throughout our building career to use the best materials possible, and for that reason we feel that we can find no better plumbing fixtures and fittings than those manufactured by your company.

The reputation of our homes has grown rapidly, and we feel that it is essential to our business to continue to use the best materials possible, and for that reason we feel that we can find no better plumbing fixtures and fittings than those manufactured by your company.

We are extremely proud of our association with your organization through the use of your equipment and materials and it is our sincere desire that this association will continue throughout the years.

Very truly yours,

LIBERTY BUILDING COMPANY

For every job you build,
there's an American Standard
Heating Equipment to suit.

The complete line includes boisilers, Warm Air Furnaces,
and Water Air Conditioners
for homes of all sizes
for coal (and feed) or oil, or gas. Plus Radiators,
Connectors, Baseboard Radiant
Panels, Fl Die Burners, Duct
-\mate Water Heaters, and

Accessories.

More and more builders who
use American Standard
Heating Equipment and
Plumbing Fixtures, are finding
this a strong selling
point to stress in their
own advertising. It tells the
public that only the best
products were used
required toughness in the
quality of the whole dwelling.
help sell more than $9,685,000.00 for Los Angeles builder!

In 1947, the Liberty Building Company constructed 107 duplex dwellings and 95 two and three bedroom homes...

In 1948, started 800 dwellings project. Sold first unit of 119 duplex dwellings in one weekend. Two months later sold second unit of 105 dwellings in a single day...

In 1949, sales continued rapidly. Had already sold 735 units by December.

... and all these homes had American-Standard Plumbing fixtures and fittings

BUILDERS everywhere, like the Liberty Building Company of Los Angeles, have found that American-Standard products help sell the houses they build. No heating equipment and plumbing fixtures are better known... none better made. Their outstanding quality, backed by strong, consistent advertising, has created wide public acceptance. It will pay you to take advantage of it!

When you install American-Standard products in the houses you build or remodel, you create satisfied customers. And whatever the type of installation... whatever the size of the budget... you will find what you need in the American-Standard line. Ask your Heating and Plumbing Contractor for details.

American Builders & Standard Sanitary Corporation, P. O. Box 1226, Pittsburgh 30, Pa.

American-Standard
First in heating... first in plumbing

Serving home and industry

American Builder, February 1950.
sewer gas can't harm CLAY PIPE

The upper invert of Vitrified Clay Pipe is safe from the destructive, corroding acid fumes that rise from sewage. It protects your reputation by lasting forever, because it's chemically inert — top and bottom, inside and outside, through and through. Clay Pipe is safe from fumes and acids alike — and it's economical, too. Fast installation time helps salvage profits of every job. Use the pipe that passes inspections easily. A complete assortment of Vitrified Clay Fittings let you "call the turn". Be sure with Clay — the only pipe that never wears out.

NATIONAL CLAY PIPE MANUFACTURERS, INC.
703 North and Hill Bldg., Los Angeles 15, Calif.
1105 Huntington Bank Bldg., Columbus 5, O.
100 N. LaSalle St., Rm. 2100, Chicago 2, Ill.
206 Connolly Bldg., Atlanta 3, Ga.

Vitrified CLAY PIPE

WALL COPING FLUE LINER CHIMNEY TOPS

American Builder, February 1950.
7 ways to CUT
CONSTRUCTION COSTS!

B&D "Quick-Saws", Hammers,
give you MORE OUTPUT...

Per MAN
Black & Decker Quick-Saws give you perfect balance, close-coupled design, reduced weight and length, comfortable "new grip" switch handle, complete safety. B&D Electric Hammers are hard-hitting and amazingly husky, yet compact and light in weight. Result: your men can handle either tool more easily, with less fatigue; turn out more work every day.

Per HOUR
Black & Decker Quick-Saws, powered by heavy-duty B&D-built universal motors specially built for tough sawing operations, are ten times faster than hand sawing. Black & Decker Electric Hammers deliver thousands of sharp, positive hammer blows per minute to make light work of many tough construction jobs.

Per TOOL
These B&D Tools are built to last, give you years of heavy-duty service! Both tools are fully protected against dust and over-heating; have powerful motors, extra-tough gears, husky housings, all the extra strength and stamina built into every Black & Decker Tool!


Black & Decker PORTABLE ELECTRIC TOOLS

Leading Distributors everywhere sell

American Builder, February 1950.
"Superior" is equipped with an exclusively patented "jamb-liner" that serves a dual purpose. It functions as a snug weatherstrip in reducing air-infiltration and also provides free, easy, smooth sliding sash.

Interchangeable "Storm Sash and Screen can be ordered as standard equipment.

"Superior" is sturdy, durable and extra heavy (1 1/16" thick jambs and 1 3/4" thick sill) to give greater satisfactory service.

"Superior" is constructed of thoroughly kiln-dried Ponderosa Pine and is toxic treated in accordance with NWMA standards.

"Superior" is one type of frame for all standard building construction—brick veneered, solid masonry and frame walls.

"Superior" is made in modular sizes. Widths: 1'-4" to 3'-8"; Heights: 2'-6" to 6'-6". Yes, it's complete to the Nth degree... Superior in every detail and a window worthy of the name "Superior"!

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1. The wind break overlaps the header, thus forming a weather-tight seal between frame and building. The tongue of the top sash is another weather-tight feature.

2. Superior Windows are counter-balanced with overhead spring balances. The uniform tension of these balances eliminates chattering where either sash is operated.

3. Sash can be installed or removed easily and quickly without loosening or removing any weatherstrip.

4. All wood parts, thoroughly kiln-dried and chemically treated.

5. Superior (cushion-type) nailed weatherstrip automatically compensates for all possible swelling or shrinking of the sash.

6. Weather-tight seal, between sill and sash, by spring weatherstrip.

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American Builder, February 1950.
Nu-Style Cabinets are used in kitchens, bedrooms, bathrooms, play rooms, offices, industrial shops and stores.

Nu-Style Cabinets offer unlimited sales possibilities in both new building and remodeling fields.

Nu-Style Cabinets are in big demand because they are flexible—they can be scribed and... they can be enameled any color or finished natural.

Nu-Style Cabinets have many features of utility, convenience and economy that appeals to every homemaker. Leading Dealers are doing a profitable business from a relatively small stock of K.D. carton packed units.

Nu-Style Cabinets are ideal as a warehouse item because they are small, compact (K.D.) carton packages that are easy to handle and stack. Leading Dealers are making big profits from a small stock.

Beautifully illustrated literature, plus advertisements appearing in American Builder, Practical Builder, Architectural Forum, Better Homes & Gardens and American Home magazines pave the way to easier sales.
Ten Years Ago...

in August, 1939, this concrete test paving was laid in Second Avenue North, Minneapolis. The badly-scaled section of roadway in the background was made with regular portland cement. The foreground section, laid at the same time, was made with Atlas Duraplastic—the first commercial use of the air-entraining portland cement originated and developed by Universal Atlas.

Both sections, subjected to the severity of ten Minneapolis winters and to heavy applications of de-icing salts, are shown just as they appeared in July, 1949—convincing proof of the characteristic durability of Duraplastic concrete, of its high resistance to freezing-thawing weather and the scaling action of de-icing salts. Longitudinal structural cracks shown some ravelling. Note perfect transverse joint.

Today

.... Added Durability and Improved Appearance in structural concrete made with DURAPLASTIC*

From initial paving installations...to the first structural job...to beautiful, modern structural achievements like the one shown here, architects, engineers and contractors have come to rely more and more on the extra durability and improved appearance of concrete made with Atlas Duraplastic air-entraining portland cement.

In Duraplastic’s rapid ten-year growth, its advantages have been applied to all types of mass and structural concrete—for foundations, walls, columns, and floors. It’s ideal for slip-form, gunite, stucco and similar uses.

With Duraplastic, less mixing water is needed for a given slump. The resulting mix is more plastic, more workable, more uniform and cohesive. It’s easy to place and finish. Water-gain and segregation are reduced. Surface appearance is improved and has higher resistance to the effects of weather-exposure.

For structural concrete needs of today and tomorrow, Duraplastic offers better concrete at no extra cost. It provides the precise amount of air-entraining agent interground with the cement for satisfactory field performance. It complies with ASTM and Federal Specifications, sells at the same price as regular cement and calls for no unusual changes in procedure.

Offices: Alibey, Birmingham, Boston, Chicago, Dayton, Kansas City, Minneapolis, New York, Philadelphia, Pittsburgh, St. Louis, Waco.


*“Duraplastic” is the registered trade mark of the air-entraining portland cement manufactured by Universal Atlas Cement Company.

ATLAS DURAPLASTIC
AIR-ENTRAINING PORTLAND CEMENT
MAKES BETTER CONCRETE AT NO EXTRA COST

“The Theatre Guild on the Air” — Sponsored by U. S. Steel Subsidiaries — Sunday Evenings — NBC Network

American Builder, February 1950.
NO JOB TOO BIG OR TOO SMALL FOR B & G Hydro-Flo HEATING

It is not just happenstance that the popularity of B & G Hydro-Flo Heating grows steadily, year after year. You find this forced hot water system in buildings of every size and character, simply because it offers completely outstanding advantages.

B & G Hydro-Flo Heating is amazingly economical in operation—delivers years of trouble-free service—and provides the kind of comfort obtainable only with controlled radiant heat. And B & G Hydro-Flo Heating is competitive in price with heating systems worthy of the name.

The close temperature regulation possible with forced hot water means that fuel is never wasted in supplying unnecessary heat. Indoor temperature is maintained by accurate controls at the comfort level, regardless of how sharply the weather changes.

Whether radiators, convectors, baseboards or radiant panels are used, B & G Hydro-Flo Heating sets the pace for efficiency, low maintenance and comfort.

This modest residence enjoys the comforts of controlled radiant warmth from a B & G Hydro-Flo System.

BELL & GOSSETT Company

American Builder, February 1950.
Building Owner Brady M. Steele writes, "It became necessary to re-roof the building housing the Cherryhurst Pharmacy and other establishments." He adds, "I was so impressed with the qualities of the 'Century' No. 4 Red Asbestos-Cement Shingles that I contracted with the Pyramid Roofing Company to put this material on the roof. Now that the job is completed I am more than pleased with the results. The entire building is enhanced by the roof."

Another K&M roofing job ... another well-pleased customer. K&M shingles will do it for you every time. Your sale is launched by the easily seen "dress up" appearance of these trim, hexagonal K&M No. 4 shingles in charming colors—Spanish red, surf green, black, gray and mottled gray. And you can quote right on shingles so easy to apply, because of large size, plus punching and notching for automatic true laying, working from either left or right.

You are able to assure customers about resistance to weather, rot, rust, fire and upkeep—knowing that K&M "Century" Shingles will make good for you. That's why they make for good business. See your K&M Dealer for full details, or write us direct.

Original manufacturers of Asbestos-Cement Shingles in this country

KEASBEY & MATTISON COMPANY • AMBLER • PENNSYLVANIA

American Builder, February 1950.
Fresh in conception...imaginative in design...revolutionary in application flexibility...powerful in consumer appeal!

It’s the dramatic new Universal electric Select-a-Range, the first really significant advance in range design in over a quarter of a century!

Now for the first time, you can design kitchens with a flexibility and freedom never before possible. Now, you can match cooking facilities exactly and realistically to the specific requirements of each residential unit. And you can do it practically and economically without custom-built equipment...and with matchless efficiency!

Yes, all this is readily achieved with the new Universal Select-a-Range. Based on modular design, it is truly functional, completely flexible in adaptation and extremely simple to install. But best of all, it frees the designer from the rigid dimensions and the limited planning imposed by the conventional "package" range.

The Select-a-Range is another great advance in the 108 year history of Landers, Frary & Clark, leader in the electric range industry. Pioneers in the electric appliance field, Universal holds many basic patents in range design and has contributed many outstanding improvements to better, faster, easier electric cooking which today are the standard of the industry. It is this experience and this leadership that are responsible for the development of the revolutionary Select-a-Range...as well as a whole new approach to kitchen planning and cooking convenience.
the dramatic new UNIVERSAL

Now you can design your range as you like it!

More than 25 different arrangements can be created from these three basic modular units. Each unit is complete in itself so that it can be installed separately... recessed in stock cabinets or custom millwork. Or these units can be fitted together... with a right-hand oven, left-hand oven, double ovens... all at the "Convenience-Level" height to eliminate back-breaking stooping and bending.

COMPLETE OVEN - with one piece porcelain enamel-lined interior, Thermostat Control and Pre-Heat Push Button, Automatic Timer and Minute Minder are standard equipment but can be eliminated if desired.

PLATFORM SURFACE UNIT - with four fast-heating "Monotube" Thrift Units, Seven Heat Control Switches. Platform backsplasher and platform light are optional.

STORAGE DRAWER - extra-heavy gauge steel, high-baked enamel inside and out, brass runners.

Typical right-hand oven arrangement. Surface unit and oven are located at "Convenience-Level" height for easy cooking. Six storage drawers for large utensil capacity.

Economy arrangement. Minimum equipment provides complete cooking facilities in a compact space at low cost for apartments and small homes. May be economically expanded at any time.

Two-Oven arrangement. One of many arrangements for large homes, estates, farms. Ovens may be right-hand, left-hand or separated at any height desired.

Separated arrangements. Platform surface unit is recessed in peninsular counter to serve either side. Oven can be placed on counter or fitted into wall. Oven venting fitted to oven door. Extra units can be added any time.

Big capacity arrangement. Two surface units and two ovens, large work and storage areas, big capacity, make this arrangement ideal for institutional use.

Left-hand oven arrangement. Oven is located at extra high "Convenience-Level" for taller people to eliminate stooping. Provides greater comfort and convenience.
Now you can create and specify exactly the range design in your kitchen planning. Gone are the restrictions of conventional range inflexibility. Here's a great new opportunity to project refreshing new ideas into kitchen design with the revolutionary Universal Select-a-Range.

The Select-a-Range is based on modular design. It is made up of three basic interchangeable, independent, self-contained units...an oven, a surface cooking unit and a roomy storage drawer. These units can be fitted together exactly in more than 25 different arrangements.

Ovens and surface units can be placed in any location at any height desired. They can be assembled as a conventional range with the much desired "Convenience-Level" oven height or they can be separated into individual units. Because each unit can be purchased separately, you buy only what you need. The Select-a-Range is easily installed and requires no elaborate preparatory work.

For added sales appeal in every kitchen, here's something new for you...something different...something to help sell the house! It can be financed on the mortgage at low cost.
interprets **Select-a-Range flexibility**

From the board of Royal Barry Wills come these six sparkling, modern kitchen designs ... illustrating how the flexibility of the Universal electric Select-a-Range adds exciting freshness and sales appeal to kitchen planning.

It is this flexibility that gives the designer greater scope to make the whole kitchen contribute more fully to better living. It is this flexibility that provides full cooking facilities in the most compact kitchen where even the smallest apartment range will not fit. This flexibility gives you no-stoop ovens at the "Convenience-Level"... larger work areas... more storage capacity... greater beauty... fuller utilization of space.

All this adds up to more sales power for you. Now homeowners can select the cooking capacity they want... from a minimum range that can be expanded later all the way up to maximum capacity. Yes, here's something new... something different to increase the desirability of the kitchen. And here is sales appeal at low cost because the Select-a-Range is priced to meet the demands of today's building market. The price of a Select-a-Range of any design can be included in the original mortgage or in a modernization financing plan.

Whether in new construction or modernization, the Select-a-Range is equally at home in Traditional, Modern or Ranch House architecture. Its flexibility is unmatched for apartments, hospitals, small institutions ... in fact, wherever modern cooking facilities are needed.

**National Advertising and Promotion**

These six Royal Barry Wills kitchen designs will be offered in four-color full-page and two-page introductory advertisements in leading national magazines such as Better Homes & Gardens, Saturday Evening Post, House Beautiful, House & Garden, etc., announcing the Select-a-Range to the public. These advertisements will appear in the Spring and will be supported by a national promotion and publicity program to consumers, builders, material dealers and appliance retailers.

1. Oven and platform surface unit are recessed in an inexpensive wood cabinet. This minimum equipment "economy" arrangement provides a full 40-inch range in a compact space with ample counter working space.

2. A fully equipped range with a right-hand "Convenience-Level" oven, large storage capacity and adequate counter space for the average size family. An ideal design for modernization.

3. For easier working convenience, the oven and platform surface unit are separated and installed at right angles. The oven is at the most convenient level with large storage and counter space at either side.

4. Oven and platform surface unit are extended with extra capacity storage and counter space between. Surface cooking unit is integrated with serving area in a peninsular arrangement for added convenience.

5. Double baking and broiling capacity is provided by two ovens mounted side by side in a wall or "Convenience-Level" height. Here is extreme flexibility not possible with a conventional range.

6. Big capacity arrangement with two ovens and two platform surface units. Low-level oven provides counter-height work surface with second oven at "Convenience-Level" height adjacent to extra large counter space.

A SPECIAL PORTFOLIO of these Royal Barry Wills designs in full color has been prepared for the building profession. For your complimentary copy, write to Landers, Frary & Clark, Dept. AB, New Britain, Conn.

in these smart new kitchen designs

UNIVERSAL

for greater freedom in your kitchen planning...

Match the Select-a-Range exactly to your

**OVEN—RA9401**—Outside dimensions: 20" wide x 25" deep x 24 1/4" high. Baking unit 2300 watts; broiling unit 2500 watts. Maximum connected load 4800 watts. One-piece, porcelain enameled interior 16" x 16" x 19" with rounded corners. Built-in rack guides assure level alignment of racks. Counter-balanced door with dual-hinge spring lock. Two oven vents at top of door. White porcelain enamel outside finish. Wired at the rear through a built-in compartment, permits oven to be backed flush against finished wall or cabinet. U.L. installation rating Form O. Mounting holes in base to fasten oven to counter or storage drawers.

**PLATFORM SURFACE UNIT—RA9402**—Outside dimensions: 20" wide x 25" deep x 9" high. Four fast-heating “Monotube” units: three, 6 1/4" 1100 watts; one, 8 1/4" 1900 watts. Maximum connected load 3200 watts. Seven heat control switches for each unit. White porcelain enamel outside finish with acid-resisting platform top. Wired at the rear through a built-in compartment, permits unit to be flush mounted within outside dimensions. Mounting holes in the base to fasten unit to counter, storage drawers or framing.

**STORAGE DRAWER—RA9403**—Outside dimensions: 20" wide x 25" deep x 7 1/4" high. White baked enamel exterior finish. Drawers are suspended on brass runners for quiet operation. Extra-heavy gauge steel, one-piece body. Mounting holes in top and bottom for assembly to other drawers, oven or surface unit.

**TOE BASE—RA9404**—Outside dimensions: 20" wide x 21" deep x 4" high. Serves as base on which storage drawers and oven or surface unit can be mounted as one integral piece. Side fastening permits two or more bases to be locked side by side for multiple “stacking” of units. Baked black enamel on heavy-gauge steel.

**SPASH BACK & LIGHT—11-9402-075 & -700**—Outside dimensions: 20" wide x 11 1/4" high to top of light. Fastens to back of the surface unit with chromium trim concealing the joint.

**COUNTER TOP—11-9403-030**—Outside dimensions: 20" wide x 25" deep x 1 1/4" high. Heavy steel with acid-resisting porcelain enamel finish. Serves as top cover for storage drawer unit.

specific design requirements

The design of the Select-a-Range provides for the building up of required cooking facilities from basic modular units. These units can be quickly assembled into one or more integrated groups as desired.

The drawings on this page illustrate how the modular design of the oven, surface unit and storage drawers permit grouping in almost unlimited variation. Complete specifications, dimensions and construction detail are shown on the opposite page.

Surface cooking unit can be brought up to counter height with three storage drawers mounted on a toe base.

When two "stocks" are designed as one integral unit, the "stocks" are fastened together providing a secure foundation.

Installation is simple and low cost

When the Select-a-Range is assembled as an integral unit with oven, surface unit and drawers in one assembly, installation is the same as with a conventional range. One 3-wire, 120/240 volt feeder circuit is brought up to the terminals in the back of the oven or surface unit and interconnection made between the two.

When the Select-a-Range Oven is to be installed in a wall or in cabinet work, the recess must be 20\%" wide x 23\%" deep x 25\%" high. At the bottom of the recess, three lengths of 2" x 4" are to run from front to back, narrow side up to support the oven. No insulation space or venting is required. Feeder circuit is brought in at the bottom rear of the recess.

When two Select-a-Range Ovens are to be installed one on top of the other in a wall or cabinet, the recess must be 20\%" wide x 23\%" deep x 50\%" high. No additional routing needed for the second oven.

When the Select-a-Range Surface Unit is to be installed flush in a counter, the recess should be 20\%" wide x 23\%" deep x 9" high. Feeder circuit should be brought into the recess at the bottom rear.

When two Select-a-Range Ovens are to be installed side by side in a wall or cabinet, the recess must be 40\%" wide x 23\%" deep x 25\%" high. Separate braking is required at the bottom of each oven.

Features make dinner, easier, better, better!

EXTRA LARGE OVEN INTERIOR
- 16" x 16" x 19" with Balanced Heat and 40% faster preheating with automatic cut-off.

AUTOMATIC TIMER
starts and stops oven as desired with simple, foolproof precision.

COUNTER-BALANCED OVEN DOOR
has automatic broiling stop.

MINUTE MINDER
keeps track of time for any cooking operation from one to sixty minutes.

"MONOTUBE" THRIFT UNITS
are fast heating, cannot warp or bend, concentrate heat distribution.

SEVEN-HEAT SWITCHES
give exact control of heat for every desired cooking requirement.

SWIVELED UNITS
swing up and out for easy cleaning. Chromium flanges keep hot utensils away from porcelain top.

For further information about the new Select-a-Range and the name of your nearest distributor, write to Dept. B-D, Landers, Frary & Clark, New Britain, Conn.
HOW'S YOUR LANGUAGE IN FRONT OF LADIES?

We don't have to tell you that a house with a kitchen and bathroom that please Mrs. Homemaker is a house half sold.

Colorful durable Formica surfaces in these two all important rooms speak a language of their own—lady talk that sells fast and sure.

The Formica Vanitory, combination lavatory and dressing table, is fast climbing to the top of home buyers "must have" list. National advertising has them looking for the famous Formica Label.

Formica is ideal for bathrooms, not alone for its beauty, but for its resistance to alcohol, boiling water, non-bleaching cosmetics, and ordinary mild acids and cleaning alkalis.

You owe it to yourself to send for Formica's full color idea folder "What's New in the Bathroom".

A free copy is yours for the asking. Write Formica, 4514 Spring Grove Ave., Cincinnati 32, O.
4-STAR FEATURE

National Lock's new no. 150

DISPLAY BOARD AND ASSORTMENT

- One Complete Deluxe Board to Replace Several of Your Other Boards
- Reduces Inventory While Providing All Major Cabinet Hardware Items
- Only 21" Wide, It Saves Counter Space . . .
  Makes Space More Profitable
- Appeals to Those Who Want the Finest . . . Increases Per Unit Profit

Superlative Quality...

Items in this assortment have been carefully selected as the ultimate in National Lock quality. Included are only the very finest...the best hardware available anywhere. Open stock, if desired. Ask your jobber for details.

Forged Brass Hardware
New Type Concealed Hinge
Beautiful Concave Knobs
Smart Die-Cast Handle
Other Fast-Selling Items

NATIONAL LOCK COMPANY
ROCKFORD, ILLINOIS MERCHANT SALES DIVISION

DISTINCTIVE HARDWARE...ALL FROM 1 SOURCE

American Builder, February 1950.
Here's Why It Pays To Specify

Pittsburgh Steeltex Lath For Plaster

You get low maintenance and high fire protection in your buildings with Pittsburgh Steeltex Lath for Plaster. This combination of galvanized welded wire mesh and absorbent backing makes possible positive embedment of the wire mesh and provides maximum reinforcement and protection against plaster cracks. Also this reinforcement has earned high fire ratings for Steeltex including Underwriters' Laboratories, Inc. test R-2258.

In addition Steeltex provides a rigid troweling surface which speeds its application and saves plaster. For better plaster construction see our catalog in Sweet's or write for Catalog D.S. 130 to Dept. AB, Pittsburgh Steel Products Company, Grant Building, Pittsburgh 30, Pennsylvania.

PITTSBURGH STEEL PRODUCTS COMPANY
A Subsidiary of Pittsburgh Steel Company
Pittsburgh, Pa.
REMODELING A STORE FRONT? You'll find that profit-wise merchants are easier to sell when you say, "We'll be using Pittsburgh Products." For Pittsburgh Glass and Pittco Store Front Metal are recognized everywhere as outstanding products for store modernization. The open-vision front shown here is typical of what Pittsburgh Products can do to help you create sales-winning store fronts for the merchants; prideful and profitable jobs for you. Architect: Phillips & Fisch, Rochester, N. Y.

WANT TO SAVE TIME AND LABOR? You can very easily with the new Pittsburgh Doorway. No time-consuming calculations, no worries about setting and fitting. Matter of fact, you don't even need a screw driver. There's no drilling of holes in frame; nothing to assemble. Everything comes to you in one "package"! The famous Pittco Checking Floor Hinges, moldings for transom glass, supports for sidelights, strikes for locks, sockets for bolts—everything! You simply unpack the frame, bolt it into the building opening and hang the massive Herculete Doors, for which it has been especially developed. There are 12 standard designs available.
tough job of building or remodeling?

Glass can help you!

IS THERE A VIEW of the garden or other spot that makes a living picture for enjoyment from inside the house? Then frame it with Twindow, Pittsburgh's window with built-in insulation. With Twindow you not only afford your client the atmospheric beauty it creates, but you give him its many other advantages as well. Because Twindow minimizes down-drafts, cuts heat losses through windows, virtually eliminates frosting and fogging. Architect: J. P. Trouard, Washington, D. C.

WHAT TO DO with that small room? To make it look larger, to give it new life, richer personality. Pittsburgh Mirrors (either single units or floor-to-ceiling panels) are the happy solution. Mirrors give the appearance of doubling the room's size. Their true reflections actually double the charm and beauty of the decorative scheme as a whole. Architect: Henry W. Johanson, Roslyn, N. Y.

See the complete listing and descriptions of Pittsburgh Plate Glass Company products in Sears' Catalog Files.

BUILD IT BETTER WITH—

Pittsburgh Glass

PAINTS • GLASS • CHEMICALS • BRUSHES • PLASTICS

PITTSBURGH PLATE GLASS COMPANY
America’s Most Outstanding Truck Values
— with more power than ever!

Here are the models to make motor-truck history. These new Chevrolet P-L trucks are advance-designed for the heaviest loads, the roughest roads, the lowest cost per trip. They are far ahead in popularity, performance, payload, price — and they are the most powerful trucks Chevrolet has ever built. There is a P-L truck for every trucking job and every one is a real leader on the job.

Chevrolet Motor Division, General Motors Corporation
Detroit, Michigan

Leading with all these PLus Features:

- TWO GREAT VALVE-IN-HEAD ENGINES: the New 105-h.p. Lead-Master and the improved 92-h.p. Thrift-Master — to give you greater power per gallon, lower cost per load.
- THE NEW POWER-JET CARBURETOR: smoother, quicker acceleration response.
- DIAPHRAGM SPRING CLUTCH for easy action engagement.
- SYNCHRO-MESH TRANSMISSIONS for fast, smooth shifting.
- HYPOID REAR AXLES — 5 times more durable than spiral bevel type.
- DOUBLE-ARTICULATED BRAKES — for complete driver control.
- WIDE-BASE WHEELS for increased tire mileage.
- ADVANCE-DESIGN STYLING with the “Cob that Breaths”.
- BALL-TYPE STEERING for easier handling.
- UNIT-DESIGN BODIES — precision built.

CHEVROLET
P*L
ADVANCE-DESIGN TRUCKS

Popularity Leaders
Official truck registration figures for 1949 show Chevrolet trucks preferred over the next two makes combined — proof of the owner satisfaction they earn through the years.

Performance Leaders
The new Chevrolet P-L trucks give you high pulling power over a wide range of usable road speeds — and on the straightaway, high acceleration to cut down total trip time.

Payload Leaders
The rugged construction and all-around economy of Chevrolet P-L trucks cut operating and repair costs — let you deliver the goods with real reductions in cost per ton per mile.

Price Leaders
The Chevrolet truck line is the very lowest priced line in the field — saves on initial cost. What’s more P-L trucks give owners dollar and cents savings in maintenance and operation.

American Builder, February 1950.
The new NE 3-wire "Plug-in" Strip is a professional multi-outlet wiring assembly with an unusual new feature: Instead of the usual two slots, each receptacle has three.

Appliances plugged into the top and center slots are controlled by doorway switches, while appliances plugged into center and bottom slots will operate independently of the wall switches. Thus, you can turn off all lamps at once, but leave the electric clock, radio, and other appliances running.

- **EASY TO INSTALL.** At last, full switch-controlled service of every outlet with minimum switch-leg wiring. No complicated behind-the-wall installations.

- **ARCHITECTURALLY CORRECT.** An unnoticeable steel baseboard trim.

- **SAFE FOR LIFE.** No soldered or screwed connections...a solid copper electrical system from switch box to the very last outlet. Tamper-proof because the capping is locked on permanently.

- **LISTED BY UNDERWRITERS’ LABORATORIES, INC.**


National Electric Products Corporation
1329 CHAMBER OF COMMERCE BUILDING - PITTSBURGH 19, PA.
50% MORE PRODUCTION IN '50

TO MEET THE DEMAND FOR NATIONAL'S "THRIFT HOME!"

- Building a quality home at a price most people can afford pays dividends in the form of more business. That has been National Homes Corporation's experience with the "Thrift Home," now the largest-selling, low-cost quality home on the market! The nationally advertised "Thrift Home" (two and three-bedroom sizes, 16 designs) is more attractive and more saleable than ever. Latest improvement is a beautiful, eggshell satin finish on all interior walls, wood trim and doors—a "New Look" for the interior. The cost is still the same, approximately $6,000 including lot, with only a few hundred dollars down.

More production means the opening of more territories. If there is no National Homes dealer in your city, write us regarding qualifications. You may be eligible for a National Homes dealership.

SOME DEALERSHIPS NOW OPEN!

In some areas, National Homes Acceptance Corporation offers a source for final mortgages as well as construction money for the convenience of our dealers.

SEE...
the "Thrift Home" at the NAHB Annual Convention and Exhibit
Stevens Hotel, Chicago
February 19-23
SPACE 95
Home owners and builders who know Durall are saying all the things you read above, and more!

With its first introduction, this remarkable new kind of window screen captured the imagination—and appealed to the good sense and pocketbooks—of home owners and builders alike. Over 2,000,000 are in use today!

FREE BOOKLET! Get our special, free Durall booklet, showing complete specifications and prices—for your files. Write today, Dept. AB-2. See Durall at your building supply dealer’s.

NEW YORK WIRE CLOTH COMPANY • 445 PARK AVENUE, NEW YORK 22, N. Y.
With the New Hi-baked Plastic Enamel Surface

A Chicag Sale stem Modernized with TYLAC, two-tone Muralac design.

A SALES TIP FOR PROFIT-WISE DEALERS

TYLAC Dealers and Distributors everywhere are building ever increasing sales volumes — not only in homes but in the rapidly widening commercial and industrial fields where remodelling and modernization programs are in progress, or definitely planned for winter and spring. They're finding eager prospects in stores, showrooms, offices, hotels, theaters, hospitals, factories — in fact, wherever there's a business establishment they find a use for Miracle Walls by TYLAC."

And rightly so, because TYLAC Hi-baked, Plastic Enamel Surface walls combine every feature of superior excellence. Their Beauty, their Economy, their Permanence, make them the preferred interior wall coverings wherever they are shown — and that adds up to Extra Profits for You!

Write us today for our liberal sales plan and many advertising and dealer helps.

*Miracle Walls by TYLAC is the registered trademark of the TYLAC Company in the United States.
better looking applications...perfectly aligned tile and plank...with the Nu-Wood clip system

No other insulating interior finish has introduced so many improvements and refinements as Nu-Wood! Fadeproof colors..., unique textures...a "foolproof" tongue and groove joint...these are only a few of the features which have made and kept Nu-Wood Kolor-Fast and Sta-Lite Plank and Tile leaders in their field. But there's another exclusive feature which assures lastingly true and level wall and ceiling surfaces...lastingly tight joints.

Read these advantages and you'll know why Nu-Wood Kolor-Fast and Sta-Lite Plank and Tile—applied by the Clip System—assure satisfied owners who STAY satisfied!

Reversible Clip Application Permits Center-of-Ceiling Starting

The reversible feature of the Nu-Wood Clip permits fast, correct application of tile from center of ceiling...easier applications, less layout time, assuring uniform ceiling border. Illustration shows clip fitted into groove.

Here is the Nu-Wood Clip fitted over the tongue of Nu-Wood Tile. Note that joint lines can be made perfectly straight because the Nu-Wood Clip permits some adjustment in the position of the tile.

Proven by Thousands of Applications! The Nu-Wood Clip pioneered a new idea in tile and plank application—fast, dependable, sturdy and trouble-free. In thousands of jobs, large and small, Nu-Wood Tile and Plank, applied by the Clip System, have provided proved satisfaction for more than 10 years!

Sta-Lite Kolor-Fast

High Light Reflection High Sound Absorption

Nu-Wood

Decorating Acoustical Insulating Interior Finish

By U.S. Pat. Off.

Wood Conversion Company, Dept. 119-35, First National Bank Bldg., St. Paul 1, Minnesota

Manufacturers of Balsam-Wood® Insulation. Sold by lumber dealers only.
"Neither Snow Nor Rain..."

Neither Snow nor Rain nor Glare of Night Stays these Couriers from the Swift Completion of their Appointed Rounds." A half-million men, handling 40-billion pieces of mail a year through 41,695 postoffices, make good this motto of a great service, which somehow has never lost its friendly, personal touch. In buildings, too, the U.S. Post Office Department has a personality of its own. Well-constructed postoffices, large and small, set good sound building standards throughout the nation. Witness this new post office in Valley Stream, L. I., near New York City.

Masonry shows the hallmark of quality workmanship and materials—in attractive walls, with fine, smooth joints, and in pleasing, even-textured interior plastering. You see the difference, just as the mason feels the difference when he puts this rich, extra-fine, easy-spreading LONE STAR MASONRY CEMENT mortar through its paces: Mortar that stays plastic until units are firmly bedded, assuring better bond...mortar with high water retention...and strength more than ample for any type masonry.

Yes, "neither snow nor rain" stays the men who work IN such a building...you can be sure it stays OUT of the walls!

LONE STAR CEMENT CORPORATION

United States Postoffice, Valley Stream, L. I.

Architect: JOSEPH J. GUNTHER, Valley Stream, L. I.
General Contractor: MAX NOVICK, Brooklyn, N.Y.
Brickwork: E. J. AUGUSTINE, Lynbrook, N.Y.
Stucco: J. ZITO & SON, Oceanside, N.Y.

Lone Star Masonry Cement supplied through:
J. P. DUFFY CO., INC., New York City, and
FALLON BUILDING MATERIALS CORP.,
Rockaway Beach, L. I.
New Rise in Construction Costs

Last March we asked "How Big A Drop in Prices?" and foresaw no substantial drop in construction costs in the immediate future. At the time residential, commercial and industrial building was falling off at a rather alarming rate which would tend to depress prices and there were reports of substantial price cuts in building materials.

The sensational increase in residential starts last summer and fall forestalled further price decreases and manufacturers are now reported to be in the process of marking prices upward.

By September of last year the full effects of last fall's record-breaking residential building activity had not been felt and prices had dropped from the high level reached in 1948. The wholesale price of Douglas Fir boards was $68.45 a thousand as compared with $70.78 a year previous. Red Oak flooring was $147.00 as compared with $183.26. Yellow pine dropped from $71.87 to $63.33.

Outside white paint was $4.06 per gallon in September 1948 and $3.76 in September 1949. Insulation board dropped slightly from $43.12 to $42.14. Various types of windows stayed the same price or went up a bit.

Prices of all construction materials were 7 per cent less than the year previous to the Department of Commerce. Lumber was down 12 per cent, plumbing and heating 1.5 per cent, brick and tile were up 1.4 per cent.


The big residential building surge in the fall of 1949 can not therefore be attributed to substantial reductions in prices. Home buyers have become reconciled to prices they thought fantastic three years ago and with their relatively high postwar incomes are able and willing to pay prevailing prices.

For a period of twenty years from 1920 to 1940, the Department of Commerce index of Construction Costs showed remarkable stability. At the bottom of the depression in 1932 the index stood at 81.1 as compared with 106.7 in 1929, a decrease of 33 per cent. The index had almost regained the 1929 level by 1937 when it reached 100.9.

The factors inherent in the price structure now which make reduced construction costs improbable are the government debt of $250 billion, Federal spending at between $140 billion and $50 billion a year, and the prevalence of union labor always demanding increased wages in mills, building material and equipment factories as well as on the construction site.

The most that can be hoped for in the foreseeable future is a reduction in construction costs of 10 per cent to 20 per cent and this seems improbable.

Although construction costs are related to residential building activity, costs do not fall as far as residential starts. From 1925 to 1932 construction costs fell 30 per cent while the number of new dwelling units started dropped 90 per cent.

So far as the average home buyer is concerned there is one item whose cost is not inflated at all— that is interest. Two primary causes of these low rates have been the government's cheap money policy and a lack of any real shortage of lendable funds.

If interest rates had gone up as much as construction costs and other items, the rates would be 10 to 12 per cent instead of 4 to 5 per cent. Monthly payments under FHA of a 20 year $10,000 mortgage at 10 per cent would be $90.50 as compared with $66.00 at 5 per cent. At 12 per cent payments would be $100.50 per month. Hundreds of thousands of home buyers would be excluded from the market. That's why new homes today are attractive bargains in spite of high construction costs.

The same reasoning applies to the cost of commercial, industrial and institutional buildings. It's outside the realm of probability that costs will go down more than 10 to 20 per cent. There is a large supply of money which can be borrowed at low rates for construction of such buildings, which are sound enterprises, as well as for modernization of old buildings.

The far reaching effects of FHA financing and low interest rates are undoubtedly the factors behind the big residential construction market. In November, 93,000 new dwelling units were started, 46 per cent above a year previous when 63,600 dwelling units were started. It is expected that starts for 1950 will hit the million mark.

Prospects for 1950 are excellent. The official forecast by the Department of Commerce is 7 per cent fewer new dwelling units in 1950 than in 1949, but there is evidence that instead 1950 will see a new all-time record in housing starts.
The use of Insulux Glass Block instead of ordinary windows is practical for many reasons:

Insulux Glass Block is unaffected by rain, snow, ground seepage, or flooded areas ways. Glass blocks do not require paint—do not rot, rust or corrode.

The thermal insulation value of Insulux Glass Block is approximately equal to an 8-inch brick wall; yet at the same time, Insulux transmits plentiful daylight to brighten up basement interiors.

Investigate the many plus advantages of Insulux Glass Block—for practically every room in every home you build. Send coupon now!
RACIAL COVENANTS—FHA has amended administrative rules to bring them fully in line with the policy underlying the recent Supreme Court decisions relative to racial covenants. Effective date is Feb. 15, 1950.

MORTGAGOR CERTIFIES—Under the new rules mortgagee must certify that he will not file of record any restriction upon sale or occupancy of mortgaged property on basis of race, color or creed or execute any agreement or lease that would so restrict the property. Certification to hold good until mortgage has been paid in full or insurance contract otherwise terminated.

PUBLIC HOUSING—Preliminary loans approved at the end of 1949 amounted to $35,862,000 to cover planning of 221,390 units in 227 localities.

HOUSING ACT—The Housing Act of 1949 provides that these units are to be built, owned and operated locally by housing authorities and rented to families whose incomes are so low that they cannot afford adequate privately-owned housing.

THE QUESTION—It always was and still is—Who knows or how will it be determined who cannot afford to pay for adequate privately-owned housing? The lowest income groups are not eligible to rent the units, because they cannot pay the government rent. How much above the lowest income families may a family be to qualify? The housing act does not do what was promised—that is, take care of the indigent families.

PRELIMINARY LOANS—They are to cover all expenses a housing authority will incur for preliminary surveys, site selection studies, appraisals, and all architectural and engineering plans except the final working drawings and making final cost estimates of the units. Average preliminary loans at present are $180 per unit.

SUCCESSFUL FARMING—The research division of the magazine's publishers made a survey of the farm building market, and discovered some interesting things destined to happen in the next 12 months.

NEW FARM HOMES—The survey shows that the magazine's readers expect to build 50,000 homes in 1950; remodel, repair or paint 798,000 existing farm homes; re-decorate all or part of 722,000; and re-furnish 797,000. This is in line with America's prediction of increasing farm building activity.

LUMBER SALES—Retail sales volumes reported to the National Retail Lumber Dealers Association for October showed an increase over September of 1.1 per cent, and an increase of 2.9 per cent over October, 1948. Lumber stocks were 7.1 per cent below those of October, 1948.

TAXES—They are looming more and more important in the public mind. Once the worker, whether he earns his living in an office or a factory, knows that of every tax dollar he pays to Washington, neither he nor anyone else ever gets more than a negligible fraction back in value of any kind, it should become easy to apply the brakes to bureaucratic expansion and socialist measures.

LOCAL OPTION—A large part of it has been taken away by the Housing Act of 1949. The act does not protect a locality by making acceptance or rejection of public housing mandatory by public vote. The decision rests with the local housing authority, acting with the aid of the Federal government. Vesting such authority in an appointed body is an intrusion on local community self-government.

PROPERTY OWNERS—The owners of homes in any city are entitled to the right to contest public housing at the polls. It is these owners who will have to pay the additional taxes to support tax-free housing units. It is even doubtful if the "lower middle-income groups" who are getting the alleged benefits of public housing would be in favor of it if they were to be told all of the facts of cost. That is, how much their income taxes might be reduced and their net earnings increased if Federal government spending for socialistic measures were stopped.

AUSTRALIA—Recent elections resulted in the rejection of the Labor Government. This followed hard on the heels of the same action and result in New Zealand, cradle of the labor government move.

ENGLAND—Here, the Labor government is having great difficulty reconciling increasing taxes with the division of increasing scarcity.
HOUSES SELL FASTER
when insulated with FULL-THICK fireproof
Gold Bond Rock Wool Sealed Blankets

THESE days with the cost of fuel sky-high, your customers want the best insulation they can get. That's why it pays you to insulate your houses with fireproof, full-thick Gold Bond Rock Wool Sealed Blankets. That way you can promise your customers fuel savings up to 40%—savings that continue for the life of the house. You can promise them a home that's cooler in summer, warmer in winter. You can promise them added fire protection with insulation that's fireproof, not just "fire-resistant" or "fire-retarding." You can point out that this full-thick insulation gives the house higher resale value too.

And new Gold Bond Sealed Blankets cost you no more in installation time and costs than thin, inadequate insulation. The 8 ft. Blankets go up fast, fill the usual 8 ft. height from floor to ceiling. Make it a point to use Gold Bond Sealed Blankets in your houses . . . and advertise the fact to your prospects. It'll sell your houses faster.

Gold Bond Sealed Blankets have a double strength stapling or nailing flange. Vapor barrier is part of Blanket. Breathe ease on 3 sides for easy handling. Also Enclosed Batts in 2 ft. and 4 ft. lengths with all the features of the Blankets. Blankets come in 3 thicknesses: Jumbo, Standard and Mat; Batts in Full-thick and Semi-thick. Complete descriptive folder on request.


You'll build or remodel better with
Gold Bond

NATIONAL GYPSUM COMPANY
BUFFALO 2, N. Y.
EDITORS' Round Table

LAST AUGUST there appeared on pages 72-77 a story about the “House Full of Ideas,” designed and built by Mr. and Mrs. Oscar Clarholm of Daytona Beach, Fla. Soon after the issue was out, the editors received a letter from Mrs. Cullers of Lansing, Mich.

MRS. CULLERS criticized the house on the basis that the plan lacks easy access by guests into either of the bathrooms. In every other detail, Mrs. Cullers agreed that the house certainly is a dream house.

IN THE NOVEMBER issue we replied that probably the Clarholms reasoned that one of the bedrooms always would be unoccupied, and that access to the bathrooms as shown would not be a handicap.

MR. CLARHOLM replied to Mrs. Cullers and the editors recently as follows: “Mrs. Clarholm and I are replying to the letter which you received from Mrs. Dorothy Cullers of Lansing, Mich., saying that “Our House Plan” lacks easy access by guests into either bathroom. In the November issue you told Mrs. Cullers that we built the house for ourselves, and therefore one of the rooms would not be occupied and the bathroom for that room readily accessible. You are right, in that the middle room, just off the dining room, is only occupied when the two boys are away from us for our out of school, and so is practically a guest room. The other bedroom in the wing is occupied by a nine-year-old daughter, and she would more than likely be in bed when we are entertaining guests in the evening. Also, and not mentioned in the August issue, is the fact that just off the screen porch, about 20 feet to the south, we have a guest house, with a living-bedroom, kitchenette, dressing room and bath. This eliminates any over-night guests in the house proper, and makes for better relations all the way around. We think that we do make guests completely comfortable, and we do not want Mrs. Cullers to think we did not try to get a ‘powder room’ into the picture, but it was either that or lose the bar. We wanted the bar and thought that our guests could use the two baths in the house, or the one in the guest house, without too much trouble on their part.”

THAT SHOULD SETTLE the (Continued on page 61)

American Builder, February 1950.
Everybody wants to see the NEW WEATHERSTRIPPED AUTO-LOK (AUTOMATIC LOCKING) ALUMINUM AWNING WINDOW the most important new development in the window industry!

The much discussed AUTO-LOK aluminum awning window will make its debut at the N. A. H. B. Convention this month. This amazing window, already in use throughout the nation, is the first window of its kind that closes tight enough and stays closed tight enough to permit effective weathering. For the first time an awning window can be used successfully anywhere regardless of weathering requirements!

Eye appeal and sales appeal are combined with flawless engineering in AUTO-LOK, the window whose vents lock automatically and can be fully opened or closed in half the number of turns of the operator than are required on other awning windows.

There is a wide range of 48 standard stock sizes and many special combination types available. Removable aluminum screens and storm sash are easily installed without the use of tools, and AUTO-LOK can be cleaned entirely from within.

A "MUST SEE" at the convention! For full details and specifications consult SWEET’S or write: Dept. A28, Ludman Corporation, P. O. Box 4541, Miami, Florida

AUTO-LOK THE Ultimate IN AWNING WINDOWS ENGINEERED FOR LEADERSHIP BY LUDMAN CORPORATION, OPA LOCKA, FLORIDA
"House Full of Ideas" issue even if it proves only that the dream house of one man is not necessarily the dream house of another.

THE FACT IS that taste in houses is about as variable as taste in men's neckties or women's hats. What one man would not wrap around his neck for any price is what another man considers to be a masterpiece of neckwear. The same is true of women's hats and the houses that families choose to live in.

SAW A PLAN the other day with what most families would think should have been a master bedroom. It was truncated at the end to permit the installation of a half-bath. Not only were about five feet sacrificed from the length of the room, but the wardrobe had to be moved from the end and installed against the long wall, thus decreasing the effective width of what was left of the room.

REASON WAS that the family building the house was extra-fastidious about the use of bathrooms. The man and woman wanted one placed inside the bedroom so that guests would not be likely to use it. The full bathroom was placed for the easy use of guests. A comfortable, airy bedroom was considered by this couple to be secondary to a private bath.

A CUSTOMER we heard of recently berated his architect because the design of a one-story house made the dining space a combined dinning room and corridor. It was necessary to walk through part of the dining space to get from the living room to the kitchen, and across the dining space to get from the kitchen to the bedrooms and bath.

RE-DESIGN of the plan included a corridor, usable only as a corridor, and required almost as much space as originally taken for the dining space. But the customer for some unaccountable reason was satisfied.

THAT probably is one of the reasons why few architects live long enough to retire. It is certainly the reason why one sees such queer things under the guise of livable homes.

OR ARE THEY queer things? They're just queer, because they cater to the special whim or whims of the

(Continued on page 63)
ANNOUNCING

The New!

THRUSH

Horizontal water circulator

Here is a new Thrush Water Circulator to provide Forced Circulating Hot Water Heat for small or large homes and smaller commercial buildings. This new horizontal type circulating pump incorporates all the time-tested features which have made Thrush a leader through the years. Whenever you want to provide the best in radiant heat, specify Thrush Forced Circulating Flow Control System of Hot Water Heat. It provides summer-winter domestic hot water from the regular heating boiler. Installation savings place it well within the reach of the modern, low cost home.

* Positive forced circulation, quiet, free from service troubles.
* Thrush Flow Control System assures constant Radiant Heat.
* Thrush controls even anticipate outdoor weather changes.

See our catalog in Sweet's or write Dept. G-2 for more information.

H.A. THRUSH & COMPANY
PERU, INDIANA

FORCED CIRCULATING HOT WATER HEAT

American Builder, February 1950.
families who want things the way they want them whether they conform to what generally is considered good practice or not.

CONTRA COSTA COUNTY is in California, and it has an NAHB chapter called the General Contractors Association of Contra Costa County, Inc. If that is a large name, and it certainly is, it isn’t too large for the kind of builders in it. Local public housing authorities and city councils in the county are finding that they have something to contend with before they saddle the citizens with the tax burdens that will come from public housing developments.

FREDERICK C. KRACKE, the association’s executive vice president, has exercised his right as a citizen to protest every proposed public housing project which in his judgment is unnecessary and wasteful. He gets results, too.

DALLAS, TEXAS is another city in which the public housers have to prove that there is need, and not merely a desire to grab some Federal pail. The Home Builders Association of Dallas prepared an exhaustive statement for the city’s council, in which Grover Godfrey, executive vice president, and his associates revealed to the council some of the perils and headaches inherent in mass public housing that the council members had not thought of.

NO ONE in the building industry, as far as we know, ever has said or implied that there is no need for slum clearance or housing the needy. The Californians and Texans mentioned above are not saying anything like that either. What they are saying is that if there is local need for either or both the problem should be accepted as a local problem, and solved locally with local legislation, local enforcement and local money.

THAT, ALSO, as far as we know, is all any opponent of Federal public housing has ever said. But that statement and the solid arguments behind it make no impression on the advocates of a regimented economy.

BUILDERS everywhere will watch with interest for the result of the grass roots battles being waged in many places, only two of which are Contra Costa County and Dallas.
You can give your clients the ultimate in comfort all year-round.

How you can offset cost of All-Year air conditioning

By deciding to use All-Year Air Conditioning in the early planning stage, you can make enough economies to give your client year-round comfort at little or no extra cost. Moreover, the features which you would eliminate—such as a screened-in porch, fireplace, attic fan, conventional heating plant—afford comfort only for a short period of time, while All-Year Air Conditioning provides your clients with the ultimate in comfort all year-round.
TODAY, everyone wants the convenience and comfort provided by Servel All-Year Air Conditioning in their homes. You can provide your clients with this modern unit simply by planning your homes around a Servel Air Conditioner. Recent studies and cost estimates have indicated that you can do it without increasing the total price. The reason for this is that, by planning around a Servel unit, you gain certain structural economies which offset the price of the Air Conditioning.

For instance, a house designed for Servel All-Year Air Conditioning needs no fireplace. It needs no porch. Outside doors and windows can be kept closed and many windows need never be opened at all. That means a big saving on screens and storm sashes. In most parts of the country the total savings would more than offset the cost of the Air Conditioning.

Keep that in mind when your clients ask you about Servel All-Year Air Conditioning. Keep in mind, too, that Servel provides them with year-round comfort... refreshing cooling in summer and instant heat in winter. And changeover is accomplished by a mere flick of a switch.

Keep in mind, also, that the use of Servel All-Year Air Conditioning is not confined just to one type of architecture. It can be easily adapted to any type, style, size, or shape of home your client wants. Remember, by including the Servel unit in the original plans, you can provide it for your client at little or no extra cost. For full facts ask your local Gas Company, or write direct to Servel, Inc., 1002 Mcrton Ave., Evansville 20, Indiana.
ONLY ELJER GIVES YOU A "TUB-FULL" OF SALES ADVANTAGES

MORE SAFETY
Low front rim . . . makes it easy for old folks or little ones to step in or out of tub. Bottom of tub is flat for extra safety.

MORE CONVENIENCE
Wide front rim-seat makes it easy to bathe children either in the tub or sitting on end-seat. Also ideal for foot bathing.

MORE COMFORT
Comfortable end-seat for a luxurious sitting shower. Tub is full-length inside with sloping end for a restful reclining bath.

EASIER CLEANING
Rectangular in shape so all parts are within easy reach for cleaning . . . lustrous surface wipes clean with a damp cloth.

SUPERB BEAUTY
Glasslike, satin-smooth finish in snow white or soft pastels. Sparkling chrome-plated brass fittings.

ENDURING QUALITY
Extra-thick, vitreous enamel is fused to a rugged, rigid cast-iron base for permanent beauty. All wearing parts of fittings are renewable for long, trouble-free operation.

It pays you, it pays us—because we specialize in Plumbing Fixtures and Brass

ELJER

American Builder, February 1950.
**ASSOCIATIONS**

**Their Plans and Activities**

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**Interest High in American Builder, NAHB Home Design Contest for Women**

Ninety-three women, approximately one-third of the women architectural students in colleges and universities in the United States and Canada, have registered for the Prize Homes Competition sponsored jointly by the American Builder and the Women's Division of NAHB.

Six prizes, totalling $1,000, will be awarded in the contest, believed to be the first of its kind for which eligibility has been limited to women. In addition to the cash awards, winners of the first three prizes will be guests of the sponsors at the NAHB convention in Chicago, Feb. 19-23, where 16 outstanding entries will be on exhibit.

The purpose of the competition is to encourage development of designs of single-family dwelling units for families in the middle income bracket. Dwellings may be one or two stories, are limited to 1,300 square feet of floor area and are suitable for sites having a depth of 150 feet and a frontage of 75 feet. It is believed that the emphasis on the woman's point of view will produce a number of new and original ideas in domestic architecture.

Comprising the jury of awards are Arthur V. Hansen, architectural editor of the American Builder; Robert E. Sangster, editor, Small Homes Guide; Charles Joern, builder, LaGrange, Ill.; Martin H. Braun, architect and builder, Oak Park, Ill.; Lee Cochran, associate with Perkins & Willis, architects, Chicago; Walter T. Andick, architect, Ann Arbor, Mich.; and Mrs. R. H. Morris, housewife, Highland Park, Ill. Judging will take place Feb. 9 at the headquarters of the Chicago Metropolitan Home Builders Association.

The three top winners will receive their awards at the opening of the Women's Program to be staged in the Grand Ballroom of The Stevens, at 10:00 A.M., Monday, Feb. 20. Prizes will be awarded by E. G. Gavin, editor, American Builder. At that time the winners will be given an opportunity to outline the features of their prize-winning entries.

Also included in the contest winners' Chicago visit will be a dinner, press conference and review of the convention Feb. 19. On Feb. 20 they will be guests of the Women's Division for breakfast and of the American Builder for a buffet lunch. Opportunities for sightseeing and shopping tours will be offered the following day.

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**Long Island Builders Re-elect Frank**

Leonard L. Frank, of Roslyn, president of the Long Island Home Builders Institute for 1949, was re-elected for 1950 at the organization's annual meeting in December. There were 183 members at the dinner held at the Stewart Manor Country Club.

In a comprehensive review of the year's activities, President Frank reported that home builders in 1949 erected more than 36,000 new dwellings units in the four counties of Long Island. In discussing the outlook for 1950, the uncertainties of government policies and legislation were listed as an important factor. "It is regrettable," Frank said, "that while government gives its own agencies a long-range building program in the form of a six-year public housing plan, the Housing Act of 1949, private enterprise has been given nothing but stop-and-go consideration."

The many accomplishments of the Institute during the past year were reviewed in the report. Legislative activities, cooperative efforts with local building officials and utility companies, work

(Continued on page 72)

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**Taft Talks on Housing At Ohio Convention**

The sixth annual convention of the Ohio Home Builders Association at the Biltmore Hotel, Dayton, Dec. 5-7 featured the views on housing problems of a roster of nationally-prominent speakers, headed by the noted Republican leader, Senator Robert A. Taft of Ohio. Other highlights included several panel discussions which elicited wide interest.

Senator Taft spoke on public and private housing. Other speakers included Edward G. Gavin, American Builder editor, who delivered the keynote address; Edward E. Carr, NAHB president; RHDA President Rodolfo M. Lockwood; FGA Commissioner Frank Roerich; Frank W. Cottrill, NAHB executive vice president; Gates Ferguson, advertising director, Colosse Corp.; and James Donohue, president, Real Estate Research Corp.


Elected president for the 1930 term was Jean H. Gore of Columbus, vice president in 1949.

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**Dallas Hoo-Hoo Reorganized**

The Dallas, Texas, Hoo-Hoo Club, holder of Charter No. 75, has been reorganized after a period of inactivity during the war and early postwar years.
Cy Sweet Says -

C. E. SWEET, President, National Retail Lumber Dealers Association

As this is being written, another year has drawn to a close, and as is customary, most business men have taken inventory of their businesses on hand, checked their equipment and personnel for necessary replacements, and planned their financial requirements for the coming year. This procedure is common practice with well-managed businesses; in fact, it is demanded by the stockholders. Unfortunately, however, the biggest business of all, your government, does not follow this course and, so far, the stockholder—the people—has not demanded it.

Let's look at a few inventory figures of just one division of your government, the Commodity Credit Corporation:
1. Nearly five million bales of cotton, worth about $750 million.
2. Nearly 450 million bushels of wheat, worth $900 million enough to give every person in the United States a loaf of bread per week for a full year.
3. Approximately 600 million bushels of corn.
4. More than 70 million pounds of dried eggs enough to last United States bakers five years.
5. About a quarter of a million pounds of dried milk, worth over $30 million.

This by no means exhausts the list, but it does give an insight into "planned economy."

How long do you think your business could continue if you had 47 salesmen calling on 1800 people? Yet the Hoover Commission found that 47 agents of seven separate services were calling on 1800 farmers in one cotton county in Georgia; that 88 agents were working among 3400 farmers in one county in Maryland.

Would you consider it economical and good business to operate trucks that were 15 years old? I am sure you would not, but the 10,000 trucks operated by the Post Office Department were, on the average, 15½ years old, as of May 1948.

How long could you continue in business if you ran a deficit of 20 per cent of your sales? The Post Office Department did that last year, and it amounted to $300,000,000.

How would your business prosper if the operating report from your bookkeeper or auditor was eight months late? The Post Office Department gets its report eight months after each quarter's end, from the Comptroller General.

How would your business get along if you had a 25 per cent turn-over of personnel? The biggest business in the world has that record.

How long would you keep a stenographer on your payroll who was unable to type and transcribe acceptable dictation, was a chronic trouble maker, and had a questionable character? Your Federal government kept such a person on the public payroll for a period of 17 months after it had all of the above information.

The fact that all of these things are happening to YOUR government, rather than to your business, makes it no less your concern. Remember, YOU are paying the bills and YOU are a stockholder in the nation's biggest business. Exercise your prerogative and see that you have proper management that will carry out your wishes.

Tell your Congressmen.

Dayton Association Appoints A. H. Falace Secretary

A. H. Falace has been appointed executive secretary of the Montgomery County Builders Association, Dayton, Ohio, succeeding the late E. Clarke King, it has been announced by Association President Stanley Swango, Jr.

Falace, a former Dayton resident, recently returned from Waxahachie, Texas, where he served as manager of the Chamber of Commerce and the Community Chest. He had previously been manager of the Dayton Chamber of Commerce Industrial Department and a member of the staff of the Industrial Commission of Ohio. He has also been assistant executive manager of the Springfield, Ohio, Chamber of Commerce and manager of the Springfield Safety Council.

A graduate of Ohio University, Oxford, he has done graduate work there as well as at Ohio State University, and has completed special courses at the National Institute of Commercial Organization Secretaries and the Southwestern Chamber of Commerce Institute.

Professional organizations of which Falace has been a member include American Society of Safety Engineers, National Association of Commercial Organization Secretaries and the Texas Chamber of Commerce Managers Association.

Prominent Speakers Slated For Michigan Dealer Meet

Senator Homer Ferguson of Michigan will be one of the featured speakers at the 1st annual convention of the Michigan Retail Lumber Dealers Association Feb. 7-9 at the civic auditorium, Grand Rapids.

Other prominent speakers will include H. R. Northup, NR/LDA executive vice president, C. A. Fulton, NR/LDA vice president; Clayton Roud, Goldsport, Miss., publisher; Col. Robert Brooks, real estate analyst of the Roy Wenzel Co., St. Louis; and Phillip Creeden, chairman of the NR/LDA public relations committee.

The exhibit floor will be completely filled, with more than 100 display booths. Popular social events which will be held again are the Old Guard Dinner, Salesmen's Midnite Frolic and association banquet.

American Builder, February 1950.
Everyone talks about preserving our free enterprise system and practically nobody does anything about it.

In fact, the handful of men who are earnestly striving to awake the people of this country to the full distance we have already traveled on the road to a Social Welfare State receive commendation and applause but know in their hearts they are accomplishing very little. It is a common characteristic of all of us to believe that OUR house will never burn down.

The most convincing example of this human lethargy is found in the futile broadcasts of Winston Churchill over a five-year period, warning the people of England that the most powerful military machine in history was being built only an hour's flying time from their island home. Not only were his warnings disregarded but he was condemned and derided as a warmonger, alarmist and enemy of the people. Now, can any people be thoroughly aroused over the loss of their individual freedom when they refuse to be alarmed over invasion, rape and destruction of their very homes and families?

Benjamin Franklin, one of the wisest men the world has known in 1000 years, thoroughly understood this weakness in human nature. He and the others who founded our American system knew full well that Individual and Economic Liberty could not exist where Economic and Individual Security were promised by a socialist government. He and others of the 38 delegates to the Federal Convention of 1787 were wise enough to anticipate a day when Security would be offered as a bribe for the Liberty which he and his compatriots risked their necks to establish—hence his warning.

With complete disregard of political affiliations, James Byrnes, General Eisenhower and Herbert Hoover have recently said the same thing in different words. By whatever name it may be called—"New Liberalism," "Dynamic Democracy," "Socialism," or "The Welfare State"—America's really great men are presently endeavoring to warn the people. Tragically enough, their warnings, like Churchill's, are commended by a few—and scoffed at by the many.

Senator Harry Cain of Washington has expressed most succinctly the three other methods by which we may lose our freedom:

"The first of these is the danger of Federal bankruptcy.Impossible? Not at all. Consider that our current debt is $256,000,000,000, our Federal budget of $42,000,000,000 still leaves an annual deficit of $5,000,000,000. President Truman has spent $191,000,000,000 during the last five years, an amount equal to the total Federal expenditure in the 168 years since George Washington's Presidency!"

The Senator warns that a one-party system, similar to the Labor Party which has governed England for the last 25 years, is quite possible. Our labor unions, operating with assets of more than $1,000,000,000, are presently working day and night to eliminate all Congressmen who have opposed the dictates of labor leaders.

Finally, and a far more subtle danger, the Senator warns that the legislative branch of government—the Congress—is increasingly controlled by a powerful and dictatorial Executive branch, the White House. Our three-way form of government, judiciary, legislative, and Executive, so carefully balanced by the Founding Fathers, is already out of balance by a politically packed Supreme Court. Through the sheer use of political patronage, the dominance and dictation of the White House may well destroy the freedom of the people's voice in government—the Congress.

When will the selfish objectives of special groups—including labor, the farmers and the veterans—be reduced for the benefit of all? At what point will the collection of tax dollars by a central government for bureaucratic redistribution back to the people become so high as to cause a revolt?

When will the citizen, the property owner, and all the American people wake up to the fact that they must choose between Security doled out by a Beneficent Central Power and Individual Freedom to face the vicissitudes of life individually?

Let's hope it will be soon!
Craftsmen Complete Association Course

GROUP of craftmen who recently completed apprentice training sponsored by Marion County Residential Builders is shown with officers. From left, seated: Elmer E. Moodley, association executive secretary; Thomas Hilton, Thomas E. Ramsey; Fred L. Palmer, association apprentice training committee chairman; M. L. Holl, association president; Perry McCollin, VA training officer; Ralph J. Ermey, Waldo Royston; Russell L. Kennard, standing: William W. Sundre, Philip E. Montgomery, Charles McConnell, Albert C. Weintraut, Charles Sutton, Paul L. Loebrorn, James Trimble, Heath R. Chappell, James W. Wells, Wolffe Dye, Jr., Alvin Kennard, Jr., Clarence E. Brockett, Edwin C. Lucas, Albert L. Drusenas.

Twenty-seven craftsmen, the first class to complete a three-year apprentice training course conducted by the Marion County Residential Builders, Inc., Indianapolis, were awarded certificates of completion Dec. 5. The ceremony took place at the NAHB affiliate's 10th annual meeting at the Antlers Hotel, at which the craftsmen were dinner guests.

The program, one of the first in the country conducted by a builders association, is available to all members who care to take part. It was begun in February, 1946, when the first class, for carpenters, was approved. The 27 men who received certificates in December were an accumulation of completions since summer.

At present there are courses for nine crafts in the home building field: carpenter, electrician, plumber, steamfitter, plasterer, painter, decorator, paperhanger, cement finisher. Sheet metal worker, bricklayer-stonemason and linoleum layer.

The association tentatively plans to hold completion ceremonies semiannually. It is hoped that approximately 50 men will complete training each year, many of whom will become permanent members of association members' production crews. Already organized is a system of registration and transfer to employees from one builder to another to effect peak employment and to meet special work needs.

Fred L. Palmer, chairman of the apprentice training committee, awarded the certificates.

‘Home Builders Frolic’ Climaxes Membership Drive

FRED C. LOUCKS, chairman of the membership committee of the Home Builders Association of New Orleans, holds a gift presented by Harold L. Pilet, association president, for outstanding work in the New Orleans group's recent successful drive which netted 114 new members.

To Test Research Findings On Home Construction Sites

A field test program using actual construction sites as laboratories will be carried out by NAHB in cooperation with the new Building Advisory Board of the National Academy of Sciences. Announcement of the program is about to get under way was made by Carl G. Luns, NAHB technical director.

Laboratory projects judged ready for field testing are being listed by William H. Schlech, executive director of the Advisory Board in cooperation with Luns. NAHB members will be selected for field applications of laboratory results, with the idea of developing data on speedier and more economical construction.

During the course of the "observation projects," close study will be made of organization, operation of work, personnel and materials and time and motion studies. Each builder will deliver a report on his own project.

The project was described by Frank W. Cottrell, NAHB executive vice president, as "opening the way for practical field testing of developments worked out in research laboratories."

Apprentices Learn Carpentry By Building House at School

The students and instructors in the apprentice training school of the Home Builders Association of Metropolitan Washington at Ayrlawn Farms, Bethesda, Md., believe that the best way to learn to build a house is to build one. They are working on one now; the finished product will be 12x12 feet, built indoors in one of the classrooms. Using the talents of instructors who have had long experience in the field, enjoying splendid cooperation from the Board of Education of Montgomery County and the Maryland-National Capital Park and Planning Commission, the school is gaining recognition as one of the outstanding in the field.

Generous contributions of material and supplies are made by association members.

William C. Mitchell, superintendent of Twinbrook, Inc., is school supervisor and Spencer Lawson, Silver Spring, Md., instructor, is the carpentry instructor. Chairman of the school is Robert R. Furman, Bethesda, Md., builder.

The first four weeks of the course consist of classes explaining carpentry as compared with other building trades, study of types of wood and their different applications; uses and care of tools and testing materials, nailing and planning. In the fifth week actual construction of the house is begun. Power tool technique is taught only in the advanced classes.

The brickwork shows that workmanship improved through the use of modular material at no additional expenditure of labor.
30-Day Courses Increasingly Important in NRLDA Educational Program

One of the major phases of the educational program of the National Retail Lumber Dealers Association is its 30-day short course. Since the fall of 1946, when they were started, 86 of the courses have been conducted in major universities and colleges. More than 3,500 retailers and retail lumber dealer employees have been sent to these intensive training schools at no cost to themselves. Graduation has frequently led to advancement and in many instances to management of lumber yards.

The courses have covered 35 subjects with class lectures and discussions led by prominent university instructors and to a large extent by men experienced in the field covered by the subject. More than 30 textbooks are now used in the classes. Aids, including films, sound films, movies and demonstration models are part of the instruction technique. Field trips to mills, factories producing building materials and to lumber yards where the work of the industry can be observed, are important parts of the specialized training.

During the current term 15 universities and colleges have scheduled twenty-one 30-day short courses in lumber dealer education. They are: College of New York, New York City; Georgia School of Technology, Atlanta, Ga.; University of Illinois, Urbana, Ill.; University of Kansas, Kansas City, Mo.; University of Massachusetts, Amherst, Mass.; University of Minnesota, Minneapolis, Minn.; Michigan State College, East Lansing, Mich.; New York State College of Forestry, Syracuse, N. Y.; Ohio State University, Columbus, Ohio.; Pennsylvania State College, State College, Pa.; Purdue University, West Lafayette, Ind.; University of Southern California, Los Angeles, Calif.; Southern Methodist University, Dallas, Texas; University of Washington, Seattle, Wash.; University of Wisconsin, Madison, Wis.

Details on the dates of short courses in these schools, and other facts, may be obtained by contacting the regional or state dealer association sponsoring the course, the school itself or the NRLDA offices in Washington, D.C.

More visual aids were recently added to intensify the sales training program. These may be used in connection with the 30-day short course or in district and group dealer meetings throughout the state or regional association areas. The material consists of slide sound films, flip charts and questionnaires for salesmen, and covers a total of nine topics: "How to Turn Buying Motives Into Sales," "How to Take the Lead in the Inter- view," "How to Counsel the Demanding Customer," "How to Plan Your Sales Talk to Keep Out Competition," and "How to Turn Objections Into Sales," are some of the topics covered.

Oklahoma Dealers’ 1950 Plans Include Projects for Public Service

Projects for 1950 were outlined and 1949 accomplishments reviewed by directors of the Oklahoma Lumbermen’s Association at a meeting Dec. 9 in Oklahoma City. The meeting, at which the new budget was set, was the first called by the newly-elected president, Walter Hinton, George C. Wright Lumber Co., Altus.

Among the highlights of 1949 activities were: Launching of a farm program which was given national recognition in magazines and was runner-up in the NRLDA public relations contest; conducting of two 30-day lumbermen’s training schools at Southern Methodist University in collaboration with Texas and Louisiana Associations; adoption of group insurance plan for members; publishing of association’s first directory and buyer’s guide; and conducting, in cooperation with Oklahoma A. and M. College, of a state-wide one-day farm building program.

Projects approved for 1950:

Establishment of legislative council to work on state and national legislation; one-day sales training short courses to be held in connection with all district meetings; continuation of farm building program with A. and M. College; continuation of 30-day training schools; a two-day membership drive in January, with awards to district winners; and an intensified public relations campaign.

Dates set for the 1950 convention are Oct. 17-18.

Pennsylvania Builders Show Set for March 6-11

The seventh annual Central Pennsylvania Builders Show, sponsored by the Harrisburg Builders Exchange, will be held at the Three Show building, Harrisburg, March 6-11.

The exhibition attracted approximately 305,000 visitors in 1949 and 189 exhibitors.
Optimism Marks Shingle Bureau Meeting

Shingle producers from Washington, Oregon and British Columbia who attended the 33rd annual meeting of the Red Cedar Shingle Bureau recently held in Seattle were given optimistic accounts of shingle markets for cedar shingles as well as of augmented production.

W. W. Woodbridge, bureau secretary-manager, said that the industry’s productive capacity has been growing steadily since the end of World War II and that the current rate is approximately 7,000,000 squares a year. Woodbridge attributed the increased demand largely to these factors: a record of storm and wind resistance in the middle west and acceptance for multi-unit housing developments by many large builders; and a tremendous increase in the use of shingles and processed shakes for side wall construction.

Convention speakers included M. L. Clement, director of the Southern Building Congress; W. B. Sweet, NELDA president; H. W. Conner, president of the Stained Shingle and Shake Association; and W. C. Bell, managing director of the Western Retail Lumberman’s Association.

E. R. Scott was re-elected president of the 1950 and Vice President H. W. McMahon was also re-elected to office. Other trustees elected were: Dale Craft, N. A. English, R. H. Ferrington, Keith G. Frickon, N. C. Jamison, J. A. MacKenzie, R. D. Mackie, Charles Plant, Fred A. Rukel, J. C. Rose, Paul R. Smith, H. V. Whittall, Earl S. Wasmuth and R. A. Wilde.

Of particular interest was the announcement that bureau’s membership increased by 17 mills and 63 machines during 1949. Membership currently totals 112 mills and 617 machines.

Long Island

(Continued from page 67)

with FHA and VA expansion of membership and service to members all added up to an impressive record.

Fred Back and a shingle bureau committee at the Miami meeting of the National directors in November. Chester Pynn reviewed his committee’s work on building codes and Rudolph Matern covered the accomplishments of the economy home committee during 1949. James Graham, who was re-elected secretary of the Institute at the meeting, submitted several proposed amendments to the constitution.

Other officers elected for 1950 are: Fred E. Gibson, of Rockville Centre, vice president for Nassau; Sidney Kedler, of Jamaica, vice president for Brooklyn-Queens; Fred J. Dolan, of Islip, vice president for Suffolk, and Cy Williams, of Port Washington, treasurer. Ernest Buck and Alfred Gross, both of Jamaica, were re-elected as directors. New directors are: Samuel Levin, of New Hyde Park; David Straussman; of Hempstead and Frank Clausen, of Roslyn. Directors who continue in office are: Kalman Klein, of New Hyde Park; chairman: Adolphine Flowers, of Merrick; Charles M. Jaeger, of Rockville Centre; Robert J. Ross, of Great Neck, and Saul Sokolov, of West Hempstead.

New members-at-large of the executive committee are Andrew T. Callan, of Manhattan and John W. McVey, of Forest Hills. Otto J. Hattwig is executive secretary of the Long Island Home Builders Institute.

Jersey Group Re-elects Officers

The entire slate of officers of the Home Builders Association of Northern New Jersey was re-elected at the annual meeting in December, attended by 112 members. The chapter was especially active during the past year in working for the interests of its home builder members. Cooperative efforts with building authorities, FHA and VA legislative work was outstanding. This fall the group spent much time and effort in combating the New Jersey public bonding law. Sixty-one new members were added to the membership in 1949.

Officers for 1950 are: Carl S. Carlson, president; Stephen Duklak, vice president; Albert A. Sieber, secretary; John M. Cucchiara, treasurer and Clarence J. Von Drehle, executive director.

OFFICERS of the Home Builders Association of Northern New Jersey for 1950. Left to right, front row: George J. Marcus, general counsel; Joseph J. Brusetti, director; Stephen Duklak, vice president; Carl S. Carlson, president; Joseph A. Goldmann, director; Russell H. Wills, director; Milton E. Zerman, director. Second row, left to right: Michael Petrukas, director; Charles Costanzo, director; Doyle E. Bush, director; Clarence J. Von Drehle, executive director; Alonzo D. Allen, director; John S. Cucchiara, treasurer and Albert A. Sieber, secretary and NAHB director. Official picture: Ralph Corletta, director and NAHB director; Fred Inozemtcev, director; Charles H. Baie, director; Emanuel Spiegel, director and regional vice president of NAHB.
Infra Solves the Problem

INFRA Insulation, Type 6, is an impermeable vapor barrier; it weighs but 1/4 oz. per sq. ft. With so little thermal capacity there is practically no exchange of heat for condensation to take place. The construction—4 inner rows of reflective air cells of slight conduction, between 3 radiant-heat-repelling aluminum sheets of only 3% emissivity, effectively prevents contact of condensation-forming temperature extremes.

Infra, which cannot form, absorb nor store appreciable moisture, has 97% efficiency in rejecting radiant heat, which represents 60% to 80% of heat flow thru wall spaces. It is also singularly effective in blocking conduction and convection heat transfer.

Condensation... Severe Problem

Condensation...severe problem in the tightly built, well-insulated, high humidity homes of today...The meeting place of warm and cold is moved inside the house, usually somewhere in the outer layer of the insulation or between the insulation and the sheathing. The vapor then collects inside the attic or the walls and the result is plenty of trouble.

"Wet spots on the ceiling or walls, as the moisture flows down from the cold attic space; falling plaster as an end result; constant and repeated paint failures on the outer walls and gable ends; and rotting rafters, joists, studs, sheathing, and shingles or siding; these are only too common and costly results of the over-insulated, under-moisture-proofed home.

"The easiest solution, of course, is the inclusion of a good vapor barrier when the house is built...A series of laboratory tests made by the Forest Products Laboratory and the University of Wisconsin in 1947...Aluminum foil had by far the best rating as a vapor barrier."


THERMAL FACTORS, INFRA TYPE 6

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USE THE COUPON FOR A FREE COPY

There was a building dealer,  
Whose name was Sam'l Brown.  
His business was progressive  
And a credit to the town.

But Sam was such a cautious bird,  
He worried day and night  
About his inventory—  
And was he buying right?

And when the spring came 'round again,  
With building on the boom,  
Sam placed some mighty orders,  
Cause he had a lot of room.

But sad to tell, the rush was on;  
The factories couldn't ship  
As much as Sam'l needed—  
And his sales began to slip.
"It might be bad," Sam figured,
"To build my stocks up high,
Until I see what others do—
And how soon people buy."

So Sam went through the winter months
A-buying hand to mouth.
While all the goods he might have had
Were shipped to "Somewhere, South."

Sam lost a lot of profit,
Which of course he would have not,
If he had just remembered:
"You can't sell what you ain't got!"

Spring business looks good.
Don't risk getting caught with your stocks down. Past experience tells us that manufacturers cannot make prompt Spring deliveries against a peak load of deferred orders. Your contractors and building customers must depend upon your asphalt shingle inventory to meet their schedules for Spring. The stocks you take in now will insure their goodwill and your future profits.
Take it from these
SUCCESSFUL HOME BUILDERS!

All of these prominent builders have chosen Kelvinator products for their projects. They selected Kelvinator for reasons based on years of experience. They mention especially the user-acceptance of Kelvinator products, their dependable performance, and their low maintenance costs over long years. For full information, please write to Department D., Kelvinator Division of Nash-Kelvinator Corporation, Detroit 32, Michigan.
What About Conventions?

What do conventions have to offer, and what can the member who attends take home with him that he can translate into tangible results in his own business? What they have to offer depends on the program content of the general sessions, and on the number, variety and informative value of the exhibits.

The quality of the program can be anything the members want it to be, because every convention head not only accepts but continually solicits suggestions from the members. Only the members are to blame if the program is not to their liking. Excepting conventions in the few cities that do not have adequate exhibit space, the effectiveness of exhibits is determined entirely by manufacturers of the products on view. The results they obtain from year to year are sufficient to spur them to strive to maintain or achieve high educational and interest value. Thus, conventions have to offer principally what the association members want them to offer.

What a member can take from them that has practical value depends entirely on how he uses his time at the convention. Conviviality and play are pleasant if not important by-products, but the real purpose of a convention is to make the time and money spent by the member who attends an investment in improved business operation.

Good examples of what members can get are afforded by the experiences of a Boston home builder and an Illinois retail lumberman last year. The builder, faced with a problem in the development of a system for circulating warm air heat, collected a group of advertisements clipped principally from the American Builder and flew to Chicago with the idea of thus taking one day out of his busy schedule, to attend one session of the panel on heating and have a quick look at the exhibits of the advertisers whose presentations he had brought with him. The proposed one day at the convention became three, spent exclusively with manufacturers of heating equipment and other building products, and resulted in a complete solution of the heating problem. A plus was in the form of several new ideas he had not thought of.

The lumber dealer listened to one speech at a dealer's convention, then left for home immediately to revise his spring purchasing schedule. The move netted the dealer excellent profits in the spring months, whereas with the plan he had charted before attending the convention he would have had to struggle to break even.

Conventions are what the association members want them to be. The values are what each individual takes the time to look for and to find.
PLANS are almost complete for the 1950 program of the yearly NAHB convention, a five-day builders' exchange which promises to surpass all previous meetings both in value to the individual and the industry. Discussion panels, a comprehensive new products display, advice on color, lighting, selling—the latest information on mortgage financing, house design, land planning—a thorough report on how to use climate to best advantage in designing houses—a record-sized exposition of materials and equipment—and a series of outstanding speakers—are some of the highlights.

Dates this year are Sunday, Feb. 19 through Thursday, Feb. 23. Preliminary meetings start Feb. 16, with NAHB committees meeting Feb. 17 and the board of directors Feb. 18.

Judging from heavy advance registration, attendance at the Convention will break former records with more than 16,000 persons expected. Exposition space was sold out almost immediately after applications were opened. Facilities of both the Stevens and Congress hotels will be used.

The display of products and materials opens Sunday afternoon, Feb. 19. An entirely new feature is being added to the exposition this year with the aid of Joe Schulte, technical director for Kaiser-Burns Homes of Los Angeles. This will be a section devoted exclusively to new products.

There will be a round of activities for delegates starting from the moment of arrival. The big Sunday feature will be the gala ceremony opening the Stevens and Congress exhibits. Several thousand people are expected for this event. The display of building products and materials will be the most lavish ever presented, containing more than 600 products used in building homes.

By using facilities of two hotels, the number of exhibit spaces this year has been increased to a record-breaking 252. The number of exhibitors will exceed 160, also a new record. There will also be more diversification of products than heretofore, with about 35 exhibitors in the show for the first time.

Exhibitors come from nearly half of the 48 states. They will send over 1,800 key personnel to Chicago to show, demonstrate and explain their products and consult with builders.

The special section reserved exclusively for new and revolutionary products will be one of the exposition highlights. Located in the Casino Room of the Congress Hotel, it will feature a diversified group of 20 to 25 new products which differ significantly in function, design or other basic characteristics from products now generally available. Although names of the products to be shown have not been released, it is known that they will include new type tools, structural items, heating systems, plumbing specialties, lighting and equipment, and operating conveniences for home equipment.

On Monday morning women builders will present one of the most colorful sessions of the convention. The program, under the chairmanship of Mrs. Henity Molgaard, well-known Milwaukee builder, will be a virtual "must" for men builders. It will feature modern wallpaper and its use in today's homes; proper lighting for homes and gardens; the best house designs for families with children, and the proper use of color—inside and out—for fast-selling homes. A highlight of this program will be the presentation of the prize-winning woman architectural student in the house-design contest sponsored jointly by the American Builder and the women builders of NAHB.

The first general session Monday afternoon, featuring many of NAHB's leaders, will set the keynote for the convention. Former President Robert P. Gerholz will preside. Reports will be made by association officers with President Rodney M. Lockwood, Convention Chairman E. M. Spiegel, Secretary Nicholas Molnar and Executive Vice President Frank W. Corrigan sharing the stage. Association business will be followed by an "on-stage" press conference with NAHB past presidents, and an address by Dr. Ruth Alexander, nationally-known newspaper woman.

Popular "shop-talk" clinics will be held again this year with nine discussion clinics and round tables—five on Tuesday morning and four on Wednesday. These important working sessions will feature FHA, VA and FNMA questions and answers; the newest innovations in heating systems; a session on local opposition to public housing; rental housing questions; office accounting; tax problems and savings; custom built homes; problems of the small builder; and time and material accounting.
The annual banquet will be held Wednesday night with Edward R. Carr, NAHB past president, as chairman. Emphasis at the banquet will be on relaxation and entertainment.

The humorous quiz program, "Dr. Hi-Cue," which tests the knowledge of home builders about their own business, will be presented again Thursday morning by its originator, Joe Havercreek, Dayton, Ohio. This "curtain raiser" proved very popular when it was introduced last year.

"Dr. Hi-Cue" will be followed by a study of the effect of climate on house design, featuring Dr. Kenneth McFarland of Topeka, Kas. Mr. McFarland is rated as one of the nation's outstanding authorities on this subject.

The climate study, "Doubling your Sales by Harnessing Climate," will be presented by House Beautiful magazine under the direction of Elizabeth Gordon, editor. This study is considered an important scientific contribution to home building and was conducted over a period of many months. The Thursday presentation will cover such subjects as the use of knowledge of climate in site selection and site development, and the influence of climate on proper house design.

In addition to the special session at the Congress Hotel, an unusually large number of new and improved products will be shown by exhibitors in the regular sections of the exposition. A survey among exhibitors indicates that over 30 per cent of the exposition will be devoted to products which are either entirely new, very recently improved, or nationally available for the first time.

Advance information indicates that manufacturers will showcase products designed to lower building costs in greater numbers than heretofore. There will be a variety of new products designed especially for small, low-cost houses.

Most exhibitors will have experts on hand to make on-the-spot analyses of working plans and to submit installation and design ideas.

In the third floor corridor of the Stevens, three additional exhibits of exceptional interest will be shown: the prize winning entries in the house-design contest for women, sponsored jointly by the American Builder and the NAHB's women's division; The Southwest Research Institute exhibit devoted to the Revere Quality House; and the national prize winners and other top entries from NAHB's latest Neighborhood Development Contest.

A well-rounded program of entertainment has been arranged. Tours and events have been scheduled for women visitors and a constant round of attractions is available to all delegates including tours of Chicago's housing projects. A grand rally will open the general sessions and the popular delegates' and exhibitors' dance will be held Monday night. The banquet is one of the outstanding social events.
Presented in this issue is our annual "Exposition in Print" — pictures and descriptions of more than 400 of the latest products used in construction are necessarily brief, including only the salient features of each item. To facilitate inquiry for supplementary information, all products have been assigned key numbers which may be used in conjunction with the coupon on page 152.

A large number of the products listed on these pages will be on exhibition at the NAHB meeting, where delegates will see many of them for the first time. In some cases manufacturers are rushing completion of new items in order that they will be ready in time for the convention. Surprise showings, without any previous announcement, are scheduled by several exhibitors.

A few of the products which will be demonstrated at the builders show are mentioned below as examples of the show's diversity. (Most of these are included in the American Builder's presentation): A rod-type concrete form tie with spreader, which is said to cut the cost of building forms by more than half.

Concrete forms made of magnesium, reported to last longer, go up faster and to be more accurate than lumber and plywood forms.

An improved type of aluminum siding. Application will be made under duplication of actual construction conditions, including such phases of home erection as installing window flashing and box corners.

A variety of equipment innovations by manufacturers of heating equipment, including a new oil or gas furnace designed especially for radiant perimeter heating, several units for small homes and basementless houses which are said to increase heating efficiency and to cut fuel consumption.

A hardboard paneling that has the appearance of Spanish leather and hardboard panels surfaced with laminated plastic in attractive colors.
A simplified standard for erecting small glass block panels in residential construction, and glass blocks in a new 12-inch size.

A new tri-well sink.

A factory-made garage door on which many designs or patterns can be incorporated at the time of installation and changed later, if desired.

Improvements in prefabricated chimneys, resulting in lighter weights and lower installation costs, including a new low-cost unit for use with gas heating exclusively.

In today's competitive market when costs must be cut to a minimum in order to provide the soundest values possible in houses of all price ranges, a thorough knowledge of the latest developments in materials and equipment is even more essential to builders than ever before. The American Builder has long recognized the wide interest in this phase of the industry and will continue to announce new developments in its regular New Products section as soon as information on them is available.
LARGE windows in the Ambrose house are designed to capture a view of lake directly in the home and mountains beyond.

"We like the view," people said, so one of Denver's exclusive suburban home developments was born. The area encompasses 577 acres which contain 250 large home sites.
FROM the observation of a beautiful site came the idea of an exclusive home subdivision. Lloyd J. King, a resident of Denver, Colo., acquired a tract of land overlooking Marston Lake near Denver, with Bowes Lake directly to the south. On this site he erected a home in 1942. The many obvious advantages of the site made it an attractive location for motorists driving along the nearby highway, who stopped to enjoy the view of the mountain range reflected in the lake at this point.

It was then that King began to realize the potentialities of the area. He purchased the 577 acres of lake and surrounding land and placed its development in the capable hands of Ambrose and Sons, realtors of Denver. Site planners were Harmon, McCravy and O'Donnell, landscape architects. They proceeded to lay out the entire 392 acres of usable area in one acre or larger lots, bearing in mind the excellent view at their disposal and arranging the individual sites accordingly. Curvilinear drives patterned after early bison trails wind in and out in relation to the site's contours, with the lake and mountain always in view. Lots with 180 degree views of these features are not unusual.

American Builder, February 1950.
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and some lots can boast of 360 degree views. The project is laid out on the theory that city people want city conveniences, but still like the advantages of country living with its wide open areas.

Situated in a section where up to this time only large ranch-type estates had been built, the Bow-Mar development naturally suggests a western or functional type of architecture. The project will eventually consist of 250 homes, a business district including all needed commodities, a public school, a community church,

LEFT: Open fireplace. terrace extends across the entire lake front of living room. Exposed real beams above are covered with rotten during the entire year. Glance in large fixed south is ¼-inch-thick plate. Below: Partial view of living room looking toward terrace. Interior and exterior of fireplace and chimney are built of local stone.

Right: Sectional drawing showing position of elementary windows.
and a stable large enough to house all the horses belonging to Bow-Mar residents.

Twenty-one homes have now been completed which were built at an average cost of $25,000 each, with an additional number under construction and many more now in the planning stage. Opportunities for home ownership have not been offered to all comers at Bow-Mar; it is based on a more personal basis... with the ultimate idea of forming a congenial community of residents of comparable means and tastes.

The two houses illustrated are representative of the style of architecture embodied in most of the houses located at Bow-Mar. Other types embrace the conventional ranch house typical of this area.

The Paul D. Ambrose and the Gerald D. Plue houses conform to the functional type. In reference to style Ambrose said, “Our principal purpose in building this way was to command a view to the south, overlooking Bowles Lake, and also to build a house which we believe is very functional. Most of our living is done in the living room which is the major portion of the house. It was built

**American Builder, February 1950.**
THE lake front approach to the Gerald D. Flues house is a good example of functional design with large glass areas and covered terrace.

OPEN planning is featured in this house. Living, dining room and kitchen are in reality one large area. Doors are non-existent between rooms except in the bedroom area large because we wanted to make it a combination living and dining room, and, if necessary, a playroom. We had large windows placed on the south wall to take advantage of the Colorado sun, which shines 365 days of the year.

With reference to functional design, Ambrose states, "Instead of building an exterior house and fitting the rooms into the shell, we did just the opposite and built the exterior shell around the rooms we actually wanted to use as living area. I believe that the Flues had approximately the same purpose in building their house. A greater amount of glass area is used and thus their home comes closer to being a sun house than ours. Only two rooms in their house do not have the heat of the sun during winter days. Both houses were built on the theory that much of our living would be outside; consequently our terraces..."
are large and protected. We find that this idea has worked out very satisfactorily and that our terraces can be used from six to seven months of the year."

Both of these houses are placed on a hilltop with a tremendous sweep of plains and mountains below. The Ambrose house built by Bellans and Williams, contractors, at a cost of $3,000, is compactly suited to the present with provision for future expansion. The architects of both houses, Smith, Hegner and Moore of Denver, have indicated in the plan a thoroughness of study in the proportioning of the existing units to the future extension. The two terraces, one for living, the other for dining, are sheltered against the winter weather. A sun-break of rattan over the main terrace prevents glare on the living room windows and at the same time permits full radiation of winter sun and circulation of summer breezes. The clerestory window in the north wall of the living room provides light to that portion of the room and full circulation of air in summer.

The Pue house, built by Sam McMorrine, contractor, at a cost of $25,000, has many of the characteristics of its neighbor, except for the fact that the glass expanse is greater and the plan is of the open type. Flat roof has wide projecting overhangs that act as sun shades for all windows and form a shelter for terrace on south wall.

Stained cedar siding on frame walls were used in the construction of both the Pue and Ambrose houses.

DETAIL drawing shown below and at left indicate the construction of front and rear walls of living room including the section with the built-in seat and cupboards.

Building Products on Review—At the Stevens

Building Products on Review—At the Stevens

Building Products on Review—At the Stevens

Building Products on Review—At the Stevens

Building Products on Review—At the Stevens

Building Products on Review—At the Stevens
Mass Production—Individual Results

Homes in 200-unit development are built to standard pattern but plan is variable to let buyers pick details they like best.

Builder Joseph Raymond of Hawthorne, N.J., has found a middle ground between building homes for sale and doing custom work. The buyer of a home in Raymond's 200-dwelling development can say "This is the way we wanted it" instead of "It doesn't quite suit us, but we had to take it because that's the way the builder did it."

Raymond achieves this without sacrificing the economy of building houses to conform to a standard pattern. His pattern is flexible, however. Although he does not build to the customer's specifications, in almost every possible instance he does give the buyer a number of possibilities from which to choose. What Raymond calls a "variable room" is an excellent example. This can be either a dining room, connecting with the living room and the kitchen through open archways, or a walled-off bedroom. The buyer decides which he prefers and Raymond builds it that way. No matter which, the price stays the same.

This policy pays off. Forty-six houses were sold the day the first model home opened. Since then, sales at the Raymond Ranch Homes project, located at New Milford, N.J., within commuting distance of New York City, have been consistently far ahead of construction. Only 91 dwellings were planned when the development was opened in October, 1949, but because of the ease with which the homes sold, Raymond soon decided to expand the project if he could obtain more land. He succeeded. The first 91 houses were planned for a 29-acre site, but within a month after selling started Raymond had bought an adjoining 29 acres and increased the number of homes to 200.

The variable room—dining room or bedroom—is not the only item about which the buyer has a choice. The customer may select from exterior color schemes created by Beatrice West of the Rahr Color Clinic. He has a choice of a garage or no garage. If he wants a garage, he may decide whether he wants a small front gable peak over the garage or over a bedroom at the other end of the house. The customer selects his own wallpaper, although the builder buys it and puts it on. The customer decides whether he wants ceramic tile or aluminum tile in the bathroom and he selects the color of tile he likes best. He chooses the color for bathroom fixtures. He decides between double-glazed or ordinary glass in the picture windows. He selects from among 14 possible colors for the breakfast nook set in the kitchen. He selects the color and pattern for kitchen linoleum. He decides whether...
He wants double-coursed red cedar shingles on the sidewalls or a combination of wood shingles and asbestos siding. He decides whether he wants stone veneer around the front picture window. He selects the style of lighting fixtures. Some of these choices do not change the over-all price of the house, and some do. With one basic floor plan, FHA-approved prices range from $10,500 to $12,500. The exact price of any particular house depends upon the exact choices the buyer makes.

There are two model homes—one with a $12,500 price tag and one at $10,500—so that prospective buyers can see all the features which make price variations. To enable buyers to inspect both variations of the variable room, one model has two bedrooms and a dining room and the other has three bedrooms and no dining room.

Raymond gives special credit to color for the rate at which his houses have been selling. Referring to the exterior color planning, he says customers “appreciate the advantages of

**BUILDING PRODUCTS ON REVIEW—AT THE STEVENS**

**AR80817—Fiberglass acoustical tile. Owens-Corning Fiberglas Corp., Toledo, Ohio. A lightweight perforated acoustical tile of compressed glass fibers, non-combustible. High sound-absorbing properties. Excellent thermal insulation values. Weight: 7/10 pound per square foot. Can be cemented or mechanically mounted.**

**AR80818—R.O.W. removable wood windows. R.O.W. Sales Co., Fonda, Fla. 315, W. Windows operate by means of spring cushion, retracted by gravity to left or right side comes free. Pressure regulator in each window.**

**AR80819—Multiplex radial-arm saw. Multiplex Co., 1001 W. 2nd St., Portland, Ore.**

**AR80820—Polyflex electric ceiling ventilator. Polyflex Mfg. Co., 140 W. 6th St., Chicago, Ill.**

COLOR consultant Beatrice West of Rahr Color Clinic shows painter exact hue. Miss West will speak at HANS Feb. convention

having a recognized authority select colors not only for each home individually but for the homes as they stand in relation to each other in the development. In other words, good color styling makes attractive homes and an attractive community, too."

The Rahr Color Clinic did not participate in the original planning of Raymond Ranch Homes. In fact, when the firm was retained late in October, about ten contracts had already been signed, and it was necessary for Raymond and his sales staff to ask these buyers to approve the color schemes worked out for their homes. All except two buyers were enthusiastic immediately, and it didn’t take long to convince the dissenters that they, too, would benefit by the color consultants’ experience and knowledge.

Nine exterior color schemes were developed for the Raymond Ranch Homes. As delivered to the builder, each scheme shows real samples of materials in every possible case—a real sample of an asphalt shingle in the selected color blend, a real sample of shake shingle stained to the hue desired and a real sample of asbestos siding in its color. Paint colors for vertical board siding, trim, accent and the porch also are shown exactly. Color locations and color specifications are given.

Each color scheme is prepared in chart form, bound, in a neat folder. The sales staff at Raymond Ranch Homes considers these folders one of its most valuable selling aids. A prospective customer is not told, for example, that the house he’s interested in will have a red asphalt roof. Instead, he is handed the appropriate color chart, which not only informs him that the roof will be a red blend but actually shows him the material itself. As Miss West puts it: “He can hold his roof in his hands.”

In developing each of the nine color schemes for the Raymond houses, Miss West began by choosing a blended color asphalt roofing. This is her customary way of working. For the Raymond Ranch Homes, there are five asphalt shingle blends—red, gray, slate, brown and green, with each except green in two different schemes.

Besides creating the different color schemes, the color clinic decided exactly which of the 200 dwellings would be colored in accordance with each scheme. Decisions are final. If a customer buys the house in location No. 87, for instance, he must take the color scheme designated for No. 87. If the customers wants another scheme, he must select a location for which his chosen color plan was specified.

Raymond is convinced that altering his professionally planned color design would detract from the appearance of the homes.

DINING room is optional; buyer may choose bedroom in its place. Regardless of choice, price of house is same. Mrs. Raymond, the builder’s wife, decorated model home interior.

$10,500 model is lowest-priced home. Asbestos siding is used on end walls and rear, wood shingles on front. Plan shows how dining room converts to bedroom.

American Builder, February 1950.
The development. This is what
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M ENT CO. INC. bathroom fixtures
AMERICAN RADIATOR & STANDARD
MFG. CO. linenium ARMSTRONG
CORK CO. washer RENDEL HOME
APPLIANCES INC. COMMANDER
ward-acting garage door. kitchen ren-
tal FASCO INDUSTRIES CORP. paint
MARTIN SENOU CO. forced air for-
ace: BORG WARNER CORP. hot water
heater LUBER OVEN FORD GLASS
CO. Youngstown kitchen cabinets: MULL
LINES MANUFACTURING CO. Young-
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CO.

The buyer, Raymond says, thought
a moment and said, "You're right.
Buyers can make an additional
color selection by choosing different
siding materials. In one color scheme,
the color consultants specified barn
red wood shingles or a combina-
tion of barn red shingles and gray
asbestos siding. If the buyer wants barn red,
he can order wood shingles on all
exterior wall If he wants barn red on
the front and gray on the ends and
rear, he can order the siding mate-
rials which will give him those colors.
"Color has become an exciting ex-
perience for me," Raymond says. "In
the three developments I built before
Raymond Ranch Homes, I selected
the outside colors myself and thought
I did a good job. But I have to admit
(Continued on page 290)

American Builder, February 1959.
With the thought that conventional procedures needed revamping, a Detroit subcontractor started training his men for faster production. He found that—

**Power Tools and Teamwork**

**Speed Rough Framing**

TWO men with this radial saw are able to cut 150 rafters, 5 cuts each, in one hour.

UNCUT material is piled on side of saw away from building. This is No. 3 saw.

NO. 3 saw in use on apartment project. Radial saws are by J. D. Wallace & Co.

DRAWING of Balch's rough framing system shows flow of material through power saws to building. Uncut material conveniently placed with four feet of space between stacks.

American Builder, February 1950.
WITH a battery of radial saws, a well-planned materials handling procedure, and a specialized work crew, a Detroit carpenter subcontractor is adding speed to rough framing. His well-tested system, used in the construction of 175 apartment units in a 10-month period last year, is several times faster than the conventional procedure he used previously.

The subcontractor, William Sulak, of the Sulak Contracting Co., does not claim to be a time-and-motion expert, but says his system relies heavily on “men being at the right place at the right time.”

His crew of about 35 men, plus their equipment necessary for rough framing, constitutes a mobile unit. They can be shifted to any job suitable to their organization, and proceed with the precision and speed of a well-trained football team. Each man on the “team” has a particular job for which he is trained. Sulak sublets the rough-framing crew to a builder doing the kind of work where his methods are adaptable, usually to multiple unit frame construction. And important to the efficiency of his crew is that he can keep a team of workers together after he has trained them by keeping them steadily employed.

Speed in the system is developed by eliminating lost motion. Uncut materials arriving on the project (see drawing) are placed in relation to radial saws so that movement of any piece is always toward the building under construction. Lumber is stacked in piles generally with four feet of space between them, on the side of the saws away from the building. Material is placed on saw conveyors, fed into the saw; and finished pieces are stacked at the other side of the saw toward the building. From this point, carriers, usually one man for each radial saw, carry the finished material to a carpenter at the building.

American Builder, February 1950.
Usually, Sulak uses two heavy duty radial saws mounted beneath portable frame sheds, and a third mounted on a trailer. The number of saws varies with the size of the project. These saws are lined up parallel to the building under construction. Sulak says that two of his men, carpenters who form a team for each radial saw, can cut 120 rafters every hour.

One man is positioned at the saw; the other at the lumber pile. The man at the saw makes the ridge angle cut-off at the top of the rafter as the first operation. He then swings the machine to the right until it is in the correct plate-angle position, located by an automatic stop.

Both men then pick up the rafter and walk to the left with it, where the man who was formerly at the saw now positions the rafter on the saw table at various pencil marks that have been made for the successive cuts. The second man at the saw finishes making the cuts, using automatic stops on the saw to quickly position for the angles.

While the man who aligned the rafter to the pencil marks removes the completed rafter from the table, the man at the saw goes back to the lumber pile and picks up a piece of lumber for the next cut.

While these saws are at work, at least two other operations in the building are underway, depending upon stages of construction. Work usually is concentrated at one end of the building so that a layout man and two assistants will not lose time. Position of men in the

American Builder, February 1950.
building, and the work they are doing, is coordinated closely with the progress of the radial saws. When outside walls are all cut, and assembly begins, these saws are used inside partition members. Plumbing openings and plaster grounds are all provided for so that when the framing crew leaves they do not have to go back to rough these in.

To add to speed and precision, this subcontractor uses power tools "wherever there's a place for them." Since work for his crew is confined to rough framing, power hand saws are used as well as the radial saws.

American Builder, February 1950.
Warm Air Distribution System Provides

SALIS price of this model home built by Paul E. Schleicher & Son, Inc., Gray, Ind., was $8,250. Down payment was $795, and monthly payments $48.15. Price included automatic washer and 14x125-foot lot, which had been fully landscaped.

Plans of Schleicher's heat distribution method, below. Heat is forced down into large duct in center of floor and cut through small ducts to continuous baseboard outlet around perimeter.

Main duct in center of floor is 13 inches in diameter. Small ducts are 3 inches. Concrete slab floor is 4½ inches thick.

American Builder, February 1950.
Even Heat

A builder-heating engineer successfully incorporates results of his research into a low-cost home venture

Heating has been of particular concern for several years to a home builder in Gary, Ind. Combining experience in industrial heating engineering with ten years of residential construction work, Paul E. Schleicher has devoted a sizable amount of his time to experimental work with heat. Today he believes he is using one of the most efficient methods he has worked with, so far, for basementless houses.

Schleicher is using an adaptation of a radiant-forced warm air perimeter system with a continuous baseboard heat outlet devised by himself. The baseboard outlet, about three inches above floor level, runs around the entire inside perimeter of the house. Heat is supplied to it through a duct heat distribution system, also devised by Schleicher (patent is applied for).

Warm air from an oil-fired counter-flow furnace is forced by fan into a duct, 12 inches in diameter, that runs through the center of a reinforced 4½-inch concrete slab. The heating system is located in the center of the floor, over the large duct. From this duct, warm air passes into 3-inch diameter pipes imbedded in the slab about two feet on centers. The heat then passes through the baseboard outlet into the rooms.

To form the continuous baseboard heat outlet, Schleicher leaves a space of approximately 1⅛ inches between the concrete slab and the inside face of the studs. A reflective type of insulation is fastened to the studs from the bottom edge of the slab to a height of seven inches. One 1¾-inch wood block is fastened to each stud at the level of the finished floor, and one for each stud is fastened at a height of about three inches above the floor.

American Builder, February 1950
The blocks above the floor level serve as a plaster ground and as support for the upper portion of the baseboard outlet (see drawing), while the blocks at the floor level serve as support for the lower portion of the baseboard. Warm air enters the rooms by leaving the ends of tubes in the slab, striking against the reflective insulation, and passing between the baseboard sections. The heat distribution system, which provides an even temperature throughout the house, has received both Underwriters' and FHA approval.

Efficiency of the method depends largely on adequate insulation. In Gary, where the firm, Paul E. Schleicher & Sons, Inc., completed and sold almost a hundred homes incorporating the system last year, the subgrade is sand. If the soil is of any other type, at least six inches of sand is recommended for the subgrade. A reinforced type of insulation is placed under the entire slab. Two feet under the outside edge of the slab, 11/4-inch thick rigid type insulation is used. This insulation, between the slab and the foundation wall, is laid so that one edge is flush against 3/8-inch insulating sheathing used on the outside walls. Attics are insulated
FOLDING door separates living room from bedroom. Heat finish of chest represents quality workmanship stressed by this firm.

with four inches of blown mineral wool.

In homes completed last year, the firm successfully used an oil-fired heating unit and flue encased in a brick chimney. In this system, a fan installed in the attic takes heat collected from the flue and fire pot in the chimney and forces it down into the duct distribution system. Cold air returns to a register located under the fan at ceiling level, and is blown back over the wide heating surface of the flue and furnace.

After thoroughly testing the efficiency of the heating system, and while their 89-home project was still in the planning stage, the Schleicher firm began to tell potential home buyers about it through advertising. Interested home-seekers could be shown several homes with contented owners where the heating system had already been incorporated. In some instances, temperature of the floor and room air varied as little as one degree. Shortly after the Schleicher 89-home project began in May, all the homes were sold; the size of the project increased, and the number of home sales for 1949 was over ninety.

Besides the heating system, other features attracted buyers. They liked the idea of a 3-bedroom home in the $10,000 class with down payments of slightly over $795, and monthly payments of about $50. One of the bedrooms is separated from the living room by a Modernform door, and if the third bedroom is not needed, ten feet can be added to the living room by merely opening the door. Fully landscaped lots, 50 to 63 x 125 feet, were included in the sales price. With popularity of his homes increasing, Schleicher is planning another 150 similar houses for 1950.

American Builder, February 1950.
A Heating Man
Looks at the
Chimney

Too often inefficient and expensive heating is the result of poor chimney planning or poor workmanship with a good design

By
Guy A. Voorhees
Technical Secretary, National Warm Air Heating and Air Conditioning Association

A MAJOR essential of good home building practice is the careful construction of a chimney which has been correctly designed to perform its intended function. This is the joint responsibility of the architect and builder—neither of whom would call himself a heating expert. Yet, if more chimneys were designed and built after consultation with the heating contractor, the number of home owner heating complaints would be materially lessened.

The fundamental purpose of a chimney is to remove from the house the products of combustion, smoke and flue gas, which have been generated in the heating units of the house. When built to serve a hand-fired coal or wood burning furnace, or one heated by a natural draft oil burner, the chimney should fulfill a second purpose; namely, to create enough draft to draw combustion air into the combustion space of the heater. Nothing either structural or decorative should be incorporated in the chimney which will prevent it from effectively and adequately serving these functions.

It is reasonable and logical that the heating contractor should serve as a consultant on chimney construction. The majority of house chimneys are built for the purpose of serving central-fired home heating systems. Because the comfortable heating of the house is his direct responsibility, the heating contractor should have a voice in every element of construction which will affect the final performance of the system which he installs.

When a home owner with a hand-fired coal furnace complains to his fuel dealer that the coal he is using "doesn't seem to have any heat in it" or "doesn't burn properly" it is a prevailing practice, based on proved experience, to peg the chimney as the first suspect. Draft gauges and other chimney function-testing equipment are enjoying increased use among fuel dealers and heating men. These are proving more and more that poor chimneys are generally the cause of poor and inefficient fuel combustion. When the defects of faulty chimney flue construction have been proved to the new home owner, the general contractor can expect to find himself on the receiving end of vociferous complaints which have, in many cases, even led to legal action.

Chimney rebuilding is expensive. It is certainly many more times costly than it would have been to correctly design and closely supervise the proper construction of the chimney in the first place.

Of first consideration in the design of the chimney is the provision of an adequate flue area for the rapid removal of smoke and flue gas. The quantity of smoke and gases to be removed will depend on (a) the kind of fuel which will be burned in the furnace and (b) the quantity of fuel necessary to maintain the house at a comfortable temperature.

It is the heating contractor's responsibility to determine the heating needs of the house in order to correctly size his heating plant installation. After having designed the heating plant and, through consultation with the home owner, determined the type of fuel to be used, the heating man can specify the required inside dimensions of the chimney flue . . . either from his own experience or from data supplied him by the manufacturer of the equipment which will be installed.

Flues built to serve furnaces which will use oil or gas burners will not require as large flue dimensions as will furnaces which burn coal. In areas where hand-fired coal may be burned, either now or later, chimney flues should be sized even larger than theoretically required in order to offset the effect of soot accumulation. Continual depositing of soot on flue walls will naturally restrict the area of free smoke passage. Dr. A. C. Willard, president emeritus of the University of Illinois and influential factor in the establishment of the continuous warm air heating research program sponsored by the National Warm Air

American Builder, February 1950.
Heating and Air Conditioning Association at this University recommends that in an area where hand-fired bituminous coal may be burned in a central heating plant, the nominal chimney flue dimensions should never be less than eight inches by 12 inches.

In addition to reducing the free area for smoke passage, soot accumulations in undersized chimney flues present definite fire hazards. Chimney fires originate at the bottom of chimneys when smoke passages are obstructed. Burning rapidly and intensely, such a fire will generate such a high pressure inside the lower part of the chimney as to practically spout the burning chunks of soot out of the chimney and on to the surrounding roof area.

The height of the flue flue is also an important design factor. This is particularly true when there is a need for "natural draft combustion" as in the case of a hand-fired furnace burning solid fuel. The chimney serving this type furnace must provide enough suction to draw air into the combustion space and up through the bed of ash and fuel.

If the heating system is designed for use with solid fuel burned in a stoker, the stoker fan will supply the forced draft pressure necessary to supply the needed combustion air and force it up through the fuel bed. The chimney need supply only the amount of draft necessary to remove the flue gases from the furnace.

An oil burner of the type operating on natural draft will require chimney suction strong enough to pull the air into the combustion space in order to support the burning of the fuel. The oil fuel burned with a forced draft fan will provide its own combustion air and the chimney draft need be only enough to vent products of combustion from the upper part of the combustion chamber to the outside.

Draft intensity of a chimney is dependent on (a) the difference between the temperature of flue gases inside the chimney and the temperature of the outdoor air and (b) the height of the chimney.

The greater the temperature difference between the flue gases and the outdoor air, the stronger the draft. That is why a chimney located somewhere near the center of the house where it is not exposed to winter chill until it rises above the roof will provide a stronger draft than an outside chimney which is exposed to the weather on one or more sides. Cold, dense flue gases collected within the flue confines of an exposed chimney, blanket the venting of the furnace and can result in fumes and smoke...
hacking into the house.

From information supplied him by
the manufacturers of the heating
equipment to be installed, the heating
contractor can advise the architect or
builder as to the desirable height as
well as the inside dimensions of the
chimney flue.

The offset flue is probably one of
the most prevalent structural faults
in chimneys to which the problem of
insufficient draft can be attributed.
The necessity for creating offsets in
keeping with design and structural
demands of certain style houses is not
to be denied. However, in a great
many cases, chimney draft problems
in offset flue chimneys could be elimi-
nated by use of the simple ingredients
of careful thought and skilled crafts-
manship.

From the functional standpoint, the
furnace flue is certainly more impor-
tant than the fireplace flue. There-
fore, if the heater flue and fireplace
flue are encased in the same chimney
and if one of the flues needs to be off-
set, let it be the fireplace flue. Wherever possible the heater flue
should be kept perfectly straight.

If offset of the heater flue is abso-
lutely necessary, it is important that
the angle of offset be not more than
30 degrees...and less, if at all pos-
sible. To make any heater flue offset
greater than 30 degrees is to invite
eventual combustion trouble in the
heating system.

If the bricklayer begins his corbel-
ling on both sides of the offset at the
same level, the cross-sectional area
of the flue throughout the offset is ma-
terially reduced. A bottleneck is cre-
ated which increases frictional re-
sistance and slows down the velocity
of the flue gases, reduces draft in-
tensity, and volumetric capacity of the
chimney.

To explain volumetric capacity:
Even when carefully made, chimney
offsets will create turbulence and fric-
tion. These two deterrent elements
will tend to reduce the velocity at
which combustion gases flow upward
through the chimney. The more slug-
gish the flow, the greater will be the
cross-sectional area necessary to
carry the volume of combustion gases
which the chimney must handle.

Whereas the cross-sectional area of
the straight part of the chimney may
have been adequate to carry the vol-
ume of gases produced, the bottleneck
created by an improperly constructed
offset will reduce the entire stack
capacity of the chimney. The draft,
or suction, potential of the chimney
is likewise throttled.

If a flue lining is used, a careless
workman will all too often crudely
knock off an end of the tile that is to
go into the offset and insert it, exert-
ing no effort to fill the jagged con-
nection in the flue angle with a
cement joint. Without properly mi-
tered joints at the inclined section of
the tile lining, chimney turbulence and
frictional resistance are increased.

Because cracks may develop in even
a well-built chimney, the National
Board of Fire Underwriters recom-
mends, and most city building codes
require, a fire clay flue lining in the
chimney. This fire clay lining should
extend throughout the entire height
of the chimney.

To assure a straight, smooth-
jointed lining, each successive length
of lining tile should be positioned
first and the supporting brick work
built up around it. This is not the
prevailing practice, however. In most
cases the brick work is built up first
and then the lining is dropped into
position inside. The inevitable result
is failure to get tight joints
between tile sections and failure to properly fill space between lining and brick work.

American Builder, February 1950.
masonry cements now available seem to be completely satisfactory.

The objection to so-called lime mortar arises from the fact that many soils contain sulphur which, after burning, shows up in flue gases as sulphurous or sulphuric acid. Lime is more susceptible to attacks by these acids than is cement and in time will disintegrate, leaving leaks in the chimney.

Since draft depends upon temperature differences between the interior and exterior of the chimney, any air permitted to leak in any place will reduce the inside temperature and kill draft. Leakage is one of the most common flue troubles responsible for causing furnaces to smoke out of feed doors.

Officials of the National Warm Air Heating and Air Conditioning Association invite architects and builders with problems or questions about warm air heating methods and systems design to contact them. In the interest of enabling home owners to obtain maximum efficiency and enjoyment from their warm air heating systems, the association, located at 145 Public Square, Cleveland 14, Ohio, is always eager to counsel designers and building contractors on warm air heating systems.

CARELESS installation of fire lining in the built-in section of the flue creates unnecessary turbulence and friction areas. (A) and (B), which retard the natural flow of the flue gases out of the chimney

PROPERLY aligned joints where the flue lining sections join at both top and bottom of incline retain full flue area and reduce turbulence. All lining joints should be made perfectly smooth and tight.

American Builder, February 1950.
ONE of the most significant forward steps in building code development in several generations was made late in 1949 when the Building Officials Conference of America completed writing and adopted a new basic building code. If this were an ordinary code, its completion would not be a forward step nor would it be significant because we have had material specification building codes, which have been tagged as obsolete, for years. This new BOCA basic code establishes minimum performance standards, and does not specify materials, thus making it much more adaptable to industry a code which automatically accepts new materials and methods just as soon as they have passed standard performance tests conducted by a recognized agency.

A building code, such as the new BOCA basic code, can never become obsolete because it sets up performance standards for strength, fire resistance, sanitation and similar factors. As long as a material or combination of materials performs to satisfy minimum requirements, it must be accepted, regardless of whether it has been on the market for a century or only since yesterday. A great many of the 2,200 odd specification codes now in use throughout the United States automatically bar many new materials and methods because of the inertia of local code authorities, plus the difficulty of obtaining amendments to the codes to accept the material, plus the opposition of unions and competitive producers and distributors. Light gauge steel, reinforced gypsum, light weight aggregate masonry block, plywood and metal sheathing for house walls, resin bonded blues, prefabricated plumbing panels, BX electrical cable and new insulating materials are denied to the residents of hundreds of cities although they have been proved acceptable in laboratory tests. If the new BOCA uniform basic performance code can be adopted generally to replace the obsolete specification codes, these problems of acceptance on new materials and techniques will be largely eliminated.

Late in 1948, the BOCA adopted an abridged edition of the basic code to satisfy a demand from smaller municipalities. One free copy of this abridged performance code was made available to every incorporated city or town. More than 2,000 were distributed and hundreds of municipalities have adopted the abridged code. The abridged edition deals with structures up to three stories in height and has proved an unusually practical document for cities up to 25,000 population. The recently completed basic code is an elaboration of the abridged edition, closely correlated with it, so that the latter can be enlarged by merely adding sections from the unabridged basic code.

Each community which chooses to adopt the basic BOCA performance code must amend the uniform draft before adoption to establish minimum requirements which vary, as a rule, with soil conditions, climate, topography and weather. These local code variations are minor in relation to the over-all basic provisions of the code.

It was five years ago that the Building Officials Conference of America decided that the hodgepodge of building codes in the U.S. and the haphazard manner of revision should be eliminated. At the same time the group adopted a vigorous program aimed at promulgation and adoption of a uniform national building code. With the assistance and full cooperation of the best engineering talent in the country, the new basic code was written. While more than 630,000 man hours was spent gratuitously in writing the code, almost $100,000 was spent in travel, office and clerical expense. A committee headed by Luther Boggis, of Atlanta, Ga., and the writer as vice chairman, represented the National Association of Home Builders in industry-wide sessions on the new code. Further implementing the current movement toward uniformity in performance building codes was the organization in 1949 of a joint committee for unification of building codes, embodying representatives from all the major code-writing groups. This committee was made up of representatives from The American Standards Association, Inc.: Building Officials Conference of America, Inc. and its affiliate, the Building Officials Foundation; Housing and Home Finance Agency; National Board of Fire Underwriters; National Bureau of Standards; National Fire Protection Association; Pacific Coast Building Officials Conference; Southern Building Code Congress; Underwriters Laboratories, Inc.; U.S. Department of Commerce; Bureau of Standards.

Four meetings of this joint committee have been conducted at which action was taken to establish uniform basic standards for definitions and terminology. The committee will continue to develop uniformization in the classification of all the groups of buildings, types of construction and other fundamental requirements.

When we realize that 47 per cent of the 2,200 existing codes in the U.S. have not been changed for 20 or more years and that the remaining 53 per cent with few exceptions, have undergone only minor variations in the same period, it is easy to understand why there is so much discouragement in developing cost-saving materials, practices and equipment in the building industry, particularly in home building. These old codes have not been changed to admit new materials and new techniques because their makeup forces such a Herculean task on any individual or group wishing to even initiate a change, let alone make the changes. City officials, who, as a rule, know nothing about building or materials, call for an endless array of statistics, research, procedure details and requirements—all correlated to current accepted standards developed by years of practice and study. The most popular code revision technique is to take the existing code, review it, accept most of its provisions, changing only those specifications on which attention has been focused by pressure from an individual or group.
The new uniform basic BOCA code can mean tremendous savings in volume production of standardized building materials, accessories and equipment. The new code establishes use groups for structures, uniform for all communities, so that if a building is intended to house a certain number of persons within any given area, the same standards prevail in all communities. The following code test on any given material or combination of materials is the same in Georgia as it is in Montana. If tests prove its qualifications for acceptance under the performance requirements of the BOCA code, then it can be used wherever the code is accepted.

Because this is a performance code, the testing techniques on new materials and combinations of materials is of especial importance. The plan is to have the existing Building Officials Foundation underwritten by BOF until it can become self-supporting. This BOF would become the clearing house which would submit materials, equipment and techniques to accredited laboratories for tests to determine their eligibility under the BOCA uniform code standards. The foundation would logically supervise the tests, assemble reports and make reports available to all interested groups. Work would be carried on closely with the U. S. Bureau of Standards, the Bureau of Fire Underwriters and other established groups issuing reports on standards and practices of interest to the building industry.

No building code, regardless of how good it may be, is enforceable unless it is backed by law. It must be passed on by the local governing body, which is made up largely of individuals with no experience in building or materials. Therefore, it behooves every individual in the building industry to educate himself on building codes and offer his services on local code committees to help the harassed politicians who are striving for the right answers to code problems. Many times there are selfish interests that must be investigated and properly classified regarding code preparation. This problem must be faced whether the interests are labor, material producers, politicians, real estate people or builders and contractors.

The Building Officials Conference of America is one of four prominent groups advancing codes for adoption. Others are the National Board of Fire Underwriters, the Pacific Coast Building Officials (Continued on page 316)
THE erection and sale of low-cost shell houses in Suffolk County, Long Island, during the last building season was an important factor in the large volume of housing completed in that area. A large portion of it was financed under FHA Title I Class 3 provisions.

One of the most successful operations catering to this market is the Long Island Houses and Lumber Co., operated by the father-and-son team of James LoDolce and Charles J. LoDolce, who are selling about eight units per week, ranging in price from $1,375 to $4,500 or $4,850 including a lot. Their basic house consists of a living room, kitchen, two bedrooms and a bath. It is a wall panelized unit, precut and fabricated at a plant near East Patchogue, Long Island.

Wall framing is conventional 2x4 No. 1 fir with studs 16 inches on center. Sheathing for walls and roof is 5/16-inch fir plywood and subflooring is 3/4-inch fir plywood. Corners are braced. Framing is assembled on jigs, some of them up to 32 feet in length. Each side wall leaves the plant as one piece. When drop siding is used for the exterior finish, that is also applied in the shop. Windows are set in the jigs and the siding brought up to them. Windows are then lifted out and moved to the job site as separate units, where they are inserted in the openings and nailed in. Siding shingles, log cabin siding and other materials are used on exteriors besides the drop siding.

In addition to the wall, roof and floor sections, with windows and exterior doors, the basic house includes an oil-fired floor furnace, kitchen cabinets, kitchen sink, electric wiring and fixtures, full bath and shower, bathroom cabinet, and assembled interior partitions with gypsum board. Flooring is asphalt tile. All ceiling gypsum board is

Volume Achieved in Panelized Shell Houses

Long Island builder successfully merchandises low-priced, uncompleted units to the public and to speculative builders. Houses are FHA-approved and many of them financed under Title I Class 3 provisions.
applied and all interior walls in bathrooms are covered with gypsum board in the basic house. Insulation, interior doors, trim and paint are not included. This unit, delivered to the purchaser's site unassembled, is priced at $2,680. For $295 more, the purchaser may buy a package from LoDolce containing the necessary materials to finish the interior including insulation for walls and ceiling, all molded window and door trim, base and ceiling cove molding for the living room. The package also includes five complete door sets—jams and doors prefinished with hardware attached. Sufficient paint and nails are also included.

LoDolce does a complete erection job for those purchasers who do not want to do the work themselves. In fact, most of the sales are made in that manner and are confined to sites within a 200- to 300-mile radius of the plant. The price of the basic house, erected and completed except for decoration, is $4,500 without the lot. This includes a concrete block foundation, a 7x8-foot concrete block cesspool and a shallow well pump with an 18-gallon tank and 300-gallon recovery rate per hour.

The rapidity with which these houses can be delivered and assembled on the site has tremendous appeal to purchasers. The floors, walls and partitions are assembled, exterior doors hung and roof shingled on the first day. On the second day, the plumber is brought in to install rough plumbing and wiring is completed. The third day, after partitions are completed, plumbing appliances and kitchen cabinets are installed to finish the job. The well, cesspool and foundation work are completed prior to start of house erection. The chimney is concrete block with a terra cotta 8-inch flue. The price on this job includes concrete stoops front and rear.

**American Builder, February 1950.**
Two variations of the LoDolce houses being erected and sold in Oakhaven project on Long Island by Dolan & Lewis, Inc. Price of the basic house, 90 per cent completed, on a 75x150-foot lot is $4,900. The model with the unfinished attic sells for $5,540 in the same project. About 120 units were sold here by end of 1949.

The houses, designed by Charles J. LoDolce, are varied price-wise, with the cheapest a “Sunshine” house with no partitions, sliding windows, unfinished floors, sold as a package to be erected by the purchaser for $1,275. The basic house, which has been described above, is advertised as the “Fair Deal” house. During the summer of 1949 a large volume of sales were made on the “Sunshine” house and also on the “Fair Deal” house to individuals and families who erected them as summer bungalows.

LoDolce will sell his houses to individuals, builders or dealers who may erect them in speculative projects or on order. The largest development of LoDolce houses is Oakhaven at East Islip, Long Island, promoted by Dolan & Lewis, Inc., developers. More than 120

Partially completed “Fair Deal” paneled house assembled over a full basement. Note plywood sidewalls and roof decking with bevel siding on gable ends. Sidewalls will be completed with wood shingle siding.

1950 LoDolce house, which will be built with the same floor plan as the 1949 house.

The basic “Fair Deal” house which sells for $3,850 delivered to the site, unassembled but including plumbing material and fixtures, kitchen sink and cabinets, floor furnace, partitions, gypsum board, trim, all interior door units and interior trim. Erected and completed on the site, without lot, but including foundation, coseal, water pump, insulation and double walls. Selling price of the house is $4,300.

American Builder, February 1950.
houses were erected and sold there up to the end of 1949 and plans call for the sale of about 100 in 1950. The basic "Fair Deal" house is erected and sold per cent completed in low-income families, who take great pride in completing the small amount of work left to do, as interior decorating and a few exterior finish additions. The large plots provide plenty of outdoor area for children, in addition to gardens, flower beds and garages. A good proportion of the residents of Oakhaven commute to the New York vicinity for employment. For those who wish to live in Oakhaven and work close to their residence, Dolan & Lewis offer assistance in finding employment for them. 

The LoDolce firm employs about 60 people in the plant and on house erection crews. Framing lumber and plywood are purchased in carload lots. A versatile crew of men from the plant who are transferred to the building sites. When work in the plant calls for more help, some of the men regularly on erection crews can be switched back to the shop to speed up work there.

Power equipment in the shop consists of four radial saws, one small band saw, three table saws, one drill, two mortisers, two powered hand saws, two electric drills, and sharpening equipment for the tools. Four regular trucks and one tractor-trailer unit are used for transporting materials and house parts. The large tractor-trailer unit is used exclusively to haul house sections.

In addition to fabricating house parts in the plant, orders are filled for precut material for contractors and builders in the area. LoDolces are also filling orders regularly for small prefabricated farm service buildings, garages and warehouses.

The Long Island Houses and Lumber Co. operation has grown steadily during the last two years. The increase in business which followed Charles LoDolce's introduction of a model village to the public warranted the use of larger facilities and from there on the business grew to its present proportions.

American Builder, February 1950.
Engineered Conveniences for 20th Century Living

Installation of manufactured and designed-on-the-job convenience features produce added comforts for owner of ranch-style home.

ANGLED wall with large cased opening forms a portion of enclosed porch; this provides protection from inclement weather for entrance door. Full length transom glass panel admits light into entrance hall.

VIEW of open porch at rear of house looking toward kitchen. Sliding doors placed in center of window wall open onto porch. Ventilation is provided by glass louvres placed at each end of window wall. Brick floor of porch is laid in basket weave pattern. White finish of trim and porch roof panels attractively contrasts the dark brown of stucco walls.

American Builder, February 1950
THE Frank C. Sheldon place in Arcadia, Calif., is an example of how special features that are likely to be used in ever increasing volume can be incorporated into medium and high priced homes.

The modern ranch house of today, which has grown rapidly in popularity, extends its livable square footage over a large area on one level. This has a tendency to widely separate the various zones of living, making it difficult for the occupants to easily communicate with each other.

When Sheldon, who is a general building contractor, planned his house, he recognized this problem and made provision during its construction for the installation of a complete Tectalk intercommunication system. Combination receivers and transmitters were placed outside the front door, in the kitchen, in the master bedroom and in each of the other bedrooms. This arrangement makes it possible for the occupants to talk with each other from these various locations, and to answer the front door from anywhere in the house.

Another feature embraces the wiring of the radio so that reception is in the master or master bedroom.

PLAYHOUSE for children is located in a corner at rear of property. It is used as a guest house in an emergency.

American Builder, February 1950
STREET view of house with San Gabriel mountains in the background. Garage driveway culminates in a paved forecourt providing access to garage placed adjacent to front entrance. Exterior walls are covered with stucco painted a dark brown with contrasting wood trim, blinds and trellis painted white. Roof is covered with cedar shingles.

An unusual feature of this plan is the lanai which is separated from the living room by a large planting box and is continuous with and a part of the adjoining dining room. Window wall separates lanai from rear porch. Quiet areas adjust living room.

SECTIONS and elevation of miniature built house and work bench adjoining rear wall of garage. Storage area under counter.

American Builder, February 1950.
can be obtained by turning a switch when the living room radio is turned on.

The Touchplate electrical system is employed throughout. Two sets of relays are located in the attic and a bell wire runs from switches to relays. Small plastic plates that operate at a light touch are used in place of switches.

A TYPE of "Lazy Beam" made by Duransteel Products. The arms swing out and the ways can be rotated to bring the contents within easy reach. Cabinet is vented on floor and ceiling, and is dispro...

A TYPE of "Lazy Beam" made by Duransteel Products. The arms swing out and the ways can be rotated to bring the contents within easy reach. Cabinet is vented on floor and ceiling, and is dispro...
VIEW through large picture window of master bedroom showing landscaped area of rear yard. High woven wood fences extend along rear and sides of property providing a measure of seclusion within their own area. Planting area inside of rear fences is kept neat with the aid of wood barricades.

VIEW in inset below. This room is separated from living room by large planting box. Rear wall of insets is entirely of glass with sliding doors in center of wall. Ceilings of both rooms are faced with three-inch-wide T. & G. boards painted a beige shade.

VIEW in breakfast nook adjacent to kitchen. Additional cabinet space is framed around fixed translucent glass panel in window. Display space is provided by plate glass shelves in front of window. Interesting night effect is obtained by recessed light fixture in beam unit.

American Builder, February 1950.
Every room in the Sheldon house has a number of manufactured or designed-on-the-job features. Storage walls, cabinets and cupboards are provided for every possible use. Drawers and shelves built into wardrobes take the place of loose furniture in bedrooms; towel storage with open glass shelves above are built into a recess in the bathroom. A storage cabinet on one wall of the garage provides space for seldom used articles.

The owners' love for plants and flowers is shown by the number of built-in flower boxes. A large free standing box forms a separation between living and dining room; another is located in entry; still another is built into sill of kitchen window.
MOTELS—A Big Opportunity for

By James V. Malone
Managing Editor,
American Motel Magazine

As popularity of these units increases, so increases the demand for attractive design, better materials and workmanship.

One of the country’s most rapidly expanding industries and one which is scheduled for its greatest period of growth within the next five years is the motel industry.

Some estimates show that there are now about 20,000 motels or tourist courts averaging 22 rooms each for more than half a million units. By 1952, according to these estimates it is expected that motel units will total 1,400,000, and that the bulk of these will continue to be in the luxury class with an average of 42 units each.

Luxury motels of the type now common in the south and southwest are growing in number in the north and east. Construction costs per unit

Split redwood screen separates terraces at the Holiday Inn Motel, Long Beach, Calif. Exterior walls of these buildings are natural redwood, while attractiveness of the fronts is enhanced by the use of floods glina. Trim is painted matched green. Window frames are sage green.
Builders

are variously estimated at between a low of $1,500 to $5,000, with one job in Dallas, Texas, now under construction, costing more than $11,000 per unit. The newness of the motel idea and the speed with which it is growing is another one of those marvels of American public service which creates for the building industry an unrivaled opportunity. Motels are not only going in for the very finest in planning and materials but for the very latest developments in all types of building service: plumbing, heating, air conditioning, lighting, kitchen equipment, and, of course, for all the extras in furnishing and decorating.

A recent study by American Motel Magazine shows that among existing motels 23 per cent have investments, exclusive of land value, of more than $30,000, 30 per cent fall into the $50,000 to $100,000 class; and 30 per cent have investments of between $25,000 and $50,000. Only 2 per cent have investments of between $10,000 and $15,000.

Preference by travelers for motels is especially marked according to American Automobile Association figures. In 1937 tourist court accommodations were preferred by only 12% per cent of the motorists on the road. In 1945, this figure had jumped to 38 per cent. Since 1945, with the growth of better motel accommodations and capacity business still being done by motels, it is clear that preference for them has again been enlarged.

The average motel investment for 1948 was more than $69,000, a $20,000 increase over 1947. This figure will show another increase in 1949 over 1948.

Planning Plays A Big Role

Parallel with the increased demand for motels on the part of tourists is the increased competition among motel owners. These proprietors must vie for the tourists' trade with superior locations, appealing design and landscaping, more services, and other desirable features. Motel construction in each instance involves problems particular to the area, but in most cases many of these can be overcome by planning ahead. Experiences of those who developed and completed the attractive Holiday Inn Motel, Long Beach, Calif., point up the fact that initial planning played a leading role in the success of the motel.

Architect O. A. Pearce, when considering the building of Holiday Inn, American Builder, February 1950
REQUIREMENT by the owner of the Queens Court Motel units was that they be as fireproof and storm-proof as possible.

SECTION of floor plan shows typical units in the Queens Court Motel owned by Jesse Newton in St. Simon Island, Ga. Notice that additional small room may be used with one of the units. This may be used as a bedroom, while large room may be used as living room. Plot plan shows how owner took advantage of land to provide privacy for units.
felt that many tourists would prefer quiet, homelike accommodations rather than the hustle of the busy hotels or the rather commercial coldness of many motels. In preliminary discussions with the designer, this and other related factors were given careful consideration.

First, while the location was good, being far enough from the main highway to insure quietness, some means of attracting the tourist from the highway was necessary.

Second, due to government building restrictions then in effect, the design had to include housekeeping units (living-dining, bedroom, bath and kitchen) which could be converted at a later date to more usable single and double apartments.

Third, the designers believed that since most tourists come to visit friends or stay for the season, every effort should be made to induce them to remain at the motel for the duration of their visit.

The first consideration being to attract tourists, the exterior materials, colors, landscaping and architectural details were planned to be eye-catching, yet subdued and inviting. The large expanse of lawn and tropical planting against natural redwood walls is a welcome contrast to glaring white stucco of many average motels.

The entrance drive placed at one side leads to the alley and carports. All apartments face the center garden and each opens to its own patio shielded by redwood fencing and planting. Grey-green window trim harmonizes with the landscape. The greyed charrette doors and the long thin black coping add a note of color.

All apartments except the manager’s and owner’s are a repeat plan for construction economy. All kitchens were equipped with double plumbing so they could be easily converted to baths when controls were removed. Connecting doors allow rental as a single or double unit or two singles.

Many of the exterior colors and materials are repeated on the interior. Redwood walls are contrasted with others of combined wood and colored stucco. Floors throughout are waxed colored concrete.

The buildings are built on a reinforced concrete slab placed over a 5-inch crushed rock fill. Wood frame construction, used throughout, is based on a 3-foot modular system. All outside walls are supported by 4x4-inch posts, 6 feet O.C. except for window posts which are three feet apart. All windows and other openings are three feet wide. Sashes are set in movable frames. Fluted glass in front is fixed by means of wood

American Builder, February 1950.
MOTELS . . .

steps. Interior partitions are framed with 2x4 studs, 16 inches O.C.

Carport for these motel units consists of a roof supported by 4x4-inch wood columns. An enclosed storage and laundry area, situated in the center of the carport, forms a division for parking space allotted to each building.

Design For Desired Clientele

An example of how both location and design were selected to appeal to a particular type clientele is represented in the Queens Court motel units, St. Simons Island, Ga.

Queens Court is located in an elite section where a great many tourists demand deluxe accommodations. Architect R. William Marshall designed the three buildings on the property to meet exacting tastes and definite requirements. Simple straightforward design is enhanced by ornamental iron railings on stairways from ground level to upstairs units in the two story buildings, and in graceful horizontal lines made by overhangs and Spanish type balconies.

A definite requirement by the architect was that the buildings be as nearly fireproof as possible; another, that they be storm-proof. This was accomplished by using masonry construction throughout. Exterior walls, of common brick, are 8 inches thick, as are masonry partitions between motel units. The buildings have reinforced concrete slab floors.

COMPLETE built-in kitchen feature Bob Steele Motel near Burlington, Wis.

FLOOR PLAN

FLOOR plan of Bob Steele Motel shows how closets, built-in kitchens and bathrooms provide sound-proofing between units. Exterior view, below, shows U-shape of court. Lot is large enough to permit an addition which will form a W-shaped building.
**Motel Built to Expand**

A U-shaped motel building, on a lot large enough so that another wing may be added to form a W-shape, has proved profitable to the manager-owner of the building near Brown's Lake and Burlington, Wis.

Though the owner, Robert Steele, had six years experience in motel management and knew much about construction and design factors needed for a successful motel, to develop his ideas he worked closely with Architect Alfred H. Siewert, of Milwaukee, and with Schmidt-Bushman, Inc., local builders of Burlington. As a result, plumbing, heating and wiring of the new addition, when Steele decides to expand his business, will not add an unusual expense. The existing heating unit is amply large for the new addition, as are existing sewage, parking space, laundry and storage facilities.

The gas-fired heating unit supplies hot water through pipes embedded in the concrete slab floors. These pipes are connected to convectors in each room which may be partially controlled by occupants.

Exterior walls are 8-inch concrete block. Foundations are supported on 8x24-inch footings placed four feet below grade. To provide soundproofing and service to clients, a built-in combination kitchen arrangement and a bathroom forms one partition in each room, while a built-in folding bed and clothes closets form the other. Interior of exterior walls is furred out, with lath and three coats of plaster applied. Ceilings are insulated with thick batts placed between joists. Roof covering is 210-pound asphalt shingles.

**Building Products on Review**

- **Plexi-Module ceiling lighting system** by Sylvania Electric Products, Inc., 155 Fifth Ave., New York 17, N. Y. Photo above shows how lighting system is plugged into ceiling duct and in turn attached to lighting fixture. Panels are suspended on chains from channels embedded in the slab.

- **Nova-Shingle, Nova Sales Co., Trenton 3, N. J.** A 16-inch exposed roof tile designed to eliminate不需要不需要的

- **Clarendon metal mouldings**, B. D. Warner Co., Inc., 395 Fifth Ave., New York 17, N. Y. Photo above shows twenty different style wallboard and wall lining shapes and products available in thirteen different styles.

- **Attached bulldozer blades**, B. G. Lafourneau Inc., Paterson, N. J. Bulldozer blade attached to Bulldozer A Roadster Tonnage and is suspended in front of machine. Blade is attached to machine by switch mounted on overhead panel. Blade can be raised or lowered.


- **Upson laminated fibre panels**, The Upson Co., Lackport, N. Y. Products include panels for full wall construction, for covering cracked or broken plaster ceilings. Fibre tile for baths and kitchens, 3/8-inch panels for general use. Panels attached with floorboard fasteners.

- **Master Universal Woodworker**, The Master Woodworker Manufacturing Co., Detroit 26, Mich. Twelve machines combined in one, it is complete woodworking shop in itself. Does crosscutting, ripping, jointing, dadoing, routing, planing, boring, sanding, rebating, mitering, other jobs.

- **Meyer engine-driven "HV" Series centrifugal pumps**, The F. J. Meyer & Bros. Co., Ashland, Ohio. Delivers large capacity against reasonable pressures, in hp and one hp X 100, this efficient pump is made in sizes 5" and 6". Line pumps and water systems for shallow or deep well use.

*American Builder, February 1950*
TO ALL intents and purposes, Southern Florida is a one industry region. Its inhabitants and for that matter the great majority of its visitors are engaged in the vocation of selling sunshine. And so good a job is done in the Floridian’s chosen occupation, that the Nation wears a path to its portals during the winter season and many thousands remain to make the State their permanent place of residence. Florida visitors and immigrants are not confined to the rich and the financially independent but cover every walk of life, all intrigued by a mild climate and freedom from the rigorous physical problems of the North.

Housing Program Enormous

To meet the epic influx of visitors and settlers permanent and transient housing is being provided in enormous quantities. Hotels of all descriptions, in number exceeding the cities of New York or Chicago, within the limits of the City of Miami Beach alone, apartment houses and apartment hotels, row housing, duplexes and finally thousands of single family dwellings are rising like mushrooms in the night, to meet the purses of all, from America’s tired millionaires to the lowest workers. It would appear that practically every outstanding name of American industry is inscribed on the portal of some Florida mansion.

Opportunities for the Ordinary Citizen

For the ordinary citizen of the middle income group, Florida offers maximum facilities for the purchase of a home. The fact that the State exempts from taxation the first $5000 of the assess valuation of every home offers near freedom from real estate taxes to the buyers of the lowest price homes and a major reduction in monthly payments to all others. As a rule, Florida home seekers have found that the monthly payments on purchased homes have been considerably less than the rental of quarters of corresponding areas, and since veterans can usually purchase without or with very small down payments, home purchase has been the rule.

A Man-made Domain

From the air, Southern Florida looks like one tremendous archipelago where some giant jump from island to island to keep his feet dry. Miami Beach, a city of unknown size varying from an approximate one hundred thousand in the summer months to half a million during the height of the winter season, is largely built upon the same sort of ground as the lake front parks and boulevards of Chicago. A sand sucker is put to work transferring the ocean’s bed to the formation of islands. In this manner the city is built upon some 38 islands, 28 of which are man-made. Causeways connect the city with Miami on the mainland and the channels between the islands are spanned with frequent bridges.

Flat Country Has Problems

An elevation of from four to five feet above sea level is presumed by Florida engineers to render land and buildings safe from hurricanes and tidal waves as they create. A few miles from the coast the land sometimes reaches an elevation of from 12 to 18 feet, and becomes something to talk about. Builders advertise homes as being 10 to 12 feet above sea level. The extensive areas of flat land creates such a drainage problem that sewers are constructed only in the denser portions, while all residences built around the perimeter depend entirely upon septic tanks.

The Air Is Also Pure

Southern Florida is remarkably clean. After a number of years, buildings still look newly painted and in better surface condition than Chicago structures after one winter season. This is true because there are no smoke belching industries and no heating systems of any consequence. The largest heating plant observed in small dwellings was a reflector electric wall unit installed at a cost of $25.00.

Citizen Employment

Aviation; the growing, marketing and preserving of fruits and vegetables; fishing to a limited degree, except sport fishing, which has shown an extensive development and the feeding, clothing and housing of thousands upon thousands of visitors, constitute the occupational pursuits of most of the people. The Chambers
of Commerce at all times seek to keep permanent residents in gainful occupations the year round. On the other hand the Personnel Agencies are constantly seeking temporary positions for winter transients. This sort of competition keeps some workers in a constant state of mental distress lest their jobs be taken from them by outsiders. However the spirit of optimism that possesses everyone coupled with the great asset, easy living, subdued apprehension and holds the population intact.

The Lowest Priced Home

The best home "buy" observed in the Miami area was a two bedroom, 720 square foot house that is selling for $5,750, including a 70x100 foot lot. The house is of concrete block exterior faced with stucco and plastered direct to the blocks on the inside. The blocks rest upon the perimeter of a concrete slab covered with asphalt tile. Ceilings and roof are formed by 2x6 rafters 24 inches on centers supporting 1x6, tongued and grooved, beveled and dressed sheathing. The sheathing provided both the ceiling and the roof platform. To the platform is applied a built up roof of felt, asphalt and crushed stone. The pitch of the roof and the ceilings as well is one inch in 12 from the center of the building. Windows and the entrance door are of "Louverlite" (glass louvers in aluminum frames). The selling price includes range, refrigerator and venetian blinds.

Another Sound Value

Another model home representing a

(Continued on page 180)
Economy House with Alternate Plan

To provide a livable two-bedroom house with an expandable roof line that can be built economically was the basic thought for this month's blueprint house.

ECONOMY without loss of living area was the prime consideration of Walter T. Anicka, architect of Ann Arbor, Mich., in designing the current blueprint house.

The house contains 1020 square feet of floor space including partitions. Space is arranged to provide the greatest amount of comfort and convenience for the occupants. The reception hall, placed in the center of the plan with a side entrance, provides immediate access to all rooms. The living-dining room and kitchen face the street with bedrooms overlooking the rear yard, away from the noise of the road.

Features in the alternate plan include a fireplace with exposed brick surfaces on three sides, and a wood grille on side of living room opposite the opening, with cupboard below. The alternate plan provides for a basement under the front end of house, approached by a stair that is placed in the area containing heater as indicated in the basic plan. Heater and laundry service are located in the basement.

To provide for additional room, and yet not increase the square foot ground area of house, the designer altered the roof pitch to establish sufficient head room for a fair sized bedroom and closets. The increased roof pitch enhances the exterior appearance of the house.

The exterior of the house follows in general the pattern of design used by Anicka and which has found a ready public acceptance. Sidewalls are covered with wide horizontal wood siding, featured areas are covered with plywood and vertical wood battens. A 5-12 roof pitch is used for the basic house, and a 9-12 pitch for the expanded unit. Asphalt shingles cover the roof.
High Cost Homes Find Ready Sale

In Toledo, like almost everywhere else, there is a need for large scale low-cost housing. In Toledo, a city with its share of unemployment, you would expect, and rightly so, that its citizens are cautious spenders. All of which doesn't sound like a ready market for new homes in the $12-40 thousand class—but one builder has proved that it is. Scholz Construction Company, a spanning new organization, in 1948 sold over a million dollars' worth of new homes and, in the year just past, topped the '48 mark.

President of the company, Don Scholz, aggressive young mechanical engineer who forsook the industrial field for home building has what he believes is the answer to the firm's success: "Interesting design—because exterior appearance sells—quality workmanship, and service."

Giving value in good measure is no magic formula, but to Scholz Construction it has sold more than 250 homes since the company was formed in 1946. This, without the use of any regular salesmen and a minimum of advertising. The volume is predicated on the time-tried truth that a satisfied customer is the best salesman.

Big, hard-working Don Scholz believes in interesting design and his houses are graphic translations of sound attractive styles from blueprint to frame and stone and brick. The houses are, for the most part, colonial-ranch-type one-story or story-and-a-half-dwellings, of a combination of two of these three materials. He has built what he considers is the longest ranch-type house in Toledo—a 113 footer, and has also included a sprinkling of modern design homes in the jobs the company has turned out since 1946.

Scholz utilizes new building techniques and products in adhering to the theory that interesting design sells. Glass block is found in nearly all of his homes, used functionally as well as decoratively in garages, kitchens, snack bars, utility rooms, bathrooms and on the street side in places where daylight is desirable, yet privacy is wanted.

In many instances he has utilized interior glass block partitions to "borrow" daylight from an outside room, thus brightening up what would otherwise be a dark corner. With no set pattern of architecture and no two houses the same, Scholz Construction does not use a mass production technique. However, all the homes are built according to efherent, workable plans which are of mutual benefit to both the builder and home owner. The company regularly employs 35 carpenters to make up the three crews it uses. One crew does the rough framing. A second crew does the
lowed by the third and final finish group of Halz's workers.

Subcontracts are let for plumbing, electrical, and metal work. The heating units are of radiant heat and pipes imbedded in the concrete of the floor.

Recently Scholz has been installing underfloor plenum heating systems in basementless houses. A reverse flow furnace feeds heat into the space between the wood floor and the ground beneath the house. The heat is admitted to the rooms by baseboard registers. The earth beneath the house is covered with two-inch crushed stone and an aluminum foil blanket is laid over the stone to complete the insulating job. Furnaces in the Scholz houses are either of the oil or gas type. Rock lath with aluminum foil backing is used for sheathing, with Fiberglas blankets in attic floor.

Scholz homes feature attached garages with many of the garages built into the continuous lines of the house. Local building codes require a fire-resisting wall between attached garages and houses, and Scholz uses a flush-type wood-faced door with an incombustible mineral core. This door withstands a one-hour fire test, thus it conforms easily to the local building code and is an attractive replacement for the old cement-asbestos faced door previously used.

Scholz Construction has two major developments completed. The first, Ottawa Plains Estates, is an attractive tract of 88 houses about 10 miles from the heart of the city. When the project was in its early stages, Toledoans by the score caused Sunday traffic jams, winding through the paved streets of the development in an interested, curious motorcade. It was at this time that many of the houses sold themselves. After the prospective buyer had been impressed by the design of the Scholz-built homes, an inquiry at the company office (a small building of construction similar to the homes) disclosed that Scholz could offer a complete "package" transaction including design, building, financing and an unwritten guarantee of construction.

The second major Scholz project is the Talmadge Estates in Ottawa Hills. The homes here are in the higher price range and for the most part are interspersed with other homes in this residential area.

The enthusiastic tenants of the

**Window of Insulation**

*American Builder, February 1950.*
Another customer relations touch that has won the confidence of home buyers is the personalized service Don Scholz offers in his capacity as president of the organization. He designs most of the houses, assisted by a young designer, Robert Wahl. Scholz also handles the financing, the general supervision of construction and spends some of his time on sales.

Vice President of the firm, an able assistant to Mr. Scholz, is Lawrence Prince, an engineer who worked with Scholz in Hartford, Conn. during the war. They foresaw the opportunity in the home building field and left industrial work to return to Scholz’ home in Toledo to begin their new business.

Together with Scholz’ father, who died in 1946 and Frank Snyder, finishing supervisor, they formed the new company.

Scholz Construction is a member of the National Association of Home Builders and finds the Association extremely helpful, particularly with labor contracts.

In January Scholz had a unique display at the Toledo Home Builders and Industries Exposition which was held in Toledo’s Civic Auditorium. The firm constructed a home 71 feet by 24 feet, of a typical Scholz design. The materials were supplied gratis by the company’s usual suppliers, the home was landscaped, and a large department store furnished it.

The problem of getting the house inside Civic Auditorium was solved by prefabricating it in 16 foot sections and then erecting it within the exposition building in about a week.

American Builder, February 1950.
Methods used in heavy construction are applied to mass small home building operation with effective results by ex-army engineer

JOHN BONFORTE, one of the largest builders of homes in Colorado Springs, Colo., has been constantly expanding his building operations since his release from the army engineer corps in 1945. In that year he set up and completed a schedule of 10 two-bedroom houses which he sold for $7,450 each. His next group of houses numbered 25. Built in 1946, they contained two bedrooms, full basements, and were listed for $9,200 to $10,000. In 1947 he moved into the $12,000 class. He built 12 of these homes in addition to four four-bedroom and two-bathroom houses that sold for $13,000 to $17,000. Late in 1947 he dropped back to a two-bedroom house that sold for $7,350. Twenty of these homes were built.

THE three-bedroom houses vary in appearance as shown in photo at left and below. A combination of stucco and siding is used on facing for one house with horizontal siding for the other. Floor plans apply to house shown at left. Room arrangement varies slightly in house below.

American Builder, February 1950.
They were sold complete with range, refrigerator and washing machine.

The Bonnyville subdivision was started in 1948 on 100 acres of level ground on the north limits of Colorado Springs. A total of 90 houses were completed in that year with an additional 49 under construction. 1949 saw Bonforte move into high gear, with 150 houses scheduled and 125 under way. The houses are two- and three-bedroom homes complete with range, refrigerator and automatic laundry. The two bedroom house sells for $8,100 and the three bedroom unit for $9,775. These prices include concrete curb, gutter and sidewalks.

Bonforte has found that the demand for new homes in 1949 was as good as 1948. Sales, which are handled by his own organization, are four months in advance of construction. Approximately 20 per cent of the purchasers are members of the armed forces who are permanently established in Colorado Springs.

The designing of the houses, which is all done by the builder, does not represent a radical departure from the norm, but rather adherence to variations of a simple, conventional type acceptable to all classes. Four different styles of exterior treatment are available in each of the two types that are built in this development. Exterior facing materials used are stucco, painted wood siding, stained redwood siding and asbestos shingles. Asphalt shingles are used in a variety of colors on all roofs. Bonforte appreciates the sales value of large picture windows and frequently employs their use, especially

American Builder, February 1950.
in areas that are protected from the glare of sun, such as porches.

In the erection of these houses conventional methods are used. A large cutting shed is maintained adjacent to the office where power equipment is operated by a trained crew that pre-cuts all dimension lumber from a prepared chart. The lumber is picked up by truck and delivered to the building site in a prescribed amount to complete a particular phase of the work.

Each phase of the construction is handled by a special crew which is confined to doing a single task on each house. This method is a constant challenge to Bonforte to keep up his sales to keep ahead of his mechanics. Special crews are set up as follows: two carpenters and two laborers are assigned to foundations and form work, two carpenters for floor framing, four for superstructure including roof framing, two for wall sheathing, two for exterior cornice work, two for window and door frames and miscellaneous items and one for laying roof shingles. This gets the house under roof ready for the plasterer and other trades. Building operations are conducted in a manner to keep all work moving along smoothly. Assur-
FOOTER forms for foundation walls are leveled accurately. 4" x 8" x 7/8-inch-thick plywood forms are numbered for re-use without delay. Double 2 x 4 walers, supports' and heading hold forms straight

A rather ingenious progress chart has been devised by Bonforte to keep an accurate account of the daily construction work done on each house.

A large piece of cardboard with the various symbols indicated on it is posted on the wall of the office. A record of each house is kept in the file on which is drawn a rectangle representing the house. As the work progresses the respective symbol indicating its phase of work is filled in on the drawing. In this manner a person who is familiar with the chart and symbols can in a moment know the progress of any particular house in construction as of that day.

Materials in the Bonnyville development include: U.S. Gypsum insulated Sheetrock; Johns-Manville asbestos shingles; Texaco and Certainteed asphalt shingles; Curtis storm and screen doors; Andersen double-hung windows; Chamberlain weatherstrips; Libby-Owens Ford glass block; U.S. Gypsum rock wool insulation; Benjamin Moore paints; hardware from three manufacturers--Kwikset, Stanley, and Schlage; Anserak kitchen cabinets; both Crane and Kohler plumbing fixtures; Coleman 30,000 BTU dual wall furnaces; Continental hot water heater, Armstrong linoleum; General Electric refrigerator, range, automatic laundry and electric clock; Telechron door chimes;

American Builder, February 1950.
A LOW COST house of high quality was the aim of Horrie B. Culpepper of Tallahassee, Fla., head of the building organization that bears his name. The "cabinet-wall" house designed by Gilbert D. Spindel of Jacksonville, Fla., offered Culpepper his greatest opportunity for reducing fixed costs through the extensive use of built-ins and site fabrication.

Being a rather practical individual Culpepper was unwilling to venture out into a full scale operation until he had a chance to feel the pulse of the public. A model house was built and completely furnished. The response was more than gratifying as 23 signed orders were received before the model was completed. The enthusiasm continued unabated during the open house and the orders continued to increase.

Capitol Hills, which is now a fully developed subdivision, contains an area of 53 acres. Work started in 1947 and up to the time of the model house, 70 houses had been built. Since then 50 additional cabinet wall houses have been completed or are now in the process of construction. The prototype of the model house is offered to the veteran for $7,270.66 with a down payment of $270.66 and monthly payments of $43.16 for 25 years. Additional refinements to the base house may be ordered during the construction period for an additional amount.

The fact that this builder's project is close to lumber producing areas prompted him to take advantage of the economies this situation invited. Being the largest customer of a mill located only 20 miles from his base of operation Culpepper sends a crew of his own men to the mill to salvage the by-product consisting of culls and droppings. These are short lengths of dimension lumber that are cut for...
specific purposes. Culpepper has his crew make up the rough framing unit of doors and windows from floor to ceiling at the mill using the cutters for cripples. The work done at the mill includes corners, tees, studs, floor joists and trusses. These are loaded in an orderly manner for delivery at job to be available to the mechanic as he needs the material. Lumber is distributed around the house and walls are then built on the ground and tilted into position on the floor.

The cabinet-walls that are used so extensively in this house eliminate the need of interior wall construction. These units include in their built-in features articles of furniture that help toward reducing the amount of money required by the purchaser for furnishings. This is an important fact often overlooked by the builder but seriously considered by earnest prospective buyers.

Materials used include JM Rockwood insulation, U.S. Gypsum RockLath, Gold Bond metal lath, Flintkote asphalt shingles, Sherwin-Williams paints, Russwin hardware, both American Standard and Briggs plumbing fixtures, Jet-Flow space heater, Rheem hot water heater, Philip Carey metal medicine cabinet, Formica counter tops, R.O.W. windows, Higgins toilet seats, Pittsburgh Plate Glass Co. glass, and Vulco aluminum screens.

American Builder, February 1950.
Memphis builder includes practical built-into-the-structure features, made possible by close supervision of men and materials.

The technique of increasing sales-appeal of low-cost homes by offering some features normally found only in expensive housing is being practiced widely by builders throughout the country. Robert Parish of Memphis, Tenn., a strong proponent of the method, found ready sale for a project of 21 five-room $6,775 houses in which were incorporated oak flooring on a concrete slab, plaster walls, oversized rafters and ceiling joists, roof and sidewall insulation, 756 square feet of floor area plus 250 square feet of attic storage space, a disappearing attic stairway and other features.

The price of the house includes a 65x115-foot $1,000 lot. It was built at a cost of approximately $7.64 per square foot. Parish bought materials carefully and supervised the project closely, taking care that waste and delays were cut to a minimum.

Construction details and floor plans are essentially the same for all of the homes. Conventional methods were followed for framing the roof and sidewalls, which include gables over projecting wings, cut into the main roof, and diagonal bracing in corners of exterior wall-framing for added rigidity. Since the construction crew was well-trained in this type of work, it was done without extra cost.

Drop siding of uniform width...
FLOOR plan shows good-sized living room, four large closets. Rough-ground tile provides 250 square feet of storage space.

was used for each house. Stereotyped exterior appearances were avoided by varying the siding on adjacent houses. Widths of six, eight and 10 inches were utilized.

All interior walls are built up of 2x4 studs, with three coats of plaster applied on both sides over gypsum lath. The bedrooms, living room and dining room are papered; and walls and ceilings of the kitchen and bath are covered with one prime and two finish coats of enamel.

Ceiling insulation consists of four inches of mineral wool, while insulating board sheathing, 1/4-inch thick, provides wall insulation. All windows and doors are weatherstriped.

The floors are select quarter-sawn oak, 2 1/4 inches wide and 25/32-inch thick. They are nailed to 2x4 saps which are spaced 12 inches O.C. and bolted to concrete slab. A coating of hot asphalt was mopped on the 4-inch-thick concrete slab which serves as a subfloor. Beneath the slab is a 12-inch gravel layer between the fill and the concrete slab is a layer of 30-pound felt half-lapped and mopped in with hot asphalt. Felt extends to the outside of the exterior foundation wall.

Exterior walls are 9 inches thick, supported by a continuous 8x20-inch concrete footing, 13 inches below grade.

Rafters and ceiling joists are 2x6 inches, with the former 20 inches O.C. and the latter 16 inches.

The kitchen has a series of built-in wood cabinets extending three feet high on the wall over the sink and at both sides of it. The floor covering is linoleum. Aluminum screens and frames are provided for all windows.

Financing in each case was with a $6,000 25-year FHA loan, plus a veterans loan for the remainder. No down payment was required and monthly payments are $50.

American Builder, February 1950.
Keeping One Step Ahead of Builder Needs

Operation of one of largest lumber firms in Wabash Valley, directed by a woman, is characterized by neatness, local confidence, enterprise.

FOR the past thirteen turbulent years, a woman has guided the affairs of the Pawley Lumber Company, Inc., of Terre Haute, Ind. Immaculately clean yards, spic-and-span stock arrangements, and fresh paint are testimonies of the feminine touch. Exemplary employee relations, eight fine lumber yards, a growing volume of business, and the newly remodeled general offices are proof of the success of this womanly tutelage.

Mrs. Elsie Pawley took over the management of the Pawley Lumber Company after the death of her husband, Stephen H. Pawley, in an automobile accident in 1936. The organization was originally founded in 1893 when the first Stephen Pawley and his son, D. H. Pawley, purchased a lumber yard in Dana, Ind. Shortly thereafter, Stephen H. Pawley, son of D. H. Pawley, became a member of the organization, eventually assumed its leadership, and expanded the business to include a total of seven yards throughout the Wabash Valley region of Western Indiana. Another yard, formerly owned by the Pierson Lumber Company, was added in 1943 by Mrs. Pawley.

The policy of the Pawley Lum-
The new building shown in the photograph (top, left) houses the general offices and the local office of the north Terre Haute yards. The semi-circular section was especially designed to utilize the acute angle portion of a trapezoid-shaped lot without distorting the rectangular pattern of the rooms. The glass used in this section was manufactured by the Pittsburgh Plate Glass Company. The overhead door which also enhances the facade of the building was manufactured by the Overhead Door Corporation.

The general contractors for the office building were C. H. Garmong and Son, Terre Haute. The sheds were constructed by Fred C. Libbert.

The first floor rooms of the office building are equipped with indirect fluorescent lighting, 3/4-inch acoustical tile, and asphalt tile flooring. Second floor rooms are decorated with varying colors ranging from drab gray to cream. One of the rooms on this level serves as a reception room for customers. An automatic hoist has been installed in this new building to facilitate the removal of cinders and refuse from the basement.

The company does build hog houses and similar small farm sheds during winter months, especially. Since the company operates two mill shops and employs two full-time carpenters, the construction of these small buildings assures a year-round supply of work.

Evidence of success under Mrs. Pawley's management is afforded by the volume of business done. In addition, the number of persons employed has increased from 37 in 1936 to the present total of 67. The organization operates a fleet of 24 trucks.

Each one of the eight yards is under separate management. As a consequence, each yard is equipped to meet its local demands with a fair degree of understanding.

American Builder, February 1950.
Selected Homes

Biving

Special Features

Add to Appeal
Of Modern Home

Small architectural details combined with bright colors make this an attractive house, both inside and out.

EXPOSED rafters in living room are painted green; walls, gray. Dining alcove, right, is separated from kitchen by a counter.
ATTRACTION color, ample storage space, adequate advantage of a site, and go «x! Getatis are the small architectural commendable features of the home from the front ts the open canopy extending 18 feet from the wall of the house, resting on a brick retaining wall at the edge of the lawn. The 2x10-inch framing members are painted white. To the right of the entrance is another framework of 2x6's, on 24-inch centers, five feet long. Above them is a 2-foot overhang which goes across the entire front of the house. The front is stucco painted gray except for the boards and batts on either side of the door. These are white. The garage front of boards and batts is also white. The low pitched roof is covered with white gravel.

The massive front door is five feet wide and two inches thick and is weather stripped. To the left of the entrance is a guest closet with sliding doors eight feet wide. To the right is a similar closet which houses the water heater and furnace. Other storage space includes a wardrobe closet in the children's bedroom, additional wardrobe and closet space in the dressing room which is combined with the bath.

Over the living room, roof rafters are exposed giving a studio living room effect. The plastered portion of the ceiling is painted yellow; rafters are stained green, and walls are gray. Above the 2x10 roof rafters are 12-inch tongue and groove boards, also stained green. The 2x7 stringers below are five feet apart and extend to the outside of the house to form the pergola.

Construction was done by Burke & Wyatt, local builders.

U-SHAPED kitchen has yellow walls, green ceiling, yellow and gray rubber tile floor

American Builder, February 1950.
Recession? Depression? . . . Nuts!

SINCE we opened three weeks ago, over 30,000 persons have visited Continental Ridge in River Ridge, N. J. They came despite depression or pessimism, despite the myths that these should be a black time in real estate. Most important of all, many came despite warnings about the alleged recession or dire forecasts of economic declension.

The 75,000 were a wide cross-section: housewives, professional men, mechanics, salesmen, clerks, housemen—folks like you and me. We talked with these people. They said nothing about economic bogeys. They told us, instead, that they were tired of waiting, of watching, of being crowded out. We heard the words of those on whose behalf we are speaking.

They made it clear that they were ready to invest, if the price was right for a fair price. Thay have just that at Continental Ridge. We are selling at a clip that gives the bargain-hunter the many advantages of recession and depression. In fact, the 500 ranch-type homes at Continental Ridge are being gobbled up so fast that—long before the first frost—result—will be sold out.

There's really value in happy, cushioned bust of the truly unaltered ranch-type homes at Continental Ridge. It's reflected in the compact, time-saving construction. It's embodied in a wealth of features—like a sheet-bonded kitchen with an exalted line of Conover built-ins, easy-of-care slate and steel cabinets, a bath with colored tile walls, floor and fixtures; floor-tortelling windows—wall overlooking a rear patio, air-conditioned heat, and an array of other features too long to enumerate.

There's really value in the beautifully landscaped plans, 75x100 or larger. It stands out in the 8 distinctive exterior designs that range from the traditional to the modern. It's emphasized in the beauty of the shaping country uplands. And it's utilized in the location—only 15 minutes from the George Washington Bridge and 20 minutes from Times Square.

After you see Continental Ridge, you will agree that the price is fair. As little as $75 a month covers the usual charges on the 2-bedroom home at $19,900. The 3-bedroom home is $29,900. There is no down payment for veterans, but extremely easy terms are available for non-veterans.

Real value for a fair price. That's Continental Ridge. That's why we can give a commanding "Nuts!" to those who would make much ado about such nothingings as recession or depression.

Continental Ridge
A project of the Eagle Construction Company
Radnor Road and Howeland Avenue
River Ridge, N. J.

Editor's Note: This advertisement, executed by Towne Advertising Associates of Hackensack, N. J., was published Aug. 1, 1950, in the New York Times and New York Herald-Tribune. It brought out more than 50,000 persons. It is reproduced here as an example of what boosters, salesmen, and brokers believe a good display advertisement about development homes should contain.

DRAWN by a highly skilled artist, this illustration is prominently featured to catch the reader's eye and also to acquaint him with the type of home being advertised. Dramatically highlighting architectural features and setting, the picture is calculated to give the reader a highly positive impression, thus paving the way for his acceptance of the copy's message.

PROVOCATIVE headline, embracing unusual theme for real estate advertising, is intended both to attract notice and pique reader's curiosity so he will read rest of advertisement.

LIBERAL use of white space, not only in margins but between lines, paragraphs and other segments of the advertisement, provides contrast, another device for compelling notice. It also heightens readability and lends dignity.

FORMAT is simple yet attractive, suggesting strength and dignity. Advertisement is characterized by absence of overly-quilted pattern that gives much real estate advertising cluttered, cramped appearance and discourages readership.

COPY, as suggested by headline, develops unusual theme, exploiting what was then a question of extremely wide interest, even concern, to virtually everyone. Treatment represents adaptation of journalistic technique to advertising. Style is snappy and convincing, with absence of overworked, hackneyed words and phrases that weaken credibility of real estate and other types of advertising.

SMARTLY designed signature, composed of simple elements, is intended to impress identity of builder-developer and his product on reader's memory.

WRITTEN mainly for New York audience, directions by car and bus are clear and precise.

American Builder, February 1950.
There is a big flaw of omission in the old adage that the world will beat a path to the door of the man who makes a better mousetrap. To be wholly true, the adage should add:

1. If it is simply but forcefully explained why the mousetrap is better.
2. If clear, explicit directions to the door are given.
3. If the maker of the mousetrap is properly identified.

No product—whether the most ingenious mousetrap ever contrived or the finest house for the money ever built—will evoke public demand unless the world is told about it. The process of telling consists, for the most part, of advertising.

Advertising is an art demanding training, experience and a high degree of skill and talent. The place to look for these qualities is in a recognized successful advertising agency. A recognized agency is one which has met credit, ethical and other requirements laid down by various publishers' associations. To determine whether an agency is recognized, call the credit or advertising manager of your nearest daily newspaper.

Care In Selecting Agency

The builder, in selecting an agency, should exercise the same care as he does in choosing his lawyer or physician. Friendship, or family or social considerations, should play no part; the choice should come not from the heart but from the head. To gauge an agency's effectiveness, the builder should:

1. Ask the agency under consideration to give him a list of its clients.
2. Ask each of these clients to rate the agency on (a) originality in copy, layouts and art; (b) attention to the client's particular (Continued on page 224).

American Builder, February 1950.
Low-Cost Homes in Reinforced Stucco

Homes, built with new type exterior wall construction for Detroit, find a ready market

Using stucco exterior walls, strengthened with a special type of steel reinforcing wire, offered something new to Builder Leo M. Riley, of Detroit, Mich. That was one reason he was anxious to try it, plus the fact that homes incorporating this type of wall construction had never been built in the Detroit area.

In preliminary planning for a low-cost home project, Riley thought he could make cost savings in wall construction, and convert these savings into extras that would add sales appeal to the homes.

In three and a half months, the Riley organization completed 24 homes incorporating the method, and Riley says his planning proved right. He reports enthusiastic acceptance on the part of home buyers—the homes, completed in November last year, were sold before completion—and he plans to build more homes with reinforced stucco walls this year.

Part of the savings made in a sales price of $8,195 for the 4-room houses went into extra tile for the kitchen and bathrooms, a kitchen ventilating fan, select oak flooring, steel cabinets and sink in the kitchen, steel windows,

First coat of Portland cement stucco is applied over steel reinforcing wire that is held 3/8 inches out from side of wall by special hunting nails. Another 3/4-inch coat of stucco will be applied, followed by two coats of cement paint.

Floor plans, left, of house above was used in all homes in the 24-house Leo M. Riley project completed in Detroit.

Sales of homes in Riley project were ahead of completions. Below: group of the 4-room homes priced at $8,195.

Kitchens in Riley homes are equipped with ventilating fans, steel cabinets, sinks.

American Builder, February 1950.
polished brass hardware throughout the houses, and for venetian blinds.

Full basements and 48x110-foot lots were included in the sales prices.

The homes rest on 8x20-inch footings placed below the frost line. These support 8-inch concrete block foundation walls. Diagonal 1x6 subflooring is used, over 2x8 floor joists. Joists, 2x4 studs, and 2x6 rafters are placed 16 inches O.C. Interior walls are load bearing. Metal trim is used. Roof covering is 210-pound asphalt shingles over 1x6 roof boards laid tight. Blanket type cotton insulation is used in walls and ceiling.

The stucco walls were made by placing a layer of building paper and 25/32-inch sheathing directly on the outside of the studs. Over this, Key-mesh reinforcing wire, made by Keystone Steel & Wire Co., was placed. A special type furring nail holds the wire 3/4 inches out from the sheathing. Over the reinforcing wire, a 3/4-inch scratch coat of Portland cement stucco was applied, allowing it to embed the steel wire. After this dried, a second 3/4-inch coat of stucco was added, then two coats of cement paint applied to complete the job.
Modern Office
At $8.78
Per Square Foot

Commercial building of individual design is constructed at low cost through unusual use of conventional materials.

PLAN is for one large room, with screen on each side of large counter allowing two semi-private offices. Above: Overhang extends to interior, varying ceiling height.

VIEW from front emphasizes bracketing effect of two dominating pylons. Concrete blocks are painted gray. Low concrete wall of planting area conforms to the horizontal lines of building.

American Builder, February 1950.
WHAT E. W. Gilland, owner of the Valley Escrow Co. in Southern California's San Fernando Valley, had in mind when he planned a new office building was a structure which would combine striking design with low-cost construction. Gilland's ideas were put into practice by John Lautner, Hollywood designer, and the result was an efficient, modern office building. The project was completed at a cost of $8,758 a square foot.

Located on a heavily-traveled thoroughfare, Ventura Blvd., at Sherman Oaks, the office attracts much attention from passing motorists. An unusual effect is offered by two large concrete block pylons which bracket the nearly solid glass front wall.

The pylons are built of reinforced concrete with a facing of concrete blocks. The vertical reinforcement of the pylons continues and becomes part of support for wall footings.

The plan is arranged so that the two side walls are solid masonry. Walls facing street and rear lot are composed almost entirely of glass, with supporting double mullions spaced four feet apart. These mullions in turn receive the roof and ceiling rafters above. Rafter walls are cantilevered out to form canopy across entire front.

The low canopy across front, with an underside of corrugated aluminum, extends for about eight feet into the office. Height of ceiling beyond canopy is raised, with appearance of greater height also emphasized by exposed ceiling rafters. Interesting lighting effects are made possible by different ceiling heights.

Free use of exposed interior structural members, both wall and roof, not only add to rugged effect of structure but also serve as means of reducing over-all costs. This type of construction is particularly conducive to rapid construction because of elimination of interior finish.
Originally appearing as a rendering in American Builder, this home, now in completed form, fills a home owner's needs.

VESTIBULE and hallway on first floor permit easy access to all rooms, as floor plan, left, shows. These areas also add appearance of greater size to downstairs rooms as illustrated by the living room directly off hallway (Below).
A large centrally located vestibule and hallway permit easy access to all rooms in this home. Any room, upstairs or down, with the exception of the den may be reached without walking through another. Though the vestibule and hallway occupy about 16 per cent of the total first floor square footage, more than the usual amount in a home, the owners and architect felt the value free circulation added to the house was well worth the use of space for this purpose. The home, designed by Rudolph A. Matern, New York architect, was originally presented in the form of a rendering and floor plan in the April, 1948, issue of *American Builder*. Because it could be adapted to their needs as well as oriented to a deep corner lot, it was selected by Mr. and Mrs. Fred A. Clark, Arlington Heights, Ill., and built for them by H. R. Jacobson & Co., local builders.

Exterior of the home is a combination of Lannon stone and cedar siding on the front, and cedar siding on the sides and rear. A sheltered entrance to the vestibule and garage is achieved by recessing part of the front wall 4 feet 6 inches back from the edge of the roof. In front of the entrance, a flagstone walk, laid in concrete over a gravel fill, blends attractively with the Lannon stone on the front of the house.

The home, as originally planned by Matern, offers a good opportunity whereby a builder can complete the four downstairs rooms, and leave the upstairs portion to be completed by owners when they choose. In the Clark home, two large attractively finished bedrooms and a bath are accessible from a U-shaped hallway at the head of the stairway. Ceilings and walls of the entire house are well insulated.

A full basement is provided. The 10-inch poured-concrete foundation walls are waterproofed on the outside, and rest on 10x20-inch concrete footings. The concrete basement floor, 4 inches thick, is placed over a 4-inch gravel fill. Floor joists are 2x10, 16 inches O.C. Over 1x8-inch diagonal subflooring, 15-pound felt is laid, then 1x2-inch strips, topped with 13/16 select oak finished flooring. Floor joists, 2x4 studs and 2x10 ceiling joists are 16 inches O.C. Interior wall covering is lath with three coats of plaster.

Storage space consists of one closet on each side of the vestibule, a closet in the downstairs hall, a walk-in-type walk-in type closet in the master bedroom and in the spare bedroom, a linen closet in the upstairs bathroom, and ample kitchen cabinet space.

AMERICAN BUILDER READER SERVICE COUPON

For further information about any Products on Review, write serial numbers of products on blank lines and mail coupon to:

American Builder Readers’ Service Dept.
79 W. Monroe Street
Chicago 3, Ill.

Name
Address
City, State

152

American Builder, February 1950.
Correctly Proportioned Footings for Homes

The soil under footings behaves in a manner very similar to that of an elastic solid, even though it may be slightly plastic. Up to the yield point, settlement will be nearly proportional to the load. In other words, a loading of 2000 pounds per square foot will cause a settlement twice as great as that caused by a load of 1000 pounds per square foot. Also, as with elastic solids, when the load is removed a certain readjustment, or recovery, will occur. The yield point of the soil is the point at which the settlement (load ratio) appreciably increases. Above that point the amount of settlement is entirely unpredictable, and, for tested soils, the safe loading is generally assumed to be 5/4 of the loading at the yield point. In the absence of tests, a safe loading of 2000 pounds per square foot may be assumed upon almost any well drained inorganic soil.

In very few cases is the soil pressure under the footings of residences so great as 2000 pounds per square foot. When the dead load only is considered, the soil pressure under the footings of an ordinary two story frame house, with both floors wall-bearing and the usual 12-inch footings, is usually between one-fourth and one-third of that amount. In accordance with the theory of elasticity, even with soil pressure so low some slight settlement is inevitable, for the settlement (loading ratio) is constant.

The correct design of footings does not necessarily consist of simply providing wide bearings; for though settlement may be minimized by so doing it may still be uneven and destructive. It is more important that the bearing area of footings be proportioned to the loads they carry, for then settlement may be equalized at all points under the structure, and the effect of such settlement minimized. Provided, of course, that the bearing soil does vary in nature or consistency at different points. A small hole, a pocket of quicksand, or an out-cropping of stone or shale, can cause serious complications. A large boulder allowed to remain in its natural bed of soil is an enduring hazard and causes trouble. Take it out, and fill the depression to the bottom of the footing with good gravel.

In most residences and small business buildings the entire roof load, that of the upper stories, if any, and the first floor load, if the floor is of standard joist type, are borne directly by the side walls, with the assistance, probably, of a central longitudinal wall or a joist-bearing girder. The end walls support little if any dead load excepting their own weight, and practically no live load. Although some obsolete city ordinances arbitrarily specify a certain width of footings for such cases, such provisions may usually be interpreted to mean minimum widths, for certainly there can be no valid objection to increasing the width of the footings at points of heavy loading. Special consideration should be given to the bearing of the center walls or joist bearers may carry 5/4, or, if the joists are continuous, up to 5/4 of the total floor load. Proper proportioning of footings should not be difficult under such circumstances if the actual intensity and distribution of the live loads can be determined.

Special consideration should be given concentrated loads. Footings under chimneys and fireplaces are almost invariably out of proportion with the footings under the structure proper. Unequal settlement occurs within a few years, for evidence of which we have but to look at the unsightly cracks in the plaster around the chimneys and fireplaces in practically 100 per cent of our homes over five years old. Chimneys and fireplaces usually are, and should be, practically free standing, with no increment of live loading. In some cases, however, the loading is decided eccentric, and care should be taken that the gravity center of the load coincides with the geometrical center of the footing.

In houses the actual intensity and position of live loads are always more or less unpredictable. It is necessary to provide for a 40 pound per square foot distributed live load on floors if they are to be strong enough to withstand possible concentrated loads such as stoves, pianos, refrigerators, etc. This live load allowance would amount to 7680 pounds upon the floor of a 12 foot x 16 foot living room, where actual live loading will probably never exceed 3/4 of that amount. In a 12 foot x 12 foot bedroom this

(Continued on page 170)
TECHNICAL GUIDE
for Builders and Craftsmen

How to Make a Reel for Chalk Line

This reel will conveniently hold 200 feet of carpenter’s chalk line. The line can also be rewound as rapidly as the mechanic can walk. The wire loop at top of reel, through which the line passes before being rewound, prevents line from becoming tangled or knotted. Line is locked in position at bottom of frame as shown on drawing. When purchasing a new line obtain a package of cotton dye and color the line. It will then last longer.—Submitted by J. G. Caldwell, San Mateo, Calif.

Let your suggestion pay you five dollars ($5.00) in cash. This sum is paid by American Builder for each short cut or job pointer that is accepted for publication. Send all material to Architectural Editor, American Builder, 79 W. Monroe St., Chicago 3, Ill.

HOW TO DO IT * HOW TO DO IT * HOW TO DO IT * HOW TO DO IT * HOW TO DO IT

No. D-64 . . . Multiple Use Sliding Table

The photographs and drawings of this month’s Better Detail Plate illustrate the design and construction of a sliding table and “pass-thru”, a feature that is growing steadily in popularity.

The pass-thru is particularly well adapted to houses of functional plan and design and houses where rooms serve a dual purpose. In this house one end of the living room also serves as a place for dining. The architect in this case has designed a table that is easily moved into position in either room. When the table is in a closed position in living room, the portion that protrudes serves as an end table with drop panel at counter line closing up the pass-thru opening; the remainder of the table is in the kitchen. When extended into the living room, the table seats four people.

The dish cupboard above the table has doors that open into the living room and kitchen. Submerged in the light shelf extending across the living room wall above cupboard is a down-lite of fluorescent tubes that lights the table below. Remainder of dining room is lighted indirectly from tubes in light shelf.

In front of the corrugated glass panels on the adjoining wall are open shelves, with one section enclosing a silver chest. Shelves are open at both sides, causing the books to stand out in sharp relief against the sunlight. The natural finish of the birch table, cupboard and open shelves is thoroughly in keeping, and provides a pleasant contrast to the strated redwood plywood surfaces of adjoining walls and the sofit of the light shelf.

The measurements given on the detail plate and the construction methods are suggestions. They necessarily will vary, depending upon conditions.

Data courtesy of Douglas Fir Plywood Association, Tacoma, Wash.

American Builder, February 1950.
How to Obtain Free Access to Corner Cabinet

W HEN kitchen cabinets are placed at the intersection of walls, the area below the counter line often becomes difficult to get into because of its extra depth.

The sketch above suggests a method that will make this space more accessible through the elimination of the conventional corner vertical frame. A vertical frame member is placed approximately 12 inches on each side of the intersection with the top horizontal frame member acting as a cantilever over to the intersection. Adjustable shelves are supported by lapping one over the other. Double hinged doors provide easy access to cabinet area.—Submitted by John C. Shanholtz, Winchester, Va.

How to Prevent Wood Posts from Rotting

W HEN building a fence or anything where posts are required, this builder has the submerged portion of the post charred in preference to creosoting. He builds a small fire on the job and subjects each post to the flame until it is well charred. This method has proven effective against rot.—Submitted by John Menkveld, Grand Rapids, Mich.

How to Stop Rattles in Window Sash

W INDOW sash in old houses that have become loose in their frames can be quickly and effectively stopped from rattling by placing a small roundhead wood screw into the window frame next to the sash. This takes up any side play caused by space between the window sash and frame. If the rattling is excessive, a screw can be placed on each side of the frame.—Submitted by Roger Isset, Kenosha, Wis.

No. G-4 . . . Store Modernization Details

THE PROBLEM: To stress two floors as major selling and display areas and to tie in the second floor display windows as an integral part of the store front.

To make the second floor window as prominent as the main floor show windows.

To create a warm and inviting effect with the use of stone, shrubs and natural wood on exterior and interior.

SOLUTION: A maximum amount of store front area devoted to glass and the use of materials generally found in the construction of homes.

MATERIALS AND COLORS: The door jamb, wood between second floor windows and sign background are red oak with a natural finish. Perma-stone facing of piers to represent structural piers for the support of building above, finished in three or four shades of a grayish lavender. Floor and bulkheads are red verona terrazzo with white Portland cement and red color pigment added to gain brilliance to floor and to complement colors in piers.

The interiors of show windows are covered with “Marbala” wallpaper in aqua and gold marbleization. Curtains on second floor behind windows are gray ninon. These operate on tracks concealed in ceiling and can be operated from open or closed position.

CONSTRUCTION: To obtain an open, all glass effect, new steel beams and uprights were installed at second and third floor levels to receive floor construction. Awnings were omitted from the front of this job and sun shades were installed in show windows. This makes a neat appearing front at all times of the day.

Sign letters are porcelain enamel, set on pins free from the red oak sign background. The portion of the front wall above the sign background was left undisturbed and the entire wall up to the coping line was painted a light chintzene color. This color had sufficient value to make the store a lot more prominent than the adjoining buildings, and yet in no way detracted from the store front area.
APPLICATION FACTS
On Red Cedar Shingles

OUTSTANDING features of Certigrade shingles, the red cedar shingles approved by the Red Cedar Shingle Bureau, are their high crushing strength, durability, light weight and low rate of expansion and contraction with changes of moisture content.

Well-manufactured red cedar shingles have established an excellent performance record in roof applications where exposure to weather is greatest. They have also proved adaptable for economical use on sidewalls.

Roof Application

Shingles are suitable for use on all roofs that have sufficient pitch to insure good drainage. Certigrade shingles may be laid with the standard exposure (covering 100 square feet with four bundles) on roofs of not less than one-quarter pitch. The standard exposures for 16-inch, 18-inch and 24-inch shingles are 5 inches, 5 1/2 inches and 7 1/2 inches. On roofs with less than one-quarter pitch, the shingle exposures should be reduced to 3 1/2, 4 1/2 and 5 1/2 inches respectively.

For example, instead of laying 16-inch shingles so that the distance between the butt lines of the shingles is 5 inches, this distance should be lessened to 3 1/2 inches. With this reduction of exposure, four layers of shingles are assured throughout the roof area. As an example, if it is necessary to lay shingles on a porch roof of one-eighth pitch, it is good practice to choose 18-inch shingles for this purpose and to lay these 4 inches to the weather.

While shingles last for long periods on steep roofs, the exposure cannot be increased beyond a point equivalent to the length of the shingle minus one inch, divided by three. In all roof construction there should be three layers of wood at every point, to insure complete freedom from leakage in heavy rainstorms.

Sidewalls

In new sidewall construction, either tight sheathing or spaced sheathing is used, although tight sheathing is more widely accepted. In mild climates, however, sheathing spaced apart on centers equal to the shingle exposure and shingled with red cedar shingles provides a very satisfactory and inexpensive wall. Building paper should be used with such construction, either between the shingles and sheathing or between the sheathing and studding. Not only is spaced sheathing satisfactorily used on residences in mild climates, but it is also effective for use on certain types of garages, implement sheds and other structures where protection from the elements is a major factor.

Covering Capacities of CERTIGRADE Shingles

Including the Number of Square Feet Covered by Four-Bundle Squares and Single Bundles for Exposures Given.

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*Minimum exposures recommended for roofs.
*Minimum exposure recommended for single covering on side walls.
*Minimum exposure recommended for double covering on side walls.

Data and illustrations through courtesy of Red Cedar Shingle Bureau, Seattle, Wash.

American Builder, February 1950.
Old Man Winter
never bothers

RO-WAY OVERHEAD TYPE DOORS

Will the garage doors you specify run the risk of being frozen shut...blocked by snowdrifts...jammed by frost-raised floors?

Not if you specify Ro-Way Overhead Type Doors! With Ro-Way it's always fair weather—because:

Snow's no problem. Even with a heavy drift against it, a Ro-Way glides right up. No need to shovel snow for door clearance.

Won't freeze shut. "Icing Up" is another worry Ro-Way owners just don't have.

Frost-raised floor can't jam it. A smooth-rolling Ro-Way lifts right up—or snugs right down to the level of the floor.

Wind's no hazard. Huff or puff, wind can't blow open a Ro-Way Door—or bang it shut.

Unaffected by moisture-swelling. Even if jambs or sections become moisture-swollen, a Ro-Way still operates smoothly, easily.

Rolls up-in-and-overhead—out of the way. Always protected from the weather when opened. Inner surface never exposed.


* Also available for commercial and industrial installations.
The Personal Touch

By R. E. Saberson

SALESMEN, front and center! The personal importance of the once great housing shortage will consist of an all-out demonstration of efficient, personal salesmanship...the weakest link in our distribution chain—the tie that is the consumer and does not bind the ultimate consumer to any particular industrial product or service.

Despite the fact that we are doing right well in our round-the-clock research laboratories and that the fertile brains of our inventive geniuses never cease working, it still takes a personal contact to complete the sale of products in the same way, in our distribution picture. And salesmen, whether manufacturers of better machines or builders of dream homes of tomorrow.

Sales Must Keep Pace

The unadorned facts of the matter are that the great majority of American concerns are far more skilled in production than in distribution. Only a rare few have the ability to turn up the efficiency of their sales organizations to keep pace with their constantly increasing production schedules.

While it does not apply with equal force to all manufacturing industries, in most others, there is in effect in America a tendency which comes close to being a mania...We must produce X per cent more goods each and every year than in the preceding twelve-month period. Unless all concerns, big or little, great or small, can spin the wheel just a little faster year in and year out, they are "losing ground."

This dubious policy of continually increasing supply regardless of demand leads eventually to overproduction simply because we do not have the ability to stop production at the same rate as we speed up production. Until we reach the time when we can do so or are willing to let well enough alone we may be sure that we shall get into trouble sooner or later.

Nineteen-fifty-nine will mark the end of the present trail for many a concern that has mastered the problems of production but has not been able to do the same thing in the distribution of their respective products. Already we have seen signs of distress in the fractious price increases now appearing in the daily papers.

Price Reductions: Not the Answer

Strange, isn’t it, how we turn to price reductions in an effort to stimulate demand, when in most cases, the Ultimate Consumer regards the slash as nothing more than a signal which tells him to wait for more and bigger cuts that are almost sure to come! "Drastic reductions" actually are two of the scariest words in our distribution lexicon. Nevertheless, they are used with careless abandon in all but the comparatively few cases where the policy is to stabilize the price structure rather than to upset the apple cart.

Naturally, there are many who will insist that “everything is too high” and that the only modicum of relief will be found in substantial price reductions. Unfortunately, such a situation invariably is accompanied by a drop in earning power. We can’t have our cake and eat it too.

All of which takes us back to our original premise. If we are going to keep on pushing our production schedules to the point where houses will be sold successfully by correspondence, Future competition in the housing industry will not come from this direction, but the struggle for the order will be one of the hardest ever seen. The absence of such a threat, which plays a leading role in the whole distribution picture, does not spell easy going for the housing industry. It merely means that the job of selling must be done personally—something that is far more difficult than the development of a printed page of unvarying efficiency which will do its stuff effectively in the distribution of certain items.

Personal Selling Important

It is the housing industry’s dependence on the personal selling that constitutes its major problem in the highly competitive days to come. So far, the going, since the war’s end, has been comparatively easy. The emergency rush in which anybody could sell anything that he picked up has gradually given way to better homes at lower prices. But eventually a good house at a satisfactory price will have to be backed up with quality selling in order to insure a profit.

Nineteen-fifty-nine was a good year, and the housing industry came down the home stretch in a burst of speed that smashed practically all existing records.

It would be just as sensible to assume that such speed can be maintained indefinitely as it would be to assume that a Derby winner can keep right on going round and round the track indefinitely at record-breaking speed.

How long can the home building industry keep up the pace? Nobody knows the answer for sure. But of this we may be certain. It now is time to shift some of the emphasis from production to distribution...the relationship between the manufacturer and the man who is to adapt the finished product to his own use.

No method of bridging this gap by other than personal contact has ever been invented. Mail order houses claim to have come close, but the fact remains that there are many human beings involved in each transaction who can gum up the works in a manner that will result in the permanent loss of customers.

The far-flung housing industry will never be blessed with any substitute for personal salesmanship. It, or any great mail order house, will never be able to apply the catalog technique to the point where houses will be sold successfully by correspondence.
PARKVIEW APARTMENTS, South Hawkins Ave.
The Hendrich Hall Hurter Company, Builders and Operators
Photograph shows part of Parkview Manor consisting of 17 buildings housing 98 suites. Last word in modern conveniences, individual Gas-Fired Janitrol Winter Air Conditioners provide personalized heating for each family unit.

HIGHLAND COURT APARTMENTS,
Typical of Several Multiple Units built by R. C. Dewey, Inc.
Janitrol Triple Service Systems are exclusive equipment with this builder. Efficient operation and low maintenance costs influenced Mr. R. C. Dewey's choice of Janitrol for servicing 200 family units. Providing convector radiation with forced hot water circulation, the Janitrol units also supply hot water for all domestic uses.

27 APARTMENT UNITS, North Cicero Ave.
E. L. Andersen and Company, Builders and Contractors
These ultra modern apartments reflect typical Swedish architecture. Each building containing nine apartments is serviced by a Janitrol boiler providing a forced flow of 200" hot water. Each apartment is provided with a thermostat control for both the convectors in living quarters and small cast iron radiators in bathroom and kitchen.

Janitrol Gas-Fired Winter Air Conditioners • Unit Heaters • Gravity Furnaces • Boilers • Gas and Oil Fired • Triple Service Hot Water Systems
ORNAMENTAL IRON by Coffman

Here's How to
BEAUTIFY
Any House At Low Cost!

Small homes can be "dressed up" with real "eye appeal" and distinctive charm for very little money with

Coffman Hand-Wrought
SCREEN DOOR
GRILLES

Makes homes more attractive, easier to sell. Puts on the finishing touch of beauty that appeals to women. Also saves the screen, strengthens the frame.

STOCK DESIGNS As Low as $15.00 *

Despite the high quality of these hand-wrought iron grilles with their fine drawn points, graceful lines, and beautiful spirals—they are standardized for economy.

STOCK SIZES For All Doors

Simple in order, just check dimensions of your door and dimensions of inside screen opening. Grilles are available in stock sizes for all stock single panel, two panel and combination storm doors. Information on special sizes sent upon request.

Write Department AB. P.O. Box 1173, for free catalog of designs, sizes and prices.

Manufacturers of the Original "Complete Builders Line" of Hand-Wrought Ornamental Iron

R. J. Coffman Co.,
Orlando, Florida

TECHNICAL GUIDE
for Builders and Craftsmen

How to Build a Utility Table

THIS all-purpose plywood table is of regulation size and height for table tennis. It can also be put to innumerable other uses depending on whether it is to be used indoors or outdoors. When purchasing material for the table tell the lumber dealer where it is to be used. Exterior-type plywood is manufactured with waterproof adhesives so it can be used under all weather conditions; and interior-type plywood is produced with adhesives for interior use. Top panels and framing members are 5/4 inch thick.

The top may be made from one piece—a 5 foot x 9 foot plywood panel—or from two pieces, 5 foot x 4 foot 6 inch each, hinged in the center. A hinged top will require less storage space. It top is hinged see diagram above for procedure.

The pieces for the base may be cut from one 4 foot x 8 foot panel (as shown, or one 8 foot x 30 inch panel.

On one of the panels, carefully mark the frame pieces to dimensions, shown on the diagram above, and cut them with a sharp hand-saw.

The notches in the various panels should be accurate in width. They can easily be made by drilling a hole at the bottom line and sawing each edge into the hole. The corners can be trimmed with a chisel. Sand all edges. The table is now ready for finishing.

To obtain a light stain finish for general use inside, apply a resin sealer, followed by a stain coat, then a flat or gloss varnish as a wearing surface. Seal the underside of the top with one or more coats of the resin sealer. Finish all edges with sealer and other coats.

The base may now be assembled. The simple lock joints hold the base rigid without the use of any fastenings. It may be readily taken apart and stored until needed again.

American Builder, February 1950.
Want Wood Cabinets in the Kitchen
That's Why Roddiscraft Cupboard Door Stock Can Mean Profits to You

Surveys show that over 70% of new homes have wood kitchen cabinets. Multiply this by the 900,000 new residence units forecast for '50. Here's a rich and ready market waiting for you. Get your share with Roddiscraft Cupboard Door Stock.

Roddiscraft Cupboard Door Stock has clear, full length edge strips bonded to a well-seasoned staved lumber core. Hardwood crossbanding and sound standard thickness birch faces complete the five-ply assembly. All stock is belt sanded to a smooth finish at the factory.

Roddiscraft Cupboard Door Stock is designed especially to eliminate wasteful cutting. This sturdy 5/8" panel is manufactured in widths of 12", 14", 16", 18", 20", 22", 24", and 26". In lengths of 48", 54", 60", 66", 72", 78", 84", 90", and 96". Order from complete warehouse stocks the sizes which will cut most economically for your installations.

Use GE Textolite® Decorative Plastic Laminates for all Kitchen Work Surfaces.


NATIONWIDE Roddiscraft WAREHOUSE SERVICE

Roddiscraft
RODDIS PLYWOOD CORPORATION
MARSHFIELD, WISCONSIN

American Builder, February 1950.
Catalogs and HOW-TO-DO-IT INFORMATION

692—SPECIFICATIONS FOR ALUMINUM WINDOWS—Issued by the Aluminum Window Manufacturers Association, 209 Cedar Ave., Takoma Park, Washington 12, D.C., booklet of specifications covers double-hung, casement and projected types of aluminum windows. Specifications are confirmed by the Pittsburgh Testing Laboratory.

693—EIGHT SIZES OF GAS BOILERS—for steam, vapor, hot water and radiant panel heating systems, using manufactured, natural, or mixed gas, are described in bulletin PM 12-0002 issued by the Automatic Heating Division of the General Electric Co., Bloomfield, N.J., A.G.A. output ratings range from 76,000 to 345,000 B.T.U.'s. Bulletin includes dimensions, specifications.

694—HOW TO SET UP WALL FORMS—Series of new bulletins illustrating and explaining how to set up Symons concrete wall forms are available from Symons Clamp & Manufacturing Co., 4249 W. Diversey Ave., Chicago 39, Ill. Complete detailed step by step instructions are given, as well as a blueprint of model foundation giving complete dimensions and a chart indicating materials necessary for the job.

695—HOW PLASTIC IS USED FOR MODERN STORE FRONTS—For retailers, store architects and designers and for plastics fabricators, Rohm & Haas Co., Washington Square, Philadelphia 3, Pa., has published a new booklet which shows how its acrylic plastic, Plexiglas, can be used on store exteriors. Titled “Plexiglas for Modern Store Fronts,” it illustrates more than a dozen applications.

696—HARDWOOD PLYWOOD COMMERCIAL STANDARD—No. CS35, effective with new hardwood plywood production since December 1, 1949, is available in printed form from the Southern Plywood Manufacturers Association, 728 W. Peachtree St., N.W., Atlanta, Ga. New standard supersedes Commercial Standard CS35-47, and incorporates major changes in glue types, maximum veneer thicknesses and test requirements, and minor changes in grades.

697—SPECIFICATION GUIDE TO SHEET COPPER INSTALLATION—New 23-page master guide is now available from Revere Copper and Brass Incorporated, 230 Park Ave., New York 17, N. Y. Prepared expressly for architects, sheet metal contractors and others interested in or using sheet metal in building construction.

698—STEEL SHELVING AND STREAMLINED WORK BENCHES—A 12-page catalog featuring steel shelving, clothing lockers and other steel equipment has been published by Precision Equipment Co., 3714 N. Milwaukee Ave., Chicago 41, Ill. New type heavy duty steel shelving and streamlined work benches are among the many types of steel equipment offered.

699—SLIDING DOOR HARDWARE—Catalog presents complete line of Kennmack hardware, including new improvements in firm's line for 1950. New 400 series has full floating ball bearing axle construction, and an improved carriage design. Catalog is available from Jay G. McKenna, Inc., Elkhart, Ind.

(Continued on page 166)

American Builder, February 1950.
Now! get your share of this profitable business ... with Marlite!

Beautiful new Marlite plastic-finished wall and ceiling panels in striking Wood and Marble Patterns make possible interiors like these—creating profitable, year-'round markets for builders.

Think of the many interiors you can install with these authentic patterns—in offices, stores, banks, hotels, restaurants, funeral homes, institutions and a host of other important markets.

With Marlite, you offer customers beauty that is permanent . . . walls that eliminate costly periodic painting and redecorating . . . durable finishes that are as easy to clean and maintain as the finest china.

Marlite goes up fast over old walls or new, is easy to cut and fit, does away with troublesome wall preparation. Choose from many decorator colors and patterns. Your prospects are reading about the economy of Marlite in widespread advertising now. Take advantage of it!

New modern interiors featuring beautiful Marlite Wood and Marble Patterns.

Send for this helpful information!

MARSH WALL PRODUCTS, INC., Dept. 203, Dover, Ohio Subsidiary of Masonite Corporation.

Please send 4-color Wood and Marble Patterns folder showing typical installation pictures.

Information on new Sound Film available for applicator training.

NAME __________________________ TITLE __________________________

FIRM __________________________

ADDRESS __________________________

CITY __________________________ ZONE __________ STATE __________

American Builder, February 1950.
Catalogs

700—METAL WINDOWS AND DOORS—A 44-page catalog offered by Ceco Steel Products Corp., 3601 W. 26th St., Chicago 30, Ill., deals specifically with the firm's steel windows, doors and operators, a line so complete and flexible that buildings of any size or type may be equipped. A 1950 edition, the number of this catalog is AIA, File No. 16 E. Drawings, installation details, and specifications are presented.

701—"HOW TO HEAT SMALL AND MEDIUM-SIZED HOMES COMFORTABLY"—A comprehensive 21-page catalog issued by Mechanical Home Systems Co., Inc., 1791 Howard St., Chicago 26, Ill., describes radiator-perimeter heating, radial heating, trunk and branch systems, used air, and the firm's furnace specifications. Illustrated with drawings, catalog contains excellent how-to-do-it pointers.


703—FITTINGS FOR HOT WATER HEATING SYSTEMS—Bulletin on B & G Monofoil fittings contains pertinent data concerning sizes of fittings, both iron and copper, together with illustrations of their proper use. Available from the Bell & Gossett Co., 8200 N. Austin Ave., Morton Grove, Ill.

704—APPLICATION OF LAMINATED PANELS—Attractive 12-page catalog issued by The Upson Co., Lockport, N. Y., illustrates and describes several different applications of Upson laminated panels. Specifications and installation data are given.

705—SIMPLIFIED PHYSICS OF THERMAL INSULATION—A title of 44-page booklet. a new edition, issued by Infra-Insulation, Inc., 10 Murray St., New York 7, N. Y. The booklet is replete with facts about heat transfer, vapor and vapor flow, condensation radiant heating, and other information pertinent to the subject of insulation and insulation values.

SERVICE COUPON—CLIP and MAIL to CHICAGO

Readers Service Department
American Builder,
79 W. Monroe St., Chicago 3, Ill.

Please send me additional information on the following product items, or the catalogs, listed in this department:

Numbers:

Name:

Street:

City: State:

OCCUPATION:

*Please note that occupation must be stated if full service is to be given.

American Builder, February 1950.
Now Curtis adds another major advantage to Prespine—the all-wood panel material that provides new value in Curtis doors, cabinets and other woodwork! Today, by an exclusive Curtis process, the beautiful natural grain of ponderosa pine is accurately reproduced on Prespine. Here is another example of the way Curtis research constantly enhances woodwork beauty and utility.

Remember, Prespine is available only as used in the production of Curtis Woodwork...and at no extra cost. Read about its advantages below—then mail the coupon for additional information.

Here's What's New About Prespine!

1. Made by an exclusive Curtis process that duplicates the natural grain of ponderosa pine on Prespine.  
2. Prespine can be lightly sanded before finishing, if necessary.  
3. Prespine can be painted, stained, shellacked, waxed, lacquered, varnished or enamelled.  
4. Prespine can be cleaned or washed after it is finished.  
5. Prespine is indifferent and lightproof. It has been subjected to rigid tests which prove its lasting durability.  
6. Prespine, when it is finished, is weather-resistant—withstanding rain, snow, excessive humidity or sharp changes in temperature.  
7. Prespine can be quickly and economically finished by skilled or semi-skilled labor.  
8. Because of the nature of Prespine, there can be no grain raising or consequent checking or blistering of the finish.  
9. Prespine door panels can be replaced as easily as ordinary door panels.  
10. All exterior Curtis Prespine doors are treated with toxic-water repellent solutions to resist termites and decay.

Note the remarkable, natural grain appearance of Prespine

PLUS these famous Prespine features

Made of finely divided wood by an exclusive Curtis process. Prespine panels withstand warping, shrinking and swelling. Prespine resists heavy impact blows...won’t mar, dent or scratch readily...won’t splinter or chip. It has superior rigidity...provides an ideal bond for paint or stain.
Announcing

THE MODERN...

You've Wanted.

UNIQUE FEATURES OF DESIGN

TOP ROLLERS: Strong, girder-type channel arms keep brass rollers in line, contact with upper track... prevent rattle and provide for extension or cutting to floor height. **TOP TRACK**: Made of extruded aluminum, slides on concealed rollers with ease.

BOTTOM ROLLERS: Bronze rollers and extending side plates insure a clean track and smooth gliding action. **FLOOR TRACK**: Track is of extruded aluminum, allowing smooth finish. The roller track is depressed below threshold for protection.

SIDE TUBES: Made of reinforced steel, the T-square tubes provide added reinforcement for rigidity of panels. **PANELS**... Smooth Hardwood Tempered Enamel can be economically painted, stained or papered as desired for beautiful decorative effect.

*Designed by Woodall. Patented 2,111,448.*
LOW COST...SLIDING DOORS
for Wardrobes, Closets, Rooms, Cabinets

Glide-All
SLIDING DOORS

Now, for the first time, you can have sliding doors in a complete, factory-assembled package! New Glide-All Sliding Doors are furnished in heights to accommodate floor to ceiling installation and in widths up to 48", complete with unique Woodall-designed rollers and tracks to accommodate up to 10 panels for a 40-foot span. Standard sizes are 8 feet in height and in widths to fit openings of 4, 5, 6 and 8 feet.

Save on Construction Costs
Glide-All Sliding Doors economically solve a problem in new building by providing up to 50% more usable room and closet space than swinging doors allow. And with floor to ceiling installation, eliminating the high cost of the usual framing, bracing, plantering, etc., the economy is apparent.

Modern, Beautiful Appearance
Glide-All Doors are made of Masonite Tempered Prefinished in natural finish which can be painted, stained or papered as desired to harmonize with room decor. With its streamlined valance and decorative finish, a Glide-All Door installation helps give rooms a beautiful, modern appearance.

Smooth, Dependable Operation
Glide-All Sliding Doors are constructed of modern materials, selected for fundamental soundness, proper functioning and economical production. They are expertly engineered by Woodall to provide smooth, noise-free, dependable operation for years of reliable service.

Installed easy as A-B-C
A Top track (provided in size and length desired) is mounted on ceiling with screws. No drop headers required unless desired.
B Bottom track is merely screwed to floor. No costly, tedious work involved.
C Doors are mounted in tracks by pushing door up in upper track to compress top roller springs—then engaging lower rollers with floor track. Doors are ready to operate smoothly and quietly on their lifetime bearings.

See New Glide-All Folder
Get more details on Glide-All Sliding Doors from our latest descriptive folders and see it in action! Send us your request for latest Architectural Builders' Plans at no extra charge. Write today for your copy.

VISIT OUR BOOTH No. 191
AT THE NATIONAL HOME BUILDERS SHOW
STEVENS HOTEL, CHICAGO, FEB. 19-23

*A PRODUCT OF*
Woodall INDUSTRIES INC.

NEW YORK 29-35 Northern Blvd, Long Island City 1, N. Y.
CLEVELAND 9591 Carnegie Road, Cleveland 12, Ohio
DETROIT 3155 Michigan Road, Detroit 6, Mich.
CHICAGO 7500 Ogden Ave., Skokie, Illinois
SAN FRANCISCO 1460 California Ave., San Francisco 24, Calif.

American Builder, February 1950.
The Aluminum ROLL-UP Kitchenette Door

A Typical Installation
(Also installed in Hudson Towers, North Bergen, N. J. — A 34 Apartment Dwelling, Architect — Erwin Gerber, Builder — Kay Construction Co., Morris Winograd.)

The roll occupies less than 6" of ceiling space.

For Kitchenette, closet doors, etc.—This metal roll-up door is priced to meet the price of all or any type of closure.

But look at these Added Features—
- For cubic economy — a real space saver.
- For sparkling good looks — Baked on enamel finish.
- For ease of installation — Furnished to your size specifications with side rails.
- For compactness — Rolls-up to less than a 6" diameter roll. No swing out or fold space needed.
- For ease of operation — A counterbalance spring roller.

The Aluminum Roll-Up Kitchenette Door has passed metropolitan building code requirements. — Approved by the New Jersey F.H.A. office and the New Jersey Tenement House Department.

COMPLETE FILE DATA MAIL COUPON

Builders, Contractors, Architects, — attach return coupon to your letter head, you’ll receive a prompt reply, including complete file information, details and installation print with minimum and maximum size specifications plus pictures of actual installations.

Orchard Bros., Inc.
67 Meadow Rd, Rutherford, N. J.
Please send full information about ALUMAROLL Kitchenette doors.

I am a [ ] Builder [ ] Contractor [ ] Contractor
Name ____________________________
Address __________________________
City ________ State ________

Correct Footings
(Continued from page 153)

allowance would amount to 5760 pounds, and the actual loading would probably never be more than 1/5 of that figure. Definitely, then, residence footings which are designed for full live loads are not correctly proportioned. Though the soil pressure may be very low under parts of the structure which carry no live loads, such as chimneys, fireplaces and end walls, the soil pressure under parts which do carry live loads will be much less, for the loads for which they were designed are not there, and in all probability never will be.

In most sections of the country roof live loadings are entirely comparable with live floor loadings. It is hardly practical to design a roof for less than 15 or 20 pounds per square foot live load, for it would be unsafe for men to work upon it. And yet 20 pounds per square foot is equivalent to 24 inches of new fallen snow, or about 5 inches of solid ice, and to produce 20 pounds per square foot wind pressure requires a wind velocity of 100 miles per hour. Granted that in some parts of the Northwest live loads of 30 to 40 pounds per square foot are common, it is equally evident that in Southern sections a load of 15 pounds is unheard of. In Southern latitudes, live loads on roofs could, and should, be almost or entirely ignored when designing footings.

It should be remembered that practically all live loads on floors and roofs of houses, with the exception of the furnishings, are either intermittent, moving, shifting or short time loads. Loadings of this kind do not cause permanent settlement of footings unless the bearing soil is seriously overloaded. Serious settlement requires time, and the soil which is stressed by short time loadings will show a certain amount of recovery when the loads are removed.

All dead loads must be considered when designing footings. All live loadings cannot be entirely ignored, but full design live loads on residence floors at any one time are very improbable. Even the probable maximum live load is almost certain to be of short duration. The following method of proportioning footings takes these facts into consideration, with some allowance for contingencies.

Use the full dead load and 50 per cent of the probable maximum live loads when designing footings for homes. For upper floors the live load allowance might well be decreased to 30 per cent.
BIG MONEY for You
Behind this Machine!

Cash in!

BE YOUR OWN BOSS—
SAND NEW AND OLD FLOORS

Step behind this American Machine—and you can step up your earnings! Right now in your community—there's a real opportunity for you to make money all year round by starting a floor sanding business of your own.

Here's something that's "right down your alley"—if you want steady and pleasant indoor work—a good substantial income with earnings of as much as $25 and more a day—an opportunity to operate as a sub-contractor in new construction and as a separate business when you sand older homes.

No experience or special schooling needed—sanders are easy to operate—you can start sanding floors and make money the first day your machines arrive. Prospects everywhere—new and old homes. No large investment—the cost of floor sanding equipment is usually much smaller than the cost of a new car. The overhead is low and you need no elaborate offices, workshop, storeroom or trucking equipment. Many men operate from their own home and use a regular passenger car to transport their equipment from job to job.

Thousands of men have been successful in floor surfacing. Many operate alone and hundreds who started out singly have built up larger organizations. Age makes no difference. Men are actively engaged in this business from 18 to 80 years old. In floor surfacing you let the machine do the work. It's a future that can bring you a lot of satisfaction and steady money!

Send for "money-making" booklet entitled "Opportunities in Floor Surfacing"—use coupon and enclose 25¢ in coin or stamps to cover handling.

FREE DEMONSTRATION of American Equipment can be arranged without cost or obligation.
No place to be "penny-wise"!

Selling a house starts at the front door...and nothing makes a first impression as pleasing as the melodious response of an Edwards CHORDETTE Electric Door Chime! These little extras are mighty important, builders say, in today's buyers' market!

**STYLED BY A FAMOUS DESIGNER**

Perfect touch to every decorative scheme is the classic simplicity of CHORDETTE...styled by famous designer, Larelle Guild. In chrome and white or mahogany and brass.

**OFFERS 3 MUSICAL ADVANTAGES**

1. Announces front-door callers with melodious chord continuing as long as entrance button is pressed.
2. Sounds a sequence of two symphonic notes as a rear-door signal.
3. Unmatched tone purity assured by Edwards' exclusive Sonoscope testing.

**Chordette ELECTRIC DOOR CHIME**

Edwards Company, Inc., Norwalk, Conn.

**Fairfax DOOR KNOCKER CHIME**

Non-electric chime a musical hit with everyone! Looks like a knocker...sounds like a chime! No wires, no time or trouble installing!

**PRODUCTS ON REVIEW**

(Continued from page 152)

- **AB250411**—All-metal door canopies. Air Control Products, Inc., Coopersville, Mich. Protects doorways against ice, rain, snow, and sun. Finished in three colors: green, blue, and tile red. Flashing nails or screws to house; heavy steel brackets screw canopy to house. Projects 30 inches.


- **AB250412**—E-Z-ON weather strip. Robert N. Bates and Co., Box 1061, Chicago 90, Ill. An all-metal interlocking weather strip for surface installations, double hung windows of wood or metal, that requires no rabbing or dismounting of sash. For use on old or new windows. CI 9-gauge zinc.
PITTSBURGH INTERLOCK PLASTIC WALL TILE

THERE MUST BE A REASON WHY PITTSBURGH "INTERLOCK" OUTSELLS ALL OTHERS!

IT's patented "interlocking" feature, backed by our national advertising program, is attracting thousands of customers all over the country!! Pittsburgh "Interlock" is styled in decorators' good taste in hundreds of luxurious color combinations! Exclusive! It "locks" on wood, plaster, stone, or non-porous surfaces "for a lifetime!!

JOBBERS! DEALERS!

... 25% faster installation means lower cost per job! No grouting! No clean-up problem! More satisfied customers! BIGGER profits for you!

ACT FAST! MAIL COUPON TODAY TO LEARN HOW INTERLOCK CAN BE A SUPER SALES MAGNET FOR YOU!

Jones & Brown, Inc.,
439 Sixth Avenue
Pittsburgh 19, Pa.

Please tell me how Pittsburgh "Interlock" can be a Super Sales Magnet to attract BIGGER profits for me.

Name
Address
City State
How-To-Do-It

How to Get Best Results from Level

To obtain the best possible results from a hand-spirit level, screw a steel plate on each end of level. Plate to extend 1/4 inch above top surface of level and to be filed flush on both sides and bottom of level. The application of the steel plates come in handy when leveling over an uneven surface. Portion of blade of an old hand saw can be used for the plates.—Submitted by R. T. Gravrok, Vermillion, S. Dak.

How to Stake Out Building

A quick, easy and accurate method of staking out a building is shown above. First, figure the diagonal of the building. Provide four short stakes to be used at each corner. In the sketch the hypothetical building, 30 feet x 40 feet, has a 50 foot diagonal.

To lay out building, drive stake 'A' at corner. Then drive a 3D common nail in center of stake to within 1/4 inch of top. Fasten steel tape to nail and measure 40 feet to stake 'B'. Remeasure just 40 feet on top of stake and drive nail. Front line of building is thus established. Measure 30 feet from nail on 'B' and 50 feet from nail 'A' and corner 'D' is determined. Then measure 30 feet from 'A' and 40 feet from 'D' and nail 'C' is located. To prove, measure 50 feet from nail 'C' to nail 'B'. To locate the hatten boards use lines and a level.—Submitted by R. G. Naugle, Rushville Point, Ohio.
...when you start with FREMONT rubber tile floors

To build smart room interiors, start with smart, colorful flooring. Whether your particular problem happens to be a den, entrance hall, bath, kitchen or nursery, Fremont's 17 beautiful fade-resistant colors are ideally matched for room color harmony. Fremont floors are easy to lay, create continuing customer satisfaction because they require so little care and outlast other types of flooring. Next building job, give serious thought to installing Fremont Rubber Tile. It works wonders in making a gracious, liveable room.

SEE US AT BOOTH 180, MEZZANINE, STEVENS HOTEL NATIONAL HOME BUILDERS EXPOSITION.

Fremont Rubber Company

310 McPherson Highway, FREMONT, OHIO

MAKERS OF Rubber Tile • Rubber Tile Adhesive • Vinyl Plastic
Cove Base • Counter Covering • Sponge Rubber
Rug Cushion • Rubber Rugs

American Builder, February 1950.
WITH SYMONS FORMS

Here you see a typical house foundation form layout that can be set-up by 3 men in 4 hours. There are 1,734 square feet of forms. Cost of erection at $2.00 per man hour is $24.00 or 1 1/2¢ per square foot. Shoring can be completed within 2 hours at a cost of $6.00 or 1/10¢ per square foot.

**TOTAL COSTS PER SQUARE FOOT OF FORMS**

| Setting-up                   | $1.75 |
| Shoring                      | $1.75 |
| Form Cost (per set)          | $1.75 |
| Tie Cost                     | $1.75 |

Forms average 75¢ per square foot. With 50 uses (100 uses is common) the per-use cost is 1 1/2¢. Ties hold 8 square feet of forms. At 6¢ each the tie cost is 1 1/10¢ per square foot.

Symons Forms are available completely made up ready for use or you may purchase the hardware for building your own forms. Forms can also be rented with 60-day purchase option. Paid rentals apply on purchase price.

**SLIDING DOORS INCREASE UNUSUAL ROOM SPACE**

New, low-cost sliding doors made of Tempered Preswood, are announced by Woodall Industries, Inc., 3500 Quston St., Skokie, Ill. Complete with roller assemblies and tracks, the doors are for wardrobes, closets, rooms and cabinets of homes. The “Glide-All” doors feature floor to ceiling application, eliminating framing, bracing and plastering, and increasing usable room space.

Panels are furnished in widths to 48 inches, and as many as ten panels may be accommodated by tracks to cover a span up to 40 feet. Spring tension arms keep top rollers in firm contact with upper track, and lower rollers ride on floor track.

To install, the top track is screwed to the ceiling, the bottom track is screwed to the floor, and doors are set in by inserting top of door in upper track and pushing up to compress top roller springs and then engaging lower rollers with floor track.

Panels are produced in standard sizes of 96 inches high by 24, 30 1/2 and 36 1/2 inches.

**IDEAS FOR NEW KITCHENS**


Presented in catalog 671 on page 126 in the December, 1949 issue of American Builder, no price was listed for this promotional piece. The M and M Wood Working Co. advises that a price of 10 cents each is charged for this literature. Each attractive folder carries a bill of materials for each of the 16 ideas.
3 REASONS WHY
IT PAYS YOU TO RECOMMEND

HEATFORM
The Superior Heat Circulating Fireplace
- most efficient and durable of all

1. delivers more heat
   - more effective heating surface
   - heating chambers around the throat and dome as well as the firebox
   - air passages at each end of and through the throat connect upper and lower heating chambers
   - air contacts all heating surfaces without use of fans
   - larger coal air inlet and warm air outlet capacity

2. more years of service
   - ribbed reinforced firebox controls warpage and adds greater strength
   - unobstructed flow of air over all heating surfaces removes heat faster, thus preventing metal from reaching deteriorating temperatures
   - round air passages across the throat reinforce its construction - prevents dome sagging
   - insures proper operation of damper
   - no exposed metal parts beneath chimney to rust-out

3. easier to install
HEATFORM is a perfect guide, hearth to floor, consisting of firebox, throat, dome and built-in damper around which masonry walls are easily built.

Heatform is nationally advertised . . .

THERE IS NO SUBSTITUTE FOR HEATFORM*
- designed and manufactured by the pioneers of the heat circulating fireplace industry and used in homes and cabins all over America.

KEY TO PHOTO
AT LEFT — SHOWING
REAR AND SIDE VIEW
with part of outer metal cut away showing the inside lining of firebox and arrows showing contact of air to all heating surfaces.

1. Horizontal baffle plates which direct a large volume of air through the lower rear heating chamber and ever the hottest of the metal
2. Large air inlets at rear level
3. Rib individually formed into the barrier plate and strength and resists expansion
4. Location of outer coal air inlet
5. Bottom view of air heating chamber
6. Superheating, connecting round air passages through the throat
7. Heat control damper has undersizing for proper position to regulate draft.
8. Smoke dome
9. Side air passages from lower to upper heating chamber
10. Inner lining of the throat

PHOTO AT RIGHT — Front view of HEATFORM

DISTRIBUTORS & DEALERS write us
FOR COMPLETE INFORMATION

OUR ATLANTIC AND PACIFIC COAST PLANTS PROVIDE RAPID SERVICE TO ALL POINTS

SUPERIOR FIREPLACE COMPANY
1708-C EAST 15th ST., LOS ANGELES 21, CALIFORNIA
601-W NORTH POINT ROAD, BALTIMORE 6, MD.

American Builder, February 1950.
Here's an easy way to get new essential information that will help you increase your income. Every volume a standard work by leading authority. Remember—it's the informed builder who is the successful builder.

ESTIMATING

1. THE BUILDING COST CALCULATOR. By John R. Smith. A system for arriving at building construction cost by use of schedules giving cost of standard units of construction for varying costs of building materials. $16.50

2. SIMPLIFIED CARPENTRY ESTIMATING. By J. W. Wilson and Clell M. Roepers. Everything needed to "take-off" a bill of materials from set of plans and specifications for a frame house—with many helpful quick-reference tables and short-cut methods that simplify the work. $3.00

3. THE BUILDING TRADES HANDBOOK. Ready reference on building subjects—mathematics, architectural drawing, structural design, materials and methods. $1.75

4. CONTRACTOR'S MATERIAL LIST. A 16-column take-off form for complete listing of materials and labor costs. $1.00

5. SPECIFICATIONS. Full set of detailed house specifications and index with spaces for inserting pertinent descriptive data. $5.00

CARPENTRY AND BUILDING

6. HOUSE CONSTRUCTION DETAILS. Compiled by Nelson L. Burbank. Exact working guide on every detail of house construction from foundation to finish. Tells dimensions, materials, processes, step-by-step working methods. $4.50

7. HOUSE CARPENTRY AND JOINERY. By Nelson L. Burbank. Every step of carpentry in and around a house, clearly explained and illustrated. Covers every job from foundations to interior trim. $3.50

8. PRACTICAL JOB POINTERS. More than 850 "tricks of the trade," short cuts, hints and modern methods of doing all kinds of carpentry and building repair jobs. Cross-indexed for quick reference by illustrated headings. $1.00

9. ARCHITECTURAL GRAPHIC STANDARDS. By C. G. Ramsay and H. R. Sleeper. A.I.A. Structural detail drawings for all types of small and large buildings. $3.50

THE STEEL SQUARE

10. STEEL SQUARE POCKET BOOK. By Dwight L. Stoddard. Illustrated and worked-out problems of laying out common rafters, hipped, octagon, hexagonal and circular roofs, roofs of uneven pitch, and curved roofs. $1.25

11. SIMPLIFIED ROOF FRAMING. By J. Douglas Wilson and S. O. Werner. Tells how to frame gable, hip and unequal pitch intersecting roofs. Contains short-cut methods, clear and practical explanations. $2.50

12. STAIR BUILDING. By Gilbert Townsend. S.B. Fully illustrated explanation of every problem in design and construction of stairs. $2.50

PLAN BOOKS

13. AMERICA'S BEST SMALL HOUSES. Exterior and interior views, floor plan sketches, material specifications and descriptions of 40 new low-cost homes. $5.95
14. HOUSES FOR GOOD LIVING. By Royal Barry Wills. A.I.A. Photographs and floor plans of 34 fine homes by a leading architect. $4.90.
15. SUNSET WESTERN RANCH HOUSES. Authoritative book on the California ranch house, with thorough pictorial descriptions and ground floor and site drawings. $3.90.
16. DUPLEX AND APARTMENT HOUSES. By J. W. Lindstrom. Floor plan sketches and brief descriptions of 34 duplexes, 11 4-apartment buildings, and 5 larger ones ranging from 6 to 12 apartments. Cubic footage given. $1.90.
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19. MODERN METHODS OF HOME HEATING. Standard heating systems illustrated with 17 floor plans showing heating outlets, 40 photographs of equipment and installations, 25 boiler and piping connection diagrams, and 11 heat loss calculating tables. $5.00.
22. HOW TO DESIGN AND INSTALL PLUMBING. By A. J. Matthias, Jr. Every step in the design and installation of the plumbing system, to fulfill requirements indicated in blueprints and specifications, explained and illustrated. $3.50.

PAINTING AND DECORATING
23. PRICE GUIDE FOR PAINTERS AND DECORATORS. Tables covering practically every type of work done by the painter and decorator, with suggested prices based on various wage scales. $1.25.
24. PAINTING AND DECORATING CRAFTSMAN'S MANUAL. Sponsored by the Painting and Decorating Contractors of America. $2.00.

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25. HANDBOOK OF BRICK MASONRY CONSTRUCTION. By John A. Mulligan. For mason contractors, estimators and construction engineers. $3.50.
27. MASONRY SIMPLIFIED. Vol. II. Practical masonry procedures in the various phases of construction, from building forms for concrete to constructing fireplaces and septic tank systems. Includes discussion of handling new products such as glass blocks, waterproofing mixtures and insulating blocks. $5.00.

ELECTRIC WIRING
29. WAINSCOTING HOME WIRING HANDBOOK. By A. Carl Bredahl. A guide for planning the wiring of moderate-priced homes, with emphasis on safety, effectiveness and efficiency. $1.00.

MISCELLANEOUS
30. HOME BUILDERS MANUAL FOR CONTRACTORS. Provides convenient data and check lists to follow all operations connected with construction of a home. Loose-leaf binder permits additions of special material pertaining to project being constructed. $5.00.
31. PRACTICAL ACCOUNTING AND COST KEEPING FOR CONTRACTORS. Complete instructions and examples showing proper methods of keeping time and compiling costs on all classes of construction work. $3.00.
32. BOOK OF SUCCESSFUL FIREPLACES. Best available book on how to construct indoor and outdoor fireplaces. $5.00.

BOOK ORDER COUPON—MAIL NOW!

Please send me at once the books indicated below. Remittance (plus 15c per book to cover mailing costs) enclosed for

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American Builder, February 1959.
is the standard

the wood mesh core flush door that unconditionally guarantees your customers' satisfaction and your own

is the standard thickness that gives this interlocking air-cell door unsurpassed strength, and dimensional stability.

is the standard thickness that has placed more than four million doors in service in buildings of every type all over the country.

is the standard thickness so widely accepted that Paine has become the largest exclusive producer of cell-type flush doors.

Naturally, you expect this trouble-free door to come ready for installation and with beautifully matched veneer faces—and it does. Dealers from coast to coast now have Rezo doors available—so specify them on all your plans. Your customers' satisfaction and your own are unconditionally guaranteed.

Sunshine for Sale

(Continued from page 123)

project and containing 750 square feet of area is priced at $7,175. The houses represented by this price are placed upon lots averaging 65 x 100 feet and included in the sale price are a refrigerator, gas range, automatic water heater, venetian blinds and full tile baths with colored fixtures. The house is of concrete blocks stuccoed on the exterior, resting upon the perimeter of a concrete slab floor. Asphalt tile is utilized as a floor finish. The interior walls are furred and gypsum drywall applied both to side walls and ceilings. The roof has a low pitch and is covered with composition roofing. The interior walls and ceilings are painted in interesting pastel colors. Veterans pay as little as $25 down with carrying charges complete at $45 per month.

A Poured Concrete House

Unique in character was a monolithic house resting on a floor slab with side walls, interior partitions and roof all poured in one process by a tremendous controllable cement mixer called a "cannon." The side walls are eight inches thick, the roof a 6-inch slab and interior partitions are four inches. Only closets are framed in wood. The rough structure is then stuccoed on the exterior and plastered direct without luring inside. Composition roofing is applied to the top slab. The house contains 800 square feet and sells for $7,550.

A Home of Good Value

Somewhat higher in the price scale is a 1000 foot, two bedroom house that sells for $9,925 and 1130 square foot house with three bedrooms that carries a price label of $10,950. On both of these houses FHA has awarded commitments within $100 of the selling prices on the basis of 25 year mortgages. With a $100 down payment and a monthly carrying charge of $77.50 on the larger of the two, the homes have been purchased and occupied as fast as completed. No "For Sale" signs appear anywhere. They have concrete block perimeter walls, stuccoed outside and furred and plastered inside. The floors are of joint construction with subfloors, oak finish floors and ventilated crawl spaces underneath. The roofs are low pitched, about 30 degrees, and covered with a locally made cement tile of Spanish pattern. The interior is ventilated by a ceiling fan exhausting into the attic, and the homes are provided with an abundance of steel frame windows with ample screened

(Continued on page 182)

American Builder, February 1930.
Time-Saving Construction Tip — with Milcor Steel Casing

Easy way to make a better, tighter steel-casing joint — faster

Here's a simplified cope-joint for Milcor Steel Casing. It saves expensive construction time on every job — because it's easier, faster — and permanently tight. (See the diagram illustration at the left.)

Milcor Steel Casing offers additional savings on overall building costs. It cuts time and costs amazingly on erection, plastering, and finishing. And that's just the initial saving. The permanence of Milcor Steel Casing keeps on saving — in maintenance, refinishing, and decorating — for years and years.

Why not give every job the extra appeal of these outstanding advantages? Build a reputation for the finest modern construction with Milcor Steel Casing — and the other steel building products in the complete Milcor line. See the Milcor Catalog in your Sweets File for complete details.

Inland Steel Products Company
FORMERLY MILCOR STEEL COMPANY

4025 W. BURNHAM STREET • MILWAUKEE 1, WISCONSIN

Baltimore 24, Md. • Buffalo 11, N. Y. • Chicago 9, Ill. • Cincinnati 23, Ohio

Cleveland 14, Ohio • Detroit 3, Mich. • Kansas City 8, Mo. • Los Angeles 23, Calif.

New York 22, N. Y. • Rochester 9, N. Y. • St. Louis 10, Mo.

For complete information — tear out this coupon and mail today!

INLAND STEEL PRODUCTS COMPANY, 4025 West Burnham Street, Milwaukee 1, Wisconsin

Send me a copy of the Milcor Manual (no obligation) giving full details on Milcor Steel Casing and other products in the complete Milcor Metal Lath Products line.

Name ____________________________ Title ____________________________

Company ____________________________ Address ____________________________

City ____________________________ State ____________________________ Zip Code

American Builder, February 1950.
Cut the time from "framed" to "finished" with a Stanley W7 Safety Saw

Make the most of the skill you pay for. Give a good man a Stanley Safety Saw and discover how much better he can be, how much farther he can spread his skill. Handles as easily as a hand saw. Duplex handle and independent trigger switches for use in all positions. Simple swing-out adjustment for depth of cut from 0 to 2 1/2". Safety guard covers saw teeth at all times. Motor and arbor mounted on sealed ball bearings. Tilting base for bevel cuts. Operates on AC or DC.

STANLEY

This trade mark on electric tools tells you the most important thing you want to know about tools.

When you buy an electric tool you have to take somebody's word about gears, motor, bearings, shaft, switches, power, etc. Whose word about tools could be more reliable than the word of "Stanley"—tool makers for over 100 years. On an electric tool the name Stanley means the tool is quality built, thoroughly tested and honestly rated. Covered by a generous guarantee and serviced by a network of Stanley Service Stations. See your dealer or write for complete catalog.

Stanley Electric Tools, 492 Myrtle St., New Britain, Connecticut.

Sunshine for Sale
(Continued from page 180)

ventilating sections. The prices include range and refrigerator.

Outstanding Development

Essex Village, an outstanding development with a complete shopping center contains an extensive 608 rental project, together with one story duplexes and single dwellings. Various types of construction have been utilized including frame covered with siding, shingles and stucco and stucco-concrete blocks. Roofs in the project are generally pitched and covered with the same sort of Spanish tile as have been previously described.

Prices are comparable, for the various types to other "askings" in the area. One unique feature in merchandising lies in the method of selling the duplex buildings. Instead of dividing them into separate units on the center of the party wall, they are sold as a whole with one side rented. In making the sale the lease and the security deposit are transferred to the purchaser to insure his ability to maintain the monthly payment on his mortgage.

The price for the complete duplex buildings is $14,950.

Wage rates in the Miami area are comparable with Chicagoland, some trades slightly higher, some lower. It accordingly becomes possible to draw some comparisons in the way of construction costs. In features of design and space allotment the two localities do not differ materially, but in climatic demands Chicagoland is burdened with many extra costs. Add deep foundation walls with thoroughly insulated slabs. Add side wall and ceiling insulation and ventilated open attic spaces. Add weather stripping or storm windows or both. Add heating plants that run from $500 to $1000 with chimneys or necessary vents. Add basements, found necessary in many local sections, and you build.

Southern Florida costs to the asking prices in Chicagoland, almost to a penny. The comparison establishes the fact that home builders, the nation over, are of the same mind. They seek to serve the home seeking public at the lowest possible prices commensurate with conservative operation and are making an enviable record in that respect.

B. T. Roe Heads Sales for Tracy Manufacturing Co.

Recently appointed vice president in charge of sales for Tracy Manufacturing Co., Pittsburgh, is B. T. Roe, who was formerly director of distribution for the Crosley Division, Avco Manufacturing Corp. He is widely known in the electrical appliance distributing field.

American Builder, February 1950.
FREE! HANDY SPECIFICATION FOLDER!

SLOANE Quality LINOLEUM PRODUCTS

FREE SAMPLES!

FOR BETTER DESIGN AND TRuer COLOR

AND A SWEET'S FILE REPRINT!

A full-color reproduction of Sloane-Biasion's 30-page Sweet's File Catalog, it contains new varieties, specifications, and details of specification applications on all Sloane Quality Linoleum Products.

Sloane-Biasion Corporation
295 Fifth Avenue, New York 16, N. Y.

Please send me free file folder containing samples and information about Sloane Quality Linoleum Products.

First Name: ..................................................

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American Builder, February 1950.
1001 USES ABOUT THE JOB

Everywhere you turn there’s a job for Paine Hanger Iron that will help you to conserve labor and reduce your costs. This simple, yet amazingly versatile product can be bent or twisted to fit your exact needs. It can be used for hanging pipe, cable, conduit and numerous other items. It can be used for strengthening construction.

Hanger Iron may be installed with nuts and bolts, screws or nails. It is 3/8" wide and 20 gauge in 10' zinc-plated coils. Perforated with holes for 1/4" bolts on 1/2" centers.

Reduce your construction costs — ask for Paine Coiled Hanger Iron from your supplier today.

THE PAINE COMPANY
2959 Carroll Avenue
Chicago 12, Illinois

WRITE FOR CATALOG

National Lock Offers
New Cabinet Hardware

In announcing their new No. 150 cabinet hardware assortment, the National Lock Co., Rockford, Ill., presents four new items in their line: Forged brass hardware, a new type concealed hinge, concave knobs, and a distinctively styled die cast handle. In addition, the No. 150 offers the complete Deluxe and Aristocrat matched sets.

Popular finishes such as bright brass, dull brass, dull bronze, bright chromium and dull chromium are stressed by the company as adding to the sales-desirability of many of the hardware items.

Offered as an assortment, with well-balanced quantities of each item, the No. 150 also provides a display board requiring minimum counter space.

C. A. Pynn New Van Packer Vice President

Chester A. Pynn, for the past two years president of Homecrafts, Inc., of Floral Park, N.Y., has been made vice president in charge of distribution of the Van Packer Corp., manu-

facturers of precast chimneys with headquarters in Chicago, officials of the company recently announced in New York.

Pynn had previously served 13 years as manufacturer’s agent for the A. O. Smith Corp., Milwaukee, Wis.

In his new position, Pynn will be in charge of international distribution of the precast chimney.
You build 'em...

BRIGGS Beautyware IN COLOR sells 'em!

Adds only a few dollars to cost of each home... gets back all your dollars ... plus profits... faster!

Here's why: Surveys prove that people want colored bathroom fixtures. In the last big national survey, 64% of all families interviewed said that they thought color was definitely smarter, newer, more modern... and that given a choice at a reasonable price they would take colored over white fixtures every time. Now Briggs brings them—and you—colored fixtures at a price so reasonable it is revolutionary! Only 10% more for Briggs beautifully styled stainproof fixtures in color than for white! Every word of that statement is worth its weight in gold to you. Not only because it means faster sales... but it may well be the sales-clincher between one of your houses and some other builder's house 6 blocks away. Get on the bandwagon! Start using Briggs Beautyware colored fixtures today! Briggs Manufacturing Company, 3001 Miller Avenue, Detroit 11, Michigan.

NOTE: 10% additional charge for colored ware applies to complete sets including Briggs brass fittings.
WIDE SELECTION
You have 76 different models to choose from, ranging in size from 250 to 42,500 net load, steam.

CHOICE OF FUELS
You can adapt Spencer Boilers to all common fuels—oil, gas, coke, and anthracite or bituminous coal.

EASY INSTALLATION
You will appreciate the flexibility that Spencer offers. All models are adaptable to either front, rear, or side installation when automatic firing is used.

QUICK STEAMING
You can assure owners of immediate heat whenever they need it. Special built-in coils provide instantaneous service hot water.

MINIMUM REPAIRS
You can be sure that Spencer heavy-duty construction throughout means extra dependability, extra trouble-free service.

EASY CLEANING
You can easily explain to owners that all Spencer Boilers are designed for easy cleaning.

For better apartment heating, specify Spencer

When planning apartments—and other types of residential or commercial structures—you'll find many advantages to specifying Spencer for heat and hot water. Note (at left) just a few of the many reasons why Spencer has earned an outstanding name among professional men and owners alike.

For further details on the complete line of Spencer Boilers, write, wire, or telephone today.

THERE IS A SPENCER for every building, for every fuel

For homes, small buildings .......................... 29 models
For small apartments, light commercial uses ......... 13 models
For large apartments, heavy commercial uses ......... 34 models

American Builder, February 1930.
Richmond proved a wise choice for these fine new homes in Minneapolis’s Woodlawn Park Section. The four Richmond Plumbing Fixtures and the Air Conditioning Unit installed in each of the 100 homes bear the famous Richmond stamp of quality—quality of appearance and quality of performance.

Whether it's a single replacement or a large development, you can be sure when you select Richmond. You can be sure of efficiency in operation and beauty of design. You can be sure of satisfied clients—happy with Richmond serving their plumbing and heating needs.
BONDEX does both

Cement Paint

ADDS LIVABILITY... by offering moisture protection millions know they can count on. No other cement paint has so many satisfied users... so much word-of-mouth advertising! When you say "Bondex"—it's accepted as the best.

ADDS SALABILITY... For Bondex comes in 12 beautiful colors as well as gleaming white. It decorates as it protects... adds beauty and distinction to masonry surfaces inside and out! Sales becomes easier when you use Bondex.

BONDEX users are Bondex boosters! That's why it is the best-known, best-accepted brand on the market... OUTSELLS ALL OTHER CEMENT PAINTS COMBINED! Bondex seals the surface of masonry—protects against moisture both indoors and out! It guards against surface disintegration. It adds color, beauty, satisfaction and saleability to all types of masonry buildings.

THE REARDON COMPANY: 1635 N. 30th St.
Chicago 14, Ill. - Los Angeles 17 - Bayonne, N. J. - Montreal 1

Minnesota Dealer's Farm Department Stresses Good Barn Insulation

Ever since its organization thirty years ago, The Kruse Company, Rochester, Minn., building material dealer, has recognized the importance of the farm market, and has served rural trade through a special Farm Department. There is considerable dairying in the area and the company has placed special emphasis on good dairy barn construction.

When Clifford V. Hicks, manager of the Farm Department, joined the firm eleven years ago, one of his first duties was to inspect a dairy barn that became and still is an effective selling argument for insulation.

INTERIOR of barn. The 8-foot alley in center permits a tractor and manure spreader to drive through for cleaning.

"Mr. Kruse wanted me to see that particular barn," Hicks commented. "Because it was a demonstration of an insulated and an uninsulated wall in service under identical conditions. It had the further distinction of being the first cavity wall around here. The owner had conceived the idea himself of building an 8-inch concrete block outer wall, and a 4-inch block inner wall, with a 1-inch air space between. He figured this air space would provide the insulation.

"He came in to discuss the construction with Mr. Kruse, who pointed out that calling this a 'dead air space' was a misnomer, because the air would circulate and set up convection currents that would carry away heat, and in addition heat would radiate across the space. The farmer was partly convinced; enough, anyway, so he agreed to pour vermiculite fill insulation into the cavity; but he wasn't thoroughly convinced, and on the East wall he left out the vermiculite above and between two windows, just to see what would happen. When I first saw the barn, it had been in service almost two years. I asked the owner how it was working out. He pointed to the area between the two windows. That uninsulated space was dripping wet, while
the rest of the wall was so dry you could strike a match on it. Whenever one of our farm customers talks about the insulation value of dead air space, I tell him to go out and look at that particular barn. Ever since this first job was installed, and we saw its outstanding results, we have recommended vermiculite insulation for a good, dry wall. Before vermiculite insulating concrete became available, we recommended vermiculite fill for cavity wall insulation. Now we use the 1:16 mix of vermiculite concrete.

Another dairy barn serves as a demonstration of well-planned remodeling and the way in which adequate insulation and ventilation can make a cold, wet barn warm and dry. This barn, 36 by 100 feet, was 14 years old. It had a single 12 inch block wall with no insulation, and frost and moisture collected on the walls so thickly that water ran down the alleys.

Eight years ago, the farm was sold, and the new owner wanted to dry up the walls. Hicks recommended lining the interior with cream-colored 4-inch clay tile, leaving a two inch cavity between the new and existing walls. Wall ties were placed, and the void was filled with vermiculite. Storm windows and a thermostatically-controlled ventilating system were installed. There was no more trouble with moisture, and the barn is comfortably warm in winter. Also, immediately apparent was the improvement in the health of the herd, and the reduction in mortality of young calves.

In conjunction with the Farm Department, The Kruse Company maintains a drafting department; and this has been an important factor in increasing rural business. No charge is made for planning, drawings, or blueprints.

"We feel that our obligation to our customer does not end with selling merchandise," Hicks explained. "We want to help him in every way we can and give him the benefit of our experience."

"When a customer comes in, we find out, first, what type of building he wants. Then we discuss the best way of building it, and recommend the materials that will do the job best. We give him the approximate cost. If he decides to go ahead, we make a careful estimate."

"We help our customers to locate their buildings. We have a transit, and we go out and give them grades."

"When the job has gotten under way, we get out to it once or twice to see that the materials are being used as they should be."

_DRAMEX_ *COLORS LIKE PAINT RESURFACES LIKE PLASTER!*

ONE COAT... fills plaster cracks—covers blemishes—gives you a NEW WALL beautifully colored and finished. It's ideal for reconditioning and redecorating old walls inexpensively.

ONE COAT... turns wallboard into beautiful "living room" walls. Many beautiful surface finishes are possible. And it's so easy to apply, ideal for "dry wall" construction in new homes or old.

_DRAMEX_ mixes with water—stays mixed without restirring—colors without streaking—is blushproof—dries in 4 hours—becomes plaster-hard—requires no sizing! AND DRA MEX WALLS CAN BE REPINTED WITH OIL PAINT!

**THE REARDON COMPANY: St. Louis 8**
Chicago 9 • Los Angeles 71 • Kansas City 33 • Montreal 1

*American Builder, February 1950.*
4 Complete WOOD Window Units

ANDERSEN GLIDING WINDOW UNITS: Sash glide from side to side in plastic sill tracks. Sash can be removed. Fully weatherstriped. Single-light or horizontal glazing. Equipped with screen and double glazing.

ANDERSEN BASEMENT-UTILITY WINDOW UNITS

Packed in cartons, completely set up for quick installation. Includes screen. Storm sash optional. Modular sizes.

REVERSIBLE SASH

Ingenious hardware permits hinging of sash at top or bottom. Removable sash can be reversed in a matter of seconds.

MANY ABOVE-GROUND USES

In stack or ribbon groupings, or singly, this Andersen unit has many above-ground uses. Ideal for cabins, garages, farm and commercial buildings.

* Specification data on Andersen WINDOW UNITS is in Swett's Architectural and Builders' Catalogs or will be sent by us upon request. See your local lumber or millwork dealer for further information.
ANDERSEN WINDOWALLS® are precision wood window units manufactured by the Andersen Corporation, Bayport, Minnesota. They provide all the advantages of wood windows at their best...wood that insulates, wood that blends with the home.

*TRADEMARK OF ANDERSEN CORPORATION

Andersen Corporation • Bayport, Minn. • Window Specialists
Housing projects of this type, which will be owned and rented by public authorities, are the bulk of building in Britain today.

Mister 'Iggins' 'Ouse

Britain's building industry has one customer—the government's socialization of the industry itself appears to be next step on timetable

By W. H. Schmidt, Jr.,
Corresponding Editor

Government is virtually the only house-buyer and is rapidly becoming the exclusive landlord of Great Britain. Hence, the home building industry—as yet privately owned for the most part—has to get along with a monopoly customer.

Is public housing a good thing for Britain? Two elementary criteria would seem to be: (1) the pace of providing housing, and (2) the relative cost of that housing.

First and foremost it must be emphasized that, today housing is a more potent political issue in Britain than it is even here in the States. Politicians rise or fall on how well the public think they get people "under roof." Hence, as may be expected, everybody is paying special attention to the job of building houses; vast sums of public monies are being poured out in subsidies; and materials and labor therefore are accorded special favors. But, despite this concentration of mind and matter, the record is not nearly as good as it was before the war.

At the present time, when housing is a national issue, fewer than 200,000 "houses" (dwelling units) of a permanent character are being produced in a year. Back in 1938, when there existed no appreciable shortage of housing, the private builders built and/or sold off some 350,000 houses. (In the United States, with three times Britain's population, only 406,000 dwelling units were produced in 1938.) And virtually all of these houses were for private owners and without subsidy, for public housing had, for some years, remained static under a conservative government regime.

It is estimated that 750,000 dwelling units in Britain were destroyed by enemy action in World War II. Furthermore, for six long years of war, no new home building was possible. And, as in the United States, population growth and a flurry of postponed marriages further deepened demand. Yet, in the entire four years from V-E Day to the end of June, 1949, only 528,000 permanent-type houses were produced in Britain, or an average of 132,000 a year. Compare this with 350,000 built in 1938! (Government propaganda claims that almost one million dwelling units were provided in the four-year period, but of these, 473,000 units were of temporary construction, the result of conversion of existing buildings, requisitioned empty private properties or abandoned military buildings—leaving 528,000 as the actual comparable production of the period.)

Cost Colossal, Too

Not only is the rate of building poorer than prewar, but the over-all cost is very much greater. In terms of the Englishman's low average income it is colossal. It isn't necessary to take the word of a conservative for this! In 1948 the so-called Grendwood committee of inquiry reported to the socialist minister who appointed it that the cost of the average dwelling unit in a public housing project had risen from about $1600 prewar to $4800 in 1948, or three times.* And unlike the building (Continued on page 194)

*All dollar values in this article are based on the old rate of four dollars to the British pound sterling, as representing more accurately what prices mean to the average Englishman's paycheck than would the new rate of exchange.

American Builder, February 1950.
R·O·W Removable Wood Windows

"I can wash both sides indoors!"

They had looked over a number of attractive homes. All had the usual “blunder” mortgage appliances. Then they were shown a home with an extra something—R·O·W wood windows that are REMOVABLE. That closed the sale.

The sales appeal of R·O·W REMOVABLE windows costs little or no more than ordinary windows. R·O·W’s spring cushion action automatically adjusts for swelling and shrinking caused by weather changes.

OVER FOUR MILLION IN USE. Consumer acceptance for R·O·W Windows has been built by national advertising in BETTER HOMES & GARDENS, AMERICAN HOME, and SMALL HOMES GUIDE. It’s the window women want.

MERCHANDISE BUILDERS: Dramatic merchandising and display help are available to make your home selling easier. Fill out and mail the coupon today for merchandising samples and more information about the wood window with SALES APPEAL.

STANDARDIZE ON
Removable
Opens Easily
Weatherstripped

See R·O·W Windows at the 1950 National Association of Home Builders Show, Booth No. 81. See Event’s Architectural or Builders File.

When in New York see R·O·W at Architects Sample Corp.

R·O·W SALES COMPANY
1210 ACADEMY • PERRINDALE 30, MICHIGAN

PLEASE Send more information on R·O·W — the window with sales appeal to

Name
Company
Address
City:
State

[ ] I am Architect
[ ] Builder
[ ] Dealer
[ ] Carpenter
[ ] Contractor

American Builder, February 1950.
Use this SALES FEATURE on your windows

It's economical and easy to combine weatherstrip protection with trouble free sash balancing.

Master No-Draft Sash Balance

Here is "finger tip" control for your clients and a maintenance free unit that does away with all double-hung window trouble. Wood sash are the best windows when properly installed and the Master No-Draft spring balance is a proven combination which saves money and time in installation and a definite selling feature for home owners.

The Master sash unit is quality equipment fabricated from non-corrosive metal and may be had in stainless steel for locations subject to salt air.

For new or old window installation get the facts today. Send coupon now.

Visit the Master Sash Balance booth at the National Association of Home Builders Show at the Stevens in Chicago, Feb. 19-23. We'll be in space 117 and will be glad to demonstrate our product.

Master Metal Strip Service

1720 N. Kilbourne Ave., Chicago 35, Ill.

Please send me, without obligation, complete information about Master No-Draft Sash Balance.

NAME
ADDRESS
CITY  ZONE  STATE

Mister 'Eggins’ 'Ouse

(Continued from page 192)

prices in the States, which have dropped somewhat during the past twelve months, costs in Britain have climbed steadily upward since the date of the Girdwood report—some estimate as high as 10 per cent.

This increase is not—as may be supposed—due entirely to increased labor and material costs. If the cost of housing be related to national income, differences in prices and wages are automatically cancelled out, because the cost of housing is measured in terms of its effect as a charge on the whole economy. In 1938, according to the Girdwood report, 2.9 per cent of the national income of Great Britain was invested in the building of new houses. Today, 2.6 per cent—or a little less proportionately—is being invested. But the nation is receiving back only 56 per cent of the number of houses it enjoyed in 1938. So the burden is about the same, but the yield has been cut in half.

Comparison of absolute costs of British and American houses is impossible because of wide differences in wages and standards of comfort. But an important British builder, with experience as a contractor in other countries (including the United States), estimates that the cost of a new house in Britain is about five times the annual income of its renter or purchaser, compared with only two-and-onehalf times his annual pay in the United States. In short, to get a roof over his head, the average Britisher must pay out, proportionately, twice what it costs his American counterpart. And this does not take into account, of course, the fact that his house may lack such ordinary American amenities as central heating and concealed plumbing.

Government Entreprenant Customer

British builders interviewed by the writer attribute an important share of the decrease in production rate and increase in cost of housing to the fact that the government is the principal customer of their industry. Shortly after it came to power in 1945 the Labor government instituted a peacetime system of licensing, under which a person ordering a new house or any substantial improvement or addition to an existing building has to obtain a license for the job. For this permit he has to go to his local housing authority which is directed to issue permits for private owners at a ratio of one house for every four built for public ownership by the authority itself. This ratio, it must

(Continued on page 196)
You'll find it **Doubly Satisfactory**

**to use WELDTEX Siding**

This unique new building material makes money for builders, saves money for homeowners.

You'll be happy when you discover that by using Weldtex Siding you can do quality work quickly...at a saving.

Made of patented 3-ply Weldtex Stariated Plywood in exterior grade, these modern siding panels are pre-cut to 48" long by 15¾" wide and ¾” thick. When you consider only 22 of these panels cover an entire square of surface, you get some idea of the speed with which you can work using Weldtex Siding. And the finished job is weathertight, with a minimum of seams and **strikingly handsome**.

Homeowners will like the fact that they get a beautiful exterior that adds to the value of their home...yet which shows them important savings.

Weldtex Siding takes paint and other exterior finishes perfectly. It's approved by the FHA on Federal Housing jobs. And can be used over any type of sheathing, or fits perfectly on 16” studs. We suggest that you use 1½” hot-dipped galvanized finishing nails spaced 6” on center horizontally, 4” on center vertically. A 2” lap prevents water backup.

Don't fail to get complete information on this newest and most economical way to finish a house with smart, modern beauty that gives double satisfaction to builder and owner. Write today for our free folder containing complete product data on Weldtex Siding, and some important tips on installation. It's yours for the asking.
ALTHOUGH apartment house living is not as popular in Britain as it is in the United States, and the socialist government favors the extension of “green belts” around the big cities, certain of the public housing projects today are of this modernistic, multiple-story type.

This writer was able to find no statistics breaking down into private and public ownership, respectively, the total number of houses built since the war. But two random samples of individual area statistics indicate to how great an extent government has become the building industry’s customer. From the end of the war to June 30, 1949, there were completed in Doncaster, an industrial city in north England (population 97,000), 688 housing authority houses, compared with 209 for private owners. As of June 30, 1949, there were under construction 202 public houses, against only 31 private houses. During the same period the housing

(Continued on page 198)
This Improved VINYLITE Insulation Saves Money!

COST IS LOW PER POUND AND LOWER PER LENGTH!

Even better in performance—and lighter in weight—than comparable insulation materials is a recently developed VINYLITE Plastic insulation for general-purpose building wire.

Because this VINYLITE Plastic insulation weighs less than others—each pound goes further, cuts cost of the improved wire.

Electrical and physical properties given to wire by this new insulation are excellent—rated by Underwriters' Laboratories as suitable for Types T and TW, and for exposure to oil up to 140 deg. F. (60 deg. C.).

Other important qualities are low-temperature flexibility, resistance to high-temperature deformation, water and oil resistance, in addition to the other VINYLITE Plastic insulation advantages of long life, easy pulling, small diameter, and permanent colors.

Some outstandingly successful uses of wire insulated with the improved VINYLITE Plastic include general-purpose building wire, as well as insulation and jacketing of fire alarm and telephone systems. For full information, or names of manufacturers, write Dept. HK-64, today.

Visit the National Plastic Exposition, Navy Pier, Chicago, March 29-31

Vinylite PLASTICS

BAKELITE DIVISION, Union Carbide and Carbon Corporation • 30 East 42nd Street, New York 17, N. Y.
 Completely built-in the bathroom

a new shower designed for Builders

BUILT-IN Cadet SHOWER, DESIGN 19B

... with Precast Terrazzo Receptor

Completely recessed, door flush with wall of bathroom, no exposed metal panels.
Beautiful in appearance—clean interior, no screws or projecting fastenings to
mar the bright white, smooth enameled finish.
Permanently water-tight—no mortar joints to crack and leak.
Installed cost is much less than tile or other built-on-the-job showers. Only one
trade required for installation.
Size, 36" x 36" x 80"—curtain or sepphy door as illustrated, bonderized, gal-
vanized steel walls, baked-on synthetic white enamel—will not rust.
Install a Fiat 19B Cadet on your next job. You will
find this shower readily accepted by home buyers.

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Please send catalog of Fiat Showers, Receptors and Doors. Also builders
bathroom floor plans sheet.

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Mail to Fiat Metal Mfg. Co., 1209 Roscoe St., Chicago 13, III.

American Builder, February 1950.
Hardware...

with an aim — You'll agree it's to your advantage, when you order hardware items of common use, to know that they are of better than common quality — aimed in manufacture to fit accurately, perform better, endure longer. Stanley produces them in full gauge, clean and bright, neatly packaged for easy identification.

and a name — Each piece conforms to the Stanley standard of dependable quality — the name to specify. The Stanley Works, New Britain, Connecticut.
How to build-in the

Luxury Look...

Economically

Partitions of Blue Ridge Patterned Glass can be used to add appeal to even the smallest house...build-in luxurious decoration for two rooms at once. And you save on papering and painting!

Blue Ridge Patterned Glass passes light from room to room...makes homes brighter, more attractive. Over 20 distinctive patterns provide privacy, create smart effects in every room.

To meet special needs, Blue Ridge Glass may be tempering (heat tempered) for greater strength and Satinol®-finished for greater obscurity. Ask your L.O.F. Glass Distributor about it. You'll find it surprisingly inexpensive...practical even on modest building budgets.

Mister 'Tiggins' 'Ouse

(Continued from page 198)

few years makes one thing abundantly clear—namely, that low cost building and high productivity are not possible in a situation in which most things which the builder requires or wishes to do can be obtained or done only by virtue of a license or official fiat. Living from hand to mouth in this manner makes forward programming of any job or series of jobs very difficult, if not impossible, and very much increases overhead costs." The official Girdwood Report itself points out that, "The difficulties of obtaining labor and material, the necessity to comply with various controls and the numerous and detailed forms, records and returns now required, have all necessitated not only more staff but staff of higher qualification and with higher salaries than in prewar days."

Town & Country Planning Act

"And that ain't all," as the Barker said. Superimposed on the whole maze of restrictions and licenses and ratios designed to ration labor and materials is the Town & Country Planning law, which places in the hands of a Central Planning Board—appointed, paid and directed by a Minister of Town & Country Planning—dictatorial powers over the use of all land in Britain. This enactment of "The King's Most Excellent Majesty, by and with the advice and consent of the Lords Spiritual and Temporal, and Commons" says, at the outset, that it is designed "to give power of control over the use of land" and to "secure the recovery for the benefit of the community of development charges in respect of certain new development." In plain language, the government has the power to prescribe whether a plot of land should be devoted to agriculture, roads, recreation, timber-growing, residence, or garbage-dumping, and to tear down, reconstruct or build—or order any of those things to be done—any house or other facility, by whomever owned, to gain this end.

(Continued on page 202)

The quickest, easiest, thriftiest way to give your home \textbf{STRIKING EYE APPEAL FROM THE STREET} is with the new Crawford Marvel-Lift Stylist.

Here's a brand new, patented construction, garage door that gives you unlimited scope for putting brilliant, striking, eye-arresting PERSONALITY into EVERY home at trifling extra cost.

Any design, traditional or modern, that you or your client may fancy can be applied to the STYLIST by means of stock moldings combined with beautiful color schemes. The same design can be repeated on front door and shutters, if you wish, and you can easily imagine what a stunning effect such a novel and colorful ensemble will produce.

For the FIRST time, you and your customers can have decorator's custom styling in a ready-built, popular-priced garage door. And you can make this styling the basis of an over-all decorative scheme that will make every home you build a standout for STYLE and PERSONALITY.

Every house can be different, distinctive, individual, and your prospects will SEE this immediately. This is a sales advantage that alert builders will grab and go places with. As you can see, it costs almost nothing extra, but what it adds can be worth plenty. Lights are available on factory orders.

Call your local Crawford Door Sales Company listed in your Yellow Pages. Dealership inquiries are invited.

Visit Booth 39 at NAHB Show at the Hotel Stevens.

Crawford Door Company

FABRICATING PLANTS in Portland, Tacoma, Los Angeles, San Francisco, Dallas, Kansas City, Chattanooga, Milwaukee, Hudson, Mass., Cadillac, Ottawa, Canada.

DISTRIBUTING WAREHOUSES in 67 major cities.
SALES AND SERVICE companies everywhere.
STURDY, EFFICIENT, FOOL-PROOF, NEW

B. AND R. UNDER-REAMER

HUNDREDS OF SATISFIED CONTRACTORS PRAISE THE B. AND R. UNDER-REAMER

"Does the job I've been trying to get done ever since I've been in the building business. The only reamer that does the job to required specifications. I wouldn't be without one."—W. M. MORROW McKinney, Texas

"Used the reamer I purchased from you a year ago, on every job since. Does a perfect job, which pleases me, the owner, the architect, and the F.H.A. Inspector."—H. H. BELL Austin, Texas

"Heartily recommend your B. & R. Reamer as the best I've ever used. Operates easier, and with less expense."—F. C. CONNER Lewistown, Texas

$97.50 F.O. R. PLANO, TEXAS

MONEY BACK GUARANTEE

EASY OPERATING WORM GEAR OPENS
COLTERS TO CUT A PIER HOLE BASE AT ANY DEPTH

ORDER NOW! BE READY FOR THE SPRING BUILDING BOOM

ENCLOSED IS CHECK FOR $ SHIP_____UNDER-REAMER(S) AT ONCE

B. AND R. COMPANY P. O. BOX 93 Phone PLANO, TEXAS 158

NAME

ADDRESS

CITY & STATE

202

Mister 'Jiggs' 'Ouse

(Continued from page 200)

And further, the government may collect from any individual whatever it deems represents the increased value of his land resulting from whatever cause. In short, if a builder should seek to develop a real estate project on land hitherto used as pasture, the government may order him to pay, in cash, a sum representing the difference between the value of land as farm soil and as a residential plot. It is said that this sum may run as high as $1000 a house—constituting a price increase of as high as 25 per cent.

While this pernicious act seems to place a great deal of responsibility for its administration on local authorities, the centralized Ministry actually wields the stick. Whatever its political tenets, local government is not allowed to refrain from socializing the land. The Act says the Ministry may be by mandate empowered to acquire the authority to acquire land or carry out "any development which, in the opinion of the Minister, ought to be carried out." And, if the Minister is in a frightful hurry, in acquiring land or facilities he doesn't have to wait for the legal period of negotiation to expire. And payment for land acquired, or to recompense for depreciation to private property resulting from government development schemes, may be made in government stock—which, at the present time, is subject to serious fluctuations in price.

There are other controls—too numerous to mention. One, for example,—the Buildings Restriction Act of 1946—allows "any officer of an authority responsible for enforcing a building law or planning control" to enter any premises at all reasonable hours" to find out if any work is being carried on contrary to planning control or to obtain information for local housing or planning authorities.

Output Falls

An important factor in high cost and low output in Britain today is that, while the labor force in building is about equal to what it was in 1938, its output is only half. The reasons are not hard to find.

Britain suffers from over-employment; there are more jobs than workers. No one needs to work to establish a good reputation so he won't be the first employee to be laid off.

There is too little difference in pay between skilled workers and unskilled laborers. In general, the lowest-paid building employee gets about 80 per cent of the rate of the most skilled.

(Continued on page 204)

American Builder, February 1950.
WHAT'S THE SENSIBLE WAY
TO CUT BUILDING TIME?

It's simple and easy to cut down the time needed to build any structure. To do it requires no change from conventional methods. A simple system of coordinating the sizes of the materials that go into the job is all that is needed. Known as modular design, this system is known as the national standard. Building materials are sized on a 4-inch "module" or unit of measurement to save time, labor and cost in construction!

WOOD... BETTER THAN EVER
WITH MODULAR DESIGN! Wood has always been the ideal material for windows, sash, frames, screens, storm sash and other woodwork products. Warm to the touch, wood insulates against heat and cold. Easily painted, stained or varnished, it holds finishes lastingly. Woodwork products are moderate in cost—precision made for quick installation. Toxic preservative treatment at the factory enhances their long life—provides extra resistance to staining, decay, insect attack or humidity. And today, leading woodwork manufacturers add an EXTRA advantage—MODULAR DESIGN!

ANSWERING YOUR QUESTIONS
ABOUT MODULAR-SIZE WOODWORK

Q. HOW DOES MODULAR DESIGN HELP ON THE JOB?
In installing windows, for example, there is ONE standard opening. This opening takes any design of modular-size window. There's less cutting, less trimming, less waste of material.

Q. WHO STANDS BEHIND MODULAR DESIGN?
Leading organizations in the building industry such as the Associated General Contractors of America, American Institute of Architects and Producers' Council endorse modular design. The U. S. Housing & Home Finance Agency recognizes modular coordination as a cost reduction system.

Q. ARE MODULAR-SIZE WINDOWS EASY TO OBTAIN?
Yes. Modular standard windows, window frames and screens are fast becoming available in all localities, thus simplifying specification procedure and assuring a ready source of supply.

Q. HOW DOES MODULAR DESIGN BENEFIT THE OWNER?
It gives him more for his building dollar. Modular design also simplifies repair and replacements of windows. In addition, the consumer can get not only his windows but his frames, storm sash, screens, trim, window shades, Venetian blinds, etc., in standard sizes to fit modular openings.

GET ALL THE ANSWERS—MAIL THE COUPON!
Ask your lumber dealer to give you the facts about modular-size windows, frames, screens and other woodwork. Find out for yourself why modular window planning can cut your costs and put you in a better competitive position. Or, mail the coupon for our free, illustrated folder.

National Woodwork Manufacturers Association 332 South Michigan Avenue * Chicago

American Builder, February 1950.
Silent as a shadow
and smooth as silk!

Those who know agree on one thing—vanishing doors must be noiseless and effortless to operate. And that is why more and more builders insist on R-W Silver Streak Vanishing Door Hangers and Track...it's got exactly what they want.

Specially designed for lightweight vanishing doors in thin-wall pockets built in standard 2" x 4" stud partitions, Silver Streak is also for use on parallel residential wardrobe doors 1/4" more in thickness. The hanger wheel, made of fine-weave cloth base bakelite, and equipped with high-finish ball bearings, gives longer wear and quiet super-smooth operation.

The track is extra heavy section, hard composition extruded aluminum. Screws are easily inserted. Only rounded surfaces of the floor guide come in contact with the door groove, preventing scraping and assuring smoother quieter performance.

For maximum satisfaction and economy, the logical choice is R-W No. 1019 Silver Streak.

LOCAL government have been in the house-renting business on a large scale since 1918. These publicly owned houses in a suburb of London were built in the late Twenties.

Craftsmanship is also below par in Britain. Even union heads admit it. At a recent convention of building trades employees, a high official declared that the dominant need of the business is a revival of craftsmanship; he implored the skilled older heads to pass along their knowledge to "the lads" and to their less-experienced adult colleagues. To illustrate the "don't care" attitude which is ruining British standards of construction: a committee of builders and architects researching new methods of construction for the building industry recently invited a high union officer to send representatives. While entirely sympathetic with the idea, the union officer said it would be futile to do so—not necessarily because the men opposed progressive methods but because "they just don't give a..." (Continued on page 296)
The heating line to use for complete satisfaction in every home you build

Insure the success of every job you deliver by a wise choice of heating equipment — fuel-thrifty Mueller Climatrol. More than 93 years of outstanding leadership justify your choice. And you have a complete line to choose from — for every size home, every type of heat, any of the three popular fuels. Standardize on Mueller Climatrol for all your jobs, and you’re sure of satisfied customers. Write for complete details. L. J. Mueller Furnace Company, 2106 West Oklahoma Avenue, Milwaukee 13, Wisconsin.
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ON BUILDING AND HOUSING PROJECTS

MATERIAL AND LUMBER HANDLING

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an All-Around, All-Season Profit-Maker

Cuts your equipment investment...saves on hand labor. Makes money for you every day in the year — many ways. Digs basements and trenches, builds roads and streets, backfills, handles your landscaping, any cut and fill work...loads all material, bulk or solid, including bricks and rocks...plows and loads snow (many contractors earn extra money during the winter months on snow removal for institutions, gasoline stations, cities, airports, farmers, etc.). Ideal for handling lumber, pipe and building materials of all types. No end to its usefulness...and profit-making ability! Send coupon NOW for full information...or ask your Allis-Chalmers dealer to demonstrate on your job.

*THE ATTACHMENTS — INTER-CHANGED IN A FEW MINUTES

* 1 cu. yd. Standard Bucket
* ½ cu. yd. Narrow Bucket
* 2 cu. yd. Light Materials Bucket
* 1 cu. yd. Rock Bucket
* Teeth For All Buckets
* Heavy-duty Bulldozer and Angledozer Blades
* Lift Fork (4,000 lb. lifting capacity)
* Crease Hook (5,000 lb. lifting capacity)
* V-type Snowplow
* Trench Hoe
* Drag Bucket
* Tine Fork
* Rock Fork

Weight with standard bucket, 16,900 lbs. 40.36 drawbar hp...diesel-powered...hydraulic operation. The only completely new tractor in its power class!

Mr. Tiggins' House

(Continued from page 204)

ha-penny." Entrance into the building field during the war of a large number of undesirables—both among employees and employers—and the "gimme-up" bomb damage undoubtedly accounts for some of the low estate of craftsmanship in Britain today. But more important, it would appear to this writer, is the lack of incentive induced by a "dead level" socialist government, which emphasizes rights and needs, fomenters class war and soft-pedals the aims of productivity and good workmanship.

Government Against Home Ownership

The most important "fact of life" for the British builder is that his government is opposed to an extension of home ownership by individuals, and seeks as its ultimate goal to have everyone housed in a building owned by a local authority, at a weekly rent. A recent government pamphlet went out of its way to point out — somewhat apologetically — that "home ownership is not however being discouraged" (italics mine), but went on to state that "personal need and not money is the decisive criterion for securing a house." "Need" does not make for individual ownership; it points clearly to authority landlordism.

The record is clear. While, as shown, the rate of building for private ownership in the early days of the one-to-four ratio reached or exceeded its proportion, private building has now been discouraged to a mere trickle. No national aggregate figures were available to this reporter, but he added up all dwelling units reported as "under construction," as of June 30, 1949, in all political subdivisions, excluding prospective buildings. In London (comprising about one-sixth the population of Britain), and found that 27,523 were for the account of borough or town housing authorities or the London County Council, while only 1,782—or six per cent of the total—were for private ownership.

An industry which finds that government is becoming virtually its only customer—as these figures would appear to indicate—better worry about its future. Yet the British building industry, on the whole, appears quite nonchalant about the fact. Many private architects say they welcome the scope, "social planning," and funds which public housing affords. Unlike most of their counterparts in the States, big home builders in Britain also build large public works—such as dams and docks—and they enjoy big government contracts too much.

(Continued on page 208)
WHAT'S BETWEEN
that NEW basement and ground water?

Only a few inches of wall separate the new basements you build from their greatest enemy...ground water! Upon the sound construction of that narrow wall depends the future of the home. Properly constructed with Medusa Waterproofed Gray Portland Cement, the foundation will always ward off ground water, protecting the home owner against the expense and trouble of a damp or wet basement!

It costs so little, yet means so much, to build lastingly dry construction. Insist upon Medusa Waterproofed Gray Cement* in all mortar and poured concrete for foundations. Use this water repelling cement for an outside plaster coating whenever walls are made of masonry construction. This original waterproofed cement contains a stearate integral waterproofing which lines the pores of concrete, repelling all water at the surface.

*When not available use Medusa Waterproofing Paste or Powder

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Gentlemen: Please send me a copy of the free booklets, "How to Waterproof Concrete, Stucco, and Masonry" and "A Discussion of Integral Waterproofing."

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You can build BETTER with MEDUSA PRODUCTS

American Builder, February 1950.
BARBER-COLMAN
Products for Up-to-date Homes

The BARCOL OVERdoor

"An improved overhead door" offering distinctive features of engineering and construction that insure durability and provide good operation. BARCOL OVERdoors are weather-tight, yet easy-working. Thousands of homes all over the country can demonstrate thoroughly satisfying installations in all sizes and in special as well as standard designs.

RADIO CONTROL FOR GARAGE DOORS

Here is a really modern home utility that is rapidly gaining in popularity. The driver simply pushes a button inside the car, and automatically the garage doors open or close! A great convenience day or night and, in stormy weather, a valuable protection. Barber-Colman Company has pioneered in the development and manufacture of successful radio control equipment since 1928.

SEE BARBER-COLMAN PRODUCTS AT THE NAHB EXPOSITION

Chicago, the Stevens Hotel, February 19th to 23rd, at the Annual Convention and Exposition of the National Association of Home Builders—see the favorite Model 50 BARCOL OVERdoor set up for hand operation, and the new Model 31 BARCOL OVERdoor equipped with the newest BARCOL Electric Door Operator and Radio Control. See why these quality products are worth considering for every new or remodeled up-to-date home.

FACTORY-TRAINED SALES and SERVICE REPRESENTATIVES in PRINCIPAL CITIES

BARBER-COLMAN COMPANY
104 MILL ST. • ROCKFORD, ILLINOIS

Mister 'Iggins' 'Ouse

(Continued from page 206)

to worry about a little thing like public housing. Many of them, frankly, that they believe in public housing. And, for the most part, British home builders have never opposed the idea of public housing, on the premise that "a little dose of public funds might help the economy—and us."

The seeds of public housing in Britain go back as far as 1890, when local authorities were empowered by law to provide quarters for slum dwellers, but the power was optional and no national subsidy was involved. Real public housing began in 1919, when the local governments' power became obligatory: i.e., they had the positive duty of providing for the housing needs of the "working classes" and were not likely to be met by other means, and had call on the national treasury for the purpose. Between 1919 and 1939, one quarter of the houses built in Britain were for ownership by government authorities. When the act was passed, private builders flocked to get authority contracts. At no time, so far as this writer is aware, did they, officially or as an industry, protest this injection of pure socialism into the business of owning and renting houses.

Now they have their reward. Not only is government their biggest customer, and the chief landlord of British homes, but that same government now shows strong signs of taking over the home-building industry itself. For many years certain local housing authorities have constructed houses with their own directly-employed labor force. Many other authorities employ large staffs to repair the houses they own. Now the powerful building trades unions have gone on record as favoring nationalization of the building and construction industries as a whole, and the government itself throws out hints from time to time that it will some day take over the contractors. Workers are being told that, as public servants, they would have continuity of employment and all the welfare amenities of working for the state. It is true that, for the present—while the "heat is on" from the public for more housing, faster—the left-wing Minister of Health is soft-pedalling his doctrine of "direct action" and even admonishing some housing authorities which build houses themselves that their production compares unfavorably with private builders. But there is no doubt his ultimate intention to nationalize the housing building industry to the same extent.

(Continued on page 212)
Over 100,000 Schlage Locks used in Kaiser Homes... $8,250, $9,950 price range

Kaiser Homes has built and sold more than 7,000 homes during the past 4 years. In Panorama City, new 2,000 house Kaiser development in the heart of the San Fernando Valley, Schlage locks are being installed in all dwellings now under construction. Fritz Burns states that, "We know the dependability of Schlage locks from years of building experience. During our California building program, we have used over 100,000 Schlage locks in Kaiser Homes in the $8,250 - $9,950 price range. They deliver the trouble-free service we want our customers to enjoy while they save us time and money in maintenance and in ease of accurate installation."

Schlage booklet No. B630 illustrates new designs and mechanical details. A postcard will bring a copy... promptly.
All basement windows pretty much alike? Not any more!

Look at these features of Fenestra’s® entirely New Basement Window:

- Easily installed—standardized in size to fit concrete block.
- Glazed—no problem of glass or putty.
- Sturdy—made of hot-rolled casement window sections.
- Weather-tight—casement-type double contact all around.
- Leak-proof—square corners for tight construction.
- Termite-proof—steel is impervious to termites, etc.
- Protected ventilation—opens in at top.
- Easy to operate—steel can’t warp or swell.
- Locks tight—with lever action.
- Fuel-proof—no side arms or hinger—nothing to get out of order.
- Easily removable—vent quickly removed from inside only.
- Low maintenance—steel—can’t shrink, rot or splinter.

**AVAILABLE IN 3 WAYS**

1. Package A—Basement Window, glazed, with Screen and Storm Panel insert, in carton.
2. Package B—Basement Window, glazed, with Screen only, in carton.
3. Basement Window unglazed—Screen available separately also.

Choose the setup that best fits your needs—that will best suit your homeowners.

Remember, with Screens and Storm Panel Inserts you can offer homeowners the most complete Basement Window on the market today. Screen held in by two screws. Clip-in Storm Panel Insert provides economical insulation. Three sizes: 2 lights—15” x 12”; 2 lights—15” x 16” and 2 lights—15” x 20”. For full information call the nearest Fenestra office, listed in the yellow pages of your telephone directory, or mail the coupon.

PLACE YOUR ORDER NOW FOR SPRING DELIVERY!

*®

Fenestra WINDOWS
GLAZED AND CARTONED

COMPLETE UNIT WITH SCREEN AND STORM PANEL INSERT

PACKAGED...no loose parts to handle

ANOTHER Fenestra FIRST

NEW Fenestra UTILITY WINDOWS

For garages, shops, dairy barns, building aresways, etc. 2' 9½" wide by 3' 6½" high. Construction and quality features same as the New Fenestra Basement Window. New package means easier handling, easier installation—windows are delivered in good condition and stay in good condition. Available in three ways:

1. Package A—Utility Window, glazed, with Screen, and with Side Guards to protect cows in barns against drafts.
2. Package B—Utility Window, glazed, with Screen only.
3. Utility Window unglazed—Screen available separately sold.

Cash in on the popularity of this versatile window.

DETROIT STEEL PRODUCTS COMPANY
Dups. A&B-2, 2260 East Grand Blvd., Detroit 11, Michigan

Please send me full information on the new Fenestra Basement and Utility Windows.

Name

Company

Address

PANELS - DOORS

American Builder, February 1950.
Take this step to profitable BUILDING CONTRACTS!

Want more profitable building contracts? Take the straight line to the construction market — use DODGE REPORTS. Don't waste time on dead-end leads where jobs are let before you have a chance to bid! Use DODGE REPORTS ... you can be first, in the right place — at the right time; you know who to see and when to see them.

Right in your own business area, every day, a definite number of real prospects get plans under way for New Construction!

You can follow up these profitable job opportunities with DODGE REPORTS.

You are told exactly where each job is located — what type of materials will be needed — who is involved in each project (name of owner, architect, engineer, contractor) — when the plans will be ready for figuring and when bids must be submitted.

This is information TO HELP YOU GET PROFITABLE BUSINESS. It saves you time and "leg work." It enables you to base your estimates upon known facts ... to time your bidding ... to close deals at the proper moment for effective results.

Let us show you, without obligation, how DODGE REPORTS can mean your first step to profitable building contracts.

MAIL THIS COUPON

F.W. DODGE CORPORATION
Construction News Division
119 West 40th Street, New York 18, N.Y.

212

American Builder Issues Available in Microfilms

The American Builder has entered into an agreement with University Microfilms, Ann Arbor, Mich., to make its issues available to libraries in microfilm form.

One of the most pressing problems facing all types of libraries today is that of providing adequate space for a constant flow of publications. Periodicals, because of their number and size, pose a particularly difficult problem.

Microfilm makes it possible to produce and distribute copies of periodical literature on the basis of the entire volume in a single roll, in editions of 30 or more, at a cost approximately equal to that of binding the same material in a conventional library binding.

Under the plan, the library keeps the printed issues unbound and circulates them in that form for from two to three years, which corresponds to the period of greatest use. When the older paper copies begin to wear out or are not called for frequently, they are disposed of and the microfilm substituted.

Sales are restricted to those subscribing to the paper edition and the film copy is only distributed at the end of the volume year.

The microfilm is in the form of positive microfilm and is furnished on metal reels, suitably labeled. Inquiries concerning purchase should be directed to University Microfilms, 313 N. First St., Ann Arbor, Mich.

Mister 'Iggins' 'Ouse

(Continued from page 208) he has already brought about the
nationalization of the house owning and renting business.

The United States, where it would appear, is now at the point in the road toward socialism at which Britain stood 30 years ago in 1919. Here, too, local housing authorities are to be set up to go into the business of owning and renting houses subsidized by a combination of national and local taxes. Public funds are to be poured into the building business. Will the lure of easy money (for a short time) silence the tongues of American house builders—or will they continue to speak out against the idea of public housing? Britain's builders chose the former course. And see what is happening to them.

American Builder, February 1950.
to make your houses more beautiful
...and more salable!

Put beautiful real clay Suntile colors in your kitchens, bathrooms and utility rooms—and watch your prospects say "Mmmm—I want that."

Color-Balanced Suntile is the real thing—real clay tile. (Doesn't merely look like it.)

Now, in addition to the long-wearing, easy-to-clean-and-maintain advantages of Suntile, you get exclusive, new colors and color combinations for your residential building.

See these new colors come to life in the Suntile Color Palette Folder. They will stay beautiful, fadeless and sparkling... reduce repair and redecorating costs... and retain value through years of hard wear.

That's because Suntile is expertly manufactured and expertly installed. Every job is guaranteed by a man who really knows tile, your Authorized Suntile Dealer.

Write us today for your Suntile dealer's name and for your FREE copy of the new SUNTILE COLOR PALETTE FOLDER. Address: Dept. AB-2, The Cambridge Tile Manufacturing Company, Cincinnati 15, Ohio.
This is the way to balance windows... and weatherstrip them too!

A Three-way Bathroom for Small Houses

Partitions enclosing each fixture in three-way bathroom to provide multiple bathroom conveniences in medium-priced houses with minimum cost is innovation of coast builder

BORIS ELIEFF, builder and contractor for the Southern California Investment Company, has developed a new three-way bathroom which is intended to furnish the convenience of two bathrooms in a house selling for less than $10,000 (generally with only one bathroom) with a minimum construction cost.

The bathroom fixtures of this new plan are parallel, arranged against a common wall. Within the bathroom as a whole, the closet, lavatory, tub and shower stall areas are separated from each other by partitions. In addition, the closet and lavatory spaces have separate entrances from the main hall. Thus, the three smaller enclosures of the bathroom assure privacy for three people simultaneously.

Mr. Elieff has employed this three-way bathroom layout in 30 two-bedroom homes recently constructed in Bell, Calif. for the Southern California Investment Company. The principle involved—that of maximum use of floor space—is a basic one in Mr. Elieff’s building. Sliding doors were also used in these residences to eliminate wasted areas. As much space as possible has been made to serve double functions within the houses.

FRONT view of house equipped with the three-way bathroom

American Builder, February 1950.
You can make small homes . . . small rooms . . . more tempting to buyers, at no extra cost with Thermopane* insulating glass.

How? By avoiding “low-comfort zones”. Make floor space usable all the way to the windows in wintertime. There’s no chilly feeling sitting near Thermopane because a sealed-in blanket of air keeps the inner pane warmer.

That extra wintertime living space is something home buyers can readily appreciate . . . it’s a real selling “plus” for you. “Sales appeal greatly increased”, one builder reports.

If you wish, you can actually save money—cut your costs—by using Thermopane. A 13’ x 20’ room, for example, might be cut to 13’ x 17’ without making it look smaller IF you have a window wall to “open it up” to the outdoors. Glaze the window wall with Thermopane and you will still be giving the buyer as much usable wintertime space because there is no “low-comfort zone”. And you will find that a Thermopane window wall can be put up for no more than a conventional wall with double-hung windows.

Double-hung, casement and picture windows in wood or metal sash are available from your dealer. Some builders in the East have developed special framework for window walls which has been very successful. For a list of Thermopane standard sizes, get in touch with your Libbey-Owens-Ford Distributor. Or write us.

---

*Thermopane® insulating glass

FOR BETTER VISION SPECIFY THERMOPANE
MADE WITH POLISHED PLATE GLASS

American Builder, February 1950.
Lower your costs! ... use portableKOHLER Electric Plants

Use a compact, portable model for small power tools, or a larger model for heavier power requirements, and watch how fast your costs come down! More and more builders are discovering that Kohler Electric Plants quickly pay for themselves in time and labor saved. Portable models are exceptionally lightweight, economical to operate, and give years of efficient service.

When you build in outlying districts, you can carry your own low-cost power supply with you. Even where there is power-line service you'll save the trouble and expense of arranging a hook-up. During the busy building season ahead, a Kohler Electric Plant will help you handle more jobs, more profitably. Sizes range from 350 watts to 10 KW. Write today for folder K-9. Kohler Co., Kohler, Wisconsin.

How Builders SELL HOMES

EDITOR'S NOTE: This is the last in an exclusive series of articles on sales ideas offered by successful builders from all parts of the United States. Congratulations are due from W. F. "Bill" Atkinson, who some time ago conducted an inquiry on sales methods used by builders. The first article in the series appeared in the October, 1949, issue of American Builder.

To build confidence among home buyers, "you do for them in the fat years what is expected of you in the lean years," says a Kansas City, Mo., builder.

"To build confidence in the buyers' minds with relation to us and our homes, we started with the first buyer in our addition several years ago. After they had lived in their house a day or two we made a personal call and asked if they had noticed any defects or had any gripes at all. If so, we immediately fixed them. Nine times out of ten a very small item appeared in their minds as a pretty serious item. We find prospective buyers are people who know someone who has bought a home from us. When we tell them in our sales talk that we stand behind our product, they believe us," the builder states.

"Another good will feature we use is to always send bouquets to each buyer at a Christmas present. Also whenever a baby is born we send flowers to the mother at the hospital. From all this we get thank you notes which I have saved in a scrap book. I use these as testimonials and find they are sure fire methods of building confidence."

BUILDING CONFIDENCE-A builder in East Pasadena, Calif., who also builds buyer confidence through giving immediate attention to complaints says, "One of the most important things we have developed is a follow-up system.

"When a complaint is made, one copy is sent into the field to the craftsman, another kept in the office. When the craftsman takes care of the complaint, or has a reason for not doing so, he writes it on his slip of paper and returns it, and this is then put in the file. You may ask what this has to do with the selling of houses, but I have found over a period of 25 years that your customer is your best salesman.

"In the present tract that we are just finishing of around 400 homes," he says, "in checking back we found that we have sold over 50 per cent on recommendation of owners already in the tract. Frankly, this has been our experience down through the years. And while this method of handling complaints involves some work, we consider it one of the most economical sales angles that we have. It is not perfect, but it gives to the owner a feeling that we are interested in his own individual job and he takes pride in telling his friends that he got a 'good deal.' In this way the recommendations are unbelievably high."

SIZE OF SALES FORCE—"The only other thing that I would suggest for many builders is—overhaul your sales force," the East Pasadena builder continues. "Frankly, we operate on a schedule and perhaps what we believe might be a sales opening to 50 to 200 houses and then must dispose of them. We start one house and finish another every day, five days a week, straight through the year. Outside of our sales manager we only have one or two salesmen at the most. The sales manager closes the sale. In this way our are much more able to control statements and promises, if such, made by any of the men. We do not let the salesmen close the deals themselves. The sales manager interviews and makes every deal final. In this way we get away from promises and statements of questionable ethics and such as that.

SEVEN SELLING AIDS are listed by a Memphis, Tenn., builder:
(1) The application form gives ideals of the community to buyers and enables us to screen for better applicants.
(2) Safety signs are put up in all subdivisions.
(3) A garden club is started in the community under the experienced guidance of a landscape architect.
(4) Sold signs are put up on homes as soon as contracts are signed.
(5) Community spirit is emphasized by guidance in economics in home owning through competent advice to buyers on the best use of limited expenditures to make the home more desirable.
(6) No repairs, except emergency, are made by the organization except upon receipt of letter from owner. This encourages the buyer to "feel wishes are being granted," says the builder, and it "eliminates trifling complaints, and enables us to have an

(Continued on page 218)

American Builder, February 1950.
NOW...See How the Keystone System Helps You KEEP YOUR BUILDING PROFITS UP

These days the builder who "goes one better" than the next contractor has an edge when it comes to turning his time and money into profits.

That's where this 44-page Keystone System Book helps you. It suggests how you can build attractive houses at lower cost ... and still add the extra features that appeal to home buyers. It gives you the reasons why building with modern reinforced concrete stucco makes good sense. It tells you how you can build stucco houses that are strong and durable ... by using the Keystone System and Keymesh Reinforcing.

Contractors and trade authorities say that the Keystone System of Stucco Application is the most helpful guide to better stucco application they have ever seen. It's certain to be of value to you—whether you are building stucco homes now or may build them in the future.

Write for your free copy of the Keystone System Book today.

Keystone Steel & Wire Company
PEORIA 7, ILLINOIS

Manufacturers of Keymesh Reinforcing • Welded Fabric • Tie Wire • Nails

Modern, Durable Stucco Calls for KEYMESH

American Builder, February 1950.
Give your homes more “come on” with PC Glass Blocks

AND WHEN YOU DO, you'll find, as many builders already have discovered, that you've given your home the extra value that buyers are looking for.

One way in which you can utilize PC Glass Blocks to turn interest into sales is by installing a few of them as a partition between rooms. Light is thus shared by both rooms—by day or night. Besides, PC Glass Blocks give home buyers actual money-saving advantages. Repairs or replacements are seldom needed. There's no painting involved. Having more than twice the insulating value of single-glazed windows, they don't require storm sash when used in exterior panels. They're easily cleaned, too. And, being non-transparent, they assure complete privacy, wherever applied.

Why not get all the details by filling in and returning the coupon for a copy of our descriptive, fully illustrated booklet. It's free and there's no obligation on your part. Do it now.

New Builders Sell

(Continued from page 216)

efficient, economical system of taking care of small complaints.

7) A maximum of legitimate publicity and a minimum of advertising is used.

** **

A FURNISHED HOME in the project helps sell, reports a Buffalo, N.Y., builder. His average priced homes, with three bedrooms, are on lots that are fully graded, seeded, and landscaped. “We spent quite a lot of money on shrubbery and landscaping (in a recent project), and put in some good sized shade trees along the streets. We had one of Buffalo’s largest department stores furnish the house, and they furnished it on a budget, in other words, kept their costs down. They advertised it in the papers and over their radio program and we, too, did the same.

“We spent a considerable amount of money advertising, and the results were that we sold 47 houses in about six weeks, and the department store told us that they felt it was a very successful undertaking for them.

“Otherwise, our sales effort is confined to keeping a finished house always available, plenty of signs directing people as to how to find it, and some interesting, readable classified advertisements pertaining to the house and the development.

“We think a furnished house is probably the best way to sell houses over anything we have tried.”

** **

HANDLE EACH HOUSE INDIVIDUALLY—“I feel one thing that has aided in the rapid and successful selling of our homes,” states an Albany, N.Y., builder, “is that we handle each house individually as far as selling is concerned. We do not use a model house or show any house before it is entirely completed. This includes all decorating, grading, lawn, sidewalks, etc., ready to live in. We then hold open house for this particular property by using newspaper display ads containing a picture of the house, and talk-only about this house to all prospects. By this method we sold all of this year’s production, except two, the first day they were offered.

EMPHASIZE COLOR — “We emphasize color in all our homes regardless of price,” says the Albany builder. “All rooms, except kitchens and baths, are papered and woodwork coloring blended with the background of the wallpaper. Kitchen ceilings are painted in gray tones. Bathrooms are

(Continued on page 220)

American Builder, February 1950.
Every builder wants to win the woman’s favor because she’s the one who decides which new home to buy. She hates noisy bells and kitchen smells which make her home unfriendly. She loves the warm, friendly tones of a NuTone Door Chime—and the sweet, fresh kitchen air that a NuTone Kitchen Ventilating Fan provides. Sell more new homes faster by appealing to the woman with these NuTone home features she loves and wants.
LOWER PRICES on Emerson-Electric BALL-BEARING ATTIC FANS for vertical or horizontal installation

Substantial price reductions on Emerson-Electric's complete line of ball-bearing Attic Fans make a complete Home Cooler Fan installation a better-than-ever investment in summer comfort for your clients in 1950! Equipped with ball-bearing motors and special ball-bearing pillow block shaft mountings, these powerful fans are designed for 5000 hours service without re-lubrication. They offer exceptionally long, quiet service, in addition to ease of installation. Built to run efficiently, when mounted vertically, horizontally or at any angle. In low attics, a space of 2½ feet above the joists is sufficient for vertical discharge installations. Available in blade sizes 20", 36", 42" and 48", with capacities up to 19,350 cubic feet of air per minute. Save half the installation cost on this tested, economical home cooling system for your clients, by installing it during original construction! See your electrical contractor or write for Home Cooler Fan Bulletin No. 404.

THE EMERSON ELECTRIC MFG. CO. • St. Louis 21, Mo.

EMERSON ELECTRIC MOTORS • FANS • APPLIANCES

How Builders Sell

(Continued from page 218)
painted to harmonize with the general color scheme. Exterior colors are varied, even to the point of mixing hybrid colors. This idea has been extremely successful.

"Some feature in each house has been advantageous to us," he reports. "In our lower priced homes we supply one extra feature—a built-in dressing table, a corner china cabinet or a special attractive shelf in the kitchen for toaster or phone, etc.—something different in each house.

FLOOR FINISH A FEATURE—"One thing that has more or less become a trade mark for our homes and which we strive and weeded towards is the floor finish. This is a must. I insist upon it being done my way, and it has paid off. We will get several hundred people through a home on an "Open House Sunday," and I will say without fear of doubt that a high figure of three will not comment on the floors. We use all select red oak and personally supervise all finishing. This I believe has been the most successful idea.

"One other successful idea," he concludes, "is the use of trees. We are favored in one particular development with very beautiful trees and a great quantity of them. We make it a point during excavation and grading to be somewhat careful and cautious so that every possible tree may be left standing. We let the owner decide if there are too many and then cut them as he desires."

PERSONAL CONTACT SYSTEM—"Our most successful method of selling is through a personal contact system," says a Beloit, Wis., builder. "As we receive inquiries regarding homes we get as much information as possible regarding the party and type of home wanted; the number of rooms wanted, type of heating plant, whether or not an attic is required for future rooms, number in family, where employed, possible price range they are interested in. If we are unable to sell them at the moment we put a card in our file and later drop them a line or if possible telephone them regarding a home being completed which meets their particular requirements. In a small city our size, we find that people like this personal touch."

A Burlingame, Calif., builder suggests seven main aspects of selling homes, with alternative methods to use if these basic aspects are not sufficient:

(continued on page 222)

American Builder, February 1950.
This Screen makes the difference

you’ll sell door and sash units FASTER with

SCREENING woven of

Firestone Velon

Tough, lightweight Firestone Velon makes the difference in the life and the shape of the screens you sell... in the volume of business you do. Velon can't rust. Velon is resilient, won't stretch out of shape. Whether you make up your own sash and door units or stock them ready-made, be sure to specify this superior screencloth. Three colors—aluminum grey, forest green, bronze brown; 11 widths; priced right for cooperative selling.

For full information and samples, ask your supplier or write either of these authorized weavers:

SWIFT MANUFACTURING CO., COLUMBUS, GA.;
PLASTIC WOVEN PRODUCTS, INC., 51 CAMDEN ST., PATerson, N. J.

Check these consumer advantages and see why FIRESTONE Velon sells itself!

- Rust and corrosion proof
- Cannot “bleed” or stain the housefront
- Never needs painting or varnishing
- Tensile strength, averaging 22,000 or more pounds per square inch
- Will not dent, bulge, or break under normal impact
- Resists sun fading—cannot be damaged by salt water, industrial smoke, dirt, grease, most acids and alkalies
- Velon cuts with a scissors—leaves no sharp ends

American Builder, February 1950.
When you plan the building of a new home or the modernization of an old kitchen, you can be sure that you will please your clients, if you consider these three important features:

**Beauty...** because the housewife wants the hours she spends in her kitchen to be in cheerful, colorful surroundings.

**Utility...** because she wants the kitchen to be sanitary in order to reduce kitchen drudgery to a minimum.

**Durability...** because she wants her investment to give her a lifetime of service and satisfaction.

**刚线丽适**
Custom Built Stainless Steel
Cabinet Sinks and Tops

give her all these advantages. In addition, they harmonize perfectly with any color and decoration scheme and add the final touch of elegance and refinement to any modern kitchen.

**Note these Exclusive JUST Radiilux Features:**
- Custom Built to meet every Personal Taste
- Patented In-Built Anti-Splash Rim in bowls
- Patented Double Pitched Drainboards
- Seamless Electrically Welded Construction
- Rounded Corners in Sink Bowls
- Die Formed Raised Edges
- U-Type Steel Reinforcing Channels under Drainboards
- Sound Deadened Drainboards and Bowls

Write today for Illustrated Literature B-2 and Name of Nearest Factory Representative

4610-20 W. 81st St., Chicago 25, Illinois

**New Builders Sell**
(Continued from page 220)

(1) Select the best possible location that can be secured with the price range desired.

(2) Have an architect, or other competent designer, prepare a compact but livable plan.

(3) Prepare adequate specifications to insure that maximum value will be delivered at minimum cost.

(4) Train a good construction crew to secure maximum efficiency in turning out a really well built house.

(5) Be sure that the price of the finished product is strictly competitive with other homes of like quality and location.

(6) Arrange the best financing possible so that no one can offer a better deal as to down payment and monthly payments.

(7) If the foregoing program is not sufficient to bring in the prospects, then:

(a) In addition to tract signs, start classified advertising.

(b) Start model homes, changing location and style of model homes as required.

(c) Do some display advertising.

(d) Start "putting the heat" on salesmen to: "Contact various home owners, to whom homes previously have been sold in various tracts, to get a list of their friends who may be interested in securing a new home. Secure prospect list through other sources—friends, business acquaintances, and clubs. Chambers of Commerce in our various communities publish lists of newcomers and indicate whether they are renting or purchasing. Renters are prospective purchasers and may be contacted through the mail or by telephone. Our advertising may point out special features, such as an expandable house. We try to point out desirability of the new homes with larger windows, better accessibility to gardens, advantages of ranch type homes, and all of the other ideas we think of to coax a family out of the rented apartment or old home into one of the new modern homes we are erecting."

**READ**
"Prefabricated Homes Up-to-Date and Down-to-Earth"
MARCH, 1950
American Builder
Matico’s Low Initial Cost
Plus Ease of Installation

Keep your flooring costs down to a minimum!

Here's how low-cost MATICO makes it easier for you to sell your houses:

Matico's Low Initial Cost
Plus Ease of Installation

MATICO Bears the Good Housekeeping Seal of Approval

This seal... nationally famous... will instill untold confidence in the mind of the buyer of a house floored with MATICO. It is your guarantee of satisfaction as well.

MATICO Consumer Advertising in 1950 in Leading Magazines

Full color advertisements scheduled to appear in the Saturday Evening Post, Better Homes and Gardens, Good Housekeeping, etc., will create a decided demand for MATICO.

Exclusively MATICO—5 New, Light “Petal Tones”

The most exciting innovation in color-styled floors—“Petal Tones” are today's sensation of the nation. Also 22 other attractive colors in the MATICO line, both solid and marbleized.

MAIL TODAY!

Mastic Tile Corporation of America, Newburgh, N.Y.

Please send complete MATICO “5-Minute Instruction Kit” showing ease of installation of MATICO asphalt tile flooring. Enclosed is 10 cents to cover mailing.

Name
Address
City
State

Mastic Tile Corporation of America
Newburgh, N.Y.
Long Beach, Calif.

Matico
the new asphalt tile
and TIME

on Every Window Opening

Savings of $5 or more per opening are reported from many projects. And the time saved on a job may mean the difference between profit and loss. The fact that two carpenters can set 64 frames in an 8-hour day indicates the speed of work.

One-der Window Frame is the modern, one-shot way to savings.

The Complete One-piece Metal Frame for metal sash Windows and in any type of wall construction

The window buck is built around this one-piece rigid frame and set in the stud wall. No fitting or adjusting is necessary.

The frame carries its own flashing outside and continuous weather-stripping flange inside. It requires no trim, inside or out; no plaster or wallboard returns; no finished carpentry.

The unit comes Bonderized and with a prime coat baked on. Only one coat needed to finish. Thus it saves two-thirds on cost of paint and another two-thirds on painting labor.

See it at Chicago!
National Association of Home Builders Annual Convention, February 19 to 23
Congress Hotel (New Products Division)

Meantime, see your Dealer or write
ONE-DER WINDOW
Sales Company, inc.

2109 Third Ave., North
Birmingham 3, Ala.

Advertising . . .
(Continued from page 145)
needs; (c) results achieved, and (d) reasonableness of production charges.
3. Obtain an “outside” opinion from advertising executives employed by publications in which the agency customarily purchases space.

At this point, the builder who erects less than 20 units a year, may comment: “This may all be very fine for the big development fellows, but what reputable agency will give a dart for my business?”

If this builder has in mind the mammoth agencies, whose tremendous overhead forces them to snicker at any account billing less than $250,000 a year, he is right.

But there are literally hundreds of smaller reputable and recognized agencies which would welcome his account.

Our own agency, Town Advertising Associates, handles several of the largest builder accounts in the New York metropolitan area, whose combined annual billing runs well into six figures. At the same time, we handle much smaller accounts. On some of these we lose money, but more than make it up when one of these little fellows goes on the big time, takes us right along with him. Some of the most treasured “oaks” in our office were once “acorns.” The same holds true in scores of agencies throughout the country, where far-sighted management will take all the “acorns” they can get.

What Agency Can Do

Hence, at no extra cost except for production charges, the small builder can avail himself of expert advertising counsel and help. His agency, if he has “chosen wisely,” will give him up-to-minute facts on the comparative pulling power of various publications and other media under consideration. It will assist him in arriving at a sound formulation of his advertising budget. It will shoulder— in expert fashion—all the creative tasks. In short, a good agency will make the builder’s advertising dollar work overtime.

It is on the creative end that the agency’s value becomes most apparent. Many builders, who place advertising direct with publications, entrust this task to space salesmen. With all due respect for these fellows—some of our best friends are space salesmen—they are, for the most part, neither copy writers nor artists, and they probably will be
NEW SECTIONAL TYPE "OVER-THE-TOP" GARAGE DOOR

14 WAYS A BETTER BUY

1. Flexible, rust-proof, aircraft-type cable. Factory assembled for quick installation.
2. Perfect door balance obtained by two-point adjustment (end of power springs and by chain on cable).
3. Turn of handle releases lock and door automatically rises to full open position.
4. Rigid steel framework anchors springs, spaces track correctly, and controls brake pressure.
5. Adjustable brake prevents door slamming or rebounding. Steel corner plate protects door.
6. Ball-bearing rollers with floating axles provide easy, bind-free operation.
7. One section of 4 panels open for installation of glass or plywood.

Here is a sectional garage door made by Frantz, pioneer manufacturer of over-head garage doors and builders' hardware. It's completely new in more than a dozen ways. The new No. 200 is easier and quicker to install, less costly to buy, and more satisfactory in service than ordinary sectional doors. Get all the facts at once... coupon brings installation details and specifications.

FRANTZ
GUARANTEED BUILDERS HARDWARE

FRANTZ MANUFACTURING CO., STERLING, ILLINOIS

FRANTZ MANUFACTURING COMPANY
Department 200-
Sterling, Illinois

MAIL THIS COUPON FOR FULL FACTS...

1. Flexible, rust-proof, aircraft-type cable. Factory assembled for quick installation.
2. Perfect door balance obtained by two-point adjustment (end of power springs and by chain on cable).
3. Turn of handle releases lock and door automatically rises to full open position.
4. Rigid steel framework anchors springs, spaces track correctly, and controls brake pressure.
5. Adjustable brake prevents door slamming or rebounding. Steel corner plate protects door.
6. Ball-bearing rollers with floating axles provide easy, bind-free operation.
7. One section of 4 panels open for installation of glass or plywood.

Frantz presents a brand new, sectional garage door with 14 new features and improvements. It's an easy-to-sell addition to the famous "Over-the-Top" line of over-head garage doors and equipment. It offers new profit opportunities! Mail coupon for full details.

FRANTZ GUARANTEED BUILDERS HARDWARE
FRANTZ MANUFACTURING CO., STERLING, ILLINOIS

American Builder, February 1950
Successful builders have been quick to recognize the added sales-appeal Modernfold Accordion-type Doors give to their houses. They've found them a good means of turning prospects into buyers.

Modernfold Doors cost no more than ordinary swinging doors. For, in figuring the cost of a Modernfold Door, you save the price of trim, jamb, hardware, painting, etc. Modernfold Doors are priced as low as $26.00 (F.O.B. New Castle).

And Modernfold Doors offer so much more. The colorful beauty of their fabric covering—the sturdy, trouble-free metal frame—the saving of so much valuable wall and floor space—and where you use large Modernfold Doors, flexibility of space.

So, plan for Modernfold Doors in the homes you build and sell. They’re a real sales-maker. Be sure to have the full story by mailing the coupon today.

Suggestions From Builders

This does not mean that the builder can offer no suggestions or ideas. Knowing that the builder lives day by day with his work and has a front-row seat on the market, the good advertising man realizes that the builder can contribute much. The danger arises when the builder, burling his weight around as the man who feeds the bill, seeks to ram half-baked ideas and amateurish notions down the advertising man’s throat. In such circumstances it often takes a truly intrepid man to brave loss of the account by voicing an emphatic “No!” The builder may carry his point, but if, as so often happens, it results in ineptual—even harmful—advertising, he has paid out hard cash for mere satisfaction of his ego.

A question of even more importance to the builder is: “How shall I allocate for my advertising?” It would be ideal if we could set down here a clear, simple formula which would embrace every condition and contingency likely to arise in a sales program anywhere in the United States. Unfortunately, we cannot, because...
Here's a brand new heating idea... a winter air conditioner, for gas or oil, designed by J&C engineers, that requires the addition of only a component package to make it either an 85,000... a 100,000... a 112,000... or a 120,000 Btu output furnace.

FOUR FURNACES IN ONE! It can actually grow with the home. Start with a four room home, and as the family and income increases... enlarge the home without changing furnaces. Simply change a small, low-cost package and increase the output of the J&C "Four-In-One" to meet increased heating needs.

The "Four-In-One" is a quality unit... with 12 gauge heat exchanger, top quality cabinet and burner, and fully automatic controls.

An original design... engineered, warranted and built by Jackson & Church Company.
Pella CASEMENT WINDOWS

PROVIDE CUSTOM WINDOW EFFECTS from STOCK SIZE UNITS

Pella Casement Units can be combined into more than 300 different sizes of varying width and height. Installation cost is cut to a minimum because all Pella Casement Windows are completely assembled and pre-fitted at the factory. Pella Casements, in modular dimensions, fit right into specified rough openings.

CHECK THESE CONVENIENT, LOW-COST Pella FEATURES

EASY TO OPERATE — Pella's patented hinge design and construction ensure easy operation.

FITS ALL TYPES ARCHITECTURE — Pella Casements fit snugly into wood, frame, brick, brick veneer, stone, etc. They convey dignity and stateliness to Colonial architecture . . . enhance Cape Cod "casiness" . . . lend breadth to Modern or Spanish styles and sturdiness to half-timbered English.

3-LIGHT WIDE UNIT — Only Pella can build these wide casement units, made possible because of Pella's patented hinge design, superior sash construction and steel liner frame.

ROLScreens — Pella casements are equipped with inconspicuous, convenient Rolscreens that roll up and down like window shades. Rolscreens eliminate putting up, taking down, painting, repairing and save valuable storage space.

DUAL GLAZING AND WEATHERSTRIPPING — All Pella Casements are dual glazed against winter cold and summer heat . . . weather-stripped to eliminate drafts.

For further information, see our catalog in SWEET’S ARCHITECTURAL AND BUILDING FILES.

ROLSCREEN COMPANY, Dept. 8-6. Pella, Iowa

Without obligation, send our PELLA CASEMENT DETAIL file a complete set of drawings showing sizes, applications and various combinations of Pella Casement units.

Name

Address

City State

PELCA CASEMENTS + ROLSCREENS + VENETIAN BLINDS

228

Advertising... (Continued from page 226)

strongly doubt whether anybody else can.

The picture is so complicated by variables that it is tremendously difficult to arrive at even a loose formula for a particular region, let alone the country as a whole. Influencing advertising costs are many fluid factors as the state of the market, the number and kind of media which must be used to tap the market, the rates of these media, the particular market sought, the competitive situation, the efficiency of the builder's sales organization and the popular appeal of the home in respect to price, terms, location, design, construction and equipment. Obviously, a home which strikes popular fancy will cost less to merchandise than one not so favored, even though the latter's price may be less.

How Much To Spend

In the New York area many builder-developers are operating on a rule-of-thumb whereby they allocate for advertising a sum based on approximately one per cent of a unit's selling price. It is virtually certain that this basis will have to be revised upward as the market continues to swing from favor and competition sharpens.

The best advice we can give about formulating an advertising budget is:

1. In selecting an agency, choose one, if possible, with a solid background in real estate merchandising problems.

2. Discuss your entire cost setup with the agency's representative. If you are not candid and honest, you will hinder him in helping you arrive at the best estimate of what your advertising cost per sale should be.

3. If you have chosen your agency wisely, its representative will be skilled and experienced in tackling merchandising problems. His counsel on your advertising budget should be given the same weight as any other expert's advice.

4. Do not regard your advertising budget as inflexible. Conditions may spontaneously arise which may force you to readjust your sights.

Advertising When Market Falls

The above point raises a question which, as far as we know, has never been satisfactorily or absolutely answered. Should the builder attempt to buck a falling market? By "falling market" is meant a true
When To Use Classified

The foregoing suggests another frequent query: "When shall I use classified and when display?" Like so much else concerned with advertising, it is virtually impossible to lay down a definite rule. Generally, where many units are concerned and the builder's advertising budget is in proportion, there is little or no question about the use of display.

It is when the budget is relatively small that the builder's advertising expert must weigh many factors, paying particular attention to the

(Continued on page 230)
INSTALL Pyrofax GAS

In Homes beyond the Gas Mains

Gas Is Preferred!
Two out of three women prefer to cook with gas—and beyond the gas mains the choice is "Pyrofax" gas. It is clean, quick and economical, not only for cooking but for water heating, refrigeration, and room heating as well. No matter where you build, you can offer home buyers all the advantages of the preferred fuel...gas.

Turn "Shoppers" Into Buyers
Give them the fuel they want—install PYROFAX bottled gas service. Installation is quick and easy—low in cost—no expensive tanks to buy—no special wiring—no changes in construction needed. Supply is guaranteed in writing.

Nationally Advertised Appliances

Magic Chef and Caloric ranges, Servel refrigerators, Ruud and Bryant water heaters, and other gas appliances are available for use with PYROFAX Gas—from our distributors in 30 states east of the Rockies.

Pyrofax

Superior BOTTLED GAS Service
For full information see SWEET'S CATALOG or address Dept. AR.

PYROFAX GAS DIVISION
Union Carbide and Carbon Corporation
30 East 42nd St., N.Y. 17, N. Y.
"Pyrofax" is a registered trade-mark of Union Carbide and Carbon Corporation.

American Builder, February 1950.
The Original Structural Insulating Board

Asphalt Treated Throughout . . . Every Fiber Protected

36 YEARS EXPERIENCE. Not only is INSULITE the original structural insulating board, but it is also the original waterproof structural insulating board.

As far back as 1915 (long before similar products were ever produced), INSULITE was being specified for double duty service in important building projects. (See old historic photo above and note that even at that early date, the unretouched banner in the photo emphasizes the moisture-resisting qualities of INSULITE.)

INSULITE Graylite products are asphalt treated throughout—not merely a surface coating. Every fibre in the board — inside and outside — is thoroughly, safely, adequately protected. That's why INSULITE resists moisture so amazingly well. If a storm wets INSULITE Sheathing (Bildrite or Graylite) before the job is finished — don't worry. No permanent harm is done.

Waterproofed Bildrite Sheathing and Sealed Graylite Lok-Joint Lath also combine to control another serious moisture problem . . . vapor condensation in walls. The double asphalt coating of the sealed Lath on the warm side of the wall retards vapor travel, while the vapor breathing characteristics of Bildrite on the cold side permits escape towards the outside. Send for new leaflet describing approved construction methods that control frost and moisture damage in walls.

How to Control Moisture Condensation in Walls

INSULITE DIVISION, MINNESOTA AND ONTARIO PAPER COMPANY
Dept. AB-250, Baker Arcade Bldg.
Minneapolis 2, Minn.

Send me this easy-to-understand leaflet showing how the approved INSULITE WALL OF PROTECTION controls moisture condensation in walls.

Name: _____________________________
Address: __________________________
City: _____________________________
State: ____________________________
Zip: ________

American Builder, February 1950.
Advertising...

(Continued from page 230)

and what the advertising man calls "lots of air" between paragraphs.
7. A smartly designed signature, which lingers in the reader's memory.
8. When necessary, clear specific directions about reaching the particular home or development being advertised. If you think many prospects may get lost, use a map.

Illustration Is Vital

The illustration of the home is so vital to good display advertising that the subject requires elaboration. The builder need only reflect on the success of various heavily illustrated magazines to realize how picture-minded the public is. A skillfully executed illustration, prominently displayed, delivers a wallop that seldom can be approached by copy. The illustration should be the finest obtainable. The cost may come high, but the impact on the reader pays handsome dividends.

We much prefer drawings to photographs because the coarse screen employed in the making of newspaper half-tones almost invariably weakens the quality of a photograph. In addition, many homes of fine exterior design photograph poorly, particularly those with natural-grain finish, and they can only be done justice by an artist trained to bring out architectural subtleties that the camera often misses.

Many display advertisements about homes, in our opinion, lose impact because they are cluttered not only by too much copy, much of it in micro-sized type, but also by a multiplicity of themes. It has been said that the reading of a newspaper should not be made a physical or intellectual exercise. The same holds true of advertising. Stated another way, if the appearance of your advertisement makes people think that they will have to work to read it, it will be largely unread.

Stick To Simplicity

Format can be simple yet attractive. And copy built around one central theme is much more digestible and likely to pull than a jumble of themes. In the opening phases of a display campaign, it is often necessary to use much copy to acquaint the public with all of the home's features. After this has been done, however, it is advisable to change copy, devising a single

(Continued on page 236)
Originators of radial and radiant perimeter heating, international engineers have now developed new low-cost furnaces for oil as well as gas to provide what the building industry has been seeking! Heat that is delivered into the floors provides warm floors, with a blanket of heat at outside walls. Closest floor to ceiling uniformity. Minimum ducting and installation expense. Low cost operation. Exclusive patented spring-suspension provides absolute quietness of operation. Compactly engineered; requires less than four square feet of floor space. Heats up to 8 rooms.

Home builders throughout the nation are finding the terrific sales advantage of furnishing this amazing new method of heating, which saves them money!

Smith-Hill, Chicago; Place & Co., South Bend; General Industries, Fort Wayne; Cottage Homes of Norfolk; Midwest Housing, Janesville, Wisconsin; and New Century Homes, Clinton, Indiana are just a few of the nationally known builders who have adopted this International equipment for their houses.

Whether you are planning one — or a thousand or more homes — these new furnaces are designed to solve your heating problem.

Fill out and mail coupon for complete brochure on how the above and other national builders are helping to sell their homes this new way!

SEE THE NEW INTERNATIONAL FURNACES AT THE NAHB SHOW—HOTEL STEVENS, CHICAGO!

Send this Coupon for Complete Information

Send your brochure showing how nationally known builders are solving their heating problems at low cost with International equipment.

I am enclosing plans and specifications. Please submit estimate for cost of complete installation in my homes.

INTERNATIONAL OIL BURNER CO.
3814 Park Ave., St. Louis 10, Mo.

American Builder, February 1950.
To Make Your Homes

Get on the Celotex

It's more profitable to feature the brands the public knows best!
And Celotex, famous for over a quarter century as a pioneer and pacemaker in the building products field, is recognized everywhere as the Greatest Name in Insulation.

It's more profitable to feature the brands that are first in consumer preference!
And year after year, impartial surveys have shown that as many as 7 out of 10 people who ask for insulation products by brand name, ask for Celotex.

It's more profitable to feature the brand that's most effectively advertised!
And last year's Celotex advertising to stimulate the building of more homes, for example, scored one of the most spectacular successes in the industry... with the public and trade alike. What's more, the Celotex national advertising campaign for 1950 promises to be even more powerful, even more productive! Yes, for over 25 years you have always been able to count on Celotex for resultful advertising and sales promotion support!
“Brand-wagon”

Yes!

Any way you look at it—it’s more profitable to feature Celotex Products!

So climb aboard the Celotex “Brand-wagon.” Use famous Celotex Building Products in your 1950 homes. Feature, display, and promote the famous Celotex line. Tie in with the tremendous new advertising push Celotex is launching to stimulate home construction this year. Write now for your free copy of an informative new book on Celotex Building Materials. The Celotex Corporation, 120 South LaSalle Street, Chicago 3, Illinois.
LOOK! The H. C. LITTLE Oil Floor Furnace LIGHTS ITSELF!

An Exclusive Feature: a Joy in Any Home.

NO PILOT LIGHT to Waste Oil or Cause Soot and Smoke. Just Carefree Comfort—at Low Cost.

AT LOW FIRST COST and LOW INSTALLATION COST, this oil floor furnace provides small homes with a fully automatic, electrically controlled oil heating plant of high efficiency and BIG heat producing capacity.

NATIONALLY ADVERTISED FEATURES SELL HOMES:

- Exclusive self-lighting feature.
- Supreme comfort.
- Less housework, because of clean fuel and no ashes.
- Burns low cost catalytic oil.
- No basement needed.
- No moving parts in burner to wear out.
- Listed by Underwriters.
- Factory guaranteed.

Advertising...

(Continued from page 232)

theme for each new advertisement.

Many of the copy techniques used in display can also be applied to classified, but the emphasis in the latter should be on presenting, as concisely and compactly as possible, an array of solid facts. Because it cannot be illustrated, the classified advertisement must seek through specific description to give the reader a clear, persuasive impression of the home’s unique advantages and its outstanding features.

Indiscriminate use of time-worn, hackneyed words and phrases makes the reader suspect the advertisement’s credibility. It also weakens the required factual description. A good classified advertisement actually amounts to an inventory of what is in the house, plus data about plot, price, terms and location.

For instance, rather than using a phrase like “charming living room,” it is preferable to list the salient features of the room in a way that will make the reader himself conclude it must be a charming place. In the same way, rather than saying that the home is “convenient to everything,” it is wiser to state—assuming it is so—that it is “1 block from 3 bus lines, 2 blocks from public school and shopping center.” Being specific about your attractions pays off.

Like its big display brother, the classified advertisement should open with an arresting headline in larger type, if for no other reason than to attract the reader’s eye as it races up and down the tightly packed columns. Smart use of white space in margins and between logical divisions of the copy and sub-heads in larger type will not only serve to attract attention but will greatly enhance readability. Obviously, competition for attention in classified columns is much more intense than in the display sections.

Nelson Corp. Names New Advertising Manager

Robert F. DeLay has been named manager of advertising and sales promotion for the Herman Nelson Corp., Moline, Ill., the firm’s president, Richard H. Nelson, announced recently.

DeLay’s duties will involve the coordination of advertising and promotional activities of all Nelson divisions, including merchandised products, engineered products, portable products and unit ventilators.
Builders are more aware today, in a buyer's market, of Walker-Turner designing. For *design* is at the bottom of the high operating efficiency of Walker-Turner woodworking machines. And the more efficiently you can build, the lower your building costs.

Actually, this emphasis on design is nothing new with Walker-Turner. New machines (such as those shown) are constantly being added to the line. But the safety, accuracy, ease of handling and economy of Walker-Turner machines are due to the fact that they've always been built with the building industry's needs in mind.

For full information about these and other cost-cutting machines in this complete line, see your local Walker-Turner dealer, or mail coupon for catalog.
This siding has permanent, flawless beauty!

The beauty and quality of Kaiser Aluminum Siding can never be marred by knots, splits or sawing scars! It’s precision produced, low in cost. Its flawless beauty will last generations!

Permanent, baked-on paint finish can’t chip, crack or peel.

STRONG, DENT-RESISTANT. Can’t rot, warp, crack or rust. Made of highest grade aluminum. Fire-resistant. Can’t be damaged by termites.

How to Nail Asphalt Shingles

Any roofing material must be properly nailed to a sound deck if it is to give sound service. The deck must hold the nails, and the nails must hold the roofing. To insure a roof that will give long, trouble-free service, enough nails of the right kind should be used and properly located.

It has been well-established that premature roof failures are almost invariably due to faulty application, not to the roofing material itself. For example, 3-tab, square-lap, strip shingles too frequently are applied with only four nails instead of six, as recommended by the engineering committee of the Asphalt Roofing Industry Bureau, and the nails are located too high in the shingle. As a result, the shingles are not anchored firmly to the deck.

It is not difficult to apply asphalt shingles correctly. In fact, contractors generally agree that asphalt roofing is easier to apply than other roofing materials. A few simple, easily-remembered instructions will assure proper nailing.

Size and Kinds of Nails

Use only galvanized roofing nails of 11 to 12 gauge, and with heads ¾ inches in diameter or larger.

Length of nails depends on type of work: use 1½ inch nails over new wood decks. Use 1¼ inch nails over old asphalt roofing. Use 1¾ inch nails over old wood shingles.

Nails should penetrate at least ¾ inches into roof deck.

Drive nails straight to avoid cutting the fabric of the shingle with the edge of the nail head.

Do not sink the nail head into the surface of the shingle.

New screening device keeps hottest rooms cooler!

Thin louvers set close together at an angle against the sun make Kaiser Aluminum Shade Screening the lowest cost screening and cooling device you can put on a window!

It deflects sun’s hot rays without blocking the view. Thus, hottest rooms are as much as 15° cooler, yet light and airy.

Kaiser Aluminum SHADE SCREENING

Sold by Kaiser Aluminum & Chemical Sales, Inc.
Kaiser Building, Oakland 12, California

American Builder, February 1950.
Exclusive Double Radial Action

Makes money for you these ways:

Helps you get more remodeling jobs!

Prices start at $195.00 including motor t.a.b. Northrock, Ohio - tank-steel to change without notice - Easy time payments!

DELTA MULTIPLEX

low-cost, portable job shop!

Helps you sell more houses!
How To Nail . . .

(Continued from page 238)

2-TAR SQUARE-BUTY STRIP SHINGLES:
—Use 6 nails in each strip. Locate the nails on a horizontal line 3/16 inches from the exposed butt edge; locate one nail one inch in from each end of the shingle; locate the remaining 4 nails 3/16 inches on each side of the center line of each cut-out; align the shingle before driving nails to avoid buckling; start nailing at the end nearest the shingle last applied and proceed to the opposite end.

INDIVIDUAL HEXAGONAL SHINGLES (Interlocking Type)—Use 2 nails in each shingle: locate one nail in each corner, one inch in from the diagonal edges; secure the lower corner of each shingle by inserting the locking device under the exposed edges of the adjacent shingles in the next course below.

INDIVIDUAL HEXAGONAL SHINGLES (Secured with fasteners)—Use two nails and one fastener in each shingle: locate the nails one inch up from the lower edge of each shoulder and one inch in from the end; apply the fastener to the lower corner of each shingle so that it secures the adjacent tabs of the shingles in the course next below, but not to the shingle in the second course below, which lies on the deck. The tab should never be nailed down.

GIANT INDIVIDUAL SHINGLES (American Method)—Use two nails with each shingle. Locate the nails 6 inches up from the lower exposed edge of the shingle, and 1 1/4 inch in from the side edge.

(Continued on page 242)
SIMPPLICITY makes Kwikset Locksets one of America's outstanding tubular locks!

Kwikset combines striking beauty, high quality and ease of installation with low cost!
Millions of dollars worth of appliance advertising has thoroughly sold prospective home purchasers on the many advantages of electrical living. They are convinced it is for them.

Alert builders are learning that they can put this conviction to excellent use. They are building homes electrically adequate to any reasonable demand of today and tomorrow. And—they're telling prospective home buyers about it.

You must wire, anyway. Why not turn this "must" into a real selling point? Adequate Wiring is one of the least costly "plus values" you can add to clinch sales and out-smart lesser acute competitors. Adequate Wiring in the plans also gets you a better appraisal—a better loan.

If you want information on Adequate Wiring, or help in applying this selling tool to your operation, the National Adequate Wiring Bureau will be glad to put you in touch with the local Bureau nearest you.

Just use the handy coupon.

Selling’s Less Tiring With Adequate Wiring

New To Mail . . .

(Continued from page 240)

GIANTR INDIVIDUAL SHINGLES (Dutch Lap Method) Use two nails and one fastener in each shingle. When laying the shingles from left to right, locate the nail in the upper left and lower right hand corners one inch in from the side and one inch in from the top or bottom edge. When laying shingles from right to left, reverse the position of the nails. Use fasteners to secure the exposed lower corner of the shingle to the overlapped portion of the adjacent shingle in the same course.

Never nail the exposed corner down. Use either corrugated wire staples applied with a stapling machine, or special copper fastening clips.

2. AND 3-TAB HEXAGONAL STRIP SHINGLES—Use 4 nails in each shingle. Locate them horizontally on a line 1 1/2 inches up from the exposed built edge. In 2-tab shingles, place one nail one inch in from each end, and one nail 1/2 inch in from each angle of the cutouts. In 3-tab shingles, locate one nail one inch in from each end, and center one nail above each cutout. Align the shingle before nailing to avoid buckling. Start nailing at the end nearest the shingle last applied, and proceed to the opposite end.

Insulation Board Institute Re-elects Fairfield

M. C. Fairfield, general sales manager of the Insulation Division of the Minnesota and Ontario Paper, was re-elected president of the Insulation Board Institute at the trade group's recent annual meeting in Chicago.

D. D. Candell, National Gypsum Co., was elected vice president. The following directors were named: J. G. Faulkner, United States Gypsum Co.; Z. H. Harwood, Flintkote Co.; W. R. Wilkinson, Johns-Manville Corp.; D. M. Pattie, Wood Conversion Co.; and Marvin Greenwood, Celotex Corp.

Promotion Placard Offered To Retail Lumber Dealers

An attractive promotion placard to help lumber dealers sell Maple, Beech and Birch flooring is offered by the Northern Hardwood Flooring Manufacturers Association.

This promotion follows the recent distribution of two dealer-aid leaflets to lumber and material dealers throughout the country. A more elaborate promotion campaign will get under way in 1950, according to W. C. Ahrendroth, president of the Maple Flooring Manufacturers Association.

Base of the display placard is three 10-inch strips of 25/32-inch Northern Hard Maple. The placard is 8 5/8 x 13 3/4 inches, printed in three colors.

Gas Burner Automatically Switches to Oil Heat During Peak Gas-Load Periods

A new type of gas burner that automatically switches to oil fuel at times when gas is in short supply has been developed by the Gas Service Company and the Midwest Research Institute of Kansas City, Mo. The development is particularly significant in view of a possible coal shortage which would place peak demands on gas.

A recurrent problem faced by gas utilities is that high demands for gas for heating often occur for brief periods of time; for example, during severe cold waves which tax the storage and production capacities of even the largest systems. The standby load maintained by gas suppliers is in many cases quite expensive, the cost to the company being several times that of an equivalent amount of base-load gas. For this reason the Gas Service Company believes that maintenance by the consumer of stand-by facilities offers a double advantage—affording peak-load relief to the utility company and assuring the consumer that automatic heat will always be available.

The equipment developed in Kansas City consists of a single unit designed to burn both types of fuel, with operation being entirely automatic. An outside thermostat automatically switches from gas fuel to oil fuel when the weather is severe; and back to gas when the temperature rises. In most areas the thermostat is set to change from gas to oil at 20 degrees F. Since there is a slight lag in the outdoor control, the switch back to gas is effected when the outdoor temperature reaches 25 degrees F.

On an annual basis the average home will use about 15 to 20 per cent oil and 80 to 85 per cent gas.

American Builder, February 1950.
"Our job is to make your job easier!"

Take a good look at the picture of the SCP regional director in your area. Note his name and address and make a point of getting acquainted with him soon. He's a good man to know. Here's why...

Your regional director of SCP was chosen because he's an expert at helping you. His calling card, in effect, means "at your service."

He knows brick and tile. He knows engineering. He knows the building business. He wants to know you.

You can count on him for sound advice on the best types of brick and tile to use on a given job, or for the latest information on how best to use them and how and where to get them. He can even tell you how to set up a program for training more men to use structural clay products.

In short, he knows or can find, the answers to a good many of your problems.

By serving you, these regional directors are carrying out SCP's programs for the building industry at the local level—bringing the benefits of our apprentice training, research, information and engineered housing services directly to you!

All you need do is tell your SCP regional director your name, your address and your problem, and he'll welcome the chance to help you. Why not call on him, soon?
MORE BUSINESSMEN will buy Reznor unit heaters next week than any other make. That industrialists, merchants, dealers and contractors will buy more Reznor unit heaters next week than any other make is not new. It has happened for years. There’s a reason for Reznor leadership. Write today.

- FULLY AUTOMATIC
- EXTRA LARGE FAN
- SPECIAL HEAT EXCHANGER
- STRONGER CONSTRUCTION
- MORE ECONOMICAL
- LOW COST INSTALLATION
- ALUMINIZED STEEL INTERIOR UNIT
- Gas Fueled Heaters Since 1871

Reznor Manufacturing Co.
17 Union St. Mercer, Penna.

Charles Simonson Appointed Eastern Sales Manager For American Builder

The appointment of Charles Simonson as Eastern advertising sales manager of the American Builder has been announced by the directors of the Simmons Boardman Publishing Corp. He succeeds J. Sidney Crane, vice president, who has been appointed general sales manager of Simmons Boardman’s transportation publications.

Simonson has served for the past three years as assistant Eastern sales manager, with headquarters at the New York office, 30 Church St.

In his new position, Crane will remain in charge of promotion for all publications and will continue to maintain headquarters in New York.

Crittall-Federal Changes Name to Crittall Inc.

Crittall-Federal, Inc., Waukesha, Wis., manufacturers of windows and doors, has announced the change of the corporate name of the company to Crittall Inc. The organization’s board of directors pointed out that the change was made to achieve brevity for the title and that no change in organization, policy or personnel was involved.

Prominent Builders Serve As Instructors in C.C.N.Y. Light Construction Course

The Midtown Center of The City College of New York has announced the appointment of three prominent New Jersey builders as instructors in three of the technical subjects in the course. The Light Construction Industry — Merchandising, Materials, and Methods.

John S. Wright, executive vice-president of the New Jersey Home Builders Association and a former small home construction manager for a large construction organization, has been appointed to lecture on Job Management. R. D. Hudson, president of the Skytop Engineering Co., Montclair, N. J., who has specialized in building substantial developments will cover Construction Methods. Fred Naef of Naef Builders, Inc., of Summit, N. J., will give the instruction in Materials and Labor Estimating.

The Light Construction Industry Course—sponsored by the National Retail Lumber Dealers Association and the New Jersey Association—is designed as a basic training course for beginners in light construction or building material distribution. Lectures by representatives of building materials manufacturers are featured.

STOP PLASTER CRACKS
USE THE BURSON CLIP SYSTEM

A practical method for installation of gypsum lathing on wood construction. No special tools or methods of building are required. The clips insure firm, permanent attachment of gypsum lath to framing, yet provide the vital "slack" which allows the wood structure to settle, twist or warp without cracking the plaster.

- BUILD YOUR REPUTATION
You add to your reputation for quality work when you use BURSON CLIPS. The construction of flooring walls and ceilings insures you —

- CUSTOMER SATISFACTION
No more disgruntled homeowners over unsightly cracks . . . no more costly patching work.

IT’S ECONOMICAL AND EASY TO INSTALL
Standard lathing nails are used with BURSON CLIPS, with 80% less nailing necessary. This speeds installation and cuts your labor costs.

FOR COMPLETE INFORMATION
WRITE TODAY
DEALER INQUIRIES INVITED
BURSON CLIP SYSTEM, INC.
2443 S. Indiana Ave.
Chicago 16, Ill.

2 BURSON CLIP SYSTEM, INC.
2443 S. Indiana Ave. Chicago 16, Ill.

American Builder, February 1950.
KENTILE GIVES NON-BASEMENT HOMES HANDSOME, LONG-LASTING FLOORS

Installs on concrete in direct contact with the earth—All fillers, binders and pigments in Kentile have high resistance to the alkali found in concrete. And Kentile's asbestos filler assures insulation against the cold and moisture in concrete floors. Equally ideal for installation on radiant-heated concrete slabs.

Also: Kentile can be laid over double T&G wood floors—or directly over firm plywood. Saves installation and labor costs because it can be laid tile by tile—eliminating the handling problems in laying flooring from heavy, hard-to-move rolls. Ready for use as soon as it is laid.

A CHILD'S BEDROOM like this gets hard usage—but that won't faze Kentile. Colors go clear through the tough, scuff-resisting material—can't wear off. Kentile stoutly resists dirt and stains—a few flicks of the mop and it's shining like new. The many desirable features of these attractive resilient floors are being brought to your clients' attention in leading magazines.

EVERY ROOM in the 6,000 Levitt Homes is floored with Kentile. Because it permits installation right over concrete on grade, Kentile helps cut construction costs in homes like this.

KENTILE floors give you freedom for design at low cost.

KENTILE
The Permanently Beautiful Asphalt Tile

IN ADDITION TO 23 COLORS and a wide variety of feature strips, you can select "Kenserte" and "Themetile"—individual decorative touches for adding custom-made distinctiveness at low cost.

DAVID E. KENNEDY, INC., 58 Second Avenue, Brooklyn 15, N. Y.
350 Fifth Ave., New York 1, N. Y. • 705 Architects Bldg., 17th and Sansom St., Philadelphia, Pa. • 1211 H.B.C. Bldg., Cleveland 14, Ohio • 228 Moore St., S.E., Atlanta 2, Ga. • Kansas City Merchandise Mart Inc., 2201-S Grand Ave., Kansas City 8, Mo. • 1440 11th St., Denver 4, Colo. • 4532 South Kolle Ave., Chicago 22, Ill. • 1113 Vine St., Houston 1, Texas • 4501 Santa Fe Ave., Los Angeles 58, Calif. • 98 Market St., Oakland, Calif. • 492 Sheffler Bldg., Boston 16, Mass.

American Builder, February 1950.
Armstrong Cork Company Adds New Auditorium to Main Offices

One of the most modern auditoriums constructed by an industrial organization for its own use has been completed by the Armstrong Cork Company at its general offices in Lancaster, Pa.

The new 900-seat structure has a professionally-equipped stage, public address and lighting system, facilities for broadcasting, and an electric organ. It is constructed as a unit with foyer, cloak rooms, and a large area for permanent displays of company products.

The auditorium is designed primarily for such company activities as conventions, exhibits, and business gatherings. In addition, the facilities will be made available for use by Armstrong employee organizations. The company's weekly half-hour radio program, "Armstrong Time," is broadcast from the stage with employees and their families in attendance.

The building serves in itself as a display of many of Armstrong's products—Corkboard insulates the roof and sidewalls and the hot air and ventilating ducts; magnesia pipe covering distributed by the firm is used on the heating pipes; cork machinery isolation reduces the noise of equipment; Linotile is used on all floor areas; and acoustical materials used include Airstone, Travertone, and Cushiontone.

NEWLY completed 900-seat auditorium

The new 900-seat auditorium is shown above as it appears from stage

\* Important price reduction in the new unit has been made on Model 2501.

Now a 3 cu. ft.
PLASTER and
MORTAR MIXER...

for the small contractor, or for
decentralized mixing on large jobs

With B. & S. engine drive $320 . . . Electric motor drive $300

Here's a unit that will place your mixing on an efficient money-saving basis. Just wheel it to the spot nearest the work . . . goes through 30-inch doors. Charging height 32 inches . . . heavy-duty blades give end-to-end action for thorough mixing . . . bag splitter saves time. Hinged housing for quick access to engine and drive . . . hinged safety grating for easy cleaning. Long-life construction . . . heavy roller chain and machine-cut gear drive . . . trouble-proof stuffing box.

Literature on request

Also 6 and 10 cu. ft. plaster and mortar mixers, tilting and non-tilting concrete mixers, concrete carts, mortar boxes

MULLER MACHINERY CO., Inc.
Metuchen 4, New Jersey
Balanced for safety...

1. WHEN YOU LIFT IT
   You can actually suspend a Speedmatic from one finger—it won’t tip, veer or twist. That’s perfect Static Balance, first reason for better sawing.

2. WHEN YOU USE IT
   Press the trigger—get that Speedmatic “feel” in action. Note how easily it handles—how smoothly it cuts—how it “obeys” your guidance. No power jerk, Perfect Dynamic Balance.

STARTS SAFE—no dangerous power jerk when you press the trigger—helical gear drive makes blade enter the cut straight and true; prevents cramping.

SAWS SAFE—big, broad base of your Speedmatic is a real safety factor—keeps saw steady, easy to manage, readily sighted on the guide line from any sawing position.

STOPS SAFE—no dangerous lunge when you reach the end of your cut—saw’s weight rests on main piece.

SAFETY is just one of Speedmatic’s 6 superior features resulting from Speedmatic’s exclusive 2-Way Balance. One demonstration will give you the whole performance story, including: Safety, One Hand Operation, Power, Accuracy, Smoothness, Durability.

Try a Speedmatic at your dealer’s today.

And that’s not all...

Your Speedmatic distributor has a complete line of these balanced, quality electric tools—saws, sanders, routers, mortisers, planes, grinders, floor sanders and edgers—and other masterpieces of balanced design.
The PERFECT TEAM

EVEREADY BRICKSAW and EVEREADY BRICKSAW Blade give you lowest money cutting costs. You can actually save the cost of your EVEREADY BRICKSAW on one job, and you can do better work faster.

CUT WET OR DRY

Take your choice—change in a second from dry cutting to dustless wet cutting. Can be obtained originally for dry cutting. Later, interchangeable wet cutting kit can be installed in a few minutes.

MAIL THE COUPON NOW

EVEREADY BRIKSAW CO.
1303 S. Michigan Blvd., Chicago 3, Ill.

Without obligation send information on EVEREADY BRIKSAW and blades for cutting...

NAME
ADDRESS
CITY
STATE

Church 104 Years Old Moved 250 Miles With Aid of Crane

A 104-year-old Congregational Church was dismantled and re-erected with the help of a Lorain Moto-Crane owned by Consolidated Building Wrecking Co., Inc., of Bridgeport, Conn. The crane traveled from Stratford, Conn., to Brookfield, Vt., a trip of 250 miles that included nar-
row, winding roads. There it was used to dismantle the church.

After the move back to Stratford, Conn., the crane was used to help re-erect the church as seen in the accompanying photograph. An eighty-foot boom was used with the crane.

It is estimated that the new owners of the church saved $25,000 when the cost of their acquisition is compared with the probable cost of a similar new one.

The Moto-Crane used was manufactured by the Thew Shovel Company of Lorain, Ohio.

CHURCH is re-erected at Stratford, Conn., after being dismantled and moved 250 miles with the help of MC-416 Lorain crane...
"It doesn't cost any more to build houses with genuine Heatilator Fireplaces—and they're a lot easier to sell! I've been using them in my fireplaces since 1935."

Says Walter Kennon, Vice-President and Chief Designer, George Wallace Realty Co., Buffalo Builders.

HERE'S a big extra selling feature that makes houses move faster—and costs you little or nothing! Build your houses around the cheery glow of a modern Heatilator Fireplace—the Place that circulates heat instead of wasting it up the chimney. Savings in labor and materials usually more than make up for the small cost of the Heatilator Unit.

1. Assures correct operation. The Heatilator Unit is a scientifically designed, lifetime-built steel form around which you can build any style fireplace. It assures correct construction even by inexperienced masons and eliminates common faults that cause smoking.

2. Saves you time and money. The Heatilator Unit adds little or nothing to the cost of the finished fireplace because it's complete from hearth to flue and ready to install. It saves on expensive firebrick. It saves mason time and labor because all designing is done. You save valuable time because the Heatilator Unit permits unsupervised construction.

3. Circulates heat, saves fuel. The Heatilator Unit takes heat that is ordinarily wasted, and circulates it to every corner of the room . . . and to adjoining rooms as well. On cool Spring and Fall days, furnace operation is unnecessary. In mild climates, it's the only heating source needed.

4. Makes any house easier to sell. It's the kind of quality comfort feature today's house-hunters are looking for! And they know the Heatilator name through over twenty years of national magazine advertising.

Write today for complete specifications and illustrations showing a variety of attractive fireplace designs employing Heatilator Units.

Heatilator Fireplaces are told by all leading building material dealers. Accept no substitute. Look for the Heatilator name on the dome and on the damper handle. Heatilator Inc., 632 E. Brighton Ave., Syracuse, N.Y.

Heatilator is the reg. trade-mark of Heatilator, Inc.

HEATILATOR FIREPLACE
Closes Sales FASTER!

American Builder, February 1950.
Here's the powder-actuated fastening tool every contractor has been waiting for! It embodies all of the features our customer-users have requested...and more.

With the introduction of DRIVE-IT "300", the powder-actuated tool "comes of age". It's a streamlined beauty with such features as automatic extension barrel, flangeless drive-pins, controlled power and 40% greater penetration. It is as safe as a screwdriver, and retains all of the time-saving, money-saving advantages of this amazing fastening method.

Clip the coupon now and get the full story on the DRIVE-IT "300". It will be money in your pocket!

Stanley Works Announces New Mobile Display Unit For Builders Hardware

The Stanley Works, New Britain, Conn., is taking its diversified line of hardware products on a nation-wide tour of inspection for hardware wholesalers, retailers and builders in a specially constructed motor coach. Designated as the "Stanley Hardware Rollorama," the new mobile display coach will carry over 1,300 sample items in the firm's builders' hardware line. It will visit all principal cities in the country where it will be displayed under the direction of trained factory representatives.

The Rollorama is constructed on a standard 36-passenger motor coach chassis with a modified body. The interior contains 24 hardware display panels which are uniquely arranged along the interior walls on both sides of swinging doors. Linoleum-topped counters with slanting fronts display panels give a modern store environment for the entire presentation. Interior fixtures are finished in prisma. Forced ventilation and thermostatically-controlled heaters are installed. A lounge area is located at the rear of the coach where representatives may discuss requirements with representatives of the company.

Announcement of the Rollorama's itinerary will be made at a later date. Advance postcards will notify distributors when to expect the Rollorama in their territory. The Rollorama was designed and constructed by M. Rundskoven Displays, East Hartford, Conn.

THE Stanley Works hardware division "Rollorama" which will tour America displaying the complete line of builders' hardware.

George P. Merritt, general sales manager of The Stanley Works hardware division says: "The main purpose of the Rollorama is to assist the entire hardware trade by bringing a completely stocked showroom directly to the dealers' doors. Aboard the motor coach, a dealer may examine the Stanley line at first hand, get help in his hardware problems from the Stanley factory-trained representatives. On special blanks which will be provided he may also have orders placed through his jobber."

American Builder, February 1950.
Sensational FLAMING BRAND Test...

SHOWS WHY ROOFS NEED FIRE-CHEX

Heat from flames causes asphalt coating on ordinary shingle to burn, melt and flow, then allowing flames to eat through highly-combustible felt. This would expose roof deck to flames. Potent asbestos plastic compound coating on Fire-Chex resists burning, melting and flowing... actually "puffs up" to insulate felt from flames and prevent ignition.

Carey Fire-Chex asbestos-plastic shingles assure unmatched fire protection for valuable buildings and human lives... enhance the value of your building projects. This fact is dramatically proven by the flaming brand test shown above...a test you can easily demonstrate for your clients with the handy kit made available by Carey. Ask your Carey representative about it today.

YOUR CLIENTS WANT BEAUTY AND DURABILITY, TOO...

Carey Fire-Chex have beauty... in client-satisfying measure. They're made in a variety of rich new colors and blends especially designed for application in copyrighted shadow-blend roof designs that cannot be duplicated... and they're extra heavy (325 lbs. per sq.) for extra durability and weather-resistance.

Whether your business is design or construction... insist on Carey Fire-Chex... the ultimate in fire-protection, beauty and durability... to help make any building a safer investment. (See Sweet's Architectural file for further information.)

Call in your Carey representative for full details.

The Philip Carey Manufacturing Company, Cincinnati 15, Ohio.
In Canada: The Philip Carey Company, Ltd., Montreal 15, P.Q.

THE HOUSE OF

Carey
New Standards Announced
For Pine Woodwork

A commercial standard for standard pine windows and sash, the first of its kind ever published, has been announced by the Ponderosa Pine Woodwork Association. The new standards, which became effective Dec. 15, are expected to be particularly helpful to architects, builders and wholesale and retail distributors of woodwork products.

In addition to establishing specifications for standard sizes, layouts and construction details of stock pine windows, sash and screens, the standard is intended to effect economies for all concerned, from the producer to the ultimate consumer through a wider utilization of the products.

Complete Kitchen
For a 5-Foot Space

A complete kitchen that occupies five square feet of floor space is one of the many interesting new products to be shown at the Annual National Association of Home Builders Convention and Exposition to be held in Chicago, Feb. 19-23.

PERMITS REMOVAL OF SASH WEIGHTS, INSULATION OF MULLIONS.

Slash Labor Costs'

Simple installation allows one man to easily install 30 or more windows in 8 hours. No high-priced skilled labor needed. This means you can get more satisfied customers at lower cost... higher profit!

Tops in Operation!

Smooth, positive action; accurate balance; finger-tip control plus the perfect seal against dust, moisture. No wood-to-wood contact. Prevents sticking windows and window rattle.

EFFICIENT LOW COST

For Old
Or New

BUILDING

ATTENTION MILLS AND LUMBER YARDS
IDEAL FOR PRE-FIT WINDOWS

Can Also Be Sold in Simple Unit Packages

Mail this coupon today!

Milwaukee Strip Service, Inc.
4451-53 W. Lindsay Ave.
Milwaukee 8, Wisconsin

Please rush me folder A-4 and price list of Milwaukee Combination Sash Balance Weatherstrip.

Name

Address

City Zone State
**Blo-Fan**

**IS superior!**

**IN THE KITCHEN**—Blo-Fan installs over the range, where it will whisk out steam, grease, and cooking odors as they rise before they spread.

**IN THE BATH**—Blo-Fan quickly expels steam from the bathroom—avoids foggy mirrors and steam-streaked walls—the air stays crisp and fresh.

**IN THE GAME ROOM**—Blo-Fan eliminates tobacco and other odors by removing stale air before it contaminates the drapes and furnishings. No morning-after odors.

**IN THE LAUNDRY**—In any weather Blo-Fan keeps the laundry clear and fresh. Steam is expelled before it spreads, windows do not fog...air is kept dry and crisp.

**HERE'S WHY!**

**FAN**—75% of the air moved by a breeze fan is thrown from the blade tips. The center is weak when it meets resistance. A fan delivers volume, but it lacks power.

**A BLOWER draws** a smaller amount of air into the vortex, discharging it with great velocity, thus overcoming resistance. A blower delivers power, but it lacks volume.

**Blo-Fan combines the volume of a fan with the power of a blower.** The fan blades feed the vortex of the blower so the vortices are fully loaded. That's why Blo-Fan delivers more air with more power.

---

Manufacturers of

**PRY-LITES**

...the modern recessed lighting fixtures with snap-on fronts.

Factories: Pomona, California; Newark, New Jersey

Warehouses: Los Angeles, San Francisco, Chicago

Stocked by more than 500 wholesalers in more than 350 cities

Pryne & Co., Inc. Box 92, Pomona, California

A Quick, Attractive Finish

FOR ALL INTERIOR WOODWORK

CABOT’S STAIN WAX

MONARCH CUTTER

FOR ASBESTOS SIDING AND SHINGLES
GUARANTEED 100% Non-Breakable

NOW, AT LAST
MALLEABLE IRON CASTING

The Monarch Asbestos Siding and Shingle Cutter in malleable iron gives you the 100% guarantee against broken castings. Because of its metallurgical structure, malleable iron is the ideal material for this cutter. The Monarch gives greater toughness, higher resistance to corrosion and will stand up to heavy and repeated impact.

The Monarch has a front and rear gage, centering, and precision cutting blades. Angle gage is optional.

27” Monarch ... $39.50
32” Monarch ... 45.00
(FOB Fort Worth, Texas)

WRITE FOR FREE DESCRIPTIVE FOLDER

TRI-STATES Building Materials Company, Inc.
P. O. Box 1476
Fort Worth, Texas

MAIL THIS COUPON

TRI-STATES BUILDING MATERIALS CO.
P. O. Box 1476, Fort Worth, Texas

Please send me, without obligation, information on Monarch Cutter in malleable iron.

Name: ____________________________
Company: _________________________
Address: __________________________

Florida Apartments Designed For Room Air Conditioning

Wall openings for room air-conditioner window ducts are a construction feature of a new apartment building in Orlando, Fla. The owner,

EXTERIOR view of Orlando, Fla., apartments. Outside wall openings have been skillfully blended into the building design

CARRIER De Luxe Air Conditioner unit, in corner of room, is feature of apartments who air-conditioned each apartment with individual Carrier Corp. room units, has reported 100 per cent occupancy for the building, even in summer months. The air vents were planned as part of the design, harmonizing with other exterior decorations.

The individual units are installed in a corner of the room, permitting full-length window light and vision.

F. W. Dodge Corp. Plans Full Representation at NAHB Meet

All of the divisions of the F. W. Dodge Corp. will be represented at the NAHB convention in Chicago, Feb. 19-23. Company officials said that members of the sales staffs of each division, together with special marketing consultants, would be in attendance during the entire meeting.

One of the firm’s displays will be a special demonstration of the Chicago Construction News, daily building trade newspaper.

TRI-STATES BUILDING MATERIALS CO.
P. O. Box 1476, Fort Worth, Texas

Mail this coupon for free descriptive folder.
REDUCE BUILDING COSTS
Pre-assembled DOORWAY CANOPIES
Pre-painted ALUMINUM SHUTTERS
Low cost PORCH RAILINGS

LOW COST
SAVES LABOR
AND MATERIAL

A STYLE
FOR EVERY
HOUSE

QUICK,
EASY
INSTALLATION

RIGID
CONSTRUCTION
MANY COLORS

LIGHT-SAVER
DOOR CANOPY
WESTWIND
DOOR CANOPY
SLANT
DOOR CANOPY
GABLE
DOOR CANOPY

STANDARD
PORCH RAILING
ARISTOCRAT
PORCH RAILING
PORCH
COLUMNS
LINE-AWAY
LAUNDRY DRIER

LIGHT-SAVER
AWNING
DAY-VIEW
AWNING
THRIFT
AWNING
CORONET
AWNING

FLOWER BOX
SHUTTERS

DRESS IT UP . . . SELL IT QUICK
WRITE FOR CATALOG AND PRICES TODAY
FAWSCO MFG. DIVISION FALLS STAMPING & WELDING CO.

FAWSCO

1709 FRONT STREET CUYAHOGA FALLS, OHIO
DISTRIBUTORS!
DEALERS!

We're buried in SALES
...need help to dig out!

Art & Iron

A few years ago, we started making the finest ornamental iron work skill can produce. Our costs were low and, not knowing better, we sold direct to the building trade and architects.

THEN ... A fast-talking advertising man said: "Use some trade papers!" We did, and what happened? We got swamped with orders!

NOW WE'RE ALL SNAFUED...

We got behind and don't know when we'll catch up. We need help! If we can get out of the sales end, we'll have more time to manufacture and design.

SO.....

If you're a distributor or dealer who can handle the finest ornamental iron work made (nice profit—you'll like it) wire, phone or write. There's a lot of business all ready to be picked up. Plenty advertising help, too.

Write to Dept. A

ARTCRAFT
ORNAMENTAL IRON CO.
1714 1 Hudson St., Columbus 11, Ohio

New Idea For Production-Line Building of Single Homes on Individual Lots

Individual homes constructed with all the savings of production-line building are being produced by the Schrader Development & Supply Co., St. Louis, Mo. The Schrader organization, a pioneer in the use of specialty crews and assembly line building in sub-division development, has a new plan for constructing a single home for an individual on his own lot.

WALL sections, porches and other building parts are produced and assembled in large plant utilizing cost power tools.

In a large plant, Schrader pre-assembles walls, porches, and porch canopies sending them out completely finished. Using the latest in power tools and advanced building design, all interior doors are fit, locked, and nailing in the jambs and are ready to be nailed in the wall openings. Trucks and trailers deliver the building parts completely assembled to individual home sites and experienced crews erect and finish the house.

Actual construction of a Schrader home has averaged 40 working days. Stock piling of building materials and continued maintenance of full working crews for both on-site and plant operation have aided in maintaining unusually speedy production.

The home plan selected for the Schrader pre-assembled project measures 25 x 32 feet with almost 800 square feet of floor space and full basement. Two bedrooms, living room, bath and large kitchen complete the structure. The home is priced at $7,75 with asbestos siding plus cost of sanitary sewer connection and garage. Brick veneer is also used with the customer paying approximately $1,200 additional.

The foundation is of poured reinforced concrete. Exterior walls are framed in units in accordance with a key plan which is illustrated, using Insulite Bildrite Sheathing applied directly over 2 x 4 studs placed 16 inches O.C. which are doubled to receive 1x3 horizontal strips serving as a nailing base for the asbestos shingles. Bildrite Sheathing provides both structural strength and needed insulation. Dado saws are used by Schrader at his plant to accurately cut the 2x4 studs so that the nailing strips may be let-in and form a flush surface.

Exterior walls are sided with asbestos shingles and roofs are of asphalt shingles. The floor is hardwood, except that kitchen and bath have inlaid linoleum. Interior walls are of dry wall construction, some painted, some papered, and bath and certain kitchen areas are finished with Insulite hardboard wall-ceiling, sprayed with synthetic enamel after being cemented in place. The kitchen is furnished with a 54 inch deluxe cabinet sink, one 15x30-inch wall cabinet, one 30x30-inch wall cabinet and one 15-inch base cabinet. In the basement, there's a gas-fired automatic hotwater heater.

Gravity hot-air heating with a coal-fired furnace is the normal heating system supplied with the Schrader

(Continued on page 258)
Reversible TO HELP YOU LOWER BUILDING COSTS

Richmond universal knockdown steel frames

Richmond steel frame jambs are reversible so they can be used for either hand of the door. Hinges are welded to hinge jamb the same distance from either end. Latch cutout is centered in latch jamb. Jambs can consequently be used on either side of frame. Being reversible and coming in three pieces makes ordering easy and reduces to a minimum storage space required.

Check These Features

- Low in cost—sturdy in construction
- Made of best quality 18-gauge steel
- Available for interior and exterior openings
- Frames are neat appearing, stable, durable
- Rolled sections insure accurate dimensions and perfect fit when assembled
- Hinges welded to jambs in manufacture
- Jamb members are equipped with clips for nailing to studs or strap anchors for masonry walls.
- Frames eliminate need of casings
- Red oxide primer coat baked on at factory
- Sizes: Width—1'6" and up in 2" multiples
  Height—4'6"; 6'8"; 7'8"

MAIL COUPON NOW
for full information about
Richmond Steel Frames

THE RICHMOND FIREPROOF DOOR COMPANY, DEPT. 2
P. O. BOX 97, FRIENDS STATION
RICHMOND, INDIANA

PLEASE SEND ME booklet giving full information about Richmond Steel Frames.

NAME
BUSINESS ADDRESS
CITY ZONE STATE
POSITION TYPE OF BUSINESS
New Idea for Production—
(Continued from page 256)

homes. In some cases a forced air, gas-fired bearing plant has been installed.

When the pre-assembled building parts arrive at the site, the units are
laid on the subfloor and assembled,

WALL panels illustrating 6x4's double-sawed for receiving 1x3 horizontal wood
nailing home strips are shown here. Inter-
ior walls are of dry wall type using either paper or paint covering

according to the key plan. The door
frames and pre-fit windows are nailed in place. The Bilt-Rite Sheathing is
all precut to sizes required for each
unit and is nailed in place after the
door and window units have been
properly placed. Then the asbestos
shingles are applied. The wall is
raised in place with the exterior being
complete. First the front wall is
raised; second, the rear wall; third, an
end wall. Then all interior partitions
are placed on subfloor. The fourth
wall is then raised in place. All corn-
ers on exterior walls are bolted to-
together. The partition walls are set
and spiked in place. All roof rafters
and ceiling joists are precut in the
plant and the building is put under
top in 3½ days with a crew of four men. All rear porches, front porches,

HOMES, 25 x 32 feet, have full basement
front porch hoods, and basement stairs
are pre-assembled and painted, then
taken to the building and erected.
The interior trim for all windows and
doors is pre-fit.

Since the beginning of their semi-
prefabrication operation last spring,
the Schrader Development & Supply
Company has erected 30 structures
using this newest idea in home build-
ing.

For Quick, Easy, Full-Powered
Sawing—This 6" Bradford Can't be Beat!

New Model 160
BRADFORD

THE BRADFORD
MACHINE TOOL COMPANY
654 EVANS ST.
CINCINNATI, OHIO

KORK-PAK
IMPROVED
JOINT FILLER

Write for complete details on KORK-PAK. See our Catalog in
SWET.ES.

WALL PANELS FOR DOORS

SERVICISED PRODUCTS CORP.
6051 W. 65th ST., CHICAGO 38, ILL.

WESTAIR
KITCHEN VENTILATORS
CEILING AND SIDE WALL MODELS

WESTERN APPLIANCE CO., INC.
5600 Grand River, Detroit 8, Mich.
Houses Sell Faster

Equipped with NORGE Appliances

Home buyers are more choosy now. They want more for their money. And they want a “package mortgage” so that they can pay the cost of necessary home appliances over a long period of time...the duration of their house mortgage. Builders everywhere find appliance-equipped homes sell faster, easier.

WISE BUILDERS INSTALL NORGE!
and with Good Reason!

You know that in practically every case it's the woman who chooses the home. You know that the kitchen is the big selling point. And the kitchen equipped with Norge is a sure winner.

First, because Norge is a famous national brand. Every woman knows the name. Every woman recognizes the value. And the husband knows that “Borg-Warner” stands for the best in engineering.

Second, individual Norge appliances sell themselves...and your house along with them. Their beauty lends glamour and drama. And each appliance is jam-packed with the features every homemaker wants.

And the builder himself finds that the Norge price is right. So when you install Norge appliances, you add much more to the value of your house than the price of the appliances themselves. You assure yourself of faster-moving units...and greater profits.

NORGE Division, Borg-Warner Corporation, Dept. AB-3
Detroit 36, Michigan

Att.: Mr. S. J. McCarthy, Director of Contract Sales.

Please send me more information on the following appliances:

- Refrigerator
- Automatic Washer
- Electric Range
- Water Heaters
- Gas Range
- Home Heaters

American Builder, February 1950.
STAPLE—to save time
speed up production

T-32 Gun Tacker

Replaces hammer and tacks at trigger rate speed. Shoots a staple wherever a tack can be driven—ideal for carpenters, insulators, roofers, etc. Special screen and window shade attachments. Loads 150 staples—3/16", 1/4" and 5/16".

Rustproof "Monel" staples available.

BUY FROM YOUR LOCAL DEALER OR ORDER DIRECT—DEPT. AB
ARROW FASTENER COMPANY, INC.
30-38 Manzur St., Brooklyn 6, New York

The RANGE-VENTOR SELLS HOMES

Without a Range-Ventor even today's modern and beautiful kitchens are incomplete. Not only does this handsome, eye-filling piece of equipment capture and exhaust kitchen odors, grease and heat at their source—above the stove—but it is a selling feature that has instant appeal. It ventilates, it illuminates, it protects walls and cabinets...and it sells homes.

Send for Bulletin 580

American Builder, February 1950.
Designed to meet today's modern construction standards, they blend with all types of architecture, and lend themselves to installations at rates up to five times as great as those where "assembled-on-the-job" units are used.

Doors are available in 1 1/4" and 1 1/2" thicknesses; 1 1/4" available as single-swing or double-acting. These doors may be provided with integral louvers or vision panels. Doors are factory rabbeted and bored for standard hardware. Frames and hinges are furnished as a one piece welded assembly. To insure parallel alignment, removable steel spreaders are welded to bottoms of the frames. Doors are furnished with a neutral color primer, electrostatically applied and controlled; frames are rust-resistant primed.

AMWELD Steel Frames are used in all types of wall construction.

Sliding closet doors have definite advantages in the saving in space and increased accessibility to closet content, plus saving in initial construction cost. Steel door panels are formed on four edges, fitted with finger pulls. Jambs, header and track — the same high quality and construction as door frames. Available for 3', 4', 5' and 6' openings — 2 doors. AMWELD Steel Sliding Closet Door Units are also available in packaged, knocked-down units. Here's a fast turnover, profit-making line that will pay you to investigate.

AMWELD Steel Door and Frame Units

Building Products Division
THE AMERICAN WELDING & MANUFACTURING CO.
WARREN, OHIO
There’s only ONE—

Various limes come from Ohio . . .
they’re OHIO limes.

When more or less white . . .
they’re called WHITE limes.

When sold for finished plaster . . .
they’re FINISH limes.

Some may even come from Ohio, be white, and be meant for finishing limes . . .

Yet, there’s only one OHIO WHITE FINISH (our trade mark), that through its consistent quality has gained favor everywhere with architects and builders, and is preferred by plasterers for its good working qualities.

You too may rely on our twin brands: OHIO WHITE FINISH and HAWK SPREAD WHITE FINISH. Scientifically processed from hand-picked, kiln burned dolomitic limestone, they are always of uniform good quality, 99.94% pure.

They are easily recognized by the Zigzag Bags.

The OHIO HYDRATE & SUPPLY Co.
WOODVILLE, OHIO

SASH BALANCES AND SPRING BRONZE METAL WEATHERSTRIPING
Complete Unit Carton Packaged — Any Size $.50

SEE YOUR LUMBER DEALER
THE WEATHERPROOF PRODUCTS CORPORATION
329 Westport Road Kansas City, Missouri

American Builder, February 1950.
Because Lo-K Insulation contains no harsh particles that irritate the skin and get into workmen's throats--because it costs so little--because it is the lightest weight of all commonly used insulating materials (.875 lb. per cu. ft.)--because it has a 1½" range for easy, time-saving fastening--builders everywhere find that its applied cost is less than that of any other commonly used insulating material.

Furthermore, it has greater insulation value (.24K factor)--is flameproofed--resists moisture--does not deteriorate with age--will not mildew or attract vermin.

For better insulation at lower cost, try Lo-K. Compare the cost. Ask your workmen which insulating material they prefer to use. Lockport Cotton Batting Co., Lockport, N. Y.

* Available in either open or enclosed blanket type--and with aluminum foil or asphalt KRAFT paper vapor barrier.

** American Builder, February 1950.**

**GIVE IT THE BLOWTORCH TEST**

You will find that it won't burn--merely chars without flaming--won't melt or fall apart. That's why it acts as a fire stop.

Furthermore, Lo-K's flameproofed qualities are permanent.

**TEST IT FOR MOISTURE RESISTANCE**

Float it for days on top of a pan of water. Because Lo-K does not absorb moisture by capillary attraction, only the part in contact with the water will be wet.
One touch of your finger will tell you why wood windows maintain their widespread popularity. For wood is a natural insulating material. It retards transmission of heat or cold, minimizing dimensional change due to temperature variation. Ponderosa Pine’s low density, smooth texture, and uniform grain provide a natural bond for all finishes. Moderate in cost, and available in modular standard sizes in a wide variety of styles, Ponderosa Pine windows are correctly proportioned and precision made for quick installation. These windows are available toxic preservative treated in accordance with tested industry standards. Preservative treatment of your Ponderosa Pine windows gives added resistance where staining, decay, insect attack or humidity are problems.

**Chicago's New Code Not Expected To Stimulate Construction**

The new "performance" building code recently passed in Chicago will benefit all types of construction in the long run, but it is doubtful that it will produce an immediate boom in small home construction within the city limits, according to the Chicago Metropolitan Home Builders Association. And few, if any, prefabricators will be able to adjust their designs and operations to meet the rigid small home regulations of the amended code Martin C. Huggett, executive vice president of CMHBA, reported.

A serious obstacle to rapid building progress within the Chicago city limits, according to Huggett, is the "compromise" amendment reached by Mayor Martin H. Kennelly December 29 after a two year struggle between the building industry and civic groups backing the "streamlined" code, and plastering groups opposing it.

The compromise amendment permits construction of non-bearing partitions of materials having:

1) A fire resistance rating not less than a wood stud partition covered on both sides with one-half inch exterior grade plywood.

2) A flame spread rating to exceed thirty.

3) Withstand an impact equivalent to 60 pounds to 3 1/2 feet.

The acceptability of virtually all materials under paragraph 3 will remain uncertain until the building code administration is set up and the tests are defined more clearly, Huggett said.

In any event, according to Huggett, it appears that the performance requirements established in the new code will require the use of materials that will increase the cost of small homes built outside the fire zones in the city materially above the cost of homes now being built in suburban areas outside of the city limits.

Other obstacles to volume home building within the city were cited by the Chicago Metropolitan Home Builders Association.

The first is the extension of "fire limits" in which frame construction is banned to the point where they now embrace 175 of 211 square miles within the city. The most desirable areas for small homes now fall within the "fire limits."

The second is the shortage of land priced low enough to be included in a "small home" package price. Seeking to break this shortage, the Committee on Housing Development of the CMHBA is working closely with

(Continued on page 266)

*American Builder, February 1950.*
Residence of Harry L. Magee. Architects, Berlinger, Hoag & d'Entremont; builder, Percy Swank

56 CASEMENT WINDOWS PERFORMING PERFECTLY IN EVERY SEASON, IN ANY WEATHER

Any casement window is only as good as its operator. The operator is the control tower of the window's flight. It must secure it instantly, rigidly, in any position desired. It must respond to the touch of a finger. Being an interior fixture, the operator must be graceful; having to live a lifetime of twists and turns, it must have guts.

That's why architects, builders, contractors, casement manufacturers, building material dealers, hardware jobbers and dealers specify, use and carry the Getty line. That's why Getty operators are found on more casement windows than all other operators combined.

Write for our descriptive brochure D. It contains complete information on our three operators (internal gear, external gear, horizontal drive) and our specialty hardware for every type of wood and metal casement.
HASKO
ARCH-KOR
FLUSH DOOR

- HOME-OWNERS like its enduring beauty
- CARPENTERS like its workability and easy installation
- EVERYONE likes its modest price

The Hasko Arch-Kor door is a better door . . . that costs no more than ordinary doors.

It is built of selected materials throughout. No seconds or rejects are hidden behind the face panels. It is built on a new principle of engineered door construction which permits manufacturing savings . . . so Haskelite can give you better materials and superior quality at conventional prices.

The Arch is a fundamental engineering form. It is the strength member in bridges, buildings, and other structural achievements of ancient and modern times. The principle of the Arch is used to produce the exceptional strength and warp-resistance of the Hasko Arch-Kor door.

This new hollow-core door is of balanced, cross-grained construction to give exceptional resistance to warping.

Because we use selected straight grained materials in the rails and stiles, the door edges plane smoothly and evenly, hinges are mounted quickly and cleanly — screws hold permanently. This workability makes faster, easier installation a sure thing with the Hasko door. Up to 1" in width and 2" in height may be trimmed if necessary. Double lock blocks permit 8-way hanging.

You owe it to yourself to find out all the details and specifications of this door that lets you give your customers a better buy. If your lumber merchant does not yet have full information, drop us a letter or postcard for the new Hasko Door bulletin.

TESTS PROVE ARCH-KOR QUALITY

HOT BOX - WET BOX TEST: A Hasko door was placed in a dry kiln at 170° F. for 48 hours then moved to a room with the humidity controlled at 80% for 48 hours. It remained 100%.

SLAM BANG TEST: A second Arch-Kor door was hung on standard hinges in a rapid door frame. It was automatically opened and slammed shut by a powerful spring, over 1,000,000 times. There were no broken hinge bolts.

Chicago's New Code
(Continued from page 264)

representatives of the Chicago Land Clearance Commission, the Chicago Plan Commission, the Cook County Housing Authority, the Housing Authority of the State of Illinois and other governmental bodies. These groups are seeking a formula for private industry-government co-operation that will encourage construction of both small homes and private rental apartments within the city.

Until these groups succeed in a program for acquiring land for private development through co-operation of government bodies, the majority of home building must continue in the suburban areas. Huggett said. Of the approximately 28,000 dwelling units begun in 1949, in the Chicago Metropolitan area, more than two-thirds were outside the city limits. This ratio will probably continue throughout 1950, despite passage of the Chicago building code.

Fred Kaiser, Honeywell's New Field Service Manager

Fred Kaiser, midwest regional manager for the company since 1943, has been promoted to field sales manager. This position is new to the company, McDonald said. Kaiser joined Honeywell's New York office in 1926.

Clarence L. Peterson, who has been Pacific regional manager for Honeywell, will succeed Kaiser in the midwest area. Gavin S. Younkin, formerly Los Angeles branch manager, will assume Peterson's former duties. In addition, the appointment of Reginald C. Cushing as the San Francisco branch manager has been announced.

FRED KAISER

Fred Kaiser, Honeywell's New Field Service Manager

Creation of a new management sales post and promotion of four branch and regional managers have been announced by Tom McDonald, vice president in charge of sales for the Minneapolis-Honeywell Regulator Company.
Beautiful New England Garden Apartments are completely equipped with Keystone Frameless Tension Screens. Iver Dunder of A.E.J. Dunder Construction Co., Summit, N.J., builders, says, "We feel this type of screen is a great improvement over regular frames. The main reasons for using, particularly in a Garden Apartment, is for quick installation, and where storage is a problem, the screens can be rolled and stored in a small area. Also being aluminum mesh screens of strong construction there is no problem of maintenance and painting which, of course, is a great improvement."

Here is the modern answer to the screen problem which saves the builder time and money and makes the home more salable. Builders have saved up to 25 minutes per window and at the same time given their home buyers the finest in insect wire screens. Write for new installation and measurement data and the name of nearest dealer today.

HOW TO DO IT . . . A few screws and simple sill brackets are all you use to install this Pre-fitted Keystone Frameless Tension Screen.

Round headed screw installed in top blind stop holds removable top bar bracket.

No bulky hardware on sill . . . just a neat, small permanent bracket.

Catch of sill engages sill fixture. Note that fixture is easily adjusted for proper tension.

Keystone Wire Cloth Co.
Hanover, Pa.

Keystone Wire Cloth Co., Hanover, Pa.

Gentlemen:
Send latest specifications, installation data and prices on Keystone Frameless Tension Screens.

Name...

Attention of...

Street...

City...

State...

American Builder, February 1950.
sell your trade the whitest white cement

A whiter white cement that gives greater beauty wherever used...widely and consistently advertised to your customers.

Trinity Portland Cement Division,
General Portland Cement Company
111 W. Monroe St., Chicago; Republic Bank Bldg.,
Dallas, 816 West Fifth St., Los Angeles

As white as snow

E-A-S-Y
installation, operation, maintenance - on the purse

The CAPITOL Taper-Seal GARAGE DOOR is a profitable Door for you to recommend and install. Customers like these self-selling, Taper Seal features: beauty - feather-touch operation - balanced action - complete weather protection - long, trouble-free life - reasonable cost. For you: faster sales - greater profits. Sizes: 80" x 60; 80" x 70; 80" x 78; 80" x 80; 90" x 70; 90" x 80; 100" x 70; 100" x 80; 100" x 90; 100" x 100.

Now! THE NEW CAPITOL STREAMLINE FLUSH-PANEL - for Faster Sales for Greater Profits - stronger, longer lasting - combines beauty and economy. Panels are electrically bonded (not nailed) to each side of the frame - insures rigidity - prevents warping and distortion. Sizes: 80" x 70; 80" x 78; 80" x 80; 90" x 70. Thickness - 1-3/4".

See your lumber dealer or write for price.

CAPITOL PRODUCTS
118 SOUTH THIRD STREET - SPRINGFIELD, ILLINOIS

WITH A VITROLINER CHIMNEY YOU GET A "Tailor Made"

ROOF FLASHING & FLUE HOUSING
VITROLINER type "E" Plus is individually designed and completely fabricated to fit your roof pitch - no cutting or fitting - just assemble handy light weight sections. Anchors to ceiling joists and extends through roof opening as illustrated.

Functions as a complete chimney - replacing all brick masonry. Used nationally by builders and contractors - time tested, proven practical and successful. Used extensively in F.M.A. construction and listed for all fuels by Underwriters Laboratories. Available in any quantity, ready installed in less than 2 hours.

Write for details - Dept. A.B. 1

CONDENSATION ENGINEERING CORPORATION
122 South Michigan Avenue - Chicago 3, Illinois

MFRS. OF VITREOUS ENAMELED PIPE FOR 20 YEARS
CUT BUILDING COSTS WITH UNI-FORMS
ON POURED CONCRETE HOUSES, FOUNDATIONS

SAVE TIME...LABOR...MATERIALS

Faster erection...automatic accuracy...minimum alignment on one side only—three reasons why UNI-FORMS make BIG savings on every type of concrete forming.

Easy to use...ready to use...UNI-FORMS guarantee a fast start, fast finish. Get the UNI-FORM story today. Send a set of plans and let us prove how UNI-FORMS can save you money. No obligation, of course.

BUILD CONCRETE HOUSES
Better...Faster...at Lower Cost with UNI-FORMS

RENTED...SOLD...
RENTED WITH A PURCHASE OPTION

American Builder, February 1950
OVER 400,000 Home Seekers

More than 400,000 home seekers buy each issue of SMALL HOMES GUIDE and read it cover to cover with intense interest. SMALL HOMES GUIDE directs their attention to quality products, the foundation of satisfied home ownership. In the pages of SMALL HOMES GUIDE building products manufacturers, builders and home owners have a common meeting place. Articles on design—construction—equipment—interior decoration—financing and maintenance hold the attention of SMALL HOMES GUIDE’s vast audience. Manufacturers’ products displayed in SMALL HOMES GUIDE influence buying decisions of home owners at the crucial point of planning.

Let us help you sell materials and equipment for the million new homes that will be built in 1950.

ISSUES ON SALE AT NEWSSTANDS FROM COAST TO COAST.

Visit us at Booth 52 NAHB Home Show

Cecil W. Farrar and F. B. Mahoney Given New Posts With Richmond Radiator

John J. Hall, president of Richmond Radiator Company, has announced the election of Cecil W. Farrar as vice president and general manager of sales and F. B. Mahoney as vice president and general manager of manufacturing.

Farrar has been associated with the plumbing and heating industry for more than 30 years. Formerly president of the Excelso Products Corporation, he joined Richmond as sales manager of the plumbing division in 1945. In 1948, he was appointed director of sales promotion for all Richmond products.

Mahoney joined the Richmond Radiator Company as general factory manager in 1944. Prior to that time, he was vice president in charge of production for the Ellwood Company and previously was vice president and director of manufacturing for the Humphreys Manufacturing Co.

Mr. Leonard P. (Cy) Jenkins has been appointed Assistant Sales Manager, Plumbing Division of the Richmond Radiator Company. Mr. Jenkins, who joined Richmond in April 1946, was formerly Director of Sales Promotion for the Barclay Company of Newark, N. J., and Assistant Sales Manager of the Service Supply Corp., Philadelphia, Pa.

American Builder, February 1950.
How to apply Stainless Steel counter edging

... this new easy way

1. File 90° V-slot in lip at point to be bent. CHROMTRIM stainless steel counter edging is easier to cut because the core is aluminum. Use three-cornered or square file.

2. Nail moulding up to corner. CHROMTRIM is pre-punched and supplied with oval-head, nickel-plated drive screws which seat flush, need no countersinking.

3. Use palm-of-hand pressure to form moulding around square corner. CHROMTRIM stainless steel edging is easier to bend. Then continue nailing . . . extra holes easily punched.

NEW. Now you have your choice of aluminum or 13 new stainless steel metal mouldings in CHROMTRIM quality.

It's easy-cutting stainless steel, too—some shapes solid and some with a light stainless cladding over easy-cutting, rust-proof aluminum core.

Choose the matching groups you need from the complete CHROMTRIM line of over 200 shapes, ready-cut, punched, each length individually wrapped to protect the finish.


Dealers: Investigate the new "Pick-of-the-Pack" CHROMTRIM Deal—choice of 38 consumer shapes and a merchandiser with each order of 14 shapes.

You get your choice in

LOOK FOR THE MOULDINGS IN THE RED-STRIPED JACKETS
Easy to Buy—Easy to Apply

A product of R. D. Werner Company, Inc.
Majestic
INDOOR INCINERATOR
disposes of all burnable home refuse

A profitable seller the year 'round
Every housewife is quick to see that this handy appliance saves steps, time, and trouble. The Majestic Incinerator gets rid of wastebasket trash plus wet and dry garbage by burning it all indoors. Waste itself serves as fuel. Unique downdraft does the trick! Dries the refuse and hastens complete burning. Guaranteed. Taps to furnace flue in basements or utility room. Tips over profits your way. Write today.

The Majestic Co.
300-A Erie St., Huntington, Ind.

SAWS
SEX SIZES—BLADE CAPACITIES TO 12"
SAFER—EASIER TO HANDLE
FAR MORE POWERFUL!

SAFETY-LOCK SWITCH—positive protection against accidental starting.
EXTRA WIDE REINFORCED STEEL SAFETY BASE for better balance—easier to handle, safer to use.
LONG-SHAFT TRANSVERSE MOTOR MOUNTING transmits as much as 25% extra power, supports blade on oversized ball bearings from one side of the tool clear to the other.
UNIQUE SHOCK-ABSORBER GEARING cushions the added power of these new saws, gives extra life to motor, gears, spindle and blade.
PROTECTED DEPTH AND BEVEL SCALES. In plain sight when you use them—out of the way when you don’t. Always accurate.

INDEPENDENT PNEUMATIC TOOL CO.
AURORA, ILLINOIS

Economy
DISAPPEARING LADDER
of Sturdy Ponderosa Pine
for HOMES - GARAGES - ATTICS
LOW COST - EASY INSTALLATION - EASY TO OPERATE
FITS MOST SCUTTLE HOLE SIZE WITHOUT ALTERATION

Immediate delivery on finished floor to finished floor sizes of 9' 4" or less.
Shipping weight 32 lbs. (nominal wt.)
Write for further information.

MINNESOTA WOOD SPECIALTIES, INC.
BOX 716, ST. PAUL, MINN.
Manufacturers of the 12Way Folding Stairway
Every Home and Business is a Prospect for

Johns-Manville CEILING PANELS

You, too, can make more money with this J-M Insulating Board Product!

Application is easy

- J-M Decorative Ceiling Panels are easily and quickly applied on new or existing construction. All you need to do is install furring strips at right angles to ceiling joists, and nail or staple the Panels in place. Detailed instructions come with each carton.

You can save time by stapling

- By using a trigger-type automatic stapler, you can cut application time by one-half, and tests show that staples hold as securely as nails. Thanks to the J-M Lightning Joint, all staples or nails are concealed in the finished job.

Attractive appearance sells additional jobs

- Panels come pre-decorated in ivory or white, and all have the durable Glasecoat finish that is smoother, harder, and more beautiful than ever. Your customers will be delighted with the new and attractive ceiling. Without fuss or muss, the room is ready for use in a matter of hours. One job sells another—and the potential market is unlimited.

Send for free Instruction Sheets and full-color brochure, IB-30A. Write Johns-Manville, Box 290, New York 16, N. Y.
Just ask your lumber dealer for CROSSETT LUMBER PRODUCTS

✓ They're well manufactured
✓ They're seasoned right
✓ They're big mill quality
✓ They're dependable

NOW AVAILABLE TO YOU IN:

ARKANSAS SOFT PINE
Satin-like Interior Trim
Soft Textured Sheathing
Nail-holding Dimension

ROYAL OAK FLOORING
See them at your dealer's

A Modern Office
For Used Car Dealers

A CANOPY, six feet wide, with flash lights on under side, extends across front.

THIS used car-lot office can be readily moved since it is constructed on a single concrete slab separated from the main slab, covering the entire lot, by a waterproof membrane. High gloss paint was used on the exterior—vertical red for 6-inch siding. The interior walls are finished with large panels of birch veneer. The ceiling is covered with 12-inch x 24-inch insulating board. Two electric heaters with blower fans furnish heat. Floors are covered with asphalt tile. Resilient Perkins, Oregon builders, constructed this office for May and Mead Co., Eugene, Ore.

PYLON 24 feet high, with steel frame, accentuates design motif

SEMI-CIRCULAR floor plan of this building is integral part of unique design. Plan is functional, with carport at right conforming to shape and position of office on opposite side of lobby. Broad patio is located for easy access to all parts of building.

American Builder, February 1950.
COMPARE GLIDE-AWAY WITH ANY OTHER-OVERHEAD-TYPE GARAGE DOOR

SEE FOR YOURSELF WHY GLIDE-AWAY ALL-STEEL, FULL RECESSING DOORS ARE EASIER TO SELL...EASIER TO INSTALL!

COMPARE...and see for yourself why Glide-Away wins popularity immediately with home owners and builders everywhere. Glide-Aways are made of welded Bonderized steel that resists rust and corrosion; double hat channel section construction gives them extreme rigidity; pre-assembled, one-piece jamb strip and weather seal assures foolproof installation; cable-controlled double door lock permits fingertip operation from interior without disturbing outside lock handles. Only ½" of headroom is required. These and many other features make Glide-Away outstanding!

See Glide-Away demonstrated in Booth 10 at the National Association of Home Builders' Show, Feb. 19-23, Hotel Stevens, Chicago, Ill.

Note how the Glide-Away space-saver, jamb-type hardware hugs the door jamb. Smooth, effortless gliding action is accomplished without sacrificing interior space. Hardware is made of N-A-X high tensile steel. Arms are welded square construction.

STEEL DOOR DIVISION

STAMPING PRODUCTS AND MFG. CO.

Stamping Products and Mfg. Co.
Steel Door Division
14031 Interlake, Detroit 27, Mich.

Please send detailed information on "Glide-Away" Garage Doors.

I am a ☐ Wholesaler, ☐ Dealer, ☐ Builder

NAME

ADDRESS

CITY STATE

American Builder, February 1950.
Lowest Initial Cost
Lowest Installation Cost
Highest Heating Efficiency

MAKE THE BURNHAM
PACEMAKER
First Choice for Low Cost Housing

How to cut costs—that's your big problem today. And PACEMAKER is the answer. This new Burnham oil burning boiler shows the way to substantial savings. It's the lowest priced cast-iron boiler on the market...but it's built to Burnham quality standards. And better yet it's factory assembled. That cuts costly installation time practically in half.

HIGH EFFICIENCY—Two crown sheets and vertical fire travel...to scrub more heat from fuel. Features usually found only in expensive boilers.

PRECAST CONSTRUCTION CHAMBER—Refractory is built into base before you get it.

BOILER SHIPPED ASSEMBLED—A big cost-saving item in these days of high labor—Factory tested at 100 lbs. working pressure.

DOMESTIC HOT WATER—Delivers abundant hot water, Summer and Winter, at low cost. Built-in copper water heater—tankless or storage type.

CONTROLS—All mounted on front of boiler directly above oil-burner, for easy wiring.

GAS-TIGHT CONSTRUCTION—All sections machine ground for tight fit—no air leakage or escape of oil fumes.

Get all the facts on PACEMAKER—the oil burning boiler that simplifies installatation and delivers what you promise!

Burnham Corporation
"PIONEERS OF RADIANT BASEBOARD HEATING"
IRVINGTON, N.Y., Dept. AB-20

THE KITCHEN-AIRE EXHAUST FAN
Is Different...!

Check these outstanding features...

- **MAXIMUM EFFICIENCY**—whence grill over the bowl allows air to enter bowl without back draft.
- **FIRE-PROOF**—grill screen is the latest in fireproofing.
- **STEEL FABRIC**—has a thickness of 1/16" for maximum protection.
- **WEATHERPROOF**—back draft damper prevents main draft loss; operating temperature of 150°F. when the damper is closed in cool, high heat drafts;
- **ECONOMICAL**—low in cost; easy to install. Grate and moisture laden air is not disturbed on insertion making exhaust clean, dry;
- **WIDE USEFULNESS**—if electrically operated, can be be extended anywhere in new or old homes—above or below stove and oven, for example; for room exhaust from fresh, and basement dry.

Here are features that the conventional exhaust units can't offer...

Kitchen-aire units are actually SUPERIOR, and they're selling fast!

Underwriters
Approved

VISIT US AT
BOOTH 42—HAND SHOW

STEWART MANUFACTURING COMPANY
3204 E. Washington Street
Indianapolis, Indiana

DELFAIR
QUALITY LUMBER

...remember!

—when it comes to HARDWOOD flooring

DELFAIR LUMBER CO.
LOUISVILLE, MISSISSIPPI

When you specify "DELFAIR", you can know you are getting flooring at its best...flooring that meets every specification for residential and commercial building. Manufactured in one of America's most modern plants. DELFAIR flooring is used in homes and buildings everywhere.

When it comes to hardwood flooring, you can count on DELFAIR.

D.L. FAIR LUMBER CO.
LOUISVILLE, MISSISSIPPI

American Builder, February 1950.
CRANE
the preferred plumbing

CRANE CO., GENERAL OFFICES: 836 S. MICHIGAN AVE., CHICAGO 5
PLUMBING AND HEATING
VALVES • FITTINGS • PIPE

American Builder, February 1950.
The cleaner home... the well-ventilated home... is the home that sells. The new Westinghouse Poweraire Home Ventilator, with the Air-Injector Grille, will help to keep your home bright and clean. It can completely change the air in an average kitchen every TWO MINUTES.

LOOK AT THESE ADDITIONAL FEATURES!
- Modern streamlined design
- Insulated outside door
- Easy to install in practically any wall thickness
- Single pull-chain control
- Economical to operate

WESTINGHOUSE ELECTRIC CORPORATION

FOR ADDITIONAL INFORMATION

You can be sure... if it's Westinghouse
FITS THE SMALL KITCHEN IN A... BIG WAY

Fits the Big Kitchen in the Right Way...
Fits the Budget in the Way You Like Best!

Already the "Rancho" is a spectacular success! 48 hours after the first announcement, builders all over the country burned up the wires for complete specifications. These "Rancho" Ranges take so little space . . . only 36" x 24¼". On top of that, because of Zero Underwriters Rating, the "Rancho" can be backed against surfaces of any kind . . . to save still more space. And the opening under the surface units is a tuck-away space any homemaker will welcome. You'll like the flexibility of installation of a "Rancho". Prospects will like the four, full-sized surface units, large oven . . . and the Westinghouse label that promises top quality.

Equip your kitchens with these new Westinghouse "Rancho" Speed Electric Ranges . . . and have a sales plan that clicks.

Write for particulars on this and other Westinghouse Appliances designed to make properties sell or rent faster.

WESTINGHOUSE ELECTRIC CORPORATION
Appliance Division - Mansfield, Ohio

Plants in 25 Cities, Offices Everywhere
TUNE IN TED MALONE... Every Day, Monday through Friday... ABC Network

YOU CAN BE SURE...IF IT'S Westinghouse
WHITE FIR

is good for low cost paneling

As manufactured by member mills of the Western Pine Association, it comes to you carefully graded and well seasoned. Ask your dealer about it and write for our White Fir Species Book which describes fully White Fir's qualities, grades and uses.

Western Pine Association
Dept. 628, Yeon Building, Portland 4, Oregon

THE WESTERN PINE REGION

*These are the Western Pines
*Idaho White Pine  *Ponderosa Pine
*Sugar Pine

These are Associated Woods
Larch  *Douglas Fir  *White Fir
Spruce  *Cedar  *Lodgepole Pine

Well manufactured—thoroughly seasoned—carefully graded—by all Association member mills

HANSEN ONE-HAND TACKERS and STAPLERS

- Building contractors find that they can simplify the application of wall board, building paper, insulation batting, foil, etc., by using the Hansen Tacker. This speedy, convenient tool drives home stout two-legged tackpoints—fast as you can grip it. It holds scores of tackpoints at a loading—and reloads in a jiffy. It gives a great saving in time over old-fashioned methods.

A. L. HANSEN MFG. CO.
5059 RAVENSWOOD AVE. CHICAGO 40 ILL

UP she goes!

Up goes building material and up go buildings—faster—with King Hoists on the job. 7 models to select from. Portable—one man can handle and operate. Model 450, 7.6 h.p., hoists 1,000 lbs. 150 ft. per minute. Built to last. Returns its cost on a single job.

Model 560, 7.6 h.p., hoists 1,000 lbs. 150 ft. per minute. Spool is 7" dia. center, 15" dia. ends, 12" long. Compact. Hundreds in use. Made by makers of King Winches, Incline-Track, Pulleys, Safety Hook.

KING MANUFACTURING CORPORATION
3142 W. CHICAGO AVE., CHICAGO 11

American Builder, February 1950.
American Kitchens Put A Valuable "Seal of Quality" on Your Homes!

You'll get your asking price when you install famous, nationally-advertised equipment in your kitchens!

American Kitchens Give Prospects Confidence That the Hidden Materials You Use Are Best Quality, Too!

Only a Man from Mars—with X-ray eyes—could tell what's behind the plaster in the homes you build.

Yet you want to prove to your prospect that you've used top-quality materials throughout.

Install a famous American Kitchen and he'll be assured! Because, being a sound business man himself, he knows you wouldn't put an American Kitchen in a shanty-built house!

Save Money, Too!

It may surprise you, but—despite their fame and certified high quality—American Kitchens actually cost less per running foot than quality wood cabinets, so you can afford to use them in even your budget-priced homes.

SPECIAL ECONOMY SINKS

The country's lowest price for this high quality. 3 models—42", 54", 66" (twin bowl). Same quality as de luxe styles, but without accessories.

FREE—NEW 1950 BUILDERS FILE

American Central Division, Dept. AB-2
AVCO Manufacturing Corporation, Connersville, Indiana

Please have my nearest American Kitchens supplier furnish me— without charge or obligation— your new builders File, complete with specification and roughing-in diagrams.

Name
Address
City  County  State

American Builder, February 1950.
Hurricane and Blizzard tested... The Miami Aluminum Awning Window is accepted in every area of the country, for every type of building, residential, public and commercial.

Constructed from 635-T5 non-corrosive aluminum alloy, the Miami Awning Window requires no painting, no repair, no maintenance of any kind.

*One remote control operator opens 2 to 6 windows,
*Hopper Vent may be specified, opens inward for indirect ventilation,
*Windows are recessed for screens or storm sash,
*Flanged vents seal shut through double metal contact,
*No weather-stripping is required.
*Standard, modular or custom window sizes may be specified.
Air Infiltration Tests Passed at Pittsburgh Testing Labs.

DEALERSHIPS INVITED! This easy to sell, nationally advertised all-aluminum window means big profits to qualified dealers. See it in February, Architectural Forum... write MIAMI WINDOW CORP., DEPT. B, 3631 N.W. 38th AVENUE, MIAMI, FLORIDA, OR... INDUSTRIAL MACHINE TOOL COMPANY, INC., WINDOW DIV., DEPT. B 301 S. OAK ST., FENTON, MICHIGAN

For HOMES, APARTMENTS, CHURCHES, HOTELS, PUBLIC BUILDINGS

MIAMI AWNING WINDOW

American Builder, February 1950.
FOR BUILDERS OF RANCH TYPE HOMES

NOW A "BIG VISION" WINDOW UNIT IN ALUMINUM

ALWINTITE'S new VIEWALL

AVAILABLE NOW! — ALWINTITE's new "Viewall" — a complete aluminum window unit measuring 9'0" x 6'0" with 9 lights and 2 projected vents. Just the unit for your new ranch-type houses.

And — this is real news — the first cost of this strong, extruded aluminum unit is usually less than similar windows in other materials. You also save real money in materials and labor when you prepare these big-unit openings. Viewall is easy to install. It has stainless steel hardware and can be putty glazed or used with special snap-on glazing beads.

ALSO for ranch-type houses, ALWINTITE has added several new low window sizes to its double-hung line. They are made in standard widths and 2'4" and 3'0" heights. Set high in the wall, these windows are ideal for any room where you want adequate lighting and ventilation plus a maximum of privacy.

Free CATALOG AND INSTALLATION DETAILS

See the complete ALWINTITE line at your dealer's today or write for Free Catalog and Installation Details. Address Dept. AB-2.

THE ALUMINUM WINDOW CORPORATION
a subsidiary of General Bronze Corporation
602 Stewart Avenue Garden City, N. Y.
INSL-COTTON

INSULATION

STOPS HEAT!

COMING AND GOING

IN SUMMER ... Ins-Cotton stops heat ... keeps it from coming inside. Only three inches of this exceptionally efficient insulation puts an effective barrier between the sun’s hot rays and the building—lowers temperatures as much as 10 degrees.

IN WINTER ... Ins-Cotton stops heat ... keeps it from escaping outside. Keeps heat inside where it belongs ... saves up to 30% on fuel bills.

Tests by the U. S. Dept. of Agriculture and leading laboratories prove cotton insulation to be from 4% to 36% more efficient than any other type of available insulation—5 factor 0.21. Flame-proof and fire-retarding, Ins-Cotton is also moisture and insect repellent—a won’t sag or settle—always uniformly thick with no high or low spots.

Weight only about 310 pounds per 1,000 square feet. 3 inches thick, including vapor barrier, making it unusually easy to handle and install. New labor can do the job at approximately $1.50 per square foot in attics—no special tools required.

Plastic to handle—contains no sheet, silica or fine glass-like particles to injure skin, lungs or eyes. A one sound absorb between walls, floors and ceilings.

For homes or for business establishments—wherever there is a need for insulation—Ins-Cotton is the ideal low-cost insulation preferred by the architect, contractor, builder and homeowner alike.

Certified Ins-Cotton contains no second-hand material—every lot is tested and certified to the U. S. Government. No other insulation except flame-proof, fire-retarding cotton insulation made under Federal control can make this claim. Meets 7B, FHA, FPHA and MIL-S-530 specifications.

INSL-COTTON DIVISION
TAYLOR BEDDING MFG. CO., TAYLOR, TEXAS • SELTON, TEXAS
Originators of Flame-Proof, Fire-Retarding Cotton Insulation

MAIL THIS COUPON TODAY!

TAYLOR BEDDING MFG. CO., TAYLOR, TEXAS

Please send specifications and full information on Ins-Cotton.

Name ___________________________ Address ___________________________

City and State ___________________ Check Here: □ Distributor □ Dealer □ Architect □ Building Contractor

American Builder, February 1950.
What Makes COMETS
Overhead DOORS

INDUSTRIAL...
The Finger Tip Control, outstanding beauty and moderate cost built into every Raynor door, regardless of size, means lasting satisfaction to the buyer and profit to the builder.

COMMERCIAL...
Three-Way Stress Construction, the finest material and the most modern production methods used in building Raynor doors, guarantee lasting quality to the user and profit to the builder.

RESIDENTIAL...
Designed by Raynor engineers - built complete in the Raynor plant - when you sell and install the complete line of Raynor doors you are offering your customers the BEST in wood sectional overhead door equipment.

Please send COMPLETE INFORMATION
Name
Street
City

RAYNOR MFG. CO.
River St., DIXON, ILL.

... with every owner? We make 'em so we know ... They use 'em - and they REALLY know. Power to spare, flashing speed, sustained, precise accuracy, nil replacement costs, weather protection, maximum mobility, newest design and innovations, best protection. All these facts make Comets the bright stars in the power saw field. Before you buy try Comets for proof. See the nearest Comet dealer or write us.
now that I could never come close to gaining the effects we have now. Take that flame red on the front picture window in the model home. That’s just a little bit of accent color but we’ve gotten a lot of wonderful comments on it. Now, I might think of putting that color there, but I wouldn’t do it. I wouldn’t have the nerve. It sounds radical but it looks great. The same thing is true of the whole approach to color design. I’ve always used asphalt shingles, because of their color as well as for economy, ease of application and other reasons, but I never made it an absolutely strict rule to pick the roof color first and always to let the roof color set the tone for the whole house. However, that really works. Be careful about picking your blended roof color and every other color fits right in.

“One of the biggest advantages of having color schemes planned for an entire development before work begins on a single house is that it permits contractors and subcontractors to do more bulk buying of materials—and, as every builder knows, buying in large quantities means saving money. With a complete color planning job done in advance, exact amounts of colored materials, such as paint, can be readily figured in advance. It’s another example of how detailed planning—with color as with precutting of lumber—costs less than doing it bit by bit as work goes along.”

Among the other choices which buyers make, they particularly appreciate selecting their own wallpaper. All the rooms, except the bathroom, are wallpapered with the papers the buyer wants. Raymond manages this by arrangement with several home furnishings stores in the New Milford area. Shopping at any or all of these stores, the buyer chooses his wallpapers. He has an allowance from Raymond of fifty cents a roll. If the paper costs more than this, the buyer pays the difference. If the cost is fifty cents or less, the buyer pays nothing directly. Then Raymond gets the paper from the store and has it applied according to the buyer’s instructions.

“Why not do it that way?” Raymond asks. “We’re giving them nothing except choice—and that doesn’t cost us anything.”

For bathroom fixtures, the buyer chooses from among white and four colors—pink, blue, green and yellow.

For the custom-built, leatherette-covered breakfast nook set in the kitchen, he chooses dark red, royal blue, green, brown, aqua, medium blue, gray, light blue, russet, charcoal, medium, red, yellow, pink or ivory.

Each of the Raymond Ranch Homes has 1,044 square feet of usable living space, exclusive of the garage. There is a full-height basement under approximately half of the house. Walls and ceilings are fully insulated. Floors are plastered. Floors, except in the kitchen and bathroom, are oak.

Plumbing is copper. Heating systems are forced air.

The minimum lot size is 75 by 100 feet. Some irregularly shaped lots are larger. Raymond is providing paved streets, sidewalks and curbing. All utilities are available.

To conserve space, the hallway connecting the bedrooms and bathroom was kept as small as possible. The hall includes a built-in linen closet.

The bedroom closets are equipped with floor-to-ceiling, sliding, louvered doors. Raymond says these closets are mothproof because “there’s never a moth where there’s light and air.” The builder points out that he learned this from the manufacturer of a moth-destroying device.

Raymond takes particular pride in (Continued on page 312)
SELECTED for faster building...

INSTALLED for faster selling!

These Case fixtures of genuine vitreous china help to accelerate construction because easy and rapid installation is engineered into their design. Put them in and let them sell for you. Their qualities of style, convenience and easy maintenance are convincing demonstrations of the value that makes houses move fast.

Case quality lavatories and water closets are available in styles to attract buyers for homes of every type and price. Distributed nationally through wholesalers listed in Classified Telephone Directories. W. A. Case & Son Mfg. Co., Buffalo 3, New York. Founded 1853.
MULTIPLY BY 57

...to get the wrong answer!

Take a minute to estimate how long it would take six of your best carpenters to cut, fit and assemble an arch like the ones used for the Lyman Lumber Company Warehouse at Wayzata, Minn. Now, multiply that by 57... because that's how many you'd need on this job. And, mister, that is a wrong answer... and it's even wrong-er when you figure the wage rates for six men!

But the right answer didn't take any figuring at all. The contractor specified Rilco Type 70 tied arches with a 44-foot span. They arrived in a freight car fifteen feet from the site. All the carpentry crew did was to assemble them, hoist them into position and bolt 'em down!

Rilco Trusses for practically any sort of commercial building come to the job completely pre-sawn. Every bolt hole is drilled at exactly the right spot. Every piece of connecting hardware is furnished. And Rilco Trusses, glue-laminated under pressure, are stronger than most "on-the-job" trusses your men could build.

Don't run the chance of getting a wrong answer... get Rilco Arches instead.
You'll make a greater profit with a GILSON Mixer

3 1/2 ST.

Window Dressing that helps sell homes!

LUMITE* rustproof screens on every window increase buyer acceptance and satisfaction!

LUMITE screens are practical, useful "extra." They're woven of durable soron plastic guaranteed never to rust never to stain sills or side-walls. They're unaffected by salt-air, smoke, rain or snow never need protective painting! They mean years of care-free screen protection for your owners. Check the low cost of providing your homes with LUMITE screening!

Sold by hardware, lumber, building supply wholesalers and screen manufacturers!

FACTS FOR ARCHITECTS AND BUILDERS

Effects of Acids, Alkalies and Salts—Essentially none.
Non-inflammable—But softens at about 240°F.
Tensile Strength, Ultimate (at 60°F)—Up to 40,000 lbs. per square inch.
Impact Strength—Greater than conventional screening.

Send for Details on Contractor's Premiums for STARLINE'S COMPLETE LINE OF BARN EQUIPMENT.

LUMITE DIVISION, CHICOPEE MANUFACTURING CORP.,
OF GIORGIA, 47 WORTH STREET, NEW YORK 13, N. Y.
CLOSE CORNERS ARE NO PROBLEM NOW!

Bostitch T5 Tackers
DRIVE STAPLES IN WITHIN 1/16" OF INSIDE CORNERS

When a Bostitch T5 Tacker sticks its tiny nose into your business, you save time, money and work. It simplifies back-breaking ceiling jobs and close, difficult corner work. You just place the tacker, squeeze the handle and the staple shoots all the way in. No missed shots, no marred surfaces, no bruised fingers! One hand free for faster, more accurate positioning. Try Bostitch T5 Tackers on your next paneling, insulating or metal lath job. You’ll notice a big cost-cutting difference.

Quick, easy way to attach cornerrite

Attaching cornerrite becomes an easy one-handed job with Bostitch H2 Self-Feeding Hammers. The just-right-length staples fasten the metal lath securely to the plaster base without going through to the stud. This floating “tie-down” guard against cracked plaster due to settling of the structure.

Application time cut in half

More and more craftsmen are shifting to Bostitch H4 Self-Feeding Hammers. No wonder! A flick of the wrist drives home or a steady 1/8" staple like a two-pointed nail. No smashed fingers, no infected mouth. Long, one-arm reach cuts down staging needs. Cuts hours off new roofing jobs.

INVESTIGATE BOSTITCH — For installing insulation, attaching embellishing paper or roofing, metal lath, etc., you’ll find that Bostitch fastens it better and faster at lower cost. Fill in coupon below for more facts.

BOSTITCH, 504 Mechanic Street, Westerly, Rhode Island

I’m interested in more information about time-saving, cost-cutting Bostitch machines for applying:

☐ Insulation ☐ Roofing ☐ Building Paper
☐ Paneling ☐ Metal Lath and Cornerite
☐ Building Paper

List other applications:

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BOSTITCH AND FASTER
fastens it better with wire

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Easier to BUY
Easier to SELL
Easier to INSTALL

ALDRICH
Compact BOILER-BURNER UNITS

Here are compact, complete, packaged boiler-burner units in sizes for home and industry, for low-pressure steam and hot water heating and/or hot water supply.

They’re economical to buy and use; easy to install in minimum space with a minimum of skilled labor. Six sizes in the Aldrich Series “B” Heat-Pak are rated at 118,000 to 808,000 BTU an hour . . . six sizes for hot water supply with ranges of 125 to 850 GPH at 100 degrees rise.

All Aldrich boilers are available for either oil or gas firing with burners readily interchangeable.

If you buy, sell, specify, or install boiler-burners, write for information about Aldrich.

The Popular New

ALDRICH Bantam

FOR MODERN LOW-COST HOMES

This outstanding boiler-burner unit, designed especially for the modern 4 to 5 room home, stands only 45" high, occupies 20" x 33" of floor space. Rated at 100,000 BTU, it can be adapted to steam, hot water, or radiant heating systems, and provides domestic hot water in case of FHA requirements. Models also available for hot water supply only.

ALDRICH OIL BURNERS

Skillfully engineered, precision-built for economy and trouble-free service. No radio interference from motors and transformers. Burners flange or base mounted. Model CX: .75 to 2 GPH. Model SAX (shown) with interchangeable draft tubes and air cones: .75 to 4.50 GPH. Model BX: 4 to 8.50 GPH. Model JU Heavy Duty: 7 to 19 GPH.

ALDRICH COMPANY

A subsidiary of Bryce Corporation, Inc.

111 E. Williams Street
Wyoming, Ill.

American Builder, February 1950.
Choose
the exact instrument you need from these three low price models

1
Finest 12" Dumpy Level available anywhere — gives you more features you want, more accuracy, more durability at less money than any other instrument. It has dust and dirt-free internal focusing and has coated optics for clearer distortion-free, sharper images.

Model
No. 8014
Price $130.00

complete with tripod

2
Here's the standard convertible level for the country for the past 30 years! No other instrument has the recognition and acceptance as given to the David White Carnegie Improved Convertible level. Now it's available to you with complete dust and dirt-free internal focusing and coated optics for clearer, sharper, distortion-free images.

Model
No. 7096
Price $150.00

complete with tripod

3
The David White "Universal" level-transit is the most practical and complete builder's instrument on the market. Now available in a new improved model—complete with internal focusing, coated optics — guarded vertical arc — in fact every possible feature to assure you lifetime durability and extreme accuracy.

Model
No. 3000
Price $145.00

complete with tripod

Choose the exact instrument you need from these three.

Compare their outstanding features, their precise, yet rugged construction, their accuracy and their price with all others. Then you'll see why we say you'll buy "right" when you buy a David White. For complete information on any one or all three of these instruments, consult our nearest dealer — or write direct to David White Co., 311 W. Court Street, Milwaukee 3, Wisconsin.

We offer complete, prompt repair service on all makes of instruments — levels, transits, theodolites, etc.

American Builder, February 1950.
Make your projects pay off these successful

Cash in on the sales success of these building projects! Equip your homes with the timesaving, worksaving, moneysaving advantages of the General Electric Complete Kitchen Package. Your houses will sell faster and you'll gain more prestige—as these delighted builders will tell you!!!

"Everying for approximately $65.00 a month—includes taxes, interest, and principal." That's what attracted and sold prospects who saw this Oman & Sons home equipped with a complete General Electric Kitchen-Laundry!

"We sold 54 the first week end!"

* Mr. J. J. Carey of Hutchinson and Carey, Denver, Colorado, says:

"We offered three bedroom houses for $9850. The first week end we sold 54 and they have been moving steadily ever since.

"We feel that General Electric equipment contributed in a great measure to this successful operation."

* Arthur H. Oman

"Sold 125 houses in 10 days!"

"We sold all the houses in ten days, due to the right combination of houses and appliances. Tens of thousands went through the Model Home... were favorably impressed with the complete line of General Electric appliances."

"A low-cost luxury home with fully equipped General Electric Kitchen worthy of a $30,000 home." That's how Kensington advertised and sold 250 $9990 to $10,990 houses in 10 days!

* Nathan Brisker, President of KENSINGTON ESTATES, INC., Brentwood, Maryland, says:

"The phenomenal success of our project, in our opinion, is due to a soundly built house well planned, good financing, and the complete General Electric Kitchen. The public deserves better living in the lower-priced home."

American Builder, February 1950.
"Sold our 67 houses the first Sunday!"

* Mr. E. A. Ballin of Hewlett Harbor Construction, Inc., East Rockaway, L. I., N. Y., says:

"Our model house was featured in national magazines and thousands visited it. The item which caused the greatest comment was the G-E Kitchen. We sold the entire development—67 houses—the first Sunday!"

"Sold not only the 40 houses, but 37 additional!"

* Mr. Mark S. Weggener, President of SPURR HOMES, INC., Denver, Colorado, says:

"We held open house for 3 days . . . sold not only the 40 houses under construction, but 37 additional on the basis of many factors in the house, particularly the General Electric Kitchen!"

The buyer of this Spurr Home saves on operation and maintenance of efficient General Electric appliances. . . . often enough to cover the slight increase in monthly payments.

"Sold 44 houses from 1 sample in 1 day!"

* Mr. Ralph Talbott, President of the Talbott Building Co., Baltimore, Maryland, says:

"We produced a sample home here with complete General Electric Kitchen . . . advertised it one Sunday. At the close of business we sold 44 houses to be built at Locubarn. (A week later a total of 71 houses were sold!)

"Included" in each of the 160 Talbott houses are the following: General Electric dishwasher and sink, 52-gallon electric water heater, electric range, Disposall® and cabinets.

To help you sell more houses... faster.
General Electric offers you merchandising

High national acceptance for General Electric equipment means faster turnover for your homes!

People prefer General Electric appliances to all other brand names combined!

Join in . . . make the #1 winner work for you!

National surveys show that your prospects prefer General Electric appliances over all other brand names!

You owe it to yourself to take advantage of this high consumer preference . . . a preference that helps pre-sell your houses.
Include electrical living for as little as $4.80 a month!

You offer your prospects the added advantage of complete electrical living when you include the G-E Kitchen Package in the long-term realty mortgage.

Everyone who can afford a home can afford an extra few dollars a month for a General Electric Kitchen! Further, the economical operation, low maintenance and long life of General Electric appliances may offset the slight increase in monthly payments.

Architectural Consulting Service for you!

Visit the General Electric Home Bureau in Booths No. 74 and 75, and sit down with us at our roundtable. There will be General Electric planning experts there to talk with you about your 1950 projects.

Our Architectural Consulting Service, we believe, can be of great assistance to you in designing and improving kitchens and layouts for your homes.

You've all to gain by bringing your house plans to Chicago. However, if you can't be at the Convention, contact your G-E distributor, or just address a note to us and we'll see that you receive all the facts you need.


You can put your confidence in—

GENERAL ELECTRIC
NOW
KITCHEN MAID GIVES YOU
Cabinets in Color

4 BEAUTIFUL SHADES PLUS WHITE

Now it's color in cabinets — these Kitchen Maid Cabinets proved and approved so many years by architects and builders. Color that gives them more buyer appeal — gives you more latitude in planning and selection. Four beautiful shades plus white will spearhead the Kitchen Maid parade of features in 1950. Plan now to choose and use these outstanding cabinets at every opportunity. Capitalize upon the durability, the flexibility, the warmth and friendliness of wood. Write for valuable planning booklet sent free to architects and builders.

COMPARE THESE FEATURES AND YOU'LL AGREE KITCHEN MAID IS TOPS

• Modern Flo-Line Styling. No dust catching edges
• Solid Hardwood Furniture Construction plus new compositions • Aluminum Drawers — quiet, easy to operate, won't chip or rust • Four-coated Reinforced Doors with quiet, cushioned action • Permanent Wooden Shelves — safe for fine china and glassware • Convenience Features and Accessories for every purpose • Wide Choice of Standard and Special Units including sinks and sink fronts
• Countertops built complete in any length, of stainless steel, plastic or linoleum in wide choice of colors • Four beautiful standard cabinet colors and white — Mint Green, Desert Sand, Savannah Blue and Twilight Grey • Valuable Planning Help from experienced dealers.

KITCHEN MAID KITCHENS

American Builder, February 1950.
HOW TO INSULATE RADIANT HEAT FLOORS

WITH ZONOLITE Vermiculite Concrete

With Zonolite Concrete Aggregate your radiant heat jobs will assure rapid heating, better temperature control, and important fuel savings. Heat loss into the ground can be greatly reduced if you follow these simple steps.

On a level well-drained base prepare a 3 or 6-inch fill of coarse stone or gravel, tamped smooth and firm. On top of this, lay a moisture barrier of one or more saturated felts.

Pour 4 inches of Zonolite concrete and allow it to set. Zonolite Aggregate replaces sand, in proportions of 3 to 1 bags of Zonolite Aggregate to 1 bag of portland cement, providing up to 16 times the insulating value of ordinary concrete.

Next the radiant heat pipes or ducts are placed, and ordinary concrete poured to a thickness of at least 1" over the top of the pipes. A 2 x 8 sill insulates against lateral heat loss and serves as a carpet nailer.

Write us for full details on any concrete or plastering job where insulation is important. Send for valuable booklets, "ZONOLITE VERMICULITE INSULATION AND LIGHTWEIGHT AGGREGATES."

ZONOLITE COMPANY
Dept. AB-20, 135 S. La Salle St., Chicago 3, Ill.

ON BUILDING JOBS OF ANY SIZE
You're ahead 4 ways...

WITH BIL-JAX TUBULAR STEEL SCAFFOLDING
1. Absolute Safety for workers
2. Less time to erect, dismantle
3. Increased job efficiency
4. Adaptable to any job!

Why put up with the time and money waste of old-fashioned scaffolding? Let BIL-JAX Quick Action Scaffolding increase safety, efficiency and profits on every off-the-ground job. Available on a sale or rental basis.

Other BIL-JAX products: Scaffold Brackets, Maintenance Treaties with and without tacking motors, Sectional and Latch-to-Ladders. Catalog and full information on request. Write...

BIL-JAX INC. - ARCHBOLD OHIO

CHROMEGE has the MOULDINGS YOU WANT FOR WALLBOARD INSTALLATION

and Chromedge does a better job!

Chromedge gives you a wide choice of trims for easier, quicker handling of any panel-type wall covering installation. They feature deep lip recesses that anchor materials firmly in place. Made of sturdy aluminum alloy, they're milled for dimensional stability. They can't rust, chip, crack, crum, or fade.

Matched sets are another Chromedge feature. They provide a tight line from floor to ceiling—coves, corners, wall cap, and wall paneling. One popular matched series is shown in the circles, above; another in the row of sketches across the bottom (1/2 actual size.) Sets are available in sizes for all gauges of wall material up to 1/2 inch. Other Chromedge shapes for wallboard are shown in half-size sketches at right. For any moulding need on floor and wall covering jobs, insist on Chromedge!

The B & T Metals Co.
Columbus 16, Ohio
Cuprinol treatment of wood has been found to materially aid the dimensional stability of doors, frames, sash and other fitted mill work. Pre-dipped wood when planed loses its dimensional stability, but application of Cuprinol to the planed surfaces will renew the original over-all protection.

Wherever Rot Might Develop

For sills, porch floors and steps; for sawed ends and bolt holes; in dead air spaces; on any wood in contact with masonry or the soil—places where rot easily develops—apply Cuprinol. It is the original water-repellent naphthenate wood preservative, applied by brush, spray or dip right on-the-job.

A Perfect Bond Between Wood and Paint

Applied to the bare wood Cuprinol takes paint perfectly, and because it is water repellent it reduces the danger of cracking, blistering and peeling of the paint. It is non-toxic to handle, and Cuprinol treated wood is harmless to pets, poultry and plants.

Distribution is being made through lumber yards and other local outlets. If not yet available near you, send for descriptive price list to select the type and quantity that you can use. In quarts, gallons and larger units.

CUPRINOL Division, Darworth Incorporated
56 Maple Street
Simsbury, Conn.
The distinctive features of AllianceWare design and construction appeal to builders and home owners alike because they quickly realize AllianceWare is the sanitary-ware that stays young.

Made of formed metal, porcelain enameled with a stain-proof, lustrous finish, AllianceWare possesses first of all complete rigidity coupled with exceptional strength. The steel used in AllianceWare tubs is a much heavier gauge than the minimum thickness allowed by Federal specifications for formed metal tubs.

A one-inch integral wall guard flange forms a ledge which permits the running of wall tile or plaster to the edge of the tub, thus providing a permanent water-tight seal of tub to walls.

AllianceWare tubs are readily installed by merely nailing

ALLIANcEWARE, INC., Alliance, Ohio
Bathtubs • Lavatories • Sinks
You'll find many a job for this

**WELDWOOD LUMBER STAVED CORE DOOR!**

There are many applications

... Residential, Commercial, Institutional

... for this new Flush Veneer Door

Many of your customers are looking for just exactly the door you can offer them with this newest addition to the Weldwood line.

The solid lumber core provides a satisfyingly “solid” feel. It also means you can hang the door from either side, and it’s especially adaptable to custom-cut lights and louvres. Hardware goes in quickly, easily, permanently.

All bonding is done with 100% waterproof phenolic glue, so that you can safely recommend this door for either exterior or interior use.

These new all hardwood Weldwood Doors are furnished with faces of richly figured hardwood veneers in all the popular species. Made in a wide variety of standard sizes; thicknesses: 1 1/2” and 1 3/4” from stock, also available in 2” and 2 1/4”.

In short, the Weldwood Lumber Staved Core Door gives you an opportunity to offer customers a quality product that combines convenience and easy working with versatile, durable, trouble-free beauty.

Your lumber dealer or nearest Weldwood branch or distributing unit has complete information on this new Weldwood product. Get complete details today.

**UNITED STATES PLYWOOD CORPORATION**

55 West 44th Street, New York 18, N.Y.

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**WAGNER ELECTRIC**

**Automatic Doorman**

Easily Installed on any type of Overhead Door

Here’s a low-cost electric push-button garage door operating unit that has proved itself by compiling a record of more than 100,000 opening and closing operations without requiring service. It can be furnished to operate your present doors by (1)—Radio control button in car (2)—Magnetic control button in car or (3)—Key control button on driveway.

Write for Bulletin AB-50—; and, if you are interested in new doors, ask for information on “ Glideover” and “ Rolley.”

Distributor branch for usual territories still available.

**CROFT STEEL PRODUCTS, INC.**

14 Market Street - Jamestown, N.Y.

**WAGNER MANUFACTURING CO.**

Cedar Falls, Iowa

American Builder, February 1950.
"Better living" bonus is standard practice with this foremost Richmond contractor

Scores of units completed and occupied, and more a-building... with a Bendix in each kitchen. That's because Mr. Taylor knows that the female half of the househunting family has a big influence on the decision.

To her, the idea of less work on washday has plenty of appeal. To her the name "Bendix" means more than any other. To the builder that's a selling point that keeps homes rentable or saleable in bad times as well as boom times.

That's why more and more builders are including the Bendix automatic Washer and Bendix automatic Dryer in their plans... and in their packaged mortgages. To the buyer, the extra cost is only a few pennies a month. To the builder it's extra dollars in profit.

Write for details of our special builder discount plan. Bendix Home Appliances, Inc., South Bend 24, Indiana.

Come see us at the Builders' Show!
Our Welcome mat will be out in front of Booth 10, Exhibition Hall, Stevens Hotel, February 19 through 22. Men who "talk your language" will be on deck to answer your questions and show you the world's favorite line of automatic home laundry equipment.

NEW BENDIX AUTOMATIC WASHER
No space-stealing set-tubs needed when you install the only washer in the world that can soap, soak, wash, rinse and dry—all by itself. Reversible door available on all models. The Bendix with its smooth, flat top provides an extra working surface... same height as kitchen counters.

NEW BENDIX AUTOMATIC DRYER
A "Box of Sunshine." No clotheslines clutter up yards when your houses are equipped with Bendix automatic Dryers. Compact, space-saving. Fluff-dries a whole washer load of clothes in minutes. Reversible doors on all models to make your space planning simpler. Exclusive, outside venting. Gas or electric models available.
You can build extra security into your cavity wall structures and give them everlasting strength by installing Copperweld® Wall Ties. Leading architects and builders rely on Copperweld Ties to provide a permanent bond for the entire life of the wall. And here's why:

A
Thick copper covering, inseparably welded to an alloy steel core, prevents rust—withstanding corrosive action of lime and mortar.

B
V-shaped drip loop drains off any moisture which might accumulate—prevents moisture from reaching inside wall.

C
Strong alloy steel core assures a breaking strength of nearly 2 tons—a strength which remains permanent because of the protective copper covering.

AND DON'T FORGET THESE—
Time-tested Copperweld Nails and Staples will help you do a better construction job. They are strong, easy to drive, and non-rusting.

COPPERWELD STEEL COMPANY
GLASSPORT, PA.
SALES OFFICES IN PRINCIPAL CITIES

MAIL TODAY
Please send me your specification bulletin, prices, and delivery information on:
☐ Copperweld Wall Ties ☐ Copperweld Nails and Staples

NAME
COMPANY
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PORTER-CABLE MACHINE CO.
3022 N. Solano St., Syracuse, N. Y.
Manufacturers of SPEEDMATIC and Guild Electric Tools

IF YOU WANT ECONOMY IN A QUALITY 8" SAW
It's the GUILD A-6 for your Contractor.
Its 32-1/4" Dial is 2-1/2" larger than the GUILD A-6. An hour's work pays for itself.

PORTER-CABLE MACHINE CO.
3022 N. Solano St., Syracuse, N. Y.
Manufacturers of SPEEDMATIC and Guild Electric Tools

IN CANADA (except B. C.): Write Strongridge Ltd., St. Catharines, Ont.
**ALL-ELECTRIC GENERAL CHEF**

Four cubic foot General refrigerator with vegetable bin, and three-burner electric cooking combination. This is the 220-volt model, with one 2150-watt and two 1000-watt burners. Also available in 115-volt model, with two 850-watt burners, to plug into any household line—one plug for range and refrigerator both. All burners are solid closed T-K units. The top removes for easy cleaning on both models. Dimensions: 39” height; 27-1/2” width; 23” depth over handle.

**GAS-ELECTRIC GENERAL CHEF**

Four cubic foot General refrigerator with vegetable bin, and four-burner gas cooking combination. The full-size Lincoln Brass burners use natural, manufactured, or L-P gases, and are easily removable for cleaning. Dimensions: 39” height to top of grates; 27-1/2” width; 23” depth over handle.

Also available—the four cubic foot General refrigerator with Formica table top, or without table top for built-in installations.

**General Chef combinations make kitchens practicable in small space...at low cost.**

New flexibility for the architect and builder is provided by General Chef cooking-refrigeration combinations—for motels, hotels, apartments, resorts, cabins, small homes, guest houses, bars, offices, hospitals, etc.

General Chef quality and performance are first class. Thousands have been produced—all well-made, attractive units with triple chrome-plated hardware, hermetically sealed Tecumsch compressors, 7-station temperature control, and high-quality burners.

Builders of America’s Finest Budget-Priced Refrigerators

**GENERAL AIR CONDITIONING CORPORATION**

4542 East Dunham Street • Los Angeles 25, Calif.

COMPLETE INFORMATION AVAILABLE IMMEDIATELY

SEND FOR DATA FILE TODAY

Please send me your data file on General Chef cooking-refrigeration combinations. Include specification data on the complete line of General refrigerators.

NAME

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CITY STATE
HE INT KOTE'S Sensational New Developments in Interior Insulation Board Products!

LETH-R-GRAIN INSULATION BOARD

adds even more versatility to this popular, low-priced product for interior finishes.

Get ready for increased business... as soon as you begin showing customers this spectacular new Flintkote development.

With a rich, simulated leather finish that closely resembles fine split cowhide... Leth-R-Grain Insulation Board is just the thing to spark up interiors of dens and recreation rooms with eye-catching beauty at purse-pleasing prices.

Recommend it for wainscoting, decorative panels or overall wall treatments. The big panels, 8 feet long in 3' and 4' widths, go up quickly and easily... and do the three-for-one job of providing structural walls, insulation and striking decorative beauty all at once!

The new Leth-R-Grain Insulation Board is available in morocco red, antique brown and jade green... and has a rugged, washable, scuff-resistant finish that combines years of serviceability with that luxury look that customers love. And you'll find commercial properties excellent prospects, too. So don't fail to take advantage of the business opportunities that are yours with this versatile new Flintkote Product.
TEXTURED DESIGN

in two striking colors brings new decorative beauty to Insulation Board Plank

And here's the newest thing in an old favorite. You know how well customers received Flintkote Insulation Plank when it was introduced. Well, show them this new Textured Design... and then watch the result.

We call these two new numbers Gray-tex and Green-tex. This new finish gives this popular material an arresting beauty for use in a variety of interiors.

Like all Flintkote Insulation Board Plank, these two new products have blind nailing joints for fast, neat installation AND the Flame Resistant Surface Finish conforms to U. S. Dept. of Commerce Commercial Standard CS42-49 Class F.

Don't fail to tell customers about both these sure-to-be-popular numbers right away.

THE FLINTKOTE COMPANY

AND ALL THE OTHER FLINTKOTE INTERIOR INSULATION BOARD PRODUCTS HAVE EXCITING NEW IMPROVEMENTS!

FLINTKOTE BUILDING BOARD is an economical insulating and structural board 4' wide, available in a number of lengths. The factory-finished White surface can be painted without priming, or installed without further treatment. Flame resistant surface finish conforms to U. S. Dept. of Commerce Commercial Standard CS42-49 Class F.

FLINTKOTE INSULATION TILE BOARD comes in 4 sizes and 4 colors (White, Green, Gray and Decoblend... a pleasant blend of coral tones). Blind nailing joints ensures neat installation. Flame resistant surface finish conforms to U. S. Dept. of Commerce Commercial Standard CS42-49 Class F.

In addition to the same colors as the Tile (above), FLINTKOTE INSULATION BOARD PLANK is available in the new Gray-tex and Green-tex finishes. Widths are 8', 10', 12" and 16"; lengths: 4', 10' and 12'. Flame resistant surface finish conforms to U. S. Dept. of Commerce Commercial Standard CS42-49 Class F.

THE FLINTKOTE COMPANY
Building Materials Division
30 Rockefeller Plaza, New York 20, N. Y.

FLINTKOTE...the extra years of service cost no more!
Profitable Opportunity
for men with construction knowledge

You can build a good business for yourself by providing termite control for your customers and other home owners. Write us now for full information.

The ANTIMITE System has been nationally recognized as a Leader for over 20 years in scientific termite control . . . scientifically engineered and planned to aid our operators in developing the highest degree of efficiency and permanency in termite control.

WRITE TODAY
For Available Franchises!

The ANTIMITE Company
537 Southwest Avenue
St. Louis 10, Missouri

Please send me immediately information on Antimite Franchises.

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Company
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City
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MONOCORD TIMBER TRUSSES

FOR CLEAR-SPAN, POST-FREE BUILDINGS

FAST ERECTION WITH LOCAL CREWS AND EQUIPMENT

- Monocord Timber Trusses are designed, engineered and factory-fabricated to meet all job and load requirements. They are delivered knock-down, ready for accurate assembly and easy erection by local crews and equipment. Monocord Trusses enable you to economically meet the growing demand for one-story, post-free buildings.

In addition to Monocord Trusses, Weyerhaeuser furnishes other typical fabricated lumber items to general contractors, builders and industrial builders.

WRITE for complete details.

WEYERHAEUSER SALES CO.

NEWARK, N.J. • ST. PAUL, MINN. • TACOMA, WASH.

American Builder, February 1950.
THE BUILDER’S SAW—ON WHEELS!

J. D. WALLACE & CO.
136 S. California Ave.
Chicago 12, Ill.

Compare before you buy—for here is the best money-making saw for contractors ever built! The Wallace No. 1 Radial Saw is specifically designed for you. It is trailer-mounted, for portability. Exclusive angulator for rafter sawing alternately cuts plate and plumb angles with one set-up and one handling of material.

High spindle speed gives faster, smoother saw cuts—better dicing, shaping, rafting and cabinet operations.

Write for free bulletins—also inquire about our universal saws, pointers, bandsaws, shapers, mortisers, dowel-borers and other tools.

10 day examination offer
SEND FOR THE TAMBLYN SYSTEM OF ESTIMATING ON FREE 10 DAY OFFER

Let me show you how you can cut guesswork out of building estimating.

Model A-8” 2½” cut $115.00
Model A-9” 3½” cut $135.00

Hazards of competitive bidding have been reduced to a minimum for thousands of contractors now successfully using my simple factors in preparing their cost estimates on materials and labor. I want to become your “silent consultant” by placing at your elbow, for immediate reference, the boiled-down essence of my 40 years’ experience—expressed in simple factors that require only the application of your local wage and material rates, to arrive at a competitive, yet safe cost, as a basis for contracts. Mail the coupon to me today.

GORDON TAMBLYN, THE TAMBLYN SYSTEM
1153 So. Pearl St. A-38 Denver, Colorado

Send me complete TAMBLYN System on free 10 days trial! If I like it, I will pay $30.75, when 10 days are up and $37.50 per month until $30.75 is paid. Otherwise I will return it.

NAME:
ADDRESS:
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STATE:

MY GUARANTEE
As a reader of this publication we are warranted in sending you a copy of the complete TAMBLYN System for 10 days free inspection. At the end of inspection period, you may mail it back or pay $30.75 in easy monthly payments.

FREE TRIAL OFFER
All Fred W. Wappat Saws are available on FREE TRIAL WRITE TODAY:

FRED W. WAPPAT
135 Valley St., Mayville, N. Y.
(on Chautauqua Lake)

This low-cost electric hand saw saves time... stands up under steady use, on the toughest cutting jobs!

ELECTRIC HAND SAWS
make all the cuts you need
FAST and ACCURATELY!

Powerful Fred W. Wappat Electric Hand Saws are low in cost—high on quality—they’re the product of over a quarter century's experience in making fine electric hand saws. Fred W. Wappat-designed gears, turbine-cooled motors, simple single-point lubrication increase efficiency and minimize off-the-job repair time and general maintenance. Hundreds of thousands of feet can be cut before a Fred W. Wappat Saw needs attention other than lubrication and blade sharpening.

You make all angles and grooving cuts—fast, with predetermined accuracy. Thanks to practical, field-proven balance, you get easy, fatigue-free operation, saving time and money on awkward, hard-to-reach cutting jobs. And, you cut a wide variety of materials—wood, transite, concrete, light gauge metal, etc.

Fred W. Wappat Electric Hand Saws are known as the saws that give a full day's work, even with inexperienced operators. They're versatile, fast, and dependable—ask anyone who uses one!
MAKES ALL CUTS IN SMALL HOME CONSTRUCTION

$73.95

NEW MODEL 87L
3-inch Capacity—9½-inch Blade

Powerful, Heavy-Duty, Light-Weight (12 lbs) Saw. For Right or Left Cutting.

New high quality Mall Saw accurately cross-cuts, rips, angle, and bevel cuts from boards, framing, and timbers. Blade available for dadoing, grooving, tenoning, coring, and cutting light gauge metals.

Makes straight cuts up to 3 inches in rough or dressed lumber, 1½ inch minimum with depth adjustment; 9½-degree bevel cuts to 1½-36 inches. Aluminum and magnesium alloy housing makes it light and easy to handle. Available with right or left blade with 115V or 250V AC-DC motor. 664-45 without Bevel Shoe Attachment.

MODEL 60
Mall Saw

4" Blade—2" Capacity

Complete with Bevel-Depth Attachment

$61.95

53 Factory-Owned Service Stations from Coast to Coast give quick, dependable repair service. Over 1000 Portable gasoline Engines, Electric and Pneumatic Power Tools for a million jobs. A Dealer in every town can supply you.

See Your Mall Power Tool Dealer Today, and mail coupon below for FREE 32-page Booklet, "Mall Portable Power Tools."

MALL TOOL COMPANY
7737 South Chicago Ave., Chicago 19, III.

Please rush FREE booklet and name of nearest dealer.

I am interested in: □ Mall Saws □ Mall Drills □ Mall Concrete Vibrators □ Mall Belt Sanders. (Check items wanted)

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State

EASY—the Finisher

Experience Built!

For over ten years, Easy Finishers have proven profitable rental equipment. Completely foolproof—can't injure operator or the work—built for heavy production and tough rental use. Easy's trouble-free performance makes rental customers come back, refers your maintenance costs and headaches. Easy built by experience for experienced operators or beginners, dependable for years.

Only Easy Gives You:

VIBRATIONLESS ACTION—Breathtaking new mechanism stops like a stop watch. Neatly smooth as an electric drill.

WINNING DESIGN—Regardless of the pressure applied, you get the best results of the cutting or shaping job.

LARGE PAD—Takes full 9½-inch diameter circle on 1½ inch, larger than earlier models, twice the cutting area of other saws.

COMPLETE SHOE—A production unit, not a hobby toy. Heavy-duty parts mean longer life and dependability.

LEVELER—Non-slip alignment cuts on large work. Stavens up to readings easily.

For complete story of these and other outstanding Easy features, send for bulletin or call your dealer or jobber.

DETOIT SURFACING MACHINE CO.
7668 W. Davison • Detroit 4, Mich.

Yours for Only

$100

This NEW Time-Saving Keely PLYFORM CALCULATOR

SAVE time designing and building forms of Plyform, the concrete form grade of Douglas Fir plywood. Handy slide-rule calculator gives construction data, based on hourly-rate of your. Included is booklet, "Design Assumptions for Keely Calculator." Clip coupon—now!
ALUMINUM BUILDING PRODUCTS

The NEW METALART heavy extruded Aluminum Double Hung Window for residential construction combines beauty, strength and low cost. Your choice of spiral balances or tape balances, factory glazing with Multi-Pane Bead Glazing or job site compound glazing, full-framed Screens or economical Tension Screens, plus all stainless steel weatherstripping and hardware.

All sizes designed to use standard size glass and to fit masonry openings without special cutting of glass or masonry.

Also Commercial Aluminum Double Hung Windows, Storm Windows, Screens, Attic Louvers, Ornamental Shutters.

MEMBER OF ALUMINUM WINDOW INSTITUTE

METAL ARTS MANUFACTURING CO., INC.
P. O. BOX 4144, ATLANTA, GA.

Please send me detailed information on your Aluminum Double Hung Window and other Aluminum Building Products.

I am a Distributor □ Dealer □ Builder □ Architect □

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Hidalift
THE 100% CONCEALED SASH BALANCE

2-way tension adjustment
Cuts installation time

Now you can tension either before or after installation. Hidalift balances offer you a choice.

during installation
the "L" type
by twisting bracket arm to desired tension.

after installation
either the cup or "L" type
by simple adjustment of the exclusive tensioning screw with screwdriver.

NO SPECIAL TOOLS NEEDED . . . Save installation time — expense. Both "L" and cup type attaching brackets available for your special convenience.

HIDALIFT DIVISION

Please check □ Distributor □ Dealer □ Builder

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City ZONE State

American Builder, February 1950.
DON'T LET
ROT AND TERMITES
ENDANGER YOUR
GOOD REPUTATION

WOLMANIZED Pressure-Treated Lumber stops costly damage due to wood decay and termites. It gives your customers better construction and prevents trouble that neither you nor building owners want to experience.

WOLMANIZED Pressure-Treated Lumber provides SURE, LASTING PROTECTION. Preservatives are driven deeply into the wood fibres under high pressure—not just brushed on.

Stop Damage to Wood Structures
at These Common Danger Points
It definitely pays to use WOLMANIZED Pressure-Treated Lumber where conditions like these exist:

1. Where excessive ground moisture, rain or thaws cause early decay failures.
2. Where wood is open to termite attacks.
3. Where wood is in contact with concrete or masonry.
4. Where steam and vapor from industrial processes promote wood decay.
5. Where walls, floors, ceilings are subject to condensation from refrigeration.
6. Where wood is exposed to moisture in humidified buildings or farm buildings.

FREE BOOKLET WORTH READING
Get all the facts on how WOLMANIZED Pressure-Treated Lumber stops wood decay and termites. Write today for this valuable booklet.

WOLMANIZED Pressure-Treated Lumber

For SURE protection build with...

WOLMANIZED PRESSURE TREATED LUMBER

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The Modern Way to Prevent Leaks

There is no excuse for cracks or leaks or repair expense in good building. Leading architects specify LUCKE to overcome this problem. Lucke Hangers build tubs into wall.

Sold by Leading Plumbing
Supply Houses
MANUFACTURED BY

W. B. LUCKE, Inc.
Wilmette, Illinois

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Bostwick Metal Casings are made of warp-proof metal, perfectly shaped for easy application around doors, windows and other wall openings.

Use of Bostwick Casing saves you time and money by eliminating tedious and unnecessary steps like sanding and wood finishing, and they are readily formed to perfect mitres.

Bostwick Casings result in a better finished job that's smoother, more spacious looking and much easier to sell.

Best of all, Bostwick Casings actually cost less than wood — both in construction time and in cost of materials!

So don’t delay. Consult your dealer today for complete information on Bostwick’s entire line of easier handling metal lath and metal lath accessories.

THE BOSTWICK STEEL LATH COMPANY
103 HEATON AVENUE - NILES, OHIO

American Builder, February 1950.
**STEEL BRACES**

for bridging wood joists

Sta-Tite Steel Braces are made of half-hardened channel steel with flanged ends that hold firmly to floors so floors can't buckle or bulge. Mitering, sawing, and nailing are not needed. Flange ends are firmly wedged and permanently locked in position by a hammer blow. One small nail through each end guarantees firmness. Braces can't split or warp. Nestled 10° in a box 3½" x 3½" x 18".

**STA-TITE STEEL BRACES**
give high efficiency at low cost.

WRITE TODAY FOR COMPLETE INFORMATION
Some jobber territory still open

BELOIT STEEL INDUSTRIES, Inc.
307 City Hall Bldg.
Rockford, Ill.

**WATERPROOF IN FREEZING WEATHER!**
with CRYSTAL
Silicone Water Repellent
Non-Freezing!
Lastingly Effective!

Construction jobs are speeded up in cold weather with CRYSTAL exterior water-proofing — applied quickly by brush or spray on dry brick, concrete, masonry, metal, wood — AT TEMPERATURES BELOW FREEZING!

Only CRYSTAL has all these advantages:

**ONE COAT.** Crystal penetrates, waterproofs entirely deeply. One gallon covers 150 to 200 sq. ft. of surface.
**TRANSPARENT.** Transparent finish; color safe, won't rub off touches, or develop efflorescence.
**STAINPROOF.** Makes surface water-repellent.

Send for detailed information and literature.

WURDACK CHEMICAL COMPANY
4950 Pyler Ave.
St. Louis 7, Mo.

**Save with Individual**

VIKON METAL TILES
buy only the number you need!

Here is the metal tile that is easily installed on existing walls or ceilings without expensive alterations or disconnection of fixtures. On new construction VIKON TILE permits economically erected walls or wall boards to be used as a satisfactory base. Can be applied over any smooth surface. Recommend Individual Vikon Metal Tiles, your guarantee of client satisfaction.

- 27 fade-resistant decorator colors and stainless steel
- will not warp, crack or craze
- resists heat and household chemicals
- fire-resistant, waterproof, seals out insects
- particularly adaptable to remodeling

**The Original Individual Metal Tile** Established 1926.
See our catalog in Sweet's Files

STEEL - ALUMINUM - STAINLESS STEEL

VIKON TIE
BEAUTY - ECONOMY - COLOR - DURABILITY

MAIL THIS COUPON TODAY

VIKON TILE CORPORATION
Washington, New Jersey

Please send me, without obligation or cost, a full-color descriptive brochure and sample of Vikon Metal Tile. I am interested in tile for:

My home ☐ As a dealer ☐ As a contractor ☐

NAME
ADDRESS
CITY, STATE
PHONE

American Builder, February 1950.
the kitchen plan. He calls attention to location of kitchen at one end of the house. This is intended to give the housewife easy supervision of almost the whole interior while she does her kitchen work. Through one archway, she can see into the living room and part of the bedroom hallway. Through the other hallway (if her house is the dining room model), she can see into the dining room, into the rest of the hallway and into one bedroom. From the front kitchen window, she can see the porch and the front yard. From the rear window, she can see into the back yard. Through the window in the outside kitchen door, she can see part of the yard at one side.

Standard equipment in each kitchen is a range, cabinet sink, cabinets, washer and the breakfast nook set. Size of the kitchen is ample for informal meals.

Architect for the Raymond Ranch Homes development is Fred J. Roughgarden of Hawthorne.

Interior decoration of the model home was done by Mrs. Raymond, who also is doing other interior decoration for which the builder is responsible.

**Mass Production**

(Continued from page 286)

**Increase Production 100%**

with **Ken Corner Level**

If you can determine the saving caused in the time and effort of layout and other operations by having the greatest precision when the original template of a line or angle is set, you know how much money and time can be saved. The A.M. model automatic production during any 15 minute period of working time. Multiply that saving by the number of 15 minute periods and you have the saving caused in the great majority of layout and other operations by having the greatest precision when the original template is set. The A.M. model will save twice as much material over the old fashion production and will save twice as much material and labor in making any cut at any time. The A.M. model is the pattern for all other template and layout operations.

END ICE HAZARDS

on

- **DRIVEWAYS**
- **SIDEWALKS**
- **STEPS**

with

**SOLVAY Sales Division**

SOLVAY Calcium Chloride

American Builder, February 1950.
FOR YOUR INSPECTION

SILVENS APARTMENTS, 806 State Street, Bettendorf, Iowa. Cost approximately $225,000. 28 modern apartments, each with 3 or 4 rooms and separate gas heating systems. All apartments completely Kitchen-Kraft equipped by Outbank-Davidsen Company, distributors.

"ONE OF THE SMARTEST THINGS I DID WAS TO INSTALL Kitchen-Kraft KITCHENS,"

says J. B. SLAVENS, Owner, Slavens Apartments, Bettendorf, Iowa

"You've got to build apartments and homes to please the average woman." says J. B. Slavens, owner of beautiful Slavens Apartments. "And it's amazing how the women who have seen my new apartments remark about the attractive, compact kitchens. Yes, I emphatically recommend Kitchen-Kraft complete Kitchens as a wise investment for any builder."

The Slavens Apartment building is just one of hundreds of apartments and homes where Kitchen-Kraft Kitchens are winning admiration from prospective owners and renters. Kitchen-Kraft fits perfectly into your building plans — no matter what style or size kitchen you have in mind. All sizes of cabinets, fillers of standard specifications from stock to fit any space. Kitchen-Kraft Kitchens make homes easier to sell, apartments easier to rent.

PROMPT DELIVERY OF ALL KITCHEN-KRAFT EQUIPMENT ASSURED. SEND TODAY FOR PRICES AND LITERATURE.

MIDWEST MFG. COMPANY  
GALVESTON, ILLINOIS
10 men, all common labor. Studs, ceiling and floor joists and all dimensional timber are cut according to a standardized plan. Studs and plates are placed on a form constructed of 8x8 timber, and nailed. Entire wall sections are built at once, siding added, and the gables finished simultaneously. In the meantime, another man cuts rafters and ceiling joists and another builds windows. All the component parts of the house are made at the mill and transported to the building site where a foundation has been poured and is ready for raising the wall sections. Floor joists and girders are laid, wall sections put up, rafters and gables added, windows put in and the roof decked.

Up to this point, it has taken 10 men three and one-half hours to make the various components of the house and four hours to set up the skeleton, a total of seven and one-half hours. The completion of the house is subcontracted to one man, who applies composition shingle roofing, lays the oak flooring, puts up interior walls and trim. Normally, two men can finish three houses in one week.

**Artists' Drawings Help Builders Sell Homes**

A young Los Angeles artist, R. C. Qvale, has built a business for himself by helping builders sell houses with the use of his art work.

**This drawing.** Originally in full colors, typical of the work produced by R. C. Qvale and Associates for nation’s builders

Qvale, who had been making delineations for architects and larger builders, decided that this was a service almost any builder could use. His solicitations among small builders led to the establishment of a mail order business that is now nationwide.

The procedure works like this: A builder sends Qvale a floor plan and an elevation of the house of which he wants a drawing. The artist, in turn, furnishes an 11 x 18-inch drawing in full color viewing the house from its advantageous angle. Lawn, trees, trim, shutters, and other features are accentuated in the art work. The cost of such a drawing is approximately $50. Glossy prints of it for advertising purposes are provided at 65 cents each.

**Murray Corp. Host to Press**

EXECUTIVES at the Murray Corporation of America and the Home Appliance division, Scranton, Pa., were recently hosts at a trade press preview of new home appliances being introduced by the firm in 1950. Discussing features of the new ranges are (from left): B. C. Gould, Murray Corp. president; H. C. Berestord, Home Appliance Division sales manager; C. H. Messer, vice president in charge of sales. Murray Corp.; and T. W. Hardy, Murray vice president in charge of the Home Appliance Division.

**Two Great MONEY MAKERS for BUILDERS**

Here are two mixers every builder should own. They speed up work, save many man hours a year and are known everywhere for their quality and rugged construction. See your CMC distributor or write for catalog.

**WONDER**

**“SUPER SIX” HOE TYPE MIXER**

Mixes cement, mortar, pot-ent plaster with ease or fiber. Has very-white long lasting drum bore—for extra 10 years of service. Triple mixing hose. Sealed Tim ken bearings on both hoe and lock shafts.
10 Day Trial No Deposit

WARREN-KNIGHT TRANSIT-LEVEL

This instrument is made for the Builder or Contractor who knows that he can work more efficiently with the aid of this instrument. It will do the work of many men—twice faster. It will give you accuracy that can’t be matched for cost. The transit is made from the finest hard woods and comes equipped with a transit level. The transit itself is the same size as the transit used by U.S. Standard Transit and Marking Tools.

SAVE TIME & money, and give yourself peace of mind.

SAVE MONEY by ordering direct from the factory.

Use WARREN-KNIGHT Co. for your old instrument.

WARREN-KNIGHT CO.
136 N. 12th St.
PHILADELPHIA 7, PA.

SAVE A DAY or more on every staircase you build

(Left) Measuring Tread

ELIASON STAIR GAUGE

in 10 minutes you can make your own length and width of stairs, risers, stringers, etc., ready for carpenters, builders, and millmen to make their own. Each and every part is marked with a length and width, the best way to save time and money. The best way to save time and money. The best way to save time and money.

Order today, or send for literature.

ELIASON TOOL CO.
818 E. 30th St.
Minneapolis 17, Minn.

TIMELY DRAFTING TEMPLATES

Speed and simplify plan drawings. Transparent—punched—catered. Make unique designs, symbols with a twist of a pencil. Works on any job. Thousands in daily use. For your dealer or order direct postpaid.

TIMELY PRODUCTS Box 2065 Columbus, OH

E-Z MARK BUTT GAUGE

Hang that door THE PROFESSIONAL WAY!

Makes a clean-cut deeply etched profile. Remove chips. Repeat on jamb. Hang door!

Comes with Leatherette Case

E-Z MARK TOOLS
P. O. Box 6377
Los Angeles 16, Calif.

American Builder, February 1950.

Eliminate COSTLY ACCIDENT HAZARDS with Strong, Safe Equipment

GOLD MEDAL LADDERS

In ladders, it’s practical economy to buy the best... and that means the safest, the strongest and the best suited to service and maintenance work. GOLD MEDAL Ladders satisfy all conditions. In design, construction and safety, GOLD MEDAL Ladders are unexcelled... for nearly three-quarters of a century, they have met the rigorous test of on-the-job service. Inspected by Underwriters’ Laboratories. Use GOLD MEDAL Ladders to cut your accident rate and save costly lost time.

*EXTENSION LADDERS—Top strength in design and construction. Equipped with steel ring loops, automatic safety hook and straps. Sizes from 20’ to 32’.

*SINGLE LADDERS—Equipped with steel ring loops, automatic safety hook and straps. Sizes from 8 to 24’.

*UNDERWRITER STEP LADDER—With safety features: non-skid step, toe guard, non-slip ladder. Sizes: 4’ to 20’.

*SAFETY PLATFORM LADDER—Ideal for general work with wide platform with adjustable platform. Sizes: 4’ to 16’ (height of platform).

LADDER JACKS

Now more and more better work can be done at a lower cost. ONE MAN Ladder Jacks are ideal for use with wall or fixed mounting on either side of a ladder. Made of strong, lightweight materials. Three sizes. For 1200 lbs. capacity. Greatly reduces the weight of ladder to be lifted. Many dealers in stock.

SCAFFOLD BRACKETS

Simplify installation of scaffolding for many many types of work. Trouble savers, they are strong. Made of rail bracket and crossbar-attached and bolted-attached types. They are not hard.

Manufacturers of:

GOLD MEDAL Tubular Steel Scaffolding—Safety Scaffolding Machines—Junior Safety Swinging Scaffolds—Steel Sidewalk Bridges—Ladders, Light Ladders—"TROUBLE SAVERS" Sectional Steel Scaffolds—Steel Scaffold Brackets—Adjustable Steel Trellises.

Write for ladder bulletin, "Safety in Scaffolding and Economy in Scaffolding."
JAEGER 3½ "AUTO-LOADER"

Cut out hopper loads while previous batch mixes—big time saving.

Open the gate and hopper automatically cuts load into drum—fast, clean!

You cut costs and boost profits when you mix 12 to 15 yards more concrete daily with no more manpower. And, you can do that with the Jaeger 3½ "Auto-Loader." It's the fastest half-bag mixer made. Catalog M-8 tells why—shows the complete Jaeger line. Write for it.

THE JAEGGER MACHINE COMPANY
Columbus 14, Ohio
loading Distributors in 130 cities
call and service Jaeger equipment.

THOROSEAL and make lifelong friends

Applications of THOROSEAL may be made over exterior surfaces of foundation walls as work progresses.

For Rain Insurance

THOROSEAL

STANDARD DRY WALL PRODUCTS
BOX X NEW EAGLE, PENNSYLVANIA

Year 'Round Protection

BOCA-Code

(Continued from page 105)

Conference and Southern Building Code Congress. This movement toward standardization of building codes should not stop until all are reduced to one workable uniform code applicable to every city, town and village in the nation.

This is not an unreasonable thought when a few simple facts are considered. Pure water is pure in every community. Fire is the same regardless of location. Materials are exactly the same no matter what their eventual destination might be. Sanitation and safety are basic. Only people and their thinking are different—and that is the main problem. If we can change attitudes, we will have the solution.

Home builders are expected to produce about 1,000,000 new houses in 1950. At a conservative average cost of $7,500 per unit the grand total is $7,500,000,000. This engineering and code authorities in the nation estimate that the BOCA standard code can save at least 5 per cent in building costs. This would mean a saving of $375,000,000 to home buyers in the United States without any sacrifice whatever in safety, sanitation, permanence or healthful living.

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American Builder, February 1950.
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