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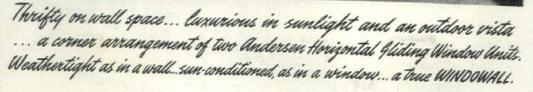
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Sold by thousands of discriminating dealers for years. Millions of feet now in use in bathrooms, kitchens, stores and shops all over the land. Available now. **NEWS...** Pressure mounts for veterans' home (this page) ... Chicago unions relax prefab ban (page 6) ... Congress looks at price control, interest cut for veterans (page 6) ... Taft joins Wagner and Ellendar on housing bill (page 8) ... Wall Street backs prefab (page 10).

BUILDING STALLS

In the face of the worst housing famine in the nation's history, almost no new housebuilding started last month. Over the country, some 60,000 houses were building. But these stalled while builders drove hundreds of miles looking for a keg of nails-or a piece of hardwareor a bathtub. Almost every newspaper headlined the housing crisis. Shrieked the Detroit Free Press: "Dog-tired soldiers can't come home to Detroit. There aren't any houses." The Omaha World-Herald ran a classified advertisement: "969 S. 49th St. Big ice box, 7 x 17 feet inside. Could be fixed to live in like a trailer."

It was clear to everybody that there would be almost no housebuilding before spring. By then, materials and equipment manufacturers promised, supplies of most building products would be available in prewar quantities. But there was a worrisome present lag in production of building supplies, and nobody seemed to know quite what to do about it. Producers blamed labor lack and labor strife, protested price ceilings. Labor charged a "producers' strike", said many manufacturers were stalling until the excess profits tax comes off at year's end.

Many an overworked architect was rudely dumped from great expectations when eager customers took a look at current bids, collapsed under the weight of current building prices. The New York Public Housing Authority turned down all bids on its first postwar project, decided to put in foundations, wait for prices to level off. Mortgage bankers said real estate prices were climbing faster than building costs, charged "appraisal competition".

Republican Senator Taft joined Senators Robert Wagner and Allen Ellender in backing a bill framed to attack the nation's long-term housing job. Representative Wright Patman brandished a bill to control house prices. Representative Clare Boothe Luce offered a plan to ease veterans' housing woes. Cities divided their attention between the public demand for moving in temporary war housing to ease the pinch and builders' pleas for help in getting short materials.

Over the whole confused building picture hung an ominous prospect: Already there was pressure for a return to government controls. Already some veterans' and labor groups looked to a government emergency housebuilding program as the only way to relieve the housing crisis. Building's job was plain: it must police its prices and push its production—or invite government regulation.

RECONVERSION

HOUSING CRISIS

In Los Angeles a discharged Marine pitched a pup-tent in downtown Pershing Square, moved in his wife and child. In Yonkers an evicted veteran sat on a curb with his wife, child and household goods, put up a sign that expressed his feelings -- "Welcome Home to the Streets of Yonkers, Veteran." In Chicago a family with 11 children lived in a garage without water, toilet or cooking stove, cooked family meals at a friend's home eight blocks away. In Eastchester, N. Y., a school superintendent and his wife moved into the home economics room of a local high school. Cried appalled local officials: "What if a group of war veterans storm the doors of the school house and demand the right to bivouac on the gymnasium floor?"

Like an enormous flood disaster, housing crisis swept the nation. And all signs pointed to a frightening fact: the worst was yet to come. Some two million more U. S. families will have to double up before the end of 1946, the National Housing Administrator said.

Nobody knew what to do to check the housing famine. Housebuilders were eager to build—but they lacked materials and labor. Federal housers were anxious to turn over temporary war houses to jam-packed cities—but they had no money to dismantle and move the dwellings. The cities wanted to help — but some worried about creating permanent slums by moving in temporary houses, others thought it was up to the federal government to supply the money for the job.

The National Housing Administrator thought so, too. Last month he asked Congress to authorize use of \$241/2 million from Lanham Act (war housing) funds to demount and move temporary houses to cities where veterans need homes. So far, Congress seemed cool to the proposal.

chicago Acts. Of all the harried, swollen cities, only Chicago acted decisively to

NEWS

ease the housing pinch. Prodded by Mayor Ed Kelly and Alderman Robert Moss, the City Council in mid-November appropriated \$1 million to be used for trucking 2,000 portable war houses and 1,000 trailers into town. With 32,-500 veterans now waiting for housing and another 100,000 to join the housing line-up by spring, Chicago looked for every way to stretch its accommodations. One way proposed by Alderman Moss: cutting up the 246,000 sq. ft. of floor space of the administration building at the giant Dodge Chicago airplane plant to provide minimum housing for about 400 families.

Best evidence of how ready Chicago was to scrap precedent for housing action came from building trades unions. Although they had stubbornly refused to lift their ban against prefab throughout the period of war housing need (see page 24), the unions last month reluctantly agreed to relaxation of the building code to permit erection of portable houses. While some hoped this might turn out to be an entering wedge for prefab, the unions asked the city's "word of honor" that houses would be only temporary, already had a letter from the University of Chicago, which wants 200 units, promising to tear them down in two years.

State Job? Boston said it had reached the "zero point" in housing. Appealing to the state for funds, the Housing Association of Metropolitan Boston urged commandeering of vacant properties, moving in of trailers and a share-yourhome campaign.

Army Barracks. One big trouble was that the migrant war workers whom everybody had expected to go home were simply not going home again. In Los



FRANKLIN D. ROOSEVELT, JR., veterans' housing champion, helps take applications as veterans line up for 600 Bronx apartments vacated by WAVES.

Angeles, for instance, only 10 per cent of families had moved out of war projects. Meantime, 26,000 veterans a month were asking help in finding houses. Some 5,000 Japanese families had already come back, and more were on the way. Since many of these families owned their own homes, their return meant evictions for Negro families who





LUCE: raised the root for veterans

had moved into Japanese neighborhoods during the war.

Frantic Los Angeles appealed to the War Department for use of surplus Army barracks and trailers in the area. The War Department was willing, but there was no money to move the trailers, recondition the barracks. Some relief came when the Federal Public Housing Authority turned over a trailer camp at nearby Torrance to 150 veterans and families.

What About Stockpiles? In San Francisco, 2,000 new houses stalled for lack of materials. Irate builders urged Congress to call for an inventory of Army and Navy stockpiles of critical construction materials which, they charged, were being held in West Coast depots. Dry-rot, the builders said, was eating away at the stored-away lumber; it would be unusable by spring.

Home builders and public housers buried their differences, met to seek some way out of the crisis, so far had failed to find one. Mayor Roger D. Lapham had set up a city bureau to help veterans find housing, but the bureau had been able to find room for only 443 families since V-J day

Politics. Temporary housing for veterans became a major issue in New York's municipal elections. Mayor-elect William O'Dwyer made it a main campaign promise. Mayor F. H. LaGuardia stolidly opposed it. To the National Housing Administrator's suggestion that the cities set up emergency housing committees, Mayor LaGuardia testily replied: "We ask for bricks and stones and plumbing, and you give us a mimeograph press release."

New York's 20,000 homeless veterans Thomas D, McAvoy



PATMAN: clamped it down on prices

got a publicized spokesman when Franklin D. Roosevelt, Jr., just discharged from the Navy, plunged into the fight for temporary housing. After two telephone calls a day for eight days, young F.D.R. got in to see the Mayor, came away with a promise that LaGuardia would try to get some temporary houses —if he were asked to by incoming Mayor O'Dwyer.

CONGRESS TAKES A HAND

Veterans' groups hinted that there might be another veterans march on Washington-this time to protest the lack of housing. While newspapers headlined the homeless veterans' plight, housebuilding's customers angrily growled their dissatisfaction with the way things are going. Mr. and Mrs. Everybody were not only worried about the present painful dearth of housing. They were even more worried because they could see no signs that new housebuilding is starting. And they were particularly appalled at the rate house prices are climbing. In woeful letters and irate telegrams they poured their worries into the Congressional ear.

Last month two prominent members of Congress offered plans to straighten out some of the housing muddle. Congresswoman Clare Boothe Luce (Rep., Conn.) introduced a bill to come to the rescue of the homeless veteran by providing:

Preference for veterans in materials for housebuilding and in occupancy of available housing.

▶ A Housing Bureau within the Veterans Administration to handle all housing problems for veterans of both wars.

▶ Increase in the maximum government guarantee for veterans' home loans from the present \$2,000 limit to \$5,000.

▶ Government payment of all interest on veterans' home loans above two per cent. (The present Act provides for government payment of interest only during the first year of the loan, sets maximum rate which lenders may ask at four per cent.)

Belligerent Representative Wright Patman (Dem., Tex.), after a month of premonitory rumbling, introduced a bill to regulate house prices. Representative Patman wants to set up a housing czar (rumor had it that he was thinking of a hard-boiled Army general) who would have the power to institute house price control in areas where prices are zooming. His bill would set ceiling prices for new houses at an amount not more than "actual costs of construction of the unit which are not in excess of the legal maximum prices of the materials and services" plus "fair market value of the land" and a "margin of profit reflecting the generally prevailing margin of profit upon comparable units during the calendar year 1941." Ceiling prices for existing houses would be set at the price asked upon the first sale after passage of the legislation.

Patman's bill would also give the housing czar broad powers to allocate materials where shortage exists, to require that preference be given to veterans in the purchase or renting of houses. and to subsidize construction where he finds that "there is no practicable alternative method for securing the construction of adequate housing accommodations at proper price levels."

The house price control bill was introduced without benefit of Administration backing. Majority opinion, both in Congress and in the federal agencies concerned, seemed to favor giving the harried housebuilding industry a chance to prove what it could do, without the burden of government regulation.

As frightened as anybody else at the prospect of climbing building costs, housebuilders, through their national association, pledged voluntary price control (see page 11). The Builders Association of Metropolitan Detroit signed a House Price Code. Elsewhere builders' groups drew up similar codes. It was plain to everybody that unless the industry can keep its own prices in line, federal control—and maybe even a return to priorities—are surely ahead.

PORTENT?

New York's plans for enough public housing to shelter 15,775 f a milies stumbled last month on a formidable barrier: current building costs.

John Lovejoy Elliot Houses, first in the city's contemplated \$116,288,000 program, has been afflicted with several kinds of troubles. Using Elliot Houses as a pilot project to find out what the new building picture will be like, the New York City Housing Authority sent out invitations for bids late in October. But on the bidding day, thirteen assembled c ontractors said not a word. Reason: a new clause in the Authority's contract which contractors believed would make them responsible for any work-stopping labor dispute.

By mid-November, the Authority had re-written the protested clause (present version—"Contractors shall not employ men or means which may cause strikes"), again invited bids. This time they got plenty, but none they could accept.

In budgeting Elliot Houses, the Authority had estimated a 30 per cent increase over 1940 building costs, figured the job should cost about \$3,860,-000. But the lowest bid offered topped the Authority's estimate by another 30 per cent. Toting up, the housers found that final bids averaged about 68 per cent over 1940 estimates, turned them all down.

• Only way out the Authority could see was to hope that things would get better. Late last month they asked for bids on only the excavation and foundation work and planned to defer construction contracts for several months. Contracts let at present building prices would mean, the Authority said, lopping off some of its program.

MATERIALS UPTURN?

Best building news of the month came from the materials front. For the first time, government and industry forecasts of materials supply reflected a cautious but unmistakable optimism.

This showed clearly at the Producers' Council meeting in Cleveland where managing director James W. Follin said: "Manufacturers of most building products . . . report that production already has reached the 1940 rate or will reach it within six months or less. Barring unexpected developments, most of the current shortages in materials and equipment will be overcome by or before April 1, 1946 . . . The products which probably will not be in production at the 1940 rate within six months are stock millwork, major electrical appliances, enameled-ware plumbing fixtures, boilers and radiators."

A Commerce Department survey found supply improving for: brick, Portland cement, cast iron soil pipe, structural



VETERAN paratrooper lives in backyard tent in Van Nuys, Calif. Navy wives (below) settle happily in Quonset huts in San Pedro, Calif.



STABLE, (below) with scanty renovations, houses 4 families and 15 children near Encino, Calif. Each "flat" rents for \$40-45. Flies swarm from nearby milk farm.



VETERAN STUDENTS at 48 schools and colleges live in trailer communities like this one on University of Missouri campus. Colleges pay cost of moving houses.

Wide World



NEWS

steel plates and reinforcing bars, reinforcing mesh, concrete pipe, gypsum board, asphalt roofing, cement asbestos insulation. Commerce listed lumber and bathtubs as critical. Still short, Commerce said, are clay sewer pipe, sheet steel and strip, concrete blocks, gypsum lath, cement asbestos shingles.

Last month Alvin I. Brown, who has been working on building's reconversion problems since Hugh Potter's departure as construction coordinator, thought of a way to help builders stalled for lack of materials. Brown's plan would permit builders to ask the nearest Army or Navy depot for whatever they lack to finish a job. Limit for requests will be \$300 worth of materials, and the Army and Navy door will be open only for a three month period beginning November 7.

BLOOD IN THE STREETS?

The real estate business, seething with indignation under federal rent ceilings, boiled over in open defiance in jampacked Los Angeles. Landlords planned a strike, threatened at a mass meeting to withdraw 23,357 apartments from the market as a protest against rent control.

In Washington, the National Association of Real Estate Boards rolled up its heaviest guns in the fight to kill off rent control by next June. NAREB also fought for immediate action to 1) increase rent ceilings by 10 per cent; 2) exempt new rental construction; 3) exempt rents over \$75.

OPA flatly refused to release its grip on rents over \$75, said the need for rent control would not end by next Juneand maybe not until the end of 1947.

To answer investors' charges that rent ceilings on new construction are blocking any new additions to the supply of rental housing, OPA announced a plan that may permit rent ceilings on newly built apartments 15 to 25 per cent higher than those on comparable existing accommodations. OPA also promised to issue maximum rent commitments, which will give apartment builders assurance of the investment return they can expect under ceilings. Builders are asked to submit plans, specifications and rent schedules well in advance of construction. OPA will establish ceilings by taking maximum rent for comparable units as a base, adding an "ample" allowance for increased building costs.

On the embattled realty front, one real estate maverick appeared. San Francisco's No. 1 real estate trader, Louis Lurie, plugged aggressively for continued rent control. "Blood might run in the streets," Lurie warned, if OPA relaxes rent controls before housing is plentiful. Said Lurie: "Full occupancy during wartime has made landlords better off than they ever were. I own 600 rooms in two apartment houses. If rent control ends next June, it will cost me just about \$6 to get an additional \$150,000 income out of those apartments — just the expense of stationery and stamps. That's what landlords will do all over the country . . ."

BUILDING MONEY

BOMB OR BULWARK?

Senator Robert Taft (Rep., Ohio) last month joined Senator Robert Wagner (Dem., N. Y.) and Senator Allen Ellender (Dem., La.) in joint sponsorship of the first comprehensive bill to enlist every private and public resource back of the U.S. housebuilding job. Senator Taft's long-promised appearance as sponsor assured the bill of nonpartisan backing and virtually assured its eventual passage by the Senate. The proposed General Housing Act of 1945 (S. 1592) replaces the bill introduced last August by Senators Wagner and Ellender (FORUM, Sept., '45). It differs principally from the earlier bill in its expanded provisions for federal aids that will assist private enterprise in meeting the housing needs of middleincome families.

If, as insiders claimed, strategy of the bill's backers was to "offer something for everybody" and so divide opposition, the attempt was not coming off. The National Association of H o m e Builders promptly became hysterical: "This industry is faced with a threat of incalculable proportions . . . This new bill, incorporating every conceivable proposal for federal aid, regulation and



MORTGAGE BANKER L. E. Mahan saw an atom bomb in W-E-T bill. Mahan (right) checks report with John C. Thompson, Newark, at New York meeting where mortgage men voted to oppose the bill.

subsidy, is catastrophic ... would spell eventual ruin for every segment of the residential construction industry."

The Mortgage Bankers Association was equally alarmed. Meeting in New York, MBA heard an analysis of the bill offered by housing economist Miles Colean, voted unanimously to oppose it. Retiring president L. E. Mahan, St. Louis, called the bill "the atomic bomb of the mortgage business."

Briefly summarized, these are the provisions which alarmed the housebuilders and mortgage men:

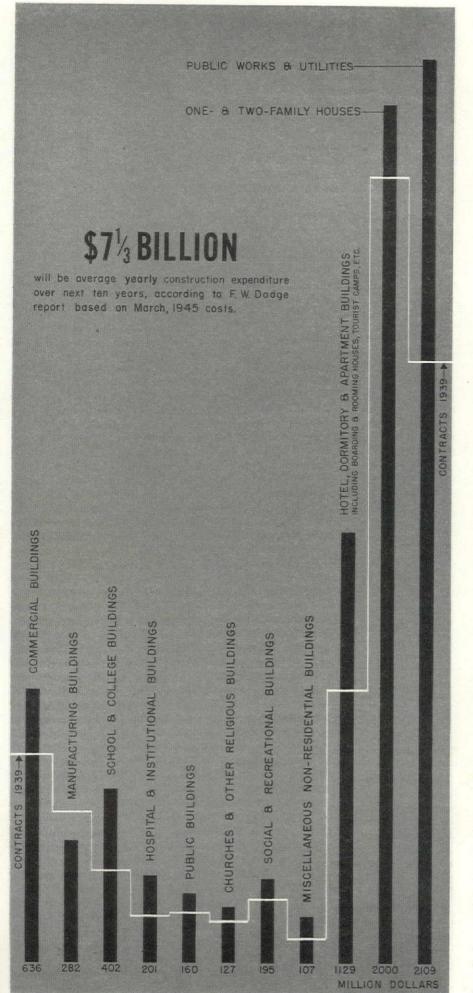
Aids for private financing. Title III makes a number of changes in FHA-insurance provisions, broadens the lending authority of federal savings and loan associations and of home loan banks. Among the most important FHA changes: Payments on insured mortgages may be lapsed because of hardship, with no one extension to be more than one year or total extensions more than three years. Permissable maturity for all FHA mortgages on new construction would be increased to 25 years. Where mortgages are insured, contractors would be required to provide a warranty for one year against defects in materials and workmanship and against any breach of regulations.

Title IV is intended to enable private enterprise to serve families of lowerincome than it can now reach. It would provide for insurance of 95 per cent mortgages to home owners and 85 per cent mortgages to builders where the principal amount does not exceed \$5,000. Amortization period would be extended to 32 years and the maximum interest rate would be limited to 4 per cent.

Where there is need for lower rental housing than can be provided under existing insurance terms, insurance would be provided for mortgages on rental property up to 90 per cent (instead of 80 per cent) of value. Mutual ownership projects would qualify for 95 per cent mortgages. In both cases, amortization period would be 40 years and maximum interest rate $3\frac{1}{2}$ per cent.

Yield insurance. To encourage direct private investment in housing for middleincome families, the government would insure an annual yield of 2³/₄ per cent. Low-rent and rural housing. The new bill makes no important changes in the provisions outlined by the original Wagner-Taft bill (see FORUM, Sept., '45 for summary). Size of the program contemplated is unchanged: 500,000 units of public urban housing every year for four years and \$5 million in annual contributions for a 5-year farm program.

Urban Redevelopment. Federal loans for



land acquisition would be enlisted to back private enterprise rebuilding. Some \$500 million worth of federal loans would be made available for interim financing up to 5 years. The government would also be authorized to loan \$50 million a year for each of the next 5 years for long-term financing up to 45 years.

The new bill, like its predecessor. provides for continuance of the National Housing Agency, federally - financed housing research, and conversion of permanent war housing to low-rent projects in which veterans would get occupancy preference.

PLENTY OF PLANS

Whatever present building headaches. there are plenty of building dollars ahead. That much was clear from conservative F. W. Dodge forecasts. Dodge's meticulous building reports cover 37 eastern states. From them, expert building statistician Thomas Holden regularly projects future building volume. seldom misses.

Holden thinks that construction volume in states covered by Dodge reports will average \$7,348,000,000 yearly in the postwar decade (see chart, left). Since these states account for about 80 per cent of all U. S. construction, builders can look forward to a total annual construction volume of not less than \$9 billion. While this is short of Building's \$15 billion goal, it is more than double 1939 volume and higher than the peacetime construction peak of 1928.

Dodge records underline tremendous construction demand. For 37 east states, Dodge reports show the following accumulated postwar project totals:

	Public	Private
Design Stage	. \$5,146	\$2,608
Contemplated	. \$6,300	\$1,693
(Millions of	dollars)

Planning figures for private building are to be taken more seriously than those for public projects, Dodge forecasters believe. "The list of public projects," says Dodge, "contains many which are in effect letters to Santa Claus. Postwar public project totals are greatly out of line with the volume of such work likely to be undertaken within any early period."

NEW FHA AIDS

The Federal Housing Administration took two steps to help housebuilding connect with a bigger market by 1) authorizing firm commitments for mortgage insurance and 2) announcing its readiness to insure financing of country (nonfarm) homes.

The "firm commitment" was introduced by Title VI (war housing) insurance. It means that FHA will insure a mortgage loan issued directly to the operative builder, who becomes the

NEWS

mortgagor until he sells the house. Before war need made this plan imperative, FHA policy had been to issue conditional commitments-that is, a promise to insure the mortgage on a house built to its standards when the builder secured a satisfactory purchaser. With the end of war housing, builders plugged for extension of the firm commitment plan to FHA's main insurance program (Title II), having found it a big help in advance construction planning and in securing interim construction financing. Last month FHA said yes, started issuing firm commitments to approved lenders to insure 80 per cent up to \$6,000 valuation and 60 per cent on value in excess of \$6,000 and up to \$10,000.

Convinced that more and more home buyers want to live in the country—but not on a farm, FHA told lenders it is now prepared to insure mortgages on low-priced homes built on small plots of land in outlying areas. FHA said it had no wish to add any push to decentralization, but thought it was time to recognize an obvious trend, accelerated by the shorter work week and improved transportation.

GI LOANS REMODELED

The GI home loan plan, badly in need of some remodeling, is about to get it. But at month's end earnest House and Senate conferees were still pondering just what should be done.

Confronted with the unwieldy provisions of the government plan to guarantee veterans' home loans, the House had thrown up its hands, passed a bill that would make the guarantee virtually automatic. But the Senate had thoughtfully whittled away at the two big obstacles on which GI home loans are stumbling:

The requirement that veterans must take advantage of the guarantee plan



ANCHORAGE HOUSE model on display at New York's Lord & Taylor department store drew crowds of visitors. L. & T. president Walter Hoving is Anchorage director.

within two years after discharge or war's end. This means that some veterans not yet ready for home purchase will lose the privilege of government assistance. It also means that others will hurry to buy houses, concentrating their purchases in the present inflationary period. The requirement that homes financed under the program must be purchased at a price reflecting a "reasonable normal value." Since house prices are zooming, few veterans can find houses priced at what a prudent appraiser calls "reasonable normal value."

To answer dilemma No. 1. the Senate extended the guarantee's time limit from two to ten years. For dilemma No. 2, the Senate, like the rest of the U. S. could find no answer. Thoughtfully, the Senators struck out the word "normal" in the original Act, hoped that this might give the plan a little more leeway in the present abnormal period.

The bill passed by the Senate also proposed:

Extension of the authorized amortization period from 20 years to 25 years for urban homes and 40 years for farms.
Loans to refinance delinquent debts incurred because the veteran was unable to pay them while in service. Thus a mortgage debt postponed under the Soldiers' and Sailors' Civic Relief Act might be refinanced under a GI loan at the attractive interest rate of 4 per cent.

Outlook was that House conferees would eventually agree to the Senate bill. While Congress wound up these remodeling plans, Representative Clare Boothe Luce thought of another, proposed a bill to raise the roof on GI home loan guarantees from \$2,000 to \$5,000 (see page 6).

PREFABRICATION

WALL STREET BACKS PREFAB

Anchorage Homes — the first factorybuilt housing corporation to seek public financing through Wall Street securities sale — is assured of plenty of capital to launch its venture into the hungry house market. When Anchorage's first issue of 250,000 shares of Class A stock and 50,000 shares of Class B stock went on the market last month, it was snapped up in a single week by enthusiastic buyers — with 20 per cent purchased by the firm's directors.

Anchorage passed up offers of 100 per cent financing from materials manufacturers, preferring to retain freedom to seek competitive bids for the materials that will go into its low-cost houses.

The prompt sale of Anchorage's first issue means that construction of a \$600,- 000 plant will start immediately on a 32-acre site at Westfield, Mass. From this plant, Anchorage plans to load houses, about 90 per cent assembled, into trailer trucks for site delivery within a 250-mile radius. Operating on a single 40-hour shift, the plant will have a capacity of 3,000 houses a year.

President W. W. Rausch expects to offer 3 to 7-room houses at prices ranging from \$3,626 to \$7,525. There will be 41 models, all Cape Cod Colonial styles. Rausch has shunned modern, partly because he thinks only about 4 per cent of the market want it and partly because he wants his product to look just like a conventional hand-built house. To this end, he has planned for complete elimination of the distinguishing mark of the prefabricated house - vertical joints where wall sections meet. In Anchorage houses, panels will be shingled and covering shingles will be inserted after sections are erected.

Actually, Rausch's system is essentially traditional construction reduced to room panel sizes and engineered for jig assembly-line production in a factory. But the amount of work completed in the factory will be much greater than in other similar systems. Hardware, electric wiring and blanket insulation will be built into shingle-finished panels. Rausch estimates that five men can set up the main structure in four hours. One big asset is the straight delivery flow from plant to site, with every unit to be erected by a factorysupervised crew.

Anchorage Homes are designed from the principles which Rausch developed during eight years as head of Holt-Fairchild, which built \$3½ million worth of war housing for the government, including the notable 624-unit Navy project at Newport, R. I. All patents and equipment have been purchased from Holt-Fairchild by the new corporation.

With announced selling prices much below the cost of comparable conventional construction, Anchorage houses look like an important bid for an eager market. Whether or not they connect with it depends on how well veteran Rausch is able to lick the familiar prefab problems of building codes, labor acceptance and merchandising.

About building codes, Rausch had few worries. Close to conventional construction, the houses, he thinks, will meet standards in most cities. Labor relations, too, are in good shape. AFofL labor will be used both in the plant and for erection. Factory workers will be paid a somewhat lower rate than outside men but will get a higher average take-home pay because of year-round employment.

Rausch expects to sell his houses through savings banks, savings and loan associations, department stores and realtors—many of whom have already asked for dealer franchises. Eventually Rausch expects to locate plants in other regions. A French corporation has been formed, entirely financed by French capital, which will manufacture houses from Anchorage patents.

OPINION

VOLUNTARY PRICE CONTROL

Winning its fight to be free of government war controls, Building felt a sharp flicker of uneasiness at the prospect of what might happen in the newly free market. Many a building man gloomily pointed to what had happened last time: After World War I building costs climbed sharply during a short-lived boom. But by 1920 high costs had precipitated cancellation of billions of dollars worth of construction plans, and the boom collapsed to the tune of dropping materials prices and inventory bankruptcies.

Crowding most other subjects off the platform, the big question of where building costs and prices are going and what to do about it dominated three major trade meetings last month. Nobody wanted to go back to government controls. But almost everybody thought that the industry must assume new responsibilities for policing itself and for cutting the cost of its product.

Producers' View. "Voluntary industry regulation is urgently needed to help hold the line on prices of new homes and other construction during the period when the demand greatly exceeds supply," Douglas Whitlock told the Producers' Council, meeting in Cleveland. "Once that battle is over, the industry then must go on to devise economies which will lower building costs in the future and help assure a continued high level of construction activity and employment."

Said PC president L. C. Hart, Johns-Manville vice-president: "The responsibility for avoiding inflation is up to the industry and the public. We must organize everywhere to demonstrate that private enterprise can accept its share of the responsibility."

Construction Council. While every sector of building has its own trade association, there has never been any effective way to bring together all parts of the giant industry whose volume means the difference between national prosperity and depression. Last month the U. S. Chamber of Commerce thought it had

(Continued on page 12)



MASSIVE BULL RING shows off graceful lines of concrete construction. Complete scaffolding was erected, and concrete poured as continuous operation. Sculptor Albert Just (below, extreme left) is preparing bronze models of famous bullfighters to deck the seven gates. Promotor Simon (right) will build a University City next.

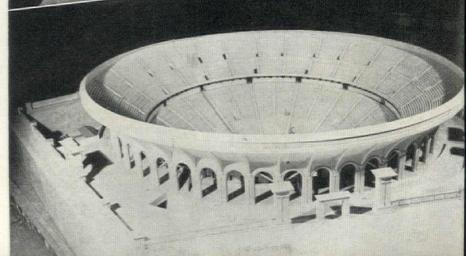


CLEAN MODERN LINES of bull-ring amphitheater (model, below) terminate in incongruous Renaissance portal decoration. The arena will seat 400,000, is designed for perfect visibility from every point.



MEXICO'S "SPORTS CITY"

Scheduled to be ready for use before the bull fighting season ends next spring, the Plaza de Toros is Mexico City's attempt to re-establish this national sport in the oldtime grand manner. Built by tycoon Neguib Simon, who makes almost all the razor blades used in Mexico, the bull-ring is only a part of a giant \$6 million sports center, which will be something like Madison Square Garden, Yankee Stadium and Jones Beach rolled into one. It will give Mexico its first football stadium, as well as Jai-Alai courts, theater, and a pool of a size to attract the Olympic Games.



NEWS

found the answer to Building's present urgent need for organization. Inviting nearly 100 building trade and professional organizations to a Washington meeting, the Chamber formed a Construction Industry Advisory Council, which will represent every part of the industry. Beamed Chamber president Eric A. Johnston: "You are here today as a symbol of the essence of democratic capitalism, self-regulation."

The new Council said its sole aim is to "aid the construction industry." It expects to do this by "developing industry opinion" and by "carrying out policies or programs of common interest" through the resources of the Chamber of Commerce. One important immediate job, as outlined by contractor Edward P. Palmer, New York, may be the "public relations task of explaining that the lifting of restrictions on the start of new construction cannot at once satisfy all demands."

Council chairman for the next year is John Stevens, president of the American Society of Civil Engineers. F. Stuart Fitzpatrick, manager of the Chamber's Construction and Civic Development Department, will serve the Council as secretary.

Mortgage dilemma. Meeting in New York. the Mortgage Bankers Association joined the general viewing-with-alarm. High real estate selling prices worry MBA even more than climbing building costs. "We all know costs are higher but nowhere near as much higher as are present selling prices," Dean Vincent, who heads his own Portland, Ore. firm, told the mortgage bankers. "Construction costs are up probably 30 to 50 per cent but selling prices are up 50 to 100 per cent." Builders asking unreasonable prices, Vincent warned, will have only themselves to blame if government pricing is imposed.

Mortgage money is as plentiful as house customers, the mortgage bankers agreed. The unprecedented amount of mortgage money hungrily seeking investment is accelerating two ominous present trends: steady decline of interest rates and inflated appraisals. Said Harold D. Rutan, executive vice-president of the Bank for Savings, New York City:

"Everybody will agree that a desirable loan plan does not permit undue competition as to the amount of appraisal, yet we are seeing such competition taking place today, particularly in the onefamily house field although no field is exempt. This can only lead to future capital loss... The investment yield on mortgages is being slaughtered and, if it continues too long, there will be a day of reckoning."

OVERSEAS

LABOR'S WAY

"This winter," Minister of Health Aneurin Bevan said, "we have to bite on iron." No matter how fast the British government pushes its enormous housing program, not many of Britain's halfmillion homeless will be under their own roofs by winter. "I shall therefore hope everyone who has accommodation to spare will make it available," Bevan told Parliament. "I wish to rely on voluntary effort . . . But if there are people so anti-social who refuse . . . it will be necessary to arm the Local Authorities with power to requisition."

Bevan hopes that enough sinks and cookers can be found to go around for doubled-up families. "There is no greater source of domestic vicissitude than two women having to share the same kitchen."

But after the emergency doubling-up will come plenty of houses—at least for lower-income families. In his first statement of Labor's housing policy, Bevan made it clear that almost all the nation's building resources will be pre-empted for government-financed, low-rent housing. Until labor and materials are plentiful, no private house-building may take place without government license. None will be given for houses costing more than \$4,824 (in London, \$5,226).

This means that Britain is earmarking materials and labor for the job thought more imperative: rehousing families who cannot afford a private enterprise house. Low-income families, of course, account for the largest number of those left homeless by the blitz-more London slums than suburban villas crumpled under the bombs. But Labor's plan is more than a purely emergency measure, dictated by the size of war damage. It is a clear-cut recognition that the government must take the responsibility for replacing substandard housing (more than 4 million British homes are over 80 years old) and for meeting the needs private enterprise cannot reach.

Local Authorities will undertake the big job of building low-rent houses. The Minister of Town and Country Planning will decide where houses are to be built, and the land will be requisitioned. The Ministry of Health will set community targets and keep an eye on how things are going—sending in emergency building squads where necessary. The Ministry of Supply will see to it that there is an ample flow of materials and equipment. Said Bevan: "The Royal Ordnance Factories which we are retaining



Ian Smith

BEVAN does not count cost

will be used if necessary to supplement the output of private industry."

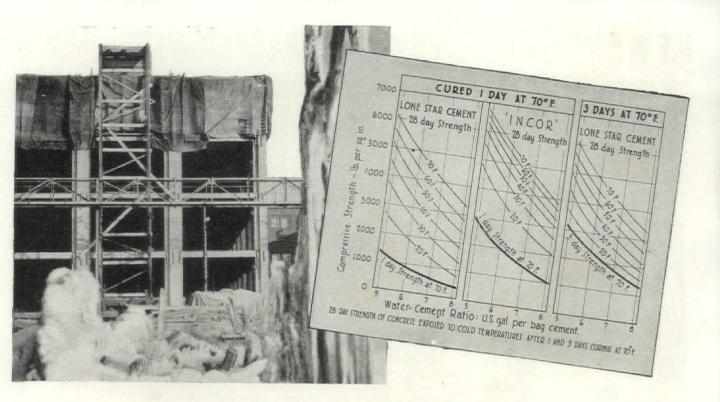
Parliament vigorously a p p l a u d e d Bevan's ambitious housebuilding intentions, asked few questions about where the money would come from. And on this score, forthright Aneurin Bevan was conspicuously silent. Last month the prudent Economist began to worry audibly. Guessing that Local Authorities could not build a house for less than \$4,824 and that they would need to build some 400,000 a year, the Economist figured that the program would cost the government about \$52 million for each year's output. Estimating that unskilled workers can afford to pay only about \$3.00 rent per week, the Economist said that net rent would amount to less than half the weekly cost of a \$4,824 house (31/8 per cent interest, 1 per cent amortization, 1 per cent for repairs and management). This means that the government would have a continuing annual burden of about \$522 million-or almost three times what Britain spent yearly for public housing in the five years before the war.

CITIES

SLUM SLIDE RULE

In Milwaukee last month city health inspectors were winding up a "cold fact" study of housing conditions in the city's worst slum area. Armed with new authority to condemn unfit dwellings, they had made a systematic room to room survey. Every sink, screen door and closet, each bed and toilet had been inspected and rated by an elaborate point system worked out by the American Public Health Association.

(Continued on page 16)



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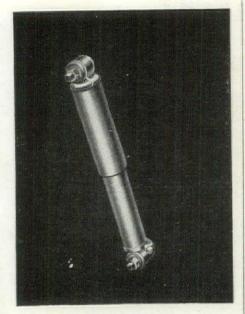
All 3 are streamlined, compact, gleaming white. The Bendix "washer" takes but 4 square feet of floor space. It washes, rinses, damp-dries, cleans itself, empties and shuts itself off, all automatically! It is the ONE automatic "washer pre-war proven in over 300,000 American homes. Today, more than a million women want to buy the new Bendix.

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How many of these do you own?

If you look under your car, you'll probably find a couple of gadgets something like this one.

They're shock absorbers.

They take the sting out of sudden bumps and jolts. They make a rough road smoother.

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If, in the days to come, bad luck strikes at you through illness, accident, or loss of job, your War Bonds can soften the blow.

If there are some financial rough spots in the road ahead, your War Bonds can help smooth them out for you.

Buy all the War Bonds you can. Hang on to them. Because it's such good sense, and because there's a bitter, bloody, deadly war still on.

BUY ALL THE BONDS YOU CAN KEEP ALL THE BONDS YOU BUY

This is an official U.S. Treasury advertisement—prepared under auspices of Treasury Department and War Advertising Council

MONTH IN BUILDING: NEWS

(Continued from page 12)

As reports came in from inspectors, trained technicians tabulated the points. scientifically divided the units into five classes of dwellings: good to excellent, generally acceptable, intermediate, substandard and slum. First findings, based on only six blocks (192 units) were general, but clearly showed that spring house cleaning in Milwaukee's sixth ward would be a year-round job.

Measured objectively by the American Public Health Association's slide-rule, most of the units were not fit to live in. few made the higher brackets. A house with 75-or more points was listed as a slum. There was no word in the technician's handbook for a dwelling which scored a total of 238. One other fact stood out in the first report: owner occupied dwellings were in much better condition than rented units.

The municipal ordinance empowers the City Health Commissioner to condemn and order vacated dwelling units which "have deteriorated so as to become unhealthy, unsanitary or so difficult to heat as to be unhealthful" (FORUM, May, '45). Owners of condemned buildings have a choice of making the alterations and repairs prescribed or abandoning the building entirely. Although no arrests had been made last month, inspectors were issuing "nuisance orders" requiring property owners to make minor repairs. (The law allows two years for costly structural alterations.) Meanwhile the city planned to begin work March 1 on a low-cost housing project for residents who would lose their substandard homes.

TEAMWORK IN DETROIT

The plan, Mayor Edward Jeffries thought, might clear all of Detroit's slums. The City Planning Commission and the City Housing Commission had both nodded enthusiastic approval. Last month chief planner, M. M. Robinson, chairman of the low-cost housing committee of the Detroit Builders Association, was busy working out the details of how to clear an initial 82-acre slum tract, provide 1,200 low-cost homes.

Like most current proposals for urban rebuilding, the Detroit plan is based on municipal acquisition of land and a writedown of value to make private rebuilding possible. But, unlike any other rebuilding plan, it emphasizes individual ownership of the new dwelling units.

Robinson, who has built plenty of low-priced houses, believes that home ownership holds one key to reduction of the monthly cost of housing. The home owner, Robinson argues, can take care of his own repair and maintenance, assume other responsibilities which up the cost of rental housing. But not all low-income families can accumulate a down-payment. Nor are many of them able to risk loosing their investment if they are obliged to move away. Robinson's "rental-ownership" formula is an attempt to lick both of these drawbacks by combining the low monthly cash cost of home ownership with the flexibility of rental occupancy.

Under the "rental-ownership" plan. \$4,900 row houses will be offered for a \$35 monthly payment. Of this, \$30 will be used for amortization over a 35-year period, interest. Robert Anderson

period, interest. taxes and insurance. The remaining \$5 will be set aside to build up an equity for the tenant. After a little over eight years, the tenant will have accumulated an equity of



ROBINSON

\$500 and can take deed to the property. If however, he decides to move, he can sell his credit reserve to another acceptable tenant or to the owner.

Prices like these mean that the cost of the urban land on which the houses are to be built must be pared far below its present assessed value. Under the Blight Elimination Law passed by the state legislature last May, the city has the power to condemn blighted and slum land and sell it to private enterprise at a figure representing its new use value.

The site chosen for this pilot project is now assessed at about \$35,000 an acre. To make low-cost rebuilding feasible, the city would have to sell the land to builders at about \$6,000 an acre. Robinson believes that the city can get back the difference between land cost and selling price by the increased tax revenue which rebuilding will bring and by the decreased cost of the extra police, fire and health s e r v i c e s now needed in the blighted area. Said Robinson: "It does not cost money to clear blighted areas—it costs money not to clear them."

Private financing for the first project. intended for Negro families, is already assured at 4 per cent and without federal mortgage insurance. Several Detroit financial institutions are interested in backing similar projects. If the Common Council approves municipal land acquisition, Robinson and a team of Detroit builders are ready to start the city's first step toward private rebuilding.

(Continued on page 20)

COMPETITION CLOSES MARCH 4

\$18,000 in prizes for gas range designs. Open to all designers. Sponsored by American Stove Co. Send program requests to George Nelson, Architectural Forum, 350 Fifth Ave., New York City.



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But it is a matter of record that no protecting sheet of plastic has ever divorced itself from a Formica "Realwood" wood veneer base. The oldest installations of "Realwood" have only been in use 10 years, but there is every reason to believe that the full bridal beauty of "Realwood" will be cherished and protected as long as the architect and building in which he uses it both shall live.

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7" from top, 11" from bottom. Standard butt on 13_8 " doors, $3\frac{1}{2}$ "x $3\frac{1}{2}$ "; on $1\frac{3}{4}$ " doors, 4"x4". Square cor-

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MONTH IN BUILDING: NEWS

(Continued from page 16)

PEOPLE

ARCHITECTS' SHOW

Chicago Art Institute visitors last month got a look at a two-man show that pointed to a coincidence between nontraditional architecture and nontradi-



tional painting. Both Samuel A. Marx and George Fred Keck lay aside the drafting pencil now and then for a brush and palette, seen equally at home with either. Marx, known for his Pump Room and lush

homes, showed a series of canvases ranging from meticulously painted still

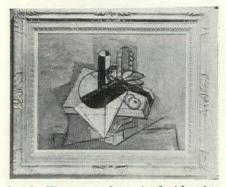
lifes to an abstraction labeled "The Disappointed Paper Hanger." Solar house designer George Fred Keck showed impressionistic seascapes and mountains, several abstrac-tions. Keck, whose



mother taught him to paint when he was eight, uses water colors. Marx draws with Conti crayons on heavy tracing paper, applies tempera with a wide

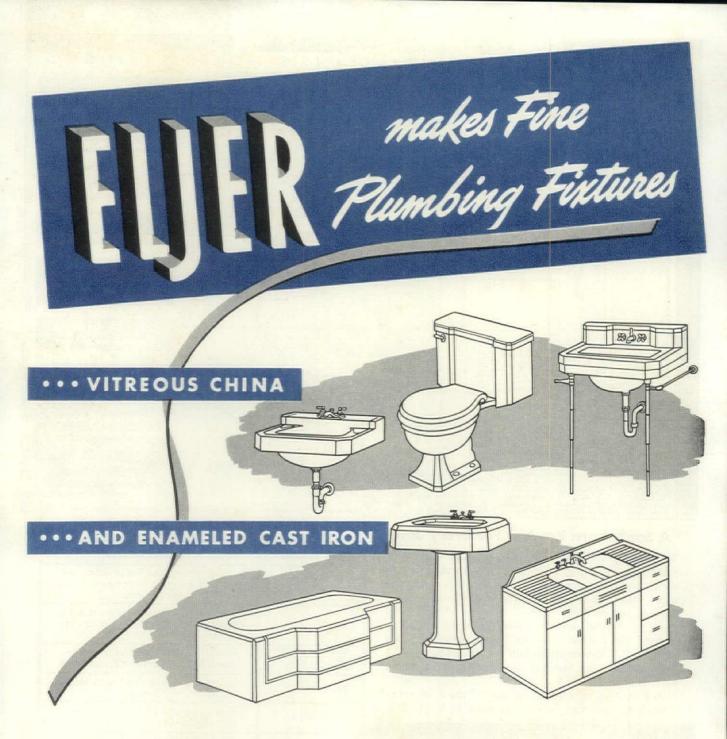


ON SHOW in Chicago are Keck seascape watercolor (above) and Marx abstraction painted on tracing paper.



brush. The crayon dust mixed with paint produces interesting accidental grays, while the crinkle of the tracing paper under the paint gives his canvases a three-dimensional quality, looking much like oil.

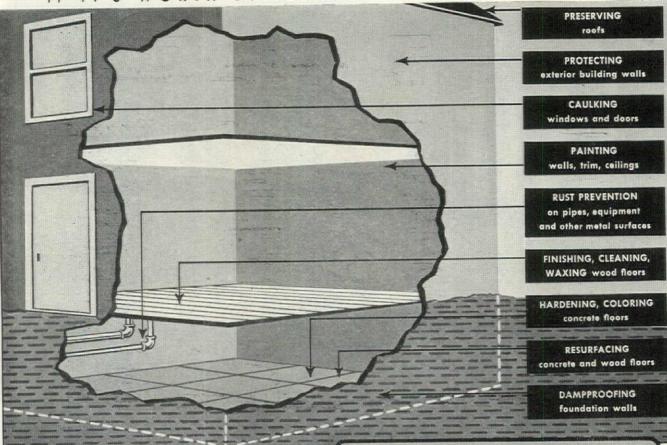
(Continued on page 24)



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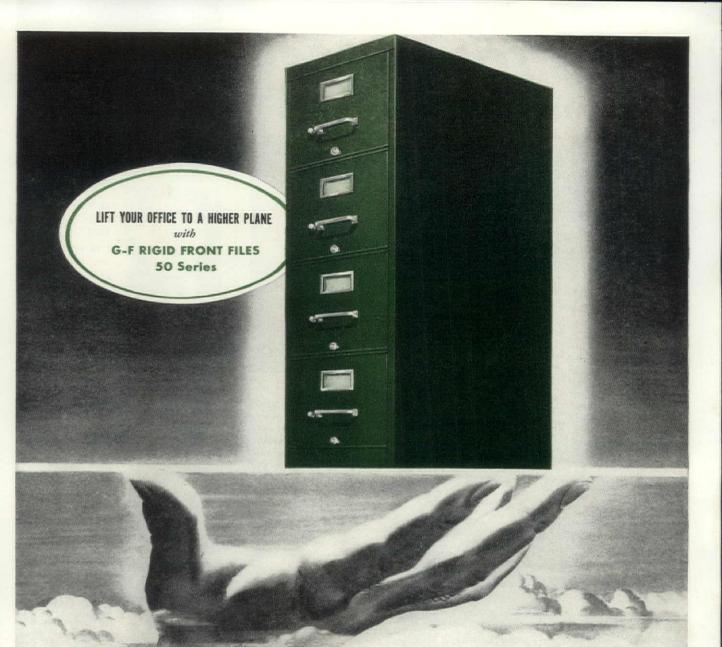
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MONTH IN BUILDING: NEWS

100 TONS LESS AFTER INSTALLING WINKLERS



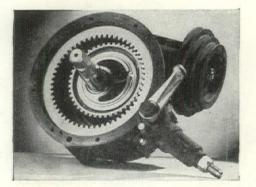
Last summer we installed four of your Winkler Last summer we installed four of your Winkler Stokers in our Junior-Senior High School building. We started the stoker earlier in the fall than we Gentlemen: We started the stoker earlier in the fall than we have usually started our hand-fired boilers. Much of nave usually started our hand-hred bollers. Much of the coal we have been able to get has been of an inthe coal we have been able to get has been of an in-ferior quality. Our buildings have been more uniformly

leftor quanty. Our buildings have been more uniformity heated than ever before. Rooms we formerly found neared than ever perore. Rooms we formerly to difficult to heat have been satisfactorily heated. Our maintenance man is a very conservative gentle Our maintenance man is a very conservative gentle-man. He told me this morning that he was entirely man. He told me this morning that he was entirely satisfied with the workings of the stokers and that we did save at least seventy-five tons of coal, and we did save at least seventy-live tons of cosi, and probably one hundred tons over what we have usually used threads hand frime This is a seventie to be

propacty one number tons over what we have usually used through hand-fring. This is approximately a This summer our School Committee, being so well twenty-five per cent saving.

A his summer our SCROOL Committee, being so wen atisfied with these stokers, is planning to install

(Name on Request) another stoker.



There are many modern appliances which improve our standards of living-but often at an increased cost. Winkler Stokers make a genuine contribution, too, but with this difference - they actually pay

> every year of their long life. The above letter is a typical comment on the manner in which a Winkler Stoker develops to the fullest the economies and other benefits of stokerfiring.

> their owners a cash dividend

FULLY AUTOMATIC TRANSMISSION -NO SHEAR PIN!

Here is the feature which gives Winkler the edge. This fully automatic transmission develops extra power to handle ordinary operating overloads-brings freedom from usual service troubles.

There is no shear pin in a Winkler! Protection against damage which may be caused if the feed screw becomes blocked is provided by the Winkler Safety Release, which automatically disconnects the transmission until the blocking object is removed. The Winkler thereupon resumes normal operation.

Send for descriptive literature



U. S. MACHINE CORPORATION, Dept. K-13, LEBANON, IND.

(Continued from page 20)

PUBLIC BUILDING CHIEF

Stepping up from Division Engineer, San Francisco office, Jesse E. Stanton is the new Deputy Commissioner for Design and Construction, Public Buildings Administration.



A West Coast architect, Stanton came to PBA in 1941 as a consultant on war housing. He directed the designing of schools and firehouses after the San Francisco fire,

STANTON

worked with D. H. Burnham on the Chicago Beautiful plans, later returned to San Francisco to establish his own firm. In his spare time, Stanton paints landscapes.

Retiring Deputy Commissioner George Howe will return to Philadelphia to write a book on modern architecture.

URBAN RESEARCH

To direct its first intensive study "of real estate problems in urban areas" Columbia University invited Dr. Ernest Fisher, one-time Federal Housing Administration expert, to join its faculty

as professor of urban land economics. Dr. Fisher is a consultant to the American Bankers Association.

Using the New York city area as a laboratory, Fisher will conduct a graduate class and



FISHER

research seminars to explore what he calls "today's problems in the dynamic period of decentralization"-the establishment of large store suburban branches, suburban housing areas, the location of great manufacturing companies on the rim of large population centers.

The New York Times approved editorially Columbia's interest in urban problems: "Any new light is welcome."

PRESS

CODE WARNING

Putting veteran reporter Lewis Hunt on the job, the Chicago Tribune loosed a front-page attack on Chicago's restrictive building code and warned in a loud (Continued on page 28)

... Another Architectural Masterpiece Equipped with TRUSCON STEEL WINDOWS



Pentagon Building, Washington, D. C. CQM, A. G. Bergstrom, Consulting Architect John McShain, Inc., Doyle & Russell, Wise Contracting Co., Inc., Associate Contractors

FFF

EFFEFEFEFEFEFEF

FFF

THE Pentagon Building has been the subject of much national interest as an architectural and structural masterpiece. Truscon Steel Windows and other Truscon products were used to enhance its design and achieve building efficiency.

Nearly 5000 openings of Truscon Intermediate Steel Casements provided a close and artistic link between exterior design and interior decoration. Truscon Donovan Steel Windows were used in the Heating Plant. The "awning" principle of these windows permits the admission of adequate air in inclement weather, and the large areas of glass admit maximum natural light.

Other Truscon Steel Products used in this famous structure are special Casement doors and transoms, industrial doors and approximately 5000 tons of Concrete Reinforcing Bars.

Ask Truscon engineers to give you the benefit of their knowledge and experience in adapting Truscon Steel Building Products to your architectural designs.



Intermediate Casements Donovan Awning Type Windows



YOUNGSTOWN 1, OHIO Subsidiary of Republic Steel Corporation MEMBER METAL LATH MANUFACTURERS ASSOCIATION



Coming! 100,000,000 windows*-rust-proof ... stronger ... more beautiful with REYNOLDS ALUMINUM

A again! And back at new low costs; with new techniques developed during the war; and in alloys produced by Reynolds.

Aluminum windows for commercial and industrial buildings, apartment houses, schools, hospitals and private homes offer great advantages. They are easy to open and close. No painting is required. They cannot rust, warp, swell, or stain sills. They are light in weight. Maintenance is cut to the bone. They can be made in all styles and sizes.

Reynolds, the great new source of aluminum, is prepared to furnish extruded or rolled form shapes to suit the needs of the window manufacturers. For other important applications of aluminum, see catalog in Sweet's or write for Catalog No. 104, "Reynolds Aluminum. Its Important Role in Architecture." Reynolds Metals Company, 2528 South Third Street, Louisville 1, Kentucky.

*From government estimates of 7 to 10 million new homes to be built in the first postwar decade





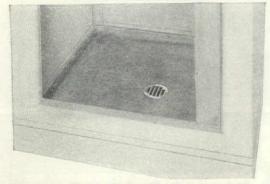
• The new Cadet shower is redesigned along modern lines with rounded inside corners and rounded stiles. These improved design features present a pleasing appearance and eliminate "hard to clean" corners in the cabinet.

Ease in erecting is an important feature. The Fiat tension locking joint is used on all four corners and in joining the side walls with the receptor. No screws are used in any of these joints. This construction speeds erection on the job and assures a watertight shower cabinet with unusual strength and rigidity.

Walls are BONDERIZED, GALVANIZED STEEL providing a surface that insures proper adhesion of the baked-on enamel. This is the same steel that has given such perfect satisfaction and long life to Fiat shower cabinets in the past.

The new modernized Cadet with improved construction features constitutes what we consider the best Cadet shower we have ever made.

Bonderized, Galvanized Steel Walls No Screws Used in Assembling Walls and Joining to Receptor



TIAI WEIAL WANUFAUUKINU UU. 1205 ROSCOE STREET, CHICAGO 13, ILLINOIS 21-45 BORDEN AVE., LONG ISLAND CITY 1, N. Y. 32 SOUTH SAN GABRIEL BLYD., PASADENA 8, CALIF.

SPECIFICATIONS

Sizes-32 x 32 x 80 -36 x 36 x 80

Walls — BONDERIZED, GALVANIZED STEEL. Finished inside and out with white baked-on synthetic enamel.

Receptor — Semi-flat standard type precast Stonetex; slipproof, leakproof, nonabsorbent. Brass drain for 2" waste connection cast integral with receptor.

Valves — Individual compression valves with arm and shower head.

Accessories — Curtain and soap dish.

MONTH IN BUILDING: NEWS

(Continued from page 24)

editorial voice that some of the city's residents would move out of town.

Outmoded, but unchanged since 1939, the massive ordinance rises to block every attempt to cut construction cost within the city limits.

In his first story, Hunt deplores the legal blockade which makes housebuilding costs in Chicago 25 to 50 per cent higher than in cities with more progressive codes. To citizens who want to buy houses for less money, he pointed out what Chicago bans:

▶ Frame houses in virtually the entire city—even in large prairie areas where fire hazards are low.

 Dry wall construction—although more expensive lath-and-plaster accounts for as much as 7 per cent of house cost.
 Prefabricated houses.

Chicago's code rigidly limits materials. Progressive codes merely set performance standards and provide for regular approval and adoption of new materials and methods to meet these standards. Chicago's machinery for code revision is controlled by the city council and wide open, Hunt charged, to "political influence".

The *Tribune* series did not overlook restrictive union rules which ban factory-assembled cabinet work, readyhung doors and windows, painters spray guns and ready-mixed concrete.

The *Tribune* summed up with a sharp warning: "Citizens will move to the suburbs of other cities. They will move because the Chicago building code puts a heavy and unnecessary burden on the man who attempts to build a home ..."

LABOR

COLLECTIVE BARGAINING

Last month Cleveland's first unionsponsored neighborhood development set a pattern for a housing cooperative based, unlike most such prewar plans, upon home ownership. Lining up several hundred members for two cooperative housing corporations, District 54 of the International Association of Machinists (AFofL) got ready to take options on land for a 200-home development in the Rocky River section and for a 175-unit project in Lyndhurst Village.

The union thinks its cooperative buying power will substantially reduce cost of materials and equipment, also means an opportunity for good neighborhood planning. Since each member of the cooperative will be liable only for his own mortgage, the Cleveland plan (Continued on page 32)





For Your Files on Air Conditioning

Chrysler Airtemp has prepared a valuable set of specially drawn isometrics for architects' reference file on air conditioning. These drawings show specific applications of "packaged" air conditioners in a wide variety of carefully chosen business establishments. The installation drawings have been reprinted and bound for your convenience. The book also contains prac-

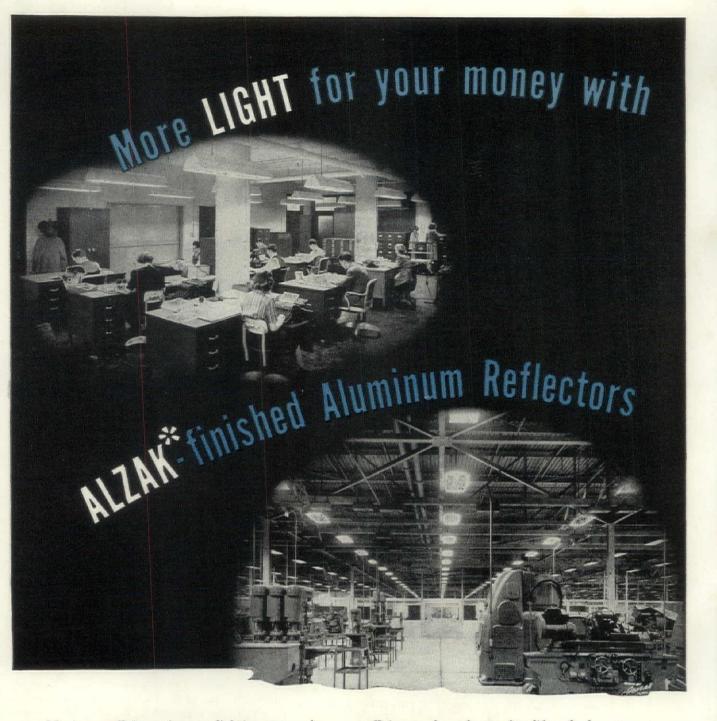
Invest in Your Future—Buy Victory Bonds—"Listen to the music of Andre Kostelanetz Thursdays, C.B.S., 9.00 p.m., E.S.T."



tical information about the time-tested, easily-installed Chrysler Airtemp "Packaged" Air Conditioners.

You can obtain a complete set of drawings without cost or obligation by filling out and mailing the coupon.

	VISION, 1119 I OHIO, DEPT. 1	
GENTLEMEN tion a set of Conditioners.	typical installat	e without cost or obliga- ions of "Packaged" Air
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ADDRESS		
CITY, ZONE,	STATE	



Maximum efficiency for your lighting system, long life and low annual costs—you gain these benefits by specifying Alzak-finished Aluminum light reflectors.

The high reflectivity of Alcoa's Alzak-finished lighting sheet, in combination with the reflector manufacturers' designs, accounts for this high efficiency. The ease with which Alzak reflectors can be kept clean enables you to maintain this efficiency throughout the life of the system.

Alzak reflectors come in various finishes; for indoor and outdoor work, for spot illumination and diffuse. In ordering your reflectors, be sure to specify the type of Alzak finish for each job. Your reflector manufacturer can most those requirements.

ALUMINUM COMPANY OF AMERICA, 1944 Gulf Building, Pittsburgh 19, Pennsylvania.



COUNT UPON Rittenhouse America's finest chime signals FOR FINEST TONE Added BEAUTY SUPERIOR PERFORMANCE

RITTENHOUSE Electric Door Chimes have merited the confidence and preference of leading architects and builders for years.

► And all through these years Rittenhouse advertising has consistently voiced the story of Rittenhouse Chime tone, smart styling and long life—to millions of home owners through the pages of leading national class magazines and newspapers. Because these branded Rittenhouse Chimes *have* made good on every promise, they lead the entire industry in consumer acceptance as quality home signals.

▶ The 1946 Rittenhouse Chime is an entirely *new kind* of electric door chime. By the use of techniques unknown before the war, Rittenhouse has achieved (1) a clear melodious tone new to door chimes, (2) the elimination of "chime static"... objectionable mechanical noises. And, with other new mechanical triumphs, these remarkably perfected chimes promise extra beauty and charm to gloriously enhance the interior loveliness of every home.

▶ To add prestige to your reputation for good judgment and discrimination . . . and to assure lasting client and home owner satisfaction . . . include Rittenhouse Chimes with the finer things you will specify for new homes and apartments.

THE A. E. RITTENHOUSE COMPANY, INC. Honeoye Falls, New York



MONTH IN BUILDING: NEWS

(Continued from page 28)

eliminates many of the financial uncertainties which blighted the prewar cooperative movement.

One share of stock in either of the two District 54 housing corporations soon to be set up will sell for \$50. This applies against the down payment when a member is ready to make his home purchase. One- and two-story houses, already planned by architect Joseph Ceruti, will sell at prices ranging from \$6,500 to \$8,000.

Financing will be handled through



the usual channels, but the union thinks that the volume of mortgages it will be able to offer a lender in one package will attract favorable terms. The housing corporations will provide an in-

ARCHITECT CERUTI will provide an insurance program to protect home buyers against foreclosure in the event of unemployment, death or disability.

Main push for District 54's pace-setting housebuilding program came from Henry C. Babcox, an architect and city planner who went to work for Jack &

Heintz during the war, joined the machinists' union. Babcox did land planning for, and later became general manager of the successful West Hill cooperative development



sponsored by PLANNER BABCOX

Cleveland's Junior Chamber of Commerce (FORUM, March, '41). As chairman of the Cleveland Housing Committee organized by the union, Babcox got plenty of support for his neighborhood plans which use cul-de-sac streets to reduce both traffic hazards and paving costs, pool land for community-owned recreation space.

Cooperative action opens a large vista to the Cleveland home planners. They hope to operate cooperative stores in their neighborhood shopping centers, buy furniture, fuel, milk, gasoline on a cooperative basis, cut home maintenance cost by group contracts. Eventually there may be a community center, child-care facilities, medical clinics.

Additional copies of "The FORUM Study of the House Market" are available in lots of 20 or more at 10 cents each.

Built-in red, white and blue dowel, the sign of Roddiscraft.

Roddiscraft standard flush veneer doors FIRE RESISTANT FOR 30 MINUTES

A fire confined for 30 minutes, 9 out of 10 times is a fire under control. Tests show that RODDISCRAFT Solid Core flush veneer doors will successfully resist a blaze for 30 minutes — ample time to extinguish it.

Solid construction gives this extra safety feature-face, crossbanding, core and edge strips fused into a single inseparable unit, with plastic glue — exclusive RODDISCRAFT standard construction.

RODDISCRAFT construction is also proof against water and moisture - highly resistant to the passage of sound.

RODDISCRAFT features enable architects to incorporate the beauty, warmth, and richness of wood doors into all building designs.

TO BUILDING SITE-

Every structure deserves the combined protection and beauty of RODDISCRAFT Flush Veneer Doors.

It's Roddis All the Way

Doors especially constructed to resist fire for longer periods are also made by Roddis.

FROM TIMBER TRACT

Roddiscraft

AGUUIGUUU WAREHOUSES CAMBRIDGE 39, MASS, 229 Vassar Si CHICAGO 8, ILL., 1440 W. Cernak Rd, CHICAGO 8, ILL., 1440 W. CHICAGO 8, ILL., 1440 W. CHICAGO 8, ILL., 1440 W. CHICAGO MARSHFIELD, WISCONSIN MILWAUKEE 8, WIS., 4601 W. State St. NEW YORK CITY 18, NEW YORK, 515 W. 36th St. SAN ANTONIO, TEXAS, 727 N. Cherry St. DEALERS IN ALL PRINCIPAL CITIES See Sweet's Architectural File for complete door line and specifications.



Contraction of



Johns-Manville Unit System provides complete interior— Walls · Ceilings · Gloors

MOVABLE WALLS—The keystone of flexibility in Unit Construction is the J-M Transite Wall. It can be disassembled and relocated as educational needs require. One-



unit rooms, for instance, can be speedily converted into two-unit rooms, or vice versa. Made of fireproof asbestos and cement, practically indestructible materials, the movable panels are used to form rigid, double-faced partitions, 4" thick. They can also be used as the interior finish of the outside walls. The Transite base is easily removable for access to wiring, etc. ACOUSTICAL CEILINGS—Important factor in helping to overcome the handicap of distracting noise, Johns-Manville Acoustical Ceilings are beneficial both to teacher



and student alike. They give the desired degree of quiet for effective teaching, eliminate frequent causes of nervousness, and are proved aids to concentration. An exclusive Johns-Manville patented construction system permits interchangeability of flush-type fluorescent lighting and acoustical ceiling units, which are readily demountable.

COLORFUL, RESILIENT FLOORS—J-M Asphalt Tile Flooring completes the Unit Construction System. Made of asbestos and asphalt, the units will withstand the kind of hard wear and abuse that must be expected in any school building. Not only durable, J-M Asphalt Tile Floors are pleasantly comfortable and quiet underfoot, thereby reducing



the disturbing effects of noisy footsteps in corridors, gymnasiums, etc. Individual units permit easy alterations or extension of patterns. Made in a wide variety of plain and marbleized colors.

Construction **OFFERS FLEXIBILITY TO MEET EVER-CHANGING** EDUCATIONAL NEEDS

* New Method

of Classroom

Johns-Manville Unit Construction opens a practical, money-saving way to expand, convert, or subdivide schoolroom units

VIVE the school you are planning *complete flexibility* throughout The entire interior ... plus all the qualities of permanent and solid construction!

You can easily do this with Johns-Manville Unit Construction provide rooms that are durable and attractive, yet easy to make smaller or larger, easy to move or rearrange, according to the unpredictable and ever-changing educational needs of a community.

Furthermore, you can have J-M Unit Construction throughout the whole interior-Walls, Ceilings, Floors-under one specification, one manufacturer's responsibility.

Here are the three elements that make the system possible:

- 1. Movable Walls . . . quickly erected or dismantled; 100% salvageable; made of asbestos-cement Transite panels, hard to mar, highly resistant to shock and abuse.
- 2. Acoustical Ceilings . . . reduce distracting noise, increase classroom efficiency. Demountable units can be taken down and relocated as desired.
- 3. Colorful, Resilient Floors . . . quiet underfoot; easy to clean; stand up under heavy traffic. Small units permit easy extension.

The successful use of J-M Unit Construction in other fields has demonstrated its unique advantages for schoolroom construction.

Before building a new school or converting an old one, write for the complete details of this important development.

Johns Manville, 22 E. 40th St., New York 16, N.Y.



Johns-Manville Unit Construction for entire School interior WALLS • CEILINGS • FLOORS combining Permanence with Flexibility

A kindergarten now, it may be a vocational room tomorrow-expanded or rearranged to meet a new need! That's the structural flexibility made possible by the Johns-Manville Unit System.

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MODERN materials for your MODERNIZATION projects

WE



Photos shown by courtesy of The Formica Insulation Company

SPRUCING UP, remodeling, modernizing! These jobs call for large expenditures the country over. And for modern styling in hotels, hospitals, theaters, office and other public buildings, you'll find no more modern materials than laminated surfacings made from BAKELITE plastics. These versatile sheet stocks give ready scope for rich decorative effects, and thoroughly new standards of maintenance, economy, wear resistance, and durability of finish.

BAKELITE plastic laminates provide more than 70 self-contained colors and finishes to choose from, including rare and beautiful wood veneers that become stain- and scuffresistant when made an integral part of the plastic structure. Distinctive inlays of contrasting colors or metal, and even luminescent laminates, give a further and practically unlimited choice. Ideal for wainscotting, panelling, doors, window sills, and baseboards, for shelving, counters, tables, and benches, these decorative laminated plastics are hard, dense, and non-porous. They do not stain, and are quickly wiped clean with a damp cloth. And, certain grades will even resist burning cigarettes.

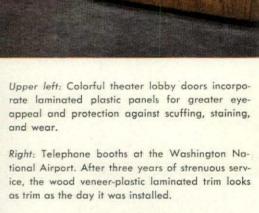
Write Department 114 for further

information about laminated plastic surfacings and the names of suppliers who are equipped to provide you with practical aid in your modernization projects.



Unit of Union Carbide and Carbon Corporation 30 EAST 42ND ST., NEW YORK 17, N.Y.

BAKELITE LAMINATING PLASTICS



Lower left: Beautiful, natural wood veneer laminates made from BAKELITE plastics combine luxurious appearance with practical advantages of easy cleaning and mar resistance.



WOOD CONVERSION Dest. Paul 1, Minneona

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Address ...

- 4. LASTING
- 1. WINDPROOF
- 2. MOISTURE-PROOFED 3. FIRE RESISTANT
- 5. Non-settling 6. HIGHLY EFFICIENT
- BALSAM-WOOL . NU-WOOD Products of Weyerhaeuser

Fenestra Building Panels

-Interlocking steel sections for roofs, walls, floors

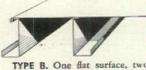
and partitions. They speed construction—save field labor. Versatility permits great flexibility of building design. Channels provide raceways for service facilities. Surfaces are ready for application of finish treatments of your choice: concrete, wood, carpeting, paint, etc.



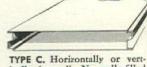


NOW SHIPPING

TYPE A. Two channels with top and bottom plate which, with service cover, form two-cell box beams.



TYPE B. One flat surface, two channel-type ribs. Flat side up or down, inside or outside.



TYPE C. Horizontally or vertically, for walls. Normally filled with insulation at the factory.

HOLORIB. Steel Roof Deck with triangular-shape ribs 6" on centers, $1\frac{1}{2}$ " deep, for spans to 8 feet.

Standard width of Type A, B and C Panels, 16", in No. 20 to No. 10 gages. Holorib 18" wide in No. 20 and No. 18 gages.

Here's your opportunity to cash in on the tremendous market!





DETROIT STEEL PRO Building Panels Division Dept. AF-12, 2252 E. G	n (formerly Holorib Div.)
Detroit 11, Michigan	
Please send me, with Building Panels.	nout obligation, information on Fenestra
Name	
Name	hele and the second of
Name Company	

SPECIAL OFFER! The "Bonus Basement" shown below was modeled from one of 20 architects' plans for an ideal basement of a modest home. All 20 designs—showing basement and upper floor plans—have been reproduced in a helpful and informative book. While the edition lasts, we will send you a copy for the special price of only 10¢ postpaid. Mail request to the address printed below.

One "oversight" in planning your postwar home can cheat you out of a

Bonus Basement

ARCHITECT ELLIOT L. WHITAKER, STATE COLLEGE, PA.

A WORD TO THE WISE!

No matter what kind of fuel you now plan to use in your new home, don't

make the mistake of "building coal out." For someday, when other fuels may become even more expensive, you may want to switch to the economy, comfort, and health advantages of heating with Bituminous Coal. So make sure your basement provides ample space for coal storage. And also be sure you get an adequate chimney—one with a flue big enough to handle Bituminous Coal as well as any other fuel. The extra cost of such a chimney flue is small—only about \$16 for the average 7-room house. Most postwar homes—even those designed to fit into the average budget—will include a handsome, useful basement room such as the one shown above.

And if you want to get *your* recreation room on mighty attractive terms—don't overlook the advantages of heating with Bituminous Coal. For you can have a "Bonus Basement"—furnished and paid for in only a few years' time by the savings that come from burning lowcost Bituminous Coal.

Bituminous Coal is not only the most economical, but also the most dependable of all home-heating fuels. It supplies steady, *uniform* heat. That's one reason why 4 out of every 7 American homes depend on coal. And, when burned in one of the marvelously efficient new coal stokers, Bituminous Coal is also an "automatic" fuel—even to the point of ash removal! Clean, quiet, odorless, smokeless.

To get a bookful of plans and suggestions for your "Bonus Basement," take advantage of the special offer described above. Then talk it over with your architect or builder. *Bituminous Coal Institute*, 60 East 42nd Street, New York 17, N. Y.

FOR ECONOMY, DEPENDABILITY, AND HEALTHFUL HEAT ... YOU CAN'T BEAT BITUMINOUS COAL

(This is one of a series of advertisements now appearing in home-makers' magazines)

LETTERS

Small houses at a small price . . . Last breeze from Puerto Rico . . . Fifth Avenue Tree Squabble . . .

Building jitters . . . Baldwin commentary carries on.

HANDICRAFT HOUSE

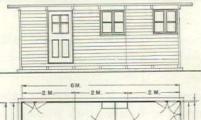
Forum:

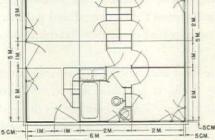
These prints illustrate my essay, Une Petite Maison Economique, that I am preparing for publication here in Paris in cooperation with the Ministrie de Reconstruction and the Départment du Bois.

It is my last (or latest) word on scientific shelter fabrication. I call the technique "Structural Furring". The entire house is in multiples of 1 metre. The tiny walls are just strong enough to support the flat roof, which is of exposed timber construction. When the masonry "overcoat" is built (at some later time) the roof construction gets additional support. There is not one piece of wood in the design that has no structural significance.

After site assembly the interior is lined with "Isorel", a French product similar to Masonite. The roof construction however is exposed.

We do not use "standard" lumber here. Wood is so scarce that we design each stick for its purpose and cut it to





the required dimensions. Some of this material will be oak (casements, splines, etc.) and some "sapir", a wood similar to North Carolina pine.

I have just finished the manuscript and 20 isometric illustrations of a book for distribution to the G.I.s. It contains 17 chapters and is called An American House Pattern. It undertakes to show in step by step detail how to construct your own \$5,000 house for \$2,500. It is

a 4-room cottage. I am issuing this book in cooperation with the U.S. Army Special Service, Handicraft Branch . . . ROBERT TAPPAN

c/o Postmaster, New York, N. Y.

PABLO-PUBLI

Forum:

In the various "Letters to the Editor" on the Neutra-Arneson-Blumenkranz controversy regarding the design of Ponce District Hospital in Puerto Rico, my name has been printed twice. In the March issue I was called "Pablo", in the September issue I was re-baptized "Publi", placing me in an embarrassing situation among my associates. Now, Pablo is a good Christian name, but Publi is something entirely new to me, unless it is the "Viennese" for my name, in which case I apologize to Mr. Neutra. As to FORUM, my name has been in the list of subscribers for years.

No, I have no intention of taking a part in the controversy, except to say that there is a lot of truth in what they all say. Said controversy has been tremendously enjoyed by us down here and we hope it continues.

RAUL G. REICHARD, arch. Santurce, Puerto Rico

Sincere apologies to much-christened Raul Reichard-ED.

VACUUM-PACKED TREES

Forum:

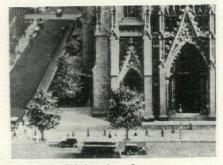
-5CM

... page 12 from THE ARCHITECTURAL FORUM of July 1945. (Recent squabble over 5th Ave. tree-planting: Best & Co's president, LeBoutillier, versus the Park Association.)

If you will be good enough to read the enclosed copy of my reply to Cameron Clark to which to date he has been unable to reply, you should be able to get your ideas in better shape than they seem to be in the second paragraph of your article:

"What Mr. Sulzberger and some other starry-eyed lip-service tree crusaders apparently didn't take the trouble to find out is since the Union Club was built at the northeast corner of 51st St. and 5th Ave. 42 years ago, there hasn't been anything under its sidewalks except vault space; and yet you are very critical because I decline to plant trees in such a

vacuum and in your snappy letter you lament that my opposition will prevent



Moth-eaten 5th Ave. trees?

further trees being planted up and down 5th Ave. from Radio City.

I certainly hope so and if you would take the trouble to examine the sad moth-eaten appearance of the trees in front of St. Patrick's and on the 5th Ave. front of Radio City, you will see what I mean and should have the integrity to admit it."

PHILIP LEBOUTILLIER New York, N. Y.

JORGENSEN JEERS

Forum:

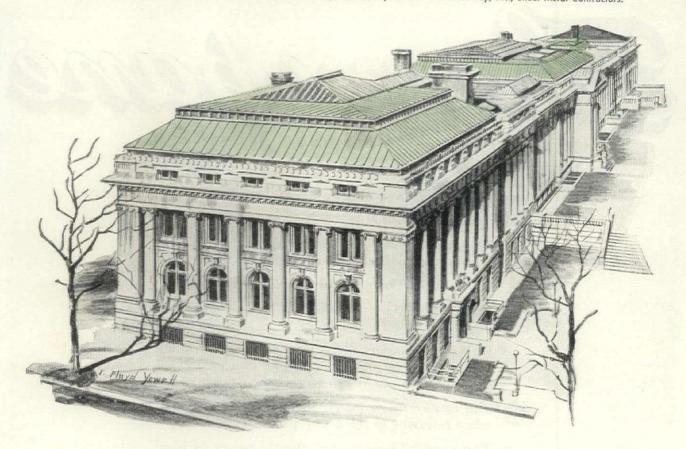
Sticking my nose into it again! Enjoyed these lines (FORUM, Oct. '45, p. 88) describing the house by Roy A. Kelley: "The L-shaped plan is arranged compactly about a circulation core at the inner corner."



CORE FITS "

BOB JORGENSEN, A.U.S. Somewhere in Fort Lewis (Continued on page 40)

Front to rear, buildings of the Museum of the American Indian, Heye Foundation, Hispanic Society of America and the American Numismatic Society. Architect: Charles P. Huntington. Anaconda Copper Roofing installed by Nicholson & Galloway, Inc., Sheet Metal Contractors.



For 40 Years, the Cost of Maintaining these Copper Roofs has been Negligible

A^{MONG} the fine cultural buildings of the city of New York are the impressive structures illustrated. Included in this group are buildings of the Hispanic Society of America, the American Numismatic Society, the American Geographical Society of New York, and the Museum of the American Indian, Heye Foundation.

Three of these buildings were erected in the years 1903 to 1905. The Museum of the American Indian was



American Geographical Society Building, another unit of the group illustrated above.

built later, in 1916. All were roofed with Anaconda Copper by the well-known sheet metal contractors, Nicholson & Galloway, Inc.

A recent inspection by Mr. John E. Nicholson, president of this company, disclosed that these copper roofs are all in excellent condition. Since their installation, cost of maintenance has been negligible.

Anaconda Copper for roofing lends itself to any decorative plan. It grows old gracefully, providing low cost roof protection. Because of its uniform temper, Anaconda Copper can

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> Thermopane is a registered trade mark of the Libbey.Owens.Ford Glass Company;

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3 Only Libbey · Owens · Ford can call a transparent insulating unit Thermopane;

Only Thermopane has the Bondermetic Seal which bonds the panes of glass into one unit to prevent dirt and moisture from entering the dry air space;

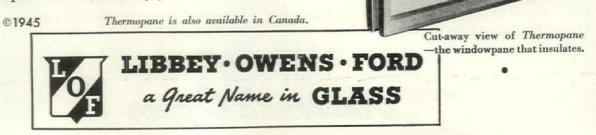
5 The name "Thermopane" can and should be used when referring to the L·O·F product;

6 The word "Thermopane" should never be used when referring to any other brand of multipleglazing construction.

We make these statements because the function of a trade mark is to unequivocally identify the manufacturer of a product... and to eliminate the possibility of confusion in the mind of the public concerning the producer of a specified product... and to assure that the customer gets what he orders.

We are sure that architects, contractors and others who are familiar with the superiority and advantages of *Thermopane* will welcome these statements... will refrain from using our trade mark in referring to any construction or product not made by the Libbey-Owens-Ford Glass Company.

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LETTERS

(Continued from page 36)

HOUSE MARKET'S PULSE

Forum:

Don't look now, but your inflationary trend is showing.

Affiliation with the OPA Rent Division has inevitably made me somewhat inflation conscious. Merely a mild case—definitely not chronic bureaucratitis. I believe that government controls should be lifted generally, so that big and little businessmen can go to bed at night free from haunting fears of the government bogey-man. But I just can't agree with your conclusion that the judgment of the housebuilders operating freely under a watchful public will produce the much needed housing, correctly priced, in the shortest possible time.

The FORUM-Crossley survey revealed that inflationary prices might cause a delay in the plan of more than one out of every four prospective home buyers. An article in the Sunday *Times* stated: "... runaway prices would cut drastically into the potential market ..." Obviously, that's not all runaway prices in housing would cut into.

You said, "The findings of this survey suggest that the public itself is likely to offer the best check against a runaway market." HOW? Will the prospective purchasers camp on building sites, carefully checking the cost of the houses? (An improved variety of sidewalk superintendents-with vested interests.) After the houses are completed and offered for sale, what form will the public watching take? Will hundreds of house hungry people sit idly by and watch one lucky fellow get a correctly priced house? Am I to believe the atomic age has reversed the law of supply and demand?

ELIZABETH K. GUTMANN New York, N. Y.

THE FORUM-Crossley survey suggests that the public can be counted on to stage a sit-down strike if the situation demands one, and back of each chair will be the deflationary push of FHA and mortgage lenders.—Ep.

Forum:

With all the philosophy of our salaried Washington, D. C., economists, my hardboiled business friends in the realty field feel that the cost of building apartment houses is too risky a venture now. I do not know how savings banks feel about lending money against first mortgages. But as long as our present dollar will purchase only about 25 to 30 cents worth of labor, and consequently materials, I feel that our federal and state governments, as well as our city governments should consider "Grants-in-Aid", in order to start toward that "60 million jobs" goal. It would, naturally, be a gigantic task to please all. Or must we wait for another "depression" when men will again work for WPA wages?

MORRIS I. POLANSKY

Forum:

Brooklyn, N. Y.

The excellent FORUM-Crossley Study of the House Market interested me but it is rather depressing, as FORUM recognizes. The conclusion that 7.5 per cent of family-units of population are good prospects is modified, as FORUM points out, by the fact that 6 per cent are borderline prospects who may easily be frightened off. I am reliably informed that an architect recently put out for bids a house which was to have cost \$6,500 before the war and that the lowest bid he received was over \$12,000. As FORUM also points out, prospects are considering, besides costs, house-quality and job-security. So it seems possible that the 1.5 per cent of sure prospects may also be frightened off and nobody will be able, or at least willing, to build a house. I don't say probably because perverse humanity is always doing the impossible, and seems to like it. Let's admit, then, that 1.5 per cent will build for themselves to suit their own tastes.

Stirred to emulation by FORUM'S example I have made a study of the situation of the remaining 98.5 per cent who must take what they can get. For this purpose I enlisted the services of the most important statistical analyst in the country. You must know him. His name is Sam and everybody calls him Uncle. I wanted an answer to the question asked in the following letter, printed in a newspaper's correspondence column under date of September 11, 1945:

"To The Editor:

Our forefathers dumped the tea into Boston Harbor, but we can't build a house.

For generations A mericans have fought, giving their lives for the right to live free of imperial or bureaucratic tyranny, but we can't build a house.

Our country is faced with a possible disastrous unemployment situation. Hundreds of thousands of our people need homes. Manpower used in the production of the material and in the construction of h o m e s w o u l d provide immediate employment for untold thousands, but we can't build a house.

Over 250,000 of our young men have made the supreme sacrifice; millions of others have endured privations and hardships beyond comprehension to insure for the people of the United States and of the world, the right to live as (Continued on page 44)

the "business-end" of Air-Conditioning

"NO AIR-CONDITIONING SYSTEM IS BETTER THAN ITS AIR DISTRIBUTION".

AREMOSTA

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This air-mixing action within the ANEMOSTAT establishes the required room-temperature at a point well above the

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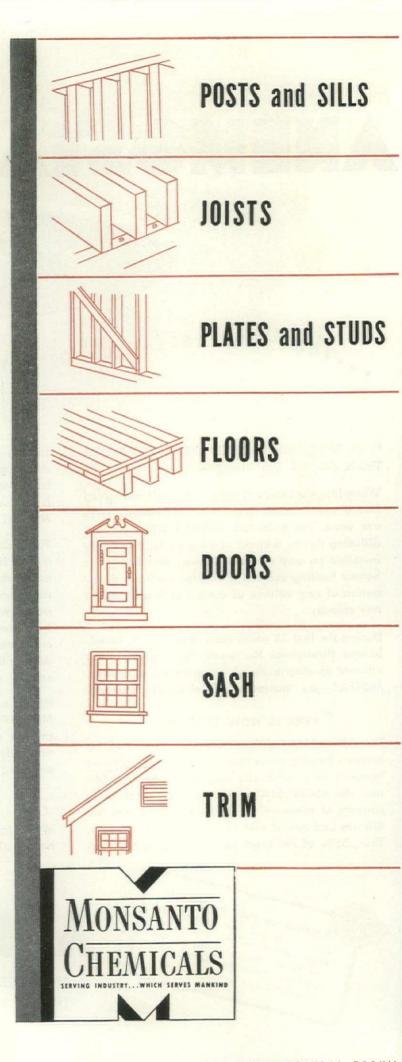
Decay at vital spots in the houses you'll be building and designing, will make owners forget all the good craftsmanship and artistry you put into them.

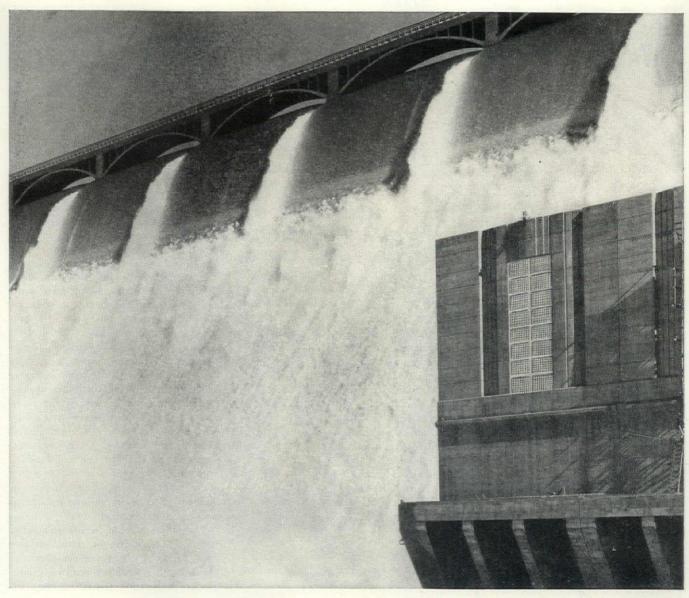
Guard against this possibility by specifying complete, modern, scientific wood preservation . . . with Monsanto's Santophen* 20 (pentachlorophenol). Microorganisms that attack millwork, porches, trim...beetles that attack hardwood flooring...and termites that go after structural parts, posts, joists or plates just can't live in the presence of this chemical.

Santophen 20 in proper formulations gives a "clean treatment" that controls biological activity in the wood . . . without lingering odors and with a surface than can be readily-painted, puttied or varnished. Dimension change can be reduced with special formulations of Santophen 20 containing water-repellents.

Santophen 20 is now available for civilian uses and we invite builders, architects and lumber manufacturers to inquire about this modern, proved wood preservative. Write: MONSANTO CHEMICAL COMPANY, 1700 South Second Street, St. Louis 4, Missouri.

*Reg. U. S. Pat. Off.





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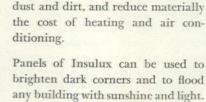
ARCHITECTS are making full use of Insulux Glass Block—in homes, offices, factories, schools and public buildings.

And-rightly so!

Panels of Insulux transmit and diffuse light far better than ordinary windows yet provide privacy along with light.



IN FACTORIES – Panels of Insulux help solve problems of light, temperature, humidity and dust control.



Furthermore-panels of Insulux cut

down sound transmission; lock out



IN SCHOOLS— Panels of Insulux flood classrooms and corridors with softlydiffused natural daylight.



IN HOMES—Panels of Insulux bring sunlight in and yet provide privacy along with light.

PICTURE OF THE GRAND COULEE DAM, COULEE DAM, WASH. Note the panels of Insulux Glass Block.



Insulux Glass Block is a functional building material—not merely a decoration. It is designed to do certain things that other building materials cannot do.

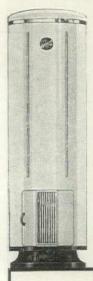


For technical data, specifications, and installation details, see our section in Sweet's Architectural Catalog, or write: Insulux Products Division, Dept. B-28, Owens-Illinois Glass Co., Toledo 1, Ohio.

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lined with Permaglas. When you specify a Permaglas heater you can promise . . . Single-piece, glasslined tank. Sanitary as a clean drinking glass. Freedom from all tank rust and corrosion. No "corrosion-dirt" in the bath ... no "tank spots' on clean clothes. Sparkling clean hot water as pure as the source.

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LETTERS

(Continued from page 40)

free and democratic people. They saved us from the tyrants of Germany and Japan; they have won a glorious military victory, but we can't build a house.

Have we freed the people of Europe and Asia only to enslave ourselves?

We have the material—the manpower —the greatest home demand in the history of this country—and the will to build.

Why can't we build a house?"

In answer Sam reports as follows:

LABOR DATA ON INDUSTRIES

		Average	
Base	Year	Weekly Earnings	
	1 cui	Burnings	
Selected Manufac-			
turing Industries	1944	\$46.08	
Locomotive Engi-			
neers	1944	64.91*	
Machine Tools	1944	57.39**	
Retail Trade	1944	26.50***	
All Business (in-			
cluding Agricul-			
ture, Mining,			
Manufacturing,			
Wholesale and			
Trade, Finance,			
Transportation,			
Public and Gen-			
eral Services)	1943	\$38.96****	

* Highest earnings according to incomplete breakdown.

** All other earnings given are less than \$55.00.

*** Lowest earnings according to incomplete breakdown.

**** 1944 earnings are not available at this instant.

Sam makes no comment so I shall simply note in passing that '43 and '44 were good years for the wage-earner.

We will assume that an owner who builds for rent with the assistance of independent private financing must get a gross return of 9 per cent of his investment to make it worth his while to build, or 6 per cent if the financing is backed by government guarantees and insurance. So, on an assumed developed land cost of 25 cents per square foot, which is fair enough, we get from the Colean-Davis rent-land value chart:

Type of House In	<i>vestment</i>	Rent
5-Room Row House Inde- pendent Finan-	9%	\$70.00
cing 5-Room Row House, Govern- ment Guaran-	9%	\$10.00
teed Financing	6%	55.00

On the basis of the commonly accepted formula, weekly earnings equals monthly rent, it appears from a comparison of the above tables that no average wageearner, except a locomotive engineer or a machine tool maker, can afford a privately built house on any terms. Therefore, the attempts of the Congress to encourage private building under the amended Housing Act, if the measure is adopted, appear destined to a small measure of success at best, even if earnings are maintained at '43 and '44 levels.

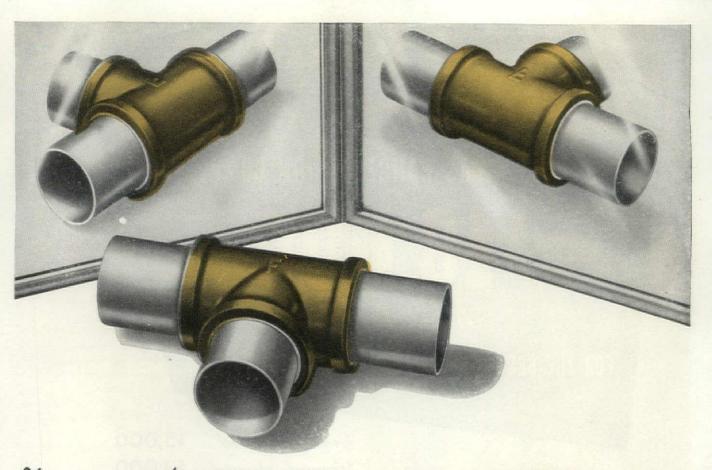
Sam points out in another table, headed "Estimated National Income by Distributive Shares", that total compensation to employees is about 70 per cent of national income, year in and year out. The inevitable conclusion is that even if all of it were redistributed more equitably there still would never be, at any given moment, enough money to consume our products.

Many independent economists and courageous statesmen have been and are pointing out that the reason for this is our financial formula based on an outmoded Newtonian space concept in an age of Einsteinian space-time flow phenomena. Yet none of these men, and I have read many of their proposals, seems to me to have been allowed to approach the question in a true spirit of scientific inquiry. They have been obliged to work in an atmosphere of political passion and emotion.

This is unfortunate, for before making political, legislative, or administrative determinations about the complex and difficult public problem involved in producing a dynamic circulating medium we should have a disinterested report on the subject. Only after we have this can we decide what to do about putting more money in the pocket of the man in the street.

Therefore, I have a proposal to make to TIME, INC., with its matchless facilities for the dissemination of ideas. Let's set the problem. We know now that if we want a device for any purpose whatsoever we can get it, and the machinery to produce it, designed in short order if we engage competent scientific and technical specialists, protect them from interference, and provide them with whatever equipment and personnel they may call for. We want at present, for immediate use, machinery to turn out a Dynamic Production-Consumption Cycle Credit Currency in quantities and at a rate of flow sufficient to finance every legitimate transaction we individuals or groups may wish to propose and consummate, without causing either inflation or deflation of prices. This is a tall order, but having just split the atom we can undoubtedly crack the credit nut.

(Continued on page 48)



From any angle FLAGGSEAL is not just a FITTING it's a PERMANENT LEAKPROOF CONNECTION!

Yes sir! Flaggseal Fittings are expressly engineered to assure strong, trouble-free joints ... and eliminate maintenance and repairs ... on I. P. S. copper tubing and brass pipe. That's why more and more owners are demanding Flaggseal Fittings in their new construction and remodeling plans.

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Why not send for the Catalog giving all important data concerning Flaggseal Fittings . . . and let them be your "springboard" for planning future copper and brass plumbing, heating, gas, fuel and process lines? Write today to: Stanley G. Flagg & Company, Inc., 1421 Chestnut Street, Philadelphia 2, Penna.





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GEORGE NELSON, A.I.A., Professional Adviser, c/o The Architec-tural Forum, Dept. F, Empire State Building, 350 Fifth Ave., New York 1, N. Y.

I intend to enter the Magic Chef Design competition, Please send me the program, including the conditions governing the competition and awards.

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THE ARCO COMPANY CLEVELAND, OHIO · LOS ANGELES, CALIF.



LETTERS

(Continued from page 44)

So, I ask TIME, INC., to popularize and ask the President to submit to the Congress for authorization and the appropriation of adequate funds, the idea of a fully implemented Credit Control Research Project in amplification of Abraham Lincoln's policy when he said, "The privilege of creating and issuing money -(sufficient to satisfy the spending power of Government and the buying power of consumers)—is not only the supreme prerogative of Government but Government's greatest creative opportunity", as well as Woodrow Wilson's purpose in advocating the creation of the Federal Reserve System. When we have the Project Report in hand we can then submit it to political judgment, and apply suitable legislative and administrative measures to carry out its purposes should it be approved by the people, with some small hope of a successful financial issue. Yours for more building money,

George Howe Washington, D. C.

MORE ON BALDWIN

Forum:

You could have eliminated a good deal of confusion if in publishing Mr. Guy Baldwin's letters, you had indicated to what extent he was right. Jumping on him with the sheer weight of no less than eighteen passionate subscribers reveals an insecurity which I would have thought you had outgrown—and leaves his facts undisputed.

Most "working architects" may need, but do not want THE ARCHITECTURAL FORUM in its present form. The seven architects in Mr. Baldwin's building who subscribe to no architectural magazine constitute no atypical phenomenon. I have viewed more than 80 homes built in this city during the boom immediately preceding the war. One shows the influence of a modern approach.

I would be nauseated by Mr. Baldwin's buildings. I ad mire the same architectural honesty you champion. Why do you not with a similar honesty admit clearly that you represent a small, though growing minority? You still have a battle to fight. You will not win it by pretending it does not exist or by falsifying the extent of your gains.

The Boston area is an eastern center of modern houses. I had to drive a good many miles to see a mighty small number of them. Only a perverse yearning after error could blind you to the fact that most buildings are still built in the spirit of Baldwin, not the FORUM. To this extent Mr. Ketchum, for example, is indulging in wishful thinking. For heaven's sake, state once, clearly, that you do not pretend to be representative of most architecture, that the minority you represent does still find "small acceptance", that you are journalists, as accused, and furthermore, pamphleteers, for a special plea. Pause long enough to realize and admit that you do deliberately "court the ill will" of the still large majority, conventional architects, by your editorial policy, by "arrogant" replies to their letters, by self-righteous missionary zeal.

With more admiration than liking.

JOHN A. WASHINGTON Clarksbury, West Va.

THE FORUM does not weight its "Letters" column. The flood of replies scoring Baldwin surprised us, too.—ED.

Forum:

Please keep printing letters by Baldwin and his critics. In a magazine devoted exclusively to an absence of humor, such a department answers the need for laughter adequately.

For example, you might title Baldwin's contributions as "Bolts From The Blue By Baldwin" (no pun intended). Or, "The Baldwin Way is the Appian Way". His opponents might be classified under "A Critique of Pure Baldwin", or "Is Baldwin Necessary?"

Since I know nothing about architecture, except that a mortgage seems to make the best foundation, I feel perfectly correct in making a tentative diagnosis of Mr. Baldwin.

Mr. Baldwin is architecturally frustrated. He fails to realize that the earth is gradually cooling, that little boys eventually become men, and that arteries harden.

Of course, it is silly to take Mr. Baldwin's anguished outcries seriously. He obviously possesses a flair for ready expression, and has thus hypnotized himself into defending a cause no more realistic than a comic strip.

It may be superfluous to remind Mr. Baldwin that the bird of time is on the wing. Mr. Baldwin, better be careful. You might get that bird.

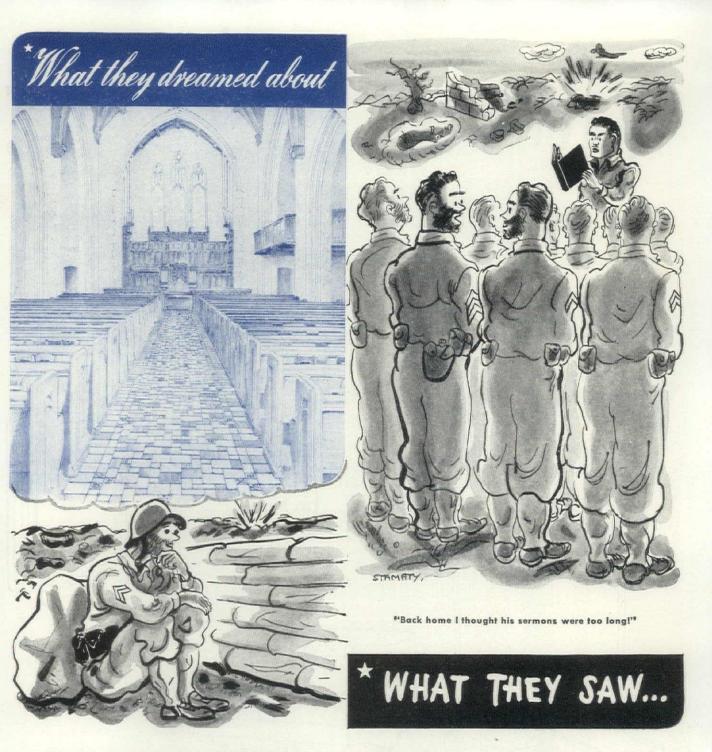
Dr. D. J. Tepper

Forum:

Oakland, Calif.

Thank you for the box seat tickets to the Baldwin-Architectural All Star tussle which you so kindly included in the subscription price of your fine magazine.

My kindest description of Mr. Baldwin's exhibition is covered by the word "pathetic." The "winners" unfortunately showed definite signs of acute confusion, particularly in their modest reference to themselves as being "representative" of the architectural profession. Would that that state of Utopian (Continued on page 52)



"Survival of the fittest" aptly describes the record of real clay tile. One of man's first building materials . . . it has been tested and approved by centuries of use in almost every style of architecture . . . in every climate. Real clay Suntile has evolved from centuries of clay tile craftsmanship. Today's Suntile is part of man's early culture, yet it is as modern as tomorrow. It combines yesterday's assets of agelessness, permanence and durability with today's newest developments in color, design, beauty and utility. For tomorrow's plans specify real clay Suntile—the material that is "fittest" for use either indoors or out in private

homes and public buildings. It will be available again in the very near future.



THIS SERIES IS BASED ON AN IDEA SUGGESTED IN LETTERS WRITTEN BY CPL. LOUIS A. PERKOVIC OF THE ARMY ENGINEERS IN THE SOUTH PACIFIC. AS THIS LONG-AWAITED PEACETIME HOLIDAY SEASON DRAWS NEAR, LET'S RESOLVE TO KEEP THE SPIRIT OF CHRISTMAS SHINING BRIGHTLY THE YEAR 'ROUND,



Electrical wiring in the postwar home will require much more attention than it received in prewar installations. Even today 95 per cent of American homes are inadequately wired to carry efficiently an appliance load which has increased WIRING steadily through the years. With more and more appliances promised for the postwar home, this situation will become really serious. Realizing that appliances are worthless if houses are not equipped with wiring systems capable of THE ARCHITECTURAL FORUM

carrying their load,

FULL-COMFORT WIRING a "MUST" for tomorrow's home!

• More and more, architects are viewing houseplans as charts of family living areas . . . and planning houses to fit living patterns.

The increased role of electricity in modern living makes it imperative to bring electrical facilities into those plans. Air-conditioning, electric cooking and dishwashing, radio and television, home workshop and laundry . . . all bring out special problems which must be solved on the architect's drawing board.

FULL-COMFORT WIRING is insurance against development of basic weaknesses in electrical distribution. It calls for:

RESERVE CAPACITY for added electrical applications. EXTRA CIRCUITS, allowing easy addition of more labor-saving appliances without costly re-wiring.

MULTI-BREAKER safety and convenience, completely eliminating fuses. (The Multi-breaker makes reserve capacity and extra circuits available easily and economically.)

DETROIT

Get the complete Multi-breaker story from your electrical contractor . . . and pass it along to your clients.

The MULTI-BREAKER eliminates fuses completely. When a short-circuit or dangerous overload occurs, the circuit is cut off automatically. A simple movement of the lever restores current after the cause of the overload has been removed. There are no delays-nothing to replace. The Multi-breaker costs little more than fusible equip-

ment . . . on many installations costs less.

LOS ANGELES



MILWAUKEE



Truly here is a shingle that blends perfectly with the warmth and friendliness of the typical American home. The new textured surface seems to weld together the lines of the roof that go far in determining the beauty and character of the house. Architects find the Ford Colonial Thatch Shingle easily adaptable to almost every type of home structure.

SHINGLES

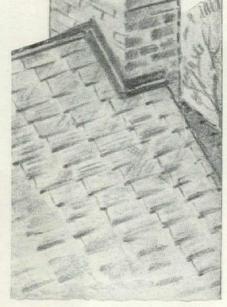
FORD'S TEXTURED

Golonial Thatch

The outstanding weather protection provided by Ford's Colonial Thatch Shingle is well recognized by both builders and home owners. The extra heavy felt used in this shingle forms a basic structure that is built for long life. The rustproof metal staple in each tab locks the roof into one complete protective unit that is wind and storm resistant. Ford's improved stapling machine speeds application and clinches each staple uniformly and securely.

A wide range of colors is available either for solid color or blended color harmony roofs. The deep shadow line of the side and head lap combined with the textured surface produce a distinctive ruggedness that is particularly pleasing.

Colonial Thatch is one of the most popular shingles we have ever made and the new textured surface promises to still further add to this deserved popularity.



YORK. PA. CHICAGO 2, ILL. VANDALIA, ILL.



Established 1865

LETTERS

(Continued from page 48)

bliss existed! To be more accurate, they represent the best of their profession.

It would be very encouraging to believe that from the average architects' boards will come a multitude of good, strong, honest designs for the houses to be built in the next few years. It is discouraging to observe, however, that all but an infinitely small part of the houses planned thus far show little or no improvement over houses built during the last fifteen years. To be sure, gadgets will be more numerous, plumbing and heating equipment will be better, and paint will last longer, but plans will still be much too rigid and elevations will still be traditional. Apparently only the very strongest men in the profession "sell" sound design, while the majority adhere to a program of sentimental appeasement.

Your magazine and several others have done and are doing a remarkable job in encouraging and promoting honest architecture, but you should not be expected to do it alone. The American Medical Association and individual practitioners continually promote the medical profession by writing articles for laymen's magazines, providing exhibits, producing films, sponsoring clinics, and giving lectures. If the public is to be convinced that life is easier, healthier, and more wholesome in a house designed by a competent architect, then the competent architects, themselves will have to do the convincing.

Yes (worse luck!), Baldwin has clients; and he will continue to have clients as long as some architects, real estate developers, and builders are willing to take that "sentimental journey" with the buying public.

A. W. ICKE

Milwaukee, Wis.

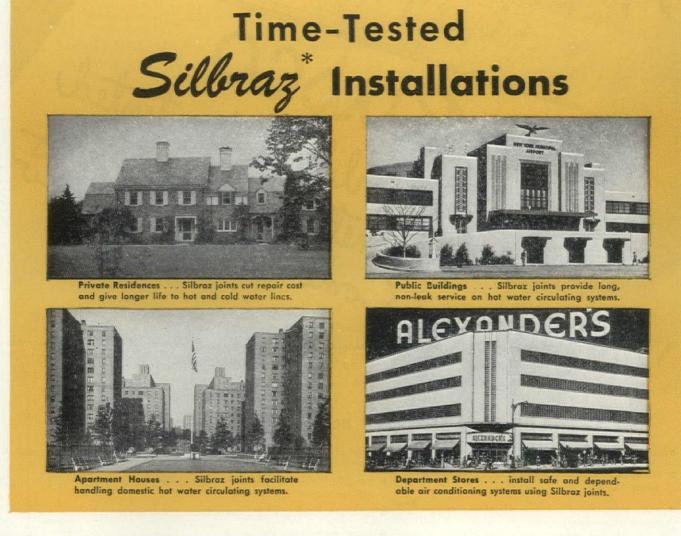
Forum:

Sincerely expressed opinions such as those by Mr. Baldwin are valuable because they make us pause to think.

For many years I have had the opportunity to study closely various groups that compose the building industry. Among these groups are the architects, engineers, builders, realtors, mortgage lenders, suppliers, prefabricators, labor, architectural schools and magazines, and the governmental agencies.

Each group has had alternating periods of retrogression and progress-not being integrated they rarely remain in balance. That is why there is always the cry for some group or some person to assume leadership.

(Continued on page 56)



Prove Advantages of "One-Piece" Copper or Brass Pipe Lines

-WITH THE SILVER ALLOY RING



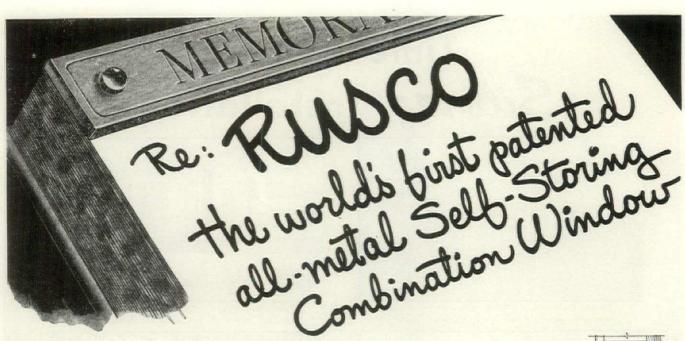
Better plumbing and heating contractors already have the special Airco oxyacteylene equipment for making Silbraz joints and the "knowhow" to do the job. You can rely on them to install "one-piece" Silbraz copper or brass piping systems. N THE typical installations shown above — as well as thousands of others, the Silbraz joint has proved its ability to "take it" under all conditions for as long, or longer, than the pipe itself.

Threadless, easily installed, Silbraz joints make "one-piece" copper or brass pipe lines that will not creep or pull apart under any amount of shock or pressure to which the pipe itself can be subjected.

When your plans call for copper tubing or brass pipe for plumbing and heating lines, fuel, gas and process lines — write Silbraz fittings and valves in your specifications. This will save your clients the nuisance and cost of repairs... and will increase prestige — and business for you.

* Reg. U.S. Pat. Off.

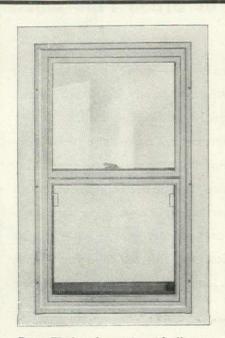




NOW, simply by writing "RUSCO" into your plans for new building or remodeling you can give your clients these exclusive, permanent advantages: nothing to changenothing to store-seasonal window-work ended forever!

All these permanent benefits:

- savings up to 1/2 of annual winter fuel bills
- year-round rainproof, draft-free ventilation-even during storms
- self-storage that eliminates all changing and storing of insulating sash



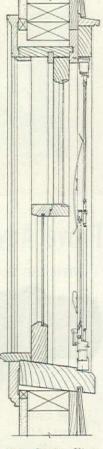
Rusco Windows harmonize with all types of architecture and weatherproof entire window opening. Rusco provides storm sash and summer screens in one permanently installed unit.

- light glass and screen inserts that are easily removed for cleaning-from inside
- Patented Adjustable Closure Frame assures a tight permanent seal against air leakage
- increased efficiency of air-conditioning systems
- lower maintenance cost
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RUSCO Windows are the *first* practical Insulating Sash for large buildings. They have provided outstanding service to the building industry since 1937. Now, redesigned and vastly improved, they permit you to offer more permanent comfort, convenience, protection and fuel economy than ever before. For complete engineering specifications see Sweets' 18a-7, or write direct for free booklet and name of nearest distributor.



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Cross Section View

NOW THE VEIL OF SECRECY

can be lifted!

Some of the well-guarded secrets surrounding the development and manufacture of America's potent weap-

manufacture of America's potent weapon... the atomic bomb...can be told. With official public announcement of the bomb and its purposes, the Manhattan Engineer District gives permission to Allied to disclose the part it played in this wartime drama. Allied Structural Steel Companies were among the prime contractors for crecting the buildings of the Hanford Engineering Works, Pasco, Washington, which housed the manufacture of the extremely effective atomic bomb.

The same skill and knowledge of fabricating techniques (together with secreey when necessary) which produced the government structure for wartime are available for peacetime buildings. With the services of the three Allied plants at your disposal, you are provided with facilities for rapid, precision fabrication and erection on large jobs as well as small jobs.

Send your plans and specs to Allied ... they will be given careful and immediate attention.

A Contributing Factor in Atomic Bomb Development

(Section of Hanford plant under construction)

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> WRITE NOW for 24-page full-color "Architectural Trends in Linoleum" Dept. 2945, nearest office below.

61 YEARS

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LETTERS

(Continued from page 52)

On the whole, the industry has made considerable progress and is now getting tuned to achieve its greatest strides.

While all groups and many individuals have made important contributions, who can honestly question that the accolade for greatest over-all inspiration and leadership has been clearly won by the FORUM.

FOSTER GUNNISON

Gunnison Homes New Albany, Ind.

Forum:

The latest Baldwin outburst in the October FORUM has just been read, and it's about time a Buffalo architect came forward to say a few words on the subject. Baldwin does not speak for myself or any of the other contemporary architects of Buffalo.

It is not with the intent of entering any dispute between Baldwin and the publishers of the professional magazines that I write this, but it would be well to "look in the records". What has Baldwin produced on his own as an architect? His attacks on modern architecture somewhat puzzle me. Several years ago he gave me a scathing denunciation of the new Kleinhans Music Hall (one of the finest modern structures of its type in the United States) knowing that about that time I was one of the few contemporary designers here. Yet shortly afterwards, he made a pen and ink sketch of the same building as his personal Christmas card; rather inconsistent.

Those who know Baldwin personally do not share his views; frankly, his letters amaze us! Could it be that he should have been a journalist? His style of writing is definitely good modern!

Buffalo, N. Y.

S. J. TAURIELLO

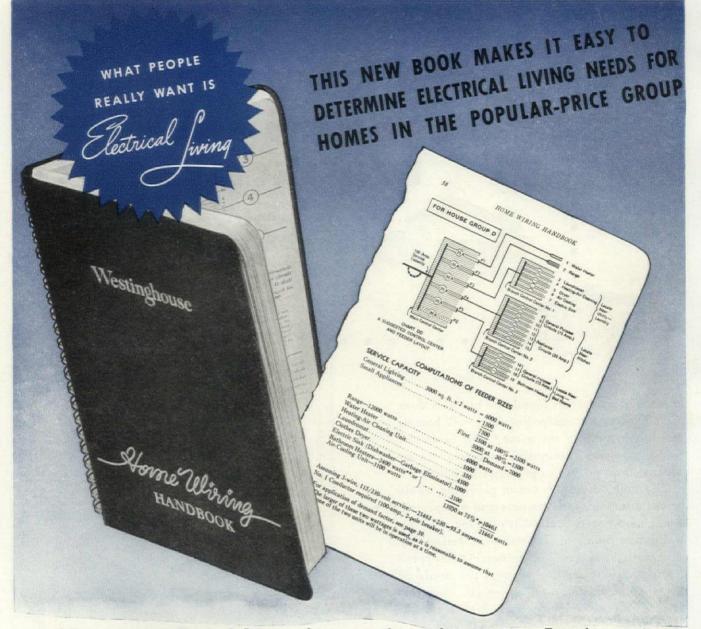
bor.

Forum: ... The French lost a war because they fought like their fathers. The English were almost beaten down because their statesmen were expert appeasers. We were unprepared because certain Congressmen and their backers saw fit to give us a miniature navy at Pearl Har-

Let us get wise to ourselves, Baldwin. You can't afford to be unprepared for future, eager America. It'll leave you in the dust with your Victorian, your Gothic, your Colonial, your clapboards and attics, and wet, unhealthy, dark cellars ...

E. CHILLAG, M.D.

Buffalo, N. Y. (Continued on page 66)



For full convenience Electrical Living, where should control centers for a house be located? What size feeders should you install? What is the minimum number and size of circuit breakers to use?

Complete data is contained in the new Home Wiring Handbook to enable you to design the most modern and efficient electrical installation for homes





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The new Crane line shortly to be announced will offer new engineering features plus a fresh advanced styling that will enhance the comfort and attractiveness of the homes you build.

Right now advanced dimensional data on this line is available-get in touch with your Crane Branch or write to Crane Co. for your copy of "Transitional Data on the Crane Plumbing Line."

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FOAMEX^{*} cushioning upholstered with

Now—let yourself go on advanced design and color in seating: now toss the word "impractical" out of your vocabulary!

Foamex cushioning opens new vistas of design for comfort and beauty. Now seating is liberated from the restrictions of bulky springs and stuffing that confine style forms. Foamex cushioning is one simple material foamed of air-and-latex cells. It provides floating support with a minimum of material—permits sleek-as-a-greyhound design. Every inch of Foamex is buoyant with millions of tiny air bubbles,

each a resilient cushion, each a breathing ventilator, each a cradle of comfort. And *Foamex* is welded together into one unit that cannot sag or lump.

Velon upholstery fabric opens new vistas of color, makes luxury completely practical. Select delicate boudoir



This is Foamex cushioning cross-sectioned to show you the millions of tiny air-and-latex bubbles. Foamex is now electronically processed to insure longer wear. pastels or frankly bold tonesachieve dramatic contrasts-choose from an infinite variety of patterns, weaves, textures-and know that Velon fabric will stay ever new, ever beautiful. For grease and grime can't dig their way in; acids and alkalis can't stain it. A wipe with a cloth dampened in water or cleaning fluid restores Velon's original freshness. Use Velon on chairs and sofas that get hardest wear-it will never sag, scuff, bag or buckle. Exposure to sun will not fade or discolor it. Like Foamex, Velon has proved itself practically wearproof through

years of wartime abuse in transportation seating. Specify *Foamex* and *Velon* today. Write Firestone, Akron, for full information.

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They know what they want ... when

The average woman spends more than 1600 hours a year in her kitchen. So it's not surprising that she has a *lot to say* about the kitchen you will design and build for her.

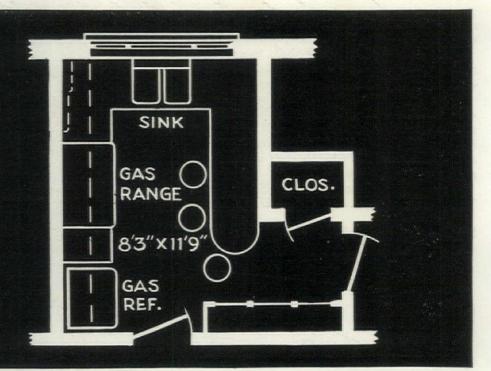
In a recent survey we interviewed hundreds of these "average women"... from different income groups, in widely separated parts of the country. Their reactions to the sample "New Freedom Gas Kitchens"— (see picture above)—are of *direct concern* to every architect and builder of private homes.

On the opposite page are some of their *actual statements* about the 3 most important factors in kitchen planning!

ARRANGEMENT "I like the way the units are grouped for convenience." "It saves steps." "It's handy... everything is uniform." "Everything is within reach." "A labor-saving kitchen." "Cupboards and units give the kitchen a systematic look."

DECORATION "It is a cozy looking room." "The kind of kitchen I should like to sit down in." "I like the indirect lighting." "It keeps the *home* atmosphere." "A gay family kitchen." "It is a pleasant place . . . one I'd like to entertain in."

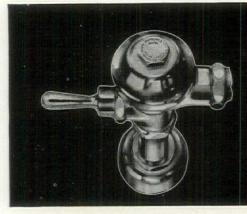
EQUIPMENT "These Gas things look more modern than any I've seen." "I like Gas for refrigeration . . . it's much quieter." "I'd rather have a Gas range than any other kind." "Range looks pretty . . . and Gas is so easy to regulate." "Gas equipment is inexpensive to run . . . but I'd insist on it at any price because it works so much better." "I like Gas for home use . . . wouldn't change for anything!"



omes to Kitchen Planning

 MULTIPLY BY 20 MILLION! Gas is far and away the most popular modern kitchen fuel. Its speed, flexibility and economy are known and enjoyed in more than 20 million urban and suburban homes... the identical communities from which you draw your clientele. So that when these present Gas users state emphatically that
 Gas is their *first choice* for the kitchen of today—it points the way to a preference worth considering. And for added attraction ... specify Gas for house heating and air conditioning. It's the ultra-modern fuel for dirt-free, trouble-free scientific temperature control. For complete technical details on modern Gas practice, appliances and systems—see your local Gas Company.

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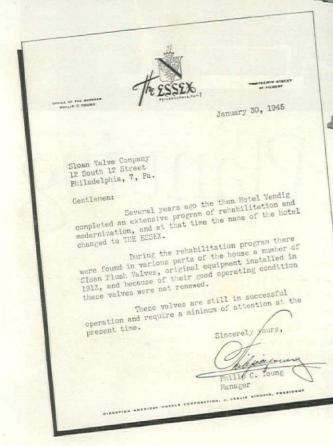
For the man who pays the bills, this service record will point the way to his logical choice of Sloan Flush Valves for buildings of the future.

We urge you to make inquiry of performance records—water saving records—and low maintenance cost records. You will find Sloan Flush Valves *unequalled* on all counts—three of the many reasons why Sloan is the world's most popular Flush Valve.

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EASE OF INSTALLATION—plus-factor of Republic ELECTRU-NITE E.M.T. which keeps jobs moving on schedule—is a mighty important reason why more and more cost-wise electrical contractors and industrial maintenance men are using this *modern* steel conduit.

Here are the facts-

First: ELECTRUNITE E. M.T. is threadless—requires no tedious thread cutting. With compression-type fittings, strong, water-tight joints are made quickly and easily with only a pair of pliers.

Second: ELECTRUNITE E. M.T. is the only steel conduit that's "Inch Marked" for easier, accurate bending. With the patented one-piece ELECTRUNITE BENDER, all types of saddle and offset bends may be made quickly and efficiently, by following directions contained on the Bending Instruction Tag which accompanies every shipment of ELECTRUNITE E.M.T.

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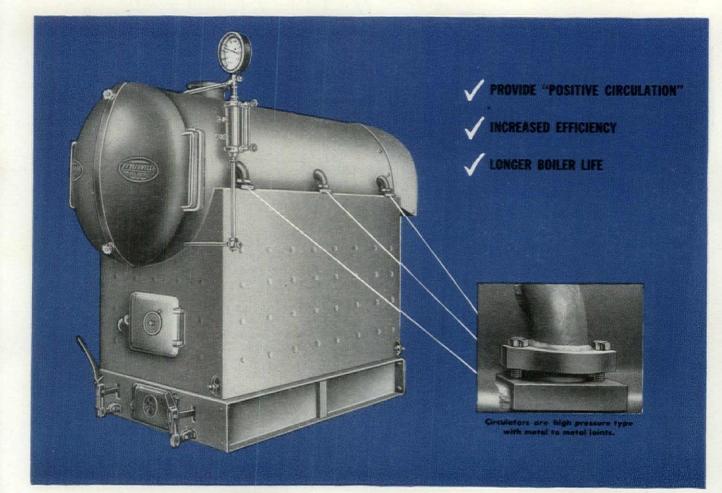
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New Titusville Compact Boiler Bulletin on request.

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This book will help you!

Here is an informative new book on the planning of "display window" bottling rooms. It was prepared primarily for bottlers to help them install their new bottling equipment to best advantage. Profusely illustrated throughout, it contains many floor plans showing the best practice in modern bottling room layout and numerous views of display windows with the bottling equipment in place.

Architects working on bottling plants will find this book of practical help. They will also find it a source of ideas for bottling room treatment that may be incorporated in their plant designs. If you would like to have a complimentary copy, just fill out the coupon and attach it to your letterhead.

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Please send me a complimentary copy of your new book, "Looking Ahead with the Bottling Industry."	
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In WASCO 3-Element Flashing, the COPPER value is supplemented by rough fabric surfaces which assure a perfect and permanent bond with the mortar, while the asphalt binder insulates against electrolysis. (Do not confuse WASCO Copper Fabric Flashing with merely coated copper products.)

WASCO costs less, installation costs are lower. Specified by leading architects for important buildings everywhere. May we send our A.I.A. folder?

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WASCO Flashing Company 88 Broadway, Cambridge 42, Mass



A LETTER FROM THE PUBLISHER

Dear Reader:

Blandford

Curiously, the FORUM-Crossley Survey is being used by both sides in the current building controversy. Those who favor con-

trols, notably Chester Bowles and John Blandford, point out, via the Survey, the record-



Survey, the record- Bowles breaking demand for housing, aggra-

vated by short labor and materials supply. These, they say, are the certain ingredients of inflation.

In opposition, Hugh Potter and representatives of the Home Builders

and Producers underline the Survey's findings which show the public resolutely resisting unwarranted upping of small house prices.



Potter

Our own views remain unchanged —there are too many unknowns at present to justify domgatic opinions. For example: labor and materials costs are up, but are they stabilized? Will labor supply improve quickly? Will labor productivity increase? Will buying resistance to today's prices really develop? When will appraisals level off? Are war-time population shifts through shifting? And when will there really be a free supply of materials?

Since most people wish controls eliminated as fast as safety permits and since most controls have been dropped, it seems sensible to give the industry a probationary period to show whether it can justify its claims and function effectively in this market. If it fails substantially to meet the need in quantities and at prices which will house those who must be housed, then controls of various types may be invoked. House building, no less than other basic industries, has earned a reasonable period to get back to work and demonstrate its efficiency and good citizenship.

After a 3-week conspiracy of silence Philip Kelly, first FORUM staff member to Clipper to Europe, has bombed us with reports from which we excerpt:

* * *

"This comes from Caserta, AFMQ for the American army in Italy. I got away from Berlin, Thursday afternoon, hit Paris at 7:30 P. M. Next day I arranged booking to Rome and also had an extremely interesting interview with Le Corbusier... about which more shortly.

"Much in Italy is being held up pending the signing of a Peace Treaty. The military now brings in enough basic supplies to give a minimum ration; other materials are allocated as needed to gradually restore the Italian economy. Things are really bad...no real leadership and much poverty.

"About Le Corbusier-technical counselor and chief planner for St. Die, a town of about 20,000 near St. Lo, almost completely destroyed. A few basic plans for this are now on display in New York but the plans for the buildings and the over-all plan are not. As a basic part of the plan, he has designed a huge, block-long multi-story building. He says we must plan our towns and homes to meet new domestic conditions; we will have more and more leisure, perhaps work only six hours daily soon . . . His plan for this building called for a complete installation of stores and shops on the fourth floor; rest rooms, physical culture and other recreational areas on the roof.

"From Rome . . . So far purchasing of materials is controlled in the U. S. by the U. S. Commercial Corporation, a branch of the soon-defunct FEA. The USCC buys under Army orders following the directives of the Allied Commission. When this changes, U. S. building equipment and material men should be informed. The demand is here but the dollars are not."

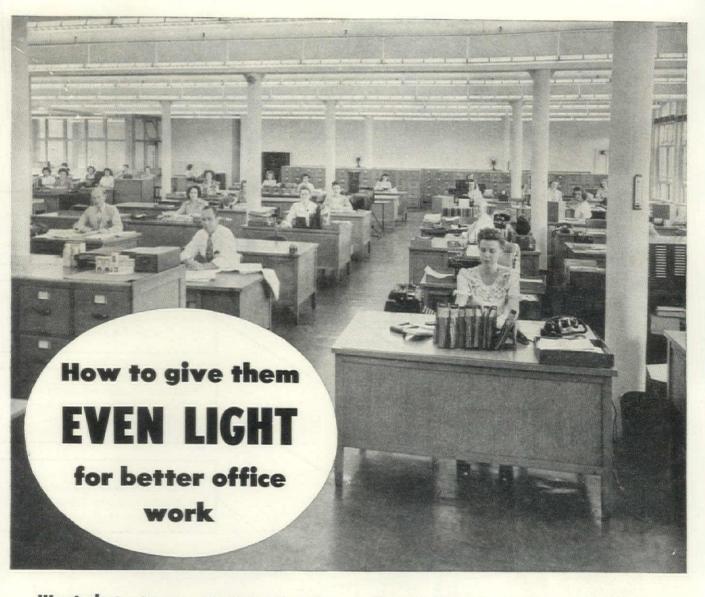
* * *

To bolster our self-respect, we ventured forth on a one-day journey to Philadelphia recently just so we could confound our sedentary friends with the terrors and hardships of travel. The plan was a flop. Awaiting our return next morning was an airborne delegation from Sweden, another from England, a builder from New Zealand, an assortment of

discharged service personnel mostly from the Pacific, and Alvar Aalto, the great Finnish architect deaf from forty



hours in the air but still able to shout "Skoal!" with his customary vehemence. The only face-saving left us is that we did travel by train. H. M.



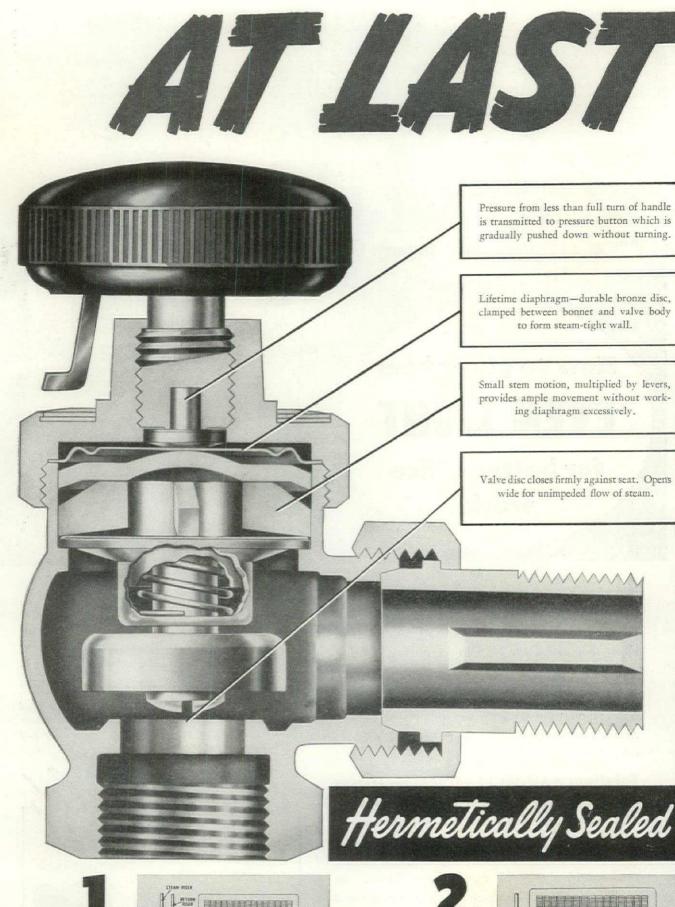
Wanted: Good lighting distribution throughout the clerical section of the Warner Chemical Company. Bothered by "spottiness" and low levels of light, they asked for help in improving lighting conditions.

Problem: To secure as uniform distribution of light as possible with the use of present outlets. And also to help create a good-looking, modern office for greater efficiency.

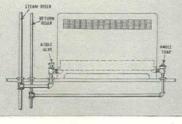
Solution: Wakefield GRENADIERS No. PG2488 in continuous rows placed 7 feet apart did the trick. Their streamlined functional design puts plenty of light down on desks, and their translucent plastic sides provide light on walls and ceilings for greater eye comfort and better working conditions. The fact that GRENADIERS provide a wireway for feed wires made it easy to utilize present outlets with a minimum of change. Incidentally, the ease of hanging GRENADIERS greatly speeded the installation. Lighting level after 1000 hours operation: 35-40 footcandles. Your clients' lighting problems may be different, but you can be sure of this... Wakefield will be glad to work with you to help provide the lighting results that you and your customers want. The F. W. Wakefield Brass Co., Vermilion, Ohio.

Are your customers throwing away DOLLARS? Proper lighting maintenance—cleaning fixtures and walls and relamping—can double or triple their light. Urge them to get the lighting value they pay for. It's important to you!





Lifetime Angle Valve and B-1 Angle Trap used with Trane Convectorradiator where horizontal laterals are below the floor.



A TRULY PACKLESS VALVE

WITH A LIFETIME GUARANTEE

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How is it different? A tough bronze diaphragm forms a hermetic al between the stem and the valve body. It seals steam and atter in, seals air out. A slight "oil can" effect moves the center the disc while the edges remain firmly sealed to the body of the lve. And an ingenious lever device triples the effect of this moveent, minimizing mechanical strain on the Lifetime Diaphragm.

No leaky packing or stuffing box. No bellows. The Trane Valve truly packless; made to last a lifetime. It is sturdily built with avy cast brass body and bonnet. Cool plastic handle with incator disclosing valve setting. Valve discs are high temperature, on-swelling, non-shrinking, perma-type composition.

Be sure to specify Trane No. 44 Hermetic *Lifetime* Valve. For formation, technical and installation details, send in your resertion at once for the new Trane Heating Specialties Bulletin S-260, now on press. It will contain complete information on I Trane Steam Heating Specialties.

stem leakage occurs at any time in the normal life of any properly used Trane Lifetime elve, a new Lifetime Diaphragm will be mailed to the heating contractor by the Trane mpany without charge.



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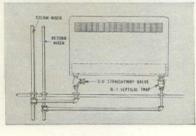
MANUFACTURING ENGINEERS OF HEATING, COOLING,

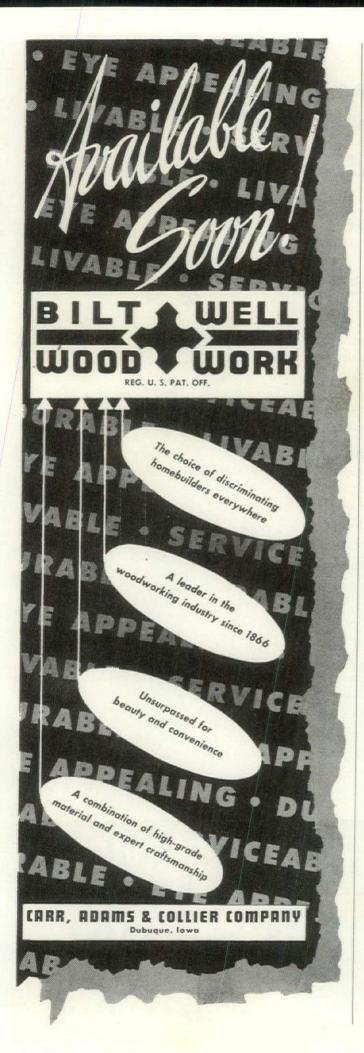
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THE FORUM

Dorothy Gray of Shoecraft, Drury and McNamee is a whirling dervish whose activities confound more sluggardly people among whom we are pleased to be numbered. In addition to a fulltime job, Dotty dabbles in water colors, ceramics, gardening, cooking and collecting Toby mugs. Although architect for most of the buildings in the Port Huron Sewage and Gar-



bage Disposal Plant (p. 112), her extra-curricular activities seem peculiarly feminine. We have ceased to wonder at the transformation of energy which produces a severe technical structure on the one hand and a delicious batch of fudge cake on the other.

Harper Richards is still suffering from severe headaches and insomnia brought on by his job of turning Yamanaka Importers' brown velvet and gold leaf offices into the new Associated American Artists' Gallery (p. 80). Shortages ran neck and neck with



the formal opening and a harassed Richards received the final delivery of furniture just twenty minutes before the first guest. It is even reported that, in the last-second rush to present a finished front, a number of the

gallery's distinguished artists abandoned brushes for a frenzied go-round with vacuum cleaners.

According to interplanetary reports from our roving astrologist, Bruce Goff is the battleground for conflicting talents—architecture and music—which have pulled him this way and that throughout his entire career. In spite of a painful first experience de-

signing a Methodist Church, architecture seems to have won out—although as late as 1932 Goff was found surreptitiously cutting compositions in paper rolls for mechanical pianos. What other fate could befall a man born on Frank Lloyd Wright's birthday while Debussy was composing La Mer?



J. Gordon Carr who remodeled the offices of Scovill Mfg. Co. (p. 101) has discovered that fame is fleeting and glamour transient. As designer of the Stork Club, New York's most famous celebrity mill, he



started majoring in chi chi. His Hall of Jewels at the New York World's Fair was a soft-spoken background for \$14 million worth of glittering gems. But now? The building is offering plebeian service to Flushing Meadows—as a tool shed and comfort station. Architectural Profession: * Specifying and selecting Builders Hardware for small homes has always been arduous, time-consuming work for Steps we are taking to simplify this procedure will make architects. specification easier ... will assure against substitution and insure client satisfaction . . . will save the time of the architect and his staff.

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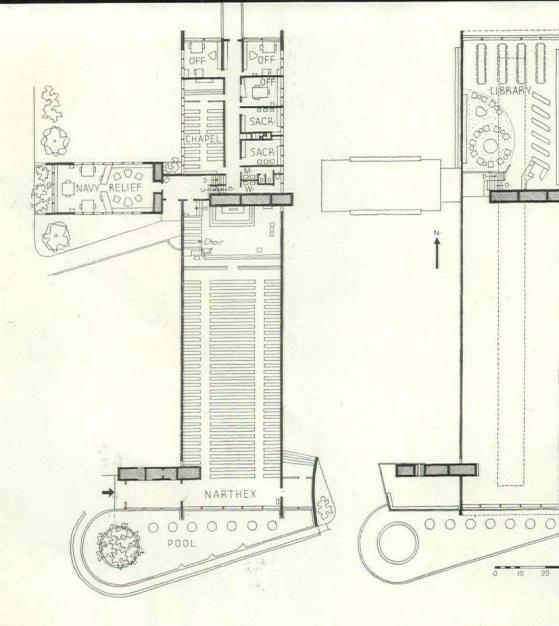
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SEABEE CHAPEL

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NAVY ARCHITECTURE at Camp Parks, Calif., shows th

Seabees have design-skill to match their construction know-how. Bruce Goff, Architect.

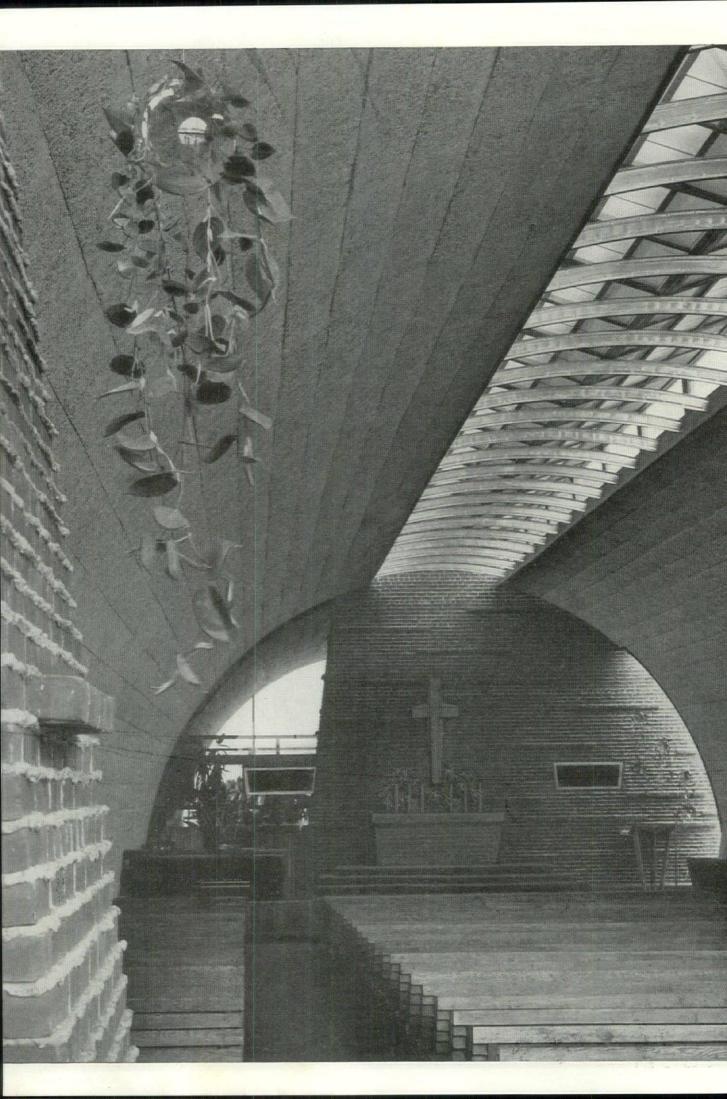
This group of buildings was designed, built, decorated and landscaped by the Seabees themselves. It represents on a peacetime plane the same collective talent which distinguished itself in the construction of hundreds of harbors and airports abroad. Associated with the architect in the project were landscape designer Ernest Thalman and the sculptor Herring M. Coe—all three of whom are now back in civilian practice. Their imaginative but highly unorthodox solutions were sponsored by the Chief Engineering Officer of the Camp, Capt. James D. Wilson. Convinced that a pleasant architectural environment was an important factor in strengthening morale, Capt. Wilson was responsible for getting the designs safely through Navy red tape. Thanks to this happy coincidence of skill and tenacity, the Camp Parks buildings emerge as structures of more than passing interest. Nine buildings, of which only the McGann Memor Chapel was not a remodeling job, comprise the reconstruct camp center.* For purposes of economy and consistenthese buildings employ the same materials as those us elsewhere in the camp—redwood, plywood and brick. Or the chapel departs from this norm—and even here the reg lation Navy Quonset hut constitutes the basic structure. The restriction to commonplace materials has not hampered to Seabee designers—as is clear in details such as the entrant pylon of the chapel, the reflecting pool in front of it, or to patios of the Hostess House.

^{*} First three to be completed are shown herewith: Chapel, Sh. Service and Hostess House. Not shown are: Main Theater, Office Club, Chief Petty Officers' Club, Women Officers' Quarters, WAY Barracks and Restaurant and Store.



CHAPEL SKILLFULLY COMBINES QUONSET HUTS, PAINTED OLIVE GREEN, WITH SALMON BRICK AND NATURAL REDWOOD

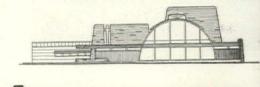






SEABEE CHAPEL

Most outstanding of the new buildings is the chapel, on a slope overlooking the main administration group. Here two "elephant" Quonsets (40 ft. by 100 ft. each) have been placed end-to-end to house chapel and library, with a smaller Quonset wing for Navy Relief. The natural contour of the site has been advantageously used to afford a sloping floor for the chapel auditorium as well as to provide for a semi-basement floor for church offices underneath the library. The main vault of the building, which runs north and south, is intersected by a massive brick pylon separating the chapel from the library. This forms the chancel back: it also houses an air conditioning unit and chimney for the heating plant. The pylon thus skillfully interrupts- but does not completely block-the strong lines of the auditorium. A glass screen on the same plane completes the chancel wall: beyond it, the vault continues to the huge north window-wall of the library.



This device, together with the vertical strip lighting on the opposite side of the altar and the clerestory lighting directly overhead, effectively sidesteps what might easily have been the depressing "gunbarrel" effect of a 200 ft. tube.

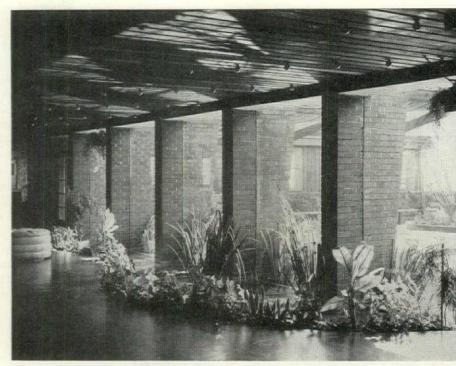
Natural and artificial illumination of the entire building shows imagination and skill. To reduce the brilliant sunlight of the region and to cut out glare, all glass is a light blue plate. In the rear auditorium wall, this blue glass is carried by perforated metal columns, aluminum-painted. Light transmission through this wall may be further reduced by a supplementary dark blue translucent curtain. The same wall is repeated at the north end of the library; blue glass and aluminum painted members also appear in the central monitor in the side walls as well as in the V-shaped lighting cove in the roof. This blue-white light falls on an interior in which pink and copper predominate, beginning with the horizontallyskintled pink brick of the chancel back. Woodwork and fixtures throughout are natural redwood. Floors in office and library sections are rust asphalt tile, while the chapel is carpeted in copper pink. The acoustical insulation with which both chapel and library are sheathed has a peach-colored casein paint.

The ingenious use of sculpture and plants is important to both interior and exterior of the building. The sculptor has achieved dignity in the altar ornaments, which are interchangeable for the different religious faiths. In a different vein are his seven sculptures of grotesque animal forms which are submerged in the reflecting pool. Landscaping reflects this romantic note in such details as the planting of the island in the pool, the hanging crystal balls of vines in the chapel and the superb tubbed plants in the lobby.

77



PLANTING ISLANDS IN PATIO

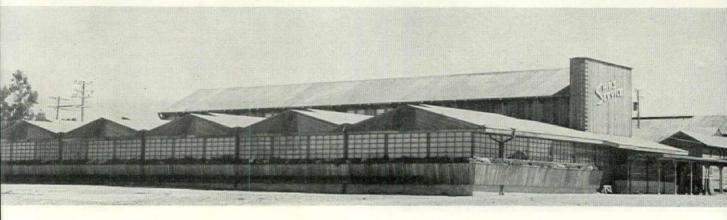


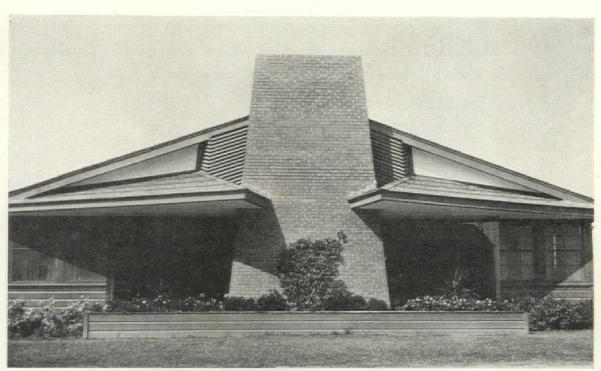
BLUE BULBS AND SUBMARINE LAMPS MAKE PLANTED GARDEN AND LOBBY

HOSTESS HOUSE. Originally a contractor's field house, this H-shaped building was the first of the remodeling projects to be realized. Its plan springs from the building's special wartime function—that of a contact point between the enlisted personnel on the base and their civilian visitors. In this capacity it provides many facilities which were sadly lacking in most camps. There are, for instance, unusually complete rest and dressing room areas for women visitors; a nursery for mothers with children; and an apartment for a full-time hostess. Architecturally, the building is likewise notable; the pleasant lounge has a number of alcoves providing some measure of privacy, while the two well-designed patios and the large dance floor and recreation room offer an unusual amount of space for weekend crowds.

BEER HALL AND SHIP'S STORES. Likewise a remodeling job, this building employs only standard (and largely second-hand) materials. Yet in both plan and appearance, it reveals a close and sympathetic study of GI needs. The huge beer hall, with indoor provisions for a long line during rush hours, is at once more pleasant and more practical than the barn-like accommodations in most camps. It is well lighted and ventilated—both by the continuous windows around two walls and by the long dormers to the north of each of the transverse gables. Diagonal beer tables increase the capacity and facilitate traffic from the bar during rush hours. In the rest of the building—ship's store, canteen and special shops—the same sensible plan and pleasant interiors are obtained with linoleum floors, plywood walls and board ceilings.

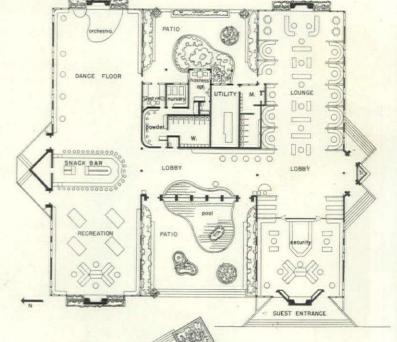
BEER GARDEN, BUILT OF REDWOOD, GETS EXCELLENT DAYLIGHTING FROM CONTINUOUS WINDOWS AND NORTH DOR





LOUNGE CHIMNEY IS FLANKED BY PICTURE WINDOWS, INDOOR-OUTDOOR FLOWER BOXES

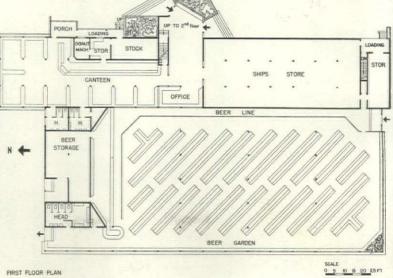
HOSTESS HOUSE has large public areas which flow together and open into the two handsome patios to handle maximum week-end crowds.



SHIP'S STORES and services for the central area (except barber shops) are concentrated in the twostory portion of this well-articulated plan.

STORE'S CENTRAL BAY HAS SCALLOPPED LIGHT COVE





GALLERY Associated American Artists, Chicago, Ill. An elegant setting by Harper Richards for the display and sale of art.

HARRY HARMAN, Associate Architect

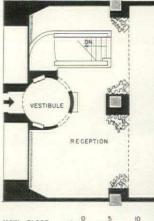
B. A. BALLENGER, General Contractor

As indicated by this interior, the mistaken belief that the character of an art gallery is derived from its exhibitions is being rapidly dispelled. Any distraction which this warm, informal atmosphere might exercise on the import of the paintings is more than offset by emphasis and skillful handling of directional lighting. The original space was simply a basement and one large room broken by a row of columns down the center. These were enclosed in a curtain wall which now divides the main showroom in half. Toward the rear, spur partitions were set at right angles to create the impression of three separate galleries and to accommodate one man shows. Contrasting with a 14 ft. ceiling height elsewhere, the furred ceiling in the reception area furthers the illusion of small, intimate groupings.





CIRCULAR FOYER HAS INVITING



MAIN FLOOR scale

Chicago Architectural Photo Co.



AN INTIMATE ATMOSPHERE WAS ACHIEVED ALONG WITH OPENESS AND PLEASANT VISTAS

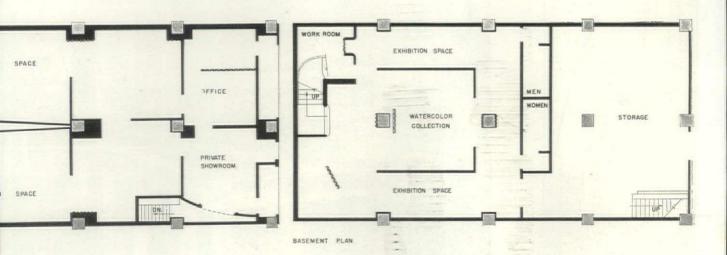
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PICTURES HANG FROM ROLLER IN CONCEALED TROUGH

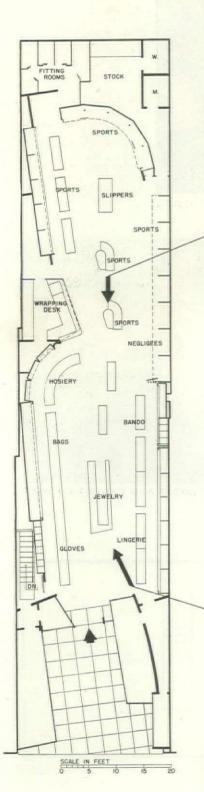


STORAGE CHEST AND EXHIBITION UNIT



WOMEN'S APPAREL SHOP, designed by M

Photos: Gottscho-Schleisner



VIEW FROM REAR SHOWS DISPLAY CASES AND LIGHTING COVE

VIEW FROM ENTRANCE SHOWING LONG, NARROW SPACE BROKEN BY EXTENDED



pidus, uses inexpensive materials to create a pleasant, informal atmosphere.

Located in Williamsburg, Brooklyn, a low-income neighborhood slowly being converted by housing projects, this women's apparel shop was designed to achieve an attractive appearance without inappropriate elegance. The simple, direct treatment used throughout the store eliminates many nonessentials and considerably cuts costs. For instance, linoleum was substituted for carpeting because of its greater durability. Wherever possible open shelving and open hanging cases were used and the rear sportswear case was built of ordinary pine siding with pine batten strips put together on the job. Since most of the customers are housewives who cannot leave their children at home while shopping, fixtures and furniture were made as sturdy as possible to withstand the onslaughts of youngsters.



REAR WALL CURVES, REPEATING LINE OF FRONT SHOWCASE

WRAPPING DESK IS AT CENTER



1267 BROADWAY CORP.,

General Contractors

FINISHES AND EQUIPMENT: WALL COV-ERINGS—rock lath and plaster. FLOORS —Masonite, Masonite Corp. linoleum, Armstrong Cork Co. SHOW WINDOWS— 1/4 in. plate glass, Pittsburgh Plate Glass Co. CABINET WORK—oak and mahogany, Jaff Bros. FURNITURE—Hans Knoll.

RESTAURANT employs parallel arrangement of counter and booths for maximum seating capacity in a narrow space. RAPHAEL SORIANO, Designer

A many times remodeled area obviously presents more problems than a project started from scratch. The restaurant shown here is the latest solution to a space modified by each successive owner and as such must capitalize on former mistakes. Originally a garage, then a store and finally a luggage shop, the entire area was crisscrossed by columns and beams of all shapes and sizes which interrupted the smooth lines of walls and roof. Because of financial and material limitations, few structural changes could be made and the architect was forced to plan the new interior around existing impedimenta. Acoustical tiles applied to both upper wall and ceiling helped to blend the jutting surfaces into an unobtrusive background. A new plywood wall and dropped ceiling panel running the entire length of the booth section add variation and warmth to the design.

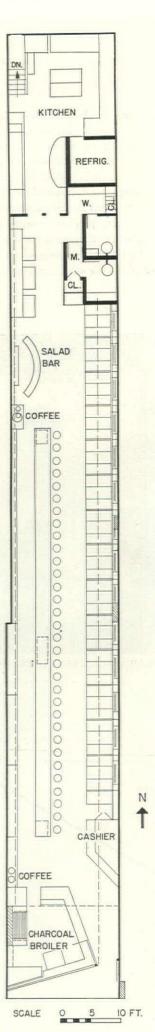


FOOD IS PREPARED IN A WINDOWED CUBICLE IN FULL VIEW OF PUBLIC

ATMOSPHERE OF CLEANLINESS IS PRODUCED BY STRAIGHT, SMOOTH SURFACES



Merriman Photos





CURVED ELEVATOR BANK OPENS INTO SPACIOUS SALES AREA. WIRE BASKET CASES DISPLAY ACCESSORIES

REMODELED SALES FLOOR Davison-Paxon Co., Atlanta, Ga.



Davison-Paxon Co., Atlanta, Ga. Harold M. Heatley, Architect Ketchum, Gina & Sharp, Consultants Thomas S. Kelly, Lighting Consultant

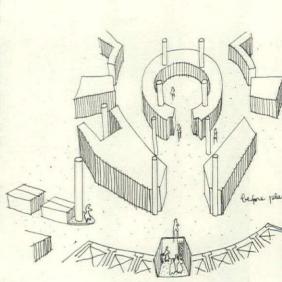
Provided it offers no bargain merchandise, a well filled sales rack can have as adverse an effect on the arriving customer as a brick wall. For store interiors, as well as exteriors, openess and visibility are psychological essentials. The outstanding change made by the remodeling of this sales floor was the elimination of a myriad of high cases, racks and partitions so that the customer now gets a good view of all departments as soon as she alights from the elevator.

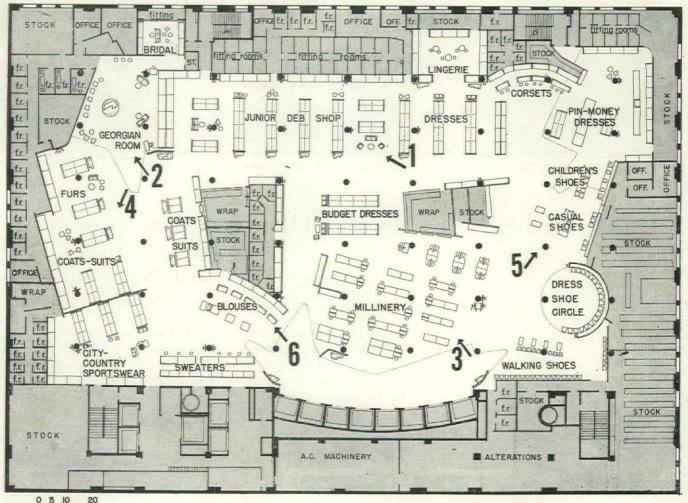
The scheme had five principle objectives: 1) to plan each sales department as an individual shop and, concurrently, to integrate the "shops" as a sales area, 2) to relate each sales department to the merchandise sold in adjacent departments and to the public traffic channels, 3) to organize customer traffic into a "shopping street" from the elevators throughout the Skillful planning without major structural changes successfully modernized this extensive sales area.

entire floor, 4) to plan service areas both in the sales area or behind the scenes for maximum efficiency, 5) to coordinate lighting, color, fixtures, signs and displays in a pleasing over-all pattern. As shown in the plan, the apparel departments, known as "demand merchandise" were located farthest from the elevators but within plain view. The less expensive dress departments were placed on center opposite the elevators. To the left is located the Georgian room for exclusive dresses, furs, coats, etc. To the right of the central apparel group is a special department, the Pin Money Shop, for house dresses and uniforms. Accessories, known as "impulse merchandise," occupy the space nearest the elevators.

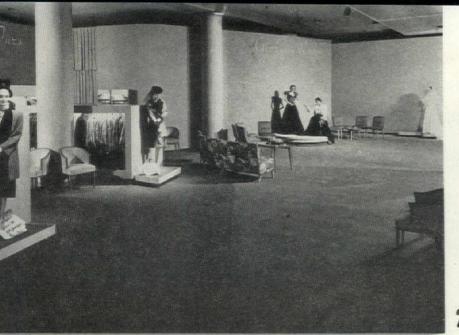
The general appearance of the floor was immensely improved by removing some ungainly plaster capitals which originally "ornamented" the tops of the columns and by covering the existing paneling at the elevators with a simple screen wall. Other screen walls, either solid or of vertical poles, are used to enclose the outer boundaries of the sales floor and to separate and accent individual sales departments. Due to restrictions, existing lighting fixtures had to be retained, but all new sales fixtures were equipped with built-in or down lighting from the ceiling, focusing attention on the merchandise. Most existing sales equipment was remodeled and reused.

Credit for the successful completion of the work under difficult war-time conditions is largely due to the supervision of architect Harold M. Heatley and to the coordination of design and purchasing carried out in New York by Joseph Amisano of the Ketchum, Gina & Sharp staff.





SCALE 0 5 10 20





INTENSE LIGHT SPOTS DRESSES

2 COSTLY CLOTHES ARE SPARINGLY DISPLAYED IN OPEN SURROUNDINGS

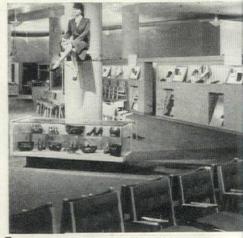






3 HATS ARE SHOWN ON CASES

4 NEW EQUIPMENT HAS SLIDING DOORS, BUILT-IN LIGHTING FIXTURES



5 DISPLAY INCORPORATES COLUMN

6 NO ATTEMPT WAS MADE TO ALTER CEILING OR EXISTING LIGHTING

CURVED DISPLAY CASES LEND BACKGROUND AND PRI-VACY TO DRESS SHOE CIRCLE.

A THE FAR A HERE WE WE

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MILLINERY DISPLAYS CON-CEAL ONE OF TWO SERVICE ISLANDS ON SALES FLOOR

PICTURE FRAME MOTIF OF STOCK CASE KEYNOTES FOR-MALITY OF EVENING WEAR **HOUSES** In-city row house from Washington (p. 89) . . . modest week-end house near New York City (p. 92) . . . log house in the same area (p. 94) . . . rancher's home in the mountains (p. 98).

THE REAR THIRD OF A FOURTEEN-FOOT-WIDE CITY LOT FORMS THIS WELCOME SUMMERTIME POOL



ntos: B. Kidder Smith

HOUSE IN WASHINGTON, D. C. In spite of wartime restrictions and a tiny lot,

the features of modern living have been obtained without offending traditional Georgetown.

Finding himself stationed in Washington during 1942, Mr. Chapman set about providing quarters for his family by purchasing one of a row of three century-old attached houses with frame party walls. The structure, though delapidated, was worth retaining since the local building code required any new building to be of fireproof materials, then unobtainable.

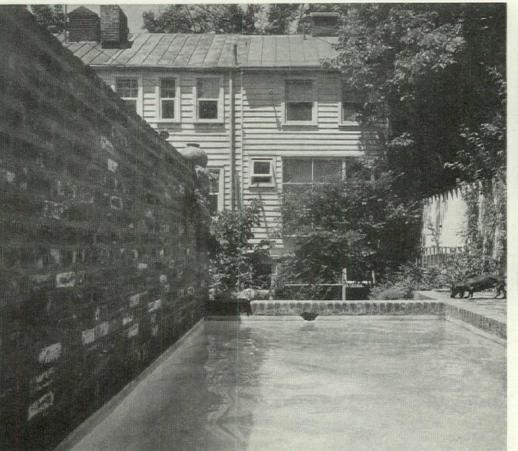
The building originally had two floors of two rooms each, separated by a central stairway, and a semi-excavated basement. The first step was to excavate the basement completely to provide a third story, the second to place the stair along the party wall to open the first floor through from front to back for added spaciousness. In such a manner, the present entry, study and living room "borrow space" from each other. To obtain two double bedrooms on the second floor as much furniture as possible was built-in, reserving floor space for circulation.

The architect explains: "To make maximum use of the yard, originally four feet below street level, the part nearest the house was deepened to bring the dining room above grade and provide a court-like extension to the house at this level. The swimming pool excavation was used to raise the back of the garden to the level of the street floor. The three part division of the garden, as well as the different levels, also minimized the bowling alley look of the original yard."

Original framing and siding were covered with new beveled siding, and wall spaces insulated with mineral wool. Second-hand brick were used for basement partitions and garden walls. Cost was \$6,380 for 11,455 cubic feet.

CONSTRUCTION OUTLINE

FOUNDATION—brick bearing wall. STRUCTURE: Exterior walls—beveled siding, building paper over flush siding, studs; inside—plaster. Floors—oak. Cellings—Rocklath, U. S. Gypsum Co. ROOF—15 lb. tin. INSULATION—mineral wool. FIREPLACE: Damper—H. W. Covert Co. SHEET METAL WORK—galvanized iron. WINDOWS: Sash—double hung. GLASS—double and single strength, quality B. FLOOR COVERINGS: Kitchen and bathrooms—asphalt tile, Congoleum-Nairn, Inc. PAINTS—Sherwin-Williams Co. ELECTRICAL INSTALLATION: Wiring—BX. Switches—toggle, Hart & Hegeman. KITCHEN EQUIPMENT: Range—Jewell, Detroit Vapor Stove Co. Refrigerator—electric, Kelvinator Div., Nash-Kelvinator Corp. LAUNDRY EQUIPMENT: Washing machine—Bendix Home Appliances, Inc. BATHROOM EQUIPMENT—American Radiator—Standard Sanitary Corp. PLUMBING: Soil and branch pipes—cast iron. Vent pipes—galvanized iron. HEATING—hot air system. Oil burner—Korth Oil Burner Corp. Regulator—The Mercoid Corp. Water heater—Lawson Mfg. Co.



VIEW FROM POOL SHOWS BIG LIVING AND DINING ROOM WINDOWS IN REAR OF HOUSE

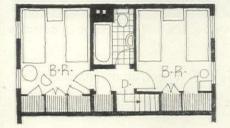
GROSVENOR CHAPMAN, Architec TEUNIS F. COLLIER, General Contr SECOND NATIONAL BANK OF WASHINGTON, Mort,



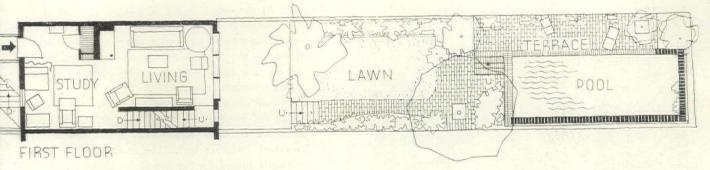
STREET FACADE CONFORMS TO LC

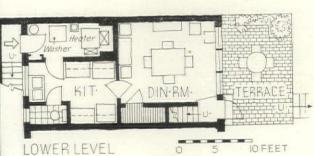


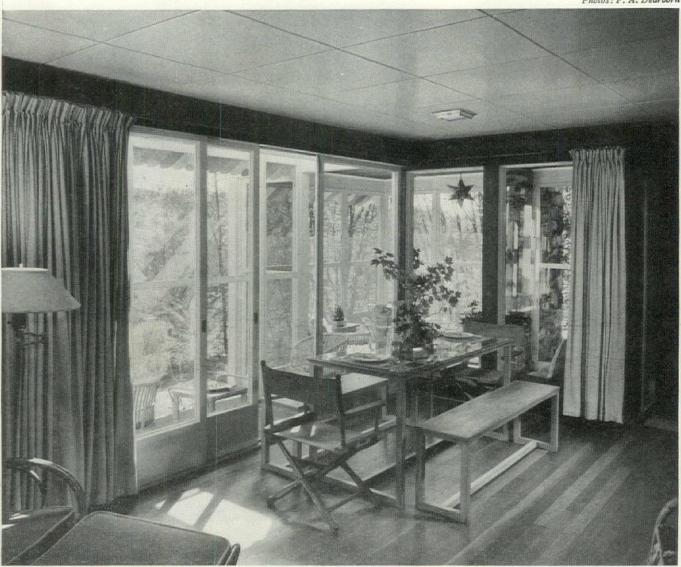
RENT SIZE OF LIVING ROOM IS INCREASED BY GARDEN VIEW THROUGH WINDOW OCCUPYING WHOLE EAST WALL



SECOND FLOOR







LIVING ROOM WINDOWS SLIDE INTO WALL POCKET AT LEFT. GLAZING FOR PLANT SPACE IS REMOVABLE IN SUMMER

HOUSE IN MT. PLEASANT, N. Y. Architect Maxfield F. Vogel, in association with Henry A. Schubart, fits a simple summer and winter weekend house to a steep rural slope.



On a hillside six miles east of Ossining, this house was built by the owner as a haven from the heat of New York summers and the hectic pace of Manhattan winters. From a rock ledge immediately behind the smaller bedroom, the three acre site descends rapidly to a ravine. The house accommodates itself to the grades with a minimum of cut and fill.

In essence, the scheme of the house is a one-story living and kitchen unit running parallel to the ground contours, intersected at a right angle in the center by a two-story bedroom unit. The main entrance is conveniently placed for the use of both upper and lower rooms and a doorway leads from larger bedroom to a roof deck.

Native stone has been used for major walls, exposed on both sides, effectively relating the house to the many rock ledges on the site. Painted shiplap siding composes the remaining walls not occupied by windows. Cost in 1940 was \$5,700, including architect's fee but not land, landscaping and furnishings.



HWEST FACADE ADJUSTS TO CONTOURS

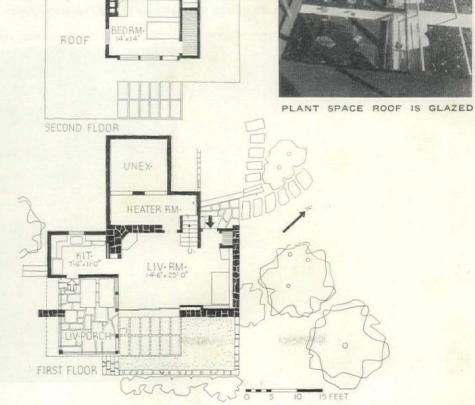


MAIN ROOMS OF HOUSE FACE SOUTHEAST FOR SUNSHINE AND VIEW

OSEPH MOSE, General Contractor

ONSTRUCTION OUTLINE

TRUCTURE: Exterior walls-cedar hiplap siding, wood sheathing, studs and hiplap redwood interior finish. Ceilings -Douglas fir plywood. ROOF-3-ply tar nd felt. Deck-Traffic Top, The Celotex Corp. INSULATION: Outside walls and oof-mineral wool bats. WALL COVER-NGS: Kitchen and bathrooms-Sanitas, Standard Coated Textile Products Co. PAINTS—Breinig Bros., Inc. WOOD-WORK: Cabinets- Morgan Sash & Door Corp., Division Interchemical Corp. HARD-WARE-J. H. Judd & Sons. ELECTRIC-AL SWITCHES-Pass & Seymour. KIT-CHEN EQUIPMENT: Range-Philgas Co. Refrigerator—Nash-Kelvinator Sales Corp. BATHROOM EQUIPMENT-American Radiator-Standard Sanitary Corp. Cabi-nets—Charles Parker Co. HEATING orced warm air system. Boiler-Fitzgiboons Boiler Co., Inc. Burner- Bettendorf Co. Regulator - Minneapolis-Honeywell Regulator Co. Water heater- Ruud Mfg. 20.

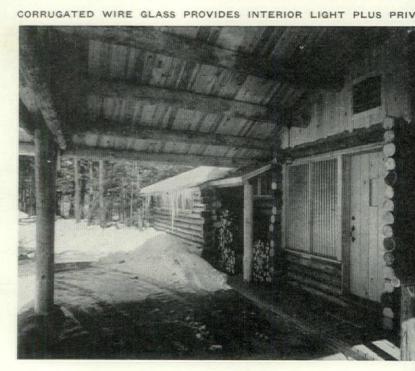


(HERENALDER

HOUSE IN CHAPPAQUA, N. Y. A contemporary use of log construction for a sech



ENTRANCE FACADE IS DOMINATED BY PORTE COCHERE SHELTERING MAIN DOOR, STACKED FIREWOOD AND PARKED



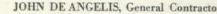
eat in Westchester County by architect George Kosmak.

"A retired big game hunter" commissioned the architect to design this log house to "provide the maximum of escape from the commercial world, a secret hideout for complete retirement and rest". In addition to summer use the place is visited frequently on winter weekends and holidays, and provision has been made for opening and closing the house with a minimum of effort. Primeval remoteness was emphasized by placing the house on a rock ledge in the center of four acres of thick woods. Log construction was used to enhance the effect of ruggedness.

The architect has been most successful in obtaining modern efficiency within the limitations of this ancient means of building, particularly in the design of the vigorous porte cochere. In plan, the wings devoted to sleeping and service are united by the central living and dining areas. Lack of windows in the living room is accounted for by the owner's desire to increase the feeling of seclusion, and to contrast this room with the adjacent porch, "a veritable crow's nest among the tree tops, with breeze and view from all directions". Specialized storage in closets for sports, gardening, housekeeping, etc., is provided in the workshop, which also doubles as a service entrance. Orientation allows sunshine to enter practically all rooms; large roof overhangs protect the bedroom windows from blowing rains.

Walls are of white pine logs, sawed with parallel faces averaging 51/2 in. wide, coped at intersections, and exposed on both exterior and interior. Spaces between log faces are caulked with a compound containing shredded redwood bark, and no other insulation has been required. The roof is of red cedar shingles graduated in size toward the peak. Interior trim is cypress; waterproof plywood has been used in the bath rooms.

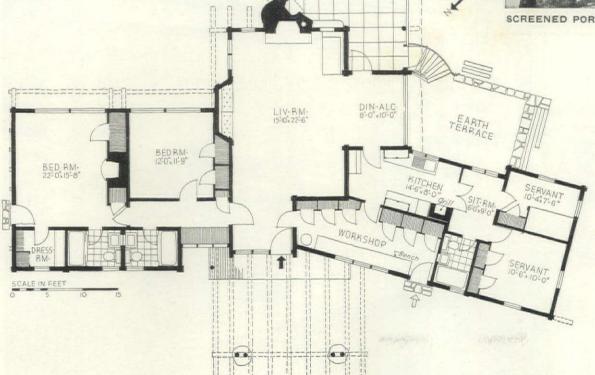
The house contains 23,100 cubic feet, and cost approximately \$14,000 in 1941, exclusive of lot, landscaping and furnishings.



Photos: Richard Garrison



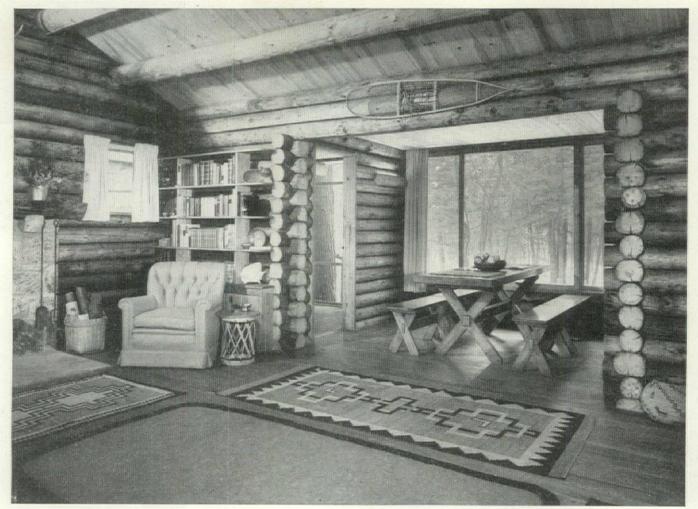
SCREENED PORCH GETS VIEW



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P.

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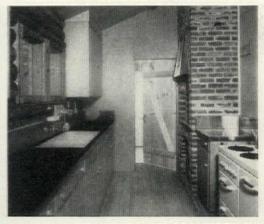
ONLY REAL VIEW FROM ALMOST WINDOWLESS LIVING ROOM IS THROUGH LARGE GLASS SIDE OF DINING ALCOVE

B·R·



Photos: Richard Garrison





KITCHEN FORSAKES DANIEL BOONE DESIGN

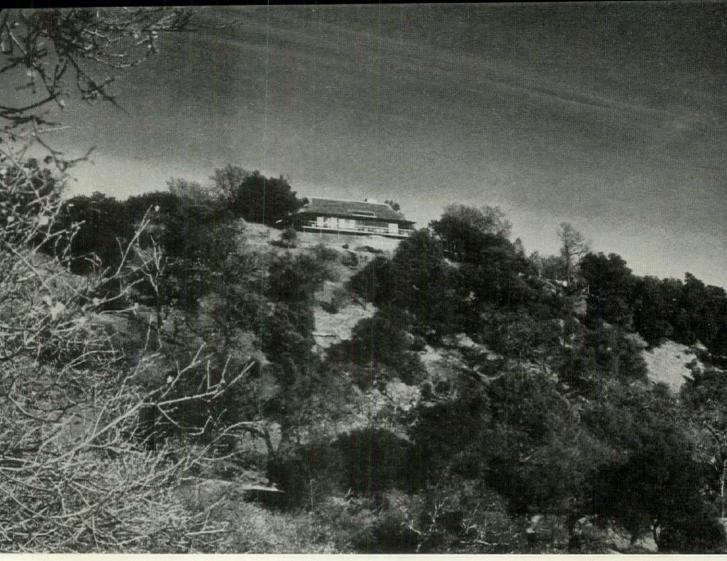
OWS ABOVE COAT CLOSET AT RIGHT GIVE LIGHT TO BEDROOM HALL

LAR PORCH AND FLAT ROOF SEEM INAPPROPRIATE TO LOG CONSTRUCTION



CONSTRUCTION OUTLINE

FOUNDATION-concrete block and local stone. STRUCTURE: Exterior wallswhite pine logs, Pacific Lumber Co. Floors -oak plank and edge grain fir. Ceiling-N. C. pine. ROOF-shingles. Decksflagstone. FIREPLACE-H. W. Covert Co. SHEET METAL WORK: Ductsgalvanized iron; remainder-copper. WIN-DOWS: Sash-wood sliding and casement, Andersen Frame Corp. Glass-A quality, drawn and plate, Libbey-Owens-Ford Glass Co. FLOOR COVERINGS: Kitchen and bathrooms-Armstrong Cork Co. WALL COVERINGS: Bathrooms-Douglas fir plywood, U. S. Plywood Co. HARD-WARE-McKinney Mfg. Co. ELECTRI-CAL INSTALLATION: Wiring system-BX. Switches-toggle. Fixtures-Lightolier Co. KITCHEN EQUIPMENT: Range and refrigerator-Norge Corp. Garbage disposal-General Electric Co. BATH-ROOM EQUIPMENT-Crane Co. Cabinets -Columbia Metal Box Co. PLUMBING: Soil pipes-cast iron. Vent pipes-galvanized iron. Water pipes-copper tubing. HEATING-recirculating hot air system, spun glass filters, humidity control, no cooling. Burner-Gar Wood Industries. Water heater-Ruud Mfg. Co.



SOUTH FACADE LOOKS OUT ACROSS MAGNIFICENT RUSSIAN RIVER VALLEY. NOTE SOLAR WATER HEATING UNIT IN F

HOUSE NEAR GEYSERVILLE, CALIF. Architect Gardner Dailey's design

for this all-wood ranch house provides unique facilities for the owner's large family.

The owner of this unusual house is a rancher who built three houses in the six years before the war. He wrote the FORUM: "When I see the constant progress made in architecture it only drives me to build another house, and your publication, although very valuable, thus becomes too expensive for a poor sheepman to have".

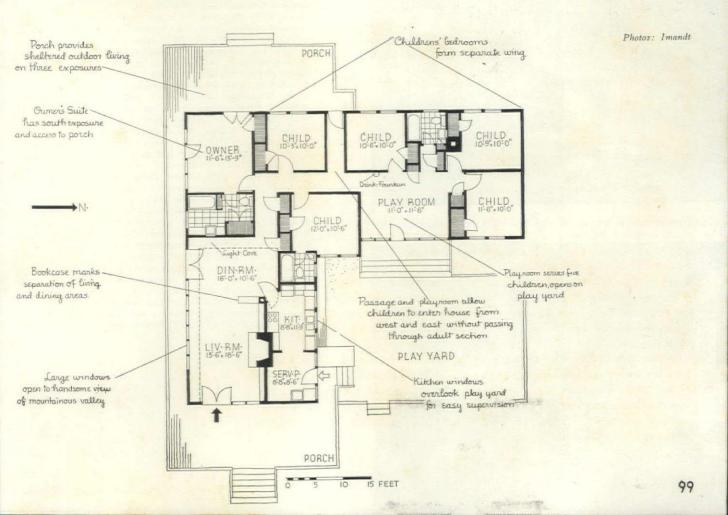
Placed at an elevation of 2,000 feet, with a view toward the great Redwood Empire mountain range, the house was designed to suit the simple tastes and habits of a family of 2 adults and 5 children. High hipped roofs and sheltered skirting porches, reminiscent of Japanese architecture, are used to advantage to provide protection from the elements in this exposed position. Also in the Japanese manner is the placing of the house on wooden posts, allowing the ground contours to undulate naturally below the floor level. Porches are created by cantilevering the floor joists beyond the wall line of the building. The plan is arranged to give adults and children separate wings of the house, so that each group may pursue its own activities near to, but independent of, the other.

Heating is by forced air from a wood-fed furnace. Hot water is supplied by solar radiation through a glazed box containing pipe coils on the south roof, with automatic controls to cut in booster coils in the furnace or an electric heater, if required by cloudiness or extreme weather.

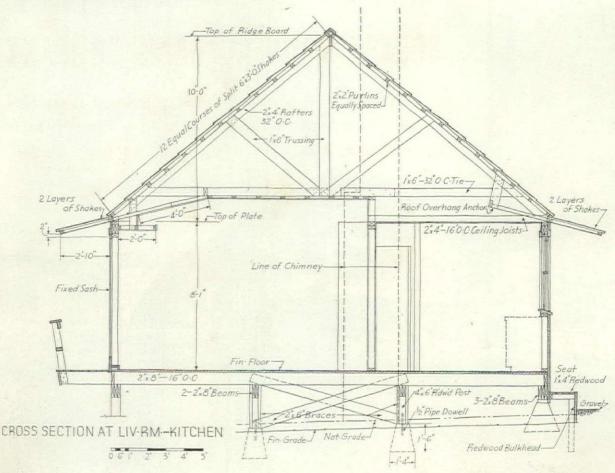
Cost was about \$10,000, exclusive of land and furnishings. Cubage of house interior is 37,450, of porches, 3,360.



LTS' PORCH OVERLOOKS VIEW TO SOUTH AND CHILDREN'S PLAY YARD TO NORTH. LARGE WINDOWS ARE TO PLAY ROOM

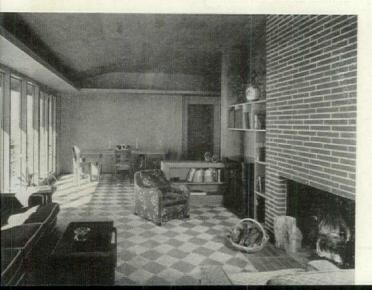


HOUSE NEAR GEYSERVILLE, CALIF.





SOUTH WINDOW BANK UNITES LIVING AND DINING SPACES



CONSTRUCTION OUTLINE

FOUNDATIONS-concrete, Portland Cement Association. STRUCTURE: Exterior walls-Douglas fir studs, vertical redwood boards. Interior walls and ceiling -plywood. ROOF-shingles. Deck-redwood boards, spaced. INSULATION: Roof-mineral wood, Johns-Manville. Sound insulation-Cabot's Quilt, Samuel Cabot, Inc. FIREPLACE: Damper-Superior Fireplace Co. SHEET METAL WORK: Flashing and ducts-galvanized iron. WINDOWS: Sash-sugar pine. Glass-sheet, Libbey-Owens-Ford Glass Co. FLOOR COVERINGS: Main rooms-Chinese matting. Kitchen and bathrooms -linoleum, Armstrong Cork Co. PAINTS -W. P. Fuller and Samuel Cabot, Inc. HARDWARE: Schlage Lock Co. ELEC-TRICAL INSTALLATION: Wiring system-knob and tube. Switches-General Electric Co. KITCHEN EQUIPMENT: Range and refrigerator-General Electric Co. Sink and cabinets-Sears-Roebuck Co. BATHROOM EQUIPMENT-Kohler Co. HEATING: Minneapolis-Honeywell Regulator Co. coil on furnace connected with solar heater, Day & Night Co., on roof. Auxiliary thermostat-controlled electric side arm heater for emergency weather, Wesix Co. WATER SOFTENER-Permutit Co.



Photos: Ezra Stoller

SCOVILL MANUFACTURING COMPANY

One of America's largest brass manufacturers meets an expanded need for administrative space by remodeling industrial bulidings into quiet, efficient offices. J. Gordon Carr, Architect.

MODERNIZED ENTRANCE IS MORALE-BUILDER FOR WHITE COLLAR WORKERS



PURCHASING DEPARTMENT is housed in former manufacturing wing. Facade was cleaned up and a

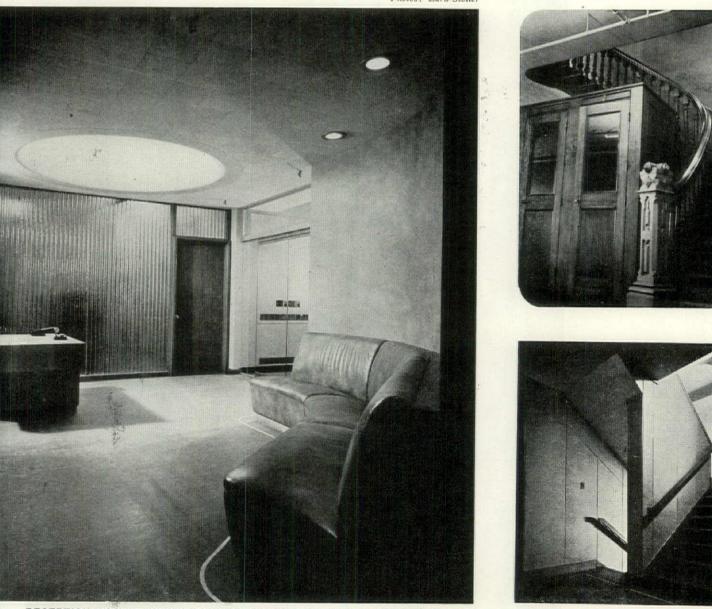
A situation common to the development of many U.S. industries has been the steady growth of plant facilities with a comparatively small expansion in administrative needs. Scovill Manufacturing Co., one of America's oldest firms, operated on this basis for close to 150 years until World War II posed the problem of a tremendous increase in office requirements coupled with a lack of modern office space. Formerly, old manufacturing buildings refurbished with a coat of paint and a few inefficient lights after the shaftwork was torn out, had represented the extent of administrative expansion. Forced to find more space quickly, Scovill again turned to remodeling, redesigning 75,000 sq. ft. of space on 17 floors of existing buildings. This time, however, the job was expertly done.

The new offices present a pared-down, efficient appearance, saved from coldness by attractive color schemes and liberal use of glass, wood and leather. Particular attention was given to lighting problems in offices used for close, accurate work. Evestrain and monotony were also attacked by variations in corridor and stairway lighting such as cove and spots. Cold cathode was used most extensively, but incandescent provided the best solution in some special cases. Acoustical materials, used to a great extent on walls, ceilings and sometimes floors, effectively lowered reverberation in large, high-ceilinged areas.

J. GORDON CARR, Architect WILCOX & ERIKSON, Structural Engin PAUL WUNDERLICH, Mechanical En W. J. MEGIN CO., General Contractor

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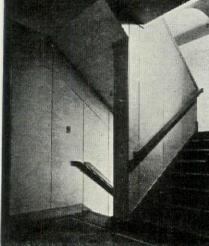
MAIN OFFICE is transformed from a gloomy Victorian interior into a light, open plan.



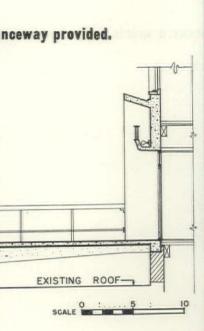
RECEPTION ROOM FINISH IS BLUE LEATHER WITH DARKER RUBBER FLOOR

Photos: Ezra Stoller



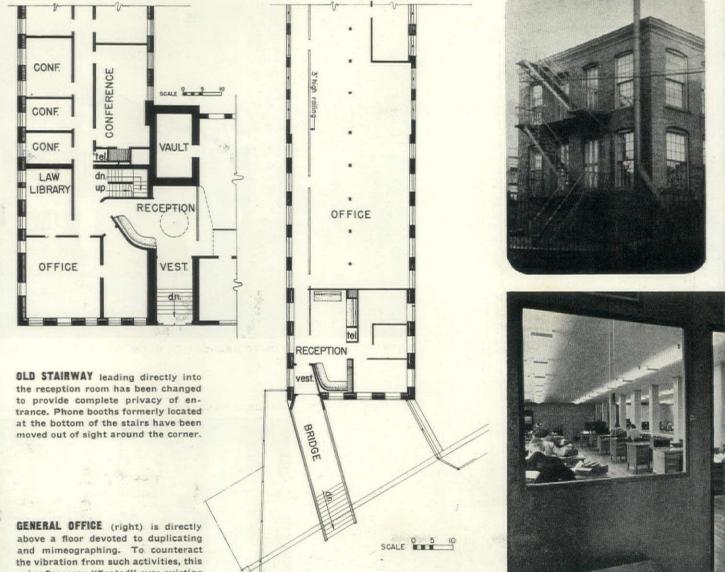


EXISTING STAIRWAY IS SIMPLIFIE





PURCHASING DEPARTMENT IS ENTERED FROM SPAN ACROSS NON-BEARING ROOF



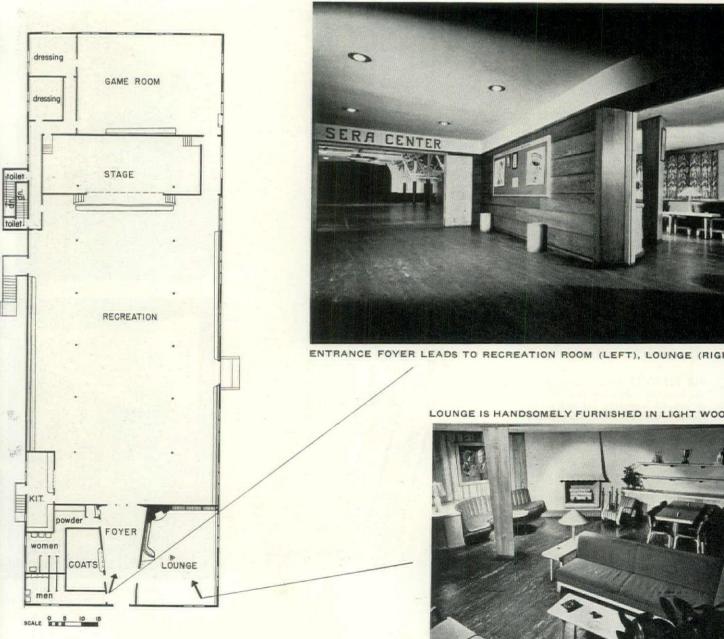
NEW INTERIOR OF OLD BUILDING

AMUSEMENT HALL built during World War I is transformed into a modern sports and relaxation c

This up-to-date recreation center is the result of cooperation between the Scovill Employe Recreation Association and the company's management. Remodeling costs, which amounted to \$4,000, were split between both groups with the Association providing another \$2,000 for special equipment. Use of the hall is free to all SERA members sixteen hours a day, but admittance is charged for public events such as boxing matches, basketball games and dances.

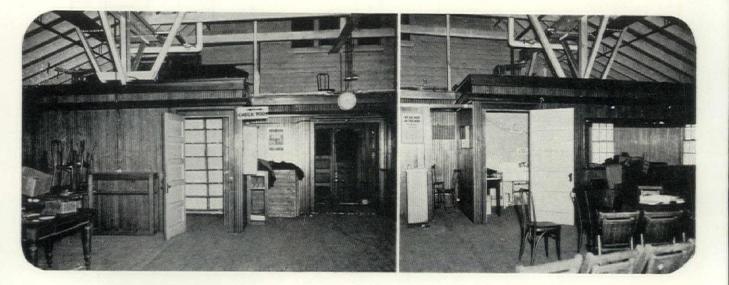
Main feature of the center is its large recreation hall, made over from the former gymnasium and providing space for a variety of large-scale activities. In addition to sports paraphernalia, an existing stage at the south end has been equipped with a movie projection screen, "disappearing" footlights and semi-concealed platform steps. Storage space is provided above the ceiling of this room and the foyer, allowing quick clearance of folding seats after a performance.

Although the greater part of remodeling was accomplished with paint and new floors, structural changes were required in the smaller lounge room. A fireplace with an interesting transite hood is now the focal point of its design. Furniture grouping divides the space for different activities—reading, games or conversation which can be carried on simultaneously. A men's room, clothes checking room, ticket office and women's lounge have also been included in the new plans and are conveniently located to the left of the main entrance.



Photos: Esra S

ing 10,000 employes of the Scovill Manufacturing Co.



SPRUCED-UP RECREATION ROOM EQUIPPED WITH NEW WALL SEATS IS USED FOR SPORTS, MOVIES, DANCING



G. E. DISPENSARY Victor Civkin's design separates

pre-employment examination from employe treatment.

GELLATLY CONSTRUCTION CO., General Contractor

To care for a wartime increase from 5,000 to 15,000 employes, the General Electric Company of Bridgeport, Conn. replaced its small in-building dispensary with this new, thoroughly-equipped medical wing. Rear and side entrances connect with existing work areas and with the employment office, affording separate access for employes and applicants. To a great extent the entire scheme is determined by this separate handling of patients. In the right section of the building, devoted to preemployment examinations, are grouped the X-ray rooms, laboratories, and doctor's offices. At the left, separated by a central corridor leading to the office areas, are employe treatment rooms for minor surgery, eye care, etc. The extreme front of the plan is thrown open into a general treatment room reached from either side and fianked by physio-therapy departments for men and women. A small vestibule provides street entrance directly into this central room, but its use is limited mainly to ambulance cases. A movable wooden railing on the stoop can be lowered, allowing beds to be wheeled smoothly off or onto the ambulance.



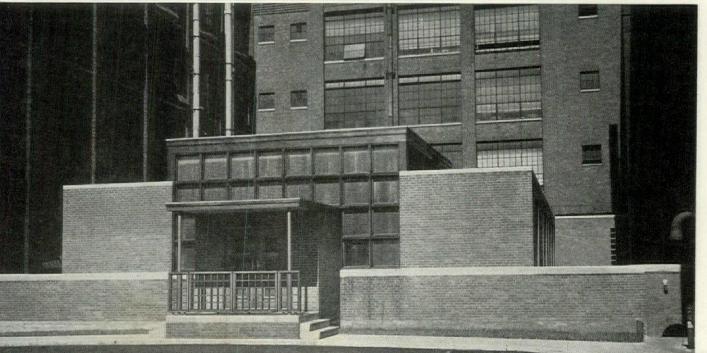
EMPL OFFIC

GLAZED WALL AT STREET ENTRANCE





FACADE CLEARLY REVEALS INTERIOR DIVISION: A GENERAL TREATMENT ROOM FLANKED BY SEPARATE WINGS



GENERAL TREATMENT ROOM VIEWED FROM VESTIBULE

37.SHOPPING CENTER

U-Shaped plan unites chain stores and specialty shops in a unified facade, encloses a generous parking area. LESTER JORGE, ERIC THORN. Architects ALFONS BACH. Designer

BUILDING PREVIEWS

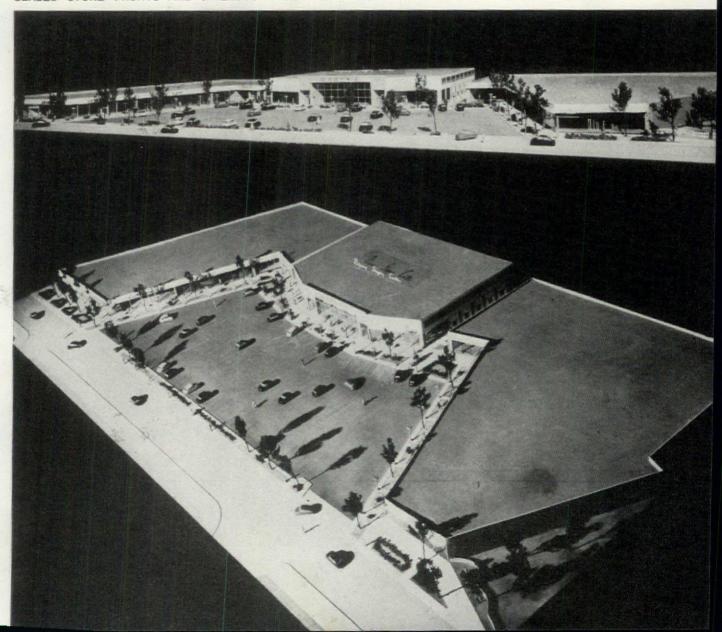


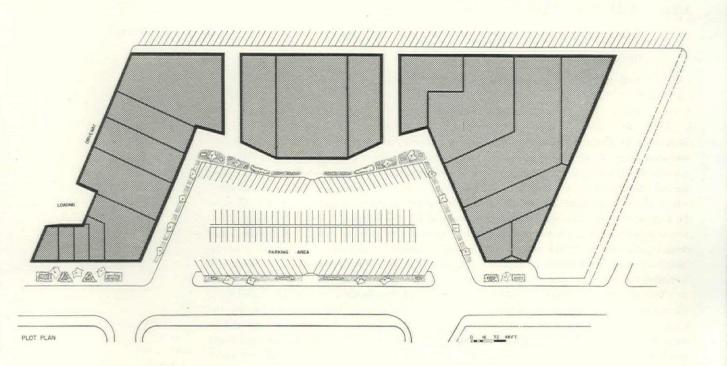
SHOPPING CENTER

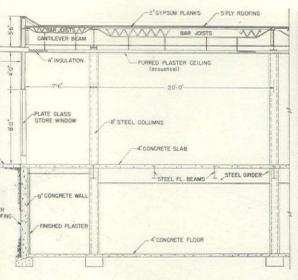
This plan for a shopping center was made after thorough investigation of the problems involved in integrating store placement and design. Original tricky solutions such as underground parking space and conveyor belt delivery systems were scotched as too complicated for a town the size of Stamford and because they would add immensely to construction costs. Instead, a simple plan involving the least change to existing street patterns was finally adopted.

The front parking lot, convenient to both street approach and store entrances and large enough for 150 cars, is supplemented by an 850-car parking space at rear. Two walkways cutting through the central shop section provide quick access from this rear lot and allow a continuous flow of traffic from both directions. The new project should prove a great relief to the present overcrowded center of Stamford which, in three square blocks, serves as a shopping district for 70,000 people, 85 per cent of whom own cars. The proposed site was carefully chosen in a central area north of the city proper where new housing and apartment developments are scheduled for erection. As yet no leases have been signed, but the stores have been designed to the specifications of the various clients represented.

GLAZED STORE FRONTS ARE SHIELDED FROM REFLECTIONS AND FROM BAD WEATHER BY A 6 FT. ROOF OVERHA





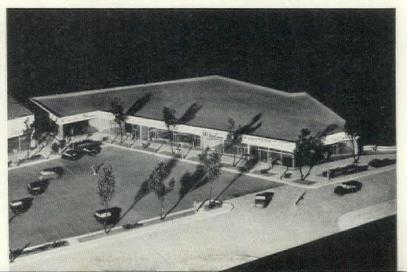




OVER-ALL PLANNING RESOLVES CONFLICTING FACADE TREATMENT

COLUMNS SET BEYOND GLASS LINE PERMIT DESIGN FLEXIBILITY

ALL SHOPS flanking the central section will be limited to one story, since studies show that second stories in Stamford shops cannot pay for the taxable entrance frontage required. An exception—the twostory central segment—will house professional offices on its upper floor. Although not yet designed, a nursery to care for children while parents shop will be included in the final plans. Unified temperature control throughout will be provided by a central oil heating system using diffused blown air.



38. VOCATIONAL SCHOOL

A thoroughly equipped trades laboratory will teach skills to farm children and returning veterans.

BOARD OF EDUCATION, WINFIELD, Owner

WM. N. CATON, Architect

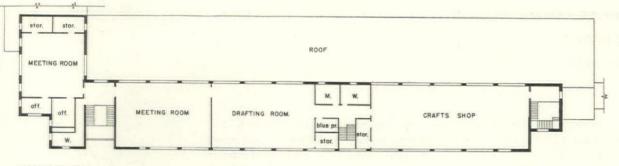
Because agriculture is the major source of livelihood near Winfield, Kan., the town's new vocational school will be devoted to the teaching of industries and crafts related to this occupation. Design of the school, therefore, places a logical emphasis on shop space, paring formal classrooms to a minimum. Shop activities also determine the extended, multiwing shape of the plan, since woodworking, welding, printing, machine and electrical work must be separated from each other to lessen noise and vibration transmission. The noisier areas are concentrated in a one-story section, while quieter activities are carried on in a two-story wing. Each shop is equipped with built-in storage space and in certain sections with mezzanine balconies. Both interior partitions and mezzanine floors are designed for easy removal so that shops may be adjusted to future needs.

One of the most interesting structural features of the design is its sensible handling of wiring and heating to eliminate the usual expensive basement. Radiant coils cast into the floor slab will be the entire source of heat in the general shop while other rooms will be equipped with a combination of warm floors and unit heaters. The building is raised above grade to allow easy access to utilities exposed under the slab. Electric wiring placed under the floor in a bus duct will allow future alterations in electrical equipment without costly changes in the system.

ITH

INFIELD





SECOND FLOOR

CLASS

CLASS

MACHINE SHOP

library

off.

off.

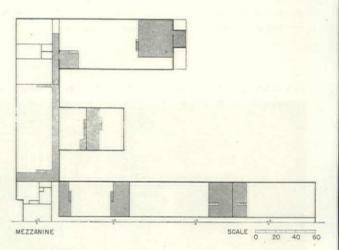
lockers

FOOD

boile

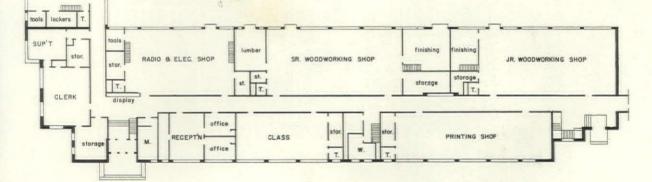
SCALE IN FEET

SECOND FLOOR extends over only one wing. Large meeting rooms placed at the corner can be easily reached from offices and shop sections.



MEZZANINE FLOORS above the first story shop sections provide extra off-floor space free from machinery and work-in-progress.

FIRST FLOOR includes most of the shop space plus reception and administrative areas which are concentrated about the main entrance.



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GENERAL SHOP

BUTCHER

39. SEWAGE DISPOSAL PLANT

Advanced theories combining treatment of garbage and sewage are applied to Port Huron's newest project.

CITY OF PORT HURON, Owner

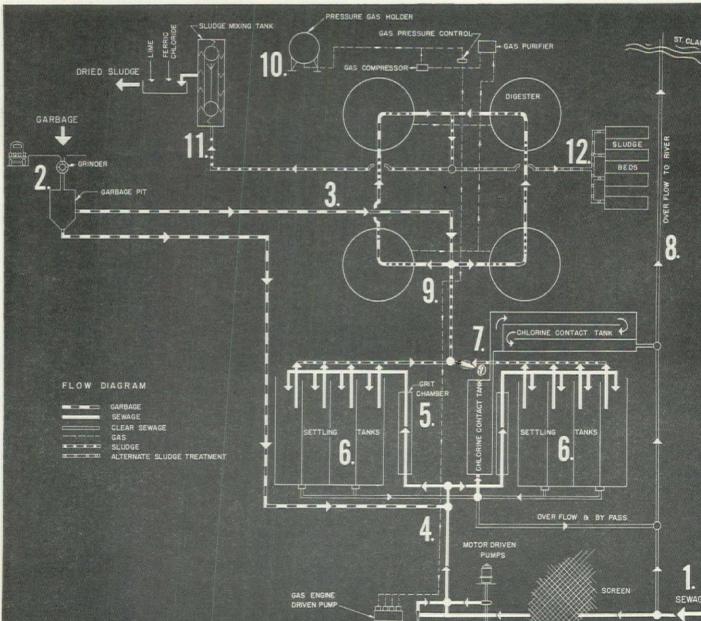
SHOECRAFT, DRURY & McNAMEE, Engineers

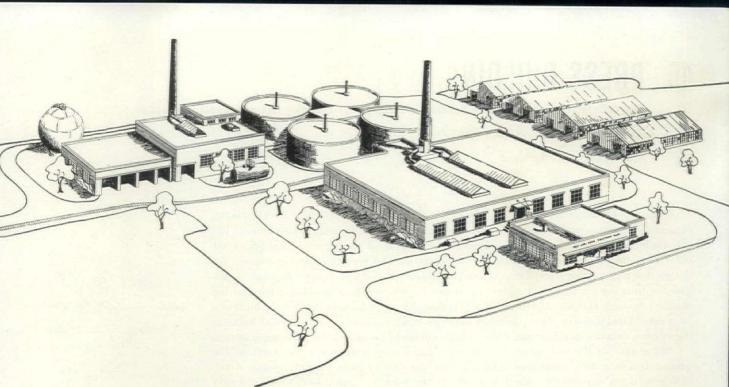
Although combination of garbage and sewage disposal into one operation is no new idea, few cities have yet put it into practice. In most instances garbage is still burned, and inadequately treated sewage dumped into our rivers. The plant shown here should be of interest to communities planning new waste disposal projects since it demonstrates the efficiency of a combined system. Methane gas, one of the most important by-products of such a process can be utilized for heating the buildings and for running the engines which drive the sewage pumps, thus affording great economy of plant operation. Another by-product—sludge—can be successfully used as fertilizer.

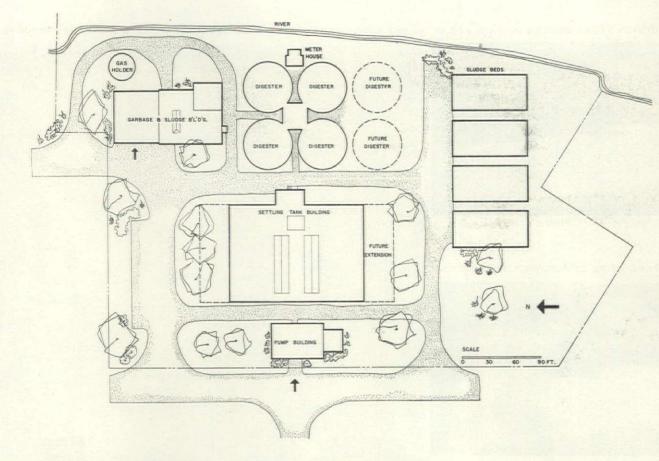
For most efficient functioning of the complicated treatment process, the plant has been designed as five separate buildings. Exterior finish of all structures is red brick with a limestone and concrete trim, while interiors are of glazed tile block. The grounds, extending for 600 ft. along the St. Clair River, are spacious enough to provide for any future expansion.











FLOW CHART (left) graphically illustrates the treatment process. Sewage is brought to the pump house 1. by intercepting sewers; screened of rags, bones, twigs, etc. and pumped to a high enough level to flow through the plant by gravity. Garbage, collected by a fleet of special trucks, is emptied into grinders 2. and thence into receiving tanks where water and air jets assist in the settling of solids. The liquid part of this mixture is pumped into digestors 3.; the more solid part is combined with the sewage 4. and permitted to run slowly through a grit chamber 5. and settling tanks 6. Here organic solids sink to the bottom as sludge. The relatively clear liquor on top flows into chlorination tanks 7. where it is purified for discharge into the river 8. The remaining sludge joins the first garbage mixture in the digestors 9. and is retained there for a six weeks period. This process produces the quantities of methane gas later stored in a spherical steel tank 10. The remaining sludge is dried in filters 11. or in sludge beds 12. when the regular filters are down for repairs.

40. PRESS BUILDING

The Philadelphia Inquirer's new building is designed for assembly line newspaper production.

TRIANGLE PUBLICATIONS, INC., Owner

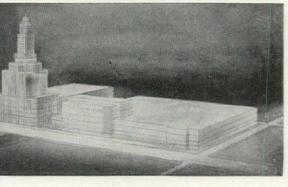
ALBERT KAHN, Architect

Although the *Philadelphia Inquirer* is already housed in its own towering office building, expanding peacetime needs have made necessary an addition to the existing structure. The new building will contain special production departments of the *Inquirer* plus offices for other Triangle publications. Since plans ready at the moment represent varying stages in the design development, they still show certain inconsistencies. Block studies illustrate a progression from the flat rotogravure plant (contracts for which will be awarded in the next few months) through various placements of a broadcasting and television tower to be built at a later date. Final decision placed the tower at the north wing, a design solution which balances the existing *Inquirer* building and allows a high-windowed facade for the press room section.

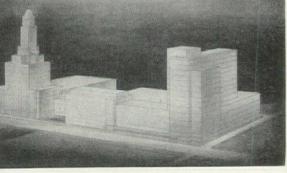
As a site for the new structure, two city blocks were acquired to the north of the present building, and permission obtained from the city to close the intervening street, thus creating a superblock. Another parcel to the west was purchased for a company garage to house the fleet of delivery trucks as well as employe cars.



1ST DESIGN STAGE BLOCKS IN MAIN AREAS CLOSE-UP OF SOUTH WING REVEALS HIGH WINDOWS IN PRESS ROOM SEC

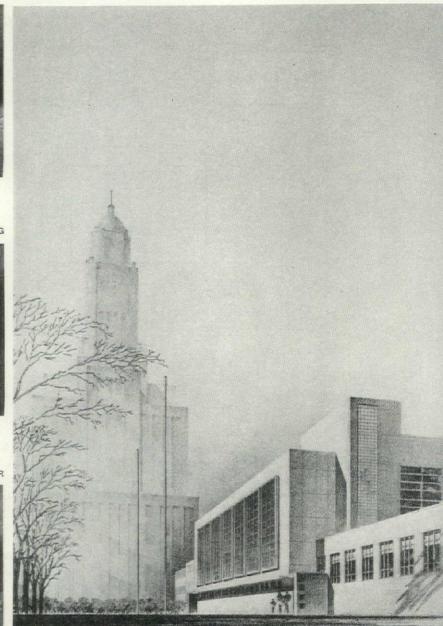


2ND STAGE ADDS END TOWER TO BUILDING



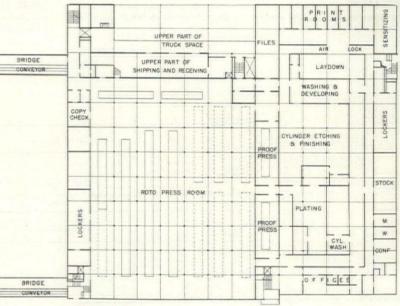
3RD STAGE SHIFTS TOWER TO THE CENTER





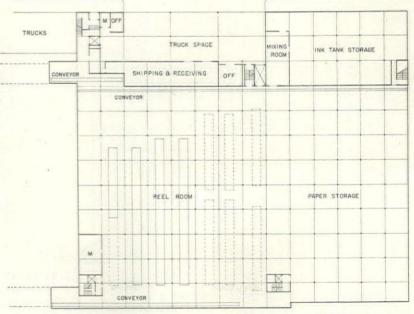


OPED STUDY OF FIRST SCHEME DOES NOT INCLUDE ADDITIONAL STORIES TO BE BUILT ABOVE CENTRAL SECTION



PRESS ROOM on the second floor of the threestory south wing is easily reached by a bridge from the old building. A production department containing facilities for developing, etching, plating and proof pulling occupies an adjacent area in the same wing. Shipping and receiving section at rear connects with an open space for delivery truck pick-ups.

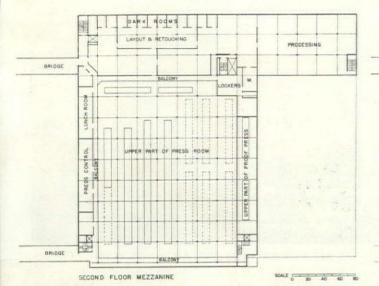
SECOND FLOOR

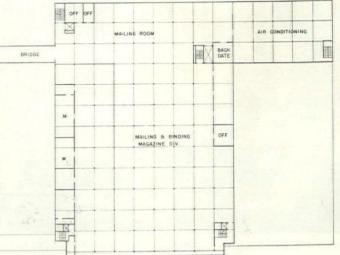


REEL ROOM follows the same general layout as the press section directly above it. Adjacent paper storage allows convenient loading of reels which are then relayed to the press department on a conveyor belt. Ink, stored on this floor, can also be transported to the press room in great quantity by such a system of conveyors.

FIRST FLOOR

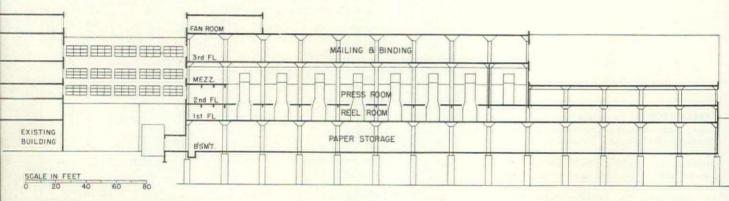
PRESS BUILDING.



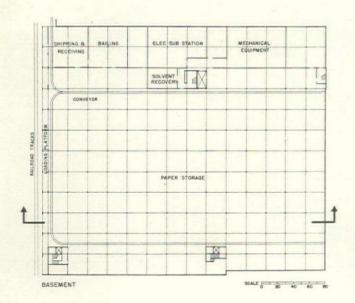


THIRD FLOOR

MEZZANINE of press room provides off-floor areas for dark-rooms, layout, retouching and processing departments. A lunch room is also included on a balcony at the south wall. THIRD FLOOR is devoted to mailing and binding with a large space for packaging and a smaller area for handling out-going newspapers. Air conditioning equipment is located here.



SECTION of south wing shows press and reel rooms sandwiched between basement storage space and the mail rooms above. Bridge between old and new buildings connects at three levels.



STOR CARPENTER S	HOP	MACHINE SHOP	ELEC. SHOP
811	OFF		

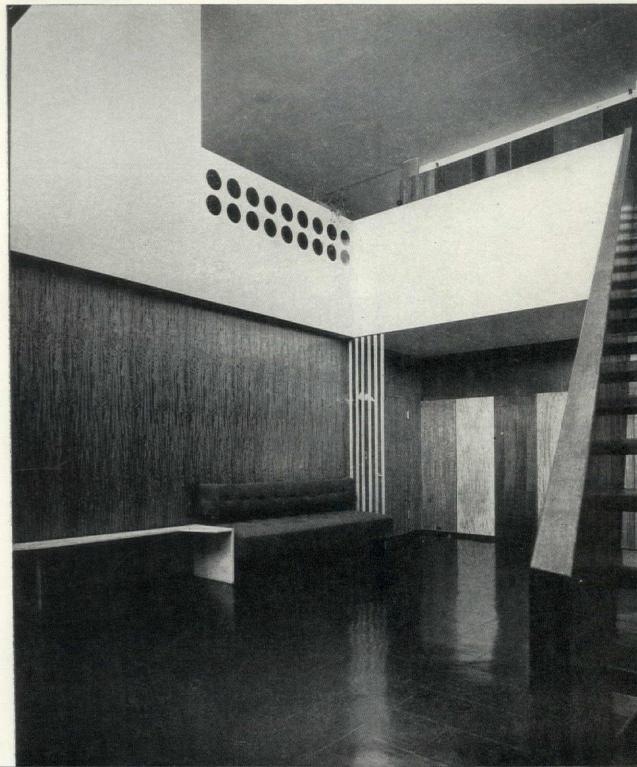
BASEMENT MEZZANINE

BASEMENT provides additional storage space for newsprint and is equipped with conveyor belts to move the heavy rolls. Mechanical apparatus necessary for building maintenance occupies a segment of the space and a mezzanine above this section houses carpenter, machine and electrical shops.



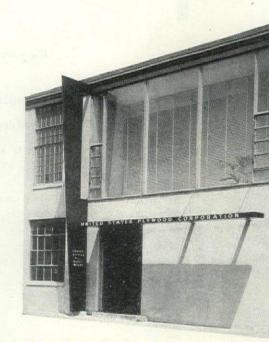
- 1. Regional sales and display for a plywood manufacturer,
 - Samuel Glaser and L. L. Rado, Associated Architects
- 2. Executive offices for a movie producer, Carson and Lundin, Architects
- 3. Conference rooms for an advertising agency, Donald Deskey, Designer
- 4. Main offices for an advertising agency, William Lescaze, Architect

ARCHITECTS GLASER AND RADO USE CLIENT'S PLYWOOD TO GOOD ADVANTAGE IN THIS LOBBY

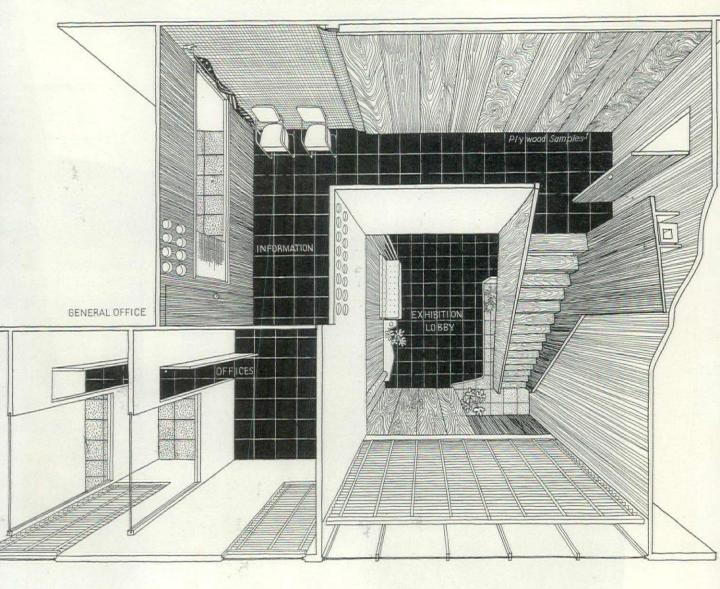


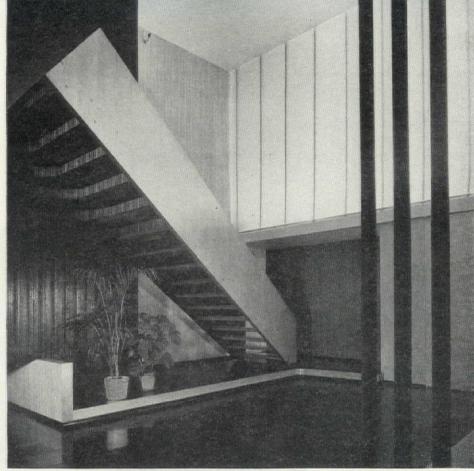
Architects Samuel Glaser and L. L. Rado combine display and reception in effective lobby.

A project which was small and which-under wartime conditions-could have easily been routine, emerges with real distinction in this remodeled office for the U.S. Plywood Corporation at Somerville, Mass. The new portion occupies a two story bay in an existing building. It was the architects' assignment to develop this area into a lobby which would provide pleasant access to the existing offices on the second story; to make the lobby itself the best possible display for the company's products; and to redesign this portion of the street front. All three have been accomplished simply and effectively. By removing the second floor of the bay in question and installing a huge, lobby-wide transom along the street, the architects have created a handsome and welllighted display area. Moreover, although a wide variety of products and applications are on show, they are so integral a part of the design as to yield no appearance of confusion. The stair to the mezzanine is both a decorative feature and a demonstration of the structural potentials of plywood. Major artificial light for the lobby comes from a bank of reflectors in the deep reveal of the transom, behind the venetian blind. The street front, with its weatherproof plywood fin, is itself a direct expression of the design within.



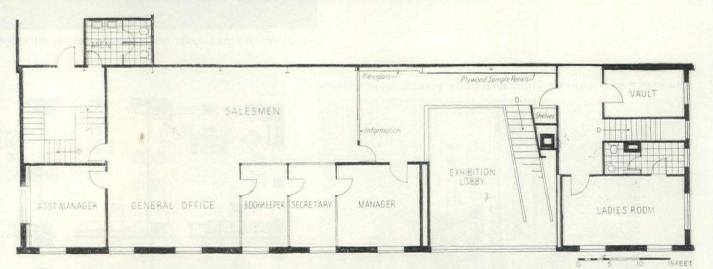
Photos: Cushing-Gellatly



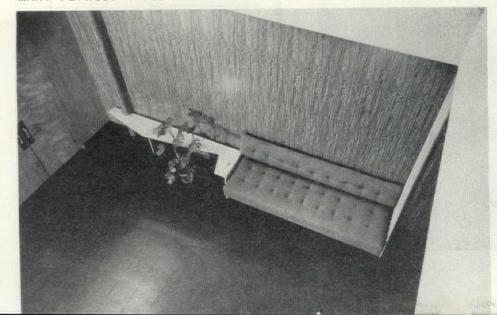


FREE STAIR DEMONSTRATES COMBINATION PLYWOOD HANDRAIL AND STRINGER

+



MANY PLYWOOD TYPES AND INSTALLATIONS ARE UNOBTRUSIVELY SHOWN



- A

Dramatic color marks New York offices for a movie magnate. Carson and Lundin, Architects.

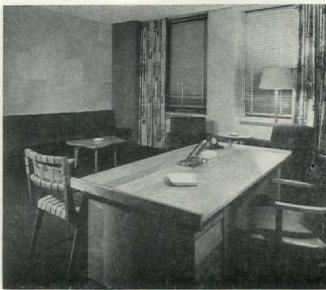
In designing the New York offices of Samuel Goldwyn, the architects faced a characteristic wartime problem: to get the job done as effectively, rapidly and economically as possible. "To accomplish this," they say, "we relied heavily on color for richness. We used stock furniture wherever possible, with good fabrics and leathers. We supplemented this where necessary with specially designed pieces. The offices are generally lighted with custom-built table and floor lamps, with a recessed lens unit built in over each desk. Beamed ceilings and awkward column breaks were furred out for a clean background." Typical of the architects' special furniture are the long built-in couches. Here cost was reduced by using a standard seating unit assembled on a built-in wooden cradle. Cleaning, repair and shifting of units for even wear is also simplified by this design.

The owners are well pleased with their new offices: after several months of use, they find them "correct in character. comfortable and extremely pleasant to work in-their attractiveness increasing all the time."

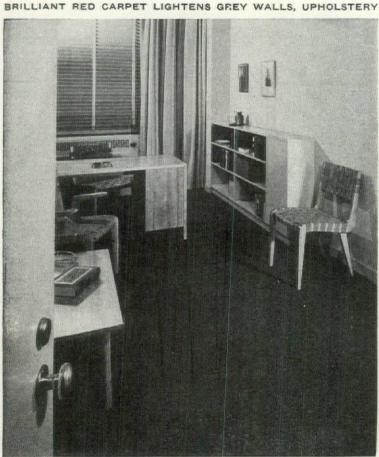
FINISHES AND EQUIPMENT: FLOOR COVERINGS-Incleum; Armstrong Cork Co.; carpets-L. C. Chase & Co., Inc. FURNI-TURE-stock-Hans Knoll Associates; special-Theodore Yonkler. FABRICS-Dan Cooper. LAMPS-Edward F. Caldwell & Son.

E. S. McCANN, General Contractors

Photos: Ben Schnall



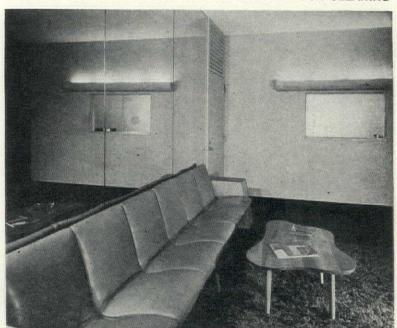
PRIVATE OFFICES USE GREY, RED, BEIGE, CHARTRE



SECY WAITING



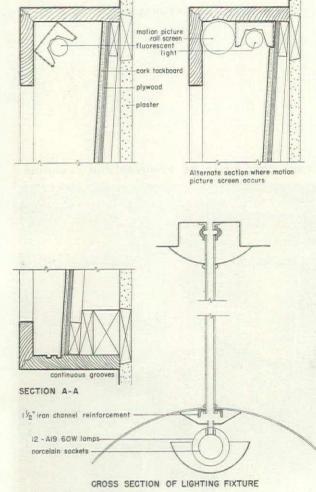
RECEPTION ROOM HAS A DEEP GREEN FLOOR, LIGHT GREY WALLS, TAN LEATHER AND NATURAL BIRCH WOODWORK.





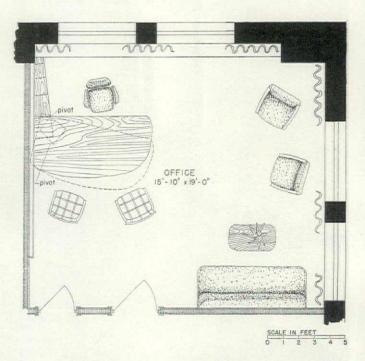
3. Remodeled offices yield pleasant and flexible conference areas. Donald Deskey, Designer.

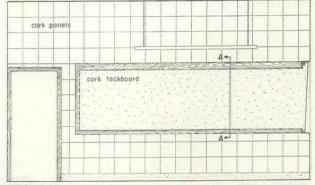
A medium sized New York advertising firm, the Grey Advertising Agency, decided to redesign the conference room and president's office in their suite in a Manhattan skyscraper. Since space was thus sharply limited, the designer's task was confined to a non-structural reorganization of three limited areas-two of which are shown here. Both conference room and president's office had to provide a pleasant appearance, flexibility for handling groups of people and efficient furniture and equipment. In the conference room these requirements led to a specially-designed table, to special lighting for both room and bulletin boards, and to a motion picture screen. Two walls are surfaced in cork tile, lacquered and waxed. Together with draperies and a carpeted floor, this offers adequate absorptive area for radio, phonograph and movie equipment, all of which are housed in cabinets along rear wall. For smaller conferences, the president's office provides adequate space, seating and display area. Here, too, such furniture as the desk is movable. Natural oak wookwork and furniture and textured fabrics give dignity to both rooms.



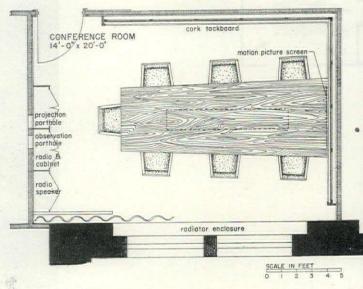
SCALE IN INCHES

ATWELL ASSOCIATES, General Contractor





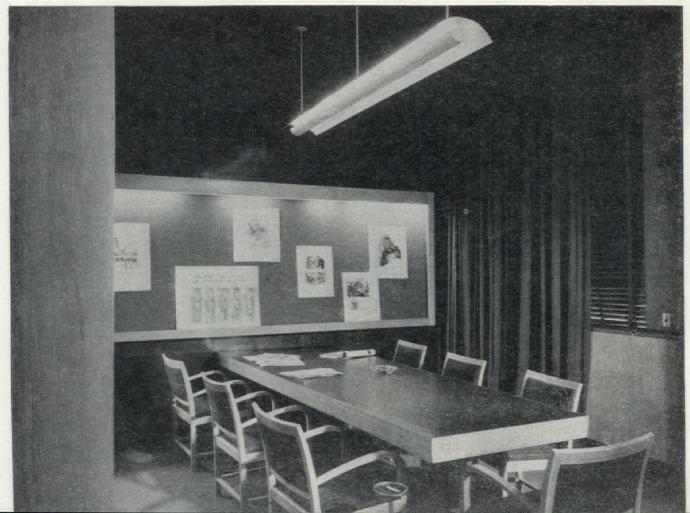
ELEVATION



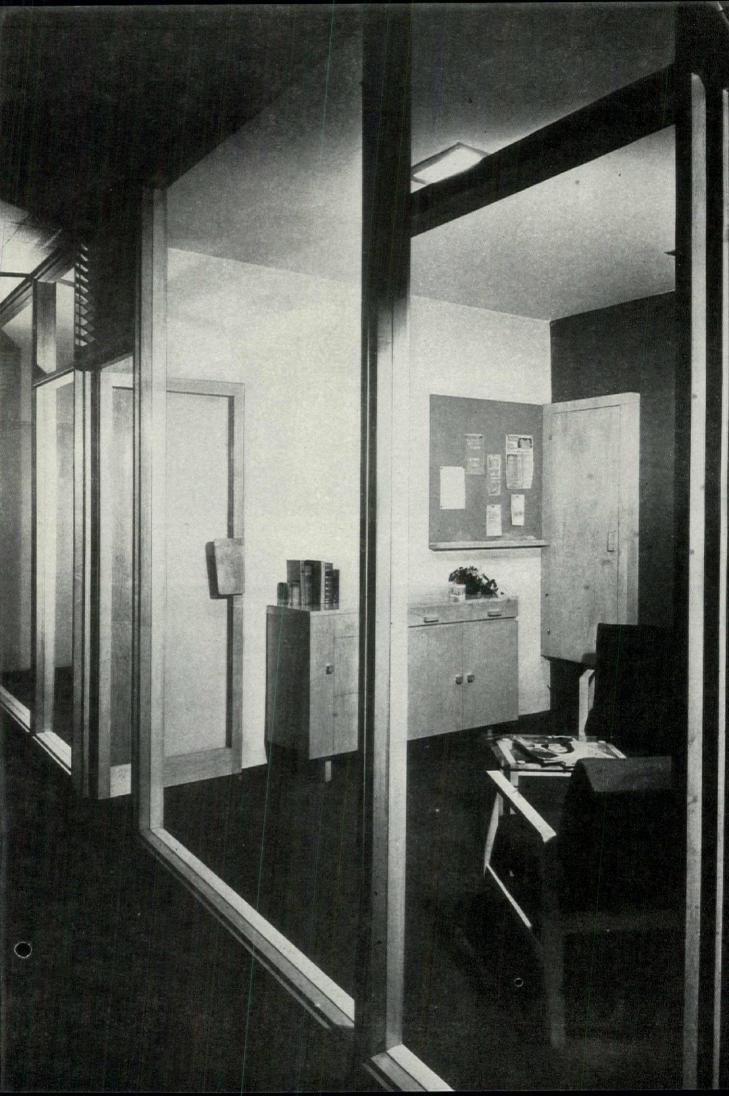
Photos: Ezra Stolle



OFFICE DESK ON ROLLERS CAN BE EASILY PIVOTED TO PERMIT USE AS CONFERENCE TABLE WHEN NEEDED



CONFERENCE ROOM DISPLAY BOARD HAS BUILT-IN LIGHT COVE ALSO HOUSING ROLL-UP MOVIE SCREEN



Lo Some redesigned interiors add sparkle to J. Walter Thompson Company's home office.

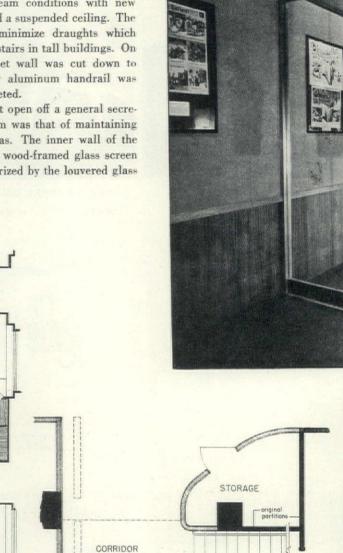
WILLIAM LESCAZE, Architect

EASTERN OFFICES, INC., General Contractor

These interiors for one of the nation's largest advertising agencies, although done at one time and in the same building, are scattered over two floors of a large New York office building. Shown here are a private lobby (right) and a bank of three small offices (left) on the tenth floor. Three private offices on the floor above are shown on the following page.

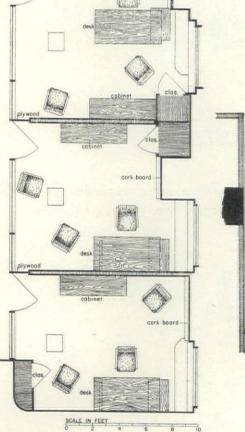
To give the lobby cohesion and unity, the architect has screened irregular column and beam conditions with new plaster and wood-surfaced walls and a suspended ceiling. The glass partition was installed to minimize draughts which result from the flue action of open stairs in tall buildings. On the stair itself, an existing parapet wall was cut down to stringer height; atop this, a new aluminum handrail was installed. The entire area was carpeted.

The three small offices at the left open off a general secretarial area. Here the main problem was that of maintaining borrowed light in these inside areas. The inner wall of the three offices was thus made into a wood-framed glass screen whose precise detailing is characterized by the louvered glass transoms over each door.





DECEPTIVELY SIMPLE, THE REMODELED LOBBY ACTUALLY IN-CLUDES A NUMBER OF FINE DETAILS: TYPICAL IS ITS STAIR



Photos: Ben Schnall

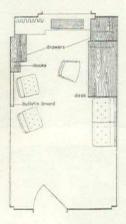
Three redesigned offices for an advertising agency. William Lescaze, Architect.

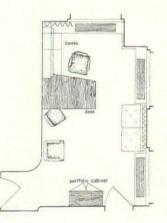




FURNITURE IS ARCHITECT-DESIGNED EXCEPT FOR CHAIRS: DESK AND SOFA ARE BUILT IN

DESK IS BROKEN DOWN INTO COMPONENT ELE-MENTS. NOTE TYPEWRITER AT LOWER LEVEL





BUILT-IN U-SHAPED UNIT INCLUDES ALL EQUIPMENT NEEDED BY EXECUTIVE AND AIDE





LETTER FROM BRITAIN

Dorothy Rosenman reports on how the British are preparing to attack their two big building problems-houses-in-a-hurry and planned use of land.

In mid-October, Minister of Health Aneurin Bevan made it clear that the British government intends to place the country's limited supply of labor and materials at the disposal of local authorities who will 1) build low-rent housing and 2) license private builders to supply for-sale and for-rent housing within prescribed cost limits. While the new Labor government was making up its mind about this course of action, Mrs. Dorothy Rosenman, chairman of the National Committee on Housing, was getting a close-up view of the British scene, accompanied by real estate dealer Adams Ashforth, construction engineer

INTEGRATED PLANNING

I have seen so much patchwork planning in the United States that I have been somewhat startled by the bold conception of the British planners. As of this date, there is no city in the United States which has a comprehensive plan for the redevelopment of its built-upon areas and a dovetailing plan for the redevelopment of the small towns around it and for the development of the open spaces about it. There is no American city which has, like London or Manchester, analyzed its prospective living, work and recreational requirements, their relationship to each other and to the surrounding area.

The British are confronting the probabilities of their future. They have set standards for the development and redevelopment of their land. They have enacted laws which give them the power to acquire land for these purposes, to relocate industry and to exercise architectural control. They have ambitious plans which consider individual areas in their relation to the whole of Great Britain, in their relation to the region about them, and in relation to the factors of which they themselves are composed.

London is concerned with the migration of workers from Scotland, Wales and the North of England. It is satisfied that some industry should be dispersed from London to areas of low pre-war prosperity if workers are persuaded to stay in those regions. They point out that it is futile to move industry out of London if workers from other parts continue to pour into it.

A plan is being formulated for the development of the whole Clyde Valley. The future of Glasgow, Clydebank, Gurock and Grenock is interwoven with the future of the agricultural area, the power facilities, the mining prospects and the transportation facilities in the environs. Therefore each area of interest is being studied in its relationship to the welfare of the whole valley.

Low London densities. Up to the present time decentralization has been as haphazard in Britain as it has been in the United States. Their presently contemplated plans, however, provide for a reshuffling of population with a neatness that is intriguing. Webster Todd (both directors of the National Committee). and by the Committee's executive vice-chairman Henry Propper. Mrs. Rosenman's summary of the British approach to rehousing and replanning was prepared just before Bevan's first statement of official housing policy. Her report helps to explain why Britain has decided that only direct government action can meet its housing emergency. It also supplies a comprehensive picture of the background of planning from which the British will draw solutions for their long-range building problems.

For instance, the Greater London Plan envisions four rings. each with a lessening degree of urbanization. The population of the Inner Urban Ring will be siphoned out until the net residential density does not exceed 100 or 75 persons per acre. In the Suburban Ring, density will be limited to 50 persons per acre.

The third or Green Belt Ring is intended to provide recreation and agricultural space to care for the wants of the Inner and Suburban Rings. It is also a barrier to their growth. They simply cannot expand into it. In the existing towns within this area the net density per acre would be restricted to 20 persons.

The Outer Country Ring would be the main reception center for the decentralized population of the Inner Urban Ring and the Suburban Ring. Existing towns will be developed and new towns will spring forth in an agricultural setting.

I cannot help but think that the actual process of moving real people hither and yon will present more real difficulties than is conjectured, and I'm glad to note that the plannershave not overlooked the fact that people cling to their own neighborhoods. They love to see the customary faces and to shop in the stores where they have dealt for years. For that reason, it is suggested that several housing authorities in the East London area might combine to create a new East or West Ham or Leyton in the Outer County Ring, transferring the members of their old communities to the new.

Retroactive zoning. I have particular admiration for the forthrightness with which the British plan to attack present non-conforming uses. In the United States, zoning has been effectively used when new neighborhoods were created and to arrest the construction of undesirable additions to an existing neighborhood. Nothing has ever been done to require the demolition of existing structures which do not conform to the present requirements of the neighborhood. Britain plans to move industry out of neighborhoods where it is considered inappropriate.

It plans to move business and industry so that they do not interfere with existing residential areas and so that they move outward in pace with the outward movement of workers from

LETTER FROM BRITAIN

crowded central areas to suburban "dormitory" towns. It has the power through its Distribution of Industry Act 1945 to relocate industry to bring employment to sections of the country where pre-war employment was on the wane. Therefore some industries may be moved from one section of the country to another.

If the Greater London Plan is consummated it will ban all new industry and will permit only minor extensions of existing industry within Greater London. Somehow or other, I just cannot see our Chambers of Commerce faced with proposals to curtail the extension of industry in any given city!

Incentives for industrial location. Birmingham has hundreds of small industrial establishments, each of which employs less than 20 people. Left to themselves, these industrial establishments cannot rebuild in the designated industrial areas. Therefore the municipality is mulling over the thought of building super industrial buildings and renting space to the small industries. This, in fact, would be an adaptation of the public market idea.

Birmingham did erect buildings to rent to industry just before the war. They built adjacent to a public housing project ("a council estate"). They built adjacent to the estate 40 as to develop architectural relief for it.

Liverpool and Manchester have developed industry in the neighborhood of the satellite communities of Speke and Wythenshawe. The purpose here is to develop a rounded community where employment is near to the home. In Wythenshawe the site is leased to the industrial concern and they build their own factory. There are more applications for industrial sites than the postwar expanded Wythenshawe can accommodate.

Coventry's plan has been approved by the city council and awaits the final step—approval by the Ministries. At first I was a bit flabbergasted to see that the models called for a city with modern architecture. I thought that the "charm" of the old city should be perpetuated. But after some thought, I decided that if I were a citizen of Coventry that I might want to live in the present and in the future instead of in the past.

EXPERIMENTAL BOOM

There is an experimental house up the sleeve wherever you go in England.

At all levels of government and among builders there is curiosity and willingness to try new materials and new methods of construction in order to create desperately needed homes at a time when skilled manpower is lacking. There is also a desire to create a home with more "fitments" (fittings) and better room arrangement. (The American GI has done his part in creating a desire among the British public for better home equipment. He has talked much of what we have back home and the American magazines have filled in any gaps that he may have left.) Experimentation with steel, with foam slag, with aluminum, with concrete, is gaited toward one objective: to build houses with unskilled building labor because the traditional skilled housebuilding labor is not yet available. Building labor-not materials-is considered to be the very crux of the building problem. The vast majority of pre-war British homes were built of brick. There is plenty of brick available but there is no sizable number of trained

brick layers or plasterers. For this reason Britain is concentrating upon the use of substitute materials which requires a different kind of handling. To date, most of these substitutes do not promise less expensive construction. They merely promise construction.

Substitutes will not stay. With all of the energy and interest being used in the pursuit of new construction practices, one would suppose that there was great expectation of prolonged use of these methods. That is not true. With the exception of the Atholl steel house at Glasgow, the substitutions were looked upon as expediencies. That is largely because most of them are not expected to cut costs. And the Britisher likes his brick.

The Atholl steel homes at Knightswood in Glasgow are not new. They emerged after the last war. We saw an "estate" (used instead of our less picturesque word "project") of them and were impressed by their pleasant architecture and by the reports of their low maintenance costs.

The Atholl house is entirely supported by steel framing and is "contained in steel cladding." The system used in the construction of the steel cladding is similar to that used in shipbuilding. Because the main structural parts can be quickly assembled from factory prepared parts and because it is a dry construction process, steel construction promises speed. England is hell-bent for housing speed.

Foam slag is cheaper. Great interest centers around foam slag, made from the expanded scum from the steel blast furnaces. It is being used in many different ways. At Pemelee in Glasgow there are experimental houses of large light-weight precast load-bearing foam slag slabs, poured in a factory built by the municipality to manufacture enough slabs to build 2,000 homes a year. There will be no transportation problem, no problem of distribution or of sale of output. The entire production capacity will be used right at home.

The slabs are the height of one story. One type is cast into a corner-piece; others are moulded to take care of door and window openings. They are erected with the help of a mobile crane.

They reckon that this process is at least one-third quicker than brick houses. This is one of the few cases where cost estimates are lower than traditional construction. At Clydebank houses of foam slag blocks were under construction. Constructors are of the opinion that foam slag blocks could be made available at reasonable prices within a 50 mile radius of steel works. Foam slag seems to be a popular material and corresponds to our cinder block in many ways.

Back to brick. The British Ministry of Works has erected approximately fifteen experimental houses at Northholt, a suburb of London (see page 172, also FORUM May '45). They expect to add to this number as new types of construction are developed in various parts of the United Kingdom.

There are three general types of houses: (1) steel frame houses, with concrete cladding, brick cladding or steel cladding; (2) poured concrete houses. Some of these are sitepoured and others precast. The aggregate is foam slag or expanded clay; (3) the standard 11 in. brick wall.

It is interesting to note that in instances where steel frame houses have steel exterior (Continued on page 130)

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In the bathroom, the medicine cabinet, lined with PLEXIGLAS shelves, has red PLEXIGLAS flap at top, marked "poison." Washbasin and towel bar are PLEXIGLAS, too, as is the illuminated wall clock. Clear PLEXIGLAS handles on faucets are indelibly marked hot and cold with dots of color.



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WITH PLEXIGLAS, LUMINOUS MURALS and radiant walls, producing original and dramatic effects, are readily fashioned. These applications are made possible by "lightpiping," a phenomenon which occurs when a sheet of PLEXIGLAS is lighted at one edge. The light is transmitted to the other edge, escaping *only* at engraved, painted or sanded surfaces. Three-dimensional effects are

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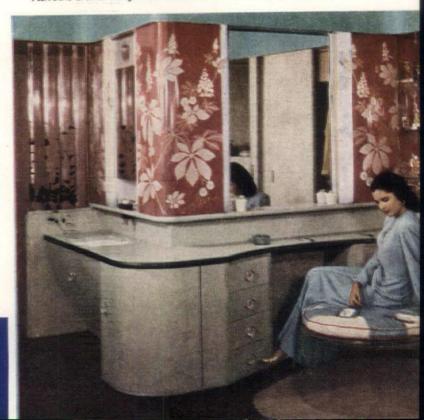
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Engraved, edge-lighted PLEXIGLAS shower stall has four spray bands, separately controlled by PLEXIGLAS knobs, duplicated inside shower. Scales set in floor register weight on eye-level PLEXIGLAS panel. Screen of PLEXIGLAS prisms (right) provides privacy for toilet compartment, yet admits ample light.

The "Dream Suite" boudoir features radiant walls of PLEXIGLAS attractively etched and "painted" in light, and a luxurious, upholstered PLEXIGLAS bench. PLEXIGLAS trays and shelves in swing-out door of dressing table, and snag-proof PLEXIGLAS drawer linings have rounded corners for easy cleaning.



New space-saving Laytex Wires and Cables are now available for branch circuit wiring.

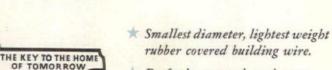
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-It satisfies him in all respects with a detail that might otherwise be a later source of trouble and complaint.

-Above all, it confirms his confidence in you and your reputation.

The McKinney catalog offers a wide choice of authentic period styles in forged iron hardware for easy selection. Check your 27B File. If you do not have a McKinney Catalog No. 8, write for a copy.



LETTER FROM BRITAIN

(Continued from page 128)

cladding, provision is made for future removal of steel cladding and substitution of the conventional 4 in. brick wall.

Prefabricated stone. An experiment of very great interest is being conducted at Glasgow. I am particularly keen about it because it seeks to solve an economic and industrial problem vital to the area. This problem belongs to private industry but the government is aiding in its solution.

Until recent years Scottish construction was of native stone. But, because of cost, the stone industry has been dying. The Glasgow Housing Council in an attempt to revivify that industry is aiding the quarry owners to experiment with "prefabricated stone." The stone is quarried by machinery. Any sized stone may be used. It is marked into even-sized units with fake joints. At this writing the finished cost has not been determined, so it is not possible to say whether the Scottish stone industry can be utilized for popularly priced 20th Century homes. But the attempt is a valiant one.

CITY NEIGHBORHOODS

Folks had said that we would not be depressed by the effects of bombing in the center of London because so much of the debris had been cleared. In spite of this the fourteen days we spent in London (divided between the first and last week of our stay) were punctuated by exclamations wherever we went. By our reckoning, at least every second block in the heart of London suffered some severe damage. Whole areas in the East End around St. Paul's were completely flattened.

I spent several hours in Stepney, one of the vast slum areas adjacent to the docks. According to the information given me, two-thirds of the houses are no longer livable. Of a normal 280,000 population there are now 100,000 living with as many as six families to a flat. I was fortunate in having a native of the district take me about—a most unusual little man not more than four feet tall, Mickey Davis, who had been the leader of the people of that area during the blitz. He lives in a converted loft building, across the street from a large warehouse, the basement of which was used as the bomb refuge for the immediate neighborhood night after night.

Everybody for dispersal. Wherever we went in England we asked about financial schemes for redeveloping central city areas so that they will contain a diversity of income levels. Builder, finance institutions (building societies), layman, local or national government, official of Conservative, Liberal or Labor party-each gave the same answer. The Council must build whatever housing is to go in the old central areas, first, because land is too expensive for private enterprise and second, because people of moderate means and of greater means want to live out of the city. In all but London it is relatively simple to live where green abounds and to get into the city with rapidity. When the urban street and transportation systems are modernized, it will be even simpler. The endless stretches of ribbon-like developments which surround London did not seem to disturb the members of the London County Council. In Manchester, Coventry and Liverpool officials, builders and laymen accepted the dispersion as normal and not to be stemmed.

Whenever we talked of the social effect of redeveloping whole neighborhoods just for one level of income, or the effect upon city finances of continuing to siphon out of the city wellto-do families paying greater taxes, (Continued on page 132)

THINK IN TERMS OF

STRAN STEEL

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That framework of Stran-Steel, with its nailable studs and joists, sets any house apart from others of comparable design. For it imparts an inner value . . . permanence, firesafety, freedom from warp, sag and rot . . . that safeguards the housing investment and enhances the builder's reputation.

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Overseas Customers: Our export department will be glad to supply full information, samples and quotation on request.



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LETTER FROM BRITAIN

(Continued from page 130)

we were told that our concern was valid. But the overwhelming concern is for rehousing those families who were overcrowded and living in substandard homes before the war and for those families whose homes have been destroyed during the war. This need is so great that it dwarfs thinking about collateral problems. It is assumed that the housing committees of the Local Councils will take care of that need for the working classes by building both upon reclaimed slum land and on peripheral land and that private builders will develop land at the edges of the city and beyond the city limits. Government financing and government subsidy for "the working classes" is an undisputed policy of Conservative, Liberal and Labor parties and it is a policy accepted without question by the private builders and by the financial institutions. There is absolutely no question of rivalry between the two except in the few cases where the Council builds by direct lal Here the private builder objects strenuously.

In Edinburgh this point of view was expressed forcil the head of one of the largest building societies (b and loan associations). He said "building societies nave repeatedly stated that they welcome corporation houses (public housing) because when you bring a slum dweller into another house out of a slum clearance area we have a prospective customer for a private enterprise house—an owneroccupier".

Laski's plan. Mickey Davis was one of the few individuals that I talked with who was actually pricked with concern about this probable stratification of income levels into frozen community patterns. According to him London slum areas are similar to ours in that people of diversified incomes live in them. He said that 15 per cent of the people in Stepney are in the tailoring trades and they earn enough to warrant paying an economic rent. Others working in the great food markets and on the docks in the better paid jobs want to live near their work and could afford to pay the price of private enterprise housing if private enterprise could build in Stepney.

Another person who was very sympathetic to my concern about stratification was Harold Laski. I gave him the example of Clydebank, the great ship building center just outside of Glasgow in Scotland which expected to rebuild all of the houses within its borders through the Housing Committee of the Council. Only members of the "working class" would be expected to live in Clydebank. Laski's answer is to seek a means of dispersing the working classes into the dormitory towns around Clydebank and leaving Clydebank as an industrial center. He thought that the cost of transportation was the nub of the problem, and that if transportation could be attained at a price, the workers could find their place in communities now used by "black coated" incomes (equivalent of our white collar groups) and by higher incomes.

We saw two developments—Speke in Liverpool and Wythenshawe in Manchester—which were laid out to include both publicly and privately financed homes. They have been built on raw land at the periphery of the cities and the land has been incorporated in the city. Both developments are of particular interest not only because they combine public and private housing endeavor and thus provide for families of diversified income but because they also provide for factory, commercial and community sites. They are really satellite suburbs.

In this cut-away closeup of a typical Silbraz joint you see how SIL-FOS penetrates throughout the joint area. . . Exceptional fluidity of this alloy does it.

BRONZE

OPPER

In this photomicrograph of a typical SIL-FOS joint between copper and bronze you see

the diffusion of the alloy into metal sur-

HANDY & HARMA

faces. Result - one-piece strength.

* Patented Reg. U. S. Pat. Off.

Silbraz* JOINTS have one-piece strength High strength is one of the big reasons for the outstanding success of the Silbraz joint-the threadless method of joining copper and brass pipe or tubing systems.

> And what accounts for this high strength? It's the low-temperature silver brazing alloy that makes the joints - SIL-FOS - known and used throughout industry for its strength, speed and reliability in joining non-ferrous metals. SIL-FOS rings are incorporated in the bores of fittings, flanges and valves used in making Silbraz joints.

> SIL-FOS makes strong joints mainly because of its exceptional fluidity under heat. When fittings are assembled in place and heated, it is this exceptional fluidity that permits the alloy to flow rapidly throughout the joint area. The instant the low flow point of SIL-FOS is reached (1300°F) the alloy penetrates in all directions and diffuses into metal surfaces.

> This ability of SIL-FOS to penetrate rapidly and thoroughly and alloy with metal surfaces is the reason Silbraz joints are strong why a pipe or tubing system made with Silbraz joints has onepiece pipe line strength.

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Draftsmen's splines extruded by Yardley Plastics Co

Draftsmen's splines continuously extruded of transparent Tenite are used by the Army Air Forces to draw accurate curves. Extruded with an H-shaped profile, they are held in place by "dogs" inserted in the channels. Because of the uniform flexibility and resilience of Tenite, the splines can be made to take any desired curvature.

An exceptionally tough material, Tenite makes durable, virtually unbreakable instruments. Other pieces of drafting equipment molded or extruded of Tenite include architects' and engineers' scales, T-squares, straight edges. Complete information about Tenite may be obtained by writing TENNESSEE EASTMAN CORPORATION (Subsidiary of Eastman Kodak Company), KINGSPORT, TENNESSEE.

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They've brightened up the

LITTLE RED SCHOOLHOUSE

... with windows of Alcoa Aluminum

Like so many city schools constructed before the war, district school buildings were also being equipped with windows of Alcoa Aluminum. Interiors are brighter, because aluminum windows make exceptionally efficient use of wall openings. Metal sections are compact, permitting maximum glass areas.

In addition, windows of Alcoa Aluminum need very little attention to keep them looking and behaving well. No protective painting is needed. There's no rusting or rotting, no swelling or warping to destroy their usefulness.

Why not gain these advantages by including windows made of Alcoa Aluminum in your plans? Window manufacturers will have these windows available shortly. ALUMINUM COMPANY OF AMERICA, 1866 Gulf Building, Pittsburgh 19, Pennsylvania.



the Wood of good taste

• It has been said there is no such thing as traditional or contemporary design . . . that there is only good and bad design. If so, Mahogany is fortunate. For ever since its introduction, it has been one of the chief vehicles of good taste. Perhaps the rich variety of pattern and color it provides accounts for this. Perhaps the reason is something more fundamental! The fact that Mahogany possesses the characteristics which appeal to the sense of probity that is the common hallmark of first-rate craftsmen. For style may change. Plain surfaces may replace ornamented ones and simplicity come to be more valued than opulence in line. But strength and stability don't change. Neither does the honesty with which a medium fulfills the artist's intent or adapts itself to the forming processes. No, these things don't change . . . and today's designers know as well as did the Brothers Adam that beauty is only one of many factors contributing to the position Mahogany holds among cabinet woods.

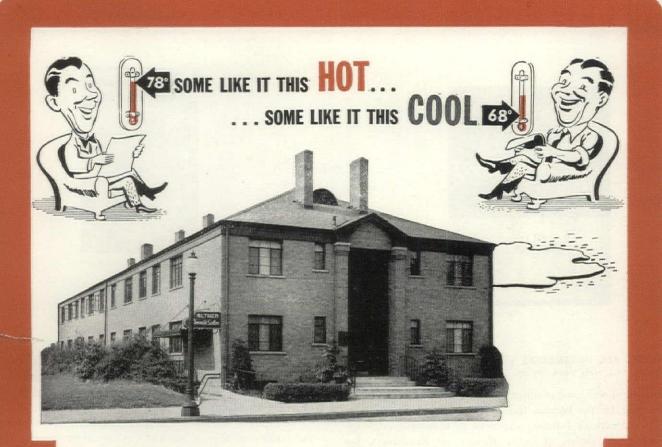
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Here's How to Give Tenants the Heat They Want

IN the Althen Apartments at Columbus, Ohio, are 16 suites consisting of living room, kitchen, dinette, bedroom, and bath. Each unit is individually heated by its own Janitrol Gas-Fired Winter Air Conditioner located in a closet opening into the living room. Each tenant pays his own gas bill, which amounts to an annual average of \$25.87* for both heating and cooking.

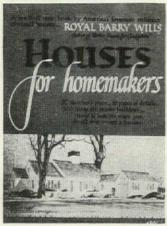
Tenants like the individualized Janitrol heating, the convenience, economy, cleanliness, and comfort of gas heat. The management of the Althen likes the low cost of installation and up-*Natural Gas Average Rate—56 cents per 1000 Cubic Ft. keep... the freedom from heating worries. They state, "We have found the Janitrol equipment efficient in operation, trouble free, and very satisfactory".

Apartments are more easily kept clean because Janitrol Gas-Fired Winter Air Conditioners leave no soot or dust. Fireman is unnecessary because there is no coal, no ashes, no furnace fixing. Space is saved by eliminating extensive ductwork and fuel storage areas.

Yes, this is a new and highly successful trend in apartment house heating. If you'd like more data on similar installations, write Surface Combustion Corporation, Toledo 1, Ohio.



BOOKS



Review this page

BABEL'S TOWER The Dilemma of the Modern Museum



Review page 144

Review page 140

HOUSES FOR HOMEMAKERS by Royal Barry Wills. Franklin Watts, Inc., New York. 94 pp. Illustrated. 81/2 in. by 11 in.

Compared with most of the expanding crop of books on homebuilding for the layman, this newest effort by Royal Barry Wills, America's foremost exponent of Colonial-brought-upto-date and author of Better Houses for Budgeteers, has much to recommend it. Most important of its good points is the interesting treatment of such inherently dull subject matter as deeds and title searching, financing and construction. These explanations are condensed to a minimum and put into simple, crisp language. Mr. Wills' "Hints to Homebuilders", which include site choice and such elements of construction as foundations, waterproofing, framing, insulation, roofing, plastering and finishing plus various principles of planning and space use, form a continuous picture story with sketches and diagrams explained by short captions. This graphic method of presentation, first exploited in the comic strips, proves much more effective in putting across ideas than long blocks of unrelieved technical copy.

Another aspect which should appeal to the prospective homebuilder is the fact that the greater part of the book is devoted to specific examples of Royal Barry Wills house designs, complete with both perspective and plan, and grouped according to approximate cost from \$2,500 to \$12,000 and up. Working details of cornices, chimneys, cupboards, hardware, etc. are also included. Among these last is the somewhat surprising contribution of a fireplace fully equipped with an imitation Colonial crane and teakettle.

This is perhaps the nubbins of what is wrong with the book. Mr. Wills has skillfully played on the prejudices of his readers which make them fearful of the new and the foreign and desirous of clinging to the false security represented by familiar objects borrowed from a more stable period in history. At the same time he assures them that they will not miss out on 20th Century convenience by doing so. Witness this statement in his discussion of modern versus traditional architecture:

"It may be conservatively stated that some of these manifestations are not practical improvements over the older ways, their chief use being to avoid emulation of traditional methods and to preserve the unique flavor ascribed to the modern movement. But of course all the best features of the contemporary house may be retained, even if some of the minor tricks and cliches are not.

"Needless to say, there is no difference between the modern and traditional house in point of mechanical equipment; each may have every up to the minute invention and convenience."

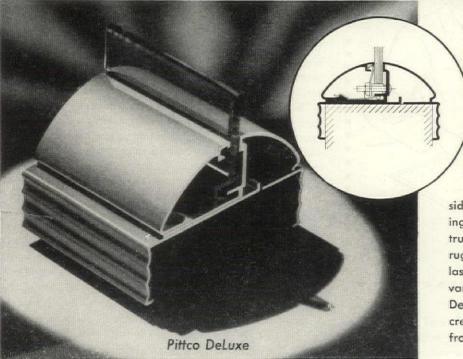
What Mr. Wills ignores is the fact that a functional interior designed for contemporary living habits cannot help becoming a compromise solution if inhibited by a traditional exterior. However, in all fairness, it must be added that he has tried to strike a balance between the old and the new. Nearly half the houses shown are of modern design. But these examples themselves reveal that the Wills technique is more successful within the restrictions of colonial than in the freer contemporary idiom. (Continued on page 140)



WILLS INTERPRETATION OF BLOCK HOUSE AND MODERN



Two lines of PITTCO METAL now available for Store Fronts of distinction



Pittco Store Front Metal is functionally, as well as artistically, designed to fit every store front need. This Pittco De Luxe double face sash is both a safe and attractive setting for "open vision" display windows and partitions with glass panels. Reversing the members permits glass to be set from inside—a decided advantage when working above normal grade levels. The extruded method of manufacture assures rugged strength, clean, sharp profiles, lasting color and perfect finish. The wide variety and imaginative styling of Pittco De Luxe mouldings help architects to create impressive, individualized store fronts of high quality.

> **PITTCO** Pittco Premier, although lighter in weight and more moderately priced than Pittco De Luxe, embodies the same thoughtful planning and inspired styling which have made the De Luxe line an outstanding success. Like Pittco De Luxe, the Pittco Premier line was designed as a unit giving an

inherent harmony which permits the architect to develop a variety of attractive store front combinations. Pittco Premier construction can be set more quickly than any other metal construction, effecting a substantial saving in setting time. Practicality plus the high degree of architectural beauty in the Premier line makes possible the creation of economical, sales-winning store fronts.

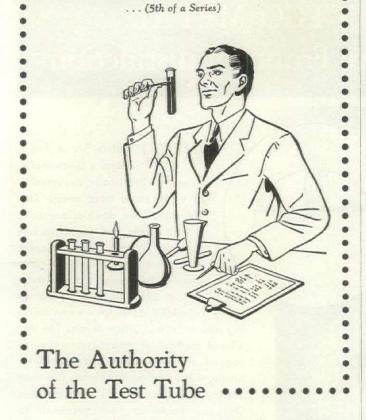
Pittco Premier



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NDMA's authority to make such tests provides a firm foundation for the confidence with which architects, builders and homeowners regard wood products carrying the NDMA seal of approval. This authority makes it possible to determine, accurately, that such products as windows, doors, screens, frames and shutters have been treated in accordance with NDMA's minimum standards . . . that their lasting qualities are improved and enhanced.



The NDMA Seal of Approval—available by license to all manufacturers and distributors who conform to the toxic preservative standards of the NDMA represents these six steps of protection: **1.** An efficient test for measuring effec-

- tiveness of toxic preservatives
- Minimum standards governing the toxic preservative treating of woodwork products
- 3. A seal identifying products treated in conformity with NDMA Toxic Preservative Standards
- 4. Mill inspection of treating equipment and practices
- Laboratory check-tests of preservative solutions
- 6. Educational effort in the public interest

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BOOKS

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(Continued from page 138)

BABEL'S TOWER, by Francis Henry Taylor. Columbia University Press, New York. 53 pp. 7% in. by 51/4 in. \$1.00.

The director of New York's Metropolitan Museum has addressed this little book to his fellow museum workers, but the statement is important and short enough for every American interested in the cultural development of his country to read. Mr. Taylor says that our museum business, which last year brought in 50 million persons to view more than 3 billion dollars worth of art, is doing a mere fraction of its potential job. He traces how this situation came about, and offers a general suggestion for improvement.

"We have seen that the public institutions of the type we represent are not an artificial creation but the product of a long organic growth. Each generation has been required to interpret this vague word 'museum' according to the social requirements of the day . . . It is no longer necessary for us to do lip service to the institution of a worn out and defeated Europe. Trustees, curators and public alike must recognize that we have emerged from the pre-war frenzy of acquisition for acquisition's sake and must digest what we already have. The emphasis for our generation must be positive and explanatory. And, above all, the museum must offer a rewarding career for men and women with a vocational conviction rather than a refuge from reality for the poetaster and the bluestocking. We must consider our responsibilities in terms of twentieth century America. Perhaps in doing so we may develop a totally new type of public institution, bearing little or no relation to the nationalized palaces of Europe. If we can do so without breaking faith with the generous founders whose foresight and bounty provided us with our present infinite and varied wealth, so much the better".

The book is full of other statements that strike at the heart of the museum malady. The Fogg-bound curator is "a highly polished introvert who exists only for himself and his own intellectual pretensions. He is lacking any real sense of public service, and does great harm not only to the institution whose prestige he hides behind but to the cause of true scholarship . . ." Curators regard trustees "as highly ornamental, and occasionally useful, sacred cows to be milked on sight." Of the museum visitor Mr. Taylor says sympathetically: "He believes in the museum, yes, but with the same 'I'm from Missouri' acquiescence with which he believes in the Constitution or the Republican Party. He votes appropriations for its support. He may even visit the museum on occasion, but he certainly takes from it little or nothing of what it might potentially offer him".

The American museum in the future must pay less attention to the individual artist and place "greater emphasis upon what an individual work of art can mean in relation to the time and place of its creation". The future museum must devote itself to "interpreting the past so that the present can make use of the judgments of antiquity as guideposts for the democratic way of life". For a work of art "is a document of history which any man can understand . . . the personal testimony of the eyewitness". The art museum "is usually thought of as a gallery for the display of masterpieces. But possibly we should think of it rather as a visual reference collection of cultural history".

The point of view Mr. Taylor vividly expounds is not completely original, as other (Continued on page 144)

One of a Series of Advertisements on Radiant Warmth.

"Invisible home heating, with neither conventional radiators nor registers in a room, is the most recent development from research activities of the University of Illinois and the Institute of Boiler and Radiator Manufacturers. The new development is known as a "Radiant Baseboard" and has several advantages over conventional heating arrangements.

Room warmth comes from a hollow cast iron baseboard supplied with hot water from a regular home heating boiler. Radiant baseboards replaced wooden baseboards along the bottom of outside walls in rooms of the I = B = R Research Home at the University during the severe past winter and proved completely successful."

From a University of Illinois News Release (4/14/45) on Radiant Baseboard Heating.

Better Heating - Better with Taco

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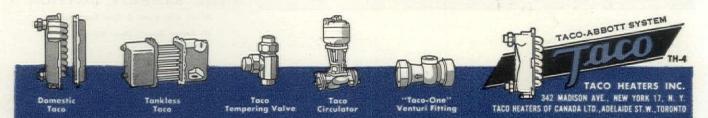
Take full advantage of these newly developed Radiant Baseboards (which the I=B=R and the University of Illinois so enthusiastically endorse) by installing them with a "Taco-One" Venturi System with a Taco Circulator and Venturi Fittings. Then you can be sure of positive flow; gentle, even heat; quick response to thermostat demands.

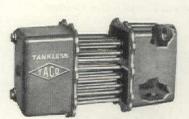
This unusual system of home heating can also give you the benefits of year-round domestic hot water – with a Taco Tankless Heater. This heater assures a plentiful supply of crystal clear hot water – and eliminates expensive installations of cumbersome "summer water heaters".

There is a Taco Tankless Heater for every home and commercial requirement. Taco Products will help you in your job of "Building Better Homes".

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DECEMBER 1945



That full utilization of roof areas will become an important consideration in the planning of future office buildings is suggested in this sketch by Torquato De Felice, New York City architect.

Setbacks and roof levels are cast into multi-

functional elements, co-ordinated with the floor area for the benefit of the office building's tenants. The uppermost roof level is equipped as a helicopter substation; the lowest level is an automobile parking station; intermediate roof levels may be utilized as zoned areas for dining, relaxation and exercise, and for outdoor exhibit and demonstration of tenants' products.

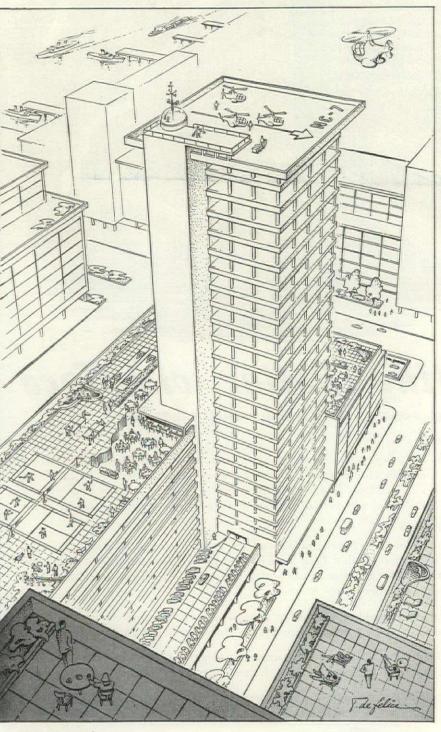
Barrett Specification Roofs, standard for flat-roof construction, are making it possible for architects and planners to execute many revolutionary improvements in design. The complete adaptability of these famous coal-tar pitch and felt roofs enables them to serve a variety of purposes, including those which have already been developed at New York's famed Rockefeller Center.



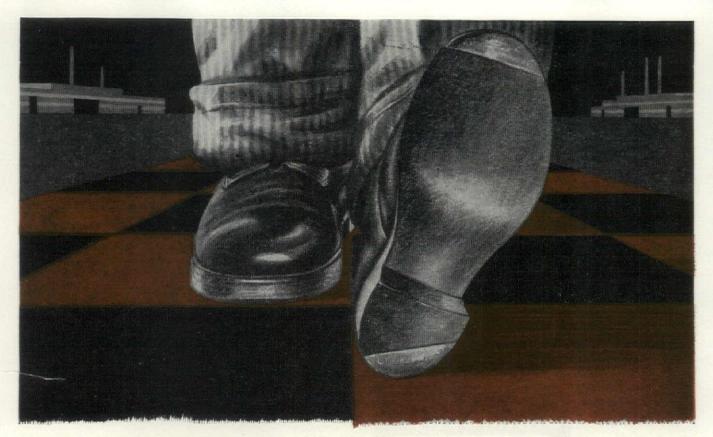
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Edgewater Gulf Hotel, Edgewater Park, Miss. Benjamin Marshall, Architect

CHAMBERLIN WEATHER STRIPS Enhance Comfort and Heating Efficiency

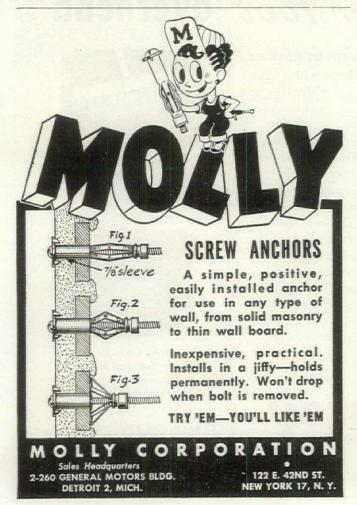
This is Mississippi's famous Edgewater Gulf Hotel. Its comfort and heating efficiency have been enhanced by the installation of genuine Chamberlin Metal Weather Strips. Many of America's finest hotels and public buildings are Chamberlin equipped. For help on your weatherstripping problems, call the Chamberlin factory branch or write for the address of the nearest Chamberlin office.

"Proper Installation Is Half the Job"



Weather Strip Company

Home Office: 1237 LaBrosse Street, Detroit 26, Mich.



BOOKS

(Continued from page 140)

workers in the museum field have made similar statements, and a few museums have begun already to operate on the interpretative principle. What is important, however, is that the director of America's greatest museum now unequivocally says that our visual institutions are badly managed from the public point of view, and that a change must take place. Mr. Taylor has done a service to our cultural development by writing this vigorous little book; he can do an even greater service by having his museum carry out the remedies he prescribes.

AIRPORT PLANNING FOR URBAN AREAS, U. S. Department of Commerce, Civil Aeronautics Administration, U. S. Government Printing Office, Washington, D. C. 98 pp. Illustrated. 834 in. by 534 in. 20 cents.

This booklet is one of a series issued by the Airport Service of the Civil Aeronautics Administration to aid and coordinate the country's development in all aspects of flying. The purpose of this booklet in particular is "to aid metropolitan area planning groups in obtaining a knowledge of the fundamentals of airport planning as it affects large size communities". The material also applies to "urban areas where the airport needs are multiplied by diverse types of aviation activities, or where a group of contiguous communities have need for a 'system of airports'".

The booklet is divided into two parts: the first, a discussion of the whole general subject of airport planning for urban areas; the second, a statement of criteria and suggestion for site selection, estimating needs, and effectuating the final plan. Five appendices occupy the latter half of the booklet, and consist of an index of currently manufactured aircraft and their appropriate airport sizes, a study to prove the safety of residential areas in the vicinity of airports, a sample of air traffic estimating for the future, an enabling act for an urban airport commission, and a model state airport zoning act.

The seriousness of the planning problems now facing most American cities is suggested: "Some observers predict that this country will have as many as 400,000 aircraft a decade after hostilities have ceased. At least one authorative estimate suggests a toal of 300,000 civilian planes within three years after the last shot has been fired. Of this number approximately 3,000 planes are expected to be used in scheduled transport operations. The remaining 297,000 will consist of smaller aircraft."

"If only the more conservative aviation forecasts are fulfilled in the ten years following the war, the need for airport facilities will be tremendous. The time to plan these facilities—enough of them, of the right kind and in the right places—is now", says the CAA booklet, which then proceeds to outline suggested methods of planning, from site choice, through needs estimates, to final execution of the scheme.

Like any government publication intended for wide distribution, a considerable amount of rather obvious basic reasoning is provided, and the suggestions are often so qualified that pussyfooting seems to result.

All matters connected with civilian aviation are still in such a state that any attempt at ordered thinking is to be commended. This CAA booklet is perhaps the only publication now available that attempts to get down to brass tacks with the planning of postwar airports—now so suddenly and urgently upon us.

40,000 feet high! stories

Here's an interior view of one of the three-decker stratosphere planes that one day may be making non-stop flights between Europe and America. This is only one of the amazing things the world of tomorrow holds in store for us. In many of these new products and in improve-ments of many products in daily use—the light alloys, magnesium and aluminum, will play an important part in effecting weight reductions, reducing operating costs. Bohn Engineers will be glad to consult with you in fitting these versatile light alloys into your production plans. BOHN ALUMINUM AND BRASS CORPORATION BOHN ALUMINUM AND BRASS CORPORATION GENERAL OFFICES, LAFAYETTE BLDG. • DETROIT 26, MICHIGAN Designers and Fabricators ALUMINUM • MAGNESIUM • BRASS • AIRCRAFT-TYPE BEARINGS

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The new Gar Wood Heating Units are destined to reach a new high in popularity. That's no wonder when you consider the thousands of owners who know from ACTUAL EXPERIENCE that Gar

Wood stands for high efficiency and unusual economy of operation. Home owners *talk* about that kind of performance. And here's a word to the wise: the new oil-fired or gas-fired Tempered-Aire Units and the oil-fired Boiler-Burner Units, Conversion Burners and Water Heaters are better than ever before . . . in performance, eye-appeal and SALES APPEAL.

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HERE'S WHY It Pays to Specify Tempered-Aire

- * Advanced Gar Wood Engineering
- ★ Tried and Proved for more than 10 Years . . . plus recent developments
- * Completely Automatic
- ★ The Original Oil-fired Farnace-Burner Unit on the Market
- ★ Beautifully Designed Die-Formed Cabinet
- ★ Now More Efficient than Ever
- ★ Proved Economy of Operation
- * More Compact... Smaller in Size

See your local Gar Wood Dealer or write us directly for further details



Canadian Distributors: Engineering Industries, Ltd., 282 Dupont St., Toronto, Ont.

HOISTS and BODIES . . . WINCHES and CRANES . . . TANKS . . . ROAD MACHINERY . . . MOTOR BOATS

The sure way to cut the cost of pipe maintenance

on all copper tube or brass pipe runs

.... SPECIFY THREADLESS

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WALSEAL'

FLANGES

JOINTS

Whenever your plans call for copper tube (iron pipe size) or brass pipe — especially in public, industrial or commercial buildings — specify patented threadless Silbraz joints made with Walseal valves, fittings and flanges. Silbraz joints effectively produce strong, lasting pipe runs.

These modern joints provide positive protection against leaks by actually becoming a part of the pipe itself. They make a "one-piece" pipe line that will not creep or pull apart under any pressure, shock or vibration that the pipe itself can withstand.

Easily installed by oxyacetylene torch brazing, Silbraz joints are the sure answer to low-cost assemblies that will require neither maintenance nor repair in the years to come. Ask your nearest Walworth distributor, or write for copy of Circular 84 giving complete data on Walseal Silbraz joints.

*Patented - Reg. U.S. Patent Office

Make it a "one-piece pipe line" with WALSEAL



13 AWARDS TO 4 PLANTS WALWORTH valves and fittings 60 EAST 42nd STREET, NEW YORK 17, N. Y.

DISTRIBUTORS IN PRINCIPAL CENTERS THROUGHOUT THE WORLD

LIGHT-REFLECTING GONGRETE FLOORS

reduce eyestrain and fatigue

LIGHT-REFLECTING concrete floors made with Atlas White cement instead of regular gray cement—absorb less light, reflect more light, and increase illumination on vertical work surfaces and undersurfaces.

SUCH FLOORS make seeing clearer and quicker...tend to reduce accidents, errors, spoilage and shutdowns of machines... add to efficiency and economy.

Write for a copy of the book, "Light from Floors." Address Atlas White Bureau, Universal Atlas Cement Company (United States Steel Corporation Subsidiary), Chrysler Bldg., New York 17, N. Y.





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To aid discharged veterans secure professional and executive employment in the building industry, The FORUM will publish without charge classified ads giving applicants' qualifications, stating preference in occupation and location. Ads may be run with name and address or with box number.

Employers seeking personnel are urged to make known their requirements. Address: G. I. Jobs

THE ARCHITECTURAL FORUM 350 Fifth Avenue, New York 1, N. Y.

POSITIONS WANTED

NAVAL AVIATOR-27, A.B. Univ. of Notre Dame, lic. comm. pilot, interested in modern western homes; Desires pos. as pilot for arch. or firm while learning arch., pref. Colo. or mountain states. Box E-147.

ARCHITECT—On term. leave from Navy. Reg. N.Y. and NCARB. Age 33, married. 10 yrs. exper. residential housing and ind. bldg. Desire resp. pos. with progressive firm. Box E-148. ESTIMATOR & SUPERVISOR—Vet. 45 with over 20 yrs. exper. in bldg. field wishes connection with constr. firm in N.Y.C. or Conn. Box E-149.

SALES ENC. FOR HOUSING-Ga. Tech. '34. Above average pos. two large corps; large scale housing project; head housing corp; Prefab research for large steel corp; effective planner, organizer, speaker. Knowl. Latin Amer. incl. Spanish and Portugese. Desire prefab. connection or initiating and managing housing proj. on sal. plus percentage for investor; Ex-Lieut. USNR. Box E-150.

SALES ENGINEER-Grad. Civ. Eng., 30, 7 yrs. exper. indus. bldg. and heavy constr. 3 yrs. in Army Aerial Survey Bn. Seeking connection as sales eng. in foreign fields. Has valuable contacts in India, understands customs and bus. ethics there. Box E-151.

ARCH. ENGINEER-34, Navy Off, avail. about 1 Jan. 5 yrs. exper. arch. and struc. design and layout of munic. utils. 2 yrs. field work. Desires to locate perm. in So. or West with engineer, architect or contractor. Box E-152.

CIV. ENGINEER-25, disch. Naval Off; limited exp., but willing and intell; desires pos. as asst. to a bldg. contractor or arch. Esp. int. in housing proj. East preferred. Box E-153.

EXPER. CONCRETE DESIGNER & SUPER.-Exper. in concrete paving & struc. constr. of hi-ways & airdromes. 5 yrs. serv. Corps. of Eng., super. airfield constr. Instructed concrete paving school. Box E-154.

LAWYER-Young AF vet with law degree and backgr. of acctg. exper. interested in entering bldg. field. Box E-155.

EXEC. ASST.-Vet. BBA degree in acctg., 6 yrs. well-rounded bus. exper. in exec. capac. Would like pos. in arch. office where he may learn bldg. Box E-156. SR. ARCH. DRAFTSMAN-2 yrs. coll., exper., Age 24; worked as asst. arch. eng. before entering Army. Would like pos. with large firm or firm where future possible. Will travel abroad. Box E-157.

MEN WANTED

DRAFTSMEN-Cedar Rapids, Io.**. Small office, Exper. schools and pub. bldgs. Exec. prospects. Give particulars, age, educ. and exper. Box R-167. DRAFTSMAN-Some office exper. and knowl. of struc. eng. Oppor. for perm. pos. and adv. and future assoc. Medium sized Va. city, good living cond. Box R-170.

CONSTR. SUPERINTENDENT — V a. bldg. material and contracting firm desires man cap. of handling complete speculative housing projs. 15 to 25 units per job. Perm. pos. with adv. oppor. Give age, educ., exper., sal. desired. Box R-171.

BLDG. MATERIAL YARD MGR.--Va. bldg. material dealer desires young mgr. for retail bldg. material bus. Yard also oper. constr. dept. Give age, educ., exper., sal. desired. Box R-172.

SQUAD LEADERS & SR. ARCH. DRAFTSMEN-Needed immed. by arch. firm in Pa. Box R-173.

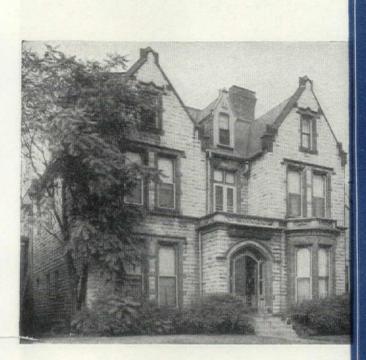
ASST. SPEC. WRITER-needed by Pa. arch. firm. Should have suff. bldg. constr. exper. to form backgr. for trng. as spec. writer. Box R-174.

ARCH. DRAFTSMEN-2 men wanted by well-known arch. firm in Chicago. One with design ability and one experienced on working drawings & details. Good salary and bonus commensurate with ability. Box R-175.

TECHNOLOGY LAB. INSTRUCTOR AND AIR CONDITIONING INSTR.--Needed by N. J. tech. high school. Box R-176.

ARCH. ENTERPRISER—Gen. business and community service over 50 mi. radius—fee basis. Creameries, quick freeze plants, small factories, stores, residences, hosp., churches, off. bldgs. in towns 2,500-12,000 pop. Local bus. men will assist well-trained arch. to est. his own firm. Corres, invited. Box R-177.

BUSINESS MGR.—An excep. opening for right man as bus. mgr. for the Sheet Metal Ind. (Assoc. Work) in the Milwaukee area. Fut. poss. State educ. quals., bus. exper., and age in reply. Milwaukee Sheet Metal Contractors' Assn., Room 108, 225 E. Michigan Street, Milwaukee 2, Wis.



Transform that obsolete big home with Parsons Pureaire Kitchens

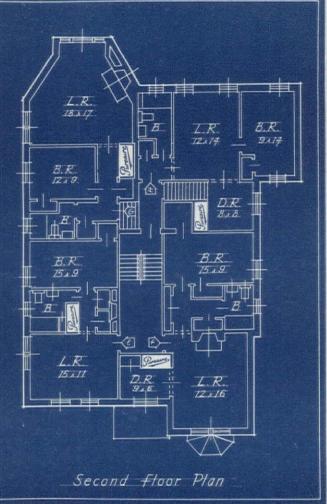


Modern conditions have created the tragic problem of too large homes, the pride of an era now past.

Such homes can be transformed into income-producing assets by remodeling in-

to apartments. And remodeling means Parsons Pureaire Kitchens—compact, complete, proved.

Doors closed, Pureaire blends harmoniously into the wall. In use, its patented ventilation feature carries away all surplus heat, vapors and odors. Yet Pureaire, production engineered, costs no



more than an old-style kitchen of acceptable quality units.

The above plan by Talmage C. Hughes of Detroit is a splendid example of remodeling transformation. And eight occupancies instead of one!

Remodeling will be a huge factor in postwar building. Forward looking architects are preparing for it now.

ARCHITECTS:—See your Sweet's Catalog for full description or write us.

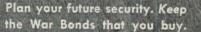
THE PARSONS COMPANY

15000 OAKLAND • DETROIT 3, MICHIGAN



IN BIRMINGHAM, ALA., 90% **OF THE OIL-O-MATIC OIL BURNERS INSTALLED IN THE** PAST 20 YEARS **ARE STILL ON THE JOB**





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* Quicklag 1-POLE

Ratings: 10-50 amperes. Thermal and magnetic trip. Safely interrupts 5,000 amperes, a-c on short circuit. Underwriters' approved for 125 volts, a-c.

* E- Frame 1, 2, 3-POLE

Ratings: 10-50 amperes. Thermal trip. Safely interrupts 5,000 amperes, a-c on short circuit. Underwriters' approved for 250 volts, a-c or 125/250 volts, d-c. Fifteen and 20-ampere single-pole ratings are Underwriters' approved for 277 volts, a-c.

* 7- Frame 2, 3-POLE

Ratings: 15-100 amperes. For 250 volts, a-c or 125/250 volts, d-c and 600 volts, a-c or 250 volts, d-c. Thermal and magnetic trip. Universal mounting characteristics. Underwriters' approved. Safely interrupts 15,000 amperes.

* G- Frame 2, 3-POLE

Companion to F Frame with thermal and interchangeable as well as adjustable magnetic trip. Ratings: 35-100 amperes. For 250 volts, a-c or 125/250 volts, d-c and 600 volts, a-c or 250 volts, d-c. Interrupting capacity 15,000 amperes, a-c. Underwriters' approved.

* K-Frame 2, 3-POLE

Thermal and magnetic trip with interchangeable trip. Ratings: 70-225 amperes. Underwriters' approved for 250 volts, a-c or 125/250 volts, d-c and 600 volts, a-c or 250 volts, d-c. Interrupts 15,000 amperes, a-c.

* L- Frame 2, 3-POLE

Ratings: 125-600 amperes. Underwriters' approved for 250 volts, a-c or 125/250 volts, d-c and 600 volts, a-c or 250 volts, d-c. Interrupts 25,000 amperes, a-c. Thermal and magnetic trip with interchangeable trip units.

AB "De-ion" Circuit Breakers

a complete line

for every application

Quicklag

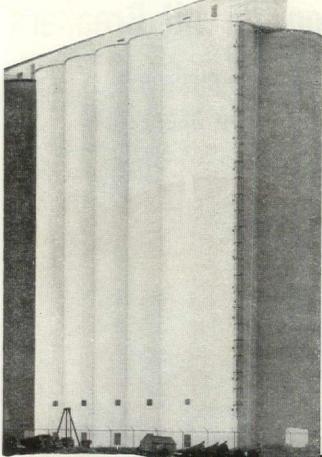
Cut machine-hour losses with these Westinghouse AB "De-ion" Circuit Breakers. With them, power is not interrupted for harmless, momentary overloads. Service is restored swiftly and with ease when a circuit fault has been cleared. Every industrial requirement is met with these space-saving fuseless circuit breakers, available in capacities from 10-600 amperes.

AB Breakers are completely self-enclosed and sealed for safety. There are no parts to repair or replace. The "Quick-Make" and "Quick-Break" mechanism is a feature of every one.

Get complete information from your Westinghouse representative or write the nearest Westinghouse office.



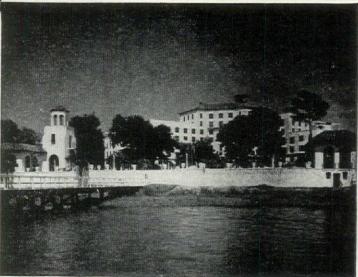
PUT THIS RAINCOAT ON YOUR BUILDINGS



Exterior Masonry needs this protection from northwestern flour mills to southern resort hotels

To extend the life of your buildings you must impede the penetration of water into your concrete, brick or stucco walls, preventing reinforcing bar rust, spalling or disintegration. All this is accomplished by Waterfoil which is unlike any other protective coating. Waterfoil is manufactured of irreversible inorganic gels which bond chemically and physically to form a dense, hard protective outer layer on structural masonry surfaces. Waterfoil beautifies and protects at the same time.

Shabby buildings exteriors treated with Waterfoil undergo an amazing change in appearance and condition. Waterfoil improves the appearance of a structure and lengthens its life. It is easily applied. We took ten years to develop and test it. Send today for the Waterfoil literature. It's most important to owners and operators of all factories, warehouses, hotels, apartments and business buildings.



Horn Products and Methods Protect Millions of Square Feet of Surface Throughout the Nation





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Established 1897 Subsidiary of the Sun Chemical Corporation Manufacturers of Materials for Building Maintenance and Construction • Long Island City I, N. Y. Houston, Texas • Chicago, Illinois • San Francisco, Calif.

If you are planning

NEAD & COMPANY has specialized in the design, construction, and erection of commercial, institutional, and industrial metal equipment for almost a century. Installations in many of the world's outstanding buildings illustrate the high standard of Snead engineering and manufacture.

Snead Mobilwalls have for years been the accepted standard movable steel partition for office and factory buildings. Snead Wainscoting has revolutionized the construction of laboratories. Hundreds of the foremost libraries throughout the world are equipped with Snead Bookstacks, Study Carrels, Conveyors and Partitions.

The experience accumulated throughout the years in solving various problems related to metal equipment can be a source of help to architects and concerns planning new projects. We offer you this wealth of experience and the services of our engineers to assist in the preparations of plans and specifications, without cost or obligation. Inquiries are also invited from firms desiring help on modernization or reconversion problems.

Write us about the type of project you are planning, and we will gladly send you specific illustrated material.



Since 1849, the Snead symbol of lasting beauty quality and progress in metal construction



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LIBRARIES

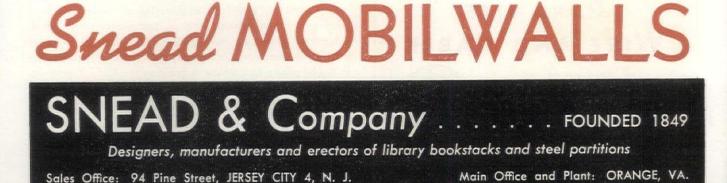
HOSPITALS

OFFICE BUILDINGS

FACTORIES

BAKELITE CORPORATION, Unit of UNION CARBIDE & CARBON CORPORATION BOUND BROOK, N. J.

Snead Mobilwalls have been used for many years in the offices as well as the laboratory and manufacturing divisions of this world-renowned concern. The extreme mobility, flexibility, and reusability of Mobilwalls have served its needs ideally. A great corporation like this cannot afford to tie up office or manufacturing space for more than a few hours when interior aterations become necessary. This Mobilwall installation has paid for itself many times over in time saved while making alterations. Write for catalog or ask our sales engineers to demonstrate how Snead Mobilwalls can serve you efficiently and economically. No obligation.





Tinned copper conductors—*both* covered with the "better than code requires" insulation. Here is dielectric strength and extra safety.

Individual cotton braid, impregnated with moisture-resisting, flame-retarding compound (color coded) and wrapped with folded, moisture-resistant paper.



Conductors laid parallel. Jute ripcord filler is laid in the interstices. A tinned copper wire is used in place of one jute filler for grounded cable.

Firmly woven cotton braid jacket over all; permanently impregnated with moisture - resistant, flameretarding compound. *Paraflex* a smooth, clean-handling cable!

• Paranite non-metallic sheathed *Paraflex* Cable is available with or without ground wire—maximum 300 volts to ground or 600 volts between conductors. Specifications on request.

IF IT'S PARANITE IT'S RIGHT!



ELECTRICAL WIRES AND CABLES "BETTER THAN CODE REQUIRES"

ANNOUNCEMENTS

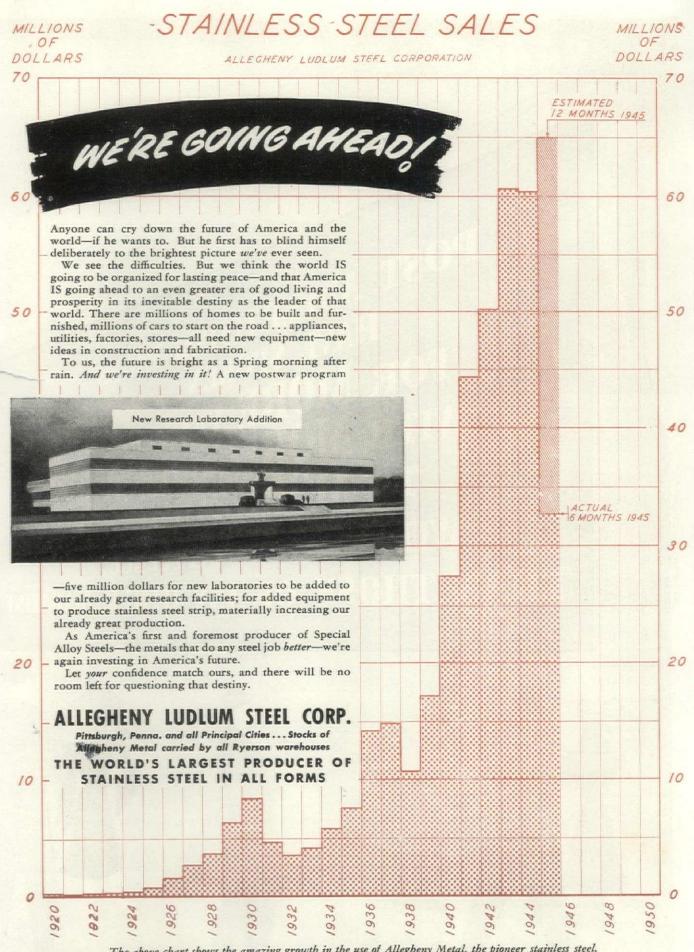
Walker Art Center, Minn. announces that a large gallery on the main floor has been designated as the Everyday Art Gallery. It is to be devoted to ideas in the planning, designing and selecting of homes, interiors, furniture, utensils, and other things of everyday life, with exhibits addressed to the average consumer. The exhibition program covers all fields of everyday art: from accessories for the home to whole communities; from examples of handicraft to the products of the machine. Specially prepared exhibits, using models, photographs, drawings, and movies, in addition to displays of actual products are to be presented and changed every two months. One section of the Gallery is to be arranged as a reading corner where visitors may study current magazines on architecture, interior design, home planning, industrial design, and related fields. There are to be government publications, research bulletins, manufacturers' literature and catalogs, in addition to an extensive clipping file. Illustrated bulletins will be published in connection with each exhibit. The opening show in January will be a survey of new developments in all fields.

The Council of the American Society of Heating and Ventilating Engineers has announced that the 52nd annual meeting of the Society will be held January 28 to 30 in New York with headquarters at Hotel Commodore. Matters which require the attention of Society members are revisions to the Society's Charter and amendments to the Constitution and By-Laws. The program committee has selected a variety of subjects for the technical sessions on problems dealing with heating, ventilating and air conditioning.

J. P. H. Perry, vice president of the Turner Construction Company, N. Y., has been elected president of United Engineering Trustees, Inc. United Engineering Trustees is a corporation set up jointly by the four national engineering Founder Societies, which have an aggregate membership of nearly 75,000: the American Society of Civil Engineers, American Institute of Mining and Metallurgical Engineers, the American Society of Mechanical Engineers and American Institute of Electrical Engineers.

CIO's union of engineers and technical employes, the Federation of Architects, Engineers, Chemists and Technicians, will hold its eighth national convention on December 7, 8 and 9, 1945, at the Hotel Empire, N. Y. C. Discussion will be concerned with such matters as a national economic and salary standards policy for engineering and other technical employes; organizational program and perspectives; development of and trends in collective bargaining for technical professional employes; community activities and participation in public affairs as a means of bringing the FAECT program to the community; science and technology in modern society and their relation to opportunities for full employment.

Fred H. Goodwin, vice president of Brown, Wheelock, Harris, Stevens, Inc., has accepted the chairmanship of the Real Estate Division for the National Service Fund of the Disabled American Veterans. (Continued on page 158)



The above chart shows the amazing growth in the use of Allegheny Metal, the pioneer stainless steel, since it was first introduced commercially in 1920. The interesting and obvious fact is that the merits, properties and outstanding values of this corrosion and heat-resistant metal have been brought into sharp focus by the war. Even with the tremendous increase in the use of Allegheny Metal depicted by the chart, its actual widespread potentialities in future peacetime applications are vastly greater.





SATURDAY Evening Post readers spend more on their homes...far more than the general average. They are among the first to buy new homes or to remodel.

Post readers are alert to all that is new and progressive. Their living standards and incomes are high above the average. They have the money to buy the things they want.

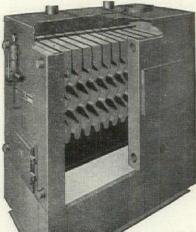
Year after year, in every community, in every neighborhood, in every income group—Post readers are the first to buy the new and better things. They set the pace, creating and influencing the demand that establishes brand preference.

When you recommend Post advertised products you reach America's richest market . . . a market that is pre-sold.

THE SATURDAY EVENING

Survey after survey proves that people pay more attention to advertising in The Saturday Evening Post than in any other magazine.

ECONOMICAL-QUICK HEAT



Cross section view of single type sectional boiler

There is

d KOVEN WATERFILM BOILER for every heating need

The fastest steaming boiler on the market, KOVEN WATERFILM, incorporates all the latest scientific developments to give quick heat, even room temperature and a plentiful supply of domestic hot water. These smartly jacketed patented boilers are made for automatic firing with oil, stoker or gas. They are available in a variety of models, suitable for large or small homes, apartment houses and industrial plants.

The sectional series boiler is especially constructed for use in large installations. This heavy duty boiler contains all the fine features of the WATERFILM line and can be taken through a 2 ft. door thus eliminating rigging costs and building alterations. The single series model illustrated contains one row of generators, however, new sections can be added whenever it is necessary to increase capacity. For more complete information write to:

WATERFILM BOILERS, Inc.

154 OGDEN AVENUE, JERSEY CITY 7, N.J. PLANTS: JERSEY CITY, N.J. • DOVER, N.J.



EVEN ROOM TEMPERATURE THROUGHOUT THE HOUSE

ANNOUNCEMENTS

(Continued from page 154)

The DAV is a Congressionally chartered organization that was formed in 1920 to help veterans in the preparation and prosecution of their just claims for benefits and to assist them in rehabilitation and job placement. In the last 25 years, it has built up, in close cooperation with the Veterans' Administration, the most extensive national service set-up of its kind in the country. Due to large numbers of disabled veterans of World War II who need its direction, the DAV, with headquarters at 41 E. 42nd St., New York, N. Y. is conducting a campaign to raise \$10 million nationally, with \$1 million to come from New York City.

GEORGE S. HUNT, former Chief of Operations Control, Douglas Aircraft Co., Inc. and independent industrial designer, has been appointed manager for Raymond Loewy Associates, Industrial Designers, for London, England. Mr. Hunt, with his nucleus staff, will be located at 19 Berkeley St., London, W. 1.

WALTER P. MARGULIES, director of interior design for the firm of J. Gordon Lippincott & Co., industrial designers, New York, N. Y., has become a partner in the firm. Mr. Margulies studied architecture at the Ecole des Beaux Arts in Paris and other European universities. He designed the interiors for several buildings at the Paris Exposition of 1937 and the New York World's Fair of 1939 and 1940. More recently he has designed interiors for the Statler Hotel in Washington.

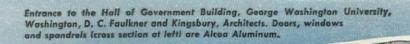
WALTER DORWIN TEACUE, industrial designer of New York and Los Angeles, announces that he has taken into partnership, Robert Jordan Harper and C. Stowe Myers. Mr. Harper is Director of Design in the New York office and Mr. Myers is Director of Design of the Los Angeles office. The partnership will continue to operate under the name of Walter Dorwin Teague.

CAPT. THOMAS LARRICK, C. E., has been released from the armed services and has returned to his former position as University Architect and Head of the Department of Architecture at Ohio University, Athens, Ohio. It has also been announced that the first two years work of a five year course and special courses for veterans are being offered this year.

JOSEPH BLUMENKRANZ announces that he is now practicing as architect and hospital consultant with Sidney L. Katz and Taina Waisman as associates, at 327 Lexington Ave., New York 16, N. Y.

VITO P. BATTISTA, AIA architect and city planner, has recently resigned from the Bureau of Architecture, Department of Public Works, City of New York. Mr. Battista has now joined the architectural firm of Henry V. Murphy of 1 Hanson Pl., Brooklyn, N. Y., and is also a member of the faculty of Pratt Institute, teaching architectural construction.

HARRY M. NEWMAN, AIA, architect, announces the opening of his office for the practice of architecture at 728 Lafayette Building, Detroit 26, Mich. (Continued on page 162)



These attractive aluminum spandrels are built up with Alcoa extruded shapes

Interesting and pleasing effects are possible with combinations of Alcoa Aluminum extruded shapes. Note the cross stripes produced in these spandrels by fitting one shape above another to form weather-tight joints. In some of the spandrels, ventilating louvres are provided simply by changing the shape inserted.

Further unusual effects can be obtained by the use of the many finishes possible with aluminum; bright surfaces against mat, mechanical finishes in combination with various oxidized surfaces. For inside work, black and colored aluminum may be employed.

Architects and builders can learn more about available Alcoa Aluminum shapes and finishes by writing AluMINUM COMPANY OF AMERICA, 2166 Gulf Bldg., Pittsburgh 19, Pa.





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... and specialization in financing homes helps you make sales to your clients more easily and quickly.

When you use our service you have the benefit of 105 years of experience in furnishing money for people to build and buy their homes.

That is why we are able to give quick service without red tape . . . fit loans to

the needs of anyone . . . give personal consideration to all applicants . . . offer most favorable interest rates . . . and at the most advantageous terms.

Our knowledge of local real estate and building values can help you conduct your business effectively. We are local businessmen, too, so that you may be sure of our friendly co-operation.



We're in there ...

DITCHING

Of course you want a greater volume of gas ranges—so do we. And we are making every effort, with all the skill and craftmanship at our command, to continue increasing production. In the meantime, our planners and designers are devoted to only one cause . . . to produce the finest gas range possible ... backed with a sound sales policy and a complete promotional program.

UNIVERSAL GAS RANGES America's Preferred Cooking Choice



CRIBBEN & SEXTON COMPANY 700 N. Sacramento Blvd., Chicago 12, III.

Majestic CIRCULATOR FIREPLACE

Fits any type of mantel—saves on installation costs — assures perfect fireplace operation!

Another FORMED STEEL Majestic Unit

Pat. No.

The structural advantages of formed steel—dramatized in many Majestic products for war use—are now featured in Majestic Circulators, Underground Garbage Receivers, Home Incinerators and many other Majestic Products! heat by means of cold-air-intake and warm-air-outlet grilles. It's the *really complete* fireplace unit—includes a scientifically engineered dome-damper, insulationsealing angle irons at sides of the opening, and built-on hooks for exact positioning of the grate basket! The "Master" model features "Radiant Blades" (metal fins) that increase heat-radiating surfaces 91

• You write "maximum functional value" into fireplace details-and

take all guesswork out of fireplace

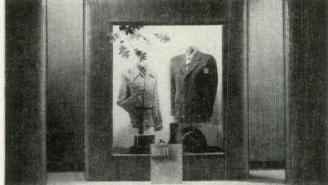
construction-when you specify a

Majestic Circulator. It circulates

The Majestic Company 1042 Eric Street, Huntington, Indiana Nationally Known and Advertused for 40 Years

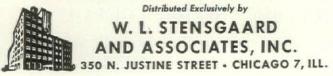
percent! Write for details.





Frame within a frame treatment created by The Great Wardrobe, Santa Barbara, California

Made of strong tempered Masonite presdwood, Structural Bends are a practical, inexpensive material for creating outstanding display treatments for smart, modern window backgrounds, interior remodeling or new construction. Seventeen basic shapes, 8' and 12' lengths, any size area can be economically treated. Flexible . . . easy to cut . . . construct . . . finish and install. Time tested, durable, modern, extremely practical, they afford unlimited opportunities to create outstanding effects at low cost. In stock. WRITE FOR CATALOG. . . PLAN YOUR NEEDS PLACE ORDER NOW



ANNOUNCEMENTS

(Continued from page 158)

The University of Chicago announces that it has embarked upon a program of education and research in planning. Beginning at once, the social science faculty of the University, augmented by experts in planning and related fields, will offer instruction for returning veterans and other members of the planning and allied professions seeking to acquaint themselves with recent developments in the theory, legislation and practice of planning. In addition to the "refresher" courses, the University will provide regular graduate instruction for which full credit will be given toward graduate degrees by the departments in which the students specialize. Inquiries should be addressed to the Dean of the Division of the Social Sciences, the University of Chicago, Chicago 37, Ill.

The Library of Congress announces the publication of a subject index to microfilms of its collection of documentary photographs. For years the Library of Congress has had important collections of photographs in its custody and steps are now being taken to make them better known and more easily and widely available. Included in the collection indexed is the photographic survey of the American people made between 1935 to 1943 by a staff of photographers working under the direction of Roy E. Stryker. The entire survey has been microfilmed and positive copies on film may be purchased at 6 cents per foot. The images are small but can be viewed easily in any of several "reading machines." Captions and original negative numbers appear on the film, with brief descriptions of each lot. Prints from the original negatives are available for purchase through the Library's Photo-duplication Service at 50 cents for each 8 in. by 10 in. copy. The Index to Microfilm, Series A, Lots 1-1737, a mimeographed, double-column, subject index of 26 pages, is available upon application to the Information and Publications Office. The Library of Congress. Washington 25, D. C.

NEW OFFICES

EMMERLING, SPELLICY & HARTMAN, architects, have opened an office for the general practice of architecture at 112 Madison Ave., Detroit 26, Mich.

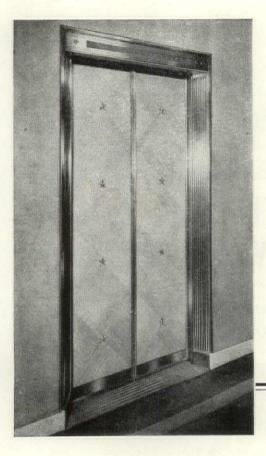
DANIEL D. MERRILL, AIA announces the resumption of his practice in the McGraw-Hill Building, 330 W. 42nd St., New York, N. Y., after an association with the U. S. Army Engineers, N. Y. District Office as chief of the architectural section.

MARTIN HAURI, architect, has established his office for the practice of architecture in Room 226, Republic Building, 107 North E. First Ave., Miami 32, Fla.

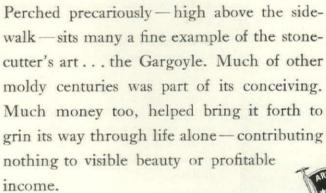
CARROLL & DAEUBLE, architects, announce the opening of offices for the practice of architecture in Suite 355-57-59, First National Bank Building, El Paso, Tex.

JULIAN H. SALOMON, camp consultant and designer, has opened an office for work in the field of organized camps for boys, girls and families, at Sky Meadow, Suffern, N. Y.

LEOPOLD HAUF, JR., architect, AIA resumes his practice at 198 E. Essex Ave., Lansdowne, Pa. (Continued on page 166)



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little of Gargoyles and their ilk—more of such income-increasing things as Modernized lobbies and Dahlstrom Elevator Entrances. Experience has proven that an attractive building lobby combined with the beauty and utility of Dahlstrom Elevator Entrance doors is the best

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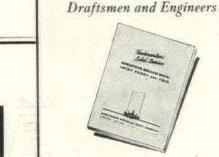
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form of "face lifting" that can be bought today. Our Design and Engineering Staff is ready to help in your planning.

Information for Architects,

Illustrated above: Dahistrom elevator entrances, 6230 Kenmore Avenue Apartments, Chicago, Ill, Architect: Frank McNally, Chicago, Wood faced doors, cast bronze stars and formed bronze frames,



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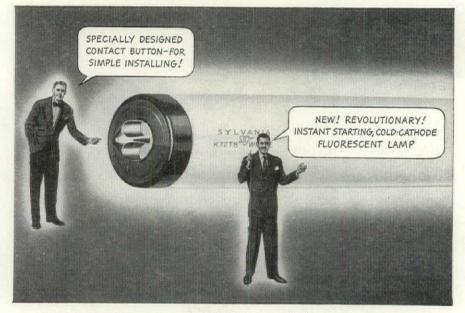




Published by SYLVANIA ELECTRIC PRODUCTS INC., Salem, Mass.

FIRST INSTANT START, COLD-CATHODE FLUORESCENT (K) LAMPS PRODUCT OF SYLVANIA RESEARCH

Another Step In The Completion Of Sylvania Electric's Lamp Line



Newest of Sylvania Electric's developments-the K Fluorescent Lampinstant starting, cold-cathode, long-lasting.

Lamp Designation	K96T8	K72T8
Nominal Lamp Length*	96"	72'
Bulb Diameter	T-8	T-8
Lamp Current, Milliamperes	120	120
Life Expectancy, Hours	10,000	10,000

Architects, in particular, will be interested in the following special advantages to be derived from installations of Sylvania K (cold-cathode) fluorescent lamps:

1945

• They will be instant starting.

• They will have a rated life of 10,000 hours.

• Will be virtually unaffected by the frequency of on-and-off operation.

• The base has a specially designed contact button for simple installing and maintenance. The lampholder is punched with a hole of similar design so that L-S lamps, similar in size and appearance, cannot be inserted by mistake.

• These lamps can be dimmed.

This newest of Sylvania's developments in fluorescent lighting will be placed on a standard production basis. They will be available early in 1946 through the usual distribution channels—will be made in 48", 72" and 96" lengths of 1-inch (T8) diameter—and will come in the standard white color. Soft white, daylight and a wide variety of other color lamps will be added as the demand arises.

Addition of these *cold-cathode* lamps to the regular line of fluorescent products makes Sylvania Electric the first lamp company to offer a *complete* line of fluorescent lamps.

SYLVANIA S ELECTRIC UNDES: CATHODE RAY TUBES; ELECTRONIC DEVICES

DEC.

CASE STUDY HOUSE No. 1

Designed for the magazine ARTS and ARCHITECTURE

DESIGNER J. R. Davidson SPECIFIES Modine CONVECTOR RADIATION

• Techniques and materials—the best of the new and the best of the old—to be integrated into thirteen houses to be

built in the Los Angeles area. That's the Case Study House program being conducted by Arts and Architecture magazine.

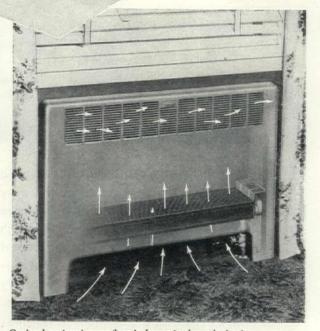
For Case Study House No. 1-designer and sponsor have selected Modine Convector Radiation. And the choice is significant.

It demonstrates the adaptability of Modine Convectors to modern houses such as this one, where fenestration and built-in furniture drastically reduce wall space normally available for radiator location.

Besides being easily built into furniture, because of the inherent space-saving compactness of Modine design — Modine Convectors provide even-temperature heating... quicker response to automatic control ... all the recognized superiorities of hot water and steam heating systems.

MODINE MANUFACTURING COMPANY, 1736 RACINE ST., RACINE, WISCONSIN

Modine Convertons



Photograph by Thomas Yee

Eddington Architectural Model.

Cooler, heavier air near floor is drawn in through the lower opening ... is heated, rises, and is circulated into room through the grille.

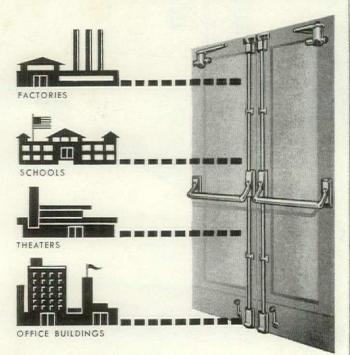


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Monarch-long recognized for quality builders finish hardware—is now a division of Clayton & Lambert Mfg. Co.



ANNOUNCEMENTS

(Continued from page 162)

LOUIS W. SANTO, architect, announces the opening of his office for the general practice of architecture in the Minnesota Federal Savings and Loan Building, Minnesota at 4th, St. Paul 1, Minn.

E. ELLSWORTH GILES, architect, announces the opening of his office at 113 Morristown Rd., Bernardsville, N. J.

S. HAROLD FENNO and STANLEY C. PODD, architects, AIA. announce the opening of their office for the practice of architecture and are to be known as Fenno and Podd, Architects at 525 Delaware Ave., Buffalo 2, N. Y.



ERRATA

Through a regrettable error in captioning in the September issue, p. 139, Rudolf Mock, who was associated with O. H. Senn as co-architect for the Park Apartments, in Basel, Switzerland, was not credited with his share in the work. Mr. Mock has been practicing in this country since 1937.

The September article on the Detroit Expressway system, p. 125, failed to point out that this expressway and transit plan was intended to harmonize and coordinate with the Detroit Master plan. Credit to Mr. Ladislas Segoe, Planning Consultant for the Detroit City Plan Commission, who acted as Associate Consultant with Messrs. Andrews and Deleuw, was inadvertently omitted.

STATEMENT OF THE OWNERSHIP, MANAGEMENT, CIRCULATION, ETC., RE-QUIRED BY THE ACTS OF CONGRESS OF AUGUST 24, 1912 AND MARCH 3, 1933, OF THE ARCHITECTURAL FORUM, published monthly at New York, N. Y. for October 1, 1945. State of New York County of New York

October 1, 1945.
State of New York } ss.
Before me, a Notary Public in and for the State and county aforesaid, personally appeared Vernon Hitchcock, who, having been duly sworn according to law, deposes and says that he is the Business Manager of THE ARCHITECTURAL FORUM and that the following is, to the best of his knowledge and belief, a true statement of the ownership, management, etc., of the aforesaid publication for the date shown in the above caption, required by the Act of August 24, 1912, as amended by the Act of March 3, 1933, embodied in section 537, Postal Laws and Regulations printed on the reverse of this form, to wit:

1. That the names and addresses of the publisher, editor, managing editor, and business manager are: Publisher, Time Incorporated, Time & Life Building, Rockefeller Center, New York 20, N. Y.; Editor, Howard Myers, 350 Fifth Avenue, New York 1, N. Y.; Business Manager, Vernon Hitchcock, 350 Fifth Avenue, New York 1, N. Y.;
2. That the owner is: Time incorporated, Time & Life Building, Rockefeller Center, New York 20, N. Y.; that the names and addresses of stockholders owning or holding one percent or more of total amount of stock are: Brown Brothers, Hariman & Co., 59 Wall Street, New York 5, N. Y.; J. P. Morgan & Co., Inc., For the account of Henry P. Davison, P. O. Box 1266, New York N.; Marine Midland Trust Co., Successor Trustee U-W of Briton Hadden for the benefit of Elizabeth Busch Pool, c. (or Iving Trust Co., Successor Truste Cu-W of K1ton Hadden for the benefit of Elizabeth Busch Pool, c. (or Iving Trust Co., Gratodies Dept., 1 Wall Street, New York 5, N. Y.; How York 5, N. Y.; Lious H., Ingalis, 10723 East Boulevard, Cleveland, Ohio; Robert L. Johnson, Temple University, Philadelphia, Pennsylvania; Margaret Zerbe Larsen, c/o Time Inc., Time & Life Building, Rockefeller Center, New York 50, N. Y.; Baruet W. Meek, c/O Greenwich, Trust Co., Mex York 50, N. Y.; The New York 50, N. Y.; Baruet W. Meek, Co Greenwich Trust Co., Greenwich

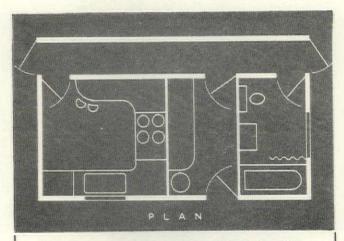
holding 1 are: None

are: None. 4. That the two paragraphs next above, giving the names of the owners, stockholders and security holders, if any, contain not only the list of stockholders and security holders as they appear upon the books of the company but also, in cases where the stockholder or security holder appears upon the books of the company as trustee or in any other fiduciary relation, the name of the person or corporation for whom such trustee is acting, is given; also that the said two paragraphs contain statements em-bracing affiant's full knowledge and belief as to the circumstances and conditions under which stockholders and security holders, who do not appear upon the books of the com-pany as trustees, hold stock and securities in a capacity other than that of a bone dide owner; and this affiant has no reason to believe that any other person, association, or corporation has any interest direct or indirect in the said stock, bonds, or other securities than as so stated by him. (Signed) Vernon Hitchrock

(Signed) Vernon Hitchcock Isusiness Manager Sworn to and subscribed before me this 19th day of September 1945. JEANNE M. CONNOLLY Notary Public

(My commission expires Mar. 30, 1947)





For kitchen, bothroom and utility room, STEEL is best. Porcelain enamel on a U·S·S VITRENAMEL base is used for wall panels, bathtub, lavatory, medicine cabinet, hot water heater, laundry tubs. Stainless Steel for the kitchen sink. Plain steel enameled for kitchen cabinets. U·S·S Copper Steel for furnace firebox and ductwork.

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UNITED STATES STEEL

N Ew ideas in home-building are coming thick and fast. Some are visionary in the extreme, but this one has already won acceptance from many practical architects. The basic idea is to design the bathroom, kitchen and utility room as one compact unit. The savings in cost are obvious because of short runs for all plumbing and heating lines.

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For other ideas and ways to improve quality, write for our booklet, "85 Ways to Make a Better Home".



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LOBBY DESIGN MERCHANDISES HOTEL AS CIVIC INFORMATION CENTER

Lobby design based on a sales idea by Bigelow Carpet Counsel

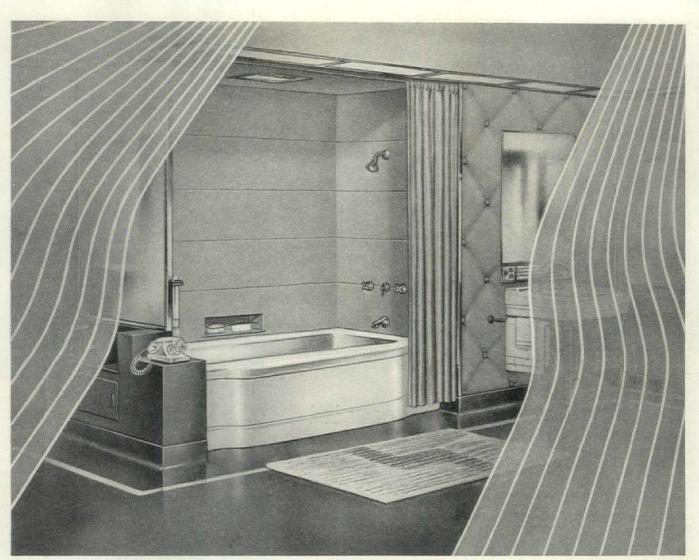
Hotel occupancy is based on service. Translating this service into a lobby design where it can be seen and appreciated by the public is the idea behind this suggestion by Bigelow Carpet Counsel.

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You'll want your plans for new homes to be modern, functional – different. Bathroom fixtures of Formed Iron will give just the right touch to "this busiest room in the house." Their practical beauty invites your imagination to explore all the interesting possibilities of completely new design.

The advanced styling of Formed Iron fixtures lends itself to any arrangement and any home, regardless of price. They can be specified in gleaming white or a wide range of appealing colors. Their high-glaze finish is acid-resisting – at no extra cost. Most important, scientific design eliminates unnecessary weight with no loss of strength. They weigh only a third as much as older types.

While Armco does not make Formed Iron plumbing ware, it does supply leading manufacturers with the special kind of iron that bonds smoothly and enduringly with the glassy porcelain enamel. Your clients trust the familiar Armco triangle trademark. . . The American Rolling Mill Company, 2191 Curtis St., Middletown, Ohio. Export: Armco International Corporation.

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The Armco book "Know Your Steel . . ." is crammed with sound advice about where and when to use special-purpose sheet steels. If there are some people in your community you believe should have it, write us on your firm letterhead. We'll send free copies.



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Building aluminum bridges in minutes

It took Precise Engineering when every part had to fit exactly . . . instantly in ponton bridges. That same Ceco engineering is equally valuable when

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ENGINEERING



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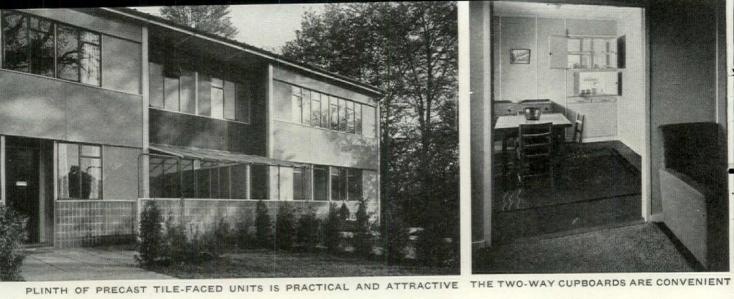
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Highway Products Division

CONSTRUCTION PRODUCTS

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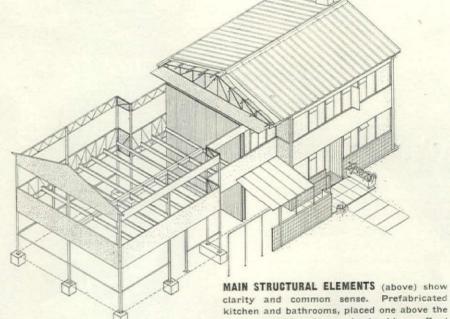


ENTRY FROM DINING ROOM



KITCHEN AND UTILITY ROOM







other, simplify plan and plumbing, afford maximum privacy for each unit.



HOWARD HOUSE: FREDERICK GIBBERD, Architect

This permanent prefabricated house is one of a group of row houses erected at Woolwich, England, and is notable equally for its structure, plan and appearance. All components of its light welded steel frame are shop-fabricated and are merely assembled at the site. Exterior finish is of asbestos-cement in modular units; interior finish may be any sheet material; roof is of corrugated asbestos sheets; floors are T & G wood. For privacy, soundproofing and mechanical economy, the prefab kitchen, laundry and bath are placed in narrower bay. Cost per unit was \$3,200 to \$3.600 exclusive of foundations and utilities.

PREFABRICATION It begins to look as though the English-who don't want the prefabs-might get them

before Americans who've been expecting them a long time.

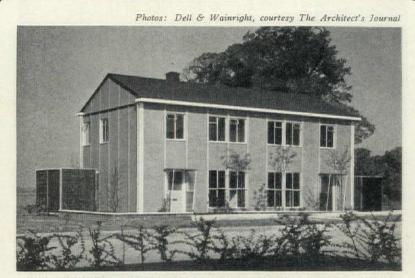
Postwar England's great interest in prefabrication is in sharp contrast to conditions in this country today, where activity is apparently at its lowest ebb in a decade. In a sense, interest in prefabricated houses has always been a sort of barometer of critical housing shortages. And, while there is an immense shortage in this country, it is not so acute nor so easily demonstrated as in England, where conditions differ in several important respects. Primarily, there is the question of actual war damage-300,000 dwelling units were destroyed or damaged beyond repair by Luftwaffe and flying bombs. To this figure must be added some 450,000 units needed for relief of overcrowding and unscrambling of families, and the replacement of some 500,000 substandard dwellings. In the face of such needs, any technique which promises to speed the production of houses assumes great significance.

The British, like all other European nations, have divided their housing problem into two categories-temporary and permanent solutions. Prefabrication is the obvious-indeed the onlyanswer to the first and the logical answer to the second. In both categories, prefabrication is being used. The new Labour government inherited the fairly ambitious temporary house program of the Churchill government which aimed at rushing 145,000 units to completion. All of these were to be prefabs, designed along the lines similar to those in this country-plywood and metal panel systems, Quonset huts, etc. However it is generally known that the present government frowns on the temporary program and current delays may result in its being overtaken by the permanent house program and eventually abandoned.

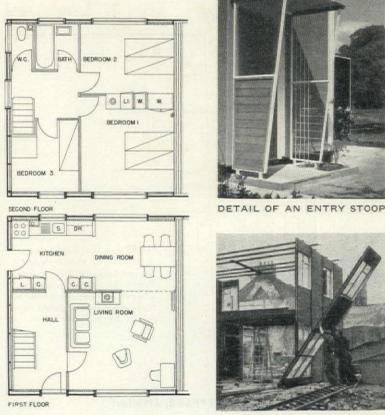
Four factors force its consideration

Although not yet statistically important, the use of prefabrication in permanent houses is the subject of lively interest. The government itself, through its Ministry of Works, has erected a number of so-called demonstration houses in various cities. Together with those developed by various trade associations, these are designed both to exhibit and to field test various structural systems. They have at least one characteristic in common; their emphasis on dry construction, the elimination or reduction to an absolute minimum of masonry, concrete and plaster work.

(Continued on page 174)



HOUSE REQUIRES ONLY 25% OF USUAL AMOUNT OF SITE LABOR



TWO MEN CAN PLACE PANEL

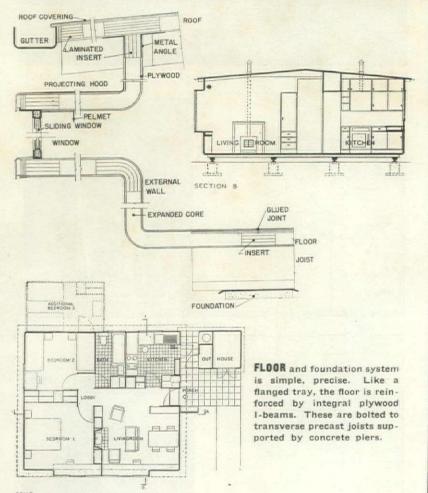
B.I.S.F. PROTOTYPE HOUSE: FREDERICK GIBBERD, Architect

Third of three types designed for the British Steel and Iron Institute, this house employs a two-story steel-framed section with factory installed surfacing, windows and doors. Floors, roofs and interior partitions are similar to those of the Howard house. Controlling factor in the design was an absolute minimum of site labor-and unskilled labor, at that. Erection time was 540 hours as opposed to over 2.000 for conventional house.

PREFABRICATION



THIS TEMPORARY ALL-PLYWOOD PREFAB SHOWS MANY ADVANCES



SCALE

JICWOOD HOUSE: RICHARD SHEPPARD, Architect

Most ambitious of the temporary prefabs, this plywood house is a cross between panel and sectional construction. Material is uniform throughout —a 2 in. sandwich of resin-bonded plywood and compressed sawdust filler, reinforced at all edges, angles and coves with integral plywood spines. All sections are shop-fabricated: the floor, with built-in coves, comes to site in three sections; the walls in 4 ft. panels, complete with hays, windows and doors; the roof in three sections. A tongue-and-groove system at all edges permits site gluing of all joints, eliminates battens. Drawings courtesy Architectural Design & Construction Admittedly this runs against the deepseated prejudice of the brick-loving British, and how far prefabrication will go in the face of it is anybody's guess. But many factors are involved which are, in the last analysis, more decisive than prejudice. These make it seem likely that prefabrication has a more immediately favorable future there than here in America:

▶ The hugeness and urgency of the housing need relative to the normal productive capacity of the British building industry. In the 20 years between the wars, it produced an average of some 215,000 units per year. Yet England needs immediately some 1,300,000 units.

▶ The present productive capacity of the British building industry is far below normal. The conversion of plants to war production, the actual destruction of many facilities, the loss of skilled labor to the armed forces and the wartime rupture of apprentice trainingall of these have reduced today's capacity.

▶ The acute shortage of conventional materials like lumber and the parallel desire of industries like steel and aircraft to develop new peacetime markets for war-expanded production.

Finally, the state of public sentiment which, after six years of wartime discomfort, demands government intervention in solving the housing shortage regardless of means or costs.

As a result of forces such as these, it is likely that first-class, permanent prefabricated houses will appear in England before they do in America. On the *(Continued on page 176)*

BRAITHWAITE HOUSE employs modular steel skeleton with special spring clip for fixing interior and exterior sheathing. Noise transmission in steel frame is reduced by wood bucks. The frame comes to site in 2-story sections.







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> EASY - TO - INSTALL Hardware 85% pre-assembled. Can be installed in an hour.

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MINIMUM HEADROOM

Requires only 2" of headroom above openings and 2" of sideroom.

> NEW AUTO-TYPE LOCK Smart, durable, easy-acting auto-type lock is exclusive equipment.

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Craw - Fir - Dor is strong. Made of durable Douglas fir. Exterior (waterproof) panels

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PREFABRICATION

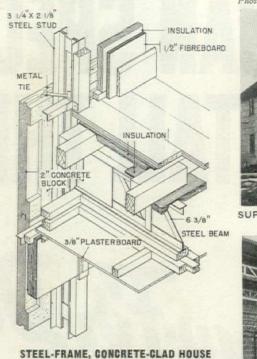
(Continued (rom page 174)

basis of current work, there is much in these houses which merits American attention. In terms of architectural design they compare favorably with conventional structures; in terms of planning and equipment, they are if anything superior.

Even such temporary structures as the Jicwood house (p. 174) show better engineering than most war-time plywood prefabs in this country. A cross between panel and sectional construction, the best features of both are preserved: the integral reinforcing of panels and coved corners are important refinements. Although the design of kitchen and bath equipment is behind American practice, the British show advance in prefab backto-back kitchen and bath units, etc.

But it is in the structure proper that British prefabrication shows a trend which differentiates it most sharply from American practice. The majority of the permanent houses use the skeleton frame -rather than the panel-as the basic structural unit. This tendency may be due to a distrust of a structure assembled entirely of panels, to doubt as to the permanence of sheet materials, or to

(Continued on page 180)



A light steel skeleton of lattice studs and joists is sheathed in precast concrete blocks in this demonstration row house. Light columns support floor joists and free interior portions of structural functions.



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which should enable us our Board of Directors Please

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Magic Voors in new plans for the plant?



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DOORS



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Blueprints of Cleveland's Union Terminal show 3 miles of expansion joints. But you could search the building, and never find so much as an inch.

The entire 3 miles is completely inaccessible. Once installed, the expansion joints are "on their own" without benefit of maintenance.

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... and they do! For they're made of Monel.*

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There are a few areas in which Seaporcel Porcelain Metals, Inc. is not represented. Inquiries from interested agents are invited.

> Seaporcel Porcelain Metals, Inc. Formerly Porcelain Metals, Inc. 28-05 Borden Ave., Long Island City 1, N. Y.



PREFABRICATION

(Continued from page 176)

the scarcity in England of lumber and plywood. Whatever the reasons, the fact remains that British designers are using a concept which is essentially that of the traditional American frame house, and one that American prefabricators have largely ignored.

The Braithwaite House (p. 174) belongs to this third class. Cold-rolled, light gauge steel members are shop-welded into two-story sections. Of modular design, these sections come in two widths with a variety of built-in windows and door openings. The system makes ingenious use of an X-shaped flanged vertical member which yields maximum stiffness and easy jointing for straight walls, intersections or corners. Included also is a zinc spring clip which acts as batten for any type of sheet surfacing. Designed for exterior and interior use alike, this clip is perhaps not foolproof for permanent exterior use but is obviously susceptible to further improvement.

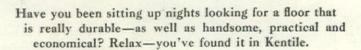
Although somewhat lighter than the Braithwaite system, the Gibberd house for the BISF (p. 173) is based upon the same principle. Wall sections of full two-story height and light enough for two men to handle, are swung into place and bolted together at the site. The system permits any sheet-type material to be used for exterior and interior surfacing. Interior walls are non-loadbearing, second-story floor and roof beams being carried by columns.

The Howard house (p. 172) employs a light post and lintel system. Here light prefabricated trusses are connected to the exterior columns on the site: they thus act as both beam and continuous horizontal spandrel. They carry the joists and extend from top of first floor windows to sill of those of the second, forming a continuous horizontal spandrel. Exterior walls are completed by setting sash between spandrels and surfacing entire area with rigid panels—in this case asbestos-cement with an insulating core of felt and asphalt. As in the other houses, complete prefabricated roof trusses are used. Floors are framed of light-weight I-beams.

A system employing what would be called in this country metal lumber is used by the Ministry of Works in its steel frame "concrete-clad" house (p. 180). Here light metal studs, full two-story height, are separately set into a channel fixed into the concrete floor slab. These are spaced in the perimeter so as to receive the lattice joists for the second floor and bottom chord of the roof truss. Stiffening braces are used between corner studs. Steel casement frames fit between the studs. Exterior surfacing consists of precast vibrated concrete panels, 2 in. thick, whose dimensions are naturally modular in both directions. All party walls, flues, etc., are masonry and independent of the structure proper.

Even in the temporary and semi-permanent prefabs, there are concepts and details which fabricators in this country might study with good results. Real advance is evident in such sectional units as the all-aluminum Airoh sectional house which is the British Aircraft Industries bid for a new market. Whatever their individual merits, such prefabs are being demonstrated all over England. They are being sponsored by the government, by trade associations, and by individual companies. In both variety of approach and in quality they challenge our leadership: in actual numbers they probably surpass us. And it would be a paradox indeed if the British—who have never liked it—get prefabrication before the Americans[#]/₂, who have waited so long for it.





DURABLE?

it!

There isn't any material more durable than Kentile. For instance, it stands up under the terrific traffic of Rockefeller Center corridors, A. & P. and Woolworth stores and looks swell for years. Cigarette burns? They are rubbed right off by steel wool.

HANDSOME?

Kentile is set tile by tile, not in sheets. You create the pattern and color combination you want.

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Kentile is cleaned by simple mopping—it is so moisture and alkali proof you can use it on concrete below grade it's resilient (quiet and comfortable)—it is slip-proof and fire-safe—it's altered anytime tile by tile.

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Kentile not only will wear indefinitely and is inexpensive to maintain, it costs less! Want proof? Ask your local flooring contractor or write

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The third third

It takes three things to complete a home, three thirds ... each equally important ... each essential if the home is going to *sell!*



The third "third" is equipment—no longer confined to plumbing and hardware, but complete electrical equipment... modern aids to better living, included as a basic part of the home.

dependability, is the reason so many builders and architects specify G-E Appliances as standard equipment in new homes.

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The difference in initial cost of a *complete* home, with all equipment included on the mortgage, is relatively minor. Economies in operating cost and maintenance, plus the longer life of G-E Appliances, will more than offset the slight increase in monthly payments.

For complete explanation of these economies, send for your free copies of the G-E Booklets. "Your New Home And Your Pocketbook," and "Castles in Foxholes." Remember, G-E is ready with a complete technical service to help you in designing homes for *better living*, electrically. Home Bureau, General Electric Company, Appliance and Merchandise Department, Bridgeport, Conn.

tion of an efficient, liveable interior with a pleasing

exterior.

The second "third" is construction—the builder's skill and use of good materials from foundation to roof, inside and out.

The *third* third may be the key to your sales! For, when it comes to meeting competition, homes with the *most complete* equipment and the *best* equipment will have a long head start.

- Such equipment includes automatic heating with air conditioning; adequate wiring and proper lighting.
- All-Electric Kitchens with refrigerator, range, dishwasher, Disposall, exhaust fan, clock, and steel cabinets.
- All-Electric Laundries, with washer, dryer, ironer, and plenty of hot water from the automatic heater.

Most People Believe The Best Is G-E

A recent survey of people all over the country shows that 53% of the women and 51% of the men say General Electric makes the best electrical appliances for the home.

This preference, backed by General Electric's record for



THE APPLIANCES MOST WOMEN WANT MOST

There is no way of eliminating moisture from the atmosphere. But you can eliminate vapor problems in the walls by installing Ferro-Therm Steel Insulation the all-metal insulation which cannot absorb moisture from the air, and which cannot convey any moisture to framework which would cause wood to rot

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Moisture resistance is one of the many plus advantages that you get from Ferro-Therm - the insulation which does far more than insulate, although it is the most effective barrier for the resistance

WHO EVER HEARD OF steel

ABSORBING MOISTURE!

MOISTURE?

Ferro-Therm Steel Insulation is absolutely moistureresistant - it cannot absorb moisture or convey any moisture to the framework.

of heat ever developed.* Because of its all-metal construction, Ferro-Therm is non-combustible and provides a definite fire-stop for wooden framework. It forms an all-metal shield which cannot be penetrated by termites, rodents, or insects. It does not settle or pack down. And, above all, it has the strength and permanence of steel - it is 100% efficient for the life of the building.



Only Steel Insulation Can Give You Steel's Advantages

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*Ferro-Therm reflects 95% of all radiated heat - makes heat

literally "bounce" off from either side. Installed in ceiling

(or roof) and exterior walls, Ferro-Therm will reduce fuel

costs by 25% to 30%. In summer, the installation of Ferro-

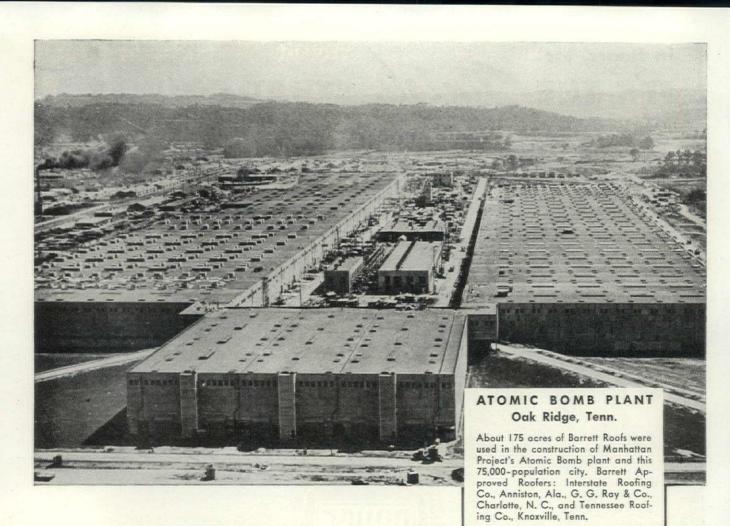
Therm will reduce temperatures in the house by 10° to 12° F.

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<i>City</i>																

Easy to Install

Ferro-Therm can be installed quickly, easily and economically. The sheets are as thin as cardboard. They take up far less space than bulky mass insulation. And they are light - easy to handle. One man can install 1000 to 1200 square feet in a day.

Only steel insulation can give you steel's advantages. Only Ferro-Therm can give you its exclusive features that protect as well as insulate. Get the full story of Ferro-Therm's superiority as an all-purpose insulation. Just mail the coupon below.



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... 7,620,000 sq. ft. of BARRETT ROOFS!

TEVER has the need for dependable roof protection been more clearly highlighted than in the construction and operation of the U.S. Government's Manhattan Project, at the Clinton Engineer Works, Oak Ridge, Tenn. For here, under direction of the War Department, the united efforts of science and industry culminated in the atomic bomb, the most potent military weapon and greatest scientific achievement in history.

In the vital race against time and the Axis, no delays or interruptions in production could be tolerated.

Plant and equipment had to operate at complete efficiency all of the time.

Barrett is proud to have had a not unimportant part in this mammoth project. The 7,620,000 sq. ft. of Barrett Roofs applied at Oak Ridge constitutes one of the largest single orders for roofing materials in the history of the industry. It included 4,500,000 sq. ft. of Barrett Coal-tar Pitch and Felt built-up roofs, and 3,120,000 sq. ft. of Barrett Dublecote Shingles and other prepared roofings used principally for workers' homes, schools and stores. Barrett

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and Today's Winner is BRUCE FINISHED FLOORS with New Factory Finish!

BRUCE

Home builders will want Bruce Finished Floors... because millions of attention-holding advertisements have sparked their interest in this modern flooring... millions more are making new friends and customers for Bruce. In leading magazines! Again and again!

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Yes, Bruce Finished Floors can truly be called America's most wanted floors!

THAN ON-THE-JOB FINISHES!

- **1** Smooth Sanding—Each strip sanded to perfect smoothness on multiple drum, precision sanders. No sander marks.
- 2 Prime Condition—Finishing starts immediately after sanding, so no "raised grain." Moisture content of flooring is right.
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- 5 Infra-red Drying applies heat uniformly ... welds finish into a tough, even film. No "unfavorable drying weather."
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- **Superior Waxing**—Special wearresistant waxis applied evenly, then polished over and over with brushes and buffers.
- 8 Proper Seasoning Finishing done weeks before flooring is used—so no hazard of finish being walked on too soon.

BRUCE FINISHED FLOORS



Color and sparkle get attention from passing traffic.

But color and sparkle alone are not enough. They may call attention to the storefront itself but fail to capitalize fully on the pulling power of the store interior. The Visual Front combines these qualities with transparency to show customers what you have to sell.

A good example is this storefront by Architect W. P. Heinl of Chicago. The open-backed windows permit a clear view of the beauty and color of its interesting interior. The displays, in effect, are carried on through the plate glass front, uniting inside and outside into one decorative scheme. For better visibility, and to make the store look easier to enter, the doors are clear Tuf-flex* tempered plate glass.

Glass has many qualities which you can employ for a better front for tomorrow's store. Available in transparent, translucent, or opaque form, in Heat Absorbing Plate Glass, and in Golden Plate Glass for protection from fading. And remember, glass has a hard, smooth finish that withstands both weather and repeated cleaning.

Enlist the merchandising advantages of the Visual Front in your designs. Write for our Visual Front brochure which is packed with ideas suitable or adaptable to your storefront problems. Libbey Owens Ford Glass Company, 71125 Nicholas Building, Toledo 3, Ohio.

* Reg. U. S. Pat. Off. -



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LABORATORIES, INC.

NEW YORK, N. Y.

Certifying Agent

Make sure that your lighting plan will provide the selling power and atmosphere you want. Consult your local electric service company for good advice.

Take time to get quality lighting fixtures . . . the kind that will give your clients lasting satisfaction-

Look for this label

Because this label means lighting fixtures that are:

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1. Built to definite specifications . . . to provide the best in lighting and lamp performance, together with dependable service.

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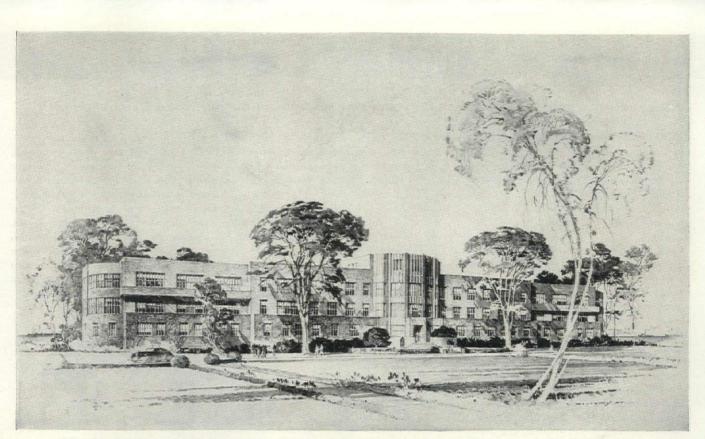
4. Benefited by the latest developments in fluorescent . . . since Fleur-O-Lier's testing and research service brings you the accumulated knowledge of the finest technicians in fluorescent lighting.

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So when you modernize, be sure of the best in fluorescent fixtures ... look for the Fleur-O-Lier label. Fleur-O-Lier Manufacturers, 2116 Keith Bldg., Cleveland 15, Ohio.

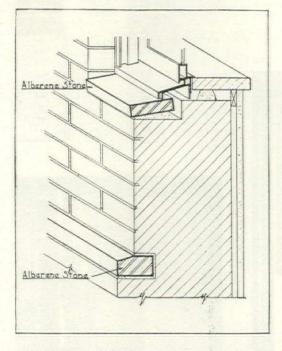
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Riverside Hospital, Tuberculosis Pavilion, North Brother Island, New York, N. Y., Electus D. Litchfield, Architect.

Sills, coping and trim of Alberene Stone are durable, colorful and economical



Detail showing $1^{-3}4''$ thick Slip Sill, and $2^{-1}4''$ thick Belt Course of Alberene Stone as used in Riverside Hospital. At circular sections, Sills carry through to form a band course. Alberene Stone used for roof and balcony copings, also.

Similar Sill treatment, $1\frac{1}{2}$ " thick, being turnished for U. S. Army Tripler Hospital in Hawaii; York & Sawyer, Architects. Alberene Stone is ideal for exterior use because it is impervious to moisture; it does not chip, scale or split. Its natural light blue-gray tone harmonizes with practically any other color. The fact that it can be cut into thin sections makes for definite economies. Used for sills, coping, spandrels, exterior or interior trim. Alberene Stone is free for all time of maintenance costs.

Our Mills in Virginia are the largest in the country devoted to producing special purpose quarried stone. We are prepared to make deliveries *promptly* of stone in a color range of gray, dark gray, blue, blue-black, dark green and black, in various textures and finishes; and *prompt delivery is an important consideration in the present emergency*. Inquiries will receive immediate attention.

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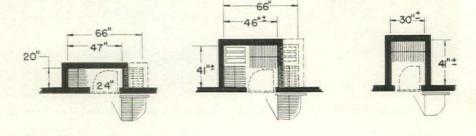
BUILDING REPORTER

Long awaited, a prefabricated home utility unit now announced promises reduced building costs.

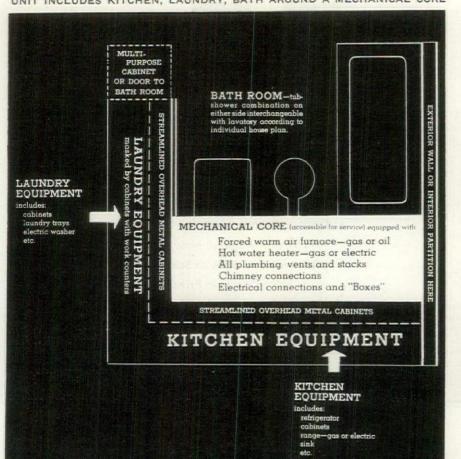
HOME UTILITY UNIT, which-in addition to a complete bath, kitchen and laundry -includes the household furnace, hot water heater, plumbing vents and stacks, chimney connections and electrical service center, has been long awaited as a key to building cost reduction. The Ingersoll Steel Div., of the Borg-Warner Corp. has now developed such a unit: a complete kitchen, laundry and bath planned around a mechanical core containing heating, plumbing and electrical services. The Ingersoll unit will come in several sizes and is reversible in plan. thus adaptable to a wide range of designs. Builders incorporating the unit will have only to pour the dimensioned concrete base, bring through utilities, set the core in place and connect the pipes and wires. Access panels are provided in the core for easy servicing. In addition to housing heating, plumbing and electrical equipment, the unit includes a chimney and plenum from which hot air is distributed throughout the house.

Factory production and assembly, reduction of house cubage and long-term financing, Ingersoll hopes, will offer a wide market for the new unit. Prototypes will shortly be installed and tested in model houses, large scale production is expected by mid-summer 1946. **EXPANDOR UNITS,** designed by F. P. Platt & Bro., architects, utilize wasted space behind doors to provide an extra closet, wardrobe, bureau, kitchen cabinet, bar or linen closet. They are especially useful for hotels and small apartments where storage space is inadequate and structural alterations out of the question. Six standard models, each designed and equipped to meet special requirements, include a wardrobe, wardrobe with drawers, bureau, linen closet, kitchen cabinet and bar. Units may be fastened to the inside surface of any ordinary door, occupying only $2\frac{1}{2}$ sq. ft. of floor space. Provided with a pilfer-proof lock, contents is protected when closet is open for cleaning. They can be installed easily and quickly in existing homes, apartments, hotels. hospitals, etc., and offer opportunities for useful innovations especially where space is at a premium. Two units used together provide a small dressing room in a space approximately 3 ft. by 8 ft.

(Continued on page 192)



REMOVABLE STORAGE UNITS attached to closet doors allow more efficient use of closet space (above). Expandors are especially useful for small apartments, hotels and for remodeling work, offering an extra closet, bureau, kitchen cabinet, bar or linen closet which is readily available and easily installed (below).



UNIT INCLUDES KITCHEN, LAUNDRY, BATH AROUND A MECHANICAL CORE

Selecting FLUSH VALVES FOR AIRPORTS and DEPOTS

WASHINGTON NATIONAL AIR-PORT, Washington, D. C., equipped with Watrous Flush Valves. Louis A. Simon, Supervising Architect. Howard Lovewell Cheney, Consulting Architect. Mehring & Hanson Co., Plumbing Contractors.

GREYHOUND-PICKWICK BUS TER-MINAL AND HOTEL, Kansas City, Mo. Watrous-equipped throughout. Wright & Wright, Architects. E. D. Hornbrook, Plumbing Contractor.

A recent survey among architects widely experienced in the design of airports, railway and bus depots discloses some interesting trends in flush valve selection.

For example, there is a definite trend toward foot-operated flush valves for both closet bowls and urinals. Concealed flush valve installations are also favored by many. A summary of these trends is included in the booklet offered below.

Of course, a primary consideration in the selection of any flush valve combination is dependable, troublefree *performance* — characteristic of all Watrous Flush Valves.



Very important also is *economy*. Here the simple Watrous Water Saver adjustment makes possible savings of many thousands of gallons of water each year.

Maintenance is another factor. This is simplified by the convenient, single-step servicing feature of Watrous Flush Valves.

Combine all these qualities in the flush valves for your new building or modernization program by choosing Watrous Flush Valves—a selection that will be a constant source of satisfaction over the years to come.

THE IMPERIAL BRASS MANUFACTURING COMPANY, 1238 W. Harrison St., Chicago 7, Illinois



ARCHITECTS' VIEWS ON FLUSH VALVE APPLICATIONS

A survey of interesting trends in the selection of flush valves for buildings is given in Bulletin No. 477. Write for your copy. See Sweet's Catalog for full information on Watrous Flush Valves.

atrous Flush Valves

BUILDING REPORTER

(Continued from page 190)

COLOR COORDINATION for all the allied home furnishing industries, recently announced by the Home Furnishings Style Council, will enable the consumer to purchase furniture, draperies, carpets, and other furnishings with definite assurance that colors will match. Members of the Council will manufacture their products in B.H.F. (Basic Home Furnishings) colors or combination of these colors, and label them with standard name of the B.H.F. color card for easy identification. Carpet, drapery, upholstery fabric, wall paper, paint and lighting equipment manufacturers are behind the program which is designed to produce volume sales in the mass market. Two years of research by color specialists in the home furnishings field have developed a system of nine basic colors with eight graduated values for each. The nine colors and their B.H.F. names are: tan group, Alamo; rose group, Grand Canyon; burgundy group, Adirondack; mauve group, Prairie; green group, Shenandoah; beige group, Cape Cod; blue group, Great Lakes; cedar group, Santa Fe; grey group, Great Smoky.

ROCK-A-FILE SYSTEM OF FILING for commercial, professional or financial offices is based on a new principle of side filing which offers space economies of from ten to 50 per cent. This system differs from conventional drawer filing systems in that the compartments swing open sidewise. Wasted space necessary for operation of drawer files is eliminated, and as projection of the Rock-A-File is relatively small when open, units are





applicable to areas where the conventional files are impractical. Broadside opening makes contents of the compartments accessible from either end of the row; thus several filers can work in one section at once. Compartments fully loaded can be left open without danger of the cabinet tipping, for the center of gravity is well inside the unit. All excess motion of pushing and pulling of drawers is eliminated and the tripping danger is relatively slight with the small projection. Rock-A-Files are available in card index size for desk top use, as well as larger cabinets for letter and legal size files. The Rockwell-Barnes Co. developer of Rock-A-File, has incorporated the system in a furniture line. which is presently available in wood. Redesigned metal units will be offered for postwar scientific office planning.

NEW PRODUCTS

MARBLE WALL PAPERS Reproduced by lithography.

Katzenbach and Warren marble papers, formerly done only by hand, are being reproduced by lithography. As handmade marble papers vary from sheet to sheet, the lithographic reproductions are (Continued on page 196)







• Father wants to read—the children want to play—mother wants the radio—and Sue wants to hold hands! What's the answer? More partitions—with more doors of Ponderosa Pine—to create peaceful, functional room units!

In "Today's Idea House"—new 32-page idea book—doors are treated with respect to their functions in making family life more convenient and more comfortable. This booklet is crammed with illustrations showing how stock design Ponderosa Pine doors and windows help you fulfill America's need for home beauty and durability



This beautifully proportioned door of Ponderosa Pine provides privacy for a room opening off a hallway. "Today's Idea House" shows a wide variety of stock door designs including sliding doors.

—yet enable homes to be built for greater economy. Remember, doors, frames and windows of Ponderosa Pine will be available as postwar building moves forward. You'll want a copy of "Today's Idea House"— and the coupon will bring you one, free!



Doors can be charming in themselves — as witness these doors of Ponderosa Pine. Note how the louvered doors at the right and the Colonial type doors at the left create an informal, livable atmosphere.

SEND FOR YOUR COPY OF "TODAY'S IDEA HOUSE!"

Arrangements for every room of the home—helpful suggestions and diagrams — are contained in "Today's Idea House." Use this booklet as a source of ideas and inspiration — a copy is yours for the asking.



Dutch doors—as shown in the photograph — are an excellent choice for children's rooms. Upper half of the door opens for ventilation —there's no danger of the child's leaving the room.



••	Ponderosa Pine Woodwork
	Ponderosa Pine Woodwork Dept. MAF-12, 111 West Washington Street Chicago 2, Illinois
	Please send me a free copy of "Today's Idea House."
	Name
	Address
	City

For Attractive, Acoustical Ceilings

AT LOWER PRICES

SPECIFY JOHNS-MANVILLE

FIBRETEX



NEW! J-M Unit Construction provides flexibility!

BULLETINS

Building interiors can be completely flexible to meet changing needs! The J-M Unit System consists of movable Transite Walls, efficient Acoustical Ceilings, and colorful Asphalt Tile Floors . . . all under one specification, one manufacturer's responsibility. Write for the complete details! Two additions to the Johns-Manville Acoustical family now bring the cost of sound control within the reach of almost every client.

Fibretex and Fibretone are attractive beveled units, twelve inches square, which have exceptionally high coefficients of sound absorption and of *light reflection*.

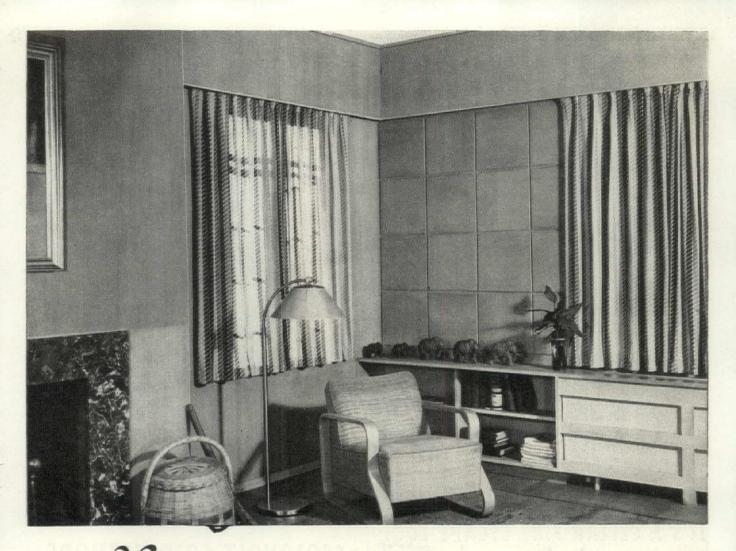
A unique feature of Fibretex is the pleasing pattern produced by its grooved squares. Its companion product, Fibretone, is distinguished by the more familiar perforated pattern. Either one makes an attractive-looking ceiling or wall that can be left with original factory finish, or painted as often as desired with no loss in efficiency. (An example of Fibretex in a school corridor is illustrated above.)

Whatever your problem in sound control may be, Johns-Manville is able to provide a solution that is scientifically correct. Write Johns-Manville, 22 E. 40th St., New York 16, N. Y.

Johns-Manville Pieneers in Sound Control



Mamper a



Your Designs will have <u>extra</u> appeal when you <u>SPECIFY</u> <u>WELDWOOD</u>!

To give your clients the unusual, up-tothe-minute homes they demand . . . design with Weldwood hardwood plywood.

Even one or two rooms finished in this modern material will become the interest centers of the house . . . available even to modest building budgets.

The many advantages . . . both structural and decorative . . . that this versatile material offers will make it a surefire favorite with everyone. There's Economy! Dri-Wall construction saves from 3 to 6 weeks building time. There's no risk of warped sash and woodwork that often results from the water in plaster walls.

There's Utility! Weldwood's versatility makes it equally suitable for paneling, papering or painting. There are endless possibilities for built-in cabinets, bookcases and other features that add so much "buy-appeal" to a house.

There's Durability! Once installed,

WELDWOOD Plywood

Weldwood Plywood and Plywood Products are manufactured and marketed by

UNITED STATES PLYWOOD CORPORATION

THE MENGEL COMPANY Incorporated Louisville, Ky.

Distributing units at Baltimore, Boston, Brooklyn, Chicago, Cincinnati, Cleveland, Detroit, High Point, Los Angeles, Newark, New York, Oakland, Philadelphia, Pittsburgh, Rochester, San Francisco, Seattle. Also U. S.-Mengel Plywoods, Inc., distributing units at Atlanta, Jacksonville, Louisville, New Orleans. In Canada: United States Plywood of Canada, Limited, Toronto. Send inquiries to nearest point. Weldwood is there to stay. Every panel is guaranteed for the life of the building.

Weldwood's wide variety of fine plywoods is rapidly becoming available again. Be sure to include this modern, attractive material in your future plans. Detailed information on availability and specifications are yours for the asking. Write us.



Plastics and Wood Welded for Good

Waterproof Weldwood, so marked, is bonded with phenol' formaldebyde synthetic resin. Other types of water-resistant Weldwood are manufactured with extended urea resins and other approved bonding agents.

BUILDING REPORTER

(Continued from page 192)

made in four different subjects each varying slightly in the disposition of the veining. The stock marbles will make their appearance in 10 colors and will be available in rolls of 8 sheets, each 20 in. by 30 in. Price is \$4.50 a roll. Manufacturer: Katzenbach and Warren, Inc., 49 E. 53rd St., New York, N. Y.



THERMOPLASTIC

Combines beauty and unusual properties.

Forticel, made from cellulose and propionic acid is the culmination of years of intense research. Combining beauty with valuable mechanical and physical properties, its use for electrical insulation, hardware, glazing materials, appliances and numerous other uses is predicted. Products made of Forticel have unusual surface lustre and brilliant mold finish without any mechanical polishing. The molding cycle is very short, and superior plastic flow quality in the molding. operation insures practically invisible weld lines. Its wide and non-critical molding temperature range, and a low specific gravity are other features. Toughness or high impact strength, which is not equalled by any other thermoplastic ester, is one of its outstanding characteristics. Colorability includes a full range, and colored mottles and intricate color designs can be produced. Special types manufactured into sheets and continuous films will lend themselves to all kinds of fabricating operations.

Manufacturer: Celanese Corp. of America, 180 Madison Ave., New York 16, N. Y.

ROOF COATING

Combination asphalt and aluminum allweather coating.

Hornlume combines asphalt with practically pure aluminum to make a roof coating that will resist the sun's rays as well as rain and snow. Available in a double container to be mixed on the job, both the asphalt coating and the integrally contained aluminum are brushed onto the roof from one can at the same time. Separation takes place by the law of specific gravity-the asphalt bonding to the roof to protect against bad weather, the aluminum staving at the top to reflect the sun's rays. Hence Hornlume is an insulator and a reflector. Manufacturer: A. C. Horn Co., 43-36 Tenth St., Long Island City 1, N.Y.

REFLECTIVE INSULATION

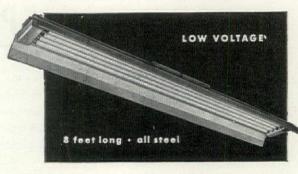
Low cost Sisalkraft with insulation value of aluminum.

Sisalation is a reflective insulation having all the qualities of Sisalkraft building paper plus the insulation value of aluminum. In addition to insulating qualities, it is a highly effective moisture vapor barrier to prevent moisture condensation in walls. Low in cost, an average five room home of approximately 1.400 sq. ft. of sidewall area can have Sisalation sidewall insulation at a cost of about \$20. Other applications include roof rafters, to keep the house cooler in summer, warmer in winter; nailed over joists in attic floor to prevent heat loss, and beneath flooring in basementless houses to keep floors drier and warmer.

(Continued on page 200)

IT'S A CELLAR FIRE ESCAPE TOO! BILCO Copper Steel CELLAR BULKHEAD FOR ACCESSIBILITY PERMANENCE SECURITY You give the home cellar real utility when you provide a direct-to-the-yard cellarway. And in modern cellars with game rooms and workshops, safety de-mands a second exit. BILCO Hatchway Doors provide a modern, trouble-free and attractive outside entrance. Copper steel lasts a lifetime. Leak-proof, warp-proof, fire-proof, termite-proof and burglar-proof. Can't be blown or knocked shut. Automatic Safety Catch BULKHEAD DOORS . STEEL ROOF SCUTTLES . SIDEWALK DOORS FILL OUT AND MAIL THIS COUPON TODAY! The BILCO Manufacturing Company 162 Hallock Avenue, New Haven 6, Conn. Please send me specifications and prices of Bilco copper steel cellar bulkheads for homes and other structures. Name Address City. State. Your Dealer's Name.....

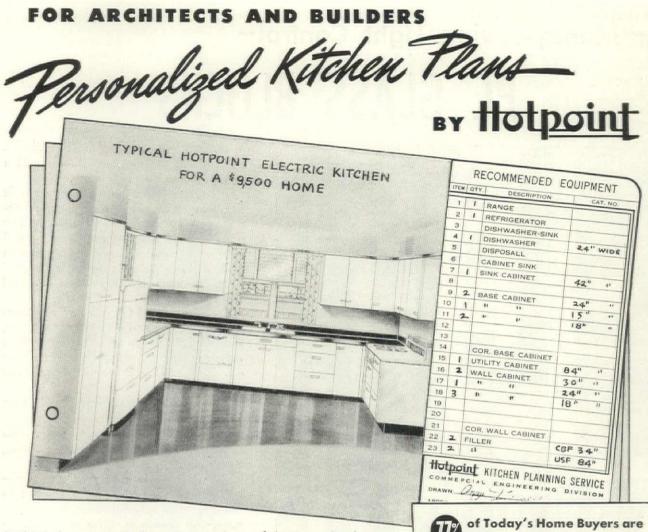
*COLOVOLT COLD CATHODE INDUSTRIAL FIXTURES



Here is the new Colovolt industrial fixture, one of a complete line of industrial and commercial "packaged" units. Equipped with the standard 93" Colovolt 10,000 hour lamp, Colovolt fixtures may be used singly or in continuous line lighting in multiples of 8 feet. Instantaneous starting, no flickering, guaranteed for 1 year except for failure due to breakage are extra advantages of the Colovolt Cold Cathode low voltage fluorescent lamp. The long life expectancy of Colovolt lamps may be realized even when constantly turned on and off, and pre-scheduled re-lamping, with no loss of production or time, is now possible with Colovolt installations.

Contact your electrical wholesaler or jobber, or write us for full details and prices.





O help you capitalize on your share of the extensive home building and modernization that is planned, Hotpoint has prepared a Portfolio of Personalized Kitchen Plans. In it you'll find plans for all types and size kitchens, including the bungalow, mansion and farm home, as well as the compact kitchenette. For detailed plans and additional information mail coupon below.

Long-term Promotions Have Created Trend to Functional, Electric Kitchens

- 1. Over a million and a half dollars were spent by Hotpoint in national advertising during the war to promote the trend to all-electric kitchens.
- 2. Scores of articles in leading magazines and newspapers have focused attention on the modern kitchen as the No. 1 room in the postwar home.
- 3. Over two million booklets, "Your Next Kitchen" by Hotpoint, have been distributed.
- 4. Leading utility companies and dealers have promoted all-electric kitchens in their communities.

Edison General Electric Appliance Co., Inc. 5651 West Taylor Street, Chicago 44, Ill. **Electric Kitchen Prospects**

"More than seven out of ten postwar homes will cost \$3,000 or more" predicts the United States Chamber of Commerce. Within that price range builders and architects will find a profitable field in planned, all-electric kitchens.

Edison General Electric Appliance Co., Inc. 5651 West Taylor Street, Chicago 44, Illinois

Without obligation, please send me your Portfolio of Hotpoint Personalized Kitchen Plans.

Name

Firm Name	
Address	
City	State

DEPENDABILITY ASSURED BY 40 YEARS EXPERIENCE

HOTPOINT REGIONAL SALES OFFICES EASTERN: 570 Lexington Ave., New York City 22, Plaza 3-9333. SOUTHERN: 304 Red Rock Bldg., Atlanta 3, Walnut 2959. CENTRAL : 1456 Merchandise Mart, Chicago 54, Superior 1174. WESTERN: Western Merchandise Mart, 1355 Market St., San Francisco 3, Underhill 2727.

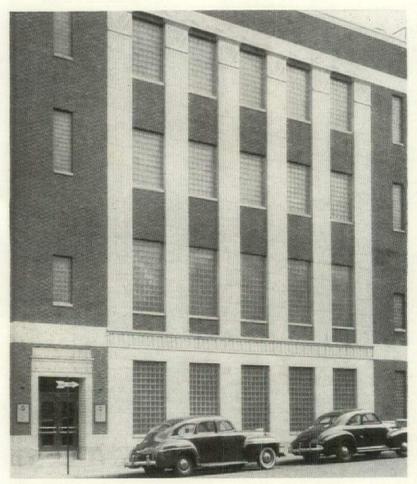


ELECTRIC KITCHENS

REFRIGERATORS . RANGES . WATER HEATERS . HOME FREEZERS . WASHERS AND IRONERS CABINET-SINK . STEEL CABINETS CLOTHES DRYERS . DISHWASHERS . DISPOSALLS

IN MOST STATES, ALL HOTPOINT KITCHEN EQUIPMENT CAN BE INCLUDED IN F.H.A. INSURED MORTGAGES

For Money-saving Light Control-PC GLASS BLOCKS



IN ALL SORTS OF PLANTS PC Glass Block construction lends a new note of beauty and distinction. Floods of diffused daylight are directed over wide areas. Infiltration of harmful dust and dirt is prevented. Temperature and humidity are more easily kept at desired levels, with less surface condensation. Unusual freedom from repairs and maintenance, quick easy cleaning, effect important cost savings. W HEN you specify PC Glass Blocks, you offer your clients a combination of good lighting and economy.

PC Glass Block panels assure ample floods of natural light, controlled and directed to meet various needs. Bright, but without glare near the opening. Diffused over wide areas. Transmitted to remote desks and machines. At the same time, PC Glass Block construction results in *actual money savings*.

Specifically, PC Glass Block construction permits you to plan larger openings, direct ample floods of light where it is needed, thereby cutting artificial lighting costs and making otherwise waste space produce profits.

The insulating qualities of PC Glass Block panels lessen heat losses, thereby saving money on fuel and retarding depreciation of heating and air-conditioning equipment.

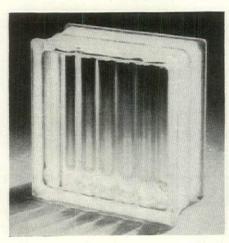
PC Glass Blocks can be easily cleanedquickly. They have greater resistance to breakage than other glazings. They eliminate sash repairs and replacements. So there's a big saving in maintenance cost.

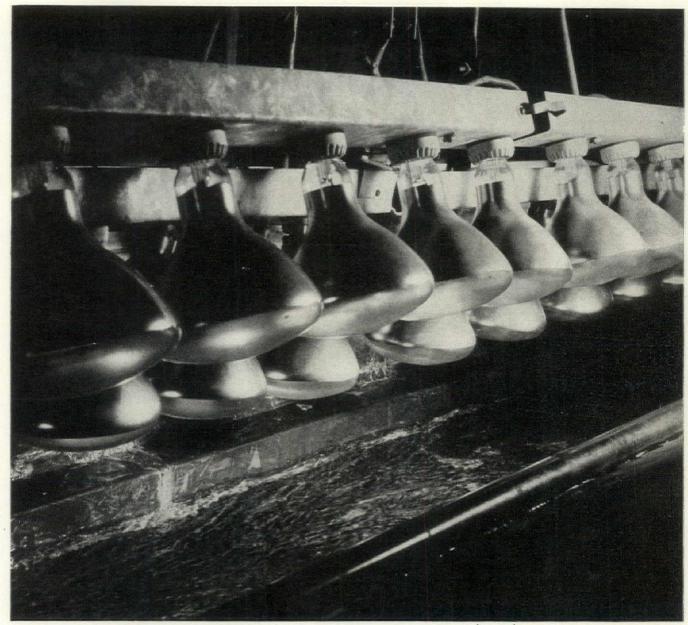
Those are some of the economy factors which have helped PC Glass Blocks to win general acceptance among architects, home builders and plant managers. You can safely be guided by their experience when you include PC Glass Blocks in plans for new construction or modernization. Write today for complete, up-to-date information on the full line of PC Glass Blocks. Pittsburgh Corning Corporation, Room 785, 632 Duquesne Way, Pittsburgh 22, Pennsylvania.



THE ARGUS PARALLEL FLUTE PATTERN

Especially designed for high light transmission and good light diffusion when laid with flutes either vertical or horizontal. Has smooth outside faces – parallel, identical interior flutes.With easily cleanable smooth faces, this conventional pattern is designed for both decorative and utilitarian use.





Cold water pouring into a heated copper gutter during test in the Revere Laboratory

WE USED HEAT TO GET

This photograph, of an experimental copper gutter being tested in the Revere Laboratory, was taken by light that was mostly heat. For the kind of light Revere was seeking in this research was information, knowledge, understanding — that we could pass on to you.

To get it, we had to bring the sun indoors, or at least its summer heat. Also sudden rainstorms, to create a temperature range of 160°. And put under them a typical sheet copper gutter such as any skilled worker might install on a building. Then we could see what happens when cold rain hits sun-baked copper, could measure any movement in the metal—could, in short, find out why sheet copper construction sometimes fails, even when materials, design and workmanship all appear virtually perfect.

From these and other Revere tests came the application to sheet metal construction of the basic but simple principle of columnar strength—from which we have worked out new data and methods that reduce this type of construction to a matter of engineering design.

11

All these facts are fully covered in the new Revere booklet, "Copper and Common Sense." To be sure of receiving a free copy, write today to the Revere Executive Offices. Revere materials are handled by Revere Distributors everywhere. For help in difficult problems, call on the Revere Technical Advisory Service, Architectural.



Executive Offices: 230 Park Ave., New York 17, N.Y. Mills: Baltimore, Md.; Chicago, Ill.; Detroit, Mich.; New Bedford, Mass.: Rome, N.Y.-Sales Offices in principal cities.

Listen to Exploring the Unknown on the Mutual Network every Sunday Evening, 9 to 9:30 p. m., EST.

BUILDING REPORTER

(Continued from page 196)

It is tear resistant, flexible and comes in 36 in. width rolls for easy application. Manufacturer: The Sisalkraft Co., 205 W. Wacker Drive, Chicago 6, Ill.

PORTABLE WASHER Inexpensive apartment size washer is simply operated.

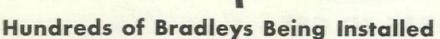
This vibration-free, miniature washer holds two pounds of clothing, has a $2\frac{1}{2}$ gallon water capacity, and is so simple in construction a child can operate it. Clothes can be rinsed as well as washed.



BETTER WASHING FACILITIES IN GREATER DEMAND



- Singer Mfg. Co., New York, N. Y. 11 Washfountains
- Shefford Hosiery Mills, New York, N. Y. 8 Washfountains



Bradley Washfountains serve up to 10 persons simultaneously with clean running water from a central sprayhead. One Washfountain takes the place of 8 to 10 separate "single-person" wash basins, eliminating from 16 to 20 faucets. This with the reduced number of piping connections means a drastic cut in maintenance work. Water consumption is less with Bradleys, space is saved-cleanliness and health promoted. The water is drained off as usedno dirty bowls to clean out-no delays-no contamination.

INSTALL BRADLEYS NOW-This is the time to re-survey all washroomsrearrange or make additions. With rumors of advancing prices on many products, architects find that forward looking manufacturers are ready to modernize their washrooms by installing Bradley Washfountains now . . . BRADLEY WASHFOUNTAIN CO., 2235 W. Michigan Street, Milwaukee 1, Wisconsin.

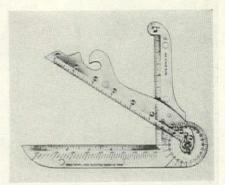
Write today for Catalog 4308 and Washroom Survey Sheet





for a centrifugal water pump speeds emptying of the tub. The agitator is of special design adapted to fine lingerie and baby clothes. Easy to lift and carry, the 1900 Whirlpool portable can be used in the bath or kitchen and stowed away in a closet or under the sink. Measuring 13 in. in diameter and 20 in. high without wringer, it is expected to retail for about \$35.

Manufacturer: Nineteen Hundred Corp., St. Joseph, Mich.



DRAWING INSTRUMENT

Combines function of eight instruments in one.

This novel instrument is accurately designed and mathematically calibrated to serve as a square, dividers, protractor, triangle, ruler, compass, french curve and mitre. It consists of a combination square and a removable mitre arm which can be mounted on the square through either of two mounting holes by a wing nut. By varying the position of the mitre arm, angles of any degree can be formed, and right angle triangles can be made with acute angles of any degree desired. By removing the arm and using it as a radius, circles can be scribed. The Parva-graph may also be used to square up lumber, to scribe a line on a board as a guide for rip-sawing, and to mitre a 45° angle off the protractor in three positions. Price \$1.25.

Manufacturer: Parva Products Co., West Haven, Conn.

BLUE PRINT READING

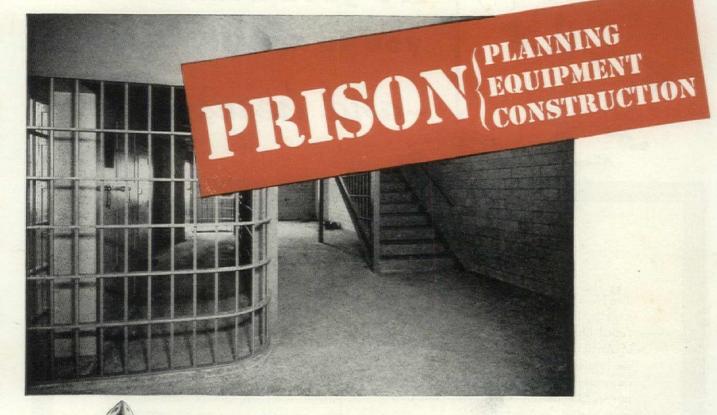
Magnifier for difficult reading and inspection work.

Twin-Reader is a new and different type of magnifier that gives a third-dimensional vision with true perception of depth. It can be held in either hand and can be used with corrective glasses. It does not replace glasses but is defined to give everyone a magnified and sharper binocular vision. Available in four powers of magnification, it is priced at \$9.50.

Manufacturer: N. L. Huebsch, 81 Yale St., East Williston, N. Y.

(Technical Literature, page 204)

VAN DORN Recognized Authority on



CALL IN A VAN DORN PRISON EXPERT

who will be glad to cooperate with suggestions, design sketches and estimates. • Van Dorn is headquarters for prison design and construction. It has planned and built more prison projects than any other organization in America. Van Dorn cells are on guard from Sing Sing to San Quentin-from Calgary to Cristobal.

Plans for new prison structures, or remodeling of old equipment, should be based on sound and tested penal practice. To avoid unnecessary work, worry, expense or dissatisfaction . . . consult Van Dorn.

From its background of 68 years of experience, Van Dorn offers architects authoritative and up-to-theminute information on prison planning. Van Dorn's manufacturing facilities and shop equipment, occupying more than 400,000 square feet, are complete. Its erection methods are modern and efficient.

There is no obligation in discussing prison planning with a Van Dorn prison specialist. Ask him to call.

THE VAN DORN IRON WORKS CO. 2685 EAST 79TH STREET . CLEVELAND 4, OHIO

It's good business for you to specify KIMSUL" -and here's why

THE NAVY QUONSET HUTS ARE INSULATED WITH

KIMSUL

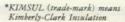
The Navy insists on top quality. That's why KIMSUL Insulation was specified for the famed Quonset Huts which served so well in Arctic cold and Tropic heat. KIMSUL is the insulation with the *superior* principle of *many-layer* construction. This distinctive feature spells uniformly efficient protection over every foot of insulated area.

immy

KIMSUL is made in widths of 16, 20, 24 and 48 inches to fit standard framing widths. It comes in three thicknesses–Commercial Thick (about $\frac{1}{2}$ "), Standard Thick (about 1") and Double Thick (about 2") to suit the design requirements of every job.

Among many other advantages which make it "good business" for you to specify KIMSUL Many-Layer Insulation are these:

- KIMSUL is favorably known to prospective home buyers because of consistent national advertising.
- KIMSUL is resistant to fire, moisture, fungus and vermin. It is termite proof.
- 3. KIMSUL won't sag, shift, or settle-its many layers are stitched together for permanency.
- KIMSUL will last the life of the structure in which it's installed.
- 5. KIMSUL comes in clean, compact rolls. Installation is simple.
- KIMSUL is marked every two feet for convenience in cutting.
- KIMSUL is flexible. It is easily shaped around pipes and other obstructions. Leftover strips of KIMSUL are used for caulking.
- KIMSUL is high in insulating efficiency "k" Factor 0.27.



For complete technical data on KIMSUL Insulation, refer to Sweet's 1945 Catalog or write to Kimberly-Clark Corporation, Neenah, Wisconsin

A PRODUCT OF Kimberly Clark

RESEARCH



No limit on size—as high and as wide as you need.

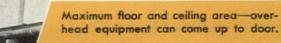


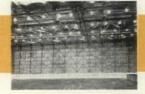
And as handsome! Any skin material to harmonize with your design. Fenestrated, if you wish.



Fully counterbalanced-electrically or manually operated. All sections reach peak at same time but may be stopped at any point, saving heat.

Safety device available to halt descent if door touches an object.





Not obstructed by snow or sand drifts. When open, this Vertical Lift Door obstructs no wall area. Roof sag from snow or around buckle from frost will not retard door action.



Movement of door is independent of weather variables.



May be divided into independent doors, still leaving opening unobstructed.



Lowest section conforms to ground slope. Sliding pilot doors, heat and sound insulation available.

Robertson Vertical Lift Door

This Door operates on the principle of getting the Door out of the way when it is open. All the sections nest above the threshold and in front of the main truss. The largest of doors can be engineered to open completely in one minute, if such speed is desirable. With the Vertical Lift, problems of buckling and jamming

Robertson engineers will be glad to are obliterated.

work with you on any installation, meeting your specifications for size and architectural detail. Write for Robertson Door literature.

H. H. ROBERTSON CO.



2403 Farmers Bank Bldg. Pittsburgh 22, Penn.

Offices in 49 Principal Cities World-Wide Building Service

TECHNICAL LITERATURE

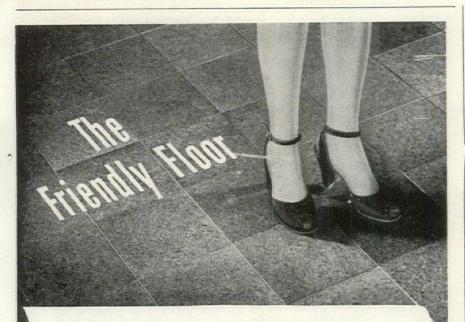
(Continued from page 200)

STEEL STRUCTURAL MEMBERS. The Steel Joist As A Structural Unit, Properties and Details, 28 pp., 81/2 in. by 11 in.

This booklet gives general information on Macomber structural members including steel and nailer joists, roof purlins, ribbed roof decking, siding plates, longspan joists and bowstring roof trusses. Data on design and stresses, erection details, bridging, painting, spacing of joists, deck and top slabs, and live and dead load reference tables adequately present products and procedure. Standard construction details for contractors installing steel or nailer joists and typical installations are featured. Safe load table is included in information on steel and nailer roof purlins. Ribbed roof decking types, ribbed steel siding plates, long span joists and bowstring trusses are summarized. Macomber Inc., Canton, Ohio.

STORE FRONTS. The Contractor and Machines for Selling, 16 pp., $8\frac{1}{2}$ in by 11 in.

Of interest to contractors wanting to handle retail store construction and remodeling, this booklet is the first of a



Kencork will soon be available again. Indeed, our plant, now partially released from Navy work, may be producing Kencork by the time this ad appears. Once more you may be able to enrich your most important rooms with this finest of floors. We call it the "friendly" floor because it's so kind underfoot (dry, warm, quiet, nonslippery and restful) and so harmonious with every decor (lovely patterns of golden tans and nutty browns). For over thirty years these wonderful tiles have been proving that nothing can match the comfort, beauty and durability of cork for flooring. If you now wish to plan for this great improvement in drawing room, nursery, bath, shop or executive office, we'll gladly mail you a descriptive folder or tell a Kennedy flooring merchant to call on you (if you so request). Write David E. Kennedy, Inc., 69 Second Avenue, Brooklyn 15, N. Y.



series of informal discussions of problems common to both contractor and the store front manufacturer. Describing the profitable store of the future as a machine for selling, it outlines Kawneer services and products available to assist the contractor in store front work. The Kawneer Co., Niles, Mich.

FIBRE CONDUIT. Orangeburg Pipe, Catalog No. 304, 20 pp., 81/2 in. by 11 in.

General properties and specifications, uses, laying instructions, fittings and other general information on Orangeburg fibre conduit is included in this catalog. Conduit installations for house to sewer connections, outside downspouts and storm drains, and industrial uses are illustrated. Handling, laying instructions and data on Taperweld joints are fully covered. Also included is material on Orangeburg perforated pipe with snap couplings for drainage work. Details illustrate fittings. The Fibre Conduit Co., Orangeburg, N. Y.

HOME LIGHTING. Recommended Practice of Home Lighting, 40 pp., 6 in. by 9 in. Price \$.25.

This handbook gives the objectives and essentials of good home lighting. Authoritative information has been assembled in a form which will enable architects, home owners and builders to design interior lighting systems which include provision for the seeing needs of the average family. Lighting recommendations for major rooms of the home are included. Illustrations are considered examples of good practice. Illuminating Engineering Society, 51 Madison Ave., New York 10, N. Y.

KITCHEN PLANNING. Planning the Kitchen, Circular Series C5.3, 8 pp., 81/2 in. by 11 in.

This informative circular covers new trends in kitchen planning with emphasis on the work center, sink center, range center, and mixing center. It includes discussions of planning and arranging the kitchen for convenience and workability and information on cabinets and accessories. Small Homes Council, Mumford House, University of Illinois, Urbana, Ill.

WASHROOMS. Washroom Layouts from Bradley Files, 12 pp., 81/2 in. by 11 in.

Numerous blueprint layouts incorporating the company's wash fountains and multistall showers are presented in this booklet. The importance of washroom planning with emphasis on the space saving features of Bradley products are included along with scale model cutouts for those wishing to make their own washroom layouts. Bradley Washfountain Co., N. 22nd and W. Michigan Sts., Milwaukee 1, Wis.

(Continued on page 208)



SHEETROCK Fireproof WALL and CEILING PANELS

No one would expect a scarecrow to fight fire. Yet, many of the 420,000 dwellings which fire attacks every year have only "scarecrow" protection. No wonder progressive architects and builders are constantly seeking safer building materials and methods.

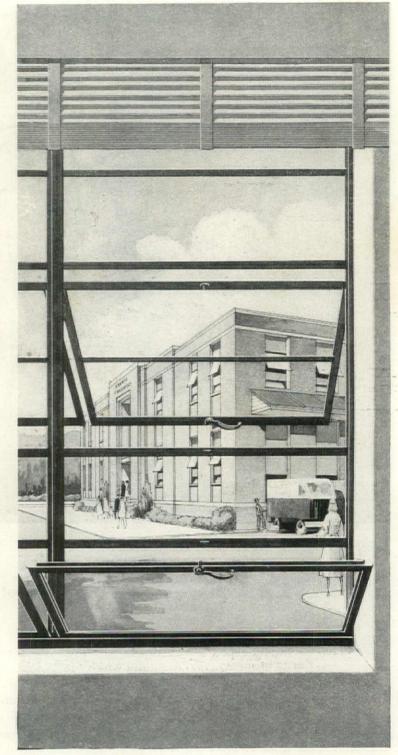
One safer building material is Sheetrock*, the fireproof wallboard. Time after time, these big panels of gypsum have proved their worth under actual fire conditions. They kept the flame in check till help could arrive. Plan to use Sheetrock on your most exacting jobs. You can decorate it by any method ... you can have smooth surfaces, curved surfaces or attractive paneled effects.

Or, if you want a wood-grained finish, choose Sheetrock in faithful reproductions of knotty pine, bleached mahogany or walnut. This versatility combined with modern protection is the answer to why Sheetrock has been used on more walls and ceilings than any other gypsum wallboard in the world.

*Reg. T. M.



Koontz Creamery, Baltimore, Maryland, Architect Carl W. Roes, Baltimore, Maryland, Contractor Edgar S. Armacost, Westminster, Maryland,



Steel Windows in Dairyland . . . The Lupton Metal Windows in this creamery meet the high sanitary standards of a modern dairy. Lupton Windows assure draft-free ventilation, abundant day-lighting and protection from insects. Easy to clean, weather-tight, fireproof . . . Simple design and rugged construction developed from over 40 years experience. Give your clients these plus features by specifying Lupton . . . A Window for every type of building.

See our Catalog of Post War Types and Sizes in Sweet's for 1945, or write today for reprint.

MICHAEL FLYNN MANUFACTURING CO. E. Allegheny Ave. at Tulip St., Philadelphia 34, Pa. Member of the Metal Window Institute

LUPTON METAL WINDOWS

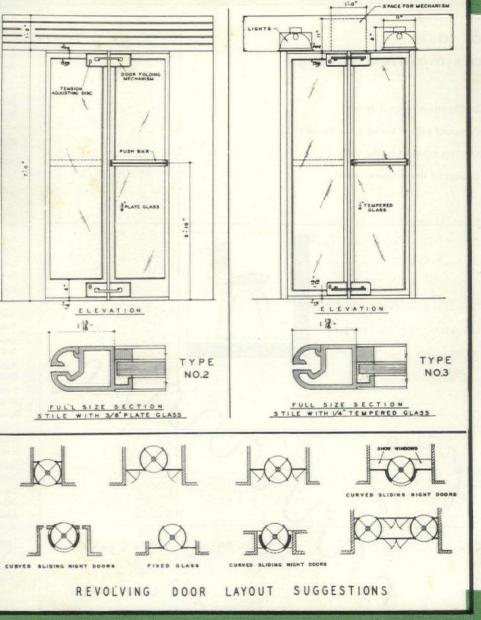
GENERAL BRONZE

PRESENTS ITS NARROW STILED

REVOLVING DOORS

for modern commercial buildings

DETAILS OF GENERAL BRONZE NARROW STILED REVOLVING DOORS WITH LAYOUT SUGGESTIONS





G B revolving doors have been specified by many of the country's foremost architects for their finest buildings. Detailed above is General Bronze's new, narrow stiled revolving door. It is particularly adaptable to modern structures where high visibility is desired.

GENERAL BRONZE CORPORATION 34-17 TENTH STREET LONG ISLAND CITY 1, N.Y.

TECHNICAL LITERATURE

(Continued from page 204)

CONSTRUCTION METHOD. Ferroglas Construction, A New and Revolutionary Development by Trucson Steel Co., 16 pp., 81/2 In. by 11 In.

Advantages of Ferroglas construction, which is designed for buildings requiring air conditioning, sound absorption, light reflection, fire and shatter resistance, or those needing but one or two of these features, is fully described and illustrated in this booklet. Conventional designs and those for special conditions. utilizing structural steel, steel panels

at last a simplified spring

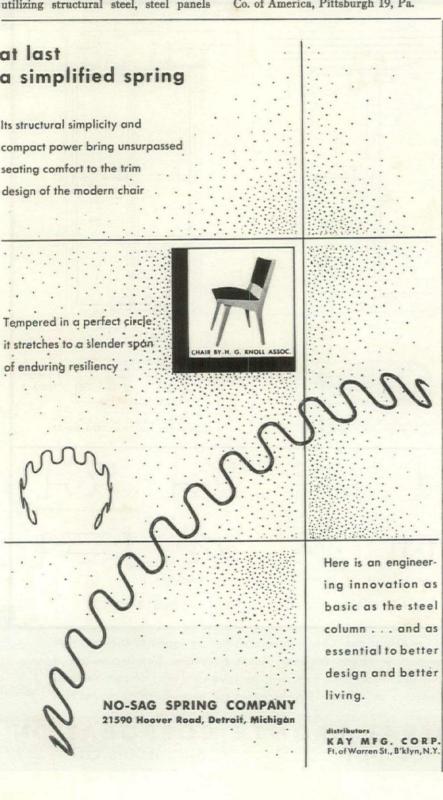
Its structural simplicity and compact power bring unsurpassed seating comfort to the trim

Tempered in a perfect circle: it stretches to a slender span of enduring resiliency

and insulation are illustrated in detail. Truscon Steel Co., Youngstown, Ohio.

ALUMINUM APPLICATIONS. Aluminum Applications by Industries, 78 pp., 81/2 in. by 103/4 in.

This publication lists approximately 3,500 applications for aluminum classified by major industries: aircraft, architecture, automotive, chemical, diary, electrical, finishes, house construction, interior house furnishings, marine construction, oil industry, packaging, railroads, rubber industry, sports goods, structural, textile, etc. Aluminum Co. of America, Pittsburgh 19, Pa.



REQUESTS FOR INFORMATION

PETER FERCUSON, architect, 30 Royal Circus, Edinburgh, Scotland, would like to receive technical literature and catalogs on plumbing and heating equipment.

LT. THAW MALIN, 509 Cameron St., Alexandria, Va., is interested in receiving material on home equipment and materials for kitchens, bathrooms, heating sys tems, lighting, furniture, interior and exterior wall constuction.

HENRY RUSSELL & Co., Agent-Distributors, Road 13-Villa 75, Maadi, Cairo, Egypt, would like to receive literature on products to be used in houses, hospitals and laboratories, with the possibility of becoming agent for Egypt.

PETER A. SMITH, Staatsburg, N. Y., would like literature on all materials required for prefabricated homes.

E. M. THOMPSON, 724 N. 63 St., Philadelphia 31, Pa., requests information on colored plumbing fixtures particularly wall hung lavatories and water closets.

GEORGE H. THOMPSON, Julesburg, Colo., would like literature on building materials and equipment for hospitals.

JOHN B. THRELFALL, Hedron, Flairwing Eight, c/o Fleet P. O., San Francisco, Calif., desires information on materials, equipment, and methods applicable to production of prefabricated homes.

JOHN R. ZINNER, 109 Laurel St., Ridgefield Park, N. J., requests data on small home construction.

REQUESTS FOR LITERATURE

THOMAS GREER COLES, architect, 101 Park Ave., New York 17, N. Y.

DONALD DURELL, Brattleboro, Vt.

OSCAR I. EMERSON, P. O. Box 178, Brunswick, Me. EDWARD M. FARMER, Pre-Architectural Curriculum, Div. of Graphic Art, Stanford University, Calif.

HAROLD W. GOETZ, architect, 704 First American Bank Bldg, Middletown, Ohio,

LUCIEN M. HAASE, architect, 1824 South Salcedo St., New Orleans 15, La.

ELBERT I. HARRISON, architect, 333 Central National Bank Bldg., 3 Oak Park Drive, Peoria, Ill.

ALBERT L. HASKINS, JR., architect, 806 Security Bank Bldg., Raleigh, N. C.

CHARLES C. HENDERSON, architect, Construction Dept., Northwestern University, 619 Clark St., Evanston, Ill. AUCUST JULIUS IGNELZI, architect, 160 East 23d St., Chicago Heights, Ill.

PAUL W. JONES, architect, Monte Libano # 670, Lomas de Chapultepec, Mexico City, Mexico.

ROBERT S. LONEY, architect, 1321 N. Taylor St., Arlington, Va.

OLSSON & ROSENLUNDS AB, Dalagatan 1 C, Stockholm, Sweden.

MAJOR JAMES D. OSTROW, Station Hospital, Camp McCoy, Wis.

THEODORE L. PERRIER, architect, Carondelet Bldg., New Orleans, La.

STUART S. RICHARDSON, 300 Linden Ave., Glen Ridge, N. J.

JUSTI ROCERS, realtor, 115 No. San Joaquin St., Stockton, 3, Calif.

WILLIAM J. RUSH, architect, Kresge Bldg., Ann Arbor, Mich.

FRED SAFRAN, architect, 96 Arden St., New York 34, N. Y.

DAVID SHOLDER, architect, 418 Heard Bldg., Phoenix, Arizona.

EUCENE JOHN STERN, architect, Stern de Mexico, S. de R.L., S. Juan de Letran 21-914, Mexico, D.F.

PFC. FRED H. TAEGER, designer and builder, Hq. & Hq. Det., 1457 S.C.U., Prisoner of War Camp, Blk 18, Camp Forrest, Tean.

KEITH B. UNDERWOOD, Alanbi, Villa Ridge, III.

LAWSON LIBBY WACNER, architect, Winch Bldg., Laredo, Texas.

STANLEY M. WARD, architect, 19 North Fullerton Ave., Montclair, N. J.





Full Kitchen Convenience IN A SPACE FIVE BY TWO!

For space saving that cuts construction costs, for the glamour that lures tenants, for the convenience that holds tenants ... choose Murphy Cabranette Kitchens!

The installation shown above is a Murphy Cabranette Kitchen No. 60. This assembly, only five feet wide, includes an efficient range (electric or four-burner gas) with oven and broiler of standard size, electric refrigerator with sealed-in unit, porcelain cast iron sink, under-sink storage cabinet, 12 cu.ft. wall cabinet and convenient cutlery drawer. There are other complete assemblies from 48" wide to any desired width.

Best of all ... all exposed surfaces are porcelain

... permanent beauty that laughs at dirt, returns with the use of soap and water and never requires redecoration.

Murphy Cabranette Kitchens are designed, engineered, manufactured and guaranteed by one organization which devotes its full peace-time operation to the manufacture of apartment kitchens. Over forty thousand of these remarkable kitchens were installed pre-war. We believe every one of them to be in use today and that owners and users will bear witness to their beauty and efficiency.

Architects, who will be responsible for America's design for post-war living, should be on our list to receive detailed literature when it is issued.

Space Saving MURPHY CABRANETTE KITCHENS of Porcelain

DWYER PRODUCTS CORPORATION

MICHIGAN CITY, INDIANA

GET THE <u>RIGHT</u> ROOF FOR <u>ANY</u> JOB FROMONE SOURCE!

• No detours from a straightforward solution, no substitutions necessary—if you specify Ruberoid! We make all types of built-up roofing, in specifications to meet any project you may have in mind —Asbestos Felt and Asphalt, Coal Tar Pitch and Tarred Felt, or Asphalt Felt and Asphalt.

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There is a place in this plan for

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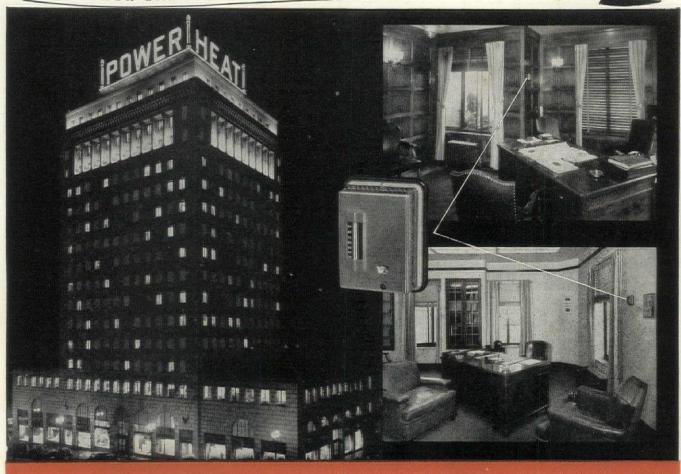
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ANOTHER EXAMPLE OF JOHNSON INDIVIDUAL ROOM CONTROL



SAVE FUEL IN "DARK" OFFICES with JOHNSON Automatic Dual Temperature CONTROL

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SINCE 1928, with Johnson *Dual* control of room temperatures, the Public Service Building in Portland, Oregon, has saved countless tons of fuel which a building of that size otherwise would have consumed. When the day's work is done, a reduced economy temperature is maintained in the rooms which are not in use. Tenants who work "overtime" merely push a button on the Johnson *Dual* thermostats in their offices. Thus, only the occupied spaces, suggested by the lighted windows in the illustration, are heated to 70°.

There are 274 Johnson *Dual* thermostats which control the Johnson valves on 440 radiators in this modern office building. Each of those thermostats is arranged to maintain, automatically, either of two temperatures—a suitable "occupancy" temperature of, say, 70°, and reduced "economy" temperature for non-occupancy hours. At the close of the normal business day, all of the thermostats in the building are set to the lower temperature, by a clock or manual switch at the operating engineer's station. Tenants who return to work in the evening restore the occupancy temperature setting readily, at their own thermostats. Later on, the central switch again resets the system to operate at the economy temperature level for the rest of the night.

Temperature comfort for each tenant is modern building service. Substantial fuel saving for building budgets is modern building management. All buildings, new or old, find individual room temperature control extremely valuable. Regardless of climatic conditions, or of the particular problems involved, Johnson Automatic Temperature Control systems are designed and built to "fit the need."

Johnson designs, manufactures, installs and services its automatic temperature control systems. Completing the whole job is the proved method for assured satisfaction. Whatever the problem in automatic regulation of heating, ventilating and air conditioning, Johnson engineers are prepared to cooperate. The Johnson nationwide organization places experts near by. Consultation does not obligate. Let us talk over your control problems with you, now. JOHNSON SERVICE COMPANY, Milwaukee 2, Wisconsin, Direct Branch Offices in Principal Cities.



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When you specify all-weather windows, remember that 'Orange' Windows are made *entirely* of Alcoa ALUMINUM. They won't rust, warp, stain or rot. Painting is unnecessary, for aluminum is its *own* protection against the elements.

Their natural-finish means good looks, too. The narrow, unobtrusive frames blend with any style architecture or exterior material.

This precision-made, long-lasting window is easy to handle. It's no trick at all to interchange the feather-light ALUMINUM screens and winter storm panes. What was once a tedious, dangerous chore, can now be taken care of by any homeowner in seconds.

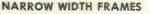
Available in a complete range of stock sizes. Write today for full information.

With this featherweight ALUMINUM unit, changing storm windows and screens is a quick, easy inside job. Winter pane removes with a lift and a tilt. Screen replaces it in a jiffy.



EASY TO CLEAN

No need to stand on a step-ladder or chair to remove upper panes for quick, easy washing. All changes made comfortably and safely from the lower portion of the window.



Extruded forms used almost entirely in making the 'Orange' Aluminum All-Weather Window. Frame width reduced without sacrificing strength.

SPECIAL ADJUSTABLE FEATURE Special adjustable feature of the

'Orange' All-Weather Window allows for variations in size of openings. A few turns with a screw driver and frame is set for form-fit weathertight snugness.



DESIGNED FOR BEAUTY Made entirely of natural-finish

Made entirely of natural-hmsh ALUMINUM to harmonize with any style of architecture or exterior finish. Quiet, dignified, it knows its place!

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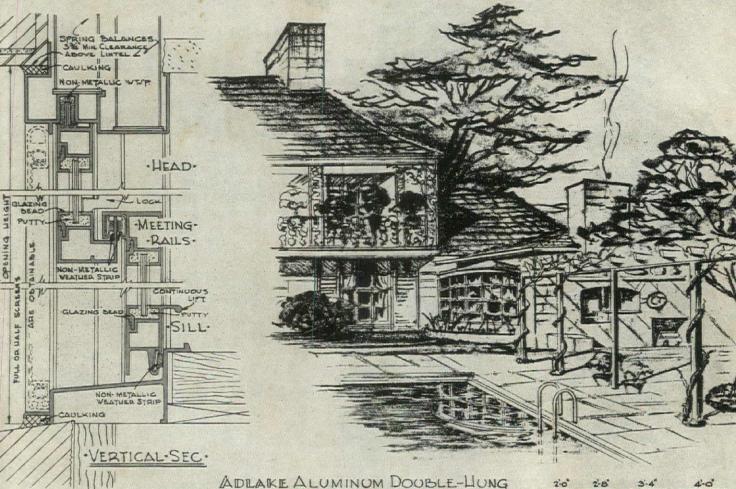
This amazing window is adjustable four ways for draft-free, rain-proof, non-fogging ventilation. Saves up to 30% in fuel. Soon pays for itself.

Patents applied for MANUFACTURED BY THE ORANGE SCREEN COMPANY, MAPLEWOOD, NEW JERSEY

ALUMINUM

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OPENING JAMB

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ADLAKE WINDOWS GLIDE SO EASILY ON THEIR NON-METALLIC WEATHER STRIPPING THAT A CHILD CAN OPERATE THEM. ADLAKE ALUMINUM DOUBLE-HUNG

A COMPLIMENT TO THE HOME, PROVIDING MAXIMUM LIGHTAND VENTILATION

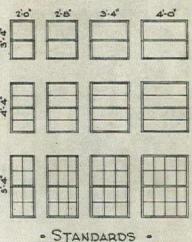
WINDOWS ARE ESPECIALLY SUITABLE FOR THE DISCRIMINATING HOMEOWNER.

THEIR GLEAMING BEAUTY IS

WINDOWS FREE YOU FROM MANY OF THE MAINTENCE WORRIES ENCOUNTERED IN WINDOWS OF OTHER MATERIALS.

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HE ADAMS AND WESTLAKE CO.

ELKHART, INDIANA, U.S.A.

PLASTIC GLAZING

for office, factory, stockroom, partitions

This highly practical, low cost method for partitioning industrial space offers these advantages:

SHATTERPROOF SAFETY ... PRIVACY ... LIGHT ... INSULATION ... ECONOMY

VIMLITE is a wire-reinforced glazing plastic—tough, flexible and translucent. It allows maximum privacy without blocking light sources. Easy to install, it can be used in complete floor-to-ceiling wall sections or in standard partition openings. Vimlite is approximately the weight of fly screen, and requires only the lightest type of framing.

Produced in rolls (25, 50 and 100 feet long), Vimlite can be cut to size with shears or snips and tacked in place under molding strips. It is dimensionally stable, and when installed it won't sag or pull its frame out of shape.

Vimilite is an excellent insulator. It is ideal material for enclosing special air-conditioned areas, and maintaining temperature differentials between office and factory. In these cases, false ceilings of Vimlite can be installed without interfering with light sources.

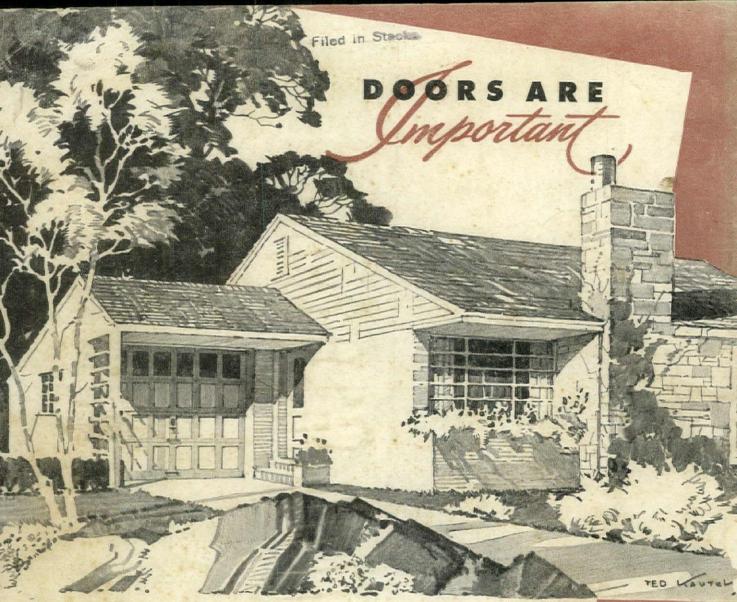
Vimlite is now available at building supply and hardware stores. Write for folder containing sample of this very useful industrial material. Celanese Plastics Corporation, a division of Celanese Corporation of America, 180 Madison Avenue, New York 16, N. Y. Use Vimilite for shatterproof skylights, spraying rooms, safety guards for machinery, draft screens, portable buildings, rooftop sun rooms where employees can get the benefits of sunshine including ultra-violet rays.

GARDENERS

Vimilite Plastic Glazing is hailproof and non-shattering. Use it on cold frames and starting beds. Protects seedlings against sudden cold snaps ,,, Transmits ultra-violet light.



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