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American Builder and the National Housing Act
An Effective Publicity Campaign in Behalf of the Home Building Industry

The passage by Congress of the National Housing Act on June 18 was largely the result of a publicity campaign carried on by the American Builder, on its own initiative and at its own expense.

The opening gun in this campaign was fired on November 1, 1933, when the American Builder released to the press of the country a statement advocating legislation to provide $1,000,000,000 of government credit for the revival of home building and modernization. That statement was quoted in newspapers throughout the country, with a combined circulation of 2,500,000. The campaign then began was continued until the day the legislation was passed. Every statement made herein regarding the publicity secured is based upon clippings actually received from newspapers that quoted material from this publication.

The editorial entitled "Home Loans for the Forgotten Man," published in the December issue of American Builder, was quoted in newspapers with a circulation of 1,314,000. The editorial in the January issue, entitled "Federal Home Loans and Recovery," and other articles appearing in that issue, were quoted in newspapers with a circulation of 4,753,814. The editorial entitled "Homes, Housing, and Problems of Recovery," and other articles appearing in the February special "Re-employment and Federal Financing" issue, were quoted in newspapers with a circulation of 7,115,004; and this issue was sent to President Roosevelt, all members of Congress and every public man with an influence on legislation. Material appearing in the March issue was quoted in newspapers with a circulation of almost 1,000,000. The editorial entitled, "Better Homes, Better Business," in the April issue was quoted in newspapers with a circulation of 1,594,505.

Members of Congress read and are influenced by the papers from "back home." The American Builder is proud of the part it played in helping secure the most constructive legislation that has been enacted to promote economic recovery.

Although it will take time to get the Act into effective operation, the government has now done its part to revive the home building industry. But legislation cannot revive home building and modernization. It can be revived only by contractors, material dealers and manufacturers, individually and in co-operation, in every community and throughout the country, planning and working to revive their own business.

It is time for many men in the building and numerous other industries to quit "waiting for business to revive," come out of their storm cellars and help revive it by their own initiative, courage and efforts.
It may be only a trifling blaze, quickly extinguished, without damage, panic, or loss of life. And then, again...

Fire is so dreaded because it's treacherous. Given a start, in a building constructed of inflammable materials, it can swiftly gain terrible headway, as countless tragedies have proved. But in a modern, fireproof building it can't get anywhere.

Security against fire is one reason why, today, you find Kalman Floor Construction in the plans of so many school buildings. The combination of Kalman Steel Joists with concrete slab and plaster provides a fireproof barrier between floors—and particularly between the first floor and the basement, where most fires start.

Kalman Joists offer other advantages, too. They are immune to termites and other wood-devouring insects. They make a floor structure that never shrinks to form ugly cracks where walls and floor meet, letting in cold air and vermin. A floor structure that absorbs sound and vibration, preventing noises overhead from disturbing the classrooms below.

In spite of their advantages, Kalman Joists add only a trifle to building costs. That's because they reach the job in the exact lengths needed, so that you don't have any cutting or fitting. Piping and conduit are run right through the open webs.

When you're figuring on a school building—or a home, or any other occupancy structure—tell the owner about Kalman Joists. Explain the fire-safety and other advantages they offer. Kalman manufactures two distinct types of steel joists: Kalman Joists (one-piece steel trusses) and MacMar Joists (steel trusses assembled by pressure welding). Either joist offers a simple means of making any occupancy structure fire-safe at moderate cost.

Kalman Steel Joists

Kalman Steel Corporation
Subsidiary of Bethlehem Steel Corporation
General Offices: Bethlehem, Pa.
Encourage the Buying Public
To Build and Repair NOW

NOW that the Big Fight at Washington has been won—the job of getting home building and home repairs started in volume being at last recognized by all as the key to re-employment and recovery—the comprehensive National Housing Act being passed, providing for ample funds and for guaranteed security and confidence—the men of the building industry must admit that the Government has supplied them with powerful tools for regaining prosperity.

Three billion, two hundred million dollars, it is estimated, is the tremendous sum in Federal cash and credit placed at the disposal of the home building industry by this legislation. The Government has done its share. The responsibility now passes over to contractors, builders, dealers, architects, manufacturers, building mechanics and home owners to do their part by signing contracts and getting actual construction promptly under way.

Local Demand for Loans Essential

The facilities for practically unlimited financing on extremely favorable terms of all needed home repairs, home modernizing and improvements and new home building are made available under the National Housing Act. The money and credits are there ready to be called for. They will not come out except to finance definite proposals based on definite jobs needed and authorized by some home owner or home seeker and definitely detailed and agreed to between the owner and a reputable contractor. The general public does not yet know nor comprehend the provisions of this Act for low cost, long-term money with which to make improvements and to build new homes. The public will have to be told, and it will have to be sold on definite needed improvements by the experienced men of the building industry who can give them dependable advice based on experience. The official summary of the National Housing Bill prepared by the Senate Banking and Currency Committee stated, "The Government does not propose nor does it want to indulge in 'campaigns' to induce home owners to participate. Local contractors and supply houses co-operating with their local financial institutions, chambers of commerce, etc., will see to that."

Have Prospects Ready When Money Is Ready

The meaning of this to every community is that the local building interests will have to work out their own campaign to interest and sell the general public if local advantage is to be taken of the opportunities under this Housing Act.

An immediate start should be made. It will take several weeks for the Housing Administrator to set up the organization and the authorized agencies under this Act. While this is being done, every builder, contractor, dealer and mechanic ought to be out among the prospects lining up the needed and desired work. Build up the public demand in your neighborhood and among your prospects so that just as soon as the machine is set up and money actually ready, you will be ready with the definitely planned and sold projects.

Local campaigns of modernizing and renovizing with house-to-house surveys by experienced builders should be considered. Such campaigns have been successful in many communities, both large and small. These have succeeded in spite of financing difficulties. Now with
that the prices on important building materials have been shoved up too fast and too high during the past six months. Something must be done, and that immediately, either to change public opinion so that the buyers will feel that this is the proper time to contract for home improvements and new construction, or these prices should be adjusted to the point of approval.

Organize Local Program

The American Builder's Three-Point Demonstration is a definite program to work to. A model or demonstration home, either new or remodeled, is Point One, to show the local public what a really modern small home is and how efficiently it can be built by the local building industry. Adequate displays of building materials and equipment in the yards of the retail lumber and building supply dealers is Point Two; and a demonstration of correct home furnishings in the local department stores to interest women is Point Three.

Local business organizations, women's clubs, schools, churches and the newspapers can, with a little leadership, be rallied behind such local campaigns for needed home improvements and new home building. The success achieved by the American Builder in securing publicity in the newspapers for the campaign of education in favor of this National Housing Bill, where newspapers in every state of the Union with a total reader circulation of more than 17,000,000 printed the AMERICAN BUILDER material, shows what can be done by the building interests in any and every community in getting local newspaper support.

Building Costs a Sore Point

The arguments in and out of Congress against this legislation favorable to home building had to do with the question of building costs. There were many to contend that building costs, both for wages and materials, are too high, are out of line with other present-day costs, rent levels and income, and should be adjusted to meet the ideas of the consuming public.

Here is evidently a very definite job for labor leaders and material interests co-operating with contractors and architects, either to convince the public that costs are not too high or to make them low enough to satisfy the public demand. Otherwise it is evident that there will be little or no business.

This is a public relations job of greatest importance. All buying in volume is done at a price level satisfactory to the buyer; otherwise no sale is made. Advertising which features quality, service and satisfaction can overcome the price idea as applied to certain lines of merchandise. Home building certainly is a commodity and a service that can be sold on the quality appeal. The competitive bidding system has put too much emphasis on price without regard to lasting quality. The hourly wage rate for building mechanics is too high and that the prices on important building materials have been shoved up too fast and too high during the past six months. Something must be done, and that immediately, either to change public opinion so that the buyers will feel that this is the proper time to contract for home improvements and new construction, or these prices should be adjusted to the point of approval.

Put Building on Fair Basis with Other Industries

The men of the building industry must realize after these four or five years of diminishing employment that the public can wait a long time to have supposedly necessary repairs and construction done if they feel that conditions and costs are not favorable. At the same time, the building industry has seen the automobile industry forging ahead with billions of dollars spent for motor cars and for other commodities which are felt to be fairly priced and offering good value for the money. The building industry is in competition with all other industries for the consumer's dollar. If the buying public can be told now that building costs are down and that now is the bargain time to make building improvements, these new low cost credit provisions of the Housing Act will be called into use at once and the home building industry can start off promptly in volume activity, which would mean steady employment for labor and sufficient demand for materials and equipment to justify capacity manufacturing and supply operations with their resulting lower unit costs.

Washington Worried Over Costs

In this connection, it is interesting to note an Associated Press dispatch from Washington dated June 22 outlining a Three-Point Plan to cut housing costs which is evidently being considered in official circles.

This proposal is said to include:

1. Use by the Interstate Commerce Commission of power bestowed by the new Housing Bill to reduce freight rates on construction materials with or without a hearing.

2. A cut by the construction industry in prices of building materials of from 10 to 15 per cent.

3. Secretary Perkins to conduct negotiations whereby labor costs would be reduced on the basis of giving workmen continuous employment rather than employment of the sporadic type now current.

These tentative plans to reduce labor costs would depend on local agreements among unions, contractors and officials whereby labor would be assured of continuing employment at a lower hourly rate but a larger return per week and year.

The responsibility for getting the new Housing Act into helpful operation depends on the efforts of local building contractors, dealers and labor leaders. The Government has done its part in setting up all the credit facilities for home building and home repairs; new homes are needed; old homes need repairs and modernization, and it is up to the building industry to organize for efficiency in production so that building can go ahead now.
FORWARD!——for better homes, lower costs

SALESMASTERSHIP AND SERVICE are the vital functions to be performed by aggressive contractors under the National Housing Act. They are the men who will make the contacts, arrange for the financing, purchase the materials and carry through much needed work that will put millions of unemployed back at their old jobs. Money for home building and repairs will be available on a scale never before known. The entire program is dependent on the energy and enthusiasm of local building interests. As the Senate Committee on Banking and Currency said, "We do not propose a 'ballyhoo' campaign. Contractors and building supply men will tend to the selling of this work."
HARRY HOPKINS

His record of speed in getting big jobs done has made Harry Hopkins the logical man for Federal Housing Administrator. The camera caught him here in characteristic pose as he addressed CWA leaders on Nov. 15 at the organization conference in Washington.

Hailed by leaders in both parties as one of the most constructive forward steps in the national recovery program, the far-reaching housing legislation requested by President Roosevelt as a mechanism for extending new Federal credit to the home owners of the nation was enacted by Congress on June 18 and was sent to the White House.

Its final passage, with hardly a dissenting murmur in either branch, was in sharp contrast to the strife which had marked its course since American Builder and other industry leaders launched their campaign last winter for Federal assistance to home construction financing.

As the Bill went to the White House for the President's signature, it creates a Federal Housing Administration to direct and supervise the home construction and modernization program authorized. It is expected that Harry Hopkins, Federal relief administrator, will be named housing administrator in charge of the new program, retaining at the same time his present post.

Eight Helpful Provisions

The main features of the Act are:

1. Federal Housing Administration created; Administrator to be appointed by President for four-year term, authorized to set up agencies needed to carry out provisions of Act.

2. Insurance of alteration, repair, and improvement loans on real property—Administrator authorized to insure banks, trust companies, personal finance, and mortgage companies, building and loans, and installment lending companies against losses on advances of credit from date of enactment until January 1, 1936, for financing, repairs and improvements upon real property; such insurance to cover 20% of total loans made by each such institution for such purpose. Individual loans limited to $2,000; interest rate set by Administrator.

3. RFC will supply Administrator with unlimited funds to be advanced by him to such lending institutions to make these repair and modernization loans.

4. Mutual mortgage insurance—a Fund of $10,000,000 is established by the Treasury. Lending institutions are encouraged to register, with the Administrator, home mortgages for guarantee, paying into this Fund annually from 1½% to 1% of the original face of the amount of each mortgage insured and thereby getting complete protection against loss. These payments into the Fund are credited to the account of each mortgage and if no default occurs, are finally paid back to the mortgage lender to cancel the mortgage in advance of its maturity. Mortgages to qualify for this mutual insurance are on one-to-four-family homes up to $16,000 face amount and on state controlled housing projects up to $10,000,000; interest rate 5% (or at discretion of Administrator 6%); maturity up to twenty years, fully amortized. Mortgage to be not more than 80% value of property.

5. Statistic and economic surveys are to be made and published by Administrator to guide development of housing and create a sound mortgage market.

6. National Mortgage Associations are authorized for the purpose of buying (and selling) first mortgages on real estate (of all kinds—no limitation in Act) and to use such mortgages as security for bonds or debentures to be sold to the investing public. Five or more persons can apply to Administrator for authority to establish a National Mortgage Association; paid-in capital not less than $5,000,000.

7. Insurance of building and loan accounts—is created a Federal Savings and Loan Corporation to be administered by five members of the Federal Home Loan Bank Board. This Corporation can borrow money by issuing bonds, fully tax exempt. It will insure the accounts of all Federal Savings and Loan Associations and of other building and loan and homestead associations. Cost of this insurance is ¼% per annum of total accounts insured, until a five per cent insurance fund is built up.

8. Amendments—Federal Home Loan Banks are authorized to advance to members 90% unpaid principal of any insured mortgage and to advance all funds needed by members for home repair, improvement, and alteration loans. Farm Credit Act of 1933 is amended to permit loans to farmers for home alterations, repairs and improvements. Federal Reserve Act is amended to permit banks to make six months loans to finance construction of residential or farm buildings, such loans to be discountable as "commercial paper" at Federal Reserve Banks. This feature insures quick action for loans.

National Housing Act

Billions Provided for Home Repairs and New Construction

HOW THE PLAN WILL OPERATE

By BERNARD L. JOHNSON
Passes—Builders Ready for Action

Because of the generous guarantees which Uncle Sam has put back of private loans made under this Act, contractors will find their local banks and other financing agencies again interested in doing business; they will soon be ready to advance the needed funds for home repairs and new home building. Contractors will deal directly with their favorite bank or loaning agency with full assurance that the mortgage is safe.

Confidence Re-established

This act will permit the banks to put their idle funds to work, under the guarantees provided, so that they can make a profit on mortgage lending without fear of defaults or frozen assets.

Local building contractors and other industry leaders should proceed at once to acquaint their local banks and other local lending agencies with the present need of mortgage money for new homes and for home modernizing, which money they can safely furnish under this new mutual insurance plan.

Building industry leaders also should lose no time in taking steps to organize a strong local unit National Mortgage Association, assuring a convenient market at par for local mortgages.

The Administrator is to proceed at once to establish local contact offices where detailed information together with official application forms and blanks can be obtained. Contractors will be guided by simple standards requirements, as to appraisals, quality of work, and economic need. The work of setting up the insurance facilities for mortgage and repair loans, as outlined under point 2, can be done very quickly, permitting contractors almost immediately to secure funds from the agencies named for carrying out their definite projects. The organization of the mutual mortgage insurance facilities will require extensive educational work among mortgage lenders. This will be pushed with energy by the Administrator, and local building leaders can be of great assistance by asking for insured mortgages. The insurance of building and loan accounts presumably can be quickly achieved through the existing Home Loan Bank and HOLC Organizations.

Building contractors, dealers, architects, realtors, labor leaders—in fact all directly concerned with the responsibility for the creation of home building and home improvement business—should be gratified that this tremendous program for encouraging needed home building and repairs and for rescuing the real estate mortgage from its recent low position and restoring it to its former premier place as a safe investment is to be accomplished through the medium of private business, aided by the Government if necessary, but encouraged above all to stand upon its own feet and contribute, as it has in the past, the largest share to American prosperity.

"The security of the home has been listed by President Roosevelt as one of the cardinal aims of reform," Senator Robert F. Wagner, of New York, stated in a radio address from Washington on June 20, praising the provisions of the National Housing Act. "This measure takes some very necessary and fundamental steps in that direction," he said, "and it will prove a blessing to home owners, to the construction industry, to workers, and thus to the public at large."

Building Contractors to Play Prominent Part

Under New Home Financing Plan

THE size of each loan under the new National Housing Act will be based strictly on the bid proposal of the reputable contractor-builder who is to handle the job. While final details of procedure must await administrative machinery now being set up, it will operate after this fashion:

The home owner who wishes to improve his property by a new roof, new plumbing, new heating equipment or other repairs to make it more habitable will first obtain a low bid from a responsible contractor. He will take this to his banker or a recognized building and loan association. If the work and contract are approved the contractor will receive his pay from the financing agency.

The home owner then will pay the debt off on the installment plan over a period up to five years, paying interest at 5 per cent. The Government enters the picture by guaranteeing the loan.

Or if the home owner wishes more extensive work, such as building an addition or a garage, he will proceed in the same fashion:

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Or if the home owner wishes more extensive work, such as building an addition or a garage, he will proceed in the same manner. The largest amount he can borrow for such work is $2,000.

In event he already has a mortgage on his house it may be increased. Or he may be asked to put up collateral. The lending institution will be allowed considerable latitude on this score.

Another section of the Bill is designed to help the home owner whose mortgage falls due and is unable to pay. He may apply to the organization holding his mortgage for a new mortgage which is insured by the Government.

The new mortgage will run for 20 years and the interest rate will be fixed at 5 per cent, or at the discretion of the National Housing Administrator, 6 per cent. In addition to interest and amortization, he will pay ½ per cent or in some cases 1 per cent, which will go into a mortgage insurance fund and will be credited back to retire his mortgage in advance of maturity if not defaulted.

This fund is expected to be ample to protect the issuer of the mortgage against any loss.

The man who does not own his home but wishes to have one built consults with a building contractor, draws up his plans and secures a firm bid for the execution of the project. He then applies to a member bank of the Federal Reserve System for a 6-months construction loan with which to meet the cost of building.

When the home is completed he applies for an insured mortgage which will be payable over a 20-year period.

The firm holding the mortgage can rediscant it with the Home Owners' Loan Corporation, if a member, or sell it to any of the new National Mortgage Associations which are to be organized for dealing in mortgages.

The private citizen who has ceased putting his money in saving and loan associations because he feels his funds are safer in a bank, the deposits of which are guaranteed, will also be enabled to join in the program. The Act sets up an insurance fund for these B. & L. deposits similar to that of the Federal Deposit Insurance Corporation.
THE SWISS VILLAGE at Chicago's 1934 World's Fair shown above features the Swiss mountain chalet. The reproduction of mountains is most realistic. Daniel H. Burnham, Architect; Kaiser-Dussett, Builders.

AT RIGHT is a detail of the Black Forest Village bringing a bit of old Germany to the Fair. Artificial snow and icicles and a real frozen lake on which skaters perform excite the interest of visitors. Paul Fuller, Architect; R. J. Sipchen & Company, Builders.

THE IRISH VILLAGE at the Fair shown at the far left attracts widespread interest with its unusual architectural design. Green is a much used color! J. J. Murphy and Wm. T. Hooper, Architects; Lundoff-Bicknell Company, Builders.

THE SPANISH VILLAGE captures the charm of old Spain, reproducing its architecture faithfully. Daniel H. Burnham, Architect; Starrett Company, Builders.
AT THE 1934 CHICAGO WORLD’S FAIR, the foreign villages are especially interesting to architects and builders. At top above is Wakefield, birthplace of Washington, in the Colonial Village. Tallmadge & Watson, Architects; B. W. Construction Co., Builders. Below is a charming bit of detail in the English Village. Holabird & Root, Architects; J. T. Schless, Builder. All details are authentic.
CONTRACTORS and builders of the suburban areas surrounding Chicago—a section that has long been the "deadest of the dead"—are experiencing a lively pick-up in business. An American Builder survey June 20 showed total construction in thirty-four suburban towns running 58 per cent greater than 1933.

What does this mean to local contractors, lumber dealers and building interests? What are the trends in materials, building methods, ideas? American Builder editors in special interviews with a large number of the men doing the work report the following:

**Good Men Back at Work**

The well established, reputable contractors and home builders are back at work with renewed optimism and a really worth while volume of work.

The live wire lumber dealers, of which Chicago's North Shore suburban region is especially well supplied, are doing a much better business and are quite optimistic. A typical example is the Winnetka Coal & Lumber Co., which reports better than 50 per cent improvement over last year. According to E. L. Weinstock, vice president, this increase is due to hard work and aggressive selling—not waiting for the Federal Government to solve its problems.

Contractors, home builders, lumber dealers, architects—all building interests—are anticipating a real pick-up in home building and in modernizing and repairs as a result of the passage of the Federal Housing Act which assures financing. Lack of financing has been the greatest obstacle to a large volume of business, all reports state.

Numerous new houses under construction were photographed, although the number is not large in comparison with 1929. The village of Highland Park has had six houses get under way since the first of the year with a total value of $23,700. Evanston has five new homes, two of which were started in May. For the most part, the houses under construction are fairly expensive type homes.

In the majority of homes, standard construction practice and architectural design are being followed. Architecturally, the new houses are on a high plane, showing refinements of the period designs that have long been popular in this country.

An attractive home in Winnetka, Ill., is under construction by the Henke Construction Co. This house has a common brick exterior, concrete floors throughout, complete air conditioning and cooling equipment with oil burning furnace, and rock wool insulation.

John H. Davies, contractor and home builder of Wilmette, is one of the active North Shore suburban builders and an American Builder reader who is doing a considerably increased volume of business. According to Mr. Davies, business this year is "vastly better than last year, and the future looks good." He is building an unusually attractive house in Glencoe to cost $30,000. The attractive feature of this house is the way in which natural stone and red cedar shingles have been used for the exterior. It has a slate roof, copper gutters, two-car garage, concrete floors throughout. He is starting work early in July on another fine home—a $20,000 house in Winnetka.

**Has $12,000 Modernizing Job**

Another job now nearing completion by Mr. Davies is the extensive remodeling of an old home located in a heavily wooded residential section of Glencoe. Some $12,000 is being spent by the owner to modernize thoroughly this old structure, taking full advantage of this beautiful location.

The exterior is being completely refinished with stucco and wide siding. A new entrance was built; a large living room; the dining room was extended 6 feet; a new heating plant installed, and a new garage and driveway built. A new all-electric kitchen, complete and modern in every detail, is being installed. The architects on this job are Olsen & Urbain, Chicago.

Another aggressive home builder specializing in fine residences on the North Shore is C. A. Hemphill. Mr. Hemphill has built a few homes each year throughout the depression—14 in three years, to be exact—and has recently completed several especially attractive ones. Mr. Hemphill designs, superintends and completely controls all phases of his job. He is one of the few contractors in
FOUR EXAMPLES OF HOME BUILDING in Chicago's North Shore suburban towns photographed June 15: (1) John H. Davies, Wilmette contractor, is building this attractive stone and shingle house in Glencoe; (2) house under construction in Winnetka by the Henke Construction Co. featuring complete air conditioning system with oil burner; (3) well insulated brick home in Evanston completed this spring by C. A. Hemphill, architect and builder; (4) remodeled house in Glencoe completely rebuilt by C. E. Carson; (5) $20,000 house under construction in Kenilworth. H. Andrews, builder; M. A. Nelson, architect.

this section who has continued to build houses for sale during the depression.

Modernizing and the extensive remodeling of houses is going on at an increased rate in Chicago suburbs. In the 34 suburban towns in the Chicago Metropolitan area, 455 recorded modernizing jobs have gotten under way during the first five months, with a total value of $541,500. In the city of Evanston, for example, 60 modernizing jobs are recorded for a total value of $145,000. In Lake Forest permits have been issued for 33 jobs for a total of $42,700; Highland Park has 24 jobs for a total of $38,000; in Winnetka 16 jobs for a total of $32,150 are recorded. For every recorded job there are many small projects that never get into the statistical record.

Contractors report a large part of this remodeling and modernizing work is being done by persons who bought real estate at a bargain during the past year or this spring and are fixing up the home for their own use. Many interesting examples were noted of persons getting a bargain in a fine old home in a splendid residential district, and at a very reasonable cost transforming it into a modern home. A considerable volume of this work was obtained by builders through close contact with real estate brokers, a point builders in other communities may well note.

One interesting modernizing job now just getting under way is being done by Contractor Gale M. Brooks of the North Shore Homes, Inc. He specializes in giving complete architectural and construction service. Mr. (Continued to page 55)
A NEW TYPE of “plan book” is now being used to help sell homes. But instead of paper, these plans are placed on lantern slides and projected in big, bold detail upon the wall of a sales room.

This method of visualizing for customers what a new home will look like is being tried out by the R. B. Whitaker Co., of Winnetka, Ill., and Kenosha, Wis., comparative newcomers to the field of contracting and home building. An inexpensive projection machine is used, which is easy to operate. The glass slides are prepared from architects’ drawings. Some 75 different home designs, including French, English, Early American, Georgian, Colonial and Modern types, have been prepared and are on file.

By means of this “Photo-Tour of Homes” method, the home prospect can study details of the house at close range. The floor plans are shown in large, clear cut fashion which he can understand. It solves the most difficult problem of home selling—visualizing for the owner what the new house will look like.

The R. B. Whitaker Co. has used the slide system for
several years for showing real estate property with great success. The firm has some 3,000 properties photographed and placed on glass slides. Anyone interested in real estate can sit down in the office and take a tour of the entire region by means of this projection machine.

Preparing for a large increase in home building in the north suburban areas of Chicago, the Whitaker Co. has this spring installed a building department under the direction of Mark H. Colwell, contractor and engineer of long experience in the home building and construction field. Under the new Whitaker home building plan, the entire selling, planning and building of a home are concentrated in one organization. When a prospect shows interest in a home he is brought to the office and by means of the projection machine shown the specially prepared designs for which the company has complete detail drawings by three well known architects. The costs on these jobs are figured monthly by Mr. Colwell and the prospect is quoted a price for the complete job.

Although the Whitaker Co. has a long experience in real estate, it has, as yet, not done much in the contracting field. Under this new plan, however, the company plans to enter the building business and assume the general contract for construction. Mr. Colwell's department will take bids and supervise the work. In addition a home modernizing plan has been widely advertised. The three architects co-operating with the Whitaker Co. plan the modernizing work.

Announcement of the new Whitaker home building and modernizing plan was made early in May this spring. Although no jobs have been started as yet, the company reports a considerable number being figured. Several mailing and advertising pieces, shown below, have been prepared which have been given wide distribution. The entrance of Whitaker into the contracting field is being watched by other building interests with great interest. The home office of the company is in Kenosha, Wis. In charge of the Chicago North Shore office is J. A. Dixon, vice president. A new $50,000 North Shore headquarters is to be constructed in the next few months. The three architects who have prepared house plans and are collaborating with the Whitaker Co. are Melville C. Chatten, Chester H. Walcott, and Mayo & Mayo, Inc., all well known Chicago architects.
A Better Sales Service
for Home Building

By L. R. PUTMAN
Marketing Editor, American Builder

In my opinion, the most important phase of business is efficient distribution. It is the lack of efficient distribution that piles up a surplus of products in one place and leaves the people hungry, naked and homeless in some other locality. There would be no need for curtailment of any properly directed production or labor, if a policy of efficient distribution were worked out. We are particularly interested at this time in labor and production in the building field. To better our present paralyzed situation, we must first increase our efficiency in distribution. We must get our materials to the point of consumption and into the hands of the consumers at the lowest possible cost, in an orderly manner and with the best service to the public.

There is a difference of opinion as to the proper channels of distribution for building materials. A clause in the code of the retail lumber and building material distributors is being held up and discussed. This same matter has been discussed, to my knowledge, for more than thirty years. The Lumber Code Authority made up of lumbermen from all branches of the industry who have studied lumber distribution for many years propose that wholesale prices on car load shipments of lumber and building materials should be allowed only to regular retail dealers who carry stocks sufficient to take care of local requirements, with these exceptions: (1) wholesale lumber dealers; (2) departments of the United States Government, including river and harbor work; (3) railroads; (4) ship yards, underground mine work, docks, dams and bridges; (5) industrial plants for remanufacturing or shipping purposes; and sales in less than car load quantities for retail lumber dealers, wholesalers, or manufacturers of woodwork for resale.

The NRA administrators propose that wholesale prices on car load shipments should also be made to state governments, electric railways; and then they throw the distribution of lumber and building materials wide open for confusion, which the Lumber Code Authority feels will either wreck the NRA or the local dealers. They propose that manufacturers quote wholesale prices on "sales in car load quantities shipped direct to the job, consumer or contractor by rail; or in the case of water cargo shipments, shipped direct from the mill to the job, consumer or contractor in not less than minimum car load quantities as determined by weights prescribed by railroad tariffs, rules and regulations, in any one delivery; or in the case of truck shipments, shipped direct from the mill to the job, consumer or contractor in not less than car load quantities as determined by weights prescribed by railroad tariff rules and regulations in deliveries completed in 24 hours."

Contractors Deciding Factor

I don't believe any law will ever be passed to take care of this situation. The industry itself must regulate this distribution. As the local contractors and builders specify and buy most of the building materials used they, in the last analysis, will largely determine whether or not the local dealers shall furnish the materials. They know whether or not a well stocked local lumber and building material yard is desirable. In fact, they know it is a necessity if a first class building service is to be rendered.

Local lumber dealers are not going to be put out of business without a struggle. If forced to, they will go into the contracting and building business and furnish their own materials, and the contractors would then probably go into the lumber and material business. In this confusion the public will receive no benefit and be forced to put up with less dependable materials and workmanship. The manufacturers of dependable merchandise are going to stick to the dealers.

The home building business is the oldest business in the world. It comes more intimately in contact with the people than any other. A home more nearly expresses the character and personality of its owners than any other of his investments. That is why it is impossible to standardize the homes of the country. We may dress alike, and ride in standardized automobiles, but a typical American citizen wants to assert himself when he builds or buys a home. Home building is and will continue to be a local industry.

Manufacturers Need Local Selling

Every manufacturer wants to get his materials to the ultimate consumer at the lowest possible cost, everything else considered. These manufacturers have spent a great deal of time and money in the study of the economical sale and distribution of their products. At times these manufacturers have felt that the local lumber and material dealers were inefficient and no doubt many of them were. The average life of a retail establishment in all lines is seven years and more than ninety per cent of all business ventures fail.

We have seen ambitious manufacturers attempt short cuts in their distribution but we know of none that have not come back, humbly begging the local retailer to stock their stuff. Every time these short cuts were attempted, the local builder and contractor suffered with the local dealer. Their interests are identical. The local building interests represent a far greater value than labor and materials. They represent service. After all, it is service we are all trying to buy.

The retail dealer makes up the town. A town is nothing more than a market place or a service station. When the town quits functioning as a trading point, then there is no town. When the town slumps, all values slump, including the nearby farms. In the same proportion that mail order houses prosper, just in that proportion do the small towns suffer. In some instances people trade away from home because of the inefficiency of their local dealers. But selfishness, shortsightedness and the lure of distant enchantment offer the greatest urge to buy at a distance.

Local lumber and material plants represent some of the largest local investments. These local dealers are among the most important and dependable citizens. More often than not they are officers in banks, school boards, churches, city governments and social organiz-
tions. They are leaders in every city, state and national movement and represent the best in American citizenship. They carry stocks of materials especially suitable to the trade they serve. Their stocks are always on display and available for immediate local use. They rank as the best credit risks in American business and add enormous capital and stability to the building industry. They are indispensable to local builders in rendering a satisfactory building service to home owners. Through their associations and trade journals, they are constantly learning and adopting workable ideas which add to their efficiency and success.

Dealer Distribution Found Best

Just the other day, I was talking to the promotion manager of one of the largest and most successful building material manufacturing concerns in the country. This concern produces five major lines in the building field and distributes through local dealers. He told me that several years ago he was told on all sides that local dealers were failures and that a new system of distribution was the need of the building business. His company was impressed with that thought and has investigated and tried many plans of going more directly to the public. He has come very definitely to the conclusion that the local dealers offer the most efficient system of distribution. Instead of trying to change the policies of the dealers to meet the ideas of his concern, he is now adjusting the promotion and distribution plans of his firm to fit into those of his local distributors. This great institution is one of the best financed in the country, never misses a dividend and can afford any plan of distribution it may see fit to adopt. Most other high class manufacturers have reached this same conclusion.

The AMERICAN BUILDER is so firmly convinced that the building industry and the public can best be served by local builders and the use of materials purchased from local dealers that it refuses to accept advertising from manufacturers who would disturb this arrangement by short cuts and demoralizing practices. We are convinced that no service can be performed more economically or efficiently by manufacturers, wholesalers, mail order houses or any other agencies than can be rendered by local retailers and local builders giving each other proper co-operation.

This controversy is becoming acute. It is distracting the attention of local building interests. It has injected doubt into the success of building codes and the NRA. It must be discouraging to the President and his code administration. It threatens to make pirates and racketeers of honorable men and firms. It removes the certainty and guarantee of quality and honesty in local building. It tends to tear down small towns and pauperize local builders, craftsmen and dealers. It would have the ultimate effect of centralizing the building industry in the large centers and in the hands of a few large firms.

"PULL TOGETHER, BOYS—YOU'LL MAKE IT"

"By pulling together, these two time-tried local interests can bring the old building boat through the rough channel and make America the best housed nation on earth."

(Continued to page 55)
MODERN IN DESIGN and modern in equipment is this new World's Fair house. In addition to air conditioning and cooling equipment, it has windows that open at a touch of the button, awnings that are lowered automatically by electric motors when the sun comes out. Double pane windows are installed.

ARCHITECTURALLY the house is designed to illustrate the latest trend in modern planning. Floor plans provide spacious rooms, a large hall, laundry off the kitchen. The architect is Howard Germann of Detroit.

**Fully Insulated Air Conditioned**

E. W. SPROUL, CHICAGO CONTRACTOR, built this modern air conditioned home at A Century of Progress. It is known as the Frigidaire House and is built to illustrate progress in insulation, air conditioning and modern electric equipment.

SHOWN AT LEFT is the refrigerating unit installed in connection with a forced air system which cools the air as needed in summer, warms it in winter, washes it or dries it as needed. At left below is shown a workman installing the 4-inch Mineral Wool insulation. Below is the automatic window opened at press of button.
HEAVY DRAPERIES such as shown in the interior at right are easy to keep clean in a completely air conditioned house.

THE AIR IS filtered, washed and warmed or cooled as weather conditions dictate. THE FIREPLACE is an unusually attractive design, simple yet impressive.
New Farm Homes Are Tested U. S. Approved

A GROWING FARM HOUSE for Southern conditions is shown above, the design of which was prepared by the Bureau of Agricultural Engineering of the U. S. Department of Agriculture. The kitchen and workroom arrangement is especially worthy of study.

Cost Key, first unit and first addition is 1.04 
18 — 16.

Inclining second addition: 1,488 — 176 — (1062) — (47) —
18 — 16.
THE ATTRACTIVE rural home on the opposite page below was designed by the College of Agriculture of the University of Georgia and approved by the U.S. Department of Agriculture. The large kitchen, screened porch and washroom are well planned for rural use. Two future bedrooms may be added at low cost. Cost Key, first unit is 1.361—156—(1249)—(53)—17—17. With addition: 1.821—194—(1733)—(72)—20—23.

THE FARM COTTAGE ABOVE was designed by Kansas State College and illustrates what a small farm home for Kansas or other Midwestern states should be. The design is especially attractive and yet is simple and inexpensive. The open porch may be screened if desired. The work and wash room off the kitchen is useful and convenient. The dimensions of the house proper are 22x33 feet, making it an extremely low cost country house. Cost Key is .954—110—(726)—(31)—12—11.
IN THE PERFECT HOME CONTEST held in St. Louis recently, this small brick house model was given a large and popular vote by home lovers. It was designed and the miniature model above built by Architect Kenneth E. Wischmeyer. The first floor plan is especially interesting; one end has a built-in seat and is used as a dining alcove. The bay opposite the entrance provides a charming corner. This modern arrangement gives a sense of size and livability which is unusual in a house of only 22'0" by 27'0" size. Inexpensive to build.

**First Floor Plan**

Cost Key is 1.343-106-638-28-16-10.

**Second Floor Plan**
ARCHITECT PAUL BOUCHERLE designed this home to accommodate a large family of moderate means. It was built in 1931 at North Madison, Ohio, and the reported cost was slightly under $5,000.

FLOOR ARRANGEMENT is good, with a fine large living room, attractive dining room with bay window. House has concrete block foundation, frame construction, shingle roof, interior walls of insulation board, cross grained pine floors, modern plumbing, warm air heating.

STUDY OF THESE FLOOR PLANS shows how Architect Boucherle attempted to provide a maximum amount of living for a fairly large family in a really small house. The kitchen-dining-service room arrangement is good, and it is to be noted that he has not stinted the size of the living room, an error frequently made in attempts at economy. Cost Key is 1,940—120—(752)—(32)—25—13.
ARCHITECT D. WENTWORTH WRIGHT has here produced an attractive Colonial home which has, in addition to its fine residential qualities, a wing adaptable for use as an office, doctor's or dentist's headquarters. The structure is well planned, well built, worthy of study as an example of good small home design. Cost Key is 1,936 —156—116—49—26—16.
A COLONIAL HOME

Designed to meet the modern requirements of a small family. This home can be constructed at a very moderate cost.

DIMENSIONS

Size of Main Building: 18'9" x 29'7". Size of Att. 20'6" x 23'7".
Ceiling Height 1st Floor 8'6". Ceiling Height 2nd Floor 7'6".
Ceiling Height Basement: Plan 2, 7'0". Total Cubic Footage: 7,000 cu. ft.

THE SMALL COLONIAL HOME is still one of the most popular types, and the two shown above are unusually attractive for such small, low cost structures. The design for a narrow lot at top of page is National Plan Service design No. 1018-C. Cost Key is 1.175—94—520—23—17—9. Colonial home at bottom is design No. 1041-C. Cost Key is 1.076—88—420—18—15—8. These are two practical designs adaptable for either city or country use.
MODERNIZATION

"which makes buildings of all kinds more cheerful, more livable and more salable"
A LARGE and rapidly increasing volume of home improvements, repairs and modernizing is expected as one of the immediate results of passage of the National Housing Act.

But the Government has clearly indicated that such an increase is entirely dependent on the extent to which local contractors, building supply men and other local interests sell this work.

The Senate Banking and Currency Committee, in its official summary of the Bill, says, "Local committees of building contractors, supply men, manufacturers, civic agencies, labor groups, newspapers, financial interests and others will set up voluntary organizations to provide local home owners with information concerning the new facilities afforded, as well as advice and assistance in making use of them."

The Committee also said, "The Government does not propose, nor does it want, to indulge in 'campaigns' to induce home owners to participate. Local contractors and supply houses, co-operating with their local financial institutions, chambers of commerce, etc., will see to that."

A prominent government official closely connected with the proposed administrators of the Housing Act has said that it is expected that contractors and builders will arrange for most of the financing of the modernizing jobs. They will line up a number of such projects and take the papers to the local financial institution that serves them best.

Estimates by government officials and others anticipate at least a billion and a half dollars of home repair and modernizing work as the result of the Housing Act. This is a conservative estimate in

HERE IS A STRIKING ILLUSTRATION of effective modernizing. At left is condition of an old kitchen in a house at Elmira, N. Y. Below is shown how the Elmira Association of Commerce and local building interests modernized one-half to dramatize the benefits of such work.
view of past volume when financing was not nearly as easy or as cheap as it is expected to be under this Bill. Whether home modernization is stimulated by individual contractors actively at work in their own way, or by enthusiastic local campaigns in which contractors and other building interests take part, it is clear that a big selling job is needed. Previous campaigns have produced surprising results; with the aid of ample financing and real contractor-dealer co-operation, much more will be achieved.

The Real Property Inventory recently conducted by the U. S. Government in more than 60 cities reveals that approximately 65 per cent of the home units surveyed require repair or modernization. The 1930 Census reported 22,832,110 1-family dwellings, 1,728,087 2-family dwellings, and 643,779 multi-family dwellings; these structures accommodated our 29,904,663 families in 1930. Basing our calculations upon the fact that one home unit is theoretically required for each family would indicate the existence of 29,904,663 home units; estimating that nearly 5,000,000 of these home units are unoccupied at the present time, due to normal vacancy, doubling up of families, etc., would establish 25 million home units as being occupied at this time and which comprise the basic market for modernization and home repair activity. If 65 per cent of these home units require minor or major repairs or other modernization, as the Real Property Inventory clearly indicates, then 16,250,000 home units may be logically conceived as the "prospects" in the nation-wide drive; $100 per home unit, on this basis, presents a market for modernization and home repair work of approximately $1,625,000,000, or $125,000,000 more than the estimates mentioned in connection with Government plans for stimulating this type of work.

According to the Department of Labor, the average amount spent for "additions, alterations and repairs" is in excess of $500 per job; this average figure, however, includes both non-residential and residential work. Residential modernization and repair, it is apparent, could be very conservatively estimated at an average of more than $100 per job. In fact, recent studies of the modernization and repair of foreclosed one-family dwellings showed that an average expenditure of $265 per house is made by financing institutions regularly in their efforts to turn such foreclosed properties to the profit side of the ledger.

In view of these facts it seems safe to assume that a goal of 1 1/2 billion dollars in modernization and home repair activity, as a result of Government stimulation of this nature, is a most conservative estimate of the possibilities, based on the known fact.

There is nothing new in the idea of an organized community campaign to create home repair and modernization work; nearly 200 different cities, towns, and villages have conducted such campaigns during the last four years. A study of these many different campaigns reveals a considerable diversification in the plans; although practically all of these campaigns had the same objectives, methods of administration and execution varied widely. Nevertheless practically all such community efforts achieved success. Without Government sanction publicly expressed, and despite difficulties encountered in financing, local community campaigns during the last few years have created...
TABLE I: RECENT SUCCESSFUL CAMPAIGNS

<table>
<thead>
<tr>
<th>Place</th>
<th>(1930 Census) Population</th>
<th>Total Pledges Secured</th>
<th>Approximate Pledge Per Capita</th>
</tr>
</thead>
<tbody>
<tr>
<td>Little Rock, Ark</td>
<td>81,679</td>
<td>2,680,000</td>
<td>$33</td>
</tr>
<tr>
<td>Sacramento, Calif.</td>
<td>93,750</td>
<td>2,394,371</td>
<td>24</td>
</tr>
<tr>
<td>Evansville, Ill.</td>
<td>63,318</td>
<td>500,000</td>
<td>8</td>
</tr>
<tr>
<td>Boston, Mass.</td>
<td>37,355</td>
<td>327,000</td>
<td>9</td>
</tr>
<tr>
<td>Jackson, Mich.</td>
<td>55,187</td>
<td>343,113</td>
<td>6</td>
</tr>
<tr>
<td>Duluth, Minn.</td>
<td>101,463</td>
<td>3,700,000</td>
<td>26</td>
</tr>
<tr>
<td>Lincoln, Nebr.</td>
<td>75,913</td>
<td>1,798,248</td>
<td>24</td>
</tr>
<tr>
<td>Montclair, N. J.</td>
<td>42,017</td>
<td>118,000</td>
<td>3</td>
</tr>
<tr>
<td>Asheville, N. C.</td>
<td>30,293</td>
<td>267,000</td>
<td>8</td>
</tr>
<tr>
<td>Columbus, Ohio.</td>
<td>290,564</td>
<td>2,000,000</td>
<td>7</td>
</tr>
<tr>
<td>Sharon, Pa.</td>
<td>25,908</td>
<td>130,399</td>
<td>12</td>
</tr>
<tr>
<td>Spokane, Wash.</td>
<td>115,514</td>
<td>4,099,869</td>
<td>26</td>
</tr>
<tr>
<td>Superior, Wis.</td>
<td>86,123</td>
<td>300,000</td>
<td>8</td>
</tr>
<tr>
<td>Danville, Ill.</td>
<td>36,765</td>
<td>300,000</td>
<td>8</td>
</tr>
<tr>
<td>Philadelphia, Pa.</td>
<td>1,950,961</td>
<td>21,500,000</td>
<td>11</td>
</tr>
<tr>
<td>TOTAL, 15 CITIES</td>
<td>3,056,740</td>
<td>$47,102,813</td>
<td>$13</td>
</tr>
</tbody>
</table>

very respectable totals in many cases, ranging from $3 to $36 per capita. The famous "Renovize Philadelphia" campaign produced pledges totaling nearly $11 per capita, while the average produced by Philadelphia plus 14 other cities reached the interesting figure of $13 per capita for a total population of 3,056,740.

A comparison of the 1930 Census figures on population, the dollar volume of pledges secured in community campaigns, and the pledge per capita per city presents very interesting material, as revealed by the accompanying table at left listing recent campaigns:

With reasonably good local administration, plus Federal backing through national publicity, etc., the countrywide campaign should result as successfully as was the case with the 15 typical cities mentioned on this basis, estimating a total population of 125 million, with $13 per capita to be obtained in pledges, not less than $1,625,000,000 of modernization and plans for a nationwide drive. It is interesting to note that the figure obtained on a basis of total number of home units estimated by the findings of the Real Property Inventory is exactly equal to the total figure reached on a basis of results obtained by community campaigns of the last few years.

That a nation-wide campaign may have different aspects from a local community campaign is admitted; however, one State-wide campaign was conducted in 1933, the "Renovize Rhode Island" campaign. In the Rhode Island drive a total population of 687,497 was involved and pledges obtained reached $6,534,813.00 or about $9.50 per capita. That campaigns covering areas greater than a single community are considered feasible, was indicated by the appointment of Richard L. Davies on January 2, 1934, by Governor Edward C. Johnson of Colorado to head the Colorado Clean-Up, Paint-Up and Modernize Bureau.
How Elmira, N. Y., Increased Home Repairs

ILLUSTRATIONS shown herewith and on preceding pages are exhibits from the modernization and home repair campaign conducted by the Building and Real Estate Division of the Association of Commerce, Elmira, N. Y.

A vacancy survey was first conducted in Elmira with the co-operation of letter-carriers to determine how much home repair and modernization work was needed; results of this survey led to the organization of a separate division in the Association of Commerce and the appointment of an Executive Committee of 30 members to direct the campaign. In addition to the use of regular newspaper space, a well-planned booklet was distributed from house to house, various circulars were used and a weekly bulletin called “Irons in the Fire” reported the progress of the movement. The campaign is estimated to have produced 970 man months of work.

Local co-operation on the part of dozens of different concerns and individuals was the real feature of this campaign and indicates how other communities can profit through the enlistment of local interests to reach a common goal. Architectural firms in Elmira, for instance, contributed preliminary sketches and estimates; local labor organizations contributed the work necessary for the community modernization example pictured in these pages; material and supply men contributed lumber and other building materials; and local merchants provided furnishings.

BEFORE AND AFTER VIEWS of the bathroom in the Elmira, N. Y., demonstration modernizing project. Contractors and builders are largely instrumental in the selection of equipment and materials in bathroom remodeling.

The local populace co-operated by turning out in great numbers to inspect the modernized house; more than 7,500 people visited this display during the first thirty days and attendants in charge reported that many people credited the display with giving them new ideas and practical suggestions for the modernization of their own homes. For educational and show purposes only half the rooms in the house were modernized, leaving the other parts in the old condition as a striking contrast.

Modernizing one of two rooms and leaving the other in its old condition certainly presents a visual contrast which is thoroughly effective in persuading the general public of the value of modernization. This same idea was carried out on the exterior by leaving part of the rear elevation in its original condition. Because the kitchen is such an important room, one-half of this room was modernized and the other half left in its original state for contrast; the old part of the room has the old floors, old wooden wainscoting, old paneled wallboard ceiling, exposed electric wiring; etc.; the new half of the kitchen shows new sash, new imitation tile wainscoting, new ceiling treatment, new built-in cupboards, new wiring and fixtures and a new sink. Who could resist a sales argument as strong as this?
STAINED and weather-beaten buildings of cement, brick and stone construction are an invitation to modernization; and contractors alive to the opportunities in resurfacing these old structures now have materials, equipment and methods especially adapted to this work.

After numerous experiments in color mixtures, aggregates and various spray machines, a pioneer operator in the concrete field decided six years ago to make an actual test of color resurfacing in order to determine its permanency over a period of years. An old portland cement stucco house in Holland, Mich., showing many discolorations and checks, was selected for the test because it offered large surfaces exposed to the elements with the south side receiving direct rays from the sun. No special treatment of the surface was made except wetting down with a hose before applying.

This work was done in the summer of 1928. The surfacing material used was high grade mineral color, cement and some other ingredients, according to a perfected formula. These materials were all ground together in a ball mill. To this mixture was added aggregates in the ratio of one part of cement to three parts of aggregate screened to uniform size. All dust and fine particles had been removed from the aggregate by passing through No. 50 screen, and large particles removed by No. 12 screen. After being thoroughly mixed dry, this material was taken to the job where it was mixed wet as used.

Due to the coarseness of this material, it was necessary to develop a special spray machine before proceeding with the job. This was done. The openings in the gun had to be considerably larger than the coarsest particles. With these large openings and coarse material it required a large volume of air at a constant pressure. Care was exercised in the amount of water used in order to secure a mixture that would spray in a plastic form.

The cost experience on this job proved its economy. A helper was employed to mix material wet and assist in moving ladders for operator. A careful record of this job was kept, which showed actual time of operator and helper of 14 hours, at a cost of $14.00. The job required 1120 lbs. of mixture, material costing $16.80, a total of material and labor at $30.80. The house measured 280 square yards of surface; thus the total cost of color resurfacing was 11c per square yard.

At the same time the owner of this house decided to put on a new roof of concrete tile and as a further test for this coloring material, the roofing tile was sprayed with the same material in several shades of green, the result being a very pleasing variegated roof. This roof was laid directly over the old shingles without any special preparation.

Renews Values

Now, after six years of exposure to severe winters and extreme heat in summer, both the side walls and the roof have retained their original beauty and show no checks or cracks. During these years many experienced concrete men have inspected this job, and have agreed that the durability of this resurfacing was due to the coarse aggregate used and the spraying of a plastic mixture.

Since this original experiment there have been numerous jobs of this nature done over all kinds of masonry surfaces, including clay brick and magnesite stucco, in many sections of the country. Reports are very satisfactory both from the standpoint of increased business received by operators equipped for resurfacing, and by home and property owners being well pleased with the colorful beauty and permanence of the work.

With this air spray equipment cracks and broken spots are filled and rough masonry or block walls are refinished to a smooth surface. Illustrations at right show some of the uses to which this method has been put. The cleaning up and decorating of basement walls to make them suitable for recreation rooms or laundries is in itself an immense field for activity. The range of colors available is large.

Large Market for Cement Work

With the national movement now under way for renovating and resurfacing, operators in masonry color resurfacing are anticipating a very satisfactory year. The results so well demonstrated by this resurfacing of old masonry point the way to additional utility for this color treatment in new construction. Rough surfaces of poured concrete can be given a smooth, impervious coat in any desired color; rough concrete blocks either of dense mix or light weight aggregate, such as cinders or haydite, can be surface colored and finished to a smooth surface as desired; cement stucco of natural gray color can be given a finishing coat to add to its moisture resistance and to produce the wanted colored effect.

Modern taste is tending toward the greater use of color in buildings, especially on broad, flat surfaces. The Century of Progress buildings have exemplified this treatment and will no doubt influence a greatly increased use of color in commercial buildings throughout the country. Where color is used, it is desirable from time to time to change the color scheme, and this can be easily done over concrete or brick surfaces by this spray equipment.

Contractors and cement products plants equipped to handle this work are finding a growing demand for color and for colored cement products, such as roofing tile, wall tile and cement brick. The point is made that while the color treatment does not need to be mixed in to color the entire unit, it is desirable to deposit a surface treatment of the colored mix sufficient to give actual body to the color surface. It is not merely a paint film.

Any surface exposed to the weather will gradually accumulate grime and stain. Washing and sand blasting have been resorted to in the attempt to maintain masonry surfaces in their original colors. The same brightening effect is secured at the same or less expense by spraying on a new surface—with the additional advantage of the extra layer of weatherproofing material to seal cracks and cover blemishes.

The experience of this firm of concrete equipment specialists is being confirmed here and there throughout the country under various climatic conditions and the varying factors of personal skill in handling the equipment.
New Ideas in Shelving and Display Racks
By WILL L. HAMMONS

NEW ideas, new methods and new designs are proving a big factor in the recovery of business in many lines. This is not only shown in the new rail- way trains and automobiles, but also in new designs for furniture, household appliances and store fixtures.

Throughout the country there are many stores in which the shelving, counters, etc., are antiquated and unattractive. And it is just such places that offer to the progressive carpenter or cabinet maker the opportunity to secure interesting and profitable employment. The average merchant is willing to invest in attractive shelving and counters to better display his merchandise if the cost is reasonable and the designs new.

The writer secured the job of building entire new shelving, counters, tables and wall cabinets in two Chicago book stores by showing the owners the advantage of attractive designs without extra cost. Since color is in vogue today the cheaper grade of lumber can be used, as it is quite satisfactory when covered with lacquer or enamel.

In one of the above mentioned jobs the white pine was enameled blue and the three-ply veneer stained a light gray. In the other the entire work was enameled green. Knots were covered with orange shelac. Practically all the new books come in brightly colored paper coverings, and enameled fixtures offer a most pleasing background for this bright display of color.

Three-ply veneer has many advantages for this class of work. It has a smooth, beautifully grained surface, is light in weight, very strong and rigid when properly supported, is inexpensive and is easily sawed in curved designs with an ordinary hand coping saw.

The inclined front at the bottom of the shelving shown in the accompanying drawing is an original and most attractive way of displaying books, as they can lie flat and expose to view the entire front cover. The veneer on this sloping surface is cut two feet wide so that there is no waste in the regular four foot wide sheets. The 1"x2" strip for holding books is nailed to the veneer before the latter is nailed in place, as the nailing can be done from the under side of the three-ply sheet. Nailing through the veneer into the 1"x2" strip with lath nails about every four inches holds the strip firmly in place.

Six d. and eight d. casing nails were used in assembling the shelving, the exposed nails set and the holes puttied. Usually the spacers between shelves are made of plain boards, but a few minutes’ extra work in cutting a curved edge on the front makes a much more attractive job, as shown in the drawing. These small, artistic details take but little time, but add so much to the general appearance of the finished work.

Three-ply veneer is an excellent material for counter and table tops. The browsing tables shown in the photograph and drawing are easily made and are both substantial and attractive. In this work glue was spread on the under surface of the veneer and then nailed with ½" brads into the sub top. The 1"x2" strip is nailed along each side of the table allowing about three quarters of an inch projection above the table top, which offers a means of straight alignment for the books displayed. The 1"x4" at ends of table keep the books from leaning and give an added finish to the table. After cutting and sanding, the two pieces forming the table legs are glued and nailed together, then securely fastened under the table top.

After shelving is placed along the walls there are usually corners or wall surfaces left which can be utilized for hanging shelves. These hanging shelves offer an excellent way of displaying special books or gift objects, and add a pleasing touch to the general appearance.
Re-inforced Brick Panels Used in World's Fair House

From the builder's viewpoint, the most novel feature of the Crowell Publishing Company's model farm house which has been constructed on the World's Fair grounds at Chicago is the "pre-casting" of the brick walls. All the walls are built of reinforced face brick, not laid in the ordinary way, but pre-cast in slabs and panels. The method by which this is done is thus described by the architect, Henry K. Holsman:

"The idea of pre-casting wall brick into slabs and panels is one of those new ideas which are revolutionizing and revitalizing home construction in this country. It is a method particularly suited to the building of farm houses because it not only reduces the cost and the time needed, but involves a type of work which men of average skill and mechanical ability can do, if properly instructed in advance.

**Panels Made on Lot**

"The casting of the slabs and panels may be done right on the lot, as it was done for the sample house built on the World's Fair grounds. Or the brick may be pre-cast elsewhere and delivered to the site all ready to be erected. They are then set in place, much as so-called pre-fabricated houses are set up.

"Both the casting and the erecting may be done with less skilled help than is needed in building a brick house by the conventional method. Moreover, in this type of construction, which is absolutely new to this country, one brick does the work of two, thereby effecting a saving in building costs. This is because the brick walls, reinforced with steel rods embedded in the joints, need only be four inches thick (the thickness of one brick) instead of eight inches (or two bricks' thickness), as in the ordinary brick wall.

**Criss Cross Steel Rods Used**

"The pre-casting is done in wooden frames, and is a simple operation. Steel rods are placed criss-cross in the frame, supported in holes made for the purpose in the sides of the frames. The rods divide the frames into squares, exactly 8½ inches each way. The bricks are then placed between the rods, over a layer of sand on the bottom of the frame. Cement mortar is then poured over the brick (the sand on the bottom protecting the face of the brick from being defaced by the mortar). When the cement is dry, the slabs can be set in position very quickly, and the walls go up in a fraction of the time which would be necessary if the brick were laid in the ordinary way. Brick molded in this manner has a strength equal to reinforced concrete.

"The slabs may be made in different sizes, in order to allow for window and door spaces. A pleasing wall pattern is created by laying the bricks in opposite directions in the adjoining 8½-inch squares.

"In the World's Fair model farm house, the interior partitions of the first floor are also built of these reinforced brick slabs, as they support the second story."

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The casting form is made of wood with holes on 8½ inch centers for the reinforcing rods. Panels may be cast on the job or in the shop. Three steps in the procedure of casting brick panels and assembling them into a building as developed by Architect Henry K. Holsman.
3 New Construction Ideas

Admiral Byrd's Hut

Construction of a light weight panel house for the use of Admiral Richard E. Byrd in his Little America exploration involved many novel features. A replica of the house has been built and is now on display at the World's Fair.

Light weight, extreme resistance to cold, rapid assembly were required features. A panel construction was adopted, each panel made up of the following layers: (1) interior surface of fireproof canvas; (2) one-eighth inch wood veneer faced both sides with kraft paper; (3) a layer of Reynolds Metallation made of heavy kraft paper faced on both sides with polished aluminum foil .0025 inches thick; (4) sheet of reinforced waterproof paper slightly corrugated; (5) two layers of kapok blanket, each about 1/4-inch thick, separated by a sheet of waterproof paper; (6) a sheet of loosely installed waterproof paper; (7) another layer of kraft paper faced on the inner side with polished aluminum foil; (8) outer surface of thin wood veneer.

Edges of panels were made of white pine boards 1 inch thick and 4 inches wide which acted as the structural framework of the building when panels were joined together.

The panel, as thus constructed, measures 4 1/2 inches from face to face and, as the construction indicates, is very light and full of air spaces. If pressed together, all the materials in the panel would take only 1 1/2 inches of space.

So effective is the construction that Admiral Byrd has kept warm with the use of only four quarts of oil in an oil stove each day in a temperature of 60 degrees below zero. The house was designed by Victor H. Czegka and built by master carpenter Ivor Tinglof.

Rear Admiral Byrd's hut is 9 ft. wide, 13 ft. 1 in. long, and 7 ft. 1 in. high, measured on the inside of the room which is the Antarctic home. In addition there is a porch 4 ft. wide and the length of the hut, the roof of which is supported on three sides by boxes of supplies piled up to the level of the flat roof deck. It is in this porch roof that the famous trap door is placed through which Admiral Byrd can make his way to the surface of the snow should any of his tunnels become choked with ice and snow. There is a door leading from the house to the porch and two wire glass windows in the roof of the house itself.

The solid white pine frame, fitted by a master craftsman as carefully as fine cabinetwork, was squared up true and pinned together with heavy wood pins, just as the old fashioned barn frame was erected by the master carpenters of earlier days.

Starting at one corner Ivor Tinglof and his assistants erected one end and laid across the top of these panels a plate made of 1 in. white pine 4 in. wide. Dowels set into the tops of each panel fitted into holes in this plate member and accurately aligned them. The two sides were then erected in the same manner with a full length plate holding them in place after the ridge pole had been set upon the center panel.

Metal Faced Plywood

Of the many new materials used in the 1934 Chicago World's Fair, one of the most interesting is the metal faced plywood used in the Ford Building, developed under the direction of Architect Albert Kahn and through the co-operation of the Haskelite Manufacturing Company of Grand Rapids, Mich., and the Apollo Metal Works of LaSalle, Ill.

Some 20,000 square feet of this new surfacing material can be seen at the Ford Building where it was used on columns, balconies, facia, and interior trim.

The metal surface is a chromium plating copper which has a shining, satin-like chromium finish. Chrome plated copper is cemented by a special process to plywood. The edges are turned over and fastened on the...
reverse side, producing a light, durable, rigid panel. The metal-faced panels thus constructed were furnished cut to size and numbered to permit rapid installation by carpenters on the job. They were fastened in place with chrome plated screws.

The combination of metal and plywood in a strong, easily handled panel section, produced a very adaptable and attractive material. Its use in the surfacing of columns, curved balconies and trim produced a brilliant and effective appearance. At the same time, the fact that it could be installed by carpenters using their ordinary tools made for rapidity and ease of construction.

Special Doors at Arlington Downs

Handling crowds of 40,000 people at the Arlington Downs race track at Arlington, Tex., is facilitated by the unusual door installation recently completed by the Chas. F. Williams Company, of Fort Worth, Tex. Twenty-two large upward acting doors manufactured by the Rowe Manufacturing Company of Galesburg, Ill., were installed this spring to meet the unusual conditions presented by grandstand construction.

The long row of doors is located under the grandstand to permit quick and easy access of thousands of people into the mutuel booths. It is necessary to enclose the area between meets; through use of the battery of upward acting doors, practically 100 per cent access to the mutuels and concessions from the track of the grandstand can be immediately provided.

Four of the doors are 19 feet 2½ inches wide by 8 feet 10 inches high—unusual dimensions, to say the least. In four other openings of this same size, two smaller doors were installed through use of a removable mullion. It is possible to clear the entire opening by simply raising both doors to the horizontal position and sliding the mullions over to one of the jambs.

The Arlington grandstand is a steel and concrete structure which accommodates 7,500 people. An investment of some $2,000,000 is represented in the race track and equipment. Harry B. Friedman of Fort Worth is the engineer and Thomas S. Byrne, Inc., of Fort Worth the general contractor.
More About Corners

FIND the description of a corner as given by Mr. Davis, Rome, N. Y. (Jan. 34), very satisfactory where three studs are used, but where a saving of studs can be of service, here is one I have used for a number of years and find very satisfactory.

Two studs are spiked together and placed directly on corner. A block 5" or 10" long is then nailed on the flat side at the bottom to make solid nailing for the wash board. Then take another block the same length, place it on the edge side of the corner post, take a strip (or I generally use a piece of roofer 1" x 2"), make it the exact length from the top of this block to under the plate. This block and strip are just tacked in place until ready for the lathing operation.

The laths are then placed on the right wing first, the ends being nailed solidly to the corner post. Then nail the block in place at the bottom, put the strip on top of the block and nail solidly to corner post in line with stud on left wing. When completed it will look the same as sketch at right.—JOHN R. MORRISON, Carpenter, Cly, York Co., Pa.

Placing Wall Framing

THE picture below shows Frank Thiers (left), carpenter contractor and home builder of Ottawa, Ill., erecting side wall framing of a new farm home on the outskirts of town. Mr. Thiers uses a method for elevating the wall that makes it possible to lift large areas with only one helper. The framing is first lifted to horses, then propped with braces, and finally pushed into place. All openings are cut and properly framed before the wall is erected. The action photo below shows a number of framing details of interest.
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That’s what Johns-Manville dealers and contractors think of the J-M 1934 Sales Plan. And no wonder they’re enthusiastic. Radio, alone, would have seen to that. For we’ve literally been snowed under with inquiries.

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With the passing of the National Housing Act, the Johns-Manville Complete 1934 Sales Plan takes on a new and more vital significance. For, while the government will provide a tremendous stimulus by awakening interest in home remodeling and repairs, the actual jobs will still have to be sold.

Never before in the history of the industry has there been a greater need for a sound sales plan.

The J-M 1934 Plan has been universally voted by thousands of dealers and contractors throughout the country as the soundest sales plan ever offered the industry.

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City: ______________________________
State: _____________________________

AB-7-34
Gauge Locates Strike Plate

THE simple gauge pictured can easily be made of tin from a coal oil or tomato can. I have found it to be a fast, practical and accurate way for locating the height and depth for the strike plate when putting in door locks.

After lock is in, close and hold the door with one hand, with the gauge in the other, and thumb on the loose sliding piece, put the gauge against the edge of door frame. For depth, push the slide piece against the latch bolt, then hold gauge tight, open the door and mark on door frame. The exact height of strike is found about the same. Especially when the door is warped or twisted, the strike with this gauge can be placed on the desired place the first time. Two other ideas I find good:

1. When replacing broken or worn out sash cords, I have found that a short chain 3 or 4 inches long bends or slides in easily over the curved opening of the sash pulley without getting stuck. Of course, one end of string is tied to the chain, the other to the new sash cord.

2. In absence of a square, or when the square is too small for a wide board, counter, hall or alley way, etc., a fast and accurate way is to first make a mark in the center. Then with a rule, stick or tapeline, measure from center mark any convenient distance to each edge. Connect a line across from each mark, and it is squared.—NILS O. FAGERSTROM, Carpenter, San Francisco, Calif.

Difficult Sash Installation

I AM ENCLOSING sketch showing how we overcame a rather baffling situation that we encountered last Fall in the installation of the steel sash in a new dairy building. The tile used in the outer walls and partitions was of the large units type with both inner and outer faces glazed, 8 inches thick through the wall and with an exposed face of 8 x 16 inches. It was very hard to cut these tile and we were forced to trim the jamb tile at the windows as noted on sections, so as to form a slot for the wings of the steel sash. We attempted to cut a narrow slot in the lintels to receive the top bar of the sash but found it not at all practical even with the use of a stone disc and Skilsaw outfit. These lintels were made up before work started and filled with concrete reinforced with rods as shown.

Tile at sill and side jambs were erected and before lintel was placed, steel sash were slid down into slots and after walls were completed, sash were blocked up tight against lintel and lined up in slot and then pointed, as shown.

In forming aluminum sill, the angle at sash was bent just shy of full so that when bolts were drawn up, the sill "hugged" the corner of the tile sill and prevented mortar from lifting it when rammed into place.

The greatest problem of all was the sill. The tile laid up to a height that did not leave room enough for a regulation stone or concrete sill and we had to develop the scheme shown in the sill section in order to make a weather-proof sill. It worked wonderfully and the aluminum sill looked well and was not more expensive than a stone or concrete sill would have been.—FRANK M. HAMLIN, Hamlin Sons, Contractors, Lake Villa, Ill.

Eliminates Water Knocks

AFTER completing a house for a client of mine, I was troubled with water knocks due to the plumber failing to put air chambers on the top of each riser.

In order to install these in the completed building it would be necessary to rip out a large amount of tile and patch same, which could not be done satisfactorily.

I devised an idea of using a two-inch piece of pipe about thirty inches long, capped the top end and placed a one-half inch valve on the other end, connected same in the cellar in a vertical position to a cold water line and installed two pet cocks, one on either end. By closing the one-half inch valve and opening both pet cocks, it allowed the air chamber to fill with air from the top and the water to run out of the lower pet cock. When the chamber was empty, I closed both pet cocks and opened the half-inch valve. This proved a very efficient air chamber and eliminated the water knocks throughout the entire house. If this chamber ever fills with water, it is a very simple matter to repeat the above operation. This attachment can be placed anywhere in the cellar on the cold water line as long as it is in a vertical position.—ALBERT WERNER, Builder, Hollis, Long Island, N. Y.
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Entire weight of truck and load carried by axle housing. Axle shafts have nothing to do but turn the wheels. You can remove the axle shafts without jacking up the truck. Straddle-mounted driving pinion for extra strength. Heavily ribbed axle and differential housings.

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Uses no more fuel than a four-cylinder engine... simply divides it into eight smaller parts and gets more use out of it. Develops over 80 horsepower. Dual carburetor. Valve seat inserts. Oil-saving pistons of new design. New type, heavy-duty, copper-lead connecting-rod bearings.

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After thousands of miles of service, you can get a block-tested, factory-reconditioned engine installed for less than the cost of a complete engine overhaul. No other truck at any price gives you this service, which adds years to the life of your truck. Ask your Ford Dealer about this plan.

THE NEW FORD V·8 TRUCK
NEW PRODUCTS — Labor saving, cost cutting items

Single Action Bubbler

The distinctive feature of the new combination bubbler and glass filler illustrated below is the fact that it operates in both its functions by means of a single handle. A simple cam arrangement within the valve, easily removable or reversible, diverts the flow of water through either bubbler or glass filler spout as the handle is turned slightly in one direction or the other.

This single-handle control is desirable because it eliminates trying first one handle and then the other. It also reduces maintenance expense.

NEW TYPE combination bubbler and glass filler operates from one control.

Tape Rule for Accurate Measuring

Eight different kinds of measurements are taken quickly and with great accuracy by the new nickel plated steel tape rule shown below. The rule case is molded to fit against an object and will stand in all measuring positions. The flat back supplies an accurate place against which the object to be measured is placed.

Taking inside measure is the outstanding new improvement in this rule. The flat back is placed against one side of an object and the tape is pulled out to touch the opposite side. The measurement is read exactly at the point where the tape disappears into the case.

The precision lever lock makes it possible for the carpenter to retain for future reference any measurement up to 72 inches. By using the lock, it is possible to measure by "feel" alone which is ideal for dark corners and hard-to-get-at places.

The tape rule is inexpensive, marked for quick reading, has a quick, safe, pull and push action, and durable plated case.

Cantilever Hearth Assembly

A simple assembly of ribbed sheet metal centering and reinforcement rods is now being made by a large manufacturer of fireplace equipment, which does away with sagging and shrinking.

Cracks are usually due to the hearth being partly supported by the brickwork of the fireplace and partly by the floor structure. This new device places the concrete slab so that it is nearly balanced on the axis of the forward wall of the ash pit; it is free from the wood floor structure and is supported entirely by the chimney masonry on the cantilever principle.

As shown in the picture above, the hearth assembly consists of:
1. Specially corrugated steel plates, which are laid together to form the hearth centering.
2. Self-supporting steel reinforcing rods with feet that hold them at the proper height for a 3½ inch concrete slab.
3. Four transverse rods that rest on the self-supported rods.

Improved Interlocking Roofing

A well-known manufacturer of metal roofing has perfected a new interlocking sheet metal roofing that represents a fundamental improvement of great importance. A special locked seam has been developed which makes the roofing more easily laid (said to cut labor costs one-half), locks solidly against blowing out or rattling, lays flat, provides quick drainage and long life. Nails are driven through a special nailing flange, then covered by the side lapping sheet.

BELOW IS SHOWN tape rule especially good for accurate inside measurements.

NEW TYPE locked seam on sheet steel roofing cuts labor costs one-half.
SAVE on gasoline ... on oil and upkeep with CHEVROLET VALVE-IN-HEAD 6-CYLINDER TRUCKS

Wise truck owners keep a sharp eye on hauling costs. Their exact records tell which trucks cost less to run. That explains why big fleet operators and thousands of single-truck owners have been switching to Chevrolet trucks. They know that the Chevrolet six-cylinder overhead-valve truck engine saves them money—on gas, oil and upkeep. They know that Chevrolet trucks give them smooth performance and plenty of reserve power without any needless extra cylinders. These and many other points of superior design have made Chevrolet America's fastest selling truck. Such overwhelming popularity is a reliable guide to follow. You can handle every job at a much lower cost by hauling with Chevrolets—the world's lowest-priced six-cylinder trucks!

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A Chevrolet truck bought by the Arizona Pacific Motor Freight Lines has covered 106,000 miles with only one set of new rings. This firm uses 12 Chevrolet trucks and semi-trailers—the most dependable and economical trucks they have owned. This firm is standardizing on Chevrolet trucks.

HEAVY DUTY REAR AXLE
Built for starting and pulling the heaviest loads. A straddle-mounted pinion, 4-pinion differential, oversize axle shafts, double-row wheel bearings, one-piece housing with big removable plate, and other features give extra strength and longer life.
Modern Ensemble Kitchens

A NEW LINE of porcelain steel kitchen units has been placed on the market by a manufacturer who has accepted the responsibility for providing a completely planned, color matched kitchen. Sink, drainboard, working surfaces, splashes, range, refrigerator cabinet, wall cabinets and floor cabinets are all made in color harmonizing units, and fit together efficiently to produce a streamlined, modern appearance.

Each unit is a complete steel cabinet ready to take its place in a kitchen ensemble. Several of these units may be installed when the contractor builds the house or does the modernizing, and others added later.

Included in the outstanding features of this line are: made of high quality steel with vitreous porcelain surface, vermin-proof, fireproof, easy to clean, reinforced doors—reversible right or left, permanent color, acid-resisting, continuous flush surfaces easy to clean.

NEW LINE of well built porcelain enamel steel units designed for harmony and efficiency. Complete line of kitchen units designed to fit with each other and harmonize as to color.

Seal Floor Finish

FLOOR SANDERS and resurfacers, and contractors interested in better floors are turning to a new type of seal surface which has been developed over the past two years to replace varnish work. A leading manufacturer of sanding machines has developed a special disc sanding machine and polisher for use with the new finish.

The seal type finish penetrates into the wood, sealing the surface so thoroughly that no dirt gets into the grain. It is applied on newly sanded floors and welds the fibres together, making a solid, wear-resisting surface.

The seal finish dries overnight, is applied with a lamb’s wool mop, and is especially good looking and durable.

An outstanding feature of the sanding and polishing machine used is the fact that it is able to get under desks and chairs. The 18-inch disc or polisher requires a height of only 4½ inches.

POLISHING and sanding machine requires only 4½ inches height for use with new type seal finish for floors.

Low Priced Electric Fan

A COMPACT new built-in ventilating fan has been announced by a prominent manufacturer, which starts with a single pull of the chain, which at the same time opens the outside shutters. Outer and inner shells are rust proof, and inside grille is finished in chrome plate. A brushless, induction type motor cuts operation cost to same as an ordinary electric light bulb. Installation is simple, construction durable.
NEWS OF THE MONTH
Building Activities and Meetings

Contractors Not Exempt

According to an opinion by the Legal Division of the National Recovery Administration, no ruling has been made that includes contractors in small towns within the scope of the term "local service trades or industries" referred to in the President's Executive Order of May 20. It therefore is to be understood according to Louis W. Hickey, executive manager of the Divisional Code Authority for General Contractors, Inc., that small town contractors and builders are not exempt from operation under the Construction Code.

Home Builders Code Opposed

Vigorous opposition to granting of a separate code for land developers and home builders, as proposed by the National Association of Real Estate Boards, was expressed at the public hearing in Washington June 14. The Construction Code Authority, the several Divisional Code Authorities, and the national trade associations sponsoring the Construction Code practically all appeared to protest against the granting of such a separate code. The definition of the separate code proposed was as follows:

"The development of land as building sites for purposes of sale or lease and the sale or lease thereof, including maintenance prior to or incident to such sale or lease; and/or the building of one and two-family homes for the purposes of sale or lease and the sale or lease thereof including maintenance, remodeling or repair thereof prior to or incident to such sale or lease."

Low Cost Refrigerator

A new type of electric refrigerator and electric range has just been announced by the General Electric Company at low prices to meet the demand for inexpensive units of this type. Units have been approved by the Tennessee Valley Authority and will be placed on sale in this section where the Government is launching a program to increase the use of low cost electrical appliances.

The new General Electric refrigerator is of the "lift top" type, with all-steel cabinet, hermetically sealed unit, carrying a 5-year service protection plan. Equally revolutionary is the new low priced range, which is equipped with automatic temperature control. The unit is 18 inches wide, 24 inches deep and 36 inches high.

An honest-to-goodness home buyer doesn't grow on every prospect list these days, but...

- Down in Lexington, Mass., Architect C. M. Willis built this snug little Cape Cod Cottage of concrete masonry. He and the owner liked the way the concrete looked...liked its low cost...liked the prospect of long life and little upkeep.

Other home buyers liked the same things. Already this house has led to three similar commissions for Mr. Willis—all to be built of concrete masonry. That's real action in today's house market.

Home buyers know that concrete offers them real value. Home sellers are learning that concrete means quicker sales...better profits...more satisfied customers.

Here are the Answers to your questions on concrete. Send for this new booklet on how to build with concrete. It will help you plan surer selling houses.

PORTLAND CEMENT ASSOCIATION
Room 157—33 West Grand Avenue, Chicago, Ill.

PORTLAND CEMENT ASSOCIATION
Room 157—33 W. Grand Avenue, Chicago, Ill.
Please send me, free, a copy of your home construction Look, "Here's How It's Built."

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This 20' BAND SAW is a MONEY MAKER!
You can absolutely depend upon this saw to lower costs. With its built-in, light socket operated motor and its ball bearing action, it handles the hardest jobs swiftly and efficiently. Regular equipment consists of saw blade, guide, brazing tongs and motor.
Send for descriptive booklet and 1934 prices on our complete line of woodworking and sawmill machinery.

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Modern Building Insulation at one-third former cost
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PEERLESS
DOME DAMPERS
When modernizing or building a new home, include a fireplace in your plans. Be sure of perfect operation by installing the Peerless Dome Dampers. Built of heavy stove plate cast iron, they will last a lifetime. Three models to choose from, Rotary control—Poker control—Chain control. All standard sizes.
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Louisville, Ky.
The American Builder welcomes letters from readers, commenting on any subject of general current interest or importance, for publication here.

Sees Drift Toward Monopoly

Houston, Texas.

To the Editor:

It seems to me that we may be unwittingly preparing for an age of industrial feudalism, if we are to adopt as a permanent institution a system of fixed prices controlled by industry. A program such as this may surely result in so-called "vertical organizations" of which the following is an example.

In the oil industry, financial data on a company usually shows it to be an "integrated company" if it is able to claim the distinction, which means that it controls crude oil sources, pipe lines, refineries, shipping and filling station outlets, either through subsidiaries or suborganizations. In this industry they have even been accused of operating some branches at a loss and making the deficiency up and more through pipe line operations to show a profit for the vertically organized group; while independents operating branches of the business like filling stations are making little or operating at a loss.

Prior to the "New Deal" this system of vertical organization had developed to some extent in other industries, of which Ford Motors is an example; to the extent that it is said to control raw sources of materials, coal mines, transportation, retail outlets and an affiliated finance company. I ask are conditions being set up to accelerate this trend throughout the fabric of our industrial life?

Are we going to eventually see the entire building industry integrated, the source of raw materials, fabricated products and supplies, particularly those materials chiefly related to the construction industry such as lumber products, integrated through subsidiaries with distribution outlets such as subdivision development, construction work, sales and financing, to the end that through one or more of these particular branches be operated at a loss (thus stilling competition in that particular branch) the integrated system itself will show a profit?

Strongly enough intrenched, it is conceivable that the lumber interests might dominate the industry, if, through price fixing control it can operate at a net profit while operating at a loss in some branches of a fully integrated lumber and building industry.

I am not talking about present practices, about some materials and supplies being higher than others, but about price fixing and artificial control; about fundamentals and the groundwork being laid upon which the structure may, through economic pressure, be erected. The whole building industry is out of gear, and I think efforts to lay it on to lack of mortgage money alone, is to travel in a blind alley.

The tendency seems to be to try to get interest rates lowered to offset the gouge in construction costs not justified by the economic condition of the country. Available capital will flow under one of two conditions—where building costs are not disproportionate, or where there is compulsion upon the buyer to pay, though the costs are disproportionate. As there is not sufficient volume through compulsion, the cry is to get the government to push, instead of applying the other remedy.

There is being compiled in this city, statistics, upon how many people could use new roofs, additional bath fixtures, electric wiring, redecorating, remodeling, etc. It seems the questions should be put in a different light. Statistics compiled to show what absolutely has to be done now would mean something. All else
(Continued to page 54)

What the SLAM-TEST SEAL means to you

The SLAM-TEST seal illustrated here is placed on every package of Genasco Asphalt SLAM-TEST Shingles, made with Trinidad Lake Asphalt Cement, the SLAM-TEST coating developed by The Barber Asphalt Company.

This seal is your assurance that Genasco Sealbac SLAM-TEST Shingles can endure more physical punishment than they will ever encounter on a roof over a long period of time . . . that they will stand the rough "SLAM-TEST" . . . and that they will give many years of trouble-free service on your roof.

If you haven't seen the SLAM-TEST demonstration write us for details.

Send this coupon NOW

Please send me information regarding Genasco Slam-Test Shingles.

Name ____________________________

Address __________________________

(Continued to page 54)


**AMERICAN STEEL SHEETS**

**FOR THE BUILDING SUPPLY TRADES**

We manufacture SHEETS of recognized reputation and value. For roofing, siding, gutters, spouting, air conditioning systems and general sheet metal work, use

**KEYSTONE Copper Steel Sheets**

for lasting service and maximum resistance to corrosion. Includes 16" band saw, AMERICAN Black Sheets, Keystone Quality Sheets, Apollo Best Bloom Galvanized Sheets, Galvanized Sheets, Henry-Coated Galvanized Sheets, Perforated Roofing and Siding Products, Terne Plates, and 0.05 Stainless and Heat Resisting Steel Sheets. Write for information.

**AMERICAN SHEET AND TIN PLATE COMPANY**, Pittsburgh, Pa.

SUBSIDIARY OF UNITED STATES STEEL CORPORATION

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**Quick! Make Money Modernizing with an AMERICAN Spinner**


Use AMERICAN SPINNER—
- for stairs, closets, floor edging, butt ends, corners—easily to handle, ten times faster than working by hand.
- Use for floor sanding—the AMERICAN RANDER. The machine that gives to floors a piano finish.

Write for particulars today.

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**Experience Tells**

Our experience of 57 years tells in the making of accurate, dependable machinery. The experience of owners and users tells in the unanimous popularity of the Parks.

Send for complete catalog.

THE PARKS WOODWORKING MACHINE CO.
Dept. BL-7, 1524 Maxwell St., Cincinnati, Ohio

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**PARKS WOODWORKING MACHINES**

Includes 14" band saw, 6" jointer and 8" circular rip and crosscut saw. Without Motor

$247

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**LETTERS from READERS (Continued from page 53)**

remains in that general class, which is explained by the statement that human nature is such that no matter what a man has, he aspires to, if costs do not prohibit and his finances permit, that which is better than what he has.

NAT U. COLLIER.

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**Lower Costs Wanted**

To the Editor:

I was very much interested in the May AMERICAN BUILDER. It is certainly great news that the administration is getting behind the home building movement. Better late than never, I suppose.

I am afraid that the administration will find that the laws in relation to codes have so increased costs that no amount of liberty loan campaigns and such sort of hurrah-boys stuff will prompt the home owner to build new houses or remodel, any where near so much as lower costs will.

I find that many materials have more than doubled in price since last year, and the only thing that prevents total building prices from being higher than the highest peak of 1928 is the fact that labor has had to cut their wages even more as the price of materials went up, in order to get work.

I feel that nominal increases in prices of materials and in wages have been very much in order during the past year. These would have been warranted by natural increase in business stimulated by the lower prices. It is an absolute fact which has been demonstrated this year that higher prices, particularly in building work, choke off a revival of new construction.

It is impossible to show that 1934 is a bargain time to build, and it will take an enormous amount of ballyhoo to make the public believe this, unless costs are lower than at present.

ROYAL BARRY WILLS, Architect.

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**Appoint Adjustment Board Head**

APPOINTMENT by President Roosevelt June 6 of Sullivan JW. Jones, nationally known New York engineer, to be impartial Chairman of the Construction Industry Planning and Adjustment Board completed organization of this important group.

In addition to Chairman Jones, the Board created under the Construction Code approved by the President on January 31, includes ten employer representatives and ten representatives of employees. The ten employer representatives nominated by the Construction Code Authority, selected from the nominations so made by the Industrial Advisory Board and approved by National Recovery Administrator Hugh S. Johnson, are:

- E. M. Craig, President, American Construction Council, Chicago, Ill.

The ten representatives of the employees, nominated by the employees in the industry, selected by the Labor Advisory Board and likewise approved by the Administrator, are:

- M. J. McDonough, President, Building Trades Department, American Federation of Labor.
- John J. Hynes, Sheet Metal Workers International Association.
- William L. Hutchenson, President, United Brotherhood of Carpenters and Joiners of America.
- M. J. Collarson, President, Operative Plasterers and Cement Finishing International Association.
- John Corfield, President, United Association of Journeyman Plumbers and Steam Fitters.
- Harry C. Bates, President, Bricklayers, Masons and Plasterers International Union.
- L. P. Lindelef, President, Brotherhood of Painters, Decorators and Paperhangers.
- D. W. Tracy, President, International Brotherhood of Electrical Workers.
- P. J. Morris, President, International Association of Bridge, Structural and Ornamental Iron Workers.
- J. V. Morelli, President, International Hod Carriers, Building and Common Laborers Union.

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ROYAL BARRY WILLS, Architect.
Suburban Building

(Continued from page 19)

Brooks has been engaged in home building in Wilmette and other North Shore towns for the past ten years, and does his own designing and planning where desired by the customer. He is completely reconstructing a house in Wilmette, spending $5,000 to produce a property that will be very valuable, as it is located in a fine residential section. The old house is being revamped inside and out, two new bathrooms added, a new kitchen, new windows, doors, siding, paint, new radiators and a general rebuilding. Mr. Brooks has visualized for the owner what can be done, and sold him on the value of these extensive improvements.

Numerous modernizing jobs were encountered in the American Builder survey showing that this important type of work is just getting started in the Midwest. Several instances where architects have, in effect, become contractors in this type of work were noted. One architect, E. A. Benkert of Winnetka, has some twelve modernizing jobs under way at the present time, which he designs and supervises, letting out individual subcontracts for the work. This activity on the part of architects is not extensive but is an indication of the trend toward centralization of activities. Another architect, M. A. Nelson of Chicago, is performing the same contracting service in the construction of a $17,000 house in Kenilworth. The carpenter-sub-contract work on this job is being handled by Hans Andrews, a carpenter-builder of long experience.

Practically all contractors and builders interviewed were interested in one subject—organization of residential contractors. They have all discovered that the contractor is the only man in the industry not well organized. Lumber dealers and their codes are well protected; plumbers have the most efficient type of organization; architects have their societies; real estate men their associations. The need for strong, well organized contractor groups to unite on sound business and price practices was repeatedly brought out.

A Better Sales Service

(Continued from page 23)

It runs counter to every American ideal and the very foundation of NRA. Let's adopt a distribution clause in the Lumber and Material Dealers' Code, that will hold the time tried principles now found successful, yet make it incumbent upon these dealers and their co-operating builders to render to the home owners and builders of the country a dependable service at the lowest possible cost commensurate with that service. For more than a hundred years retail lumber and material dealers have faithfully served manufacturers, local builders and home owners. I urge every carpenter, contractor and other reader of The American Builder to co-operate with their local lumber and material dealers in their present fight for recognition.

It Costs No More to Use Dependable Weather Strips

The Success of a weather stripping business depends greatly on the reliability of materials used. Customer satisfaction cannot be gained by using inferior materials. You can supply Accurate Metal Weather Stripping

Non Rutable and Fully Guaranteed at no greater cost than you would pay for cheaper grades.

Accurate strip can be supplied in the highest quality for every opening and can be guaranteed. Write for new improvements and details.

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NEW FACTS

TIMBER ENGINEERING CO., Washington, D. C.

850—Joint Connectors—Teco Timber Joint Connectors as perfected by the engineering staff of the National Lumber Manufacturers Assn., which open up an entirely new field for heavy timber construction, are illustrated and described in a 16-page booklet.

STARLINE, INC. (Formerly Hunt, Helm, Ferris & Co.), Harvard, Ill.

851—Plans for Farm Buildings—How to plan and build a dairy barn, together with barn ventilation, dairy barn equipment, including stalls, stanchions, feed and litter carriers, hay tracks and rolling door hangers comprise the contents of a 64-page illustrated handbook.

JOHNS-MANVILLE, 22 E. 40th St., New York City

852—Building Board—J-M Hard Board for innumerable finishing and structural uses for city buildings, farm buildings and toy construction is introduced in a new 16-page booklet with many illustrations. How to make a folding tennis table is just one of the useful stunts made clear in this book.

THE MARSH WALL TILE CO., Dover, Ohio

853—Marbleite—A fiber sheet wall tile for homes and commercial use is presented in a specification folder with color illustrations and details of installation.

CEMENT DATA

PENNSYLVANIA-DIXIE CEMENT CORP., 60 E. 42nd St., New York City.

854—Cement, Portland—“High Early Strength Concrete.” Booklet explains how to secure high early strength concrete with standard Penn-Dixie cement.

PORTLAND CEMENT ASSN., Room 154, 33 W. Grand Ave., Chicago, Ill.

855—Masonry, Concrete—“It Pays to Own a Fireproof Home . . . Here’s How It’s Built.” A 20-page illustrated booklet which takes a fireproof concrete home apart and puts it back together again. Contains 50 photos and drawings which tell the story.

ZENITHERM-STRUCTURAL GYPSUM CORP., 30 Rockefeller Plaza, New York City

856—Floors and Walls—“Zenitherm for Architectural Interiors and Exteriors,” an 8-page illustrated booklet describing Zenitherm walls and floors, including color chart and specifications.


857—Safety Treads—Aluminum Rubber Bonded Safety Treads are detailed and specified in an illustrated folder devoted to modernizing as well as the new stair problem.

METAL PRODUCTS

TRUSCON STEEL CO., Youngstown, Ohio

858—Truscon Building Products—A complete line through the local dealer consisting of casements, projected and pivoted windows, basement windows, steel doors, steel joists, reinforcing, both rods and fabrics, metal laths and accessories, and waterproofing illustrated and described in a series of specification folders.

AMERICAN SHEET AND TIN PLATE CO., Pittsburgh, Pa.

859—Sheets, Black and Galvanized—“Steel Sheets Applied to Modern Construction.” A 24-page booklet describing black and galvanized sheets for heating and ventilating uses, and construction purposes.

MILCOR STEEL CO., 4111 W. BURNHAM ST., MILWAUKEE, WIS.

860—Ceilings, Walls, Metal—“Milocor Metal Ceilings and Walls.” A 72-page catalog showing the most popular metal ceiling and wall designs, including the unique Milcor Spanish texture.

THE BOSTWICK STEEL LATH CO., Niles, Ohio

861—Lath, Metal—“Bostwick Economy Catalog.” 32 pages, giving practical data on metal lathing with drawings and specifications.

THE EDWARDS MANUFACTURING CO., 401-417 EGGLESTON AVE., CINCINNATI, OHIO

862—Tile, Metal—“Metal Spanish Tile and Shingles.” 56 pp. 24 detail drawings showing application of metal tile.

WILLIS MFG. CO., Galesburg, Ill.


PAINT, ROOFING, INSULATION

THE SHERWIN-WILLIAMS CO., Cleveland, Ohio

864—Paints, Varnishes—“A Book of Painting, Varnishing and Lacquering Specifications” prepared by the S-W Department of Architectural Service is a 14-page reference book of color cards and approved specifications for the solution of many painting problems.

MADE-RITE PRODUCTS CO., St. Louis, Mo.

865—Paint—“Dry-Lite Portland Cement Paint.” Catalog page describing Dry-Lite portland cement paint, Plascote flat wall paint, Keenex plastic paint, etc.

BINNEY & SMITH CO., 41 E. 42nd St., New York City

866—Pigment—“Dark Colored Concrete.” 8-page general descriptive folder, containing illustrations, specifications and dark color chart of cement and concrete pigment, emulsified carbon black.

THE BARBER ASPHALT CO., 1600 Arch St., Philadelphia, Pa.

867—Shingles, Asphalt—“Genasco Laticrete Asphalt Shingles.” A 16-page folder printed in four colors describing and illustrating these patented, locked-on shingles and their 7 outstanding points of merit.

JOHNS-MANVILLE, 22 E. 40th St., New York City

868—Roofing Materials—J-M asphalt shingles presented in full assortment of colors in a new 4-page circular featuring reroofing and residing home improvement opportunities under the J-M $1,000,000 to Lend Plan.

REYNOLDS METALS CO., INC., 19 Rector St., New York City

869—Reynolds Metallation—Insulation for home and industry is illustrated and demonstrated in a unique 8-page booklet with metal covers and actual samples of Reynolds Metallation. Details show methods of application.