THOUSANDS OF HOME OWNERS ARE ASKING ABOUT
CELOTEX INTERIOR FINISH PRODUCTS THAT

Build! Insulate! Decorate!

—AT ONE LOW COST!

Give Your Houses the Modern Charm and Economy Your Customers Are Reading About in Celotex Advertising

FEBRUARY magazines carried a four-color advertisement telling about the beauty and economy of Celotex Insulating Interior Finish. Thousands of coupons have come in from people who want to know more about this modern building method! It's the new vogue—to make one material do several jobs—to gain structural strength, proved insulation, and smart modern beauty at one low cost!

Your own prospective customers have been reading these Celotex advertisements. They'll be asking questions when they talk to you. Be sure you know all the answers! Get the facts now on the wide range of new tints and textures available in Celotex Plank and Tile and Celotex Key Joint Units. Mail the coupon today!

The word Celotex is a trade name identifying a group of products marketed by The Celotex Corporation.

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

Please send me the latest information on Celotex Insulating Interior Finish.

Name
Address
City
County
State

Published monthly by Simmons-Boardman Publishing Corporation, 105 W. Adams St., Chicago, Ill. Subscription price, United States, Possessions, and Canada $1 year, $2.00; foreign countries: 1 year, $3.00; 2 years, $4.00; 3 years, $6.00. Single copies, 25 cents. Entered as second-class matter at Ill., 1909, at the Post Office, Chicago, Illinois, under the act of March 3, 1879, with additional entry as second-class matter at Mount Morris, Ill. Address communications to 105 W. Adams St., Chicago.
CONTENTS FOR APRIL, 1940

Front Cover Home, Photographed by F. S. Lincoln ............... 1
Architect, Arthur E. Allen; Builder, George Melios (Plans and Details, Page 74)
Publisher's Page—For Increased Building Employment—by Samuel O. Dunn .......... 57
Editorial—No Dictatorship on Long Island .......... 59
We Draw Economies Into Our Plans—by Arthur E. Allen .......... 60
More Quality Homes for the Money Is Long Island Objective 
Builders Tell the World .......... 61
Buyers Respond to the Unusual in Home Fittings—by David George Barouther .......... 62
Eye Appeal and Sex Appeal Items Help LI Builders Sell Homes .......... 63
FHA and Facts about Long Island Home Building Standards .......... 64
Home Design Section with 8 Pages in Full Color and Map Showing Location of 250 Largest Long Island Developments with List of Builders .......... 65-95
Long Island First Impressions
Mott's Quality Specifications
Mott Long Island Interiors
America's Largest Home Builders—Gross-Morton
Levitt's Luxury Details
Front Cover Long Island Home
Full Color Style Guide for New Homes
250 Largest Long Island Developments
Large Norgate-at-Roslyn Homesites Attract
Betsy Ross Girls Help Sell Homes at New Salem
100 Cottages Sold on 100 by 100 Foot Plots by Rorech
Priceless Extras* at Chester Hill
McGowan $25-a-Month House Has 27 by 28 Foot Basic Plan
New Features in Evanston, Ill., Apartment .......... 96
Designing Schools for Economy and Low Upkeep .......... 99
How to Build Low Cost Service Stations .......... 100
2-Flats Are Easily Brought Up-to-Date at Moderate Cost .......... 102
Shop Modernizations Pay Dividends .......... 103
Building Combines 5-Room Apartment and Small Store .......... 104
Finding Length of Common Rafters—by Gilbert Townsend .......... 106
This Third Article on the Steel Square Explains Rafters Tables
Shopcrafter's Corner—Fences for Privacy and Decoration .......... 108
Prefabricated Steel Panel System for Industrial Buildings .......... 110
New Products Department .......... 111
News of the Month .......... 120
Letters from Readers .......... 158
The 1940 Building Directory .......... 163
Classified Directory and Buyers' Guide; Trade Name Index
TruCost Department .......... 167
New Information—Catalogs Offered .......... 186
Index to Advertisers .......... 195

JOSEPH B. MASON Editor
Eastern Editor
R. E. SANGSTER Managing Editor
DOLA PARR Associate Editor

BERNARD L. JOHNSON
JOE SANDERS
Editor
Marketing Editor

LYMAN M. FORBES Research Editor
L. E. ARENT
Art Editor


55
New Low-Cost Factory-Finished Flooring
RESISTS SCRATCHES . . . HAS BEVELED ENDS AND EDGES!

Now, you can give home owners a factory-finished hardwood floor that will stay beautiful for years to come! And no wonder! Bruce STREAMLINE Flooring is finished a scientific new way that penetrates the pores of the wood . . . gives floors a tough, lustrous, lasting finish that wears with the wood. That’s why it doesn’t scratch, chip or peel like ordinary flooring finished the old style surface way. What’s more, this amazing new flooring usually costs less than ordinary flooring finished on the job. Home owners everywhere like the gracefully beveled ends and edges, and the generous width of the strips (3¼”). This new idea creates a shadow “patterned” effect that gives floors an appealing new beauty like that of expensive plank floors.

Then, too, a Bruce STREAMLINE Floor is ready for use the very instant the last nail is driven in . . . because there’s no sanding, finishing or polishing to do. Available in Oak, Maple, Beech in several shades and grades. Installed exactly like ordinary strip flooring. Send the coupon for full details and “Scratch Test” Panel.

E. L. BRUCE CO.
1570 THOMAS STREET
MEMPHIS, TENN.

HARDWOOD FLOORINGS — FLOOR FINISHES — TERMINIX
A new book on "Housing" by Dr. E. E. Wood published by the Federal Works Agency, Washington, D. C., presents a chapter entitled, "Housing Shortage in 1938 and Probable Needs to 1950." It concludes that a total of 13,279,000 family dwelling units should be built during this present decade if the nation is to keep pace with population growth plus new housing demand arising from demolition and obsolescence.

This is probably the largest figure yet offered, based on authoritative studies, gauging the size of today's potential home building program. One million three hundred thousand new home units ANNUALLY for the next ten years is about three times the number of new home units built last year.

The need was present last year, and continues to face the building industry today.

Funds for building these needed homes are ready, and are available at the lowest rates and most favorable terms in this nation's history.

Materials and equipment for these buildings are on hand, with industry tooled to supply all additional needs.

Building labor is ready waiting to be employed; in fact, the thousands of unemployed and only part-time employed building trades workers are perhaps the country's biggest obstacle to economic recovery.

The need, the money, the materials and the men are all present. They call for a tremendous home construction program. Yet building scarcely moves forward. The early months of 1940 are just about holding their own with 1939, to say nothing of the 300 per cent increase pictured by Dr. Wood and other survey authorities.

What is the "precious ingredient" in this situation that is lacking?

Well, it is probably confidence. The man who must risk the investment in a new home for himself and family or in a group of houses or an apartment for rent can not be assured today that his risk would be justified. He finds that building costs are too high as compared with other costs, especially rents, and as compared with average incomes. He finds that property owners are menaced by increasing taxes, and by the competition of tax-exempt and tax-supported government housing.

Labor "trouble" and labor restrictions that add to building costs are destructive to his confidence and so retard this much needed home building program; and responsible labor leaders might well give thought to sponsoring more actively some broad policies that would put Labor solidly behind the present drive for more and better low cost homes and for fairer taxes on them.

As a suggestion for such policies, why not take these eleven points, established twenty years ago by Judge K. M. Landis in Chicago when he adjudicated a critical building trades deadlock:

1. Peaceful adjustment of labor disputes by arbitration.
2. No stoppage of work either individually or collectively under penalties prescribed.
3. Any journeyman may use in his work the tools of any other trade.
4. Shift work will be paid at the regular rate.
5. Contractors not affiliated with associations may avail themselves of all benefits by joining association.
6. There shall be no restriction of output.
7. There shall be no restriction as to the use of machinery, methods or appliances.
8. There shall be no restriction against any raw material or manufactured material except prison made.
9. Employers may employ or discharge whomsoever they please and employees may work for whomsoever they see fit.
10. The foreman is to be exclusively the agent of the owner.
11. Nothing shall prohibit an employer or one member of the firm from working on his own job.

Increased confidence among small investors, increased volume of home building, increased and steadied building trades employment, increased prosperity and benefits for all would certainly result if these "Landis Award" principles could be generally adopted.
THAT COOL SPRING NIGHT

Frost Hazard

QUALITY PAYS . . . INSIST ON 'INCOR'

'Incor' 24-HOUR Cement means just what the name says—uniform, dependable 24-HOUR service strength. AND LONG-TIME DURABILITY, TOO—proved by 13-year performance record . . . a vital advantage EXCLUSIVE with 'Incor', the FIRST high early strength Portland Cement. Quality pays . . . because better cement makes better concrete.

SAVE TIME, MONEY, WORRY
GET LONG-TIME DURABILITY
USE 'INCOR' 24-HOUR CEMENT

SPRING is fickle... temperatures drop suddenly, exposing concrete to freezing risk. Save time, money, worry. Use 'Incor' 24-HOUR Cement . . . heat mixing water . . . protect the concrete promptly after placing. 'Incor' hardens and cures 5 times as fast—is safe from freezing that much sooner. For 24-hour service strength, supply enough heat to maintain curing temperature at 60° to 70°.

This better quality 24-HOUR Portland cement means better concrete, too. Tidewater Construction Corporation used 'Incor' on the new 13-span Lafayette River Bridge at 26th Street, Norfolk, Va. Working straight through the Winter, 'Incor' cut heating costs, speeded completion, reduced job overhead. And they didn’t have to touch the under-side of the arches—because of 'Incor’s workability.

Dependable high early strength plus long-time durability—proved by 'Incor' s 13-year service record. Use 'Incor'*—you'll be money ahead if you do. Write for copy of booklet entitled "Cutting Concrete Costs." Lone Star Cement Corporation, 342 Madison Avenue, New York.

*Lone Star Cement Corporation
MAKERS OF LONE STAR CEMENT • • • 'INCOR' 24-HOUR CEMENT

American Builder, April 1940.
No DICTATORSHIP on Long Island

HOME building flourishes on Long Island because few of the restraints, restrictions and labor dictatorships that plague many metropolitan areas have been allowed to obtain a strangle hold there.

Long Island is one of the fastest growing home communities in the world because its builders are giving home buyers good houses at low prices. They are able to do so because they have strenuously resisted anything that tends unduly to increase home costs. Such a condition doesn’t “just happen.” It is the result of a constant battle on the part of vigorous and experienced building organizations that fully realize that the only way the home building industry can prosper is to keep constantly giving the public a higher value house at a lower price.

Take the matter of labor and unionization. Long Island builders pay their workmen well—higher than average. But they have strenuously resisted unionization because they object to the restrictions on output and other union regulations that would reduce efficiency. They say that unionization would raise the selling price of the average Long Island house 30 per cent. It is not an increase in hourly wages that would do this, they say, but such possibilities as the 30-hour week, limitation of output, rules against use of power equipment and other union red tape, restrictions, regulations and discriminations.

Most Long Island builders feel that they had a good object lesson in what happened to one of their prominent operators when he opened a new development in highly unionized Westchester County. This builder—one of the smartest and most efficient operators on the Island—started a 100 per cent union job in Westchester. He built 100 houses—and abruptly quit. He ran into so many obstacles, he said it wasn’t worth the trouble. An identical house that he built on Long Island to sell for $8,500 had to bring $11,500 in Westchester. He got out, and that community and its workers and its business men lost an opportunity to have hundreds of new homes.

New Ideas Catch on Quickly

Other factors contribute to favorable home ownership conditions on Long Island. Taxes are reasonable. Building codes, while strict enough to protect the home owner, do not unduly interfere with the use of new and improved products and materials and methods. Competition is keen enough all along the line to satisfy the most ardent exponent of free and unrestricted competition as a factor in bringing about lower prices. Most material men, in fact, will claim that it is carried a bit too far.

Operative builders on Long Island have one of the largest, most prosperous metropolitan populations in the world to draw from. Their prospects are as typical as a cross section of the United States. Credit must be given them for their willingness to accept new ideas and their quickness to adapt them to the job of producing and selling better homes at lower cost.

Care must be taken in generalizing about Long Island builders. There are those who specialize in low-priced homes for the mass market in the more heavily built-up areas. There are an equal number who build better looking houses farther out in beautiful wooded surroundings. There is a vast volume of low cost row house construction, but also some of the finest “small estate” home building in the world is on this 118-mile island. Contrary to general opinion, building is not concentrated in the hands of a few big operators but is spread out among a large number—probably 1,000 or more.

As a perusal of this special Long Island issue of American Builder will show, most of the successful builders there in any price class are men of sound training, long experience and ability. A surprising number are the sons and grandsons of builders. A dozen of the most spectacularly successful home developments involving many hundreds of homes are being run by intelligent college-trained young men. They have set high standards of construction, have employed the most competent architects and land planning experts. They are putting attractively styled houses on large plots of ground—frequently a third and half acre.

Smart Merchandisers Also

From the first inception of FHA, Long Island builders have been quick to appreciate its possibilities. They have eliminated the excessive financing charges that to this day are maintained by many lending institutions in other parts of the country. They have obtained an interest rate of only 4 1/4 per cent—probably the lowest in the country.

Coupled with all of the above, Long Island builders have realized that it takes smart merchandising to sell homes. They have not been afraid to install those “extras” in items of equipment and materials that catch the prospect’s eye. The result is that Long Island homes are colorful, well equipped and salable. All of which adds up to the fact that home building flourishes where a determined effort is made to keep it free of restraints and where the builder consistently gives the buyer more quality house for his money.
EDITOR'S NOTE—Arthur E. Allen, not yet 40 years of age, has designed more private dwellings than probably any other architect in this country. He has been responsible for the planning of more than 22,000 homes that have been built and sold in the Long Island suburban section of New York. Homes built from Allen plans would house the entire city of Mobile, Ala., Topeka, Kans., or Portland, Me., figuring less than 4 members per family.

Last year Mr. Allen filed 2,420 individual plans for small houses. He specializes in architecture for the large scale speculative home builder and keeps in close touch with home buying trends. His office in Jamaica is in the heart of the "fastest growing island" in the country.

The 1940 home builder is on the spot. Hemmed in by building codes, FHA construction standards, and various mortgage requirements, he is besieged by competition and faces the problem of giving the home buyer more quality house for his money, or else—

"Blame the architect" has become a favorite indoor sport for the builder, and justifiably so. In the good old days when builders could concoct homemade plans out of a book and build and sell rows of undistinguished boxes, they regarded architecture in the way a bachelor considered a wife—an expensive luxury.

But lately it has been discovered that expert planning can result in more house value, cheaper to erect, and the architect is recognized as being worth his salt. For the architect now shows the builder how to save legitimately on material and labor costs and still create more livable and comfortable space in a home than his competitors can produce.

The man in the street may look at the green shutters of a Cape Cod bungalow and exclaim: "Charming architecture!" The experienced builder on the other hand can balance himself on the floor beams of a house being framed and pronounce it: "Cleverly planned." Why?

Because exterior design is comparatively unimportant in the cost of a house. The layout of rooms, to render a maximum of the cubic content usable and attractive, holds the secret of cost. It is just about as cheap to dress up an exterior in half-timber stucco English style as is to create a simple frame Colonial facade. All-brick or half stone may run slightly higher in most localities, but their use often can be justified by popular preference.

The first place to start saving in the plan and construction of the small house is in excavation and foundation. The most economical plan of construction is naturally a rectangular or square house with no breaks in its perimeter. This becomes apparent immediately in foundation work. For example, a small house measuring about 20 feet wide and 30 feet deep will have a perimeter of 100 feet and cover a total area of 600 square feet. If one corner of this house is to be left unexcavated for a setback of about 5x5 feet, the perimeter of the foundation work will still be 100 feet and yet the house will be smaller by 25 square feet.

**Floor Beams Control Room Size**

The next point in which careful planning can save dollars and cents in materials and labor is in floor beams. Arbitrary room sizes necessarily entail a considerable waste of material and labor time in cutting down floor beams from their standard multiples of 2 feet. When beams can be purchased in lengths of 8, 10, 12, 14 feet, etc., it is more expedient to plan a room width of 13'4" in the rough, for instance, than to plan it 13 feet wide or 12'1/4 feet or 12. Since a bearing of 4 inches is required on each end of a floor beam, a standard length of 14 feet can be used without cutting beams down and a room width of 13'4" can be obtained. If a room is planned to be (Continued to page 144)
Builders Tell the World

FIRST you need a good product; then you have to tell the world about it. How can you do this best? Long Island builders say that smartly designed, well-located signs are the answer.

Like any other job, designing and making signs is the job of a specialist. Several of the signs of one such firm—Cameo Sign Service of Brooklyn, N. Y., are shown on page below.

Naturally, the character of a sign must be determined by the character of the development or the people desired as customers. The Trump Homes advertisement below is one of Cameo's masterpieces, tying in with the New York World's Fair and appealing to buyers in (Continued to page 130)
WHETHER you call it Chi-Chi*, oomph, eye appeal or just smart merchandising, Long Island builders never miss a trick. They not only give the buyer more QUALITY house for the money, but throw in a host of specialty equipment and lighter luxury items that make the housewife’s life more gay and exciting.

A direct about-face in sales philosophy has been made by the top-flight, successful speculative builders on Long Island. From the theory of giving the buyer as little as possible in the way of extras, he has swung to the practice of dressing up his house with almost everything that has tempted the public in magazine advertisements in recent years. In doing this the builder has discovered that even though in some cases additional equipment dictates a slightly higher price, he can sell his house faster than his competitor and build more of them.

They’re Romance Bound

A package—the window dressing—a dash of showmanship—are factors that sell houses as readily as motor cars are sold by their chromium accents, streamlining, cigar lighters, radios, heaters and bright paint colors. For the average family is romance-bound when looking for a new home. Flowers in window boxes, mirrors in baths and dressing rooms, cheerful wall papers, mean more to the average prospective home buyer than such substantial details as three coats of plaster, poured concrete foundations and steel lally columns, all of which happen to be more or less standard under our building codes and mortgage requirements.

Many a good builder still feels that honest construction marks the limits of his jurisdiction. He feels that sensible buyers will appreciate being left free to select their own extras according to individual preferences. Automobile builders felt that way about self-starters around 1912 and 1913, when headlights were extra, and so were bumpers and tops and even tires. The home builder in this frame of mind calls his competitor’s trimmings “gadgets” and he can’t understand why his own houses will not sell as fast.

However, “gadget” proves to be a misnomer. In a floodtide demand for modern conveniences, the public will not be damned. A crystallization of popular preference for oil burners has prompted Green Park Estates, for example, to include them in the purchase price of 850 homes being built. The younger generation’s love of shower baths has guided the Gross-Morton Corporation in providing sliding glass panels in front of bath-tubs in cases where separate glass-enclosed stalls are not expedient. Such items of equipment are not gadgets. They are salesmen—veritable robots—they speak for themselves.

Enter the “Hollywood Bath”

The colored tile bath with harmoniously colored fixtures is standard today through almost every price class on Long Island. It includes, in addition to the inevitable Venetian mirror medicine cabinet, a built-in laundry hamper, an ample array of built-in accoutrements such as towel racks, tooth brush holders, soap containers.

*Chi-Chi (pronounced Chee-Chee)—popular fashion term for things that are super-chic or dressed up.
Eye Appeal and Sex Appeal Items Help L.I. Builders Sell Homes. Find Extra Conveniences Pay Their Way

By David George Bareuther

and in some cases built-in scales for the ladies who are worried about their diets. Newell & Daniel and Shorehaven, among others, have given some of their bathrooms an outer wall of glass brick to offer the most timid soul the privilege of a shower in the sun. Sutton Park at Lawrence, L. I., devotes the entire wall above the bathtub to an enormous mirror. The United Associates, without a Roman on their staff, introduced the sunken bathtub in $6,000 houses where they featured "Hollywood Baths."

Man-size bathrooms are not confined to any definite price class. They are found big enough for both tub and shower stall with plenty of elbow room for a brisk rubdown in the $6,000 Gross-Morton home, the $8,000 houses at New Salem, the $10,000 to $12,000 Walter Uhl creations at Flower Hill, and the $15,000 to $25,000 residences of Munsey Park.

Munsey Park, by the way, an independent village of more than 400 homes built in the past ten years, recently demonstrated the "talking doorbell," a Western Electric contrivance. This makes it possible for the housewife to converse with the Fuller brush man via house phone from kitchen or upstairs hall.

Telephone base plugs to accommodate portable phones, which can be transplanted to guest room, boudoir, or nursery in the manner they are passed around tables at swanky restaurants, are worthy of a long eye on. They were installed in the large country homes at Sterling Ridge in Westchester and we shall see the day when they are more of a luxury than the stationary telephone is today.

But to get back to the popular price field, a base plug that is common in the new Long Island homes is the radio outlet. This supplies both ground and built-in aerial contacts in the same way that it does in modern city apartments.

There is virtually no detail of extra equipment that the progressive builder can afford to overlook. Chromium closet fittings amaze the prospect and they cost little more than the usual painted clothes pole and haphazard hooks. Shoe racks, hat racks, tie racks are worth many times their cost when installed in a house. Clever builders have placed a few hooks high to keep evening gowns from dragging. Closets that are illuminated automatically by means of a hinge switch as the door is opened, cedar lined closets, triple doored wardrobes with three full length mirrors for dressing—all are to be found in the new Long Island speculative homes.

Crystal chandeliers, indirect lighting from mouldings, pinhole flood lights for dining room tables, tubular (Continued to page 132)
FHA and the FACTS about Long Island home building standards

By Joseph B. Mason

INCE the Federal Housing Administration insured its first mortgage on a residential property on Long Island in December 1934, vast changes and improvements have taken place in this "fastest growing community."

There is incontrovertible evidence to the fact that Long Island operative builders are selling better By Joseph B. Mason

Larger plots, wider street frontage, better laid out communities.

2. Better architectural design and more variety.

3. Improved interior planning, with better circulation, lighting, exposure, privacy of sleeping quarters.

4. Improved heating plants guaranteed by certificates from both manufacturer and plumber; automatic controls.

5. Copper and brass plumbing and flashing.


8. Diagonal sheathing, more insulation, fire stops and fire-retarding construction.

9. More efficient equipment and conveniences.

THOMAS G. GRACE, New York State FHA Director.

wooded Long Island countryside are now being opened to development, with land costs greatly reduced. The result is that the Long Island home buyer of today gets attractive homesites in highly desirable "estate" surroundings at prices that would have been considered impossibly low a few years back.

Thomas G. Grace, New York State Director, is a dynamic, witty Irishman who has made many friends and achieved results all along the line. He has been well assisted, in the Jamaica district office where most of the Long Island work heads up, by Stanley R. White. The processing of more than 272 million dollars of insurance commitments—which is their record to date—is one of the biggest jobs done by FHA anywhere in the country.

Contrary to usual beliefs, all Long Island building is not concentrated in the hands of a small handful of builders. FHA records show that there are approximately 250 operative builders who have put up developments of 25 houses or more. American Builder estimates that there must be more than 1,000 fair-sized builders on the Island.

Kings, Queens and Nassau counties, located as they are close to one of the greatest concentrations of population in the world, get the bulk of the new construction. Since 1934 Queens county has had a 400,000 increase in population and Nassau county 125,000.

The combination of a large population, a co-operative minded FHA, smart and energetic builders, and equally smart and energetic financial institutions has resulted in the tremendous building development that has taken place on Long Island in recent years. Not only were the Long Island builders first to appreciate the opportunities offered by the FHA program, but many financial institutions were equally alert. While big bankers faltered, institutions like the South Shore Trust Company of Rockville Centre, Baldwin National Bank, Franklin

(Continued to page 134)
Long Island
First
Impressions

LONG ISLAND builders have a way of putting their best foot forward—and in this instance it is the front entrance. These are three of the most recent creations of the architectural department of Mott Brothers, Inc., and they illustrate to a high degree the quality, style and good taste of the successful Long Island builder.

CLOSE inspection of these Mott entrance details shows not only beauty of design and proportion but attention to weathertightness, flashing, caulking and a long-lasting paint job. They are the product of years of sound building.
HAROLD B. and EDWARD C. MOTT.

prominently identified with the building industry on Long Island. This is the background of the present large Mott Brothers' organization which today headed by Harold B. and Edward C. Mott, who, in the course of the past 17 years, have built thousands of houses.

Even during the deepest depression days, the Motts kept on building and selling houses. As a result, they stored up a wealth of knowledge, and developed an organization which has enabled them to give extraordinary house value for the money. During this period of years, the Motts built up a complete and detailed set of specifications, adherence to which assures the

Mott's Quality Specifications

Product of 3 Generations of Building on Long Island. Firm Now Extending Unique Service to Other Builders

For three generations the Mott Family has been prominently identified with the building industry on Long Island. This is the background of the present large Mott Brothers' organization which today headed by Harold B. and Edward C. Mott, who, in the course of the past 17 years, have built thousands of houses.

Even during the deepest depression days, the Motts kept on building and selling houses. As a result, they stored up a wealth of knowledge, and developed an organization which has enabled them to give extraordinary house value for the money. During this period of years, the Motts built up a complete and detailed set of specifications, adherence to which assures the

Mott's Quality Specifications

Product of 3 Generations of Building on Long Island. Firm Now Extending Unique Service to Other Builders

For three generations the Mott Family has been prominently identified with the building industry on Long Island. This is the background of the present large Mott Brothers' organization which today headed by Harold B. and Edward C. Mott, who, in the course of the past 17 years, have built thousands of houses.

Even during the deepest depression days, the Motts kept on building and selling houses. As a result, they stored up a wealth of knowledge, and developed an organization which has enabled them to give extraordinary house value for the money. During this period of years, the Motts built up a complete and detailed set of specifications, adherence to which assures the

Mott's Quality Specifications

Product of 3 Generations of Building on Long Island. Firm Now Extending Unique Service to Other Builders

For three generations the Mott Family has been prominently identified with the building industry on Long Island. This is the background of the present large Mott Brothers' organization which today headed by Harold B. and Edward C. Mott, who, in the course of the past 17 years, have built thousands of houses.

Even during the deepest depression days, the Motts kept on building and selling houses. As a result, they stored up a wealth of knowledge, and developed an organization which has enabled them to give extraordinary house value for the money. During this period of years, the Motts built up a complete and detailed set of specifications, adherence to which assures the

Mott's Quality Specifications

Product of 3 Generations of Building on Long Island. Firm Now Extending Unique Service to Other Builders

For three generations the Mott Family has been prominently identified with the building industry on Long Island. This is the background of the present large Mott Brothers' organization which today headed by Harold B. and Edward C. Mott, who, in the course of the past 17 years, have built thousands of houses.

Even during the deepest depression days, the Motts kept on building and selling houses. As a result, they stored up a wealth of knowledge, and developed an organization which has enabled them to give extraordinary house value for the money. During this period of years, the Motts built up a complete and detailed set of specifications, adherence to which assures the

Mott's Quality Specifications

Product of 3 Generations of Building on Long Island. Firm Now Extending Unique Service to Other Builders

For three generations the Mott Family has been prominently identified with the building industry on Long Island. This is the background of the present large Mott Brothers' organization which today headed by Harold B. and Edward C. Mott, who, in the course of the past 17 years, have built thousands of houses.

Even during the deepest depression days, the Motts kept on building and selling houses. As a result, they stored up a wealth of knowledge, and developed an organization which has enabled them to give extraordinary house value for the money. During this period of years, the Motts built up a complete and detailed set of specifications, adherence to which assures the

Mott's Quality Specifications

Product of 3 Generations of Building on Long Island. Firm Now Extending Unique Service to Other Builders

For three generations the Mott Family has been prominently identified with the building industry on Long Island. This is the background of the present large Mott Brothers' organization which today headed by Harold B. and Edward C. Mott, who, in the course of the past 17 years, have built thousands of houses.

Even during the deepest depression days, the Motts kept on building and selling houses. As a result, they stored up a wealth of knowledge, and developed an organization which has enabled them to give extraordinary house value for the money. During this period of years, the Motts built up a complete and detailed set of specifications, adherence to which assures the

Mott's Quality Specifications

Product of 3 Generations of Building on Long Island. Firm Now Extending Unique Service to Other Builders

For three generations the Mott Family has been prominently identified with the building industry on Long Island. This is the background of the present large Mott Brothers' organization which today headed by Harold B. and Edward C. Mott, who, in the course of the past 17 years, have built thousands of houses.

Even during the deepest depression days, the Motts kept on building and selling houses. As a result, they stored up a wealth of knowledge, and developed an organization which has enabled them to give extraordinary house value for the money. During this period of years, the Motts built up a complete and detailed set of specifications, adherence to which assures the

Mott's Quality Specifications

Product of 3 Generations of Building on Long Island. Firm Now Extending Unique Service to Other Builders

For three generations the Mott Family has been prominently identified with the building industry on Long Island. This is the background of the present large Mott Brothers' organization which today headed by Harold B. and Edward C. Mott, who, in the course of the past 17 years, have built thousands of houses.

Even during the deepest depression days, the Motts kept on building and selling houses. As a result, they stored up a wealth of knowledge, and developed an organization which has enabled them to give extraordinary house value for the money. During this period of years, the Motts built up a complete and detailed set of specifications, adherence to which assures the
house buyer of a good job and also eliminates the usual controversies which often arise between the builder and customer. Covering some 56 closely typewritten pages, these specifications deal with all phases of the construction operations. They not only indicate what is wanted and what materials and equipment will be used, but also describe in detail how the work will be done. Special forms are provided for the designation of the type and color of equipment selected for each room. Every item receives careful attention. Included in these specifications for each house there is a guarantee effective for one year against faulty materials or workmanship. Each buyer is given a copy of these extensively detailed Mott Brothers' specifications with his name inscribed on the cover, as documentary evidence of the high standard of construction in his house. This also serves as a valuable reference for future appraisal, resale or alteration.

Also in the course of the development of their business, the Motts built up an excellent architectural and decorating staff which, by working closely with each home buyer, lends effective aid in the proper selection of color, interior finishes, equipment, etc., to the end that everything going into the house harmonizes artistically.

(Continued to page 142)
FINE craftsmanship and good architectural design typical of the better Long Island builders are shown in this interior of a Mott specification home. The built-in bookcases, simple random width paneling and nicely detailed dentil contribute to its success.

YEARS of successful operations have convinced Long Island builders of the value of good architectural design as well as good interior decoration. Mott Brothers maintain an expert architectural staff as well as an interior decorator, who works out color schemes that "hang together" and give the buyer lasting satisfaction.

FIREPLACE niche, at left, is an attractive example of an interior architectural detail that gives Mott homes charm and salability.
PINE paneled interior in this Long Island home built to Mott specifications has a light stain and wax finish. Fireplace is nicely styled.

MIRRORED fireplace, at right, gives this Mott living room an added sense of size. The white trim contrasts with the black fireplace facing.

AT far right is shown a more classic type of Mott fireplace detail with marble front and decorative mantel. The dentil treatment at ceiling gives an attractive and decorative touch.

More Quality House for the Money
America's Largest Home Builder

Gross-Morton Has Built 6,500 Houses Since 1921. 9 Model Homes Opened in Jamaica Development This Spring

Large volume, coupled with small overhead, appear to be keys to the 20-year success of Gross-Morton. These builders have been consistently giving home buyers more Quality House for the Money, and as a result, since 1921 have built and sold 6,500 houses, with a gross sales value of 46 million dollars.

As the year 1940 gets into full swing, they have three developments on Long Island, one of which, Bayside Hills, is now nearing completion, and another is Jamaica Estates, where there is space for some 800 houses. Anticipating a good building year, they have just opened nine striking new model homes to the public in their Jamaica Estates project.

Who and what is Gross-Morton? This firm consists almost entirely of three men, namely, George M. Gross, president and chief executive; Al Gross, vice president in charge of sales; and Larry Morton, brother-in-law of...
The Gross boys, who is in charge of construction. The Gross boys are sons of a Queens County builder, and before entering the building business in 1921 attended New York University and City College where they took courses in commerce and engineering. Their biggest year was in 1928 when 929 houses were built in their 3,000-house Laurelton development.

Operations of Gross-Morton firm come the closest to the “mass production” methods talked about by the so-called housing “experts” of any building operation. The building operations are broken down into a large number of sub-contracts, each highly specialized. The close-knit Gross-Morton organization has little waste motion or overhead of any kind. Salesmen are on a direct commission basis. Over a period of years standardized methods, materials and buying power have kept costs at a minimum while giving the home buyer greater and greater value for his money. The Gross-Morton $6,000 house of today is a far better value than the $8,000 house of 1921 or the still more expensive house of 1929.

Important in the success of Gross-Morton over a period of years have been two other individuals not directly connected with the firm. These are Arthur Allen, the architect who has designed all the Gross-Morton houses, and Peter J. McKenna, advertising man who has

(Continued to page 150)

FRONT and side entrance, stairs and vestibule are cleverly grouped in bungalow plan. Bedrooms have quiet and privacy. Kitchen and bath plumbing are economical.

SIDE entrance to kitchen in this new model Gross-Morton brick bungalow is close to the street. Brick exterior, slate roof and metal windows are some of the featured items.
ILLIAM and Alfred Levitt have done more to influence the course of home building on Long Island and in the rest of the nation than any other individuals that may be named. Since they started building houses in 1929—when they were 18 and 22 years old respectively—these brilliant young men have built and sold some 1,800 houses. Last year they built 225 houses.

What accounts for this continued and truly remarkable success in home building? It is perhaps best summarized by saying that they give more quality house for the money, a finer environment and more luxury details than can customarily be found in such moderate priced homes.

In their latest development, Strathmore-Vanderbilt Country Club, they purchased the Long Island estate of the Vanderbilts, turned the mansion into a private club for residents of the community. The original beauty of the setting has been maintained and every house beautifully landscaped. Yet the price range has been kept principally in the $9,500 to $16,000 class, with only a small percentage ranging in the higher brackets.

Because Strathmore-Vanderbilt Country Club has been spectacularly successful—will be completely sold out early this year—American Builder presents here with photographic studies of a typical street scene and the latest Levitt interiors. When photographed early in March, this new Levitt exhibit home had been just completed but had not yet been opened to the public.
In the four-color insert in another part of this issue, a striking Levitt house on Country Club Row is shown in vivid real-life colors. The Levitt interiors may be best described by saying that a flare for colorful, dramatic treatment permeates the house. There are large, strikingly located picture windows, decorative metal stair rails, unusual wall designs executed in plaster. Bits of bright and cheerful colors attract the eye in the kitchens, closets and hallways. Large plate glass mirrors are mounted in powder. (Continued to page 136)

LEVITT'S SUPER-KITCHEN
Bright and cheerful Levitt kitchen is equipped with an abundance of cabinets and counter space. Ceiling is furred down over cabinets; small molding strips and trim are painted a bright red or blue. Glass block provides diffused light.

LEVITT'S LUXURY BATH
Extra large and luxurious for a $14,000 home. Ladies' dressing table at left; shower stall at right. Closet fixture is enclosed in glass-doored compartment at rear opposite the shower stall.
American Builder, April 1940.

F. S. Lincoln, Photographer

Front Cover Long Island Home

Arthur E. Allen, Architect
George Melios, Builder

FOR its front cover home in this special Long Island issue, American Builder has selected the residence of George Kemp at Great Neck, L.I., designed by Arthur E. Allen, well known Long Island specialist in residential work, and built by George Melios, a substantial builder of Great Neck.

This house was one of a group selected by the Sherwin-Williams Decorative Studios for inclusion in their remarkable new 120-page “Paint and Color Style Guide.” Shown in large and vivid detail, the colors recommended by the experts of the Decorative Studios are Gloss White walls, Willow Green shutters, Thatch Brown roof. An interesting feature of the exterior is the wide plain band of stucco below the cornice.

Floor plan provides a convenient garage entrance and an unusually attractive covered porch as part of garage wing. The kitchen is large enough to provide dining space. There are two good bedrooms and bath downstairs, well isolated, and an unusually large bedroom and bath upstairs with ample closet and storage space.

In describing this house to American Builder, the owner paid an unusually fine tribute to the builder, George Melios of Great Neck, saying that he was well satisfied with the job that was done, and then went on to say that Mr. Melios had not only done a good job in the first place but had taken care of every slightest defect that occurred—including such items as a dripping faucet several years later.

The house is substantially built, including a gas-fired Bryant heating system, Electrolux refrigerator, Stanley hardware, complete Johns-Manville rock wool insulation throughout and Sherwin-Williams paints.

Two bedrooms and bath downstairs in this front cover Long Island home. There is one large upstairs bedroom with bath, plus ample closet and storage space. Kitchen breakfast alcove is handy.
Paint and Color Style Guide to Home Sales

GLIMPSES OF A NEW WORLD of paint and color are revealed on this and the following pages—showing how builders are putting smart colors to work in selling homes. Here are sales-tested interiors and exteriors with their brilliant real-life colors shown through the medium of color photography. Arresting color combinations are shown that can put new life into drab houses.

THESE COLORFUL EXAMPLES dramatically show that color styling is one of the most inexpensive aids to home selling. These pages of color suggestions have been prepared by expert color stylists of the Sherwin-Williams Decorative Studios and are part of an impressive new 120 page portfolio, the "Paint and Color Style Guide" recently released to the building industry.
LEVITT & SONS, who are among the most successful builders on Long Island, are outstanding advocates of the use of smart color, both inside and outside of their homes. They have definitely put color to work in creating home sales.

IN THE ABOVE HOUSE a smart distribution of color lends style and distinction, with light and dark values distributed to accentuate the length of the house. Upper portions are of rich maroon; brick and lower portions painted with Sherwin-Williams Stucco and Concrete Paint. Note contrasting shutter tones. Floor plans and details of this house are shown elsewhere in this issue.
Showmanship in Color

RICH, deep-toned color used in large plain masses creates an impressive effect in this living room and focuses attention on the smartly styled white fireplace paneling. This is showmanship in color that creates interest and sales, yet remains within the bounds of good taste and livability.

NEW HOMES and model homes, such as builders erect, are the "showrooms" of the building industry, and the selections of equipment, interior finish and color have a far-reaching influence on new home painting and modernizing. Walls above are painted with Flat-Tone Delft Blue; ceiling, Flat-Tone White; woodwork, Enameloid White.
Smartly Styled To Sell

PAINT AND COLOR styling costs very little—yet it can become one of the most potent selling aids to the builder. Smartly styled interior details, such as are shown in this breakfast nook and kitchen, make the house sell itself.

COLOR SPECIFICATIONS for the breakfast nook include Flat-Tone Canary Yellow ceiling, Flat-Tone White walls, Enameloid White woodwork, Flat-Tone Terra Cotta cabinet interior. For the kitchen, the colors are Semi-Lustre Canary Yellow walls and ceiling, Enameloid White woodwork and Enameloid Blue shelves.
Harmonized Exteriors

THE TONE or atmosphere of a house or of a whole building project can be made bright, modern and up-to-date by color-styling. Here are 3 harmonized exteriors suggested for builders by the Sherwin-Williams Decorative Service. Colors for the roof, walls, trim and shutters have been specially planned to harmonize correctly and give the exteriors a smart, salable appearance.

COLOR SPECIFICATIONS — Upper left: walls, Cream Gray; shutters, Cardinal Red; trim, Green; roof, Thatch-Brown Shingle Stain. UPPER RIGHT: walls and trim, White; shutters, Slate and Castilian Blue; roof, Castilian Blue 4 parts, black 1 part. LOWER LEFT: walls, Gloss White; shutters, Fiesta Yellow; trim, Gloss White; roof, Thatch-Brown Shingle Stain.
250 Largest Long Island Developments

This list and the map on pages 84 and 85 represent the most complete directory of prominent Long Island operative building developments ever published. Prepared with the invaluable assistance of the staff of Thomas G. Grace, state director, and Stanley R. White, regional director of the FHA, location of every FHA-approved development in which 25 or more houses have been built is shown. In some cases the same operative builder has several developments and these are given separately. In a few cases completed projects are included. Some 20,000 houses have been built in these 250 developments.

Because the principal volume of building is concentrated in three counties, Kings (Brooklyn), Queens and Nassau, these three only are shown in detail. In the accompanying list the map number shows location in each county. To illustrate, No. 2 on the map in Kings County shows Trump Homes located in the Flatbush section of Brooklyn. No. 2 in Queens County shows Artcraft Homes located in Astoria. No. 2 in Nassau County shows Montfort Hills at Port Washington. In some localities where several developments lie close together a single number is used to designate the group.

Total number of homes indicated in the column at far right of list gives, as nearly as can be estimated, the total number of homes built in that particular development to date. Wherever possible, the name of the principal official of a firm is shown in parentheses following the development name.

BROOKLYN, KINGS COUNTY

<table>
<thead>
<tr>
<th>No.</th>
<th>Development</th>
<th>Price Range</th>
<th>No. of Homes Built</th>
<th>1939</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Louis B.</td>
<td>$6,000-$8,000</td>
<td>95 85</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>Trump Homes (F. C. Trump), Flatbush</td>
<td>6,750-7,900</td>
<td>250 700</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>Leichtung, Flatbush</td>
<td>6,000-12,000</td>
<td>70 140</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td>Le╭ Peachow, Flatbush</td>
<td>6,000-7,500</td>
<td>50 40</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td>New Deal Homes (F. Filiroma) Flatbush</td>
<td>6,750-8,000</td>
<td>100 150</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.</td>
<td>Paul Rinaldi, Flatbush</td>
<td>30 60</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7.</td>
<td>Nathan Halperin, Flatbush</td>
<td>100 180</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8.</td>
<td>Hollywood Homes (David Miskeph), Flatbush</td>
<td>5,250 88</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9.</td>
<td>Economy Homes (Philip Levine) Flatbush</td>
<td>5,750-9,000</td>
<td>60 200</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10.</td>
<td>Anthony Ferrante Bldg. Corp., Flatbush</td>
<td>6,000-7,900</td>
<td>151 175</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11.</td>
<td>James Match Homes (Spindel) Flatbush</td>
<td>6,000-7,900</td>
<td>50 100</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12.</td>
<td>Progress Homes (Baum) Bedford Section</td>
<td>6,000-7,950</td>
<td>25 55</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(Continued to next page)
250 Largest Long Island Developments
(Continued from preceding page)

<table>
<thead>
<tr>
<th>No.</th>
<th>Development</th>
<th>Price Range</th>
<th>Total</th>
<th>No. of Homes Built</th>
</tr>
</thead>
<tbody>
<tr>
<td>13.</td>
<td>Guterman Bros., Jackson Heights</td>
<td>6,000-7,500</td>
<td>60</td>
<td>150</td>
</tr>
<tr>
<td>14.</td>
<td>Guterman Bros. (Jules Guterman), Jackson Heights</td>
<td>6,000-6,500</td>
<td>75</td>
<td></td>
</tr>
<tr>
<td>14A.</td>
<td>Rental Housing: Queensboro Garden Housing</td>
<td>6,000-7,500</td>
<td>75</td>
<td></td>
</tr>
<tr>
<td>15.</td>
<td>Jess Homes (Jesse Seligman), Corona</td>
<td>6,000-7,500</td>
<td>75</td>
<td></td>
</tr>
<tr>
<td>16.</td>
<td>Jaxland (Joe Fulton), Flushing</td>
<td>5,000-6,500</td>
<td>75</td>
<td></td>
</tr>
<tr>
<td>17.</td>
<td>Willow Manor, Jackson Heights</td>
<td>6,000-8,000</td>
<td>75</td>
<td></td>
</tr>
<tr>
<td>18.</td>
<td>Winhill (Mitchell Ittelson), Woodside</td>
<td>5,000-6,000</td>
<td>75</td>
<td></td>
</tr>
<tr>
<td>19.</td>
<td>Matthews (G. X. Matthews), Elmhurst</td>
<td>5,000-6,500</td>
<td>75</td>
<td></td>
</tr>
<tr>
<td>20.</td>
<td>Elmwood Homes (Human &amp; Rosenberg), Elmhurst</td>
<td>5,000-6,000</td>
<td>75</td>
<td></td>
</tr>
<tr>
<td>21.</td>
<td>Hyatt Realities (Frank Principe), Ridgewood</td>
<td>5,500-7,500</td>
<td>75</td>
<td></td>
</tr>
</tbody>
</table>

Queensboro Garden Housing

<table>
<thead>
<tr>
<th>No.</th>
<th>Development</th>
<th>Price Range</th>
<th>Total</th>
<th>No. of Homes Built</th>
</tr>
</thead>
<tbody>
<tr>
<td>15.</td>
<td>Jess Homes (Jesse Seligman), Corona</td>
<td>6,000-7,500</td>
<td>75</td>
<td></td>
</tr>
<tr>
<td>16.</td>
<td>Jaxland (Joe Fulton), Flushing</td>
<td>5,000-6,500</td>
<td>75</td>
<td></td>
</tr>
<tr>
<td>17.</td>
<td>Willow Manor, Jackson Heights</td>
<td>6,000-8,000</td>
<td>75</td>
<td></td>
</tr>
<tr>
<td>18.</td>
<td>Winhill (Mitchell Ittelson), Woodside</td>
<td>5,000-6,000</td>
<td>75</td>
<td></td>
</tr>
<tr>
<td>19.</td>
<td>Matthews (G. X. Matthews), Elmhurst</td>
<td>5,000-6,500</td>
<td>75</td>
<td></td>
</tr>
<tr>
<td>20.</td>
<td>Elmwood Homes (Human &amp; Rosenberg), Elmhurst</td>
<td>5,000-6,000</td>
<td>75</td>
<td></td>
</tr>
<tr>
<td>21.</td>
<td>Hyatt Realities (Frank Principe), Ridgewood</td>
<td>5,500-7,500</td>
<td>75</td>
<td></td>
</tr>
</tbody>
</table>
22. Park Central (Sam Evans), Forest Hills
22A. Rental Housing:
Queens Blvd., Apts.
22B. Rental Housing:
22C. Rental Housing:
22D. Rental Housing:
23. Havenwood (Jacob Brody), Elmhurst
23. W. & S. (Willy & Sjursen)
23A. Rental Housing:
23B. Rental Housing:
Continued to page 152

(Continued to page 152)
Large Homesites Attract

Norgate-at-Roslyn
Offers One-Third- to One-Half-Acre Plots

The day of the cramped, crowded homesite is passing. Proof of this statement lies in the fact that many of Long Island's smartest builders are rapidly switching to new land areas where their houses can spread out in attractive wooded surroundings.

A good illustration is Norgate-at-Roslyn, operated by G. A. Mezger.

Gustave Mezger, in addition to being a builder of 17 years experience and sound reputation on Long Island, is a graduate engineer from the University of Syracuse.

About a year ago he successfully completed a 60-house operation at Norgate-at-Manhasset and started his present operation at Roslyn. This new development has aroused much interest, not only on the part of the public but in building circles, because of its definite move toward the rambling type of Colonial home built on large wooded plots.

Plots in this property range in size from one-quarter, one-third, one-half acre, up to as high as three-quarters of an acre. Most of the property is heavily wooded. During the past year 30 houses were sold and Mezger's plans for 1940 call for between 75 and 100 houses, in price range from $8,450 to $18,000.

The Mezger-built houses are replete with charming Colonial touches, such as carriage lamps, picket fences, low shed entrances, weather vanes and shutters.

Included in the Mezger specifications of materials and equipment are:

HEATING—Fitzgibbons steel tube boilers, 2-pipe Bell & Gossett forced circulation hot water system.

WIRING—G-E wiring and switches throughout. Levolite fixtures.

INSULATION—4" Johns-Manville Rockwool insulation, walls and ceilings.


KITCHEN EQUIPMENT—Boro Wood Products kitchen cabinets, Tappan gas range, G-E 6 cu. ft. refrigerator.

WINDOWS—Hope's steel casement windows.

COPPER TUBING—Anaconda hard copper tubing.

BATHROOM EQUIPMENT—Standard Sanitary fixtures.

PAINT—A. C. Horn paint.

SHINGLES—24" No. 1 Royal red cedar shingles.

LATEST Long Island trend is illustrated by two of G. A. Mezger's low rambling Colonials, designed by Architect Philip Reanyk, shown at left. The Norgate-at-Roslyn houses have such charming old Colonial details as shed entrances lighted by carriage lamps; low white picket fences; pleasant little back porches; brick, clapboard and shingle construction.
Low Rambling Colonials on Large Wooded Plots Sell Best, Says G. A. Mezger, Long Island Builder with 17 Years Experience

COLONIAL Charm with a capital "C". The inviting entrance is enclosed by a picket fence, and the large plot permits the builder to spread the house out, with its most impressive face to the street.

FLOOR plan features comfortable downstairs bedrooms. Extra bedrooms upstairs may be left unfinished at time of construction and added later when owner's needs require them. Philip Resnyk, architect.
How Colonial Charm Intrigues Buyers at New Salem; 100 Homes Sold in Less Than Year

WHEN expectant home buyers visited Williams-Harter's Colonial model homes at the recent 1940 opening of New Salem at Port Washington, Long Island, they were met at the doors by as attractive a bevy of beauties as ever graced a Broadway show.

Not only beautiful, but well trained—for Messrs. Williams and Harter executed a scoop in showmanship by hiring eight girls who had served as hostesses in the Homes of Tomorrow at the New York World's Fair last summer.

The girls were dressed in appropriate Colonial costumes in keeping with the Early American spirit of New Salem. They did not engage in actual selling, but escorted visitors through the houses answering all their questions and pointing out the attractive features of the houses. Each girl presided over a model home designed in the spirit of some famous Colonial house. The eight model homes were named after the following:

Pidge Tavern, Pawtucket, R.I., built in 1640 and used by Lafayette as headquarters; Balch House, Beverly, Mass., built in 1638 and famous for its Early Colonial architecture; Hamilton House, Salem, Mass., another famous Early American home from rural New England;
Winston House; Miller Cottage, Concord, Mass., built about 1775; Putnam Homestead, Greenwich, Conn., a famous Connecticut home drawing on the shipbuilding traditions of the coastal towns; The Buckingham, Marlboro, Mass.; The Tyler House, Windsor, Conn.

Each house was described by a small folder giving the historical background but also pointing out the modern features of the present-day version.

Thus Cy Williams and Walter J. Harter, young college-trained developers of one of Long Island North Shore's latest and most successful communities, carried on the Early American tradition they had established.

The Colonial theme and atmosphere are carried out throughout the development with split rail fences, carriage lamps, specially designed Colonial street markers and, of course, authentic Colonial architecture in the houses themselves.

Perhaps the original start on this Colonial technique was made when Williams and Harter visited the Colonial village at the Philadelphia Sesquicentennial Exposition some years ago.

When they acquired the large tract of land bordering Port Washington Boulevard less than two years ago, the first move they made was to purchase a large quantity of genuine old post and rail fences from an old farm, which they transplanted and whitewashed. They took several long motor tours through New England photographing outstanding Colonial houses. Right from the start they designed and built authentic copies of Massachusetts salt-box designs, Cape Cod fishermen's cottages and stately Back Bay Federalist homes. Every sign, every street name, and even the real estate office itself carried out the Colonial motif. Some of the street names include, for example, Plymouth Road, Lowell Road, Colonial Road, Deerfield Road, Alden Road, Salem Lane, Colby Road.

Public response to this technique exceeded all expectations. The first section of more than 50 houses was quickly sold out, and options were taken on additional land, with the result that approximately 100 dwellings (Continued to page 138)
100 Cottages Sold on 100 by 100 Foot Plots

After 25 Years Experience, Rorech of Hempstead, L. I., Says These Colonial Cottage Homes Prove “Best Value” Sellers

CHARLES J. Rorech of Hempstead, Long Island, is the son of a builder and started in the business as a carpenter some 25 years ago. He has built many hundreds of homes in West Hempstead, Jamaica Estates, and Great Neck, ranging from $4,000 to $35,000 in cost. The Rorech business now being conducted in three different developments is a “family affair,” with Charles’ four brothers and a sister all taking part.

Of all the Rorech projects, the most outstanding recent success is the East Hempstead Homesteads project, in which small Cape Cod cottages on 100 by 100-foot plots have been very well received by the public.

Rorech was one of the first to buy up large enough parcels of land to be able to give such good sized home-sites. Being out of the congested part of Long Island, taxes are low, with the result that the houses—most of which are in the slightly under $5,000 class—can be carried by the home owner for about $36 a month, including interest, amortization and taxes.

All of the Rorech-built houses are insulated, being built with insulating sheathing. In his three developments including Goodrich Homes at West Hempstead and Williston Homes, Williston Park, Rorech has built some 210 houses in the past three years. He expects to build 100 or more this year.

Specifications and construction details of East Hempstead Homesteads houses include the following: 2 x 10 floor beams; 12” poured concrete foundations; Insulite...
Bildrite sheathing; National boilers and A. B. C. oil burners; Caloric gas ranges; braced frame construction; copper radiators, gutters, flashing and water pipes; double oak floors; log burning fireplaces; weatherstripped windows; guaranteed slate and heavy asphalt roofs.

Colored tile bath and showers are included in these houses; hot water control is with Sav-U-Time remote water heater control, Sav-U-Time Sales Co., Rochester, N.Y. These are some of the better value highlights.

INSULATING sheathing is used.

RED brick model with dormers. Extra rooms on second floor.
"Priceless Extras" Influence Home Buyers

Otto J. Hartwig, who handles the advertising for Chester Hill and a number of other Long Island developments, has frequently said that there are certain "priceless extras" that influence home buyers. The first of these he believes is neighborhood character. People who buy homes usually have children and their desire is to get away from crowded or unattractive quarters to more countrylike, beautiful surroundings.

Chester Hill at Manhasset, L. I., operated by F. G. Lyons and W. Busch, undoubtedly has "priceless extras" as to the neighborhood. It lies in the heart of the North Shore's finest residential section, with a private park, lagoon and fine stand of trees.
OVAL COUNTER or bar separates this colorful Chester Hill kitchen from the dining area. Modern wallpaper, bright linoleum colors, well spaced windows and Venetian blinds help achieve this fine effect.

right on the property. The roadways are attractive, winding and practical, 24 feet wide, of reinforced concrete, with sidewalks running along the curb, so that it is possible to step from a car at any point.

Chester Hill's "priceless extras" extend also to the houses themselves which are beautifully designed and well landscaped. W. Busch, in charge of the building operations is a skilled architect as well as builder. He has carried many fine details of construction and workmanship throughout the interiors of the houses. The kitchens in particular, as shown herewith, are colorful, attractive and livable.

Construction details and equipment include: General Electric oil burning winter air conditioning; U.S. Gypsum mineral wool insulation, 2" in sidewalls, 4" in second floor ceilings; Bangor slate roof laid over 24-lb. felt; Detroit Steel Products Fenestra steel casement windows; select oak floors; complete weatherstripping; copper and red brass water piping; bronze screen; Overhead garage doors.

ANOTHER Chester Hill kitchen which shows some of the "priceless extras" that help sell Long Island homes. The comfortable breakfast nook is backed by a circular glass block bay. Cabinets are trim but colorful. Accents of bright colors in the ceiling molding, trim and Venetian blinds add a lively decorative touch.
$25-a-Month House
Has 27 by 28 Foot
Basic Plan

How McGowan of Central Islip Gets the Costs Down

His aim is to produce houses within reach of the man who can afford a rental of $25 to $30 a month. This spring he has embarked on a new program which has much promise. A four-room model home illustrated here-with a basic floor plan 27 by 28 feet has been built. McGowan advertised that he would build the identical house anywhere in the vicinity for $2,990—no cash payment required if the owner’s lot was clear and free. (See sample advertisement that is shown at the end of this article.)

Obviously it is hard to design a house that will suit everyone, so as the hundreds of prospects have gone through the model house and made comments McGowan has developed a number of standard variations. Thus, if a prospect says the living room is too small he can quote him a price immediately on a very similar house with a slightly larger living room. Or if he would prefer to have a full dining room and one bedroom rather than two bedrooms, McGowan can quote an immediate price on such a plan.

The success of this approach has been very good. Within a month after the
McGowan's model house and basic plan are clever, practical and economical. There is no waste space, yet rooms are large enough for comfort, having good cross ventilation.

An outstanding item that helps keep his costs down, according to McGowan, is the use of dry-wall construction throughout. His living room is paneled in decorative Douglas fir plywood panels which have vertical beads that give the walls the effect of wide random-width vertical board paneling. The plywood is painted an attractive eggshell white. The kitchen is also finished in plywood and in the bedrooms he uses both plywood and decorative insulating boards.

Part of the charm of the living room is due to the use of a decorative frieze which McGowan has designed, made up of a strip of 1 by 4, a crown mould and small blocks of latticing—3/8 by 1 1/4 by 2 1/4 inches in size, individually nailed in place.

(Continued to page 140)
New Features in Evanston, Ill., Apartment

In order to justify the higher rentals at which most new apartment projects must seek tenants in competition with older existing structures, designers and builders generally have incorporated into such buildings all the latest of planning technique and equipment which has recently been developed. Consequently, larger multifamily buildings such as the Isabella Park apartments completed a short time ago in Evanston, Ill., and illustrated on these pages show many improvements in the type of accommodations offered.

This project contains 91 apartments of 3, 3½, 4 and 5 rooms each, arranged in five projecting wings extending from the main portion of the building on a site, 439 by 174 feet. Financing was handled with a $400,000 mortgage insured by FHA out of a reported total investment of $600,000. Burnham & Hammond were the architects who designed the three-story and English basement building under FHA supervision. The Northwestern Company of Evanston, of which Richard C. Johnston, Jr., is treasurer, as well as president of the Isabella Park Building Corp., was the builder. John M. Smyth Co., Chicago, furnished the model apartments.

The amount of the site covered by the building and the use of the unoccupied area for courts, drives and parkway as well as the relation of the individual units to these outside features is particularly interesting. The end-to-end double "E" shape of the structure provides four wide courts as shown in the plan below. These open on a parkway separating the apartment from a landscaped park that acts as a buffer for the residential section be-
The courts assure free access to fresh air and sunshine and are attractively landscaped with terraces at the back as illustrated in the above view.

Wide window areas of the Fenestra casements and decorative glass block inserts arranged in a vertical treatment of brick fluting to light the front stair wells give a decidedly modern styling to the exterior. Rear stair halls are entirely concealed from the front. Exterior construction is face brick veneer on Waylite block and hollow brick laid up as a 12-inch wall; trim is Indiana limestone. The first floor is of reinforced concrete construction; other floors have 2 x 12 and 2 x 10 joists, with 2 x 8 roof joists covered with a 20-year Koppers built-up asphalt roof. Third floor ceilings are insulated with USG Red Top glass wool; all flashings are copper.

On the interior 3-coat plaster is used over waterproofing on exterior walls, on Pyrobar for first floor, and on Rocklath for interior partitions. Detroit Steel Products Company's steel fire doors shield the service entrances to apartments; other doors are one-panel pine by Carr, Ryder & Adams.

One of the equipment highlights is the use of American Radiator cast iron convectors which contribute to a more refined interior appearance. Heating system is with one-pipe steam supplied by two Kewanee boilers which are fired with two Link-Belt stokers. A central incinerator has been installed.

The layout of the various apartments has been planned...
to offer the best use of space for convenient living and wall space for proper furniture placement. Rooms are slightly larger than those in the average apartment building. Living rooms range between 13 by 18 feet to approximately 14 by 19 feet. In the front apartments, living and dining rooms are combined to give an open arrangement having an overall dimension of slightly more than 18 by 23 feet as shown in the two larger views above. Another unusual arrangement is found in the four-room units which have the dining rooms so arranged off both kitchen and connecting hall to bath that these rooms can be used as second bedrooms, closets being provided. Other materials and equipment include: Standard Sanitary fixtures in bath, Hess medicine cabinets, Bruce block oak floors, Nairn linoleum, Cambridge tile in bath, Corbin hardware, kitchens equipped for convenience and efficiency with built-in St. Charles units, Westinghouse refrigerators, A-B gas stoves, General Regulator ventilating fans. Rents range from $55 to $90.

THE two larger interior illustrations above show opposite ends of the combination living-dining room (center plan below indicates arrangement of this type unit located in the front tiers); this was one of the apartments furnished for public inspection by John M. Smyth Co., Chicago. The view at top left shows corner window in bedroom of this same apartment. Note concealed radiation behind dressing table. Below at left is plan of one of the five first floor apartments which proved to be exceedingly popular.

ABOVE: Typical first floor five-room layout, four-room combination, two variations of other four-room units, one of three-room size.
EXPOSED cinder masonry, with bull-nosed units for window sills, glass block and fibre ceiling tile are used in this modern school.

Designing Schools for Economy and Low Upkeep

By Peter E. Brender

Brender and Beam, Architects and Engineers, Wayne, Michigan

REAL and not false economy has provided School District No. 9, Nankin Township, Wayne, Michigan, with a new firesafe school at a cost of $8,650 per room, or $217 per pupil.

Economy was the watchword all along the line—from design to finished structure. The school district had but $42,825 of its own funds with which to supply much-needed accommodations for the 360 children in the district. This was supplemented by a PWA grant of $35,038, making the total $77,863.

To the limitation of funds was added the requirement of the state school law that the building be fire-resistant. This meant that the building be constructed of firesafe materials. Also, the school district required that classrooms be larger than are usually built to meet modern educational needs. Finally, that type of structure was demanded which would incur the minimum of maintenance.

Reinforced concrete was selected as the structural material. Exterior walls were finished with 4-in. face brick; interior walls and partitions were built of exposed and painted cinder concrete masonry units.

Design of the building was directed toward two objectives: to make the working drawings and specifications as simple as possible, and to reduce waste space to the minimum. Plans and specifications were drawn to avoid special interpretations for either contractor or owner, and to obtain the minimum number of changes after construction had begun.

As to waste space, so carefully was the building designed that not even attic space was reserved between ceiling and roof. Thus, the maximum cubage was secured.

Simplification of design resulted in erection speed, another factor which contributed to economy. Only ten weeks elapsed from the start of construction to placement of the slab roof.

The type of structure was found to be economical of labor cost since, for the most part, common and semi-skilled workmen could be used. These were locally employed at the reasonable going rate.

Concrete masonry units for interior partitions as well as interior walls were chosen not only because of their substantial structural qualities, but also for their acoustic properties.

(Continued to page 151)

HALLWAYS and classrooms of new school in Wayne, Mich., are designed to meet modern educational needs.
How to Build Low Cost Service Stations

For a number of years the petroleum retail marketers and suppliers have realized that with the smaller gallonage they are now selling per outlet and the reduced spread it is necessary to keep the retail outlet investment very low. In order to be profitable, owner-operated stations or those built to lease must be erected at a price which allows the former low occupancy cost or the latter a rent that the lessee can pay.

The Atlantic Refining Company in New England, in finding a solution to this, has built a number of plywood service stations. Such stations are of the same general design and have the same general construction details as a group of stations built in the Middle West by W. A. Park, service station consultant. These show the simplicity of plywood construction, as detailed in this article, and its exceptional results.

The work is entirely field fabricated by local contractors; the materials used are standard as shipped from manufacturers. The frame is the usual 2 x 4 construction with studs 16 inches on center.

The plywood that is used in the service stations is purchased from one of the several mills making a water-
proof plywood unconditionally guaranteed against ply separation and is the same material that is now used by several companies in the manufacture of boats. It is obtained in lengths equal to the height of the building and in four-foot widths, so that no horizontal joints are necessary. Because of this, the building is entirely laid out in modules of four-foot widths; that is, all dimensions are multiples of four feet. On these particular stations the height was 12 feet, the depth 24 feet, the bays or stalls and the office 12 feet in width.

The outside plywood is ½-inch thick, the roof sheathing 5½-inch thick, and all interior ⅛-inch thick. Exterior plywood has all long edges shiplapped at the mill. All plywood is installed lengthwise of the joists, and all plywood is glued to the studs with joints full of resin glue and nailed with 4d nails 6 inches on center.

For the show window a corner design is used, the corner post and mullions 4 foot on center being 4 x 4. Other mullions or division bars are 2 x 4. All show window glass is 3/16 crystal and is set with mastic in rabbet. All other windows are casements, some of which are fixed and some swing out. These casements and the doors are set between studs with no other jambs and stops planted on. The sills for the windows are rabbeted, however, and with a drip. Thresholds are metal. No casings, trim or battens are used, giving a smooth, straight surface that is easy to clean, costs less to maintain and is less expensive and better in appearance. On flat roof buildings an Armco or Toncan iron coping is used.

These stations have shown no difficulty in heating; however, they can be further insulated by installing a fibre paper or a blanket insulation between the studs.

All exposed wood is primed with a resin primer which completely eliminates any grain raising. It is then finished under usual painting specifications (less the primer) and if desired, the surface can give the appearance of porcelain enamel. It has been found that these buildings should be painted once in three years (on the western stations that have been up that long), and in the meantime they are kept clean and new in appearance through washing. The smooth, straight surface makes this easy and quick to do.

The foundation is run several inches above the floor, making a sanitary cove base, protecting the bottom where the most abuse is, and giving additional height to the building. In all these stations, the lubricating room is a step down from the office, thus providing for the customers to drive in at grade level and making it possible to get a protecting walk around the building that adds to appearance and also may be used for display.

On a number of these stations porcelain enamel fronts have been installed and Vitrolite can be used in washrooms.

The designer of these stations, on a number that he owns himself, has used 24-foot roof joists with no beam support, with the plywood nailed and glued, and over a four-year period has found no sag whatever. He also has tried setting the studs 24 inches on center, in which case there has been an almost unnoticed bulge between studs. Where these studs were 24 inches on center, standard 1'-10'' wide casements were used, set between the studs and therefore requiring no stud cutting for windows, the headers and sills being cut in between the studs.

The experience of the designer is that this building costs less than any other type of construction, is stronger, longer lived, has less maintenance cost, and for his purpose is better in appearance.
2-Flats Are Easily Brought Up-to-Date at Moderate Cost

TO DEMONSTRATE what can be done to bring a thirteen-year-old two-flat building up-to-date at reasonable cost, Mills & Sons, Chicago builders, did a complete job on one of a group of such buildings which their real estate department was handling for resale. These buildings were well built and are sound structurally, but recent innovations in planning and equipment indicated that modernization of the interiors would be a good investment since no major changes were required.

The completed job showed a surprising improvement, as illustrated in the views on this page; suggestions will be found here for similar projects, the two-flat having been popular in most sections of the country.

The exterior, except for small items, remained the same. On the interior, kitchen and bath underwent the most striking changes because of new fixtures installed.

Floor plan indicates minor amount of partition shifting; the following list in the form of a proposed specification outlines the extent of the work:

KITCHEN—Carpentry: Remove pantry, patch floor, reinstall and furnish necessary trim, new quarter-round, chair rail and ground for same. Remove ironing board, cut off casing heads. Install only new steel sash over sink, furnishing new lintel over steel casements. Furnish and install new stool and apron. Fur out over kitchen cases, and build arch for same. Install steel kitchen cases. Chrome all kitchen hardware and replace, including

IN THE typical 13-year-old two-flat building below at the left, one of the apartments was completely modernized, as shown in the three interior views, as a public demonstration of the possibilities in such properties. The minor nature of the structural changes required is indicated in the plan at right.
Shop Modernizations Pay Dividends
Volume of Profitable Business for the Builder Can Be Secured by
Selling Commercial Property Owners on Advantages of Remodeling

Numerous examples are constantly being reported of how both owners and builders are profiting from current programs of store improvement. Such renovations must, of course, be sensibly planned and carried out but there are still plenty of opportunities for the industry to do a real selling job in every community.

For instance, when Jack Goodwin remodeled his radio, music and electrical appliance store at Seventh Street and Wisconsin avenue in Milwaukee he hoped to make some profit through increased business and savings in heating expense. But he was not prepared for what actually happened. The modernization paid for itself within a year in increased sales.

The increased volume of business is continuing, at the rate of approximately four to one. The heating bill has dropped from approximately $60 a month to $15 a month.

Mr. Goodwin did not want a half-way job of modernization. He consulted a well-known architect. Increased profits have more than covered the architect's fee as well as the actual building cost. The architect's recommendations were followed throughout.

The walls of the main show room were finished in structural insulation, Masonite. The material is inexpensive, and is prefinished in colors. In addition it was applied in large sheets, further reducing installation costs. No further finishing or decorating was necessary. Recessed openings were made in the walls near the ceiling to accommodate indirect lighting, ventilation equipment and cut-out names of some of the trade lines handled in the store.

Small tiles of the same prefinished wood fibre material were used for the ceiling. This treatment provided both acoustical correction and thermal insulation and made the room light.

Individual demonstration studios for radios and phonographs were finished in the same wood fibre material but with a different decorative treatment. Each of the three studios was finished in a different color combination. The structural insulation was grooved vertically, giving a planked effect. The grooving gives the studios an appearance of greater size, and the acoustical insulation value of the material confines sound to the individual rooms.

Formerly, according to Mr. Goodwin, it was necessary to keep the heat turned on in the store 24 hours a day during the winter months. Now it is turned off at the close of each day's business.

But what is more important, Mr. Goodwin says he now sells as much merchandise in a week as he formerly did in a month.
This combination florist shop, garage and apartment building styled in simplified Georgian design provides all needed business and living accommodations for the proprietor. Floor plans, sections and details appear on opposite page.

The fact that the owner and proprietor of this Chicago florist shop reports a big increase in his business over the volume done in the establishment he formerly occupied speaks well for the styling and general design of the structure. The pleasing Colonial lines and Georgian Colonial detail have been carefully adapted to a business place of this nature by the architect, Victor L. Charn, Chicago. The outstanding character is given further customer eye appeal by the surrounding buildings which are either of a modernly styled type or of the older, non-descript, commercial structure design.

The front, with its balanced design of two entrance doors flanking a curved display bay on the first floor and a central window and door grouping above, is done in red Colonial brick and Indiana limestone trim. The wood bay, balcony sash and blinds in their simplified treatment, give a certain amount of domesticity to the elevation in contrast to the usually harsh lines of such buildings.

The interior of the shop has a feeling of openness due to the bay effect created by the plastered openings in the rear wall behind which a refrigerated display case is set. Indirect lighting is used.

The storage and work space is lighted by two skylights, one on each side of the building, and a large glass block panel in one wall; if the adjacent property on this side is improved to the lot line, this light from this latter source will of course be blocked off. The two-car garage at the rear is handy for receiving and loading merchandise.

The five-room apartment above has good sized rooms and plenty of storage space. A hinged bookcase balancing one of similar design to the right of the mantel gives access to a closet off the living room. The porch at the rear is glazed in. The bath and kitchen have wainscot of tile; floors throughout are oak except linoleum in the kitchen and tile in the bath. The heating system consists of oil-fired boiler and radiators, the one in the store being recessed.
RIGHT: Elevations of front and rear walls of florist shop designed by Architect Victor L. Charn, Chicago. Sections indicate construction at front and rear of building.

BELOW: Basement, first floor and second floor plans show features of this unusual building arrangement. It is designed to fit on a 25-foot lot.
Finding Length of Common Rafters with Tables on THE STEEL SQUARE

This Third Article in the Series on Important Uses of the Steel Square Explains Rafter Tables and Shows How to Lay Out Various Common Rafters

By Gilbert Townsend

Articles in this series for the two previous months have dealt with the use of the scales and tables of figures which are to be found on the steel square and with its use in the laying out and cutting of the braces which are frequently required in building braced frames and towers. While the carpenter is often called upon to construct such frames, especially in connection with the larger buildings, such as barns or churches, the job on which he is most likely to be working day in and day out is the ordinary dwelling house and here the steel square will prove to be well worth its cost in helping him with the task of framing the roof.

A Sloping Roofs

It has been the custom for many centuries to build houses as well as churches and barns with sloping roofs, so that the rain will run off from them as quickly as possible and have as little chance as may be of getting inside, and although large city buildings are successfully constructed with flat roofs and the modernistic trend is towards the use of this type of roof for dwellings also, it will be many years before such roof design will become common. Therefore, carpenters must look forward to framing up sloping roofs for a long time to come. In large houses, these roofs become very complicated due to the shape of the plan, which often has several ells projecting from the main body of the structure and in many cases the angles at which these ells project are not right angles in plan, which still further aggravates the carpenter's headache. Even when brick or stone masonry is used for the walls of such mansions, the roof is almost always framed up in wood by a carpenter with the aid of his steel square.

The complicated roofs with hips and valleys and dormers will be taken up later, but the most usual and fortunately the easiest job of roof framing which a carpenter has to do is the simple gable or pitch roof and this will be dealt with first, the principal features being the ridge at the top, the eaves at the two side walls, and the two gables, one at each end.

Framing for Gable or Pitch Roof

Fig. 1 shows the framework for a "pitch" or "gable" roof, consisting of the horizontal plates resting on top of the vertical studding of the side and end walls, together with the ridge, or ridgeboard, also horizontal, and the sloping common rafters. The ridge board extends along the center of the roof for its full length at a level considerably above that of the plates. The position of the ridge with relation to the level of the plates is determined by two things—the width, or span, of the roof between the two outside sidewalls, and the slope or pitch of the roof surfaces. The sloping rafters on each side of the ridge bear against it and thus hold the ridge in place. The lower ends of these rafters rest on the plates at the top of the side walls (the eaves of the roof) and exert a thrust against these plates which is resisted by the ceiling joists of the top floor (not shown in the illustration), which act as ties between the two side walls. The rafters are called "common" rafters to distinguish them from other kinds of rafters which occur in more complicated roof frames such as will be illustrated and described later on in this series of articles.

The problem which confronts the carpenter is to find the easiest and quickest way to cut the common rafters to the correct length and with the ends properly shaped so that they will fit snugly against the ridge board and on top of the wall plate. Without the help of the steel square, this would be much more difficult than it actually is. Fig. 2 illustrates a section taken through the roof frame. If you could take the roof frame shown in Fig. 1 and saw it in two crosswise with a huge saw and then look directly at the end, you would see something like what is shown in Fig. 2, with the cut ends of the wall plates and ridge showing in section as illustrated and the rafters and wall studs showing in direct elevation in their true length (to scale), and at their true slope. The distance measured right across the building from outside to outside of the wall plates is the span of the roof. Half of this span is
called the run of the rafters and is the distance measured horizontally from the outside edge of the wall plate to a plumb line passing through the center of the ridge.

Pitch of Roofs

The "run" of a sloping roof is made use of together with its "rise" to determine the pitch or slope of the roof and also to find the length of the rafters.

In Fig. 2 the point marked by the letter P is a point on the side of any one of the rafters where the rafter crosses the outside top corner of the wall plate. As will be seen by a study of the illustration (Fig. 2) the point P is not on the line of the lower edge of the rafter nor is it on the line of the top edge of the rafter, because in Fig. 2 the rafters project at the eaves of the roof, beyond the outside of the building wall to form overhanging eaves. In Fig. 1 where there are no overhanging eaves, this point P would lie in the line of the top edge of the rafter. In any case a line drawn on the side of the rafter parallel to its line of the ridge board, then the distance from point P to the top surfaces of the wall plates and if a plumb line were to be dropped from point P on the rafter at the center line of the ridge board and dividing this distance by the distance out to wall studs, also measured to scale. This procedure will give a fraction which, with the aid of the square shown to smaller scale at the left hand side of Fig. 3, can be used to find the rise-per-foot-run. Knowing the rise-per-foot run the square can be used to find the length to which the rafters must be cut in order to fit properly into the roof frame and make a finished job corresponding to the drawing. Thus in Fig. 2 the rise of 7 feet divided by the span of 21 feet equals 7/21 or 1/3 which is the pitch of the roof and the corresponding rise-per-foot-run is 8 inches, the slope being 8 inches in 12 inches. See Fig. 3.

But perhaps the roof may be of such a type that the

(Continued to page 146)
Fences for Privacy and Decoration

As a means of accenting the style of a house or enclosing certain portions of the yard for privacy, fences are again returning to popularity. However, fences have outgrown their purely practical job as enclosures and, as shown on these two pages, they have definitely become a part of the home; entrance dooryards, service courts, home recreational areas, and front yards can often be made more decorative and useful with fencing. In California, fences are being used more extensively than in most other sections, as these examples indicate.—Hi Sibley.

A SIDED wood frame wall (Fig. 1) with wooden grilled windows and top rail set on a masonry base as shown at right screens home in Altadena, Calif.

LEFT: This solid panel gate (Fig. 2) of unsurfaced, unpainted wood assembled with quarter-inch carriage bolts picks up the character of the upper portion of the house; contrasting ornamental pickets harmonize with the siding.

IN Fig. 3 below, the construction of the service yard enclosure at the right is indicated. Ten-inch lap siding picks up the horizontal lines of the garage door at far right and gable end of wing at left.
THIS Balboa Island, Calif., cottage has a rustic post and rail fence which is nicely designed in relation to the house; Fig. 4 below shows this type of rough-hewn work.

Fig. 4

THE character of the novel siding arrangement in the gable of the above house is picked up in this fence which is finished with whitewash to carry out the similar treatment of the stucco on the exterior wall surfaces.

Fig. 5

THE tight 9-inch lap siding wall enclosing the front yard area, as shown below, assures privacy for outdoor relaxation. In Fig. 5 at the right, this construction is shown; louvered inserts allow air circulation while screening interior; chicken wire can be tacked over the framing members to act as a trellis for climbing flowers or vines.
Prefabricated Steel Panel System for Industrial Buildings

A NEW type of prefabricated, all-steel industrial building has just been developed, in which extra structural strength and rigidity are attained by pulling the steel panel sheets into tension between the framing members.

These new buildings can be used for either temporary or permanent structures. Both roofing and sides are built of patented panel sheets, framing members, and fittings that can be assembled or disassembled "like a Meccano set" by unskilled workers with no other tools than a socket wrench. The structural strength of the materials or their finished appearance is not affected by frequent assembly and disassembly.

This new method of construction was invented and developed by Harvey B. Lindsay, president of the Dry-Zero Corporation, Chicago, and is known as Lindsay Structure. The company erects no buildings itself, but fabricates and sells the necessary Lindsay Structure to specified dimensions and details.

The new Lindsay Structure principle represents a definite break from all traditional methods of putting steel together into industrial buildings. Heretofore, sheet metal has been used on industrial buildings simply as a covering material. Structurally, the sheets have been little more than just so much dead weight. Practically all the load has been carried by the steel framing members. If the framing begins to "work" the stresses are concentrated at the weakest points of the sheets—the rivets, bolts, or screw holes—or the tightest points of the weld.

In Lindsay Structure, every ounce of steel is called upon to contribute its structural strength—even the steel in the panel sheets! The sheets are "pre-tensed" to instantly resist the slightest movement of the framing, and the load is distributed over their entire area. This is done by means of a patented flange and tensioner which creates a union between sheets and framing that approximates the full strength of the sheet. With this construction, therefore, it is possible to use lighter gauge sheets and lighter framing, usually with a marked gain in strength.

Buildings can be erected of Lindsay Structure in all sizes and styles. Standard Ls materials are fabricated to within ½ inch of any desired dimension. The size of the finished building can also be altered by simply adding or removing panels, which can be done without special tools, in a few man-hours.

Lindsay Structure buildings can be built with either flat or pitched roofs. In either case, the paneling is the same on walls and roof. For wide spans, specially designed roof trusses are furnished. Standard parts can also be furnished for either square or rounded corners. Door frames are fastened directly to the frame and window frames are spot welded to the panel sheets. Doors and windows can be replaced by regular panel sections of the same dimension. Thus, their location may be changed at any time without the use of new materials.

All materials in the Ls building are marked to facilitate erection. With the patented Ls method of assembly, parts can be assembled with a simple socket wrench instead of riveting and welding. No cutting or fabrication is necessary. Two men have been able to assemble or take down a 12x9x10 ft. tool house in approximately three hours.

Lindsay Structure is well adapted for portable construction. It can be dismantled as readily as it can be assembled, and moved from place to place and rebuilt any number of times. Its salvage

(Continued to page 149)
New Products to Deliver More Home Value

J & L Lightweight Channel

THE Jones & Laughlin Steel Corp., Pittsburgh, is now manufacturing the lightest 10-inch hot rolled steel channel section in the world, weighing only 6 5/8 pounds to the foot. Designed to meet the increasing demand for rigid steel stairs in residences, apartments, housing projects and other light occupancy buildings, this new lightweight channel supplies ornamental metal manufacturers with a product of true shape and accurate dimension of known structural quality steel, and is stronger than cold formed steel channels of equal weight. It meets all demands for safety and comfort, giving the protection of sound structural steel.

CONSTRUCTION-BUILT lightweight steel stairs of new channel section.

Finish for Asbestos Cement Siding Shingles

A NEW process finish for asbestos cement siding shingles, called “Glatex,” has recently been announced by the United States Gypsum Co., Chicago. The finish is a permanent mineral glaze baked on and into the shingles at high temperature, from which oil, grease, soot and other stains can be removed with soap and water; acids do not affect it.

“Glatex” is now available in two designs—wavy edged and clapboard. The wavy edge is available in white, cascade green and silver brown, the clapboard in white alone. The wavy edge design is textured to resemble fine wood graining, and the clapboard has a smooth surface.

ASBESTOS siding shingles have finish of permanent mineral glaze.

Blind Nailing for Interior Finish

A NEW method of applying insulation board interior finish has been announced by the Wood Conversion Company, St. Paul, Minn., manufacturers of Nu-Wood. It is known as the Nu-Wood Clip System. The clip is so designed that it can be applied either on the tongue or groove joint of Nu-Wood Kolor-Fast and Star-Lite Tile and Plank, and can be fastened to the material before the units are placed in position for nailing. As shown in the illustration, one end of the clip is rounded and the other is square. This enables the applicator, through his sense of feel, to determine which end is to be applied to the unit, depending on whether he is working in the tongue or groove edge. Because of this feature, the applicator can work out from the center of the room in all directions.

Nu-Wood clips are available through retail lumber dealers in boxes of one thousand.

NEW ceiling clip takes tongue of finish on one side and fits insulation board groove on other.

Conco Gas-Fired Units

THE Conco Corp., Automatic Packaged Heat Div. of H. D. Conkey & Co., Mendota, Ill., has just announced its new line of automatic gas-fired heating and conditioning equipment, the new units to be marketed in connection with the Conco stokers and oil-fired equipment through established dealer outlets.

The new line is comprised of three new series of heating and conditioning equipment—gas-fired air conditioners in two models, gas-fired gravity heaters and three gas-fired wall and floor heaters. The various units are available in a range of sizes to cover both domestic and semi-commercial installations.

The new Conco gas-fired air conditioners operate in completely enclosed, tamper-proof cabinets, the heating element of each being formed from pressed steel sections welded into a single, rigid piece. Important safety features include an automatic pilot, a fan and limit switch to protect the unit from overheating, and a pressure regulator to maintain a constant gas input under fluctuating line conditions. Both new models are thermostatically controlled, and leave the factory completely wired, assembled and ready for installation.

ONE of the available models in a new line of gas-fired winter air conditioners.

“Thrift-Pak” Attic Ventilator

THE Rex-Airate “Thrift-Pak,” manufactured by Air Controls, Inc., Cleveland, Ohio, is a package unit attic ventilator of special interest to small home owners. This unit, which is well insulated of steel throughout, is installed in attic with the ceiling grille in place beneath the vent box, and delivers a generous volume of air. It should be started after sundown to exhaust the heat that has accumulated in the house and attic during the day, replacing it with cool night air which is drawn in through open doors and windows. Included in the package unit are a quiet fan in steel cabinet, all-steel vent-box, expanded metal ceiling grille,

(Continued to page 112)
and rubber-coated connector. Air delivery when allowance is made for resistance of vent-box and grille is 4100 C.F.M. The approximate shipping weight is 140 pounds.

UNIT attic ventilator is rated by A.S. H.V.E. standards.

Improved Coolvent Attic Fan

THE Autovent Fan & Blower Co., 1806 N. Kostner Ave., Chicago, has announced further improvements in its line of Coolvent attic fans for drawing in cool night air and circulating it through the house. Motor is mounted directly below the fan shaft on a sturdy sheet steel pedestal which can be adjusted for proper belt tension. Fan is supported by steel tubing; self-aligning ball bearings are mounted in new flanged type rubber pillow blocks for quietness. A low cost suction chamber and ceiling grille assembly is now available to complete the system.

UNIT attic ventilator is rated by A.S. H.V.E. standards.

FAN wheel diameters for attic fans range from 24 to 54 inches; operate at slow speeds from 281 to 577 RPM.

Combination Window Screen and Storm Sash

A NEW combination screen and storm sash with special ventilating and interchanging features has been placed on the market by the Phenix Manufacturing Company, 2684 North Humboldt Ave., Milwaukee, Wis. The combination window frame and sash is made of weatherproofed clear cut Ponderosa pine with joints secured by the company's wedge-lock joint construction. Of unusual interest is the easy removal and interchange features of either the screen or storm window. Everything operates from the inside with a special lock and bolt fastener developed by the company. When used as a storm window the insert can be lowered in a jiffy, providing draughtless ventilation through the top and sides of the lower panel. As a screen, for summer use, the inside window can be left open at the top to provide constant ventilation and protection against rain storms.

Relief for Sticking Casements

THE H. B. Ives Co., New Haven, Conn., is manufacturing a casement operating fastener which works through the screen to draw in or push out any casement sash which has a tendency to stick due to swelling caused by dampness. It sash sticks, lifting the handle of the Ives fastener frees it instantly, and likewise the device reaches out more than a half-inch to draw in a casement and close it snugly.

All-Steel Ventilating Louvre

A NEW all-steel louvre ventilator, made in four standard sizes for home construction, has been designed and is offered by the Milcor Steel Company, Milwaukee, Wisconsin. It is made of galvanized, weather-resistant steel and is painted before shipment as an added protection. A special feature of the ventilator is its thin louvre blades which, the manufacturer claims, permit the passage of more air than is possible in other type ventilators. If for some reason it is desired to close the ventilator, a wire fly-screen covering the inside can be removed and sheet metal or cardboard slipped into position to prevent the entry of cold air.

It is stated by the Company that the advent of airtight, insulated home construction has made the need for winter ventilation fully as important as are its cooling advantages. This has been brought about through the necessity of providing means for the escape of moisture laden air which would otherwise condense in walls and roofs, causing damage and rapid deterioration. The new ventilator was first put on the market a few months ago and the manufacturer reports that it has received the ready acceptance of building men.

“Protective Eye” Door Knocker

WITH the handsome and entirely innocent appearance of a door knocker, a new safety device called “Protective Eye” allows the housewife to look out and inspect any caller. In its center is hidden a bull's-eye of “one-way glass.” This is the secret of the device which is made by the Chicago Venetian Blind Co., 39th & Michigan, Chicago, because one cannot see in from the outside.

One-Hand Tacker

A MECHANICAL device that "spits" tacks as fast as the hand can grip is the Hansco Model T-1 Tacker, a product of the A. L. Hansen Mfg. Co., 5059 Ravenswood Ave., Chicago. This device drives a specially designed tack, with a slender, streamlined head and a pin-like leg, having great penetrating and holding power, which drives into the hardest woods, thin metal or light (Continued to page 114)
PROSPECTIVE BUYERS nowadays are looking for homes that offer all the comforts and conveniences of modern living.

That's why Gas and Modern Gas Appliances have become such record-breaking salesmen!

Gas, because it's clean, economical...up-to-date. Gas Appliances, because they are so good looking and compact...so perfectly suited to the American home of today!

Because gas-equipped homes sell easier, faster...they naturally bring bigger, surer, better profits. Thus, it is sound salesmanship—as well as good design—to let "Gas Do The Four Big Jobs" of cooking, water-heating, refrigeration and house-heating!

PROFIT FOR YOU! You can make more money by installing gas equipment for the "4 Big Jobs." Ask your local gas company for information!

AMERICAN GAS ASSOCIATION
Build BETTER BUYS for QUICKER SALES

WOLMANIZED LUMBER* makes houses better built, easier to sell.

If you want to speed up the sale of houses you build, put yourself in a position to say this to prospective buyers:

"This house is a better buy because it has dependable protection against termite and decay damage. See," (you point to Wolmanized Lumber) "we have used Wolmanized Lumber at the points where termites and decay first attack. This gives you lasting protection, yet it adds less than 2% to the cost of the house—a fraction of what one repair would cost."

This selling point hits the mark. Wolmanized Lumber is the one protective material which is clean, pressure-treated under one standard specification, and sold under one brand throughout the country. Banks and financing agencies approve it.

Ask us to send you selling helps which will help you sell houses in which Wolmanized Lumber is used. AMERICAN LUMBER & TREATING COMPANY, 1406 Old Colony Building, Chicago.

LOW COST FOR FULL PROTECTION—Because Wolmanized Lumber used at the danger points, joists, sills, and subfloor, protects the whole structure, effective protection with it adds less than 2% to the total cost of the house.

WOLMANIZED LUMBER

(Continued from page 112)

weight tin. The tacks are in strips of 100 tacks per strip, packed 5,000 tacks per box.

The tacker weighs 1½ pounds; it has a narrow width front, capable of driving in close or narrow spaces and permitting flush tacking, and its handle has a hold-down spring, ingenious in design, which holds down handle for carrying tacker in pocket.

New 3½ End Dump Mixer

A NEW 3½ End-Discharge trailer-mixer has been added to its line by Lansing Co., Lansing, Mich. Lightness and proper balance assure high speed trailing and easy, quick placing on the job. Features include air-cooled engine, Hyatt and Timken bearings, self-cleaning mixing blades, easy tilting wheel and cushion, steel or pneumatic tired wheels.

Screw-Tite Spiral Flooring Nails

THE Independent Nail & Packing Co., Bridgewater, Mass., is manufacturing Screw-Tite nails, which are made from special steel by an exclusive process but in much the same manner as any conventional round nail. The spiral thread is machine rolled onto each individual nail, which is then hardened and tempered so that it will not bend or break. The long pitch, spiral thread, which appears on the lower part of the shank only, turns the nail as it is driven, and gently penetrates both flooring and sub-floor without drastically displacing the wood fibres. The smooth upper shank, having no thread, merely turns around in place as it draws the flooring down tightly to the sub-floor and against the preceding strip, continuously holding it firmly in place.

These nails hold with the tenacity of wood screws, anchor the flooring to the sub-floor; therefore, squeaky floors, cupping and buckling are eliminated. They are made in all standard sizes, while special sizes can be made to order.
Sun Rays Furnish Hot Water for Homes

TRAPPING heat from the sun’s rays and turning it to practical use by heating water up to 204 degrees temperature for hot water heating systems is the clever feat accomplished with the aid of insulation board by a local roofing manufacturer of Miami, Florida. More than 25,000 of these systems, ranging in capacity up to 500 gallons, have already been installed and directly connected to the regular hot and cold water service lines of all types and sizes of homes and commercial buildings in the Miami area.

Known as the solar water heating system, developed by W. R. Robbins and Son, it consists roughly of two parts, one, the “heating element,” and two, the storage tank. These units are connected and piped directly to the water service system of any building. The heater is a galvanized steel case, 50 inches wide and 30 inches deep, built in any desired length to fit roofs of various sizes. This case has the bottom and four sides lined with %4-inch Celotex cane fiber insulation board. The insulating material lining the tank functions like a blanket wrapped around a hot water bottle. After the sun sets and the night air becomes cooler, the insulation holds the heat loss of the tank to a minimum. In addition, a special ferox treatment of the insulation prevents formation of fungi and dry rot commonly encountered in installations such as this where high moisture and hot air are always present.

The heating element fits into the tank and consists of special annealed, copper tubing upon which are soldered, in intimate contact, electrolytic copper heating fins which cover the entire floor of the case. The top of the case is covered with glass held in position by steel mullions similar to those employed in modern steel window sash.

TRIMPAK . . . streamlined for LOW-COST HOMES!

Ask for information about “PAC-TRIM” . . . the new low-priced product with TRIMPAK quality

PAC-TRIM . . . newest product from Trimpak . . . has been created especially for homes in the $2,500 price range.

Now . . . builders of groups of houses can get Trimpak quality at low cost!

Like Trimpak, Pac-Trim is made only from the cream of the log, comes to the job clean and bright, saves labor. Pac-Trim is cut to approximate lengths, eliminating waste. It is seasoned thoroughly and uniformly. It takes and retains paint and varnish perfectly. Supplied in all woods. Also manufactured with wood or steel lock-joint, with stools and aprons returned. Pac-Trim is alone in its class for low-priced homes! Write for designs, specifications and prices.

TRIMPAK CORPORATION
44 Whitehall St., New York, N. Y.
ONE HAND
Drives A STANLEY Safety Saw

IT’S BUILT TO MAKE MONEY FOR BUILDERS

USE it in the shop, to pre-cut stair stringers and other timbers that can be done inside – then take it out on the job. It handles jobs like bevel cutting for roof framing, cutting off sheathing, ripping floors and scores of other jobs easily and quickly.

The Stanley Safety Saw is built for builders, with the in-built power and ruggedness that a builder needs. The balance and the complete safety features make this an easy and safe tool to use. Ask your Stanley distributor for a demonstration, or write for literature. Stanley Electric Tool Div., The Stanley Works, 133 Elm Street, New Britain, Conn.

STANLEY ELECTRIC TOOLS
“COST LESS PER YEAR”

according to Oscar Fisher and L. H. Meyer in their U. S. Plywood Corp. “Plywood Handbook.” It has been established that the winter sun, if permitted to enter through glass on the south wall of a house, will provide an average of heat through the winter season equal to a square foot of radiation per square foot of glass. Conversely, if it is permitted to enter during the summer, it will result in a similar amount of discomfort.

A simple hood such as the one illustrated below may easily be provided on the south windows of a house. It will exclude the direct rays of the summer sun and permit the winter rays to enter and warm. If the hood is lightly constructed of Weldwood according to the critical angles shown on the drawing, it will automatically provide for such control.

DIAGRAM showing how a hood keeps out summer heat and lets in winter sunshine.

** Bilco Junior Conservatory Window **

A new treatment for basement and cellar windows, either above or below grade, to utilize them for growing plants, has been perfected by the Bilco Manufacturing Co., New Haven, Conn. This firm offers the Bilco conservatory window for installation as shown in the accompanying cross section detail for a cellar window with area way below grade. The window and frame are of standard size, 36” by 26”, with housing of Bethcuy copper bearing steel 1½” high at the back where it goes against the house.

This junior conservatory comes as a complete unit with the hardware and hinges electrically welded. There is an adjusting and self-locking bar on the inside for opening the window and holding it in several positions. Header flange is provided to make a watertight joint where built into masonry wall or attached to stucco or clapboard walls. Sash side rails interlock with frame to produce a tight joint all the way around. This unit is furnished without glass, or with shatterproof glazing, and also with built-in copper roll screen included if desired.

This new home building specialty adds extra value to the home. It gives extra space outside the basement window with added light and ventilation for the basement; it provides an ideal space for flowers, bulbs, and early start of seeds for transplanting. It is easily attached to new or present structures, and conforms in appearance to almost any type of architecture. It is moderate in cost.
BRIXMENT has Far Greater Water-Retaining Capacity!

WATER-RETAINING CAPACITY is the ability of a mortar to retain its moisture, and hence its plasticity, when spread out on porous brick. High water-retaining capacity is of extreme importance in mortar. If the mortar does not have high water-retaining capacity, it is too quickly sucked dry by the brick; the mortar stiffens too soon, the brick cannot be properly bedded, and a good bond cannot be obtained.

Brixment mortar has extremely high water-retaining capacity. It strongly resists the sucking action of the brick. Brixment mortar therefore stays smooth and plastic when spread out on the wall. This permits a more thorough bedding of the brick, and a more complete contact between the brick and the mortar. The result is a better bond, and hence a stronger and more water-tight wall.

**MAKE THIS TEST - Prove BRIXMENT is BEST!**

1. Slap a small amount of Brixment mortar, and an equal amount of mortar made with lime and cement, on a brick. Wait a minute, then feel each mortar.

2. Test each mortar. You will find that the Brixment mortar stays plastic far longer than the other mortar. This proves greater water-retaining capacity.
News of the Month
Building Activities and Meetings

Survey Shows Real Estate Tax Rates Affect Home Building and Buying

In a great majority of American cities, large and small, the real estate tax rate is a very definite influence on real estate price levels and on volume of real estate sales. High taxes—and fear of higher taxes—are a very real deterrent to real estate investment.

Conversely, a lightening of the tax burden, and particularly the putting of a ceiling on the real estate tax, has been reflected definitely in better tax collections, in wider home ownership and in higher real estate price levels. That is the consensus of observations made by real estate boards of the country reported to the National Association of Real Estate Boards in a questionnaire on various phases of real estate taxation, preliminary findings of which are now being tabulated by the Association.

The reports, copies of which were sent to the Association, were made initially to a governmental department, officials of which drafted the questionnaire.

The question: "Have you observed any influence of changes in the tax rates or assessed valuations on the prices of property and the turnover in property of various types?" Seventy per cent of cities replying gave a decided yes.

How Various Cities Reported

St. Louis, for example, reports: "Today, general property taxes are a greater deterrent to the sale of real estate than any other factor." Springfield, Mass., observes: "Lowered taxes have tended to make property more easily sold, and high taxes, even with low purchase price, have killed many a sale." Jersey City says: "High taxes retard building." Wichita, Kans., reports: "Upping of taxes in last assessment in exclusive residential districts is causing a trend toward suburban development." South Bend, Ind., records: "As taxes go up, prices and turnover (except for forced sales) go down, and vice versa." New Orleans notes: "Higher taxes have depressing influence on price of property and adversely affect their turnover." Des Moines adds: "Especially for investment property." Worcester, Mass., finds: "As the tax rates have increased, prices fell and turnover lessened." Lincoln, Nebr., (which reports intangibles taxed almost nil, while real estate is carrying 79.9 per cent of total government cost): "High taxes destroy value and reduce sales." Olean, N.Y., finds: "Rising taxes are most certainly stagnating the real estate market." Moorestown, N.J., finds them "particularly unfavorable in the case of farms." Parkersburg, W. Va., observes that "only the fact of a difference in tax rate as between two residential properties is sometimes a deciding factor in a sale." Portland, Ore., states: "Where levy has been increasing each year, real property is purchased for use only; there are no speculative buyers in the market."

How Reductions in Rates or Assessments Help

On the happier side of the picture, Dayton, O., states: "Reductions in either tax rate or assessments stimulate sales and increase collections." Seattle, Wash., writes: "We feel that the 40-mill over-all limit on the real estate tax in this State (on a 50 per cent valuation) has made the ownership of real estate more desirable." Bellingham, Wash., also states: "The 40-mill limit law has had a tendency to increase property turnover," and Greys Harbor, Wash., adds: "Since we have had the 40-mill limit there is a greater desire to own homes." Grand Rapids, Mich., reports: "Since we have been operating under a fifteen-mill and over-all limit on the real estate tax more people of limited income are purchasing homes and tax collections are much higher. We believe there is a direct relationship between the tax rate and home ownership." Flint, Mich., makes a similar statement: "As a result of the 15-mill limitation there is a definite increase in real estate activity. Assessed valuations, reduced during the depression, have been slightly raised, but not enough to offset the effects of limitation.

In 21 per cent of the cities replying there had been either no change in the tax rate or no observable relationship between tax

(Continued to page 122)
Mr. J. Harry Dickman, president of J. H. Dickman and Company, 211 E. 4th St., Cincinnati, Ohio

"Cincinnati is partial to steel casements because they appeal to Cincinnati's thrifty nature," says Mr. J. Harry Dickman, topnotch builder and president of the Home Builders Association of Greater Cincinnati.

"I like Mesker Guildhall Casements because they are permanent and solid and require so little maintenance, and with their 100% ventilation they allow my home owners to enjoy the summer breezes that we get across our hilltops."

...And Mr. J. Harry Dickman should know! He is one of Cincinnati's leading builders of fine, modern homes and has been in the business for over thirty years. Install Mesker Guildhall Steel Casements in the next house you build and see how quickly thrifty home buyers appreciate their many exclusive features: better ventilation, more daylight, easier to wash from the inside, easier to screen and smarter in appearance... all at a price unbelievably low.

See your nearest Mesker Dealer for complete prices on the entire Mesker Steel Window Line
Please "Persnickety" Prospects ..and tight-listed ones, too! 
— with Marlite

Only Marlite gives you all these "must" advantages in a single pre-finished wall material ... gives your homes that "quality" atmosphere that pleases prospects, speeds up sales,
1. UNLIMITED DECORATIVE SCOPE. Over 100 colors (from pastels to full strength colors) and many patterns: plain, tile, marble and genuine wood-veneers, to choose from.
2. EASY TO CLEAN. Marlite's glass-smooth surface is easily kept spic and span with a damp cloth.
3. ECONOMICAL. Reasonable in first cost ... saves expense of periodic renovating.
4. ADAPTABILITY. Suitable for a wider range of applications than any other pre-finished wall material due to variety of colors and patterns available.
S. EASY TO INSTALL. Large wall-size panels (4 ft. by 12 ft.) can be cut to size and applied to any surface, new or old, curved or flat, by carpenters in a few hours' time.
Write for FREE colorful Booklet on Marlite Home Interiors. See our Catalog in Sweet's 11/34.

MARCH WALL PRODUCTS, INC. 
43 MARSH PLACE • DOVER, OHIO
See Marlite Exhibit at New York World's Fair, Building Materials Building

Marlite 
FOR CREATING BEAUTIFUL INTERIORS
WALL-SIZE PANELS IN LUSTROUS COLORS AND PATTERNS

NEWS—
(Continued from page 120)
situation and market situation. In 9 per cent of the cities the influence of the tax situation on market activity or prices, while observable, was felt to be relatively slight.
Atlanta, Ga., points out that the tendency toward increased taxation is probably a greater deterrent to purchasers than is the tax actually levied. Reported by various cities: large numbers of people finding locations outside of the corporate limits because of constant increase in tax rate.

March Residential Contracts 
About Same As Year Ago

RESIDENTIAL contract awards in 37 eastern states, as reported by F. W. Dodge for the period Mar. 1-22, amounted to $79,904,000 as compared to $82,421,000 for the same period in 1939. The first two weeks of March registered a 17 per cent increase but the third week cut down the gain.

Statistics for the four classes of construction are as follows:

<table>
<thead>
<tr>
<th>Class</th>
<th>Mar. 1-22,'40</th>
<th>Mar. 1-22,'39</th>
<th>Feb. 1940</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residential</td>
<td>$ 79,904,000</td>
<td>$ 82,421,000</td>
<td>$ 74,858,000</td>
</tr>
<tr>
<td>Non-Residential</td>
<td>51,780,000</td>
<td>64,648,000</td>
<td>70,565,000</td>
</tr>
<tr>
<td>Public Works</td>
<td>46,308,000</td>
<td>41,440,000</td>
<td>42,929,000</td>
</tr>
<tr>
<td>Utilities</td>
<td>14,099,000</td>
<td>13,121,000</td>
<td>12,222,000</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>$192,151,000</td>
<td>$201,630,000</td>
<td>$200,574,000</td>
</tr>
</tbody>
</table>

New Triple-Duty Building Material

THE Insulite Co., Minneapolis, Minn., has announced the creation of a triple-duty building material that serves as a plaster base, a rigid insulating material, and a barrier against vapor travel into stud spaces. The new product, known as Sealed Graylite Lok-Joint Lath, is integrally waterproofed with asphalt, comes in 18 by 48 inch panels in three thicknesses, and has shiplap joints to provide a maximum of efficiency in insulation and vapor control.

Plywoods and Laminated Plastics Discussed

AT TECHNICAL meeting, sponsored by the Bakelite Corporation, was held at The Franklin Institute in Philadelphia, Tuesday evening, March 12, the subject being "New Bakelite Resin Developments in Laminated Plastics, Plywoods and Veneers." Three hundred eighty-five invited guests were present.
George R. Meyercord, president of the Haskelite Manufacturing Corporation, spoke on "Improved Bakelite Resin-Bonded Wood Structures." He described how plywood had been faced with metal to give it greater strength and how a thin sheet of asbestos was inclosed within the panel for greater fire protection. Mr. Meyercord also told of the development of the Fairchild Duramold plywood airplane that was designed by Colonel V. E. Clark.

D. J. O'Conor, president of Formica Insulation Company, spoke on "New Developments in Laminated Plastics." He discussed the acceptance of laminated material by furniture designers and architects and its use for panels and table tops in the library of Congress and on the new Cunard liners—the Queen Mary and the Queen Elizabeth.
CLIP AND RETURN THIS COUPON NOW

It will bring you 12 or more issues of American Builder with the latest information and news of the building industry—plus your FREE COPY of Recommended Homes, containing 180 pages of new suggestions, photographs and floor plans, showing modern salable homes—all for less than you spend on your daily newspaper.

Name..............................................................................................................
Address .........................................................................................................
Line of Business ............................................................................................

Please check whether new subscription renewal

AMERICAN BUILDER and Building Age
30 Church Street, New York, N. Y.

$2.00  [ ] one year
$3.00  [ ] two years
$4.00  [ ] three years

Enclosed is

$2.00
$3.00
$4.00

This offer is good only in the U. S., its Possessions and Canada.

FREE if you return this coupon now.

A copy of Recommended Homes will be sent absolutely free, with any paid in advance subscription or renewal for American Builder, accompanied by $2.00 for one year, $3.00 for two years or $4.00 for three years.

This Book May Be Worth Hundreds Of Dollars To You—It Contains 180 Pages

Packed With Practical Salable Ideas And

Shows 129 New Homes and Floor Plans

OUR NEW SPRING PLAN BOOK—Just Off The Press

Here are a few of the many features which will make Recommended Homes a valuable reference book now and for many months to come.

There are the 15 New York World's Fair houses in "The Town of Tomorrow" . . . the House of Vistas . . . the Double Duty House . . . Triple Insulated Long Island Colonial . . . Traditional New England Homes . . . Tomorrow's Garden House . . . Celotex Modified Classic Homes . . . compact 5-room Southern Home built at Atlanta . . . 5-room cement Shingle cottage in Muskegon, Mich. . . . five popular model homes in Detroit's "Duchess Project" . . . a cozy bride's home in the Cape Cod manner at Northwood Park, Baltimore . . . and many other "best sellers".

Many examples of the ultra-modern all electric home—homes of the functional type—built to sell and not for show. These include a Houston prize winner . . . Monterey Style Home in Elklands Park, Pa. . . . all electric home in Detroit with many new features . . . homes in Cedar Rapids, St. Paul, Philadelphia . . . and selected homes which have won prizes in G-E and AGA Home Competitions.

In some localities the all gas home is preferred, and Recommended Homes recognizes this preference with examples of the finest and most practical, such as . . . the Portland, Ore., "House in the Woods" . . . a 6-room cottage in San Gabriel Village development, Los Angeles . . . a fine Dutch Colonial in Columbus, Ohio . . . a New England Colonial Prize Winner in White Plains . . . a Miami "Moderne" transplanted to Billings, Mont.

You certainly will find valuable the pages devoted to quickly figuring the amounts of payments on FHA loans. Also there is a lot of practical information on technical details such as a chapter on Textures and Coatings for the Surfaces of Concrete Walls . . . a chapter on "Mirrored Doors, how to use them to advantage in the home" . . . a chapter on Outdoor Grilles and Barbecue Fireplaces . . . and many other pages devoted to helpful ideas and suggestions.

AMERICAN BUILDER

and Building Age

The World's Greatest Building Paper

30 Church Street, New York, N. Y.
Pullman Sash Balances

MORE ECONOMICAL
Than Weights and Cords

Pullman Sash Balances are installed in 10 to 15 minutes per window as compared to 30 to 45 minutes or more with weights and cords. Sash are grooved in one operation instead of two. No pulleys, cords, weights or weight pockets to bother with. Expensive box frames are eliminated and less lumber is required.

Pullman Sash Balances assure perfect window control—easy and quiet operation. They are entirely encased of pressed steel construction—light in weight and non-breakable. No leakage of cold air as with pulley installations. Saves the home owner's coal bill.

Write TODAY

PULLMAN MFG. CORPORATION
Established 1886
1180 University Ave., Rochester, N. Y.

Curtis Engineer Honored

SERN MADSEN, engineer and research director of Curtis Companies Incorporated, Clinton, Iowa, manufacturers of Curtis Woodwork, was one of a group of "Modern Pioneers" named by the National Association of Manufacturers at a banquet and program held recently in Chicago. The program, industry's observance of the 150th anniversary of the founding of the American patent system, honored those persons whom they believed had enhanced living standards and created employment through their patented discoveries and inventions during the last 25 years.

Mr. Madsen was nominated and selected as a modern pioneer for his many contributions to the woodworking and building industry. During his many years of service with Curtis Companies Incorporated, he has received 69 patents and has 15 more pending. One of his outstanding achievements was the development of the Curtis Silentite Pre-Fit Window Unit—the first basic improvement in double-hung window construction in nearly three hundred years. He has also developed the Curtis Silentite Casement Unit—Miterite Trim—and numerous other products and machines which have greatly improved modern woodworking and modern homes.

New Plant for Concrete Building Units

A NEW plant for the large-scale production of prefabricated concrete building units by new principles of manufacture is being built in Pittsburgh by The Cemenstone Company. L. M. Johnston, president of the company, states that the wide acceptance of Cemenstone products has necessitated removal to a location which will permit acreage for necessary expansion. The company also has formed its own sales organization.

New buildings are to be erected and equipped with the company's patented machinery, which employs vibration, heat and rapid cycles of manufacture to produce building shapes of more uniform appearance and of greater weatherability and strength. Blocks for wall structures, lintels, used for wall structure supports over doors and windows, and slabs for floor and roof construction are the first products of the new plant, but the company plans to expand its operations to include the manufacture of every type of building element where concrete can provide superior and more economical construction.

The company has patents registered in the United States and foreign countries which cover the process of manufacture, machinery, and the design of the products.

Chicago Home Show Announced

THE National House and Garden Exposition of interest to the entire home building industry will be held this year at the Coliseum in Chicago from May 4 to 12, inclusive, with more elaborate and varied exhibits than ever before presented.

John A. Servas, founder and managing director of the Exposition, whose headquarters are at 228 N. La Salle Street, Chicago, has reported that display space is being taken by prospective exhibitors in view of the program now being planned to attract the crowds.

NEWS BRIEFS—

THE United States Savings and Loan League will hold its 48th Annual Convention in Chicago Nov. 13 to 15; this will be the sixth time that the organization has met in Chicago since it was founded there in 1892, and as the first meeting in the '40's, this convention will take stock of what the decade of the '30's did to and for the association business. . . . MONARCH Metal Weatherstrip Corp., St. Louis, Mo., has announced the election of John A. Goellner as president. . . . A new type of shingle stain which holds color longer without bleeding or running and at the same time protects the shingle itself against rot, warping and curling has been announced by PROTECTION Products Mfg. Co., Kalamazoo, Mich. Greatly improved appearance due to color fastness is claimed.
Whether You Contract to Build
Or Build to Sell . . . .

GENUINE RED CEDAR SHINGLES
Will Never Let You Down

Hundreds of thousands of new Cedar Shingle roofs built during the last few years are testimony indeed to the confidence of the builder and home owner in the amazing qualities of genuine Cedar Shingles. Made better than ever before under the Certigrade Official Inspection Label, you can use them for roof and side-walls with perfect confidence coupled with high-class appearance.

The Certigrade Handbook
Prepared by a wood technologist, mailed free on request. One hundred pages detailing the uses, application, and technical data. Write the Red Cedar Shingle Bureau, Seattle, Wash., U. S. A., or Vancouver, B. C., Canada.

FOR GUARANTEED GRADES AND QUALITY, SPECIFY—

CERTIGRADE
Red Cedar Shingles
Certigrades pass official inspection for grade and quality.
CUSTOMER-ATTRACTING CEILINGS mean more business for grocers. The decorative ceiling treatment in the Streamline Market, Columbus, Ohio, was achieved by combining 32" x 32" panels of cream Temlok De Luxe with a border of green. Temlok Dealer: McNally Lumber Company.

**CEILING PROBLEM SOLVED**

*Insulation, Attractiveness, and Quiet achieved at low cost with TEMLOK DE LUXE*

**HERE’S a profit-tip for you in this colorful grocery store ceiling—a typical example of the wide market which exists for Armstrong’s Temlok DeLuxe. This versatile wall and ceiling material is easy to sell in all types of buildings—commercial and residential—because it offers customers everything they want in an interior finish. It insulates—saves fuel and adds to year-round room comfort; it decorates—comes in five attractive colors and in panels, planks, and boards, for distinctive walls and ceilings; quiets noise—a big sales feature for commercial installations.

Also, Temlok De Luxe is made by the makers of Armstrong’s Linoleum, nationally known for high quality building products. Why not try Temlok De Luxe on your next interior job? Near-by stocks assure you prompt delivery. Write for complete information and samples to Armstrong Cork Company, Building Materials Division, 979 Concord Street, Lancaster, Pennsylvania.

**NEW TEMLOK INSTALLATION METHOD GIVES QUICKER, STRONGER RESULTS**

New metal devices—Armstrong’s TEM-CLIPS—provide a permanent, invisible support which “floats” individual panels or planks against furring strips on walls and ceilings. They allow normal movement of the base without disturbing the Temlok De Luxe. For a faster, more efficient installation, use Armstrong’s Tem-Clips on your next project.

**Armstrong’s TEMLOK INSULATION**

DE LUXE INTERIOR FINISHES

TEMSEAL SHEATHING - LATH - ARMSTRONG’S MONOWALL

Cheerful But Inexpensive
Small Home Heating

SMALL homes in mild climates are being very satisfactorily heated by the living room fireplace equipped with a “Superior Fireplace Circulator,” according to testimonials and evidence attractively presented with photographs and diagrams in a new 32-page portfolio of fireplace designs issued by the Superior Fire-place Company, 1046 S. Olive St., Los Angeles. The arrangement for heating a small two-story house with two bedrooms upstairs is illustrated below. Note that the centrally located fireplace in the living room pulls in cool air from both living room and kitchen, and after passing it over the hot metal backplate of the fireplace, conducts it up through a metal flue to the two rooms above. There is also a warm air outlet to the dining room, assuring its warmth. The living room itself is heated directly from the fireplace by radiant heat, while the kitchen range naturally takes care of that part of the layout.

This improved fireplace equipment makes of the fireplace a practical heating plant, and not merely an ornamental living room feature.

In the Superior fireplace line are models adapted to practically any condition of design, room layout, etc. Warm air circulation to supplement the customary radiant heat action has fully demonstrated itself and is proving very popular in vacation cottages and in small homes throughout the country.

AIA Convention Set for May 21

HUNDREDS of architects, industrialists, and educators will assemble in Louisville, Ky., on May 21 to participate in the seventy-second national convention of the American Institute of Architects. Housing, city planning, and other national problems will be discussed in sessions lasting four days. The Producers’ Council will convene concurrently with the Institute.
NOT one of the ninety-five lucky families that live in this modern apartment is going to do any worrying about the floors in the kitchen, bath, or breakfast room. That's because Armstrong's Linoleum is on the job in each of these areas. Ninety-five housewives—and maids—will find it easy to keep this linoleum clean and bright. For there's little work involved in the simple dusting, occasional washing and waxing, that these floors require.

And the master-of-the-house won't have to reach into his pocket or bicker with the landlord about expensive floor refinishing. That just isn't necessary with Armstrong's Linoleum. The colors run right through the material—so they won't scuff or wear off.

Any architect or builder is making a wise move by installing floors of Armstrong's Linoleum.

There are over 200 colors and patterns available, so it is easy for you to create smart floors. For full information, see Sweet's or write for file-sized literature. Armstrong Cork Company, Building Materials Division, 1218 State Street, Lancaster, Pa.
A Tremendous RESPONSE

Greets the New Strand Door

And no wonder when you consider its SENSATIONAL LOW PRICE, its remarkable simplicity and its amazingly easy operation.

Are You Sharing In This Landslide Of Profits?

If not, get in now and specialize on this outstanding, low-priced door that makes swinging garage doors as obsolete as the horse-and-buggy! Made of laminated hot-plate resin-bonded plywood, guaranteed by the manufacturer not to separate. Light-weight, rugged, one-piece type, perfectly balanced. A child can operate it with a finger-touch. Simple, fool-proof mechanism. Only two moving parts. No weights, tracks or pulleys. SHIPPED KNOCKED-DOWN. INSTALLED IN ONE HOUR. Tap this great market. Inquire today.

STRAND DOOR

ONE-PIECE OVERHEAD TYPE

ASK YOUR DEALER or MAIL COUPON


Send me free folder and full details.

Name

Address

☐ Contractor ☐ Dealer

Builders Tell the World

(Continued from page 61)

the mass home market. An entirely different atmosphere is maintained in the Sutton Park sign and entrance detail illustrated. Here an atmosphere of dignity and restraint is achieved, appealing to persons interested in the more expensive type of country home.

Builders who resolve to consult a local sign specialist to enliven their sales approach should first consider whether they have a name or a theme worth advertising. A few of the popular Long Island developments bear the following names: Saddle Rock Estates, New Salem, Flower Hill, Kew Gardens, Insured Homes, Parkway Community Homes, Norgate, Willow Manor, Chester Hill, Sussex Homes, Forest Hills, Sutton Park, Shore Haven, Garden City, Green Park Acres, Hillside Heights, Alden Terrace.

Street names, too, are important. In Levitt's Strathmore-Vanderbilt Country Club development, street names have been selected with particular care to reflect the appeal of the neighborhood. Included are such alluring phrases as Payne-Whitney Lane, Castle Ridge Road, Sherry Hill Lane, Mill Spring Road, Country Club Drive, Fairway Lane, Flower Lane, Garden Turn, Mountain Cut Road, Soundview Crest, Timber Lane.
American Builder, April 1940.

Build with FIR-TEX and you build Profits

INTERIOR FINISH

1...5 Striking Tints

Fir-Tex insulating color panels are the ideal material for special rooms... in attics, it insulates as it builds... in basement recreation rooms, it beautifies, soundproofs and insulates... in library and music rooms, it stops reverberation. These Fir-Tex panels come in five popular pastel shades—Ivrykote, Wheatkote, Greenkote, Blukote, and Aprikote. The Colors are baked on, for permanence. The surface is glazed; doesn't attract dust or cobwebs. Fir-Tex is two-in-one— it builds as it insulates.

The consumer acceptance for Fir-Tex, built up with a quality product and with consumer advertising, helps smooth the way for sales. See the full-page, full-color advertisement in the May American Home (circulation 1,750,000).

(Right) A typical attic room finished in Fir-Tex insulating color panels. Ceiling is of Ivrykote and walls are of Wheatkote.

2 FOR STRUCTURAL USE...A Full Line of Boards

Plaster Base Lath
One installation cost; builds as it insulates. Insulates completely—save to eave and floor to ceiling. Better, cheaper than lath-plus-insulation.
...Fir-Tex Insulating Plaster Base Lath has a stronger bond, eliminates plaster wastage between lath, reduces plaster leaks to a minimum, eliminates unsightly lath mark on ceilings. Builders from coast to coast are using Fir-Tex Insulating Plaster Base Lath for super jobs at minimum costs.

Sheathing
Use on all side walls and on pitched roofs. On side walls, Fir-Tex sheathing takes the place of ordinary sheathing and building paper and adds insulation. It provides protection from wind, dust, cold, heat, noise. Has greater bracing strength than wood sheathing. On pitched roofs, Fir-Tex sheathing insulates where the greatest heat loss occurs; adds materially to the structural strength of the building, and provides a permanent moisture barrier.

SEND FOR CATALOG AND SAMPLES
Free...1940 edition of Fir-Tex catalog, featuring new, improved products...also sample boards, to enable you to see yourself the many advantages of this product. Mail to—
Fir-Tex
Porter Building, Portland, Oregon.

FIR-TEX INSULATING BUILDING BOARD
Here is an idea that will make your houses easier to sell or rent. Use clever inset designs in Linowall—the linoleum-like wall covering that is truly washable. Write now for other interesting wall covering suggestions.

BOOST BUSINESS WITH
SALES-WINNING WALLS

ONE sure way to speed sales and rentals is to dress up interiors with colorful walls of Armstrong’s Linowall. This permanent, linoleum-like wall covering will bring new life to old rooms and add real sales-appeal to your new houses.

Women are delighted with the many pleasing features of Linowall. The colors and patterns go with any decorative scheme. And the fact that Linowall can be washed just as easily as linoleum always makes a big hit. Linowall is permanent, durable—it won’t crack, craze, or crumble on moderately settling walls, and the rich colors can’t wear off.

With all its advantages, Linowall will save you money. It costs only about half as much as other permanent materials. Furthermore, when you tell customers that Linowall is made by the makers of Armstrong’s Linoleum, you have another strong sales-clincher. Get the whole story. Write today for your copy of a free, color-illustrated booklet, Decorative Walls of Enduring Beauty. Armstrong Cork Company, Building Materials Division, 1218 State Street, Lancaster, Pennsylvania.

Armstrong’s LINOWALL
Made by the makers of Armstrong’s Linoleum

GLASS blocks, modern wall paper and colorful linoleum contribute to sales appeal of this Independence Homes kitchen.

Buyers Respond
(Continued from page 63)

lights in bathrooms for shaving, are no longer unusual in ready-built homes. Built-in bars with auxiliary kitchenettes including sink and gas plate are provided in pine paneled basement recreation rooms, even in homes that sell for less than $5,000.

Electric door chimes of one type or another have displaced the old fire-alarm doorbell, while Gross-Morton are including electric clocks in kitchens that have the door chimes enclosed within them. Electric ventilating fans in kitchens are appearing more and more often, while efficient insulated console gas and electric ranges are as permanent in standard kitchen equipment as the inlaid linoleum on the floor, the tile or linoleum drain boards, and built-in cabinets and cupboards. Builders frequently feature an all-electric kitchen including among other things, a dish-washer and garbage disposer for the sink drain.

Any builder will bet his hat that more electric equip-

DISAPPEARING door in this Gibson built home designed by Arthur Allen leads to extra second floor rooms. Attractive bookcase front makes space do double duty.
GLASS shelves in front of glass blocks hold ivy plants in this Long Island breakfast nook with built-in seats. No wonder the girl next door drops in for a cup of coffee.

ment will be demanded as electric rates are adjusted further into the realm of practicability. The widely favored over-head garage door will be operated electrically, or perhaps by radio from the automobile dashboard—a device that already is on the market. Nursery rooms will be equipped with time switches to allow the light to go out automatically when the baby is asleep—another invention already available.

No builder need be frightened by this stampede for special equipment. Houses are built to be lived in, so why not sell them ready to be lived in? The modern builder is selling more than shelter. He is a creator of solid comfort. He should ask himself: “Does my house have oomph?” Then rely on the sophistication of the American public, which does not expect to get something for nothing.

• The lady is pleased. . . And why not? Every woman wants a modern bathroom, with modern fixtures.

And Formed Iron Plumbing Ware is fast becoming the American family favorite; it is fine ware at moderate cost. Try it with the next home you build. See how its faultless styling and attractive color combinations make a bathroom a thing of beauty.

And remember — this Formed Iron Plumbing Ware is acid-resisting at no extra cost. It is formed from ARMCO Ingot Iron — your assurance of the highest basic quality. Every piece is entitled to carry the famous ARMCO label. Point out this familiar trademark to your prospects and they’ll know you install only top-quality fixtures.

ARMCO
INGOT IRON
A NAME KNOWN TO MILLIONS

• Hot-water Hint: The newest thing in hot-water tanks is one that’s porcelain enameled inside and out on ARMCO Ingot Iron. No more leaks and rusty water. Write for details. The American Rolling Mill Company, 1111 Curtis Street, Middletown, Ohio.
**FHA and the FACTS**

(Continued from page 64)

Square National Bank, and others led the way. Today such banks as these are selling their mortgages as fast as they make them to the larger institutions, and not only getting a premium for them but making a pretty penny for themselves by servicing the paper for their customers.

When "Tommy" Grace is not busy dedicating new home building developments, making speeches, or cutting the red tape of some knotty financial problem, he is glad to talk about Long Island builders. "The old suspicion that attached to speculative building enterprises has been successfully eliminated," he told American Builder. "Home seekers today realize that the property standards and minimum requirements set up by the FHA for its own protection automatically protect them too. As a result buying has kept steady pace.

"The housing program owes much of its success to the fine work of operative builders," he said. "Without them I doubt if we would have advanced as we have. It is their volume production which has resulted in home owners getting more for their money today than ever before and in keeping the price range within the reach of the elements in our population that the FHA is most anxious to put into their own homes."

He pointed out that there has been a notable trend on Long Island toward lower cost houses. Recent new developments in connection with the low-cost $2,500 class house with 5 per cent down payment make him believe that there will be a great expansion in this field.

"I can say without reservation that hundreds of builders on Long Island are prepared to go ahead with such a program," he said. "And the Long Island banks stand ready to finance it."

Grace believes that the future for Long Island is exceedingly bright. As he put it, "It has the wooded country, seashore, lakes and hills that are natural territory for home lovers—and each year improvements in transportation facilities bring them nearer and nearer to the heart of New York City." Describing the character of the 20,000 new homes that have come into existence on Long Island under FHA, he said:

"These are not houses stuck up in rows or laid out in
a haphazard manner. In authorizing their construction the Federal Housing Administration has not only insisted on due regard for neighborhood harmony and architectural attractiveness but has land-planned them and landscaped them until today they are the real beauty spots of Long Island. Under the direction of Mr. Seward Mott the Land Planning Division of the FHA has done a truly magnificent job in Queens and Nassau counties, and it has been done without any loss of land space or of any of the utilitarian features that should accompany a modern home.

“Great many factors have contributed toward the remarkable building development on Long Island, but outstanding among these I believe is the policy of Administrator Stewart McDonald to lessen the burdens of home owning wherever possible. Nowhere else in the country has such instant advantage been taken of each move made in this direction. When experience convinced Mr. McDonald that a 90 per cent mortgage with a 25-year amortization period was feasible for properties up to $6,000 in value, he immediately went to Congress and asked authority to put such a system into effect.

Real Aid to Home Buying

“The impetus given residential construction by this shrewd move is too well known to require extended comment here. When the condition of our Mutual Mortgage Insurance Fund justified placing the mortgagor’s premium on decreasing balances it was done. At the same time the old service charge allowed mortgagees was eliminated and later on the maximum interest rate was cut from 5 to 4½ per cent.

Vulnerable sections of a building near the ground and foundations are subject to damage from decay and termites.

Protect the home-owners’ investment against unnecessary maintenance costs by using:

DU PONT Chromated Zinc Chloride makes lumber more resistant to decay than any other “clean” treatment. It is also repellent to termites, fire retarding, clean, odorless and paintable.

Lumber preserved with DU PONT Chromated Zinc Chloride protects wood construction for more than the normal life of the investment, outlasting untreated lumber from 3 to 10 times.

Don’t miss this opportunity to add more durability to your buildings. Write us today for your copy of “Stop Decay and Termite Damage”, and names of suppliers of this treated wood.
IT PAYS TO RECOMMEND

"Over-The-Top" DOOR EQUIPMENT

Many a contract, many a property transfer and many a rental is affected by the convenience and efficiency of Frantz "Over-The-Top" Equipment. Day after day, year after year, this trouble-free equipment will testify to your good judgment and prove a powerful leverage on new business. If you're not familiar with the 1940 model, by all means get acquainted at once . . . write for complete information.

FRANTZ MANUFACTURING CO.
Sterling, Ill.

Levitt's Luxury Details
(Continued from page 73)

rooms, over fireplace mantels and in bathrooms. While the interiors are striking and attractive, they are done in good taste in colors that harmonize effectively.

Special note must be paid to the Levitt bathrooms, which are frequently double the size of the ordinary bath. The toilet fixture is usually placed in a separate compartment with an opaque glass door. A separate shower stall with a similar glass door is always provided in the master bath. In the latest type of bathroom, as illustrated with this article, a built-in tile ladies' dressing table with hot and cold running water is placed at one side of the room. A huge plate glass mirror is set in the wall over the tub. A portion of the floor near the entrance to the master bedroom is carpeted. This portion is 4 inches lower than the tiled areas. Lighting fixtures are ample and well placed, and there is an abundance of towel racks and other fixtures.

The latest Levitt kitchen, also shown with this article, is a housewife's dream of efficiency and completeness. There are extensive tile top work counters, two sinks, large and efficient cabinets. Ceilings are furred down in an interesting fashion.

Levitt houses are skillfully planned and built, and the Levitt crew of workmen, fortunate in having steady year-round work, is one of the best. Standard materials and equipment used include the following:

HEATING—General Electric winter air conditioning throughout.

American Builder, April 1940.
LEVITT home as shown in this month's Color Insert (plans below)

INSULATION—Johns-Manville Rockwool insulation.

WINDOWS—Detroit Steel Products' Fenestra steel windows and screens.

REFRIGERATOR—Electrolux.

VENETIAN BLINDS—National Acme warp-proof blinds.

HOT WATER—Whitehead automatic gas storage heater with Monel tank.

PIPING—Anaconda red brass throughout.

PLUMBING FIXTURES—Kohler of Kohler.

GLASS—Pittsburgh plate glass throughout.

ROOFS—Banger slate; copper nails.

KITCHEN RANGES—Tappan visual-controlled.

GARAGE DOORS—Stanley overhead-type doors.

MEDICINE CABINETS—Columbia Metal Box cabinets.

CLOSET FIXTURES—Knape & Vogt K-Venience fixtures.

HARDWARE—Schlage and Sargent.

KITCHEN CABINETS—Boro Wood Products.

Specifications also include poured concrete foundations, thoroughly waterproofed; No. 1 grade and trademarked lumber throughout; copper leaders and gutters.

While Congress, newspapers, radio and forums are telling of the dire need of defence and security, America's architects will do something about the security of living conditions in American HOMES.

By doing what?

Preventing passage of water, moisture and vapor; loss of fuel heat; damage to walls and ceilings; damp and drafty rooms; and damage to structure caused by condensation of water vapor inside wall and roof spaces—by wrapping the house in Brownskin.

"Wrapped in Brownskin" insures a new measure of weatherproofing, damp-proofing and vapor sealing built-in for the life of the house. Brownskin is unique. It is creped to s-t-r-e-t-c-h. It gives everlasting protection. It is especially treated to resist deterioration. It is tough; easily applied in high wind; conforms to uneven surfaces. It is an engineered specialty, waterproofed and moistureproofed by a special Angier vacuum process. There just is no protective wrap like Brownskin. It pays its own way. As necessary for the $5,000 as for the $18,000 house.

NEW IDEA! THRU-WALL FLASHING ceases to be a "tough spot" when Brownskin Through Wall Flashing is used. The principle is common sense—airtight protection where most wear occurs. Different thicknesses or simply laps with edges of Brownskin. Send metric Drawings and Samples of Types 6-2-2; 5-3-3; and 6-2-6; 5-3-3.

DEALERS: WRITE ON YOUR LETTERHEAD FOR DEALER FRANCHISE-OPPORTUNITY

ANGIER CORPORATION
81 Widdell Street, Framingham, Mass.

SEND FOR SAMPLE of "Sam-the-Brownskin-Man." Also A I A File Fold- ers on Brownskin and Copperskin.

Brownskin
For superior to ordinary sheathing papers because (1) Repeats with a stretch of 15%; (2) Specially treated to resist deterioration and highly waterproof; (3) Pure copper bonded to s-t-r-e-t-c-h-a-b Vapor-Seals and dampproofs 100%. Easily shaped by hand. Has the advantages of heavy copper at 1/2 the cost.

Copperskin
Pure copper bonded to s-t-r-e-t-c-h-a-b Brownskin. Vapor-Seals and dampproofs 100%. Easily shaped by hand.
**SMITH MIXERS**

THE T. L. SMITH CO., 2849 N. 32nd St., Milwaukee, Wis.

Please send literature on the following:

☐ Smith S1/2-S  ☐ Smith 7-S  ☐ Smith 10-S

Name ____________________________________________

Address __________________________________________

---

**TRAILSMITH** — 2 wheel end discharge mixer.

**NON-TILT** — 4 wheel side discharge mixer.

**3 1/2-S**

Tilting Mixer with same general design as the famous Smith high speed BOULDER DAM mixers. Handy feed chute. End-to-Center mixing action. Fast tilt and pour discharge through short 40 arc. Costs no more than ordinary "tub" mixers.

**SMITH MIXERS**

THE T. L. SMITH CO., 2849 N. 32nd St., Milwaukee, Wis.

Please send literature on the following:

☐ Smith 3 1/2-S  ☐ Smith 7-S  ☐ Smith 10-S

Name ____________________________________________

Address __________________________________________

---

**BETSY ROSS GIRLS SELL HOMES**

(Continued from page 89)

were erected and sold the first year. As this issue goes to press, a total of 122 individually designed Colonial homes have been built and sold in New Salem, and a new tract of land of 34 acres has just been acquired on the opposite side of the road to accommodate 150 more dwellings.

In addition to the showmanship involved in the Colonial idea, there are many solid and worthwhile features that make home ownership desirable in New Salem. Streets are artistically laid out in winding, wooded terrain. Lot sizes have been continually increased until at present the average is now 85 by 100 feet.

Since Williams and Harter are experienced substantial

---

**WILLIAMS-HARTER’S 1940** version of the historic Miller Cottage of Concord, Mass. The original was built around 1775.

---

**SECOND FLOOR PLAN**

HISTORIC tradition but a modern plan. There are 6 good rooms and 2 baths in this 1940 version of Miller Cottage.

---

**FIRST FLOOR PLAN**

HISTORIC tradition but a modern plan. There are 6 good rooms and 2 baths in this 1940 version of Miller Cottage.
THIS is the Williams-Harter version of Putnam Homestead built in Early Colonial days at Greenwich, Conn.

builders, they are putting up substantial well equipped houses. Their standard specifications include: Curtis Silentite windows, Schlage locks, Standard Sanitary plumbing fixtures, Ketcham chromium shower doors, Chase copper pipe, slate roof, Pacific steel tubular boilers, Pass & Seymour switches and wiring, Bell & Gossett hot water plants, Perfex and Electrol oil burners, Lightolier lighting fixtures, Armstrong linoleum, Detroit-Jewel and Roper gas ranges, Johns-Manville rock wool insulation.

Painting throughout the development is executed in pure white lead paste, linseed oil, turpentine and drier, purchased in separate sealed containers and mixed on the job according to prescribed formulas. The brilliant, lasting colors featured in trim, sash, dormers, gables and shutters are achieved with colors in oil mixed in the formula to obtain the specially desired tones.

FIRST FLOOR PLAN

FLOOR plans of the modern version of Putnam Homestead are compact and efficient.
IN SMALL AND LARGE HOMES

**Added Baths Help You Sell**

Weisways make possible added baths even in small cottages—and there are models equally adaptable for finest homes. Builders everywhere have proved that these leakproof, self-contained cabinet showers help close sales—and add dollar value far beyond their small cost.

Weisways are complete, independent units, thoroughly adaptable to modern construction materials and methods. Weisway receptors of vitreous porcelain have Foot-Grip, No-Slip floor with distinctive sea-shell pattern—safe, sanitary, silent as the tread of a bare foot. Get details and specifications.

MAIL COUPON TODAY

HENRY WEIS MANUFACTURING CO. (Est.1876) ©
401 Oak Street, Elkhart, Indiana

Gentlemen: Please send specifications and detailed information on Weisways for [ ] new homes [ ] modernizing [ ] commercial or industrial building.

Name: ____________________________  
Address: __________________________
City: ____________________  State: ________

ATTENTION—getting envelope in which McGowan encloses advertising folder. People never fail to open this envelope.

**$25-a-Month House**

(Continued from page 95)

In every way possible, McGowan has standardized his basic house and its materials and equipment. This permits him to do a considerable amount of work in his own shop. This workshop is located in a large building he acquired which also houses his office, and, incidentally, three attractive apartments upstairs which are rented and carry the upkeep of the entire structure.

In his workshop, McGowan fabricates an unusually attractive set of kitchen cabinets, built for the most part of 3/4 inch plywood, with flush plywood doors. In addition, he makes door heads, seat covers, corner cupboards, brackets, louvres, linen closets, and many other lumber and millwork items. He keeps at least one man busy all winter, building these stock items. It also enables him to keep his small but regularly employed crew busy inside in rainy weather.

McGowan firmly believes that standardization is the only answer to low-cost home building. He has considered various approaches to the subject and has given thought to the possibility of building standardized wall panels in his shop but as yet has not gone that far. Included in the standard products and equipment he uses are copper gutters, leaders and flashing, copper piping, Richardson & Boynton boilers or Sunbeam warm air furnaces, with Laco High-Low oil burner, Vancouver Artply decorative plywood, Masonite and Celotex interior wall finishes, U. S. G. asphalt roofing, Certigrade Red Cedar shingles, Unique windows, Standard plumbing fixtures, Schlage and National hardware and locks, Armstrong linoleum, Breinig paints.

**Confucius Say**—"He Who Buys Home When Young Has No Rent Problem When Old."  

VISITORS TO "ELMORE" SAY—"The 'Elmore' Best Home Buy on Long Island"

Visit MODEL HOME - Elmore St., C. I. - Open 1 P. M. to 9 P. M.

MODERN 4-ROOM HOME WITH SLATE DECK PORCH
Solid Oak Floors—Modern Kitchen—Beautiful Cabinets—Copper Gutters, Copper Plumbing—Unique Windows (no such weights)—Modern Linoleum in Kitchen—Modern Heating Plan—Automatic Humidification—Radiator in every Room—Summer Hot Water—All These and More—For Only $2,990.

ARBREFIELD BY SUFFOLK AVE. - CENTRAL ISLIP

"Your Furniture Store" Islip, N. Y.

HAROLD MCGOWAN

"He Who Buys Home When Young Has No Rent Problem When Old."  

NO CASH REQUIRED COMPLETE.

Payment Like Rent  $2,990

BUILT ANYWHERE

All Legal Charges Included in Price

Even Confucius has been called upon to help McGowan sell his $2,990 model house.
HAROLD McGOWAN
Announces “THE ELMORE”
A 1940 COMPLETE HOME AT
$2,990 BUILT ANYWHERE
You are invited to make an inspection.
Here are a few of the many features:

- Large four room home
- Modern electric fixtures
- Modern double construction
- New type warm air heating
- Double floors
- with humidification.
- Finished floors, solid oak
- Large cellar
- Linoleum kitchen and bathroom
- Space for playroom
- "Standard" plumbing and fixtures
- Double floors
- Bath and shower
- Large closets
- Special kitchen cabinets with
- Linoleum counter tops
- Cross ventilation
- Large attic
- "Standard" plumbing and fixtures
- Large altic

NO MONEY DOWN!
SMALL MONTHLY PAYMENTS!

SUFFOLK AVE., CENTRAL ISLIP
Phone Central Islip 6220
Model furnished by Brown’s Storage Warehouse.
"Your Furniture Store," Islip, N. Y.

Advertisements used in announcing the new “Elmore” model house.

McGowan backs his construction program with a clever but practical and inexpensive advertising program. He builds and displays a number of attractive signs, and regularly carries small advertisements in the local weekly newspaper. He recently titled his ad—“Confucius Say: ‘He Who Buys Home When Young Has No Rent Problem When Old.’” He has also had much success with a folder enclosed in a No. 10 envelope, which has printed on it in large type:

“HAVE YOU HEARD?
EVERYONE IS TALKING ABOUT IT!
LOOK INSIDE”

This envelope is left at people’s homes and never fails, according to McGowan, to get people to at least open it and read the folder inside.

In fact, McGowan has brought the smart merchandising, planning and building methods of the large metropolitan builders to the rural and small town section of Long Island, and he is getting real results.

Newlyweds and Nearlyweds
Here Is Just What You Have been Looking For!

A BEAUTIFUL 4 ROOM HOME—MODERN IN EVERY DETAIL—
BEST BUY ON LONG ISLAND—
NO CASH REQUIRED
BUILT ANYWHERE
PAY LIKE RENT
$2,990 COMPLETE

You Must See This Home to Appreciate It

“Elmore” Model Home
Elmore St., Central Islip
Phone Central Islip 6220

Furnished by Brown’s Storage Warehouse.
“Your Furniture Store,” Islip

MODEL OPEN EVERY DAY — 1 P.M. to 9 P.M.

A TYPICAL McGowan advertisement is published in his local weekly newspaper at very low cost.
More interesting uses of Masonite Presdwood Temptrtile

Housewives dream of a kitchen like this. Here Masonite Presdwood Temptrtile is painted white with red stripes. Wall clock is an ordinary electric clock mounted behind a removable section of Presdwood Temptrtile. Snack bar, planning desk, sink top and splash board are Masonite Tempered Presdwood.

Spick, span and modern is this bathroom. Presdwood Temptrtile wainscot is painted white with black striping. Above the Temptrtile, Tempered Presdwood is used. In remodeling work these grainless, moisture-resisting boards can be nailed right over old walls. Built-in dressing-table and the convenient cabinets are faced with Tempered Presdwood.

The new-home and remodeling ideas shown on this page will be carried to millions of consumers in Masonite’s national advertising appearing in May. We would like to have you examine Masonite Presdwood Temptrtile at close range and will gladly forward a sample. The coupon below is for your convenience.

MASONITE
PRESDWOOD
TEMPRTILE

The Wonder Wood of a Thousand Uses • Sold by Lumber Dealers Everywhere

MASONITE CORPORATION, Dept. AS-8
111 W. Washington St., Chicago, Ill.

Please send me a free sample and more information about Masonite Presdwood Temptrtile.

Name
Address
City
State

NICELY detailed stone front Colonial variation of Mott plan, shown on page 66.

MOTT SPECIFICATIONS
(Continued from page 67)

The success of this form of large scale operation with its definitely advantageous buying power, supported by sufficient volume to warrant the maintenance of a complete architectural and decorating staff, estimating department, and efficient construction organization, led the Mott Brothers early in 1938 to inaugurate an entirely new type of service in the building field—perhaps best described as a complete builders' service organization.

So, today finds Mott Brothers, Inc., officially out of the building business, busily engaged maintaining this service organization for builders—a plan which makes it possible for even those who operate on a limited scale to gain full advantage of the productive selling methods, operating efficiency, and time and money saving economies the large Mott Brothers' organization offers.

Functioning in this manner, Mott Brothers, Inc., are in reality building equipment and supply dealers. They maintain their own lumber and supply yard, and a complete warehouse which is recognized by the largest building material producers. In addition to the usual lines of building materials, they stock and handle heating equipment, hardware, plumbing supplies and millwork. Materials and equipment are purchased in large quantities at wholesale prices—substantial savings are effected all along the line. Thus, important savings are passed along to their builder customers, and of course, ultimately to the home buyer. Further economies are effected through the maintenance of their own trucking
and delivery service. They are able to quote their builder customers a guaranteed complete price which covers the cost of all equipment and materials for each house, and also furnish them with a detailed estimate showing what the labor cost should be for each individual job.

Under Mott Brothers, Inc., plan, actual construction is handled by the local builder, but the Mott organization provides the plans, estimates the cost, assists the builder in selling, and as stated before, supplies him with materials and equipment at guaranteed prices. Several such setups are already in operation. Houses built to Mott Brothers’ specifications are located in Garden City and Flower Hill, Long Island; Colonia, Short Hills, Teaneck and Tenafly, New Jersey; and in Westport and Bridgeport, Conn. While thus far operations have been confined almost entirely to the large building development mentioned, Mott Brothers are in a position to provide this service for any contractor, large or small, within a 50 mile radius of New York City, whether it be for one house on an individual plot or in connection with a complete development.

As a means of further aiding their builder customers, an inviting home building headquarters has been set up by Mott Brothers, Inc., in the General Motors Building, New York City. Here these builders, as well as home buyers, find a complete display of kitchen and bathroom equipment, tile, wallpapers, millwork, lighting fixtures, hardware and other products used in the construction of houses built to Mott Brothers’ specifications. Prospective home buyers are directed to the jobs as well as to the display room through consistent year-round advertising paid for by Mott Brothers, Inc. Participating builders bring their customers to this display room where sales help is rendered if necessary and architectural consultation is available. Trained decorators assist in picking out appropriate wallpapers, paints, tile colors, lighting fixtures, etc., assuring attractively decorated and finished houses.

Mott Brothers, Inc., believe that by participating in their plan, the local builder is able to give the home buyer a better planned, a better built house at a substantially lower price, and at the same time make a fair profit for himself.

Materials and Equipment

It is impossible to give more than a brief sketch of the Mott specifications. Brief excerpts include the following:

FOOTINGS—1-3-5 concrete 8” thick and 8” wider than the wall it carries.

CELLAR FLOORS—3” thick concrete subfloor with cement finish 1 part screened sand and 2 parts cement, troweled smooth, marked off in 30” squares.

DAMPPROOFING—Exterior cellar walls 1 coat asphalt emulsion.

FIREPLACE—Lining and back hearth fireclay brick laid in cement mortar. Bennett Fireplace Co. ashdump and ecoutment door.

STUCCO—Mohawk Portland Cement stucco.

PLASTER BASE—Perforated gypsum board lath.

PLASTER—Mohawk Keenes cement plaster and White Lime Plaster.

INSULATION—4” Rockwool insulation 2nd floor ceiling, ceilings of dormers, bay windows and 4ver garage or exterior porch.

DOOR AND WINDOW FLASHING—Copper flashing, extended 2” behind felt, neatly turned down ½” on front and secured with nails 6” on center.

ROOF—Slate laid over 24 lb. asphalt-saturated felt.

(Continued to page 144)
Only this method provides
WALL-SIZED PANELS

Now you build houses to order—any size, any type—in 17 to 30 days. The Precision-Built method of construction makes this possible. $4,000,000 of homes have already been erected this way.

You fabricate walls and ceilings in large units—usually in a single piece. No other method of prefabrication gives you these wall-sized panels—which assure you of controlled costs and therefore controlled profits.

Send for your copy of TOMORROW’S HOMES, giving all details of the Precision-Built method of construction—showing you how to control your methods and your costs, using only local labor and with quality materials bought from your local lumber dealer. This book tells how to sell, fabricate and erect houses—in 17 to 30 days.

TOMORROW’S HOMES contains nearly 400 pages and is profusely illustrated with photographs and full construction details. It provides a complete, accurate and rapid estimating system—with area, lineal foot and cubic yard tables from 1’ 0” x 1’ 0” to 50’ x 50’.

This valuable new book—normally priced at $10.00 per copy—is privileged to established builders at $5.00 per copy. Use the coupon below—mail it in today—to make certain of getting your copy.

WEATHERPROOF
HOMASOTE
Insulating and Building Board

HOMASOTE COMPANY, TRENTON, NEW JERSEY

I enclose check ( ) money order ( ) to secure copies of TOMORROW’S HOMES at $5.00 per copy.
( ) I would like further details about Precision-Built Construction.

Name
Address
City       State

We Draw Economies

(Continued from page 60)

exactley 12 feet wide, 16 inches on each floor beam must be wasted, for a 14-foot beam is necessary. Therefore, most room widths in the newest Long Island homes will be found to run 9’4”, 11’4”, 13’4”, etc. The saving on costs through the use of standard size material, in this manner, often goes far toward making larger rooms more economical to build. And this is why the most popular living rooms in the modern Long Island small house measure 11’4”x19’ or 13’4”x20’.

Reduces Waste Hall Space

Similar savings can be effected in strategic planning of ceiling heights by employing standard length studs. Since studs also come in multiples of 2 feet, an 8-foot stud resting on a 2-inch shoe and carrying a 4-inch plate will provide a clear ceiling height of 8’3”. This allows 2 inches for double flooring and 1 inch for lath and plaster ceiling. Occasionally a certain amount of trimming or dressing of studs and beams may be necessary on the job, but this is a minor item compared to the waste of materials and time when non-standard sizes are used. The arrangement of rooms is a vital point in controlling building costs and value of house delivered. Hallways, for example, can waste more cubic space in a house than they are worth. At the same time it is undesirable to place undue use on any room as a passageway to another room. An architect can allow himself about 10 percent of the floor space of a house for more or less waste space. However, the farther he can reduce that 10 percent margin the more efficient his floor plan will prove to be.

Circulation—that is, easy and convenient access to any one room from another, is a major factor in planning the

MOTT SPECIFICATIONS

(Continued from page 143)

TILE—Quarry Tile, matt glazed, cushion edged or vitreous ceramic tile in colors.

KITCHEN CABINETS—Murphy Door Bed Co. cabinets.

STEEL WINDOWS—Campbell steel windows, with 2” x 3” bevelled sill, 3/4” x 3” surrounds set in mastic cement securely screwed to frame. Frames flashed with asphalt felt and sills flashed with copper-plated asphalt impregnated felt.

WOOD SHINGLES—24” red cedar shingles laid with exposures not exceeding 11”.

CLOSET FITTINGS—Knafe & Vogt K-Venience hat, shoe and tie racks.

MEDICINE CABINET—Columbia Metal Box Co. cabinet with 16” x 22” plate glass mirror door.

PIPING—Chase Brass Co. piping.


GAS RANGE—Modern Maid gas range equipped with Robertshaw automatic oven control, automatic lighter and timer.

HEATING—Thrush Flow Control balanced single main hot water heating system, with Electrol E. C. series heating unit, with built-in tankless domestic water heater and oil burner with automatic controls. Richmond recessed radiators. Chase copper tubing with sweat fittings.

GLAZING—B quality with “Hold Fast” metal window putty.
Plumbing Savings Important

The elimination of one interior door is a big saving in the cost of a house under the modern scale of home building. Sometimes a door from living room to kitchen can easily and logically be eliminated in a bungalow layout when the natural passage is through a seldom used dining room. A saving of this kind in a development calling for 200 houses is not an item of $10 for one doorway, but a total of $2,000.

Stock sizes of windows should be specified in planning the small house. Steel casement windows save on the cost of trim, and in the Long Island field where they have been found to add to the salability of homes because of popular demand, their cost averages about the same as double-hung millwork sash.

Worthwhile savings in plumbing can be achieved by the proper arrangement of bathrooms. Plumbing stacks usually rise in a corner of a bathroom. If the bathtub, washstand, and toilet are scattered so that drains and supply lines must be carried around most of the room, considerably greater expense will be involved than in the sensible grouping of fixtures so that shortest lengths of pipe will be required. In almost all modern homes in the Long Island field baths are placed directly above kitchens in 2-story dwellings or directly adjoining kitchens in bungalows. This method of planning saves in pipe lengths and labor, and further increases the efficiency of the plumbing system.

Standard stock sizes in kitchen cabinets should be allowed for in planning the modern kitchen. Factory built wood cabinets have proved to be the most economical in the Long Island field, but the selection of wood or steel largely depends on the relation between cost and public demand. Many builders have found that slightly more expensive details of equipment add more than their cost to the value of a house when it comes to salability. Departures along these lines, however, depend greatly upon local competition.

Universal, however, is structure, and what one may save here, all may save. The blueprints that call for roof rafters running parallel to ceiling beams will be far more economical than plans that show rafters at right angles to beams. Parallel construction avoids conventionally ties between rafters and beam, whereas contrary construction entails auxiliary ties that add to the cost of building.

The small house always has been and always will be first of all an economic problem. If a builder aims to lure buyers to his houses he will find the charming made-moiselle called Architecture far from being an expensive luxury, but actually a forthright asset.
THAT IS Sales Appeal

SALES MAGIC IN ITS END-LESS COMBINATIONS

TYLAC enables you to take full advantage of the selling power in that word "Exclusive." You can personalize each job to suit the individual. The 4 basic TYLAC patterns, 16 lustrous colors, Prestwood mouldings and stainless steel trims, make possible an endless variety of strikingly beautiful effects.

PERMANENCE THAT MEANS ECONOMY

TYLAC is predecorated—needs no painting or varnishing. It is not damaged by hot water, fruit juices, fats, oils, household acids, or alcoholic beverages. TYLAC eliminates the chipping, cracking, and crazing common to many wall coverings. EASILY APPLIED over any surface, old or new.

USE TYLAC on every job and you'll get more jobs.

Tylac Company
Monticello, Illinois

Always new, smart, modern wall coverings for Any Interior where beauty, permanence, and economy are prime factors.

MAIL COUPON TODAY
for FREE Copy of the Tylac "Door Opener"

1..."Door Opener"
2...Sample of Tylac sent to any established builder, contractor, architect, lumber yard or building material supplier. Write on your business stationery.
3...I would like to talk with a Tylac Representative.

Name
Address
(State when)

THE STEEL SQUARE

(Continued from page 107)

rise at the center of the span cannot be measured from the drawing. A roof of this kind is shown in outline in Fig. 4. In such a case, the run and rise can be measured from the drawing to scale at some point other than the center of the building, as indicated in Fig. 4, where the rise of the rafter above the top of the wall plate measured at a point 3'-6" from the inside of the wall plate is seven feet. The rise and run will both be in feet but they can be applied to the steel square to the scale of one-inch-equals-one-foot as shown in Fig. 5 where the line A-B has the same slope as the roof shown in Fig. 4. If, then, the square is laid on a large sheet of strong brown paper and heavy marks made along the outside edges of the tongue and blade, the points A and B can be located on these lines and the line A-B can be drawn through them after lifting the square. A-B will then be the line corresponding to the slope of the roof.

Now if the mark along the outside edge of the tongue on which the point A appears is prolonged to the right, the square can be set down on this mark again, as shown by the dotted lines, with the 12 inch mark on the outside edge of the tongue placed at the point A, so that the distance from the heel of the square to the point A will correspond to a one foot run. Then the point at which the line A-B (extended) crosses the outside edge of the body or blade of the square will show the rise-per-foot-run of the roof slope—in this case 24 inches per foot run.

Length of Rafter

Having established the rise-per-foot-run, the length of the rafter per-foot-run can be read off directly from the tables on the face of the steel square and from this the total length of the rafter from point P to point O can be found by multiplying the length-per-foot-run by the number of feet in the run. This will be the length of the rafter measured along the measuring line from point P to point O in Fig. 2, or from point P to point O in Fig. 4.

Fig. 6 shows that the Measuring Line is the straight line which might be drawn on the side of a rafter parallel to the line of the top edge of the rafter and passing through the outside upper edge of the wall plate and the length of the rafter per foot run referred to by the note on the face of the body of the steel square reading—"LENGTH OF MAIN RAFTERS PER FOOT RUN" is measured along this line as shown in Fig. 6, which explains itself. It shows the total run divided up into sections of one foot each and indicates the rise corresponding to each of these sections (in other words, the rise-per-foot-run) and also the length along the measuring line corresponding to each of these sections of the run and labelled LENGTH-PER-FOOT-RUN. It will be seen
that there are just as many sections of the total length marked "length per foot of run" as there are sections of the total run marked "12 inches," and this shows that multiplying the length-per-foot-run by the number of feet in the total run will give what is known as the "length" of the rafter, that is to say the length from point P to point O. To this of course must be added the amount of the projection of the rafter beyond the wall plate at the eaves, which is sometimes called the "tail" of the rafter. In the case of the rafters shown in Fig. 1, there

(Continued to page 148)
In heating problems, rely on the ROUND OAK DEALER

AUTOMATIC COAL HEAT For Homes of All Sizes

No matter what size or style of home you build, there is a guaranteed Round Oak automatic coal furnace and air conditioner to meet every heating requirement. Illustrated above is the SKX Airkenzer, one of the most popular units, built especially for efficient and economical modern heating. Equipped with the modern Round Oak Stoker (or any other standard stoker) it provides all the advantages of automatic coal heat, plus the many comforts of winter air conditioning...at a cost that will satisfy the most exacting home buyers. It will pay you to learn all about the famous Round Oak line today...and the important sales advantages it offers. See the Round Oak dealer or mail the coupon for latest data.

ROUND OAK of Dowagiac, Mich.

STOVES • RANGES • FURNACES • OIL BURNERS • AIR CONDITIONERS • STokers

The Round Oak Company, Dowagiac, Michigan — Dept. AB-4. Send complete information on your Coal Fired Air Conditioners.

An Opportunity For BUILDING SUPPLY DEALERS

If you are interested in making a direct dealer connection to handle Round Oak heating equipment (providing there is not an active dealer in your city), write us today. More and more building supply dealers are taking on furnace lines...putting the profits in their own pockets!

Use of the Rafter Table

A study of Fig. 6 suggests that another way to find the length-per-foot-run would be to take 12 inches on the outside edge of the tongue of the square and the rise-per-foot-run on the outside edge of the body or blade and to measure off the diagonal distance between them—distance A-C in Fig. 5. However, there is an easier way by which the length can be read off directly from the rafter tables on the face of the square. To do this you first have to find the rise-per-foot-run as explained before and then find in the inch line on the outside edge of the face of the body of the square the figure which is the same as this rise. It might, for example, be 8 inches as shown in Fig. 7. On the best squares there would be found underneath this inch marking a column of figures as shown in Fig. 7, and the top figure in this column will be in each case the length (in inches and hundredths of an inch) per-foot-run corresponding to the rise per-foot-run which appears in the inch line on the edge of the square directly above. See Fig. 7. The rest of the figures in the column underneath the inch mark 8 are for other purposes, which will be explained later on.

RULE: The rule, then, is as follows:

To find the lengths of common rafters per foot of run, look on the first line below the outside edge of the face of the blade, see Fig. 9, which is marked “length of main rafters per foot run,” and under each of the numbers in the inch line on the top edge of the blade of the square from 18 inches down to 2 inches will be found numbers giving, in inches and hundredths of an inch, the length per foot run of rafters whose rise per foot run is 2 inches, or 18 inches, or any number of inches in between. Then, to find the “length” of the common rafter, multiply this “length-per-foot-run” by the number of feet in the run, which is one-half of the distance in feet across the building from outside to outside of the wall plates.

EXAMPLE: Find the length of a common rafter in a roof where the rise per foot of run is 8 inches and the width of the building from the outside edge of the wall plate on one side to the outside edge of the wall plate on the other side is 20 feet. The roof will have a one-third pitch. The run will be one-half of 20 feet or 10 feet.

First, find the rafter tables on the face of the steel square blade, see Fig. 8. Locate on the inch line along the outside edge of the blade the figure which is the same as the rise per foot run of the roof. In this example, the figure will be 8, since the rise per foot run is 8 inches. See Fig. 7. Next, look on the first line under the figure

THE STEEL SQUARE

(Continued from page 147)

is no tail at all and the measuring line coincides with the top edge of the rafter. The steel square is shown in Fig. 6 in the same relative position as it occupies in Fig. 2.

8 and you will find 14.42, which means that the length of the rafter per foot run is 14.42 inches. Since the run is 10 feet and the length of the rafter per foot run is 14.42 inches, the “length” of the rafter will be 10 x 14.42 inches.
Prefabricated Steel Panel System  

(Continued from page 110)

value is especially high, since it is not easily damaged by taking down or transporting to another site. Its light weight and compactness reduce shipping costs. Lindsay Structure panels are superior in weather tightness to most sheet metal joints except good crimp-and-solder or solid line welding. The roof can be quickly and thoroughly waterproofed by applying a calking compound to the joints. Its parts are furnished with a black steel or galvanized finish, to which paint or special finishes can be easily applied. Insulating material can be placed between the wall and lining by fastening furring strips to the flanged channels.

Lindsay Structure can be used to make general industrial buildings, pump houses, meter houses, garages, warehouses, small shops, contractor's shacks, freight houses and loading docks, as well as tourist cabins, concession stands, filling stations, and other structures. Its unique construction lends itself to an unlimited number of applications.

Beauty is ever the same, but men's ideas of beauty change. Now, modern architecture has brought "streamlined" simplicity to home design. Modern furniture has introduced simple surfaces of fine-grained woods. Decorators have looked for floors in harmony, and found them in Maple... Northern Hard Maple.

Maple's delicate graining matches modern furniture. Its cheerful beauty fits modern decorative schemes. It seems to wear forever. Its lasting smoothness is easy to finish and easy to clean. In every way, Maple is modern.

You can lay it "natural" or color-stained, in strips, blocks, or patterns, color-selected or regular, in wide variations. And you lay it "trouble-free," sure of a satisfied customer.

Today, floor modern homes with Maple. And a way to be sure of all Northern Hard Maple, is to look for the MFMA trademark on the wood.

MAPLE FLOORING MANUFACTURERS ASSOCIATION  
1781 McCormick Building, Chicago, Illinois  
See our catalog data in Sweet's, Sec. 11/78.  
Write for folder on floor finishes suitable for homes.
WALKED ACROSS

THIS PARLOR FLOOR

—YET IT LOOKS AS IF NOBODY HAD STEPPED THERE! Across the threshold of the Appalachian Oak Floor exhibit at Chicago's World’s Fair, stepped a million people, treading, shuffling, scraping, in a floor-punishing procession. When the last visitor had gone, when they came to cart away the furniture, the floors still gleamed in brilliant beauty, almost as fresh-looking and attractive as at the day of the opening.

Those floors were finished with shellac! Shellac is built to take punishment. It's the toughest, most scar-resisting finish ever created. Bring down a hammer blow on a shellacked floor, and it may dent, but the shellac won't crack! Shellac preserves the wood while it protects the surface.

On your next building, write enduring beauty for the floors into your blue-prints... specify a good brand of pure shellac.

SHELLAC INFORMATION BUREAU
70 Pine Street, New York City

America's Largest Home Builder

(Continued from page 71)

handled the firm's sales literature, newspaper advertising and promotion material. Some of the successful architectural planning methods employed by Mr. Allen are described in another article in this issue. The sales promotion method of Mr. McKenna and his associates in Metropolitan Advertising Agency of New York City, were described in detail in the April 1939 American Builder.

Although firms such as Gross-Morton are frequently described as speculative builders, there is actually very little speculative home building involved. Sales are made from the model homes built early in the year. Through intensive advertising, prospects are brought out to view the model homes where they select the style that fits their taste and pocketbook, the lot on which they want it and the interior colors and decorations that appeal to them. As a rule, Gross-Morton orders are far enough ahead so that they can build at least 10 to 25 houses at a time, and frequently much larger numbers.

With nine different floor plans, each of which may have a variety of exterior treatments, the home owner has an ample range of different houses to choose from.

Two Most Popular Types of Homes

Accompanying this article are shown the most popular two-story Gross-Morton house known as the J-type and the most popular one-story model known as the JBC bungalow. This little bungalow has much to recommend it, with the front and side entrances, two coat closets and stairs cleverly grouped in one corner at the front of the house. The bedrooms are at the rear where they have privacy and quiet. The bathroom and kitchen plumbing is economically placed back to back. In addition to the five rooms and bath downstairs, the home owner can have several additional rooms and a bath, if desired, upstairs providing an especially large house for the price.

The Gross-Morton interiors are colorful and attractive, and special attention is paid to the kitchens and bathrooms. Practically all the houses have fully tiled baths, with a separate shower stall with glass door. Other materials and equipment include: Celotex Vapor-seal sheathing, U. S. Gypsum Rocklath plaster base with three coats of plaster, General Motors Delco oil burners with Thatcher steam boilers, Ketcham glass shower stall doors by G. M. Ketcham Mfg. Corp., of Brooklyn, Ludowici-Celadon tile roofs, copper water pipes and flashing throughout, Kohler of Kohler bathroom fixtures in color, Boro Wood Products kitchen cabinets.

The Gross boys and Larry Morton are proud of the job they are doing and confident of the future. They are particularly proud of the fact that they are now getting the second generation of

BOOKCASE niches in a Gross-Morton living room.
home buyers in their newer developments, the sons and daughters of people who bought homes in their earlier developments. "Nothing could make us feel better," Larry Morton told American Builder, "than to have a young couple say, as one did just the other day, 'When we got married we decided that nothing but a Gross-Morton home would do—just as our parents did.'"

ANOTHER variation of popular JBC-type Gross-Morton bungalow, with space for additional rooms on second floor. Floor plan shown on page 71.

* * *

Designing Schools

(Continued from page 99)

tical properties. Thus was avoided the necessity of installing special acoustical board. And reduction of noise and echo in a schoolroom or in the corridors is highly desirable.

To reduce noise further, linoleum was used in the corridors and in the kindergarten; asphalt tile floored all the classrooms. Ceilings were finished with a wood fibre board.

School planning requires more space per room than it used to. This does not necessarily mean that each teacher carries a heavier pupil load. Rather, the extra space is needed because of the change in educational technique. Emphasis is being placed more and more on interest-group instruction as represented by the domestic and manual arts and sciences.

Taking this trend into account, classrooms were made 22x32½ ft. This is the equivalent of more than 8 per cent more floor area than is found in the classroom of customary size. The school contains six rooms 22x32½ ft. and two more this size augmented by 9x16-ft. alcoves.

All hardware and finishing were selected with economy and low maintenance in mind. Everything, however, was chosen in accordance with modern standards of comfort and health. That these were secured is evident from the following partial list of features:

Salt-glaze tile base throughout, concrete stairs with grits cast in the treads, concrete stairway railings, vitreous china plumbing fixtures throughout, cored fire alarm system, two lighting circuits per room with the inner row of lights controlled by electric eyes, a central radio and automatic phonograph with a speaker in each room, electric clocks in all rooms, split system of ventilation and forced hot water heating, zone control of hot water heat, and copper water pipe.

Board and Yates were the general contractors. James E. Coent was the plumbing and heating contractor, and M. F. Bowers the electrical contractor.
Modern Rubber Roller Drum Drive

No ring gear—no pinion—no countershaft, less wear—smooth running.

LOAD WHILE MIXING—INCREASES PRODUCTION 40 TO 50%

END DISCHARGE

Write For Bulletin 2X

KWIK-MIX CONCRETE MIXER CO.
PORT WASHINGTON . . . WISCONSIN

NEW 3½-S KWIK-MIX
MIX
non-till

NATIONAL RADIATOR PRODUCTS

250 Largest Long Island Developments
(Continued from page 85)

<table>
<thead>
<tr>
<th>No.</th>
<th>Development</th>
<th>Price Range</th>
<th>1939</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>22</td>
<td>Bradford (Nathan Bright), Elmhurst</td>
<td>5,000-6,500</td>
<td>20</td>
<td>40</td>
</tr>
<tr>
<td>23</td>
<td>Mayflower (Bernkoff), Elmhurst</td>
<td>5,000-6,500</td>
<td>30</td>
<td>50</td>
</tr>
<tr>
<td>23</td>
<td>High Park Homes (Human &amp; Rosenberg), Elmhurst</td>
<td>5,000-6,500</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>23</td>
<td>Juniper Park Homes, Elmhurst</td>
<td>4,900-6,000</td>
<td>20</td>
<td>150</td>
</tr>
<tr>
<td>23</td>
<td>Green Park Estates (Turner &amp; Noone), Elmhurst</td>
<td>5,000-6,000</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>23</td>
<td>Philhaven Homes (Kalvarsky &amp; Davis), Elmhurst</td>
<td>5,250-6,000</td>
<td>50</td>
<td>50</td>
</tr>
<tr>
<td>23</td>
<td>Goodwill Homes (N. J. Manone), Elmhurst</td>
<td>5,250-6,000</td>
<td>40</td>
<td>50</td>
</tr>
<tr>
<td>23</td>
<td>Choice Homes (H. W. Gibbs), Elmhurst</td>
<td>5,250-6,000</td>
<td>40</td>
<td>50</td>
</tr>
<tr>
<td>23</td>
<td>Fairview Homes (Bernkoff), Elmhurst</td>
<td>5,250-6,500</td>
<td>40</td>
<td>50</td>
</tr>
<tr>
<td>23</td>
<td>Superb (H. Guterman &amp; Miller), Elmhurst</td>
<td>6,000-6,500</td>
<td>50</td>
<td></td>
</tr>
<tr>
<td>23</td>
<td>Victoria (David Minkle), Middle Village</td>
<td>5,000-6,250</td>
<td>15</td>
<td>40</td>
</tr>
<tr>
<td>23</td>
<td>City Park Homes (Sol Atlas)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>24</td>
<td>Splendid Homes (Jocquef Schupf), Forest Hills</td>
<td>6,000-7,000</td>
<td>25</td>
<td>35</td>
</tr>
<tr>
<td>24</td>
<td>Nu Mode Homes (E. Scarpinato &amp; Sons), Forest Hills</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>24</td>
<td>Integrity Homes (Fleischer), Rego Park</td>
<td>5,400-6,500</td>
<td>20</td>
<td>40</td>
</tr>
<tr>
<td>24</td>
<td>Forest Hills West Homes, Forest Hills</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>24</td>
<td>Forwin Homes (Louis Jacobi), Forest Hills</td>
<td>5,000-6,500</td>
<td>40</td>
<td>50</td>
</tr>
<tr>
<td>24</td>
<td>Armon Homes (Armon Olivier), Forest Hills</td>
<td>5,000-6,000</td>
<td>50</td>
<td>60</td>
</tr>
<tr>
<td>24</td>
<td>Janel Homes (Kessler), Ridgewood</td>
<td>5,000-7,000</td>
<td>50</td>
<td>75</td>
</tr>
<tr>
<td>24</td>
<td>Nira Homes (Greig &amp; Sifferien), St. Albans</td>
<td>6,500-7,500</td>
<td>50</td>
<td></td>
</tr>
<tr>
<td>24</td>
<td>Villati Homes (Anthony Villati), Forest Hills</td>
<td>6,000-7,500</td>
<td>50</td>
<td></td>
</tr>
<tr>
<td>24</td>
<td>Fulton Homes (Joe Fulton), (See Jasland), Forest Hills</td>
<td>5,970</td>
<td>70</td>
<td></td>
</tr>
<tr>
<td>24</td>
<td>Independence Homes (Henry Must), Bayside</td>
<td>5,500-7,000</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>30</td>
<td>Monaco Homes (James Monaco), Bayside</td>
<td>5,000-7,000</td>
<td>40</td>
<td>50</td>
</tr>
<tr>
<td>31</td>
<td>Selig (Gustav Selig), Forest Hills</td>
<td>5,000-6,500</td>
<td>20</td>
<td>40</td>
</tr>
<tr>
<td>31</td>
<td>Prime Homes (Halbruch &amp; Bluestone), Forest Hills</td>
<td>5,000-6,000</td>
<td>50</td>
<td>100</td>
</tr>
<tr>
<td>31</td>
<td>Forest Park Homes (H. Hildebrand), Bayside</td>
<td>5,000-6,000</td>
<td>30</td>
<td>50</td>
</tr>
<tr>
<td>31</td>
<td>College Homes, Bayside</td>
<td>5,000-6,750</td>
<td>40</td>
<td>70</td>
</tr>
<tr>
<td>31</td>
<td>Plass Homes (M. Dalis), Bayside</td>
<td>6,000-7,000</td>
<td>30</td>
<td></td>
</tr>
<tr>
<td>31</td>
<td>Flushing Estates (M. J. Roth), Lochside</td>
<td>4,300-5,500</td>
<td>100</td>
<td>200</td>
</tr>
<tr>
<td>31</td>
<td>Harmon Homes, Forest Hills</td>
<td>5,500-6,500</td>
<td>25</td>
<td>30</td>
</tr>
<tr>
<td>31</td>
<td>Hillside Court, Forest Hills</td>
<td>3,000-5,500</td>
<td>30</td>
<td>40</td>
</tr>
<tr>
<td>31</td>
<td>Gross-Morton Bayside Hills (Geo. Gross), Forest Hills</td>
<td>6,000-8,500</td>
<td>100</td>
<td>400</td>
</tr>
</tbody>
</table>

American Builder, April 1940.
American Builder, April 1940.

40. Morton-Praver (Barney L. Morton), Flushing...
41. Green Park Estates (J. L. Turner), Flushing...
42. Insured Homes (Town House), (B. M. Hess),
43. Kessler Homes (Sidney Kessler), Ridgewood...
44. Estates Housing (Paul Roth), Flushing...
45. Kew Gardens Hills (A. B. Wolosoff), Kew Gar-
46. Parkwy Community (E. F. Bonner), Jamaica...
47. Surrey Estates (Max Oehlert), Jamaica.
48. University Manor (Hillier & Edkins), Flushing...
49. Pless Homes (M. Dallis), Flushing...
50. Orseth, Flushing...
51. Marvel Homes (Friedel & Zwek), Flushing...
52. Horace Harding Homes (Morton Wolosoff)
53. Moss Homes, Inc. (Joseph Moss), Flushing...
54. Holliswood Homes (Paul Roth), Flushing...
55. Gross-Morton-Jamaica Estates (George Gross),
56. Approved Homes (Jos. B. Alderman), Flushing...
57. Cunningham Pl. (Wm. Adelman), Flushing...
58. Hollis Hills Homes, Hollis...
59. Fresh Meadow Homes (Adelman), Flushing...
60. Foch Building Corp., Flushing...
61. Sterlingshire-United Associates, (S. A. Gogel),
62. Horch's Homes (Frank J. Horsch), Bellerose...
63. Park Hill Homes (Rose), Bellerose...
64. Bellerose Manor (L. C. Lemmerman), Bellerose...
65. Insured Homes (B. M. Hess), Bellerose...
66. Dahl Homes, Bellerose...
67. Dominion Homes (Phillips Bros.), Bellerose...
68. Hillside Estates (D. Warshauer), Harricks...
69. Hillwood Homes (Lee), Hollis...
70. Sterlingshire (Sam Gogel), Jamaica Estates...
71. Gaw-nel Homes (Nelson), Queens Village...
72. Spencer Homes, Inc. (Geo. La Pasta), Queens
73. Village...
74. Plymouth Heath (B. B. Evans), Springfield,
75. Gilroy Homes (Casper & Goldfinn), Jamaica...
76. Holban Homes (Max Spevack), St. Albans...
77. Strand Homes, Inc. (Ed. Miller), St. Albans...

42. Insured Homes (Town House), (B. M. Hess),
Kew Gardens...
46. Parkwy Community (E. F. Bonner), Jamaica...
48. University Manor (Hillier & Edkins), Flushing...
49. Pless Homes (M. Dallis), Flushing...
50. Orseth, Flushing...
51. Marvel Homes (Friedel & Zwek), Flushing...
52. Horace Harding Homes (Morton Wolosoff)
53. Moss Homes, Inc. (Joseph Moss), Flushing...
54. Holliswood Homes (Paul Roth), Flushing...
55. Gross-Morton-Jamaica Estates (George Gross),
56. Approved Homes (Jos. B. Alderman), Flushing...
57. Cunningham Pl. (Wm. Adelman), Flushing...
58. Hollis Hills Homes, Hollis...
59. Fresh Meadow Homes (Adelman), Flushing...
60. Foch Building Corp., Flushing...
61. Sterlingshire-United Associates, (S. A. Gogel),
62. Horch's Homes (Frank J. Horsch), Bellerose...
63. Park Hill Homes (Rose), Bellerose...
64. Bellerose Manor (L. C. Lemmerman), Bellerose...
65. Insured Homes (B. M. Hess), Bellerose...
66. Dahl Homes, Bellerose...
67. Dominion Homes (Phillips Bros.), Bellerose...
68. Hillside Estates (D. Warshauer), Harricks...
69. Hillwood Homes (Lee), Hollis...
70. Sterlingshire (Sam Gogel), Jamaica Estates...
71. Gaw-nel Homes (Nelson), Queens Village...
72. Spencer Homes, Inc. (Geo. La Pasta), Queens
Village...
73. Plymouth Heath (B. B. Evans), Springfield,
74. Gilroy Homes (Casper & Goldfinn), Jamaica...
75. Holban Homes (Max Spevack), St. Albans...
76. Strand Homes, Inc. (Ed. Miller), St. Albans...

40. Morton-Praver (Barney L. Morton), Flushing...
41. Green Park Estates (J. L. Turner), Flushing...
42. Insured Homes (Town House), (B. M. Hess),
Kew Gardens...
46. Parkwy Community (E. F. Bonner), Jamaica...
48. University Manor (Hillier & Edkins), Flushing...
49. Pless Homes (M. Dallis), Flushing...
50. Orseth, Flushing...
51. Marvel Homes (Friedel & Zwek), Flushing...
52. Horace Harding Homes (Morton Wolosoff)
53. Moss Homes, Inc. (Joseph Moss), Flushing...
54. Holliswood Homes (Paul Roth), Flushing...
55. Gross-Morton-Jamaica Estates (George Gross),
56. Approved Homes (Jos. B. Alderman), Flushing...
57. Cunningham Pl. (Wm. Adelman), Flushing...
58. Hollis Hills Homes, Hollis...
59. Fresh Meadow Homes (Adelman), Flushing...
60. Foch Building Corp., Flushing...
61. Sterlingshire-United Associates, (S. A. Gogel),
62. Horch's Homes (Frank J. Horsch), Bellerose...
63. Park Hill Homes (Rose), Bellerose...
64. Bellerose Manor (L. C. Lemmerman), Bellerose...
65. Insured Homes (B. M. Hess), Bellerose...
66. Dahl Homes, Bellerose...
67. Dominion Homes (Phillips Bros.), Bellerose...
68. Hillside Estates (D. Warshauer), Harricks...
69. Hillwood Homes (Lee), Hollis...
70. Sterlingshire (Sam Gogel), Jamaica Estates...
71. Gaw-nel Homes (Nelson), Queens Village...
72. Spencer Homes, Inc. (Geo. La Pasta), Queens
Village...
73. Plymouth Heath (B. B. Evans), Springfield,
74. Gilroy Homes (Casper & Goldfinn), Jamaica...
75. Holban Homes (Max Spevack), St. Albans...
76. Strand Homes, Inc. (Ed. Miller), St. Albans...

40. Morton-Praver (Barney L. Morton), Flushing...
41. Green Park Estates (J. L. Turner), Flushing...
42. Insured Homes (Town House), (B. M. Hess),
Kew Gardens...
46. Parkwy Community (E. F. Bonner), Jamaica...
48. University Manor (Hillier & Edkins), Flushing...
49. Pless Homes (M. Dallis), Flushing...
50. Orseth, Flushing...
51. Marvel Homes (Friedel & Zwek), Flushing...
52. Horace Harding Homes (Morton Wolosoff)
53. Moss Homes, Inc. (Joseph Moss), Flushing...
54. Holliswood Homes (Paul Roth), Flushing...
55. Gross-Morton-Jamaica Estates (George Gross),
56. Approved Homes (Jos. B. Alderman), Flushing...
57. Cunningham Pl. (Wm. Adelman), Flushing...
58. Hollis Hills Homes, Hollis...
59. Fresh Meadow Homes (Adelman), Flushing...
60. Foch Building Corp., Flushing...
61. Sterlingshire-United Associates, (S. A. Gogel),
62. Horch's Homes (Frank J. Horsch), Bellerose...
63. Park Hill Homes (Rose), Bellerose...
64. Bellerose Manor (L. C. Lemmerman), Bellerose...
65. Insured Homes (B. M. Hess), Bellerose...
66. Dahl Homes, Bellerose...
67. Dominion Homes (Phillips Bros.), Bellerose...
68. Hillside Estates (D. Warshauer), Harricks...
69. Hillwood Homes (Lee), Hollis...
70. Sterlingshire (Sam Gogel), Jamaica Estates...
71. Gaw-nel Homes (Nelson), Queens Village...
72. Spencer Homes, Inc. (Geo. La Pasta), Queens
Village...
73. Plymouth Heath (B. B. Evans), Springfield,
74. Gilroy Homes (Casper & Goldfinn), Jamaica...
75. Holban Homes (Max Spevack), St. Albans...
76. Strand Homes, Inc. (Ed. Miller), St. Albans...

40. Morton-Praver (Barney L. Morton), Flushing...
41. Green Park Estates (J. L. Turner), Flushing...
42. Insured Homes (Town House), (B. M. Hess),
Kew Gardens...
46. Parkwy Community (E. F. Bonner), Jamaica...
48. University Manor (Hillier & Edkins), Flushing...
49. Pless Homes (M. Dallis), Flushing...
50. Orseth, Flushing...
51. Marvel Homes (Friedel & Zwek), Flushing...
52. Horace Harding Homes (Morton Wolosoff)
53. Moss Homes, Inc. (Joseph Moss), Flushing...
54. Holliswood Homes (Paul Roth), Flushing...
55. Gross-Morton-Jamaica Estates (George Gross),
56. Approved Homes (Jos. B. Alderman), Flushing...
57. Cunningham Pl. (Wm. Adelman), Flushing...
58. Hollis Hills Homes, Hollis...
59. Fresh Meadow Homes (Adelman), Flushing...
60. Foch Building Corp., Flushing...
61. Sterlingshire-United Associates, (S. A. Gogel),
62. Horch's Homes (Frank J. Horsch), Bellerose...
63. Park Hill Homes (Rose), Bellerose...
64. Bellerose Manor (L. C. Lemmerman), Bellerose...
65. Insured Homes (B. M. Hess), Bellerose...
66. Dahl Homes, Bellerose...
67. Dominion Homes (Phillips Bros.), Bellerose...
68. Hillside Estates (D. Warshauer), Harricks...
69. Hillwood Homes (Lee), Hollis...
70. Sterlingshire (Sam Gogel), Jamaica Estates...
71. Gaw-nel Homes (Nelson), Queens Village...
72. Spencer Homes, Inc. (Geo. La Pasta), Queens
Village...
73. Plymouth Heath (B. B. Evans), Springfield,
74. Gilroy Homes (Casper & Goldfinn), Jamaica...
75. Holban Homes (Max Spevack), St. Albans...
76. Strand Homes, Inc. (Ed. Miller), St. Albans...

Friendly Doorways by McKinney give EXTRA SALES APPEAL to your Homes

First impressions count—and a Friendly Doorway is a silent salesman for good taste and quality building. McKinney Forged Iron Hardware lends warmth and charm to every door and is adaptable to most homes in any price range.

You’ll find quality hardware throughout the home helps make SALES and SATISFIED HOME OWNERS.

McKinney Manufacturing Company • Pittsburgh, Pa.

75 YEARS OF DESIGNING AND MANUFACTURING GOOD HARDWARE
**KOST KUTTER JR.**

A keen sawing outfit that gets the work done quicker. Tilting top—10" saws powered with famous 3.6 H. P. Briggs & Stratton engine. Saw dust proofed. Easy to transport.

**KOST KUTTER SR.**

Sensationally new. Completely enclosed and saw-dust proofed mechanism. Tilting top. 14" saws. 6 H.P. Wisconsin engine. Takes up to 4 inch stock. CMC also makes the "Power Sawyer"...a big outfit with 16" or 18" blades for 6" stuff.

**NEW CATALOG**

Get this book showing the newest Mixers, Pumps, Hoists, Saw Rigs, Carra, Barrows and other new equipment in this year's wonderful new CMC line.

**CONSTRUCTION MACHINERY COMPANY**

WATERLOO, IOWA

---

**The New VENTO CHAMPION**

Combines the Chief Advantages of ALL Basement Windows in ONE

In this day of vital interest in better basements you'll find the new Vento Champion basement window the sure-fire route to arousing interest in every prospect; to assuring complete satisfaction to every owner. Operating both as a top-hinged and a bottom-hinged window, it gives each individual exactly the type of ventilation and opening he desires. Moreover, it is an extremely well built window; exceptionally weather-tight and bound to operate perfectly under all conditions; designed for quick and easy installation, neat and quick attachment of screens and the most practical method of puttyless glazing.

**Costs Nothing Extra**

Not one cent more than any other first line window: less than some, in fact. Ask your dealer about the new Champion at once, or write for complete details. We're confident it's THE basement window you will want to standardize on.

**A Complete Line**

Vento offers you a complete line of window products for all types of buildings. Write to us for complete information on any type you are interested in. Or, better still, ask your dealer about them.

Vento Steel Products Company has been long and favorably known for its excellent dealer cooperation.

---

**250 Largest Long Island Developments**

(Continued from page 153)

43. Equity Homes, Inc. (Louis Fleisher), St. Albans...5,500 35
44. Aura (Tolle & Galuso), St. Albans...5,500 35
45. Grenendale Homes, Inc. (Law & Paul Reizen), St. Albans...5,500 35
46. Newman Homes (Jas. J. Newman), St. Albans...6,000 75
47. Dorset Homes, Inc. (Olanoff & Spivack), St. Albans...5,500 35
48. Queens Lawn (Baron), St. Albans...5,500 25
49. Gateway (George Spravick), St. Albans...5,500 50
50. Southern State Parkway (E. Beck), St. Albans...5,000 200
51. Reisen, St. Albans...5,000 60
52. Garland Manor Homes, Inc. (E. Beck & Jos. Moccetti), St. Albans...5,000 40
53. Morton Homes (Goldberg), St. Albans...5,500 60
54. Jefferson Homes, Inc. (V. Ruggiero), St. Albans...5,500 75
55. Insured Homes (R. M. Hess), St. Albans...4,990 95
56. Merrick Park Gardens Corp., Jamaica...5,500 60
57. Bonsell Homes, Elmont...3,800 50
58. Waidron Homes (Sam & Ben Reizen), St. Albans...5,500 60
59. Newman Homes, St. Albans...6,000 75
60. Eton Homes (De Charlie), St. Albans...5,500 60
61. Excelsior (Gladston & Etkin), St. Albans...5,500 75
62. Kurgold (Kurland & Goldberg), Flushing...5,500 60
63. Franston (Walter Spackler), Elmont & St. Albans...4,500 550
64. Thrifty Cottages (Sam Wanam), St. Albans...4,500 500
65. Lincoln Homes, Inc. (Jos. Bierdick), St. Albans...5,500 500
66. Select Homes (Jack Greenman), St. Albans...5,500 25
67. Haben Homes, Inc. (Levin), St. Albans...5,500 60
68. Skillman Homes Corp. (Ben Biegeleisen), Frankilne Square...5,000 75
69. Fallows & Friese (Frank K. Fallows), Uniondale & W. Hempstead...3,000 40
70. Forman, New Hyde Park & St. Albans...4,250 500
71. Brampton (Roth), Springfield...5,000 250
72. Brody, Laurelton...4,500 750
73. Jay-Bee (Joe Bierdick), Laurelton...5,000 400
74. Scottford Bros., Rosedale...5,000 400
75. Delwood (Andrew Warwick), Ozone Park...5,000 400

---

**Vento Steel Products Company**

MUSKEGON, MICHIGAN
NASSAU COUNTY

Map No. Development Price Range
1. North Shore Acres (W. Uhl, H. L. Carey), Glen $6,000-$8,500
2. Montfort Hills (Theo. M. Lay), Port Washington 7,000-10,000
3. Harbor View Homes (C. F. Standinger), Glen Head 5,000-6,500
4. North Shore Park Homes, Great Neck 4,000-7,000
5. Saddle Rock Estates (Robt. J. Rose), Great Neck 8,500-13,000
6. New Salem (Williams-Harter Corp.), Port Washington 7,000-10,000
7. Chester Hill (W. Busch), Manhasset 7,000-12,500
8. Mott Bros. (H. B. Mott), Flower Hill 6,500-10,000
9. Lake Success, & Flower Hill, Newell & Daniel (Porter Daniel) 8,500-14,400
10. Walter Uhl, Flower Hill 7,000-10,000
11. Norgate (E. A. Meager), Roslyn 8,450-18,000
12. Shorehaven (H. L. Loshen), Manhasset 7,000-12,500
13. Strathmore (Wm. Levitt), Manhasset 8,500 up
14. Wyngate (Patrick J. Callan), Gr. Neck 7,000-12,500
15. Wadsworth, Westbury 7,000-12,500
16. Droesch Homes (Frank Droesch), Westbury 4,000-5,500
17. Droesch Homes, New Hyde Park 4,000-5,500
18. Wade Homes, New Hyde Park 4,000-5,500
19. Zenith Homes (Paul Fager, New Hyde Park 4,000-5,500
20. Old Colony Lane Homes, Great Neck 7,000-8,000
21. Lakemont Estates (Mishkin), New Hyde Park 4,000-5,500
22. Hillside Heights (R. W. Duggan), New Hyde Park 3,500-5,500
23. Hillside Park Oaks (Stewart Burnland), New Hyde Park 4,000-5,250
24. Hillside Tuxedo (Stewart Burnland), New Hyde Park 3,500-5,000

(Continued to page 156)
**Quit passing on the profits on Flat Roof jobs to others.**

No expensive equipment needed—just a hammer, knife, brush, and yardstick. Precision-made, factory-inspected materials eliminate all “mystery” and guess-work. You can bid lower and make real money. A tested and proved method—millions of square feet now in use.

**YOU CAN GET THIS BUSINESS IN YOUR TOWN**

Stores, Offices, Hotels, Theatres, Factories, Dairies, Laundries, Garages, Warehouses... wherever a “Built-Up” is needed.

Send for Illustrated Specification Manual and Prices.

---

### 250 Largest Long Island Developments (Continued from page 155)

<table>
<thead>
<tr>
<th>No.</th>
<th>Development</th>
<th>Price Range</th>
<th>1939 Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>25</td>
<td>Williston Homes (Chas. J. Rorech), Williston Park</td>
<td>3,500-5,000</td>
<td>20 50</td>
</tr>
<tr>
<td>26</td>
<td>Mott Bros., Garden City</td>
<td>7,500-12,500</td>
<td>400</td>
</tr>
<tr>
<td>27</td>
<td>Delano Park (Terrenova), East Hempstead</td>
<td>3,500-5,000</td>
<td>15 50</td>
</tr>
<tr>
<td>28</td>
<td>East Hempstead Homestead (Chas. J. Rorech), E. Hempstead</td>
<td>4,950-7,000</td>
<td>100</td>
</tr>
<tr>
<td>29</td>
<td>Goodrich Homes (Chas. J. Rorech), W. Hempstead</td>
<td>4,500-7,000</td>
<td>40</td>
</tr>
<tr>
<td>30</td>
<td>Frafell Homes (Frank J. Fellows), Uniondale</td>
<td>3,970-4,500</td>
<td>50 100</td>
</tr>
<tr>
<td>31</td>
<td>Alden Homes, Hollis</td>
<td>4,000-5,200</td>
<td>170</td>
</tr>
<tr>
<td>32</td>
<td>Jefferson Homes (Max Jaeger), Elmont</td>
<td>3,490-4,250</td>
<td>50</td>
</tr>
<tr>
<td>33</td>
<td>Paul Baur &amp; Son, Franklin Square</td>
<td>3,700-5,500</td>
<td>25</td>
</tr>
<tr>
<td>34</td>
<td>Franklin Square Homes (D. Teicholz), Franklin Square</td>
<td>4,000-5,500</td>
<td>250</td>
</tr>
<tr>
<td>35</td>
<td>Linquare Bldg. Corp. (Harold Kaplan), Franklin Square</td>
<td>4,000-5,500</td>
<td>50</td>
</tr>
<tr>
<td>36</td>
<td>Skillman Homes (Ben. Bieglestein), Franklin Square</td>
<td>3,400-5,000</td>
<td>75</td>
</tr>
<tr>
<td>37</td>
<td>Bradley Homes (Max Hirschorn), Franklin Square</td>
<td>4,500-5,500</td>
<td>25</td>
</tr>
<tr>
<td>38</td>
<td>Franklin Square Manor (Stitch &amp; Bailey), Franklin Square</td>
<td>3,400-5,000</td>
<td>50</td>
</tr>
<tr>
<td>39</td>
<td>W. Hempstead Manor (Janos &amp; Lester), W. Hempstead</td>
<td>5,790-6,790</td>
<td>50</td>
</tr>
<tr>
<td>40</td>
<td>Hempstead Oak (Frank Fellows), W. Hempstead</td>
<td>4,500-6,500</td>
<td>120</td>
</tr>
<tr>
<td>41</td>
<td>Garden City Manor (Wyder Bros.), Munson</td>
<td>4,250-6,000</td>
<td>25</td>
</tr>
<tr>
<td>42</td>
<td>Jasberger, Malverne</td>
<td>3,000-5,000</td>
<td>75</td>
</tr>
<tr>
<td>43</td>
<td>Malverne Park Gardens (Sam Harris), Malverne</td>
<td>6,500-9,000</td>
<td>75</td>
</tr>
<tr>
<td>44</td>
<td>Wynn Homes, Malverne</td>
<td>5,500-7,500</td>
<td>25</td>
</tr>
<tr>
<td>45</td>
<td>Hempstead Park Acres, West Hempstead</td>
<td>7,000-12,000</td>
<td>30 50</td>
</tr>
<tr>
<td>46</td>
<td>Stewart-Burdick, Valley Stream</td>
<td>3,000-4,000</td>
<td>55</td>
</tr>
<tr>
<td>47</td>
<td>Stratford Homes (Stratford Bros.), Valley Stream</td>
<td>4,000-5,000</td>
<td>100</td>
</tr>
<tr>
<td>48</td>
<td>McDermott Homes (Arthur McDermott), Valley Stream</td>
<td>5,500-7,500</td>
<td>50</td>
</tr>
</tbody>
</table>

---

*Laux finished all-plywood "Puget Sound House" in exclusive Sheridan Heights, suburban Seattle.*

Living room of the Puget Sound Model Home, shown above, beautifully finished with PLASTEREZ.
<table>
<thead>
<tr>
<th>Builder/Development</th>
<th>Location</th>
<th>Price Range</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nu-Way Homes (Sam. Weisbart)</td>
<td>Valley Stream</td>
<td>$7,500</td>
<td>15</td>
</tr>
<tr>
<td>Gibson Homes (Wm. R. Gibson)</td>
<td>Gibson</td>
<td>$5,500-6,500</td>
<td>100</td>
</tr>
<tr>
<td>Klein Estates (H. Klein)</td>
<td>E. Rockaway</td>
<td>$5,500-7,000</td>
<td>40</td>
</tr>
<tr>
<td>Sunbury (W. R. Gibson)</td>
<td>Hewlett</td>
<td>$5,000-6,500</td>
<td>50</td>
</tr>
<tr>
<td>Fair Oaks (P. Kraushaar)</td>
<td>Cedarhurst</td>
<td>$6,000-7,500</td>
<td>25</td>
</tr>
<tr>
<td>Klein Estates (J. D. O'Connell)</td>
<td>Valley Stream</td>
<td>$6,000-7,500</td>
<td>75</td>
</tr>
<tr>
<td>Fairhurst (Albert Oshrin)</td>
<td>Baldwin</td>
<td>$4,000-5,000</td>
<td>25</td>
</tr>
<tr>
<td>Stately Oaks (F. G. Chalmers)</td>
<td>Valley Stream</td>
<td>$5,000-6,500</td>
<td>15</td>
</tr>
<tr>
<td>Dover Park (Bruggeman &amp; Schafer)</td>
<td>Valley Stream</td>
<td>$5,000-6,000.</td>
<td>50</td>
</tr>
<tr>
<td>Westwood Gardens (W. L. Donavan, Jr.)</td>
<td>Valley Stream</td>
<td>$4,250-7,000</td>
<td>30</td>
</tr>
<tr>
<td>Lynbrook Gardens (Sokolov)</td>
<td>Lynbrook</td>
<td>$5,000-6,000</td>
<td>40</td>
</tr>
<tr>
<td>Rental Housing: Twin Oaks Lodge</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Canterbury Homes (Jaeger Bros.)</td>
<td>Rockville Centre</td>
<td>$8,000-12,000</td>
<td>40</td>
</tr>
<tr>
<td>Knollwood (Sokolov)</td>
<td>Rockville Centre</td>
<td>$6,000-8,500</td>
<td>40</td>
</tr>
<tr>
<td>Four Star Homes (Zarelli)</td>
<td>Baldwin</td>
<td>$5,000-6,500</td>
<td>60</td>
</tr>
<tr>
<td>Krown Homes (Louis Krown)</td>
<td>Baldwin</td>
<td>$4,500-6,000</td>
<td>75</td>
</tr>
<tr>
<td>Loft Estates Homes (Geo. A. Loft &amp; Gustav Svenson)</td>
<td>Baldwin</td>
<td>$7,500-11,500</td>
<td>20</td>
</tr>
<tr>
<td>Sweet Briar (Albert Oshrin)</td>
<td>Baldwin</td>
<td>$5,000-6,500</td>
<td>40</td>
</tr>
<tr>
<td>Baldwin Terrace</td>
<td>Baldwin</td>
<td>$4,000-5,000</td>
<td>25</td>
</tr>
<tr>
<td>Freeport Acres (J. Walsh)</td>
<td>Freeport</td>
<td>$8,500</td>
<td>20</td>
</tr>
<tr>
<td>Riordan, Roosevelt</td>
<td>4,000-5,000</td>
<td>30</td>
<td></td>
</tr>
<tr>
<td>Fair Oaks (Kraushaar)</td>
<td>Woodmere</td>
<td>$7,000-8,500</td>
<td>20</td>
</tr>
<tr>
<td>Merooke Homes (Strongfield)</td>
<td>Merrick</td>
<td>$4,500-6,000</td>
<td>25</td>
</tr>
<tr>
<td>Causeway Homes (F. J. Colan)</td>
<td>Merrick</td>
<td>$4,000-12,000</td>
<td>90</td>
</tr>
<tr>
<td>Harbor Green, Harmon Realty Co., Massapequa</td>
<td></td>
<td>$6,000-8,500</td>
<td>50</td>
</tr>
<tr>
<td>Billmore Shores, Massapequa</td>
<td>$4,000</td>
<td>25</td>
<td></td>
</tr>
<tr>
<td>Green Acres (Irwin Chanin), Valley Stream</td>
<td>$5,500-6,000</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>Nu-Way Homes (Sam. Weisbart), Valley Stream</td>
<td></td>
<td>$4,700-5,500</td>
<td>40</td>
</tr>
<tr>
<td>Gibson Homes (Wm. R. Gibson), Gibson</td>
<td>$5,500-6,500</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>Fair Oaks (P. Kraushaar), Cedarhurst</td>
<td>$4,000-6,500</td>
<td>25</td>
<td></td>
</tr>
<tr>
<td>Sunbury (W. R. Gibson), Hewlett</td>
<td>$5,000-6,500</td>
<td>75</td>
<td></td>
</tr>
<tr>
<td>Lyndsey (W. R. Gibson), Hewlett</td>
<td>$5,000-6,000</td>
<td>15</td>
<td></td>
</tr>
<tr>
<td>Lynbrook Park (H. Klein), Lynbrook</td>
<td>$5,500-6,500</td>
<td>25</td>
<td></td>
</tr>
<tr>
<td>Ideal, Lynbrook Estates (J. D. O'Connell), Lynbrook</td>
<td></td>
<td>$5,000</td>
<td>300</td>
</tr>
<tr>
<td>Union Park (W. Stewart), Lynbrook</td>
<td>$6,000-7,000</td>
<td>25</td>
<td></td>
</tr>
<tr>
<td>Eberlein Homes (Eberlein Bros.), Lynbrook</td>
<td>$5,000-6,500</td>
<td>55</td>
<td></td>
</tr>
<tr>
<td>Klein Estates (H. Klein), E. Rockaway</td>
<td>$5,000-7,000</td>
<td>25</td>
<td></td>
</tr>
</tbody>
</table>

INCREASE YOUR FIREPLACE PROFITS

**Superior Fireplaces Cost But Little More Than the Ordinary Fireplaces**

The Superior Circulator is a complete form (from hearth to flue) built with proper style and dimensions around which any design fireplace can be built.

**Superior Fireplaces Deliver More Heat**

The Superior Circulator is constructed on same principle as a warm air furnace. The air chambers around the firebox and smoke dome absorb and circulate through the home approximately one-third more heating surface per size unit than other types of circulators with air chambers around firebox only.

They give longer years of service than other makes because the firebox is heavily reinforced and the back-wall is constructed of 3/16" rust-resisting boilerplate iron and the larger flow of air through the heating chamber helps prevent the metal from overheating and deteriorating.

They are designed and manufactured by the pioneers of the industry—nineteen years of concentrated engineering thought have achieved the Superior Circulator.

They are in use in thousands of homes in all climates. They were selected on their merits by the Federal Housing Authority—one of the major southern projects.

Immediate shipments from Warehouses or Distributor's Stock at convenient points.

Write for: 48-page Fireplace Plan Book showing 50 fireplace designs and 30 four- and five-room floor plans for one- and two-story homes and cabins and how to heat them with one Superior Fireplace.

Superior Fireplaces Company
1046 South Olive Street
Los Angeles, California
Manufacturers of wood, coal, and gas fired fireplace circulators.
MULTISAW ARM PAYS FOR ITSELF ON TWO HOUSES

NOTE SWIVEL HEAD AND 28' ARM
All adjustments are made with quick-acting clamps and locks. Easy-to-read index plates are in convenient positions.

THE NEW MULTISAW ARM, teamed up with a Power King Saw, pays out quickly by putting your sawing on a production basis—on the job or in the shop. Portable, quickly and easily set up for rip, cross cut and mitre, either straight or bevel—ideal for scoring of brick, stone and tile. Cross cuts, rips, mitres, etc. Slide bar mounted on eight sealed ball bearings has 28" stroke. Swiveling head accurately graduated 0 to 60° either direction. Elevation adjustment 9". Takes any POWER KING Saw 8" to 11" inclusive.

It pays to buy equipment that will pay for itself. Write for Bulletin.

POWER KING TOOL CORP.
DEPT. AD WARSAW, IND.

LETTERS from Readers on All Subjects

Finds Ad Pages Valuable

To the Editor:
The November 23, 1939 issue "Engineering News-Record" contained the following signed communication:

"Sir: It is obvious to most subscribers to trade and technical periodicals that the publication cost of an issue is many times the subscription price. The difference between cost of production and receipts from subscriptions is met by the income from advertisements. Whatever merit our technical magazines possess, in fact their very existence, is largely due to those who advertise therein.

"It is said that the reading matter of the advertisements in engineering papers is 99 per cent truthful. These advertisements have a definite educational value which is attested to by the fact that the best technical libraries bind the advertising sections of leading periodicals in separate volumes and give them a place on the shelves.

"Every reader of a technical paper should read the entire advertising section. The writer has adhered to this practice with beneficial results for over half a century.—Robins Fleming, Structural Engineer, (retired)."

It occurs to me that something of this kind might well appear not only in the Editor's pages, but also might be emphasized periodically on the Publisher's page of any publication. Along with this I suppose all of us editors should be encouraged and stimulated to make our advertising pages as worthwhile as the Editor's pages.

UNIVERSAL ATLAS CEMENT CO., M. A. Berns, Publicity Manager.

The lime that's packed in Zig Zag Bags

Fine plaster work requires lime of uniform quality -- fresh, fat and fluffy. Insist on Ohio White Finish or Hawk Spread White Finish. They come in Red Zig Zag Bags. Write for booklet about finishing lime.

The Ohio Hydrate & Supply Co., Woodville, Ohio

Manufacturers of: Ohio White Finish • Hawk Spread White Finish • Ohio Ritewall Fibered Lime Plaster • Ohio Sanlime Finish • Mastite Masonry Mortar • Ohio Masons Lime • Ohio Ground Lime.
Three Research Projects

Buffalo, N.Y.

To the Editor:

Last spring I asked two thousand research men in five countries, "What will be the outstanding contribution from YOUR field of research during the next three years?" I have now ventured into another phase of this subject and have already received replies from many of America's important industrialists to the question, What new products, processes or materials might industrial research develop that would be valuable to your industry?

From the first survey we determined what the research man was developing for industry. From the second we hope to develop what the industrialist would like the research man to develop for him. For instance, the manufacturer of vacuum cleaners would like an inexpensive metal to turn out a lighter weight product, thereby easing the burden of the housewife. With several thousand manufacturers reading these wants, some of them are bound to be satisfied, and American business to that extent, at least, will be stimulated.

To complete this survey, I am putting the same question to you as head of one of America's important technical journals and I shall appreciate the benefit of your thoughts.

LIBERTY BANK OF BUFFALO

By Bert H. White, Vice President

ANSWER:

The building industry, as well as building owners, would be greatly benefited if there could be successful industrial research to develop

1. A non-rusting and non-staining sheet metal of reasonable cost, good strength and good workability.
2. A non-leaking and permanent mortar or joint adhesive for masonry units.
3. A non-shrinking, non-swelling treatment for lumber for construction.

The above represent fundamental weaknesses in materials widely used and generally available to the building industry which result in short service life and heavy maintenance expense on all buildings subjected to the extremes of North American weather.—EDITOR.

(Continued to page 160)
LETTERS— (Continued from page 159)

Canadian Co-operation

To the Editor:

I have just read, with great interest, Mr. Northup's article on $1.00-a-day homes and am imposing upon you for further information.

Your most informative trade magazine, American Builder, has just come to my attention and after carefully reading your February issue I feel that much more has gone before in the matter of small home development.

I have made arrangement with the Newspapers to get all future copies but would like the past copy in which low cost methods of construction are described, particularly the joistless wood plank floor.

If I may, I would like particulars of the National Small Homes Demonstration, Inc., and a copy of the "Sales Tools" as outlined on page 125. I understand that this promotion is sponsored by the organized lumber trade in the U.S. Is there any way in which we could co-operate or make use of the plan in our Canadian market? Our president, Mr. Leonard Hill, is past president of the Ontario Retail Lumber Dealers' Association and has strongly advocated aggressive merchandising methods through that body. I know he will be interested in your 1940 program.

HILL-CLARK-FRANCIS, LTD., General Contractors,
By Wm. C. Wingrove, Advertising Manager.

"Ideas" Offered Home Builders

To the Editor:

The Candland Company has recently opened a "Home Building Idea" branch of their housing finance organization at 3138 N.E. Sandy Boulevard, Portland, Ore.

The purpose of this branch office is to place information concerning building of homes within easier reach of the public. The office hours are 9:00 a.m. to 9:00 p.m. Monday through Friday, and 9:00 a.m. to 5:00 p.m. Saturday.

Don't buy casement hardware without knowing what's inside the case...
An important function of this new office, in cooperation with architects, building material dealers, etc., is to furnish the public with ideas relative to floor plans, exteriors, kitchens, and bath arrangements, and to maintain a complete library of books and current periodicals dealing with homes. This library is open to anyone interested, and we do not have salesmen in the office. However, our representatives are available for consultation without obligation at any time.

We have the February issue of America Builder in which appears the article "$1.00-a-Day Home Is 1940 Goal," and the work of the National Small Homes Demonstration, Inc. Our program is along the same line as that described in this article, and we are interested in securing any available material on small homes. We note that the National Small Homes Demonstration, Inc., has miniature model homes for office and window displays. Our new office has sufficient floor space for several attractive displays, and we will appreciate any information you can give us as to how we may obtain the models and any other material that would be of value in our library.

THE CANDLAND COMPANY

By Keith A. Neilson, Manager, Branch Office.

Front Cover Home

Rochester, N.Y.

To the Editor:

The picture of the home on the cover of your February issue of America Builder we are using as an illustration of inefficient insulation. It definitely shows a stack action and heat loss on the sides and walls of this house, with the way the snow has melted back at these points. It is a very good picture of how much heat is lost in many types of so-called insulated homes.

C. STORKS BARROWS, Architect.

A Report from Washington

Washington, D.C.

To the Editor:

In chasing around these statistic-compiling government offices, where all manner of high class (speaking educationally wise) (Continued to page 166)

Practical Accounting and Cost Keeping for Contractors

This practical book describes the easiest and best methods of keeping all kinds of contractor's records, time keeping, cost keeping, bookkeeping, Social Security records, estimating forms, etc. It illustrates and explains bookkeeping systems for the smallest builder or the largest general contractor. It shows how to keep costs on the job and in the office, how to prepare intelligent estimates, and how to draw up contracts and sub-contracts.

170 pages, 300 illustrations, 8½ x 11½ inches, cloth, $2.50.

Hogg's Wage Tables for Building Contractors

This handbook prevents mistakes and saves time when figuring pay rolls. There is a complete set of wage tables worked out by quarter hours for any length of time from 1 to 80½ hours, and every wage rate from 30 cents, increasing by 25½ cents per hour, to $2.25 per hour. It also includes all odd rates, such as $0.683. You simply refer to the table showing the rate per hour and then follow down to the nearest quarter hour.

190 pages, 4½ x 6½ inches, thumb-indexed, flexible, $2.50.

BOOK SERVICE DEPARTMENT

AMERICAN BUILDER and BUILDING AGE

30 Church Street New York, N. Y.
High Speed” CONCRETE VIBRATORS

First fair sized job.

For Drilling, Cutting, and Dressing Concrete

SYNTRON COMPANY
295 Lexington Ave.
Homer City, Pa.

SYNTRON ELECTRIC TOOLS

“Electro Magnet” HAMMERS

For Drilling, Cutting, and Dressing Concrete

“High Torque” POWER SAWS

“High Speed” CONCRETE VIBRATORS

Syntron Tools carry two reputations—and are known by contractors all over the world—

First: As tools that can be depended upon to work through the job without breaking down.

Second: As labor savers that will pay for themselves on the first fair sized job.

Write for new booklet illustrating many ways these tools speed up jobs and save money.

SYNTRON COMPANY
295 Lexington Ave.
Homer City, Pa.

MICKLIN METAL CORNERS
REINFORCED SAGPROOF CONSTRUCTION

Reinforced sagproof window screen frames and screen doors are easily made with self-squaring Mcklin Metal Corners. Only a hammer and saw needed. Mcklin Metal Corners are made of lead-coated steel, which is rust resisting and takes paint without priming. The position of the nails is indicated and the nails are driven through the metal. This countersinks the nails flush with the metal. The nails supplied will never loosen or split the wood.

MICKLIN DUAL CORNERS

Reinforce both sides of the wood. The diagonal channel base permanently prevents sagging.

MICKLIN SINGLE CORNERS

Provide a quick and easy repair for loose, sagging frames. Applied to the back of the frame without removing wire or other facing.

Order a supply at once—to save labor and lumber on new construction and remodeling jobs.

Complete New Catalog just off the press. Write for free copy today.

Manufactured and sold exclusively by

W. J. DENNIS & CO.
2110-20 WEST LAKE ST. •• CHICAGO
NOW COLOR REALLY SELLS
FOR YOU—IN THE SHERWIN-WILLIAMS
PAINT AND COLOR STYLE GUIDE

The Sherwin-Williams Decorative Studios have produced a Paint and Color Style Guide that is so accurate, so real you feel you are stepping into the actual rooms the moment you look at the illustrations. Architects, builders, realtors, banks, insurance companies, painting contractors are wildly enthusiastic. There are 145 of the most beautiful illustrations you have ever laid your eyes on. All of which means that the Sherwin-Williams Paint and Color Style Guide can be the biggest boon in the world to your business. With this service you become a color authority because every style and suggestion is complete in every detail including actual reproductions of paint, furniture, rugs and hangings.

You can’t afford to be without the Paint and Color Style Guide. Overnight, it’s changing the entire conception of selling color for the home. It’s taking the country by storm!

YOU’VE NEVER SEEN ANYTHING LIKE IT!

FACTS AND FIGURES ON THE SHERWIN-WILLIAMS STYLE GUIDE:
1 It is the largest volume ever published in quantity.
2 Its plates constitute one of the world’s largest colorplate orders—236 plates in all.
3 It permits for the first time knowing in advance just how a color scheme will look.
4 It is the world’s largest Kodachrome photography job.
5 It explains color for the first time in really simple language.
6 It enables builders and architects to duplicate exactly any room or exterior color scheme.
7 It shows how to harmonize furnishing colors with colored walls.
8 It enables builders and architects to use colorful paints that formerly were safe only in the hands of a decorator.
9 The open Style Guide covers over five square feet in area.

WRITE TODAY FOR FULL INFORMATION on the Sherwin-Williams Paint and Color Style Guide. Due to the tremendous demand and the astonishing value of the Style Guide only a limited number are available.

THE SHERWIN-WILLIAMS CO.

THE SHERWIN-WILLIAMS COMPANY, DEPT. A. B. 4 CLEVELAND, OHIO

Gentlemen:
I am interested in the Sherwin-Williams Paint and Color Style Guide. Please let me know how to obtain one or more copies.

NAME

FIRM NAME

ADDRESS

CITY

TYPE OF BUSINESS
In this book are brought together the best features of two popular predecessors: "Good Construction," by "American Builder," and "Building Age Construction Details." Sections are presented in construction sequence so as to constitute a working guide in detailing every step in the construction of a modern dwelling, from foundation to finish.

Many of the details and photographic views have appeared in "American Builder and Building Age." In addition there is brought together graphic and factual information that is otherwise scattered through books, magazines, catalogs and sets of plans. Because of its plan of organization it can be used as a companion volume to the author's CARPENTRY AND JOINERY WORK by carpentry apprentices and in the school as well as in the contractor's drafting room.

Many of the important new building materials such as plywood which have been developed in recent years are pictured. The assembly of pre-fabricated units is shown in step-by-step views. Various systems of pre-fabrication construction are shown as well as the standard methods of wood frame house building and finishing.

Now Ready

HOUSE CONSTRUCTION DETAILS

Compiled by Nelson L. Burbank

Author of Carpentry and Joinery Work

Builders will find this new book helpful when making alterations in a set of stock plans and when drawing up a complete set of plans. By simply referring to the detailed cross-index the draftsman can locate drawings of construction details and photographic views of the finished work which can be used for guidance. The layout of these details is in accordance with standardizations recommended by housing authorities wherever such have been established.

CONTENTS

Floor Plans—Sets of House Plans; Excavations—Foundation Forms—Foundations; Outside Walls; Inside Walls—Wall Sheathing—Ceiling Joists; Roof Construction—Bay Construction—Roofing; Cornices and Porches; Exterior Wall Construction; Interior Wall Coverings—Interior Trim; Stair Construction; Windows; Doors; Hardware; Closets—Shelves—Built-in Equipment; Finished Flooring; Chimneys and Fireplaces; Scaffolds; Garages; Heating—Air Conditioning; Elements of Electric Wiring; Insulation—Sound Proofing; Gates—Garden Furniture; Shopcrafter's Corner; Camps—Cabin—Cottages; Farm Buildings; Wood Connectors; Pre-fabrication—Modern Building Materials; Painting and Finishing; Modern Homes; Index.

320 pages, 1500 Illus., 9 x 12 inches, cloth, $3.00

Money back if not satisfactory

BOOK SERVICE DEPARTMENT

AMERICAN BUILDER AND BUILDING AGE

30 CHURCH STREET, NEW YORK
PAYNE'S NEW ZONEAIR

Nation-Wide Popularity IN A SINGLE YEAR.

Just a year ago this month the New Payne Zoneair was introduced to the gas heating field. Yet in that short time it has won countless friends from coast to coast.

Why such outstanding, immediate popularity? Simply because the New Payne Zoneair offers, in a single, compact unit, all the functions of true winter air conditioning. It heats, circulates, ventilates, filters and humidifies—automatically!

Used individually to heat separate groups of rooms, it provides the added advantage of convenient, economical zoned warmth.

For information about the latest 1940 Model Payne Zoneair, see your local dealer or write the factory.

PAYNE FURNACE AND SUPPLY CO., INC.
Beverly Hills, Calif.

You Pay No Premium for Modern Steel Bridging

- The final cost of Union Metal steel bridging is no more—frequently less—than wood because it takes from $\frac{3}{4}$ to $\frac{1}{2}$ less time to install. This time saving is made possible because (1) entire supply of steel bridging for an average house comes in one conveniently carried carton; (2) it is quickly attached with roofing nails; and (3) eliminates replacement of splits.

Union Metal steel bridging can't warp or shrink, thereby eliminating cause of squeaky floors. Approved tests at leading engineering school prove this product stronger than standard 1" x 3" wood bridging.

Union Metal bridging is available in lengths to fit all regular joist sizes and spacings. Write for free sample, descriptive folder and prices.

THE UNION METAL MANUFACTURING CO.
CANTON, OHIO

LETTERS—

(Continued from page 161)

scientists are engaged in investigating everything from how to generate power from the fire of the firefly to what makes a mountain keep on mounting, I ran across a "statistic" or two which I thought might read well to those who get your valuable sheet.

Here is what I found, and this is true beyond a shadow of doubt: House sizes are decreasing, room sizes in houses and apartments are decreasing, in both size and number, as well as general use or purpose. Houses are less expensive because of these things. Maybe birth control may cut families to fit houses. Government entry into all manner of businesses seems to be affecting our existence. We are fast approaching the trailer home.

You don't need me to tell you how all this affects the interest of your readers.

RILEY ELGEN.

Average Home Market?

To the Editor:

I was interested in your article regarding the homes sponsored by "Good Housekeeping." We subscribed to the first issue at a cost of $32 but we did not subscribe to the second because, out of a list of twenty average prospects, we did not find a single person who could pay for the $8,000 to $12,000 "Good Housekeeping" house.

We feel that the plan in general is fine and we admire the purpose; but we do not think that they are selling the right priced house. I believe that it is a fact that 94 per cent of the towns in the U.S.A. are under 25,000 in population, and as Fort Dodge is 23,685 and we and our prospects can be considered as average, it seems that they are missing the big market.

Could you give us statistics on income division groups, number of houses built in the U.S. in a year, and the average price of these houses?

FORT DODGE LUMBER COMPANY,
By John Haire, Jr.
"TruCost" Estimating Figures for Home Designs in this Issue

The Editors have prepared a 28 PAGE EXPLANATION of American Builder's "TruCost" system of quick, accurate estimating and offer it to anyone interested at 25 cents per copy. Please enclose payment when ordering. Address American Builder, 30 Church St., New York City.

Page 66, April: Mott, Bldr.
"TRUCOST" ESTIMATING FIGURES
FOR THIS HOUSE: Basement Walls, 106 lin. ft.; Trench Walls, 90 lin. ft.; Basement Floor, 645 sq. ft.; Garage Floor, 180 sq. ft.; Excavation per ft. deep, 28 cu. yds.; Outside Walls, 21.00 sqs.; First Floor, 6.50 sqs.; Second Floor, with fin. flg., 6.50 sqs.; Ceiling, 13.00 sqs.; Roof Pitch, 8" rise per ft. run; Roof, 1.10 sqs.; Cornice, C & F, 170 lin. ft.; Cornice, 6", 64 lin. ft.; Partitions, 180 lin. ft.; Inside Finish OS Walls, 212 lin. ft.; Front and OS French Doors, 2 opgs.; Rear and Grade Doors, 1 opg.; Garage Door 8 ft. wide, 1; Inside Doors and Cased Opgs., 14 opgs.; Windows and Casemts, 18 opgs.; Gable Sash and Louvers, 2 opgs.; Chimney, 36 lin. ft.; Main Stairs, 1; Porch Floor, 1.08 sqs.

Page 67, April: Mott, Bldr.
"TRUCOST" ESTIMATING FIGURES FOR THIS HOUSE: Basement Walls, 114 lin. ft.; Trench Walls, 90 lin. ft.; Basement Floor, 792 sq. ft.; Garage Floor, 190 sq. ft.; Excavation per ft. deep, 33 cu. yds.; Outside Walls, 25.00 sqs.; First Floor, 8.00 sqs.; Second Floor, with fin. flg., 8.00 sqs.; Ceiling, 16.00 sqs.; Roof Pitch, 8" rise per ft. run; Roof, 14.50 sqs.; Hips and Valleys, 104 lin. ft.; Cornice (incl. Porch), C & F, 175 lin. ft.; Cornice, 8", 175 lin. ft.; Partitions, 200 lin. ft.; Inside Finish OS Walls, 288 lin. ft.; Front and OS French Doors, 2 opgs.; Rear and Grade Doors, 2 opgs.; Garage Door 8 ft. wide, 1; Inside Doors and

(Continued to page 170)

Building material dealers are not prone to "take pen in hand" to write voluntary letters of praise to manufacturers. But they have done it regarding Hall Overall Garage Door Sets. No item in our line ever aroused more spontaneous enthusiasm than has our garage door hardware. Hall Overall Garage Door Sets are simple in design and easy to install, with no complicated parts to get out of order or ever give trouble. The original, low-priced, overhead type of garage door set, Hall Overall offers a variety of sizes and styles for every type of garage.

Ask your dealer about Hall Overall Garage Door Sets or write us for information and new low prices for 1940.

HALL MANUFACTURING CO.
Cedar Rapids, Iowa
CONCO Automatic Package Heat

IT’S SO EASY TO INSTALL!!

Easy installation and freedom from service problems with Conco Automatic Package Heat. You can offer your prospects their choice of coal, oil, or gas heat — and the equipment comes factory-wired and completely assembled. Conco automatic packaged heat has eye-appeal, is moderately priced, and the many outstanding engineering advantages combine to make it easy to sell. Add that extra profit that goes with the heating installation in the homes you are constructing. Write or wire us today for additional facts.

COAL-OIL-GAS FOR REAL PROFITS

CONCO CORPORATION
Automatic Package Heat
DIVISION OF H. D. CONKEY & COMPANY
42 AUTO AVENUE MENDOTA, ILLINOIS

NEW EBCO Dishwashing SINK

FOR ANY CABINET TOP . . . in home or apartment

America’s most talked-about sink! A beautiful, new, work-saving sink that appeals instantly to every woman. Two compartments make dishwashing amazingly simple — no dishpan or tea kettle needed! Racked and rinsed in rubber-dipped drain basket, the dishes steam dry themselves. But also look at these unique features! Concealed spray and swing-spout mixing faucet is mounted on back ledge which also contains integral soap dish. This eliminates in-the-wall piping, and simplifies installation. Flat rim also insures watertight fit with tile, linoleum, metal or composition sink tops. Made of genuine cast iron, porcelain enameled in a choice of colors. Large sediment-filtering duo strainer. A sink sensation moderately priced!

Write for details!
DISTRIBUTORS WILL ALSO FIND THEM INTERESTING

The EBCO MFG. CO.
401 W. TOWN ST. COLUMBUS, OHIO

TruCost Figures
(Continued from page 167)

Cased Ops., 13 opgs.; Windows and Casements, 20 opgs.; Chimney, 36 lin. ft.; Main Stairs, 1; Porch Roof, 1,900 sq.; Porch Ceilings, 1,900 sq.; Porch Beam, 30 lin. ft.; Porch and Balcony Post and Newels, 4; Porch Roof, incl. Main Roof.

Page 70. April: Gross-Morton, Bldr.
“TRUCOST” ESTIMATING FIGURES FOR THIS HOUSE: Basement Walls, 98 lin. ft.; Trench Walls, 8 lin. ft.; Basement Floor, 598 sq. ft.; Excavation per ft. deep, 26 cu. yds.; Outside Walls, 20,500 sq.; First Floor, 5,900 sq.; Second Floor, with fin. flg., 6,000 sq.; Ceiling, 11,900 sq.; Roof Pitch, 10° rise per ft. run; Roof, 6,500 sq.; Hips and Valleys, 32 lin. ft.; Cornice, C & F, 115 lin. ft.; Cornice, 6°, 1,15 lin. ft.; Partitions, 140 lin.; Inside Finish OS Walls, 2,000 lin. ft.; Front and OS French Doors, 1 opg.; Rear and Grade Doors, 1 opg.; Inside Doors and Cased Ops., 12 opgs.; Windows and Casements, 15 opgs.; Chimney, 36 lin. ft.; Main Stairs, 1.

Page 71. April: Gross-Morton, Bldr.
“TRUCOST” ESTIMATING FIGURES FOR THIS HOUSE: Basement Walls, 138 lin. ft.; Trench Walls, 18 lin. ft.; Basement Floor, 1,134 sq. ft.; Excavation per ft. deep, 48 cu. yds.; Outside Walls, 20,000 sq.; First Floor, 11,000 sq.; Second Floor, without fin. flg., 11,000 sq.; Ceiling, 11,000 sq.; Roof Pitch, 14° rise per ft. run; Roof, 16,000 sq.; Hips and Valleys, 75 lin. ft.; Cornice, C & F, 200 lin. ft.; Partitions, 188 lin.; Inside Finish OS Walls, 140 lin.; Front and OS French Doors, 1 opg.; Rear and Grade Doors, 1 opg.; Inside Doors and Cased Ops., 15 opgs.; Windows and Casements, 20 opgs.; Gable Sash and Louvers, 2 opgs.; Chimney, 32 lin. ft.; Main Stairs, 1; Porch Floor, 33 sq.

Page 74. April: Allen, Archt.
“TRUCOST” ESTIMATING FIGURES FOR THIS HOUSE: Basement Walls, 148 lin. ft.; Trench Walls, 80 lin. ft.; Basement Floor, 1,200 sq. ft.; Garage Floor, 200 sq. ft.; Excavation...
per ft. deep, 50 cu. yds.; Outside Walls, 20.00 sqs.; First Floor, 12.00 sqs.; Second Floor, with fin. flg., 5.00 sqs.; Second Floor, without fin. flg., 5.00 sqs.; Ceiling, 17.00 sqs.; Roof Pitch, 10" rise per ft. run; Roof, 18.00 sqs.; Hips and Valleys, 30 lin ft.; Cornice, C & F, 200 lin. ft.; Partitions, 230 lin. ft.; Inside Finish OS Walls, 248 lin. ft.; Front and OS French Doors, 1 opg.; Rear and Grade Doors, 2 opgs.; Garage Door 8 ft. wide, 1; Inside Doors and Cased Opgs., 18 opgs.; Windows and Casements, 16 opgs.; Gable Sash and Louvers, 1 opg.; Chimney, 32 lin. ft.; Maie Stairs, 1; Porch Floor, 1.75 sqs.; Porch Ceilings, 1.50 sqs.; Porch Beam, 28 lin. ft.; Porch and Balcony Post and Newels, 9; Porch Roof, 2.40 sqs.; Porch Cornice, 32 lin. ft.

Page 87, April: Mezger, Bldr.

"TRUCOST" ESTIMATING FIGURES FOR THIS HOUSE: Basement Walls, 150 lin. ft.; Trench Walls, 120 lin. ft.; Basement Floor, 1,080 sq. ft.; Garage Floor, 400 sq. ft.; Excavation per ft. deep, 46 cu. yds.; Outside Walls, 30 sqs.; First Floor, 11.00 sqs.; Second Floor, with fin. flg., 6.50 sqs.; Ceiling, 20.00 sqs.; Roof Pitch, 12" rise per ft. run; Roof, 20.00 sqs.; Hips and Valleys, 75 lin. ft.; Cornice, C & F, 250 lin. ft.; Partitions, 250 lin. ft.; Inside Finish OS Walls, 275 lin. ft.; Front and OS French Doors, 2 opgs.; Rear and Grade Doors, 1 opg.; Garage Door 8 ft. wide, 2; Inside Doors and Cased Opgs., 22 opgs.; Windows and Casements, 32 opgs.; Gable Sash and Louvers, 3 opgs.; Chimney, 36 lin. ft.; Main Stairs, 1; Porch Floor, 2.00 sqs.; Porch Ceiling, 1.50 sqs.; Porch Beam, 20 lin. ft.; Porch and Balcony Post and Newels, 6; Porch Roof, 3.00 sqs.; Porch Cornice, 20 lin. ft.

Page 91, April: Rorech, Bldr.

"TRUCOST" ESTIMATING FIGURES FOR THIS HOUSE: Basement Walls, 126 lin. ft.; Trench Walls, 70 lin. ft.; Basement Floor, 952 sq. ft.; Garage Floor, 400 sq. ft.; Excavation per ft. deep, 40 cu. yds.; Outside Walls, 17.00 sqs.; First Floor, 10.00 sqs.; Second Floor, without fin. flg., 10.00 sqs.; Ceiling, 10.00 sqs.; Roof Pitch, 12" rise per ft. run; Roof, 19.00 sqs.; Cornice, C & F, 200 lin. ft.; Partitions, 150 lin. ft.; Inside Finish

(Continued to page 174)
TruCost Figures (Continued from page 171)

OS Walls, 126 lin. ft.; Front and OS French Doors, 1 opg.; Rear and Grade Doors, 1 opg.; Garage Door 8 ft. wide, 2; Inside Doors and Cased Opgs., 14 opgs.; Windows and Casements, 18 opgs.; Gable Sash and Louvers, 2 opgs.; Chimney, 32 lin. ft.; Main Stairs, 1; Porch Floor, .20 sqs.

Page 92, April: Chester Hill.

"TRUCOST" ESTIMATING FIGURES FOR THIS HOUSE: Basement Walls, 160 lin. ft.; Trench Walls, 60 lin. ft.; Basement Floor, 1,400 sq. ft.; Garage Floor, 190 sq. ft.; Excavation per ft. deep, 50 cu. yds.; Outside Walls, 22.00 sqs.; First Floor, 18.00 sqs.; Second Floor, with fin. flg., 6.00 sqs.; Second Floor, without fin. flg., 2.00 sqs.; Ceiling, 20.00 sqs.; Roof Pitch, 14° rise per ft. run; Roof, 19.00 sqs.; Hips and Valleys, 32 lin. ft.; Cornice, C & F, 225 lin. ft.; Partitions, 225 lin. ft.; Inside Finish OS Walls, 250 lin. ft.; Front and OS French Doors, 1 opg.; Rear and Grade Doors, 2 opgs.; Garage Door 8 ft. wide, 1; Inside Doors and Cased Opgs., 20 opgs.; Windows and Casements, 30 opgs.; Gable Sash and Louvers, 2 opgs.; Chimney, 34 lin. ft.; Main Stairs, 1; Porch Floor, 1.00 sq.; Porch and Balcony Post and Newels, 3; Porch and Deck Rail, 14 lin. ft.

Page 95, April: McGowan, Bldr.

"TRUCOST" ESTIMATING FIGURES FOR THIS HOUSE: Basement Walls, 110 lin. ft.; Trench Walls, 17 lin. ft.; Basement Floor, 700 sq. ft.; Excavation per ft. deep, 28 cu. yds.; Outside Walls, 14.00 sqs.; First Floor, 7.00 sqs.; Ceiling, 7.00 sqs.; Roof Pitch, 9° rise per ft. run; Roof, 8.00 sqs.; Hips and Valleys, 32 lin. ft.; Cornice (incl. Porch), C & F, 120 lin. ft.; Partitions, 80 lin. ft.; Inside Finish OS Walls, 110 lin. ft.; Front and OS French Doors, 1 opg.; Rear and Grade Doors, 1 opg.; Inside Doors and Cased Opgs., 7 opgs.; Windows and Casements, 15 opgs.; Gable Sash and Louvers, 3 opgs.; Chimney, 32 lin. ft.; Porch Floor, 70 sqs.; Porch Ceilings, 60 sqs.; Porch Beam, 17 lin. ft.; Porch and Balcony Post and Newels, 1; Porch Roof, (incl. under Main Roof).

100% FOR MASTER YES SIR! EVERY
Concern or individual without exception who received a Master for competitive test—bought the Master—
A record of which any manufacturer can be proud. Compare Master power—
GUARANTEED

Cutting Speeds—Accuracy and Durability under most trying conditions—Before buying "INVESTIGATE" the Master thoroughly.

Write today for full details or arrange to have us send you a Master for test purposes by your own operator. No obligation.

THE MASTER WOODWORKER MFG. CO.
Incorporated 1917
531B, LAFAYETTE EAST.
DETROIT, MICH.
### TRUCOST ESTIMATING FIGURES FOR THIS HOUSE: Levitt-Bldr.
- **Basement Walls**: 124 lin. ft.; **Trench Walls**: 108 lin. ft.; **Basement Floor**: 880 sq. ft.; **Garage Floor**: 190 sq. ft.; **Excavation per ft. deep**: 36 cu. yds.; **First Floor**: 480 sq. ft.; **Second Floor**: 480 sq. ft.; **Ceiling**: 19.00 sq. ft.; **Roof Pitch**: 8" rise per ft. run; **Roof**: 12.00 sq. ft.; **Partitions**: 220 lin. ft.; **Inside Finish OS Walls**: 290 lin. ft.; **Front and OS French Doors**: 124 lin. ft.; **Partition and Balcony Post and Newels**: 4; **Porch Roof**: 1,500 sq. ft.; **Porch and Garage Cornice**: 72 lin. ft.; **Porch and Deck Rail**: 200 lin. ft.

### TRUCOST ESTIMATING FIGURES FOR THIS HOUSE: Williams-Harter, Bldrs.
- **Basement Walls**: 140 lin. ft.; **Trench Walls**: 100 lin. ft.; **Basement Floor**: 975 sq. ft.; **Garage Floor**: 190 sq. ft.; **Excavation per ft. deep**: 33 cu. yds.; **First Floor**: 9.75 sq. ft.; **Second Floor**: 6.00 sq. ft.; **Ceiling**: 18.00 sq. ft.; **Roof Pitch**: 10" rise per ft. run; **Roof**: 16.00 sq. ft.; **Hips and Valleys**: 20 lin. ft.; **Cornice, C & F**: 200 lin. ft.; **Partitions**: 188 lin. ft.; **Inside Finish OS Walls**: 220 lin. ft.; **Front and OS French Doors**: 124 lin. ft.; **Inside Doors and Cased Opes.**: 24 opgs.; **Windows and Casements**: 24 opgs.; **Gable Sash and Louvers**: 2 opgs.; **Chimney**: 32 lin. ft.; **Main Stairs**: 1; **Porch Floor**: 2.00 sq. ft.; **Porch Ceilings**: 1.50 sq. ft.; **Porch Beam**: 24 lin. ft.; **Porch Cornice**: 32 lin. ft.

### TRUCOST ESTIMATING FIGURES FOR THIS HOUSE: Williams-Harter, Bldrs.
- **Basement Walls**: 110 lin. ft.; **Trench Walls**: 80 lin. ft.; **Basement Floor**: 675 sq. ft.; **Garage Floor**: 190 sq. ft.; **Excavation per ft. deep**: 30 cu. yds.; **Outside Walls**: 220 lin. ft.; **Excavation per ft. deep**: 220 lin. ft.; **First Floor** (Continued to page 178)

---

**175**

---

**HEATILATOR**

**Metal Roofs**

Look Better
Last Longer
Cost Less

*Your customers are reading our advertisements in their favorite small town and farm magazines. They are learning, as their fathers and grandfathers before them learned, that Edwards Metal Roofs provide protection from Fire as well as from lightning, from wind as well as from weather. They know why Edwards Roofs look better and last longer than other roofs and why Edwards Roofs are most economical. Thousands of these people write to us in answer to these advertisements. They ask where they can buy Edwards Metal Roofs. Whenever we have a dealer we refer them to him and help him close the sales.*

*Our new Catalog No. 95 will put you in position to get your share of this profitable business. Write for it today.*

**THE EDWARDS MANUFACTURING CO.**

542-562 Eggleston Avenue Cincinnati, Ohio
California Redwood Distributors, Ltd., 35 W. Wacker Drive, Chicago, Ill.
M. B. Furrin & Co., Cincinnati, Ohio.
Florida Lumber Ind., Inc., Jacksonville, Fla.
Frost Lumber Ind., Inc., Shreveport, La.
Lone Fir Lumber Co., Seattle, Wash.
Robert McNair Shingle Co., 182
Troy Lake Lumber Co., Chicago, Ill.
Walter G. Scott, Los Angeles, Calif.
Sheville Fine Sales Co., Minneapolis, Minn.
Wells Automatic Co., 13
LUMBER—WHOLESALE (California)
Wood and Aluminum—Also complete line of Plasterers Tools, Hawks, Floats, Darboins.
Write for Catalog
MAYES BROS. TOOL MFG. CO., Portland, Me., Phila., U.S.A.
LEVELS—CONVERTIBLE
Kendro & Eise, Hoboken, N.J.
Warren-Knight Co., 187
Draway Co., 188
LEVELS—FARM
Endress Co., 190
Keuffel & Esser Co., Hoboken, N.J.
Stanley Tools, New Britain, Conn.
Warren-Knight Co., 187
Draway Co., 188
LEVELS—LINE
Empire Mfg. Co., Kewanee, Ill.
Stanley Tools, New Britain, Conn.
Warren-Knight Co., 187
Draway Co., 188
LEVELS—MASONRY
Endress Level Mfg. Co., 190
Stanley Tools, New Britain, Conn.
Warren-Knight Co., 187
Draway Co., 188
LEVELS—METAL
Endress Level Mfg. Co., 190
Stanley Tools, New Britain, Conn.
Warren-Knight Co., 187
Draway Co., 188
LEVELS—CONVERTIBLE
General Electric Co., 179
National Electric Prod. Corp., 180
LIME—FINISHING
Cement Co., 181
Certain kind Prod. Corp., 45
National Mortar & Supply Co., 185
Ohio Hydrate & Supply Co., 185
U. S. Gypsum Co., 81
LIME—HYDRATED
Cement Co., 181
Louisville Cement Co., 119
National Mortar & Supply Co., 185
Ohio Hydrate & Supply Co., 185
U. S. Gypsum Co., 81
LIME—LUMP
Louisville Cement Co., 119
National Mortar & Supply Co., 185
Ohio Hydrate & Supply Co., 185
U. S. Gypsum Co., 81
LIME—PREPARED
Cement Co., 181
Louisville Cement Co., 119
National Mortar & Supply Co., 185
Ohio Hydrate & Supply Co., 185
U. S. Gypsum Co., 81
LIME—PROOFING
See Water-Proofing, Limestones.
LINING—CLOSET (Cedar)
E. L. Bruce Co., 9
Johns-Manville
LINING—STUD WALL
Angler Co., 187
LINING—STUD WALL
Flint Co., 189
Linford Ind., Inc., Shreveport, La.
lynx Co., 18
LUMBER—DOOR
Johns-Manville
LUMBER—WALL
Angler Co., 187
LINOLEUM—See Coverings, Floor Coverings
Donley Brothers Co., 9
Kerns Bros. Co., 9
Majestic Co., 88
Truscon Steel Co., 9
Vento Steel Prod. Co., 14
Frants Mfg. Co., 138
McKinney Mfg. Co., 153
Selbmann & Co., 8
LUMBER—WHOLESALE—See adv. this page.
Strand Building Prod. Co., 180
SCHLAGE
SCHLAGE
LOCK COMPANY
SAN FRANCISCO, CALIF.
LOCKS—SASH
Curley Kkich Mfg. Inc. 33
Frants Mfg. Co., 136
Mckinney Mfg. Co., 153
Rinehart & Co., 42
Locustville, 139
LUMBER—ASBESTOS
The Philip Carey Co., 36
Hershey’s Lumber Co., 14
Johns-Manville
LUMBER—OVERSIZE (Glued)
Kinslow Lumber Co., 42
LUMBER—PRESSURE-TREATED
American Lumber & Treating Co., 114
Bradley Lbr. Co., 9
MACHINES—BLUEPRINTING
David White Co.
MACHINES—BORING
DeWalt Products Corp.
MACHINES—CEMENT BRICK
Colorcrete Industries, Inc.
MACHINES—CONCRETE BLOCK
Colorcrete Industries, Inc.
MACHINES—CONCRETE BLOCK
Concrete Emulsion Co., Inc.
MACHINES—DISINFECTION
American Radiator & Standard Sanitary
MACHINES—DRAIN TILE (Cement)
Colorcrete Industries, Inc.
MACHINES—DRAIN TILE (Concrete)
Colorcrete Industries, Inc.
MACHINES—FENCE POST
Colorcrete Industries, Inc.
MACHINES—FLOOR FINISHING
American Floor Surfacing Machinery Co.
MACHINES—FLOOR SURFACING
American Floor Surfacing Machinery Co.
MACHINES—FLOOR SANDING
Colorcrete Industries, Inc.
MACHINES—FLOOR SCRUBBING
MACHINES—FLOOR SPREGLING
DeWalt Products Corp.
MACHINES—FLOOR SPRAYING
Colorcrete Industries, Inc.
MACHINES—FLOOR SPRAYING
Concrete Equipment Co.
MACHINES—FLOOR TILING
MACHINES—FLOOR WATERPROOFING
American Floor Surfacing Machinery Co.
MACHINES—FLOOR WAXING
American Floor Surfacing Machinery Co.
MACHINES—FOOTBRICK
Colorcrete Industries, Inc.
MACHINES—FOOTRCIPING
American Floor Surfacing Machinery Co.
MACHINES—FRAPPLING
Colorcrete Industries, Inc.
MACHINES—FRAPPLING
Concrete Equipment Co.
MACHINES—GARDENING
American Saw Mill Machinery Co., Hack- ettown, N. J.
MACHINES—MORTISING
DeWalt Products Corp.
MACHINES—MORTISING
Master Woodworker Mfg. Co.
MACHINES—PAINT CONDITIONING
Landon P. Smith, Inc.
MACHINES—PAINT SPRaying
Colorcrete Industries, Inc.
MACHINES—PAINT SPRAYING
Concrete Equipment Co.
MACHINES—PAINT SPRAYING
MACHINES—PAINT SPRAYING
American Saw Mill Machinery Co., Hack- ettown, N. J.
MACHINES—PRESSURIZED AIR
American Floor Surfacing Machinery Co.
MACHINES—PRESSURIZED AIR
DeWalt Products Corp.
MACHINES—PRESSURIZED AIR
Master Woodworker Mfg. Co.
MACHINES—PRESSURIZED AIR
Concrete Equipment Co.
MACHINES—PRESSURIZED AIR
Concrete Equipment Co.
MACHINES—PRESSURIZED AIR
MACHINES—PRESSURIZED AIR
American Saw Mill Machinery Co., Hack- ettown, N. J.
MACHINES—PRESSURIZED AIR
Master Woodworker Mfg. Co.
MACHINES—PRESSURIZED AIR
American Saw Mill Machinery Co., Hack- ettown, N. J.
MACHINES—PRESSURIZED AIR
Master Woodworker Mfg. Co.
MACHINES—PRESSURIZED AIR
Concrete Equipment Co.
MACHINES—PRESSURIZED AIR
Concrete Equipment Co.
MACHINES—PRESSURIZED AIR
MACHINES—PRESSURIZED AIR
American Saw Mill Machinery Co., Hack- ettown, N. J.
MACHINES—PRESSURIZED AIR
Master Woodworker Mfg. Co.
MACHINES—PRESSURIZED AIR
Concrete Equipment Co.
MACHINES—PRESSURIZED AIR
Concrete Equipment Co.
MACHINES—PRESSURIZED AIR
MACHINES—PRESSURIZED AIR
American Saw Mill Machinery Co., Hack- ettown, N. J.
MACHINES—PRESSURIZED AIR
Master Woodworker Mfg. Co.
MACHINES—PRESSURIZED AIR
Concrete Equipment Co.
MACHINES—PRESSURIZED AIR
Concrete Equipment Co.
MACHINES—PRESSURIZED AIR
MACHINES—PRESSURIZED AIR
American Saw Mill Machinery Co., Hack- ettown, N. J.
MACHINES—PRESSURIZED AIR
Master Woodworker Mfg. Co.
MACHINES—PRESSURIZED AIR
Concrete Equipment Co.
MACHINES—PRESSURIZED AIR
Concrete Equipment Co.
MACHINES—PRESSURIZED AIR
MACHINES—PRESSURIZED AIR
American Saw Mill Machinery Co., Hack- ettown, N. J.
MACHINES—PRESSURIZED AIR
Master Woodworker Mfg. Co.
MACHINES—PRESSURIZED AIR
Concrete Equipment Co.
MACHINES—PRESSURIZED AIR
Concrete Equipment Co.
MACHINES—PRESSURIZED AIR
MACHINES—PRESSURIZED AIR
American Saw Mill Machinery Co., Hack- ettown, N. J.
MACHINES—PRESSURIZED AIR
Master Woodworker Mfg. Co.
MACHINES—PRESSURIZED AIR
Concrete Equipment Co.
MACHINES—PRESSURIZED AIR
Concrete Equipment Co.
MACHINES—PRESSURIZED AIR
MACHINES—PRESSURIZED AIR
American Saw Mill Machinery Co., Hack- ettown, N. J.
MACHINES—PRESSURIZED AIR
Master Woodworker Mfg. Co.
MACHINES—PRESSURIZED AIR
Concrete Equipment Co.
MOULDS—PICTURE
Bradley Lith. Co. ........................................... 9
Creative Litho Co. ........................................ 8
Exchange Sawmills Sales Co. ......................... Kansas City, Mo.
Frost Lumber Industries, Inc., Shreveport, La.

MOULDS—METAL
Aluminum Co. of America, Pittsburgh, Pa.

MOULDINGS—BASE
Aluminum Co. of America, Pittsburgh, Pa.

MOULDING—BASE
Aluminum Co. of America, Pittsburgh, Pa.

MOULDINGS—WOOD
Pine Sales Co., Minneapolis, Minn.

MOULDINGS—PICTURE
Creative Litho Co. ........................................ 8
Exchange Sawmills Sales Co. ......................... Kansas City, Mo.

MOULDINGS—PICTURE
Bradley Lith. Co. ........................................... 9
Creative Litho Co. ........................................ 8
Exchange Sawmills Sales Co. ......................... Kansas City, Mo.
Frost Lumber Industries, Inc., Shreveport, La.

MOULDINGS—BASE
Aluminum Co. of America, Pittsburgh, Pa.

MOULDINGS—METAL
Aluminum Co. of America, Pittsburgh, Pa.

MOULDINGS—WOOD
Pine Sales Co., Minneapolis, Minn.

MOULDINGS—PICTURE
Creative Litho Co. ........................................ 8
Exchange Sawmills Sales Co. ......................... Kansas City, Mo.
Frost Lumber Industries, Inc., Shreveport, La.

MOULDINGS—BASE
Aluminum Co. of America, Pittsburgh, Pa.

MOULDINGS—METAL
Aluminum Co. of America, Pittsburgh, Pa.

MOULDINGS—WOOD
Pine Sales Co., Minneapolis, Minn.

MOULDINGS—PICTURE
Creative Litho Co. ........................................ 8
Exchange Sawmills Sales Co. ......................... Kansas City, Mo.
Frost Lumber Industries, Inc., Shreveport, La.

MOULDINGS—BASE
Aluminum Co. of America, Pittsburgh, Pa.

MOULDINGS—METAL
Aluminum Co. of America, Pittsburgh, Pa.

MOULDINGS—WOOD
Pine Sales Co., Minneapolis, Minn.
HERE'S REAL APPEAL!

HOTSTREAM WATER HEATERS
Want to put more Sales Appeal into the homes you design or build? Hotstream offers:
APPEAL of SMART STYLING... The beautiful Hotstream Heater is at home in the most modern surroundings.
APPEAL of PERFORMANCE... Backed by factory guarantees of 5 to 20 years.
APPEAL of ECONOMY... Initial and fuel savings appeal to every home-owner.

Put Hotstream to work for you. Write for Catalog No. 40... describing "The most complete line of water heaters in the world."

THE HOTSTREAM HEATER COMPANY
8007 GRAND AVENUE • CLEVELAND, OHIO

KITCHEN CABINETRY of wood, metal and newest compositions

IDEAL FOR ARCHITECT AND BUILDER
Selection of Kitchen Maid Cabinetry solves many a problem for both architect and builder. Constructed of wood, metal and newest compositions...each where it serves best...this famous cabinetry meets every individual preference. Available in two price ranges, it is also adaptable to practically any budget. Write for color catalog and details.

TruCost Figures
(Continued from page 175)

2-Flats—
(Continued from page 102)
opening devices for steel casements. If needed, double-acting door hinge for swinging door, furnishing and installing brass push plates, etc.

Plumbing: Remove ice box waste line and gas line to outside wall where same run through pantry partition, relocate gas line for first floor stove. Change location of sink waste stack vent and water lines for new sink location. Furnish new chrome sink faucet and trap, and strainer not furnished with cabinet sink.

Cabinets: "Unibilt" St. Charles steel cabinets, sink, strainer and new type colored porcelain top for sink and counter, or if preferred top may be white (sink included but no faucet, strainer or trap).

Steel Sash: Steel casements over sink with Fenwrought metal framed copper screens, and crank handles for opening windows.

Glass: New glass for steel frames over sink.

Linoleum: Prepare kitchen floor, install standard weight marbleized field Nairn linoleum laid over felt cemented to floor and to linoleum, white feature strip and 6" black border.

Venetian Blinds: For windows over sink.

Painting and Decorating: Wash walls and prepare for painting with DuPont paint and enamel. Paint and stipple (2 coats) above chair rail; enamel (2 coats) below chair rail. Wash and paint

LANSING
3½ E. D.
Trailer Mixer

EASILY HANDLED
TILTING WHEEL,
GEARS & BRAKE

This new E. D. (End Dump) Lansing Trailer Mixer is faster, more compact, easier handled. Overall length only 57" and entire width 44", with weight of 65"; 26" wheels with pneumatic tires. Write NOW for complete information.

LANSING COMPANY, LANSING, MICHIGAN
A New Mixer Built for Action
woodwork (including doors) 3 coats.

Masonry: Remove pantry window and brick up same; remove old kitchen window, partly brick up, install new steel windows and make sill.

Plastering: Plaster where ironing board is removed. New plastering (3 coats) where ceiling is furred down and arch made.

Sundry plaster patching.

Electrical Wiring: Move ceiling outlet to new center; hang only two new fixtures—1 at new ceiling center and 1 in arch over sink. Install new refrigerator outlet, new counter top, and double combination double convenience outlet with two switches. New plates on any old convenience outlets.


Plumbing: Furnish and install chrome concealed shower, shower rod, shower curtain and window curtain to match. Furnish and install Standard lavatory, combination faucet, pop-up waste, towel bars and trap. Furnish and install new Church white toilet seat.

Linowall (bath only): 5 feet (except 7 feet around bath) with metal beading.

Plaster Patching: Estimate any needed.

Electric Wiring (bath only): Install new outlet over medicine case (difficult job of fishing wires, etc.). Hang 2 new fixtures.

New Lighting Fixtures: 1 new center ceiling fixture; 1 new bracket fixture, with convenience receptacle for shaving, etc.


LIVING ROOM & SMALL HALL: Venetian Blinds.

Plastering: Estimate an average.

Electric Wiring: Install two new Duplex convenience outlets:

The Builder's Saw!

For more profit, the Wallace No. 1 Radial Saw is phenomenal in its economies! Saves from $75 to $200 on every $4,000 to $8,000 residence. Equally profitable for heavy construction work.

This one machine does:
- X-CUTTING
- MITERING
- RIPPING
- DOADOING
- ROUTING
- SHAPING
- JOINTING
- GROOVING
- CUTTING TILE

Safe, speedy, accurate in operation. Cuts jack rafters, hip rafters, studs, joists, sheathing, flooring. Use for cabinet work, moldings, sash, routing stair-stringers, etc.

If you want to make extra profits, write today for bulletins on the Wallace No. 1 Radial Saw.

J. D. WALLACE & COMPANY
136 S. California Avenue
CHICAGO, ILLINOIS

MAKE SMALL CLOSETS

WITH K-VENIENCE CLOTHES CLOSET FIXTURES

Small or awkwardly shaped closets are sometimes hard to avoid but have always been a source of irritation in the home. Now you can double the hanging space with no increase in cubage—and provide a neat handy place for wearing apparel simply by installing K-Veniences. More than 40 modern, practical fixtures to choose from. Attach easily to door or wall. Inexpensive. Nationally advertised. Used extensively by leading Long Island and other important developers.

FREE CATALOG—See your Builders' Hardware dealer or write today. Includes many installation ideas—shows complete line.


KNAPE & VOGT MANUFACTURING CO.
Dept. M-4 Grand Rapids, Michigan
2-Flats—
(Continued from page 179)

furnish and install new plates for present convenience outlets; remove and disconnect 3 bracket outlets. Hang only two new bracket fixtures over fireplace.

Lighting Fixtures: Furnish two new bracket fixtures over fireplace.

Carpentry: Remove bookcase doors and patch neatly where hinges are removed. Remove, chrome and replace hardware. Re-nail moldings and stops. Cut tops from casings.


DINING ROOM: Venetian Blinds.
Plastering: As needed.
Wiring: Hang dining room fixtures, install new plates for switch and convenience outlets.

Lighting Fixtures: 1 new center ceiling fixture.


BEDROOMS & CLOSETS: Plastering: As needed.
Wiring: Install only new fixtures (1 each). Furnish and install new convenience outlet (1 in each room).

Lighting Fixtures: New center fixture, pull chain (in each room).

Carpentry: Remove casing projections. Remove, chrome and replace hardware. Furnish and install double curtain rods.

American Builder, April 1940.

varnish floor 2 coats. Wash, seal and enamelled doors 2 coats.

STAIR HALL: Carpet: Furnish and install carpet and pads

for stairs from first sidewalk level to entrance door to first

apartment and including landing.

Plastering: As needed.

Carpentry: No work (unless new front door).

Painting & Decorating: Wash walls and ceilings. Prepare for

painting. Paint and stipple above dado 2 coats. Enamel below
dado 2 coats. Wash and prepare woodwork. Enamel woodwork
3 coats. Wash and varnish floors, steps and risers. Wash and varnish window sill and sash. Wash and varnish doors.

Electric Fixtures: Furnish 1 double wired fixture at grade

entrance, 1 outlet wire to first. Floor and 1 outlet wire to second

floor.

Electric Wiring: Hang only 1 new fixture at grade entrance.

Furnish and install 2 new mail boxes. Install chime (small bar-
type) and furnish same.

BASEMENT: Painting: Wash with hose. 1 coat Luminal on

walls only. Silver coat all pipes for water lime and electric

circuit, windows, door and iron beams. Black enamel varnish

faces. Bronze metal furnaces.

NEW FRONT DOOR (if wanted).

Painting: 3 coats spar varnish, sanding, etc.

Carpentry: Furnish door, hinges, lock set, knocker, mail slot,

chrome house numbers, fit door and attach all of above. Furnish

and install leaded glass in opening.

For the above specified modernization program, which repres-

ents a complete job of remodeling, Mills & Sons quote a lump

sum price. This covers all needed labor and materials for a single

flat and the space which is common to both tenants in the building;

those items for the flats themselves would have to be doubled

to modernize the whole building. Mills also offer alternate

schedules which allow the tenant to undertake some of the work

for himself at a later date.

The job pictured in this article is a demonstration project

which has been opened to public inspection for some time. It is

reported that Mills & Sons have resold 30 of these two-flat

buildings since the first of the year, indicating good results for

their program.

American Builder, April 1940.
NEW Guild Tool Electric Hand Saw

Finer, Faster sanding. This Easy Electric Way!

Rtsome Hand Sawing Gone

Now You Can Saw This New Electric Way!

Entirely new Guild Handy Cutters, just $5...Hundreds of uses, inside or out, price or value on only $1 Cutters. Ideal for plywood, hardboard, flooring, crating, etc. Blade can be used on ripping, tenoning, dadoing, Rums from light socket. Write for FREE folder TODAY!

New Guild Tool Co.
1720 Park St., Syracuse, N. Y.

Finer, Faster Sawing

HUTHER BROS.

manufacturers of

Circular Saws, Dado Heads, Band Saws, Shaper Steel, Machine Knives.

HUTHER BROS. SAW MFG. CO., INC.
Brockports, New York

SAW—ELECTRIC
American Brass Co., New York, N. Y. 155
DeWalt Products Corp. 145
Detroit Steel Products Co. 153
Fuhrmann & London Mfg. Co. 150
Hope’s Windows, Inc. 23
Kiewit Mfg. Co. 147
Mauers Brothers Iron Co. 121
Midvale Mutual Door Company, Tacoma, Wash. 151
Truscon Steel Co. 154
Weyerhaeuser Sales Co. 13
Wouterus Steel Products Co. 154

SAW—PORTABLE POWER
American Power Tool Machinery Co. 134
American Saw Mill Machinery Co., Hacket-town, N. Y. 155
DeWalt Mower Co. 146
Master Woodworker Mfg. Co. 174
Parks Woodworking Machine Co. 176
Porter-Cable Machine Co. 167
Power King Tool Corp. 158
Sand Fire, Machine Knives. Rochester, N. Y. 169

SAWS—SWING
American Saw Mill Machinery Co., Hackettown, N. Y. 154
DeWalt Mower Co. 146
Porter-Cable Machine Co. 167
Power King Tool Corp. 158
Sand Fire, Machine Knives. Rochester, N. Y. 169

SAW SASH—HOLLOW METAL
American Brass Co., New York, N. Y. 155
Milcor Steel Co., Milwaukee, Wis. 170
Union Coach & Car Co. 148

SAW SASH—MADE WOOD
American Saw Mill Machinery Co., Hackettown, N. Y. 155
DeWalt Mower Co. 146
Master Woodworker Mfg. Co. 174
Parks Woodworking Machine Co. 176
Porter-Cable Machine Co. 167
Power King Tool Corp. 158
Sand Fire, Machine Knives. Rochester, N. Y. 169

SAW SASH—WIRE
American Sash and Door Co., Hackettown, N. Y. 156
DeWalt Mower Co. 146
Master Woodworker Mfg. Co. 174
Parks Woodworking Machine Co. 176
Porter-Cable Machine Co. 167
Power King Tool Corp. 158
Sand Fire, Machine Knives. Rochester, N. Y. 169

SAW SASH—PORTABLE POWER
American Power Tool Machinery Co. 134
American Saw Mill Machinery Co., Hackettown, N. Y. 155
DeWalt Mower Co. 146
Master Woodworker Mfg. Co. 174
Parks Woodworking Machine Co. 176
Porter-Cable Machine Co. 167
Power King Tool Corp. 158
Sand Fire, Machine Knives. Rochester, N. Y. 169

SAW SASH—WIRE
American Sash and Door Co., Hackettown, N. Y. 156
DeWalt Mower Co. 146
Master Woodworker Mfg. Co. 174
Parks Woodworking Machine Co. 176
Porter-Cable Machine Co. 167
Power King Tool Corp. 158
Sand Fire, Machine Knives. Rochester, N. Y. 169

SAWS—CIRCULAR
American Saw Mill Machinery Co., Hackettown, N. Y. 155
Construction Machinery Co. 156-183
DeWalt Products Corp. 148
Detroit Steel Products Co. 153
Hope’s Windows, Inc. 151
Truscon Steel Co. 154
Weyerhaeuser Sales Co. 13
Wouterus Steel Products Co. 154

SAWS—SHAPER
American Sash and Door Co., Hackettown, N. Y. 156
DeWalt Mower Co. 146
Master Woodworker Mfg. Co. 174
Parks Woodworking Machine Co. 176
Porter-Cable Machine Co. 167
Power King Tool Corp. 158
Sand Fire, Machine Knives. Rochester, N. Y. 169

SAWS—STORM
Walkerturner Co. 182
Wodack Electric Tool Corp. 194

SAWS—PORTABLE POWER
American Power Tool Machinery Co. 134
American Saw Mill Machinery Co., Hackettown, N. Y. 155
DeWalt Mower Co. 146
Master Woodworker Mfg. Co. 174
Parks Woodworking Machine Co. 176
Porter-Cable Machine Co. 167
Power King Tool Corp. 158
Sand Fire, Machine Knives. Rochester, N. Y. 169

SAWS—SWING
American Saw Mill Machinery Co., Hackettown, N. Y. 154
DeWalt Mower Co. 146
Master Woodworker Mfg. Co. 174
Parks Woodworking Machine Co. 176
Power King Tool Corp. 158
Sand Fire, Machine Knives. Rochester, N. Y. 169

SAWS—PORTABLE POWER
American Power Tool Machinery Co. 134
American Saw Mill Machinery Co., Hackettown, N. Y. 155
DeWalt Mower Co. 146
Master Woodworker Mfg. Co. 174
Parks Woodworking Machine Co. 176
Porter-Cable Machine Co. 167
Power King Tool Corp. 158
Sand Fire, Machine Knives. Rochester, N. Y. 169

 Сейчас нужно сделать скриншот с этим изображением, а затем вставить его в текстовый документ. Затем проанализировать содержание изображения и текстового документа, чтобы определить, какие изображения могут быть использованы в документе. Затем нужно сконвертировать текст в формат HTML для вставки в документ. После этого нужно создать документ в формате PDF. Наконец, нужно проверить документ для корректности и внести необходимые изменения. В результате должен быть готовый документ.
NEW INFORMATION—CATALOGS OFFERED

Readers Wanting to Receive Any of the Catalogs and Data Sheets Listed in This Department Should Write on Their Business Stationery Direct to the Manufacturer. When Writing, Mention This Department of American Builder and State Your Occupation or Business Connection.

"HOW TO SELECT AND INSTALL A WATER SYSTEM"—A new 48-page illustrated handbook for planners and builders of homes in the country. It includes chapters on—How to estimate water requirements for homes and farms; how to select the right type of pump; how to plan the well; how to protect the water supply against contamination; information about piping, storage tanks and accessory equipment; miscellaneous information about things to do and things not to do when selecting and installing an automatic water supply system. This guide will help specifiers and buyers of electric water systems to avoid costly mistakes. It gives authoritative answers to most of the common problems encountered between those who recommend and sell and those who buy electric water systems. It is timely in that it ties in with the rapid expansion of high lines in rural and suburban areas which depend on individually owned water systems for running water—THE DEMING CO., Salem, Ohio.

"MILCOR METAL TRIM"—An attractive spiral-ring bound handbook with photographs and data giving the latest designs in metal trim for modern interior construction. A valuable feature of this catalog is the half-scale cross sectional diagrams giving complete dimensions for each product and showing the best method of installation. The complete Milcor metal trim line is presented.—MILCOR STEEL CO., Milwaukee, Wis.

ATTIC VENTILATION—The Rex catalog and the installation manual, companion pieces for architects and builders, give timely information on electric fan equipment and how to install it for effective summer cooling. The application of electric coolers for

Attic Ventilation—The Rex catalog and the installation manual, companion pieces for architects and builders, give timely information on electric fan equipment and how to install it for effective summer cooling. The application of electric coolers for

30% to 40% MORE CONCRETE with this Latest Jaeger 3/2S

- Load Measuring Batch Hopper (12" lower) while you mix and discharge — fast as a power loader.
- Cris - Cross "R" - Mix Drum gives more thorough mix, faster discharge.
- Accurate Measuring Water Tank is fast, syphon type.
- 3/4" Perforated Steel Plate Design—handy to the layman or to your contractors. We also furnish Fire Flashed Ceramic Tile in beautiful patterns suitable for Vestibules, Sun Parlor's, Dining Rooms, Bathrooms and hallways at 30c to 80c per square foot.

THE JAEGER MACHINE CO.
351 Dublin Ave.
Columbus, Ohio.

NOW ONLY 50 CENTS for 40 House Plans

GET THIS BIG BOOK OF LOW COST HOMES—Architecturally correct in design—Practical Plans—Sound Construction—Economical to build.

These 40 House Plans are designed by a master architect, with years of experience in the Home Building field. They meet the demand for fine living at low cost.

THE JAEGER MACHINE CO.
351 Dublin Ave.
Columbus, Ohio.

LLOYD FLOOR & WALL TILE COMPANY
1925 Walnut St., Kansas City, Mo.
commercial buildings, theatres, shops, restaurants, etc., is covered in a separate guide of 28 pages well illustrated.—AIR CONTROLS, Inc., Div. of The Cleveland Heater Co., 1933 W. 114th St., Cleveland, Ohio.

"SHORT COURSE IN INTERIOR DECORATING"—Priced at 10 cents to help defray the cost of mailing, a 16-page full color portfolio presents the following features in chapter heading form: Living rooms, choosing the right color scheme; dining rooms, sound principles; bedrooms, more sound principles; 57 color schemes for walls; decorating "tricks" that help; attics and basements, casein paste paint; Luminall color card. This new portfolio sums up many years of experience by a leading interior designer. It is offered as "what women want in the way of painted walls and ceiling effects."—NATIONAL CHEMICAL & MFG. CO., 3618 S. May St., Chicago, Ill.

DISTANT CONTROL FOR WATER HEATER—Complete information is now available concerning the Savutime water heater remote control which is offered as the inexpensive way of giving the advantages of expensive automatic systems. By the touch of a button in bath, kitchen or basement, Savutime lights or shuts off the water heater.—SAVUTIME SALES CO., 90 Manhattan St., Rochester, N.Y.

FIR-TEX INSULATION FOR INTERIOR FINISH, HEAT AND SOUND CONTROL—A very attractive new 28-page handbook, with many illustrations in full color, tells all about Fir-Tex, how to use it, and actual results secured, when used for beautiful interior finish effects, as an insulating plaster base, for wall or roof sheathing, as sound control, and for refrigeration. Uses in the home, for commercial buildings, and in industry are included. The front cover picturing "the twins" is winsome enough for framing.—FIR-TEX INSULATING BOARD CO., Portland, Ore.

"BILT-WELL MILLWORK"—A new 16-page brochure in best architectural style illustrates several of the most interesting spe.

(Continued to page 190)
BUILDING TILE
CONCRETE-INTERLOCKING

Less Cost
Made With Compressed Air
SEND FOR CATALOG
LAY-MORE TILE MACHINE CO.
CRAWFORDSVILLE, IND.

TILE-PARTITION
Colo-Crete Co. 16
Certain-teed Products Corp. 16

TILE-ROOFING—See Roofing, Tile

TILE-STEEL
Weyerhaeuser Sales Co. 16

TANK FITTINGS—See Fittings, Tank

TAPES-MEASURING
Keuffel & Esser Co., Hoboken, N.J.

TELEPHONES-INTERIOR
Edwards Mfg. Co. 14

TELEPHONE DIRECTORY ADVERTISERS—See adv. Advertising, Classified Telephone Directory

TEMPERATURE-REGULATORS—See Thermostats

TENNESSEE
DeWalt Products Corp. 143
American Lumber & Treatment Co. 114

TERRAZZO RUBBING MACHINES—See adv. on this page

THERMOSTATS
American Radiator & Standard Sanitary 8

TIE-WIRE
American Brass Co., New York, N.Y.

TILES—WATER HEATERS—See Heaters, Tank

TINCLAD DOORS—See Doors, Tinclad

TIN WALL
Lars Sales Co. 156

TOILET BAGS—See Bags, Tool

TOILET STALLS—See Stalls, Toilet

TOOLS—CARPENTRY
Brandton Mfg. Co., Atlanta, Ga. 167

TOOLS—MASTER STRIP
Armstrong Cork Co. 128-129-132

TOOLS—METAL STRIP
Armstrong Cork Co. 128-129-132

TOOLS—WIRE
American Bronze Co., New York, N.Y.

TOOL BOXES—See Boxes, Tool

TOOL GRINDERS—See Grinders, Tool

TOOL BAGS—See Bags, Tool

TOOLS—MASTERS
Herron-Zimmers Moulding Co. 161

TOOLS—WOOD
American Lumber & Treating Co. 114

TONIC—WATER
McKinney Mfg. Co. 156

TOOTHBRUSH—CLAY
Hoboken, N.J.

TOWERS CONCRETE PLACING
Truscon Corp.

TRAP BRACKETS
American Lumber & Treating Co. 114

TRAYS—LAUNDRY
American Radiator & Standard Sanitary 8

TREES—CONCRETE
Truscon Steel Co.

TRENCHES-CONE-FLOOR AND WALL
Crawfordsville, Ind.

TRELLES—STEEL
Steel Scaffolding Co., Evansville, Ind.

TRIANGLES—See Instruments, Drawing

TRIM-MORE—STEEL
Steel Co.

TRUSS—STEEL
Weyerhaeuser Sales Co. 13

TRUSSES—INTERIOR (Wood)
Allmetal Weatherstrip Co.

TRUSSES—ROOF (Steel)
Allmetal Weatherstrip Co.

TRUSSES—ROOF (Wood)
Weyerhaeuser Sales Co.

TRY AND MUTE SQUARES—See Squares, Try and Mitre

TUB HANGERS—See Hangers, Bath Tub

TUBS—BATH
American Radiator & Standard Sanitary 8

TUBS—LAUNDRY
American Radiator & Standard Sanitary 8

TURF—MOWING PLANTS—See Plants, Turf

TURF—MOWING PLANTS—See Plants, Turf

TURF—SAND
Crane Co.

TURF—SAND
Crane Co.

TURF—SAND
Crane Co.

TURF—SAND
Crane Co.

TURF—SAND
Crane Co.

TURF—SAND
Crane Co.

TURF—SAND
Crane Co.

TURF—SAND
Crane Co.

TURF—SAND
Crane Co.

TURF—SAND
Crane Co.

TURF—SAND
Crane Co.

TURF—SAND
Crane Co.

TURF—SAND
Crane Co.

TURF—SAND
Crane Co.

TURF—SAND
Crane Co.

TURF—SAND
Crane Co.

TURF—SAND
Crane Co.

TURF—SAND
Crane Co.

TURF—SAND
Crane Co.

TURF—SAND
Crane Co.

TURF—SAND
Crane Co.

TURF—SAND
Crane Co.

TURF—SAND
Crane Co.

TURF—SAND
Crane Co.

TURF—SAND
Crane Co.

TURF—SAND
Crane Co.

TURF—SAND
Crane Co.

TURF—SAND
Crane Co.

TURF—SAND
Crane Co.

TURF—SAND
Crane Co.

TURF—SAND
Crane Co.
### Ventilators—Kitchens
- American Radiator & Standard Sanitary... 8
- Autovent Fan and Blower Co., Chicago, Ill. 9
- Donely Brothers Co., 9
- Edwards Mfg. Co., 9
- Libbey-Owens-Ford Glass Co. 9
- Tile-Tex Co., Chicago Heights, Ill. 9

### Ventilators—Wall
- Air Controls, Inc. 19
- Autovent Fan and Blower Co., Chicago, Ill. 19
- Donely Brothers Co., 19
- Edwards Mfg. Co., 19
- Libbey-Owens-Ford Glass Co. 19
- Tile-Tex Co., Chicago Heights, Ill. 19

### Radiant Kitchen Vents
- Complete Line of Wall, Ceiling, Chimney Types
- Write for literature & prices

### Shepler Mfg. Co., 116
- Pittsburgh, Pa. 116

### Vents—Wainscoting—Tile
- Gibbs Boardtiie Corp., Chicago, Ill. 146
- Libbey-Owens-Ford Glass Co. 146
- Tile-Tex Co., Chicago Heights, Ill. 146

### Washstands
- American Radiator & Standard Sanitary... 8
- Crane Co. 8
- Donely Brothers Co., 8
- Edwards Mfg. Co., 8
- Libbey-Owens-Ford Glass Co. 8
- Tile-Tex Co., Chicago Heights, Ill. 8

### Windows—Case Ment (Steel)
- Detroit Steel Products Co. 27
- Hope's Windows, Inc. 27
- Kewanee Mfg. Co. 27
- Libbey-Owens-Ford Glass Co. 27
- Tile-Tex Co., Chicago Heights, Ill. 27

### Windows—Garage
- Detroit Steel Products Co. 27
- Hope's Windows, Inc. 27
- Kewanee Mfg. Co. 27
- Libbey-Owens-Ford Glass Co. 27
- Tile-Tex Co., Chicago Heights, Ill. 27

### Windows—Garage (Wood)
- Andersen Corp. 53
- Carr, Adams & Collier Co. 53
- Curtis Companies, Inc. 53
- Farley & Loetscher Mfg. Co. 53

### Windows—Hollow Metal
- Donely Brothers Co. 176
- Edwards Mfg. Co., 176
- Libbey-Owens-Ford Glass Co. 176
- Tile-Tex Co., Chicago Heights, Ill. 176

### Windows—Horizontal Sliding
- Andersen Corp. 53
- Libbey-Owens-Ford Glass Co. 53

### Windows—Louvre (Steel)
- Hope's Windows, Inc. 23

### Windows—Puttyless
- Detroit Steel Products Co. 27
- Donely Brothers Co., 27
- Edwards Mfg. Co., 27
- Farley & Loetscher Mfg. Co. 27

### Windows—Reverseable (Metal)
- Detroit Steel Products Co. 27
- Donely Brothers Co., 27
- Edwards Mfg. Co., 27
- Libbey-Owens-Ford Glass Co. 27

### Windows—Reverseable (Wood)
- Weyerhaeuser Sales Co. 13
- Weyerhaeuser Sales Co. 13

### Windows—Roof
- Detroit Steel Products Co. 27
- Donely Brothers Co., 27
- Edwards Mfg. Co., 27
- Libbey-Owens-Ford Glass Co. 27

### Windows—Roof (Wood)
- Curtis Companies, Inc. 190

### Windows—Reversible (Wood)
- Weyerhaeuser Sales Co. 13

### Windows—Reversable (Wood)
- Weyerhaeuser Sales Co. 13

### Windows—Sliding
- Detroit Steel Products Co. 27
- Libbey-Owens-Ford Glass Co. 27
- Tile-Tex Co., Chicago Heights, Ill. 27

### Windows—Triple Glazed
- Detroit Steel Products Co. 27
"Show Me the Man with an EMPIRE LEVEL in his Tool Kit... And I'll show you a Careful Workman!"

Skilled Workmen prefer the "Extreme Accuracy" of EMPIRE LEVELS, with their interchangeable, easy-to-read precision-tested Vials and Vial Cases. EMPIRE Levels are ALL that a Quality Building Tool should be—accurately balanced for heavy use, convenient, sturdy, attractive—the kind you'll use with pride. Broken Vial Cases may be economically replaced on the job—no fuss or delay.

Empire Aluminum Levels are EMPIRE No. 151-E Aluminum Level with 2 built to a Standard That Meets U. S. Government Specifications. INTERCHANGEABLE VIAL CASES

EMPIRE LEVEL MFG. COMPANY
715 South Sixth Street
Milwaukee, Wisconsin

8 full-sized machines in one unit!

And each of the 8 is independently operated. With the Model "A" you are really equipped to do a complete job.

MODEL "A"
PLANING MILL

Complete line of individual and combination machines

Good Woodworking Machines Since 1887

THE PARKS WOODWORKING MACHINE CO.
Dept. BL-4
1524 Knowlton Street
Cincinnati, Ohio

NEW UNI-POINT RADIAL SAW—A new big broadside illustrates this new and unique universal machine, of which the manufacturer states, "Cuts everything—including your costs!" It is offered in two sizes, Junior and Senior, and with motor power ranging from \( \frac{1}{2} \) to \( \frac{3}{4} \) H.P. Sawing, dadoing, routing, and shaping operations are easily handled with the several attachments and the ingenious mounting of this machine with its work table.—AMERICAN SAW MILL MACHINERY CO., Hackettstown, N.J.

$189.52 for 1940 BOSS 3 1/2 S

As Illustrated

With cushion or pneumatic tires

Built to A.G.C. standards

2 H.P. Stover engine

Timken bearings

Heavy duty springs

New Boss catalog just off the press

All Sizes

Mixers—Hoists—Carts

Write today—save 25%

THE AMERICAN CEMENT MACHINE CO., Inc.
Dept. C. KEOKUK, IOWA

American Builder, April 1940.
DOUGLAS FIR PLYWOOD PROMOTION—A package of new helps for dealers, contractors, architects is ready for distribution. A heavy varnished paper wall hanger gives actual thickness and characteristics of the five association registered grades and thicknesses ranging from 3/16 to 1-3/16 inches, 3-ply to 7-ply. A 16-page handbook reprint the Sweet's Catalog file data for 1940, and a bright consumer piece in envelope stuffers form features "The House in the Sun," a Los Angeles design that is worth studying.—DOUGLAS FIR PLYWOOD ASSN., Tacoma, Wash.

"KEES HARDWARE SPECIALTIES"—Catalog No. H-18 has 24 pages and covers detailing the popular Kees items such as screen and storm sash hangers and hardware, corner braces, window guards, metal building corners for all types of siding, wall plugs, wall ties, etc.—F. D. KEES MANUFACTURING CO., Beatrice, Nebr.

"MONARCH MAINTENANCE MATERIALS"—Catalog No. 42 is an attractive handbook of 16 pages covering the Monarch plastic roof cement, caulking compound, patching compound, waterproofing, aluminum paint, etc.—MONARCH WATERPROOFING PRODUCTS CO., 1522 Walnut St., Kansas City, Mo.

ALL-STEEL GARAGE DOORS—The all-steel door at a wood door price and of the up-and-over type is illustrated and described in a folder giving "21 points." Standard sizes offered are 8' wide by 7', 7'6" and 8' in height.—DIXON DOOR CO., Inc., Van Buren, Ind.

"CELOTEX PRODUCTS FOR SOUND INSULATION"—An 8-page technical bulletin by the Research Engineering Department discusses the transmission of sound through walls of different types. Fourteen different forms of wall or partition construction are analyzed with respect to sound transmission. Floors and ceilings and noise leakage around doors are also included.—_THE CELOTEX CORP., 919 N. Michigan Ave., Chicago.
A SURE-FIRE AID
IN CLOSING NEW HOME SALES...

REX AIRATE
Comfort Cooling

Your prospects' faces will light with pleasure when you switch on the REX AIRATE and send a refreshing air flow through the house. It is a feature that's hard to resist because it means summer comfort for many years to come.

A REX AIRATE adds little to the cost of a house, but increases its sales value tremendously.

All-steel package unit with automatic ceiling shutters is easy to install in any attic. Five sizes.

WRITE FOR DATA
AIR CONTROLS, INC.
Div. of The Cleveland Heste Co., 1931 W. 114th St., Cleveland, Ohio.

WODACK "Do-All"
Combination Electric
Hammer and Drill

MODEL MDH

Drills Concrete
Drills Metal
Drills Wood

Made so the hammer can be taken off the drill without removing chuck. Two tools in one. Use star drills for concrete—twist drills for metal and wood. Capacity in concrete 1¾"—metal ½"—wood ¾". Additional uses—chiseling, chiseling, vibrating, brush hammering, tamping, grinding and buffing. A money maker for builders and installers of building equipment. Saves time, expense and muscle. Runs from lamp socket, AC or DC. Star drills all sizes ¾" to 1¼". Write for folder.

Wodack Electric Tool Corp.
4630 W. Huron St.
Chicago, Illinois

REID-WAY "8" Floor Sanders
NO GEARS, PULLEYS OR BELTS
"Only One Mowing Part"

Increase profits and prestige—yet reduce upkeep expense. Motor forms sanding drum. Works directly up to quarter-round on BOTH SIDES. Speedy, powerful, clean-finish job. One person can carry and opera a. Equipped with automatic sandpaper-lighter and motor protector.

REID-WAY OSCILLATOR for Piano-like finish
For handsome hand-rubbed effect without extra labor costs, use Reid-Way Oscillator on last finishing cut.

SEND TODAY FOR FULL INFORMATION ON REID-WAY "8" FLOOR FINISHING SYSTEM.

The REID-WAY Corporation
504 30th St. S.E.
Cedar Rapids, Iowa

CAN YOU READ
THE STEEL SQUARE CORRECTLY?

CARPENTERS! TINNERS! MILLRIGHTS! STUDENTS!

Know how! It's easy with our chart. The square is the basis of all carpentry. Know how to find the lengths of the different rafters, commons, hips, valleys and jack rafters. How to read the brace table and the board foot table. How to frame any polygon or cut its mitres. How to find any angle in degrees, also many other things. Blue print 27¢ gives full explanation. Send 35¢ in coins for your chart, or $1.00 for three charts. Print name and address plainly.

MASON AND PARRISH
ENGINEERS
205 N. BURICK ST.
KALAMAZOO, MICH.

Are You Losing
Any Tools?

Do you know which tools are yours—which your workmen's? You can be sure, and prevent both accidental loss and theft when tools, ladders, scaffolding and construction lumber, wheelbarrows, etc., are clearly and permanently branded.

Mark the evidence of your ownership permanently with an Everhot brander! Write for illustrated literature.

EVERHOT MFG. CO.
Dept. AB
MAYWOOD, ILL.

MAKE DRAIN TILE. Big 4-way market. Farm drainage—building foundations—and old road drainage—suburban and farm home sanitation systems.

BIG PROFIT MARGIN. Material and labor costs approximately 36c per rod of tile. Sells for 48c to 80c. Machine capacity 10 rods per hour. New Champion Machine simple, easy to operate. Shipped on 15 days' trial.

INVESTIGATE. Write today. Learn about the profit possibilities for you with this machine.

CONCRETE EQUIPMENT COMPANY
531 Ottawa Ave.
Holland, Mich.

ADD A ROOM TO YOUR HOME
GET THE GOOD OUT OF YOUR ATTIC. BY USING OUR IMPROVED FOLDING STAIRWAY.

NO HATRED CLEARANCE NEEDED. NO OBSTRUCTION TO ATTIC FLOOR. NO DRAWS OR PULLEYS. CONVENIENT—ATTRACTIVE—MAKES ANY HOME WORTH $500 MORE.

Write for free Folder A-48

THE MARSCHKE CO.
551 University Ave.
St. Paul, Minnesota

American Builder, April 1940.