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How Architects Look At Flush Valve Applications

To determine the trends in the selection of flush valves for various types of postwar buildings, the manufacturers of Watrous Flush Valves recently completed an extensive poll among architects. The results of this poll covering schools, hospitals, industrial plants, airports, railway and bus depots, have already been published in the form of advertisements. These application Data Sheets have now been reprinted in Bulletin No. 477, "Architects’ Views on Flush Valve Applications". This bulletin includes a general summary which shows, among other interesting details, that a growing preference is indicated for foot-operated flush valves. It also shows that silent-action flush valves are now preferred for many applications.

We believe this bulletin will be particularly helpful in connection with your postwar projects. Write for Bulletin No. 477.

THE IMPERIAL BRASS MFG. CO.
1240 W. Harrison St., Chicago 7, Illinois

Specify Watrous for Postwar Projects

The sound design and careful workmanship built into Watrous Flush Valves make their selection a source of constant satisfaction over the years to everyone concerned.

Catalog No. 448-A includes complete information on Watrous Flush Valves. Write for your copy. Or see Sweet’s Catalog File.
Within but a few weeks, the atmosphere of Washington press conferences has changed completely. A reporter asking WPB Vice-Chairman H. G. Batcheller the kind of question about reconversion which but a short time ago would have evoked nothing more than, "That problem is under consideration," instead drew an eloquent plea to concentrate on the war. The effect, as such answers come forth with all degrees of relevancy to all sorts of queries, has been to make the subject of civilian production seem slightly improper; it inspires self-conscious giggles like a naughty word. Meanwhile Krug, Batcheller and the others no longer start their conferences at scratch before roomfuls of newspapermen, but instead come well primed with charts and releases that keep discussion focused on the critical war programs which the Army and WPB are pushing.

Reconversion Shift

The reconversion bubble had taken more than a year to blow to its full final circumference. First mutterings were to be heard at WPB industry meetings in the spring of 1943; the campaign for a WPB construction bureau had started in the fall of the same year. Similarly, the counter-offensive, whose goal was to puncture it, first became formidable when reconversion seemed to be progressing most gloriously. Just as war agency releases about getting rid of restrictions were coming forth in maximum abundance, reports of the WPB's statistical staff to the full Board, at Krug's suggestion, dropped such subjects as allegedly excessive procurement which irritated the Army. Instead, they concentrated on critical programs—which the Army liked. Then failure to defeat Germany in 1944 threw out the whole foundation of WPB's reconversion planning, notably the estimate of 40 per cent war contract cancellations.

The swift scene shifting, returning war production to the Washington foreground, obscured the fact that nothing at all had happened. During the fall months when, as a typical case, builders were being promised an ample supply of components after V-E Day, no reconversion actually was taking place. Similarly, when earlier promises were withdrawn, there were no cuts to speak of in civilian production. Meanwhile, attempts at precise definition of the method of reconversion between V-E and V-J Days have become fewer. The Army and Navy feel less confident that they can make firm forecasts of the supplies we still need to invade and conquer Japan. Without such forecasts, reconversion planners have nothing to go on.

Production Bureau's Work

WPB's Production Bureau, which was the prime symbol of 1944 reconversion ideas, has for all practical purposes been junked. Its chief, Arthur J. McComb, has moved into the office of WPB Vice-Chairman Batcheller, and John L. Haynes, who had long served in the old Facilities Bureau, took over. Actual work within the Bureau resembles that of the old unit much more than the description of the new one in the directives setting it up. Work consists mainly of the review of building projects, although part of the staff still applies itself to postwar considerations. Status of the Bureau within the WPB has probably dropped.

Where emphasis lies is summarized in a recent direction to WPB field men. They were told to look carefully into how much labor would be needed on NHA housing proposals, turning them down where war production might be robbed of workers. Remodeling and repair jobs, on the other hand, were to be treated with greater kindness because usually they needed little outside labor.

Haynes is well regarded by the Washington building lobbyists. For one thing, they know him. Before the war he was a contractor in the District itself and since has been in WPB, chiefly handling lumber. However, for the time being, the Bureau seems to be undergoing a drop in status within WPB.

Status of L-41

The immediate manufacture and piping into dealers' inventories of building components, of course, is not taking place. Plans for the requisite amendment of L-41, and other orders, have been withdrawn. The Army and Navy are keeping firm hold on production facilities. Because they expect sudden demands for weapons that they cannot forecast now, it is unlikely that they will allow plants losing war contracts to mark time by making civilian items. Points of this kind are usually decided in part by local officials, however, so that policy is not rigid. Meanwhile some members of the Bureau will continue to putter around with plans for ultimate release of com-

(Continued on page 10)
Here are the WINNERS of the "FLEXIBLE HEATING" COMPETITION

Sponsored by THE BITUMINOUS COAL INSTITUTE
Conducted by KENNETH K. STOWELL, A.I.A. Professional Advisor

JUDGES: PROF. ERNEST PICKERING, University of Cincinnati, Chairman
CAMERON CLARK, New York, N. Y. HARRIS ARMSTRONG, St. Louis, Mo.
ROLAND WANK, Detroit, Mich. CARROLL F. HARDY, Cincinnati, O.

1st PRIZE $1500 WAR BONDS*
ELLIOIT L. WHITAKER of the Department of Architecture
Pennsylvania State College, State College, Pennsylvania

2nd Prize $1000 War Bonds*
STEPHEN J. ALLING
7373 Kirkwood Lane, Cincinnati, Ohio

3rd Prize $750 War Bonds*
KENNETH M. NISHIMOTO
44-1-B, Rivers, Arizona

15 AWARDS OF $100 WAR BONDS*
*SERIES E MATURITY VALUE

William P. Brower,
641 Doremus Avenue, Glen Rock, N. J.

ROBERT A. DESHON,
3918 West Sixth Street, Fort Worth, Texas

WALTER H. GRUBER,
312 East 206th Street, New York City

HENRY HEBBELN,
409 East 51st Street, New York City

CHARLES K. HINZEL,
8406 109th Street, Richmond Hill, N. Y.

CAPT. KARL KAMTH,
Corps of Engineers, Ft. Sam Houston, Texas

THEODORE LUDEROWSKI,
1613 Preston Road, Alexandria, Virginia

LEE CHARLES MIELEK, 9754 Hoxie,
and LAWRENCE LATTIN SMITH,
9928 S. Hoxie, Chicago, Illinois

WILLIAM G. MOECKEL,
709 West 19th Street, Wilmington, Del.

GEORGE R. RUSSO,
428 Marlton Pike, Camden, New Jersey

SIMON SCHMIDBERGER,
5469 Sylvan Ave., New York City

JOSEPH SHLOWITZ,
53 Tommele Avenue, Jersey City, N. J.

FREDERICK W. STRITZEL,
1427 Parsons Avenue, Columbus, Ohio

FRED VAN WAGENINGEN,
232 West 12th Street, New York City

FREDERICK W. WESTMAN,
116 Warren Avenue, Milton, Mass.

• The purpose of this competition was to stimulate creation of designs for the ideal basement of the post-war small home—incorporating the principle of "Flexible Heating."

"Flexible Heating" is a descriptive term for a heating plan that permits the use of any fuel—bituminous coal, anthracite, gas, or oil.

In view of the diminishing reserves of certain fuels, public interest has still further increased in bituminous coal—the most plentiful and least expensive of all home-heating fuels. Thus, this contest sought to produce plans which, by providing adequate chimney and basement facilities, would permit the use of any fuel with equal efficiency.

The Bituminous Coal Institute extends congratulations to the winners—and sincere appreciation to all of the many architects who participated.

A selection of the contest entries, including the 18 winning designs, will soon be made available to architects and others interested in building new homes.
The Problem of Cooling Off a Hot-Headed Building

... doesn't bother Allen Engineers

High temperature relief problems should not be approached with the glib idea that anything between thirty and sixty air changes an hour in a building will be adequate. That is guesswork, and it is almost as simple and much safer to eliminate the guesswork and use a common-sense scientific approach.

There have been many large area ventilating devices sold during the war period, which, in our humble opinion, should not have been so sold or specified (unless one uses the alibi that fan equipment was not available under the then existing priorities). On the other hand, there are equally outstanding jobs where the use of fans for high temperature relief is wholly unjustifiable. We have yet to find a job where the plant engineer could not tell us the actual heat input used for process in the building suffering with the hot head. Knowing this data, a precise calculation is possible, showing the expected temperature difference that can be maintained in the building, as well as a figure showing the expected velocity of gravity flow due to temperature difference and height between inlets and outlets (commonly called stack effect).

With these figures as a base, it is only necessary to look in a price book and determine whether or not gravity equipment or fan equipment will be the least expensive over a period of time. Allen always follows this sound procedure in attacking a high temperature relief problem and bases its recommendation on outlet temperatures agreed upon between Allen and the customer. In this way final results are always satisfactory. We are always ready to talk shop with you. The Allen Corporation, 9751 Erwin Avenue, Detroit 13, Michigan.

THE Allen CORPORATION
ENGINEERED VENTILATION FOR INDUSTRY
An Important Message About YOUR POST-WAR POSITION

This message is for men who are seeking ways and means of capitalizing upon present-day opportunities and of preparing for bigger, better jobs in the post-war world.

It is only the man who is familiar with ALL of the fundamental principles of business and industry who is properly equipped to assume executive responsibility. There is no "ceiling" on his career other than that which is self-imposed; and in the years of expansion, after Victory, his services will be in greater demand than ever before!

Essential Knowledge

The Alexander Hamilton Institute's well-rounded Modern Business Course and Service, endorsed by many of the nation's top executives, is designed to provide subscribers with a thorough, complete training in the four major business functions: Production, Finance, Accounting and Marketing. A working knowledge of all of these important divisions of business and industry is absolutely essential to the executive of today—and to the executive of the future!

Noted Contributors

Who are the distinguished academic, business and industrial leaders behind the Institute? How is the Modern Business Course and Service brought to subscribers in a convenient, time-saving form? How will the Course and Service specifically help you—right now, today? These questions, and many others, are answered in the Institute's FREE 64-page book, "Forging Ahead in Business."

Stimulating Book

As an inspiring, informative piece of business literature, written in the light of recent world-wide developments, "Forging Ahead in Business" has no peer. Said one man who had sent for it: "It's the most stimulating book I have read in ten years! Most of the stuff that business men are called upon to read nowadays is dull and theoretical. 'Forging Ahead in Business' hit me right between the eyes!"

More than 3,000,000 copies of "Forging Ahead in Business" have already been distributed to men interested in self-improvement. It has been described as "a turning point in the lives of literally thousands of men!"

Get This Book—FREE!

You are urged to send immediately for your copy of "FORGING AHEAD IN BUSINESS." Today's timely edition can be of immense value to you. It demonstrates how the Institute can give you immediate help in your present position, while preparing you for post-war opportunities.

There are no copies for boys or the merely curious; but to any man of serious purpose it is sent free and without obligation.

Refrigerator Production

WPB men feel a natural regret at no longer being certain that their research on particular components and fixtures will be used. They learned, for example, that mechanical home refrigerators under best conditions would not be turned out in less than 90 days and that, given present troubles in buying materials and keeping labor, the period would average about six months. It was found that facilities—not in use by Army or Navy—could turn out 3,350 refrigerators after three months, could reach a maximum monthly production rate of 73,500 in the seventh month and turn out 692,350 by the end of the year. On the basis of 40 per cent cutbacks, 4,350 would be turned out in three months; in the ninth month the maximum rate of 159,300 would have been reached and the year's production would total 1,205,150. This was considered a fine picture indeed.

Similarly, the Consumers Durable Goods Division of WPB found that 90 per cent of the manufacturers making commercial or domestic electric fans could handle civilian orders without cancellation of war work. There are fairly precise ideas on the volume of this and other items that could be made, under various specified conditions, after V-E Day.

Construction Outlook

Under the circumstances WPB does not look for a marked early upturn in construction even if the European war ends this spring. In that event, it foresees total volume of only $3,950 million compared with its estimate of $3,840 million in 1944. Housing would expand from $685 million in 1944 to a mere $775 million, with the entire expansion in the privately-financed field. Industrial construction would drop from the 1944 total of $920 million to $725 million by virtue of reduced building of war facilities. The only genuine expansion would be in various public works ranging from school building to road construction. These figures, which were put out in an of-
We suggest these floors for

**BANKS**

**Linotile (Oil-Bonded)** provides a distinctive, exceptionally durable floor for all public areas and offices. Available today in a variety of colors and sizes, it offers unlimited design possibilities. Armstrong's Linotile is recommended for suspended floors only.

**Standard Asphalt Tile**, also available today, is ideal for tellers' cages, work areas, and rest rooms. This low-cost floor is easy to clean and keeps its attractive appearance for years. Armstrong's Asphalt Tile is also especially suited for below-grade vault areas because moisture won't affect it.

*When they are available, Armstrong's Cork and Rubber Tile may be considered for offices and tellers' cages.


**ARMSTRONG’S RESILIENT TILE FLOORS**

ARMSTRONG’S CORK TILE AND RUBBER TILE CURRENTLY ARE NOT AVAILABLE
For Clean Cut Clarity in Reproduction!

Your blueprints can’t be any better than the original pencil tracings. But they can be just as good. The Hi-Density Lead of Microtomic “Van Dyke” Drawing Pencils gives you—with far less pressure—sharp, clean, cleanly blue-printable lines. With uniformly graded “Van Dykes” your work is always smooth...your touch always sure. Ask for a demonstration sample today.

THE EBERHARD FABER DRAWING PENCIL

FREE SAMPLE

The figures are intended as a mere outline, as a way of telling those who don’t mind looking at numbers that earlier ideas for wholesale release of industry on V-E Day have been abandoned. As a matter of publicity policy this was preferred to straight prose that might have inspired headlines for all to read. Actually, WPB officials feel utterly at sea on 1945 volume. Since the Army may at any time need sudden shifts in production, before or after V-E Day, the field is open for swift decisions to build new war plants. This sometimes entails new housing and new local public facilities. On the other hand, present war construction jobs may be dropped. NHA officials expect to be busy moving temporary buildings from town to town.

Veterans’ Market

War veterans are slowly coming into the market for homes under the recent Veterans’ Administration regulations which provide government guaranteed financing. Thus far, all of the transactions involved purchase of existing dwellings. If the trend continues, it will suggest that for the single buyer it is generally cheaper or otherwise more convenient, under present market conditions, to buy than to build. There have been too few transactions to indicate definite tendencies.

Senate Hearings

Senator Taft’s hearings on building construction, set from January 9 through January 23, were designed to collect opinions on these questions, as put to those called on to testify:
1. Nature of permanent federal organization in the building field.
2. Disposal of war housing.
3. Problems of the revival of home building, including the relaxation of wartime controls.
4. Role of the federal government in future public housing.
5. Types and method of private credit aids.
6. Relation of the housing agencies to the general credit policy of the government.
Recent surveys show that many General Motors dealers plan to correct this situation as soon as building restrictions are relaxed. As its contribution toward an improved standard of automotive sales and service facilities, General Motors believes it should call on the creative talents of the architectural profession in arriving at forward-looking solutions to this unique and important problem.

General Motors has therefore established

60 PRIZE AWARDS
TOTALING $55,000

to induce the widespread participation of architects, designers, draftsmen and students in the competition.

The Professional Adviser, in collaboration with automotive experts, has prepared the program, which will include all data necessary to guide competitors.

SEE FOLLOWING PAGE FOR AWARD DETAILS
This competition is limited to residents of the continental United States and Canada. Employees of General Motors or its subsidiaries, of The Architectural Forum or of advertising agencies serving the above, are not eligible. Competitors must register in order to receive the program and complete instructions. The competition closes at midnight, April 16, 1945.

George Nelson, A.I.A., Professional Adviser, c/o The Architectural Forum, Empire State Building, 350 Fifth Avenue, New York 1, N. Y.

I intend to enter the GENERAL MOTORS competition. Please send me the program, including the conditions governing the competition and awards.

Name______________________________

Firm (if any)________________________

Address____________________________

City________________State____________

Check one: Architect______ Designer______ Draftsman______ Student______

Other Occupation____________________

*The awards for design detail are in addition to the awards for the planning projects.

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$55,000—60 PRIZES
Was the roof of tomorrow here yesterday?

Architects: Ford, Bacon and Davis, Inc., New York
Roofers: Irvin Prickett, Philadelphia

—but protected by the same roofing used in Yesterday's roofs—

KOPPERS COAL TAR PITCH AND TARRED FELT

Modern buildings look different... they are different—embrying all the wonderful improvements that have been developed in this great scientific age. But they boast the same type roofs that have been proved by years of satisfactory performance... long enduring and low in maintenance costs. These roofs—made of Koppers Old Style Pitch and Approved Tarred Felt—are as modern as the buildings they shelter; because no other roofing material has yet been discovered that offers better service and greater satisfaction.

Architects and designers are sustaining good reputations by specifying Koppers Old Style Pitch and Approved Tarred Felt roofing materials.—Koppers Company, Inc., Tar and Chemical Division, Pittsburgh 19, Pa.

*K Designed when possibility of air raid was great, windowless and fully air-conditioned, building could function 100% during raid.
The freezer pictured below ranges in size from 24 to 50 cu. ft., has four compartments, each covered by a separate insulated lid.

**Plastic Surfacing**

Newly announced is *Kimpreg*, a surfacing material for bonding to the plywood in hot presses. Neither a plywood, nor a conventional plastic laminate, *Kimpreg* gives the plywood a flat-like surface, making it more durable, stronger, less subject to abrasion, decay, scuffing or stains. Moreover, this new plastic surfacing material is said to give plywood a finish that will wear better than paint. Predicted postwar uses: in the construction of prefabricated houses, kitchen cabinets, table tops, built-in furniture, etc. Kimberly-Clark Corp., Neenah, Wis.

**Neoprene**

Release of *neoprene*, a synthetic rubber made from coal, limestone and salt, from war’s demands will bring greater durability and practicality to many household products, according to a Du Pont forecast. Sponge cushions and mattresses, tile-like flooring material, carpet backing, and numerous structural parts for household equipment are named as possible applications of this man-made rubber.

One of the most interesting of these predicted applications is a new type of terrazzo flooring made by stirring marble chips into colored neoprene latex, pouring the mixture over the floor foundation, and troweling it down. Satisfactory installations in shipboard shower stalls, state rooms and galleys indicate that this tile-like flooring may be adaptable to home bathrooms, cellar playrooms, kitchens and swimming pools and terraces. Combinations of two or more colors can be developed and border treatments may vary the pattern.

Such a flooring not only gives a decorative effect, it is said, but offers a resilient surface, is non-slippery whether wet or dry, and does not crack easily.

The material can be applied in a single coating as thin as 1/8 in. without a special sub-base. It will adhere to wood, concrete, steel, and almost any other kind of floor surface. E. I. Du Pont de Nemours & Co. (Inc.), Wilmington, Del.

**Year-Round Air Conditioner**

Chrysler Airtemp has combined their packaged summer cooling unit with their forced warm air conditioning furnace to provide for postwar production a centralized combination service at low cost. The same blower, filter and ducts which circulate, clean and distribute warm air in winter, are used in summer cooling. A simple damper arrangement directs the air from the winter air conditioner through the cooling coil in summer and almost entirely around it in winter.

The unit is compact, and functionally designed. The cooling unit with its hermetically-sealed, direct connected compressor, runs in a permanent bath of oil. Bearings are pressure lubricated, vital parts super-finished to reduce friction. The use of a cooling tower is contemplated to permit the same water to be used over and over. This arrangement can be used in those installations where a continuous supply of cooling water is impractical to obtain. Packaged residential air conditioning units up to 3 h.p. capacity will be designed to operate on 220 volt single phase 60 cycle current or on a three phase circuit. Airtemp Division, Chrysler Corp., Dayton, Ohio.

**Tankless Water Heater**

A new heater of the “instant” type, designed especially to provide a large volume of hot water over periods of peak demand, is offered in eight sizes, with capacities ranging from 175 to 900 gal. per hour of water heated from 40° to 140° with boiler water at 180° F., or 350 to 1530 gal. with boiler water at 212° F.

The new heater, Type HT Tankless Taco, using boiler water as the heating medium, is intended primarily to meet domestic hot water demands of apartment houses, clubs, smaller institutions and business buildings, with smaller sizes for two-family dwellings. Cylindrical in shape, it is installed below the water line of the boiler, with boiler water surrounding the tubes through which domestic water flows. Taco Heaters, Inc., 342 Madison Ave., New York 17, N. Y.

(Continued on page 112)
It's easy to get the facts. The Dravo Building Survey form organizes all the data, provides quickly a basis for tentatively laying out a suitable direct fired warm air system and estimating installation costs, fuel consumption and normal operating expenses.

Direct fired warm air systems engineered by Dravo have provided dependable economical heat in thousands of installations during the past few years. They use any available standard fuel and produce over-all operating efficiencies from 75 to 85%, depending on the type and quality of fuel used.

If this type of heating is suitable for any of the buildings you have in plan stage, there is a substantial saving in sight! For an accurate analysis, start by writing for a copy of the Dravo Building Survey form—address Dravo Corporation, Heating Department, 300 Penn Avenue, Pittsburgh (22), Pa. No obligation, of course!


FROM 300,000 TO 4,000,000 B.T.U. PER HR.
UNITS COMBINE FOR ANY DESIRED OUTPUT
Architects and engineers who have made the difficult journeys to faraway battlefronts with the Army Engineer Corps or the Navy's Seabees have had the opportunity to observe not only their own installations, but also some of those of the enemy. Here is one interesting German installation studied by the Army, as recorded in photographs taken by the Signal Corps. It was found intact in the hills northwest of Soissons, France, apparently abandoned in such a hurry that it was impossible to destroy it. Designed as a permanent barracks and air raid bunker, not as a battle position, it gives interesting testimony as to the enemy's thoroughness, and leads to speculation about what is yet to be reported from really fortified positions of the Siegfried Line. Incidentally, the fact that positions such as this were by-passed so easily in a war of movement affords some small idea of the difference between a mobile campaign and the type of fighting the Allies have now been forced to accept, in the storming of prepared positions in a relatively stabilized front. These photographs give a graphic explanation, however inadequate, of the new seriousness of the European war for the Allies. And of the new emphasis on infantry and artillery, and their supply problems, to achieve a new break-through.
Above: dining room of the German barracks and air raid bunker hurriedly abandoned by the supermen, near Soissons, France. That the warriors of the "master race" were not exactly uncomfortable during their occupation is attested by the spacious fireplace, well-made furniture, radio, and air conditioning

Right: interior of a bunker cabin, looking from living room into sleeping compartment. Note the wall paneling, steam radiator, electric light switches. And, just over the built-in table visible through doorway, are radio plugs

Below: the air conditioning and gas filtering units inside the air raid bunkers. Intake and outlet pipes are on the left. Spare filter units are seen in the lower center. At the right are batteries for emergency power.
In October, 1942 in these pages Mr. Ely had this to say concerning oil burning systems:

"The Petro System which has been in use in the National Newark Building for 12 years has given an excellent account of itself, performing year-in and year-out with clock-like efficiency. I can say that Petro equipment helps maintain the occupancy in an office building, because dependable heating service is essential in keeping the old and in attracting the new renters.

"In our huge war-building program, a plus-program is expected from heating equipment, and where oil systems are used, they will, in my opinion, fulfill all requirements for dependability and low operating costs."

In view of conditions as they are shaping up for the future, Mr. Ely continues with his comments:

"In our postwar estimates of oil burning systems certainly dependability and low cost continue to stand as uppermost requirements in the planning of architects and engineers. We expect the plus-program which heating-systems delivered to war industry to carry on into private construction.

"Concerning bank buildings in particular, we believe that the formidable, and sometimes forbidding, appearance of the 'barred-window' effect in banks will give way to more home-like exteriors. In the future there promises to be more users of banking services than ever before, and many of them, who had their first introductions through bond purchases and savings accounts, may be unacquainted with banking procedure.

"Bank fronts and entrances should be designed with the idea of making them more inviting to these people. Offices should be arranged so that bank officials will be more accessible, and the users will feel more at ease in finding their way about.

"Ordinary merchandising principles, like those used in a store, should guide the architect and engineer in his bank planning. These principles include, of course, conducive surroundings; and Petro-heating will render a necessary contribution, for it provides the comfortable and healthful environment for users and employees.

"I continue to find that Petro equipment performs with reliability and economy, a satisfaction alike to architect and owner of every type of structure."

Wilson C. Ely is a member of John H. & Wilson C. Ely of Newark, who have long been known as one of America's leading architectural firms. They have to their credit many industrial, public and commercial structures, among which is the National Newark Building, New Jersey's largest office building. Other buildings they have designed include those for the Mutual Benefit Life Insurance Co., American Insurance Co., City Fireman's Insurance Co., all in Newark; the Fidelity and Deposit Co. of Maryland (New York City Branch); East Orange Municipal Center, East Orange, N. J.; and the St. Barnabas Hospital, Newark.
Demands Of War Come First

With the over-optimism of 1944 vanishing in the storms on the western front, it is clear that the wartime activities of architects and engineers are far from finished. That, indeed, they will be under newly intensified pressure to design at breakneck speed new munitions plants, warehouses, transportation facilities, hospitals, housing, for a truly all-out two-front war. Clear, too, that the wartime activities of architectural firms will continue to take precedence over post-war project planning.

Architects and engineers, in the armed services and out, have made vitally needed contributions to the conduct of the war. They have met every challenge, and with limited material, time, and manpower, have turned out the blueprints that made possible our unprecedented war production. The armed forces have commandeered their services for design and drafting tasks involving speed, precision and imagination. Tank parts, aircraft parts, shipping containers, prefabricated buildings, materiel of every description has come from their boards. Undoubtedly they will find themselves with new, and possibly stranger tasks, with still closer secrecy and still greater urgency. For obviously the realization that the war will be longer than first expected brings new emphasis on new weapons, new facilities, and new wartime technology generally. Each new research effort brings new calls for trained designers and capable draftsmen as the first step in production. Men who have been doing this work, and more men, will continue to burn the midnight oil in the closed rooms of the architectural organizations engaged in this necessarily secret activity.

The realization of a longer war ahead, a new time table for simultaneous wars on two fronts, means new demands for the construction of war facilities of every kind, new demands on the designers of buildings. These new demands for critically important structures for war purposes will be met, as have the earlier demands, with speed, ingenuity, and efficiency. The already bright wartime record of construction-for-war assures still greater speed and efficiency in meeting present demands. War projects of every description will be given the double-green, full-speed-ahead priority they merit. Where V-Day projects must be set aside to achieve this priority—aside they will go.

The emphasis on V-Day planning has changed, and will change, with the fortunes of war. It is obvious that the new war demands will make necessary the continuation of material restrictions and manpower regulations. The resumption of civilian or peacetime construction must await the completion of the war-building program. To the extent that planning for peacetime can proceed without hindering the prosecution of the war, it should proceed. For right behind victory on our two-front war, there is a peace to win at home and elsewhere. V-Day planning should continue to be pushed to the fullest possible extent consistent with a policy that the demands of war come first.
BY JOSEPH HUDNUT

Comment on the Boston Contest

The Boston Contest, recently concluded, was conceived by the Boston Society of Architects and administered by Boston University. The purpose was to focus attention upon the need for a revaluation in a changing world of the conditions in political structure, economics, transportation, taxation, and in residential distribution, which obtain in Boston.

To accomplish this purpose the public was invited to submit, in the form of manuscripts supplemented by sketches, programs for civic reorganizations and improvements. A first prize of $5000 and a second prize of $2000 were offered.

When the Contest closed on June 19, 1944, ninety entries had been received—in many instances by groups of individuals who worked as a team. On December 7, 1944, the judges announced the award of the prizes, the first of which was won by a team from the Harvard faculty headed by Professor Carl Friedrich. The second prize was won by a team of Boston businessmen with Mr. Henry I. Harriman as chairman.

Professor Hudnut here reviews the Contest and its significance as a contribution to the progress of city planning.

CITY PLANNING AND THE PUBLIC MIND

COUNCIL PROPOSED IN FIRST PRIZE PLAN

Would Take Over Water, Sewers, Parks and Parts of Fire, Police, Health, Welfare Departments

Here Are Changes for Bostonians If Plan Were Accepted

- Remove buildings from property tax—lower service charge.
- Abolish personal property tax.
- Build on Boylston-Tremont sides of Common to join shopping districts.
- Close 30 small downtown streets to allow larger buildings.
- Keep service traffic within buildings instead of in streets.
- 10-15 "vital" express highways to speed access in and out of Boston.
- Small parks to open up North and West Ends for residence.
- Turn old waterfront into park.
- Beltway around edge of district.
- No rapid transit extensions except in red.
- "goldring" for representation.

Super-Road, Transit W. Belt Betterment Offered

Joint Action Asked to 2d Prize Plan

Third Place Winner Plan in Boston Contest Told

Harvard Group Wins $5000 Boston Prize

60 Page Paper On Master Plan

Yank Gains Space on Parkways

Prize Plan Urges Union of Cities

Boston Is the Obstacle

Buying of 'L', Tax Reform Proposed By Businessmen

2d Prize Greater Boston Plan

Boston Area 'Authority' Suggested

Improvement for 1st Prize Plan

Of Contest Plans
When the city of New York was governed by the Tweed Ring, that reckless and ingenious society of pirates, being zealous to provide themselves with the maximum number of lucrative paving contracts, extended the city on all sides with many straight and wide thoroughfares. In Boston, where the government was strict and upright, no such extravagance was entertained for a moment. Here we were scrupulous to continue our streets, as these led outward from the growing city, in the tight, wayward and venerable style established by our ancestors and their cows. In Boston no penny of public money was wasted either in unnecessary paving or in the acquisition of land not essential for the flow of horse-motored traffic.

Today the crooked government of New York has taken its gains and departed; but the crooked streets of Boston—still paved, I am sure, with the very best of intentions—remain, exacting their diurnal toll from her strict and upright citizens.

The moral—one must have a moral in Boston—is plain. Honesty, to be the best policy, must be seasoned with clairvoyance. Something more is needed in civic affairs than economy in administration, commendable as that may be. I have been surprised more than once in reading the history of cities to discover the evil which honorable men have wrought and the good which we owe to scoundrels. When neither takes thought of the future, the one may as readily as the other hit upon the just course of action.

What is important about streets is not their width and length and degree of curvature or the way in which they are paved and lighted and policed but the places to which they lead, the kind of people they bind together or keep apart, the currents of activity and interchange which they assist or retard; and these are also the important considerations in the design of every element, tangible or intangible, in the civic pattern. The nature of political structures, for example—I mean the machinery and mode of operation by which the several parts of a metropolitan area are governed—is clearly less important than those political concordances or maladjustments which will grow out of these. An immediate convenience in the location of an airport would scarcely be worth-while if it embarrassed the growth of a port of entry for foreign trade, and a present expediency in taxation is dearly bought if it contains the seeds of future blight.

In all these matters the prime consideration is the consequence upon the life of the people: the way in which immediate action directs future growth, assists or discourages a future unity, facilitates or embarrasses a future prosperity. Cities are never static. When you touch a city you must know its dynamic nature. You must be conscious for that moment at least of a growth and a becoming, of something that is on its way, of something crowded with potentialities of change and surprise.

I participated in the Boston Contest first as a member of the Executive Committee and then as a member of the Jury because I believed as I still do that this competition will assist in the public mind not only this consciousness of a city in evolution but also a sense of public responsibility in our present decisions for the direction of that evolution. I did not imagine that by a process not unlike that of a sporting event we should unravel the tangle of Boston or materialize out of some secret empyrean a palliative for the many evils which afflict that city—still less that we should mark out once and for all a path for
A map showing the composition of metropolitan Boston which embraces some 62 cities and towns (submitted with the manuscript which won Second Prize). On the page opposite, a diagram showing the structure of the metropolitan district, the communities, belt and spoke highways, etc. (from First Prize manuscript)

the guidance of the wise and honest who follow us. I conceived the Contest, rather, as an avenue by which these things could be brought to the public mind. Believing in a city molded continuously by opinion, I thought of the Contest as a means of creating that opinion—and of giving opinion a nature favorable to civic health. In a word, I believed in the Contest as good propaganda in the cause of planning.

We must not be afraid of propaganda. The word is defined in my Webster as “effort directed systematically towards the gaining of public support for a course of action.” I could have defined the Boston Contest in identical terms.

Conceived by Mr. Roger Greeley, then president of the Boston Society of Architects, as an instrument for good planning in Boston, the Contest was administered by Boston University as a program for the education of the people. Its essential purpose was “the development of citizen interest and participation” in a program designed to promote the welfare of this city. Although no one imagined that we should arrive at a master plan, we did believe that an attempt at such a plan and at such a prospectus might be made a very provocative instrument. It might, for example, create discussion. It might promote a new awareness of the city, focus attention upon the city’s problems, awaken the imagination and the conscience of citizens. It might even furnish, if there should be established some agencies for continued study and experiment, a basis of idea from which a renewed progress might be possible.

It was in this spirit that the Contest was organized and conducted. The Governor of the Commonwealth, the Mayor of Boston and the Chamber of Commerce lent their support as sponsors and were joined in this sponsorship by three of the city’s universities—Harvard, Boston University and the Massachusetts Institute of Technology. A Jury, of which Mr. Charles Francis Adams was chairman, was appointed; a program prepared; and the public invited to participate.

Planning is one of the sweet uses of adversity. People plan when they see that something in their affairs is going wrong. When all is going well they will leave the event to God. Never did England plan so valiantly as under her rain of bombs; and America planned most wisely when her factories were silent and her bread lines long. There was no need to plan Boston when her crowded port was a self-sufficient distributing point for foreign goods consumed by half a continent; no need to plan Boston when the expanding West provided an unlimited market for her calicoes and rubber shoes, when the exploitation of that rich empire opened a million channels for our venture capital, when the people of Europe packed our crowded slums with an inexhaustible cheap supply of that commodity called labor. Boston, moving outward in a wide concentric semi-circle from the crescent of her bay, poured through the gates of her besieging hills with a prodigal energy and a carelessness of consequences like that of lava flowing from a volcano.

Wide areas of marshland were reached and built over, and then, already cramped for space, the city invaded the harbor and shallow water-courses with a tangled profusion of warehouse, factory and railroad. When at length the city had shadowed her narrow streets with a clutter
of skyscrapers, less audacious than those of New York but as little disciplined, and crowned her ranged hills with square miles of three-decker wooden tenements, unique to the Boston civilization, Boston found time to look at herself.

In the course of her growth, Boston engulfed a score of towns, embedded thenceforth in the city as plums are embedded in a pudding. Cambridge, Quincy, Roxbury, Charlestown, Wellesley, Brookline: each has its physiognomy, its way of life, its special economic and social interests. Each defends itself, builds for itself privilege, tradition, and legal barriers—like lost battalions besieged behind the enemy's lines. Each renounces, in whole or in part, a responsibility for those evils which imperil the city's heart. Each welcomes in varying degree those who would escape from these evils into the illusive security and semi-rural peace of the suburb. A "Greater Boston" is created half by expansion and half by accretion: a city which is yet not a city being cut into segments by invisible barriers. These barriers separate—not in physical reality merely, but in thought and spirit—the interdependent functions of the city. They confine also the central heart dependent not upon a part but upon all of those who are nourished by it, there should be excited in all of these a more immediate and evocative sense of a responsibility shared together. Political adjustments would be made speedily and new political agencies readily created, once that habit of mind were established; and indeed I think that neither the machinery for cooperative effort already provided nor the councils and assemblies and administrative framework proposed by the many participants will otherwise bring about any genuine collective order. Such tools are useless in unwilling hands.

It is a remarkable circumstance, and a most heartening one, that political reconstruction should have played so large a part in the city planning programs of the Boston Contest. None of the premiated plans (and few of the others) were "master plans," sprung full-grown from the brain of a planner, nor were the manifold problems of city life attacked except in rare instances merely by the well-tried expeditents of architecture and engineering. The chairman of the group which won the first prize is a professor of economics.

When things go wrong in civic life people turn first to politics; afterwards they think of economic factors. When they have thrown out the administration they remember that, whether Republican or Democrat, all of us draw our nourishment from a soil which all must cultivate. It has yet to be proved that the causes of Boston's decline process of Boston. There are, of course, differences. The isolationist cz independent spirit is more definitely conformed among the smaller communities of Boston than among those of London, and the very limited area of Central London (the City) does not excite the fear or jealousies excited by "Downtown Boston." Of Greater Boston's 2,500,000 people only 800,000 live in "Boston Proper"—that is to say, under jurisdiction of the City of Boston's government. Around this jurisdiction there are ranged sixty-two self-governing communities, no one of which was planned as a part of Boston, no one of which acknowledges an interdependence among its neighbors, no one of which desires to become a part of Boston.

We must not hastily conclude that this state of affairs is not without its advantages. Perhaps Boston, like London, is "too big to be regarded as a single unit." Perhaps Boston is fortunate in this established community grouping, considered so desirable in London as a means of facilitating local organization and control; and if in London the identity of existing communities is to be established, their degree of segregation emphasized, we may find some satisfaction in the fact that in Boston this process has already reached its goal by means of phenomena more like those of Nature. For my part, I am surprised that so few participants in the Boston Contest failed to celebrate these advantages conferred upon Boston by the special design of Providence, or that none carried the principle to its obvious sequence which would be, of course, the re-establishment as separate communities of those once-independent towns—Quincy, Roxbury, Dorchester, Charlestown—which have been one by one annexed to Boston Proper. If I had prepared a manuscript for the Boston Contest, I should have invited these enslaved cities—and also East Boston, South Boston, the West End and, yes, the Back Bay also, if that suggestion is not blasphemy—to secede from Boston and to join their carefree encircling sisters. Thus, by making the central heart dependent not upon a part but upon all of those who are nourished by it, there should be excited in all of these a more immediate and evocative sense of a responsibility shared together. Political adjustments would be made speedily and new political agencies readily created, once that habit of mind were established; and indeed I think that neither the machinery for cooperative effort already provided nor the councils and assemblies and administrative framework proposed by the many participants will otherwise bring about any genuine collective order. Such tools are useless in unwilling hands.

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in manufacturing, relative to the nation as a whole, or in income or in employment lie in political handicaps, however flattering that notion may be.

A plentiful and daring capital, a greater proportion of skilled labor, an advantageous geographical position, and a lack in its special fields of truly able competitors placed Boston only twenty years ago among the first American cities both in the value of its manufactures and the number of men employed in manufacture. Timid capital, a lowered proportion of skilled labor, changes in economic geography, and an abundance of aggressive competitors have now placed Boston in a position less favorable for continued prosperity than that of at least eight other great cities. The sponsors of the Boston Contest did not hope to discover a new recipe for prosperity; but they did hope to make Boston conscious of this growing crisis in its affairs. We are on this ship together; and those on the promenade deck should know what is going on in the engine room. No one who makes his living in Boston can expect to escape the consequences of economic decline should it continue after the temporary stimulus of the war.

It must be confessed that the participants in the Contest did not offer any very convincing reassurances. We are invited to be courageous, adventuresome, inventive and less inclined to protect our children from themselves by means of trust funds conservatively administered. We are advised to claim a larger share of federal disbursements which have always been far less than our contributions and to prepare, like other cities, a shelf of public works ready for execution in a fabulous Postwar World.

Nearly all the participants offer plans for the improvement of the Port of Boston, once crowded with the world’s shipping. Nearly all propose new and larger airports and persuade us, with varying degrees of eloquence, that Boston ought to be a port-of-call for air-borne commerce with Europe. Nearly all point out, sometimes with a slightly satirical tone, the natural attractions of New England as a vacation area—the climate, history, quaint romance, scenic beauty, ski-trails, and good hotels which might become the sources of economic greatness—and one partici-
pant, awarded the third prize, included a scheme for the reconstruction around Faneuil Hall of an Olde Boston and went Williamsburg one better by inhabiting his "tourist attraction" with a costumed population conversing in the antique tongue of Colonial times. Nor was there any participant who overlooked the economic value of our educational institutions which as by-products of those processes by which they enlighten the world can be made to fill the pockets of Bostonians with silver.

These are economic palliatives and were so recognized by most of the participants who, after exploring them all, returned to production and distribution as the true sources of the city's prosperity. The way out of our present difficulties must lie in a revitalization of our industries and our merchandizing and in adjustments of these to the changing scenes of our national life. Boston needs no retreat from enterprise. That habit of industrial specialization which has long characterized this city, that mode of operation which results in quality production rather than in mass production, that hospitality to new idea and invention, and, above all, that self-reliant and imaginative promotion which the world has long associated with Yankee trade: these must remain the sure and established foundations of our future wealth as they were of our wealth in the times that have passed away. Our important resource is our tradition.

That tradition embraces something more than political idea and successful business. When people remember New England they are not apt to remember first either our contributions to the structure of the Republic or our ingenuity in making and selling—important as these are. People remember first all that New England has done to lift and sustain the happiness of the American people. They remember that flowering of letters which first gave distinction to the American culture, they remember the birth of those principles and practices which gave us free and liberal education and the ethical convictions which destroyed slavery and defended religious liberty.

It is surprising, therefore, that more participants in the Boston Contest did not attempt some solution of those social maladjustments which, though not unique to Boston, are yet of all our maladjustments the most iminical to civic health. Perhaps that is because the program of the Contest did not invite such solutions with an earnestness equivalent to that with which it invited political and economic proposals. Not all the gangsters live in Chicago, not every racial and class hatred is confined in Los Angeles, nor are chaos and uncertainty in the social pattern unique to New York. In all the world no slums are more horrible than those of Boston, no blighted areas more wide and mean.
VICTORY PARK HOUSING, COMPTON, CAL.

Adrian Wilson and Theodore Criley, Jr., Architects;
S. B. Barnes, Civil and Structural Engineer

Consultants: Capt. Robert J. Kadow, associate civil and structural engineer;
Robert M. Storms, mechanical engineer; Clayton T. Gibbs, electrical engineer;
Lt. Wilbert Davies and Ralph D. Cornell, landscape architects.

For the school building: H. L. Gogerty, architect, Wilson and Criley, associated architects
Designed for "semi-permanence," this is one wartime housing project which managed to include many of the advances in community development, site planning, school building and construction. And which, therefore, holds considerable promise for postwar usefulness. It was one of the earlier ones, the housing units completed late in 1942, the school and community building a year later. It contains 500 dwelling units, in 174 separate buildings. The project serves ship-building workers around Los Angeles Harbor; it is in the outskirts of Compton, on the southern edge of the industrial area. Compton Boulevard, the north boundary, leads to shopping district and interurban station.

Freely Organized Site Plan

The site of 80 acres was a completely unimproved area, and all surface and underground improvements had to be installed. The absence of previous improvements, plus the extremely low coverage (6.1 units to the acre) permitted a free organization of space in design. While small groupings of buildings are geometrically arranged, the over-all pattern is one of large flowing curves.

Project streets provide all vehicular access to buildings from within the project, keeping local traffic from the through boundary streets, and through traffic out of the
Above: two views of the entrance canopy of elementary school, on the street side. Upper view on opposite page shows louvers above porch roof shading the clerestory windows which provide bilateral lighting for classrooms.
project. A modified superblock is created with a network of pedestrian parkways connecting the central play area, with its school and community building, to all dwelling units.

Buildings are arranged in their courts with all kitchen sides facing inward. These courts have cul-de-sac parking areas leading from streets, the balance of the space in lawns. Clothesline supports are built as trellises to permit screen planting of vines. At the street end of each court is a fenced enclosure for garbage and trash cans. The garden sides of houses face the pedestrian parkway network, with a 70 ft. minimum space between buildings, for lawns and tenants' gardens.

**Community Building and School**

The elementary school reflects new developments notable
in California schools: bilateral lighting, activity alcoves in classrooms, open arcades instead of closed corridors. The building is so planned that additional wings may be added, radiating into the school yard.

The Community Building provides offices for the local housing authority and for management and maintenance, a health clinic, and a nursery school. Its auditorium is planned for dual use for project meetings and school functions. School and Community Building are linked by curving arcades.

Site Prefabrication System

The dwelling units were almost entirely site-prefabricated. A sample building of each type was framed and roughed-in for approval. On later buildings all framing members and boarding were precut, roof assemblies made on jigs, and plumbing assemblies shop fabricated. All exterior boarding was dipped in creosote stain after cutting, and sash, roof lookouts and exposed eaves painted before assembly.

After second floor decks were in place, all second-story walls were framed, boarding and sash applied while the walls lay horizontally on the decks. The whole walls were then raised as units completely finished on the exterior, so
The "A" or "B" type dwelling unit, as seen from the living room or garden side. The "B" type units are the "A" in reverse.
that no scaffolding was necessary. This technique more than offset the slightly higher material cost of wood over plaster. Four different combinations of color were used, each including a stain color, a stucco color, and one for trim. All building eaves were painted alike to give a unifying motive; and all buildings in any one court have the same scheme.

**Materials and Finishes**

Dwelling units are of wood frame construction, on concrete foundations. Exterior walls are stucco over wire lath and felt; redwood boards and battens at porches and second stories. Floors are oak in living and bedrooms, linoleum in kitchens and baths. Interior walls and ceilings are of interior stucco in living and bedrooms, Keene's cement plaster, enameled, in kitchens and baths. Doors and sash are of wood. Heating is by oil-fired console heaters; buildings have vents and gas supply piping for substitution of gas console heaters after the war. Water heating and cooking is by gas; refrigerators, electric.

**Landscaping**

To enhance an already attractive community, the landscaping was quite extensive. The plant list includes only a few varieties, all chosen for hardiness and quick growth. In addition to existing walnut trees in a part of the tract, new trees include several species of eucalyptus, acacias, sycamores, jacarandas, and Siberian elms. There are also vines over porches and trellises, and screening of bushy shrubs. Parking areas are defined by hedges of Ligustrum.
"FLEXIBLE HEATING" COMPETITION

Sponsored by the BITUMINOUS COAL INSTITUTE

REPORT OF THE JURY

The jury was pleased to find so many well-studied and well-presented solutions to the problem of designing a basement for flexible heating. There were many serious efforts to work out new and better solutions to the age-old problem of designing a more comfortable, livable small house. The great majority of designs were modern in plan, facilities and spirit.

While some of the houses were compact, and therefore easily heated, others were rambling and had a maximum of exposed wall for the space enclosed. However, economy of heating was not the prime factor in judging the competition. A convenient and well-arranged basement, with a workable heating plant was essential. The planning of the house itself was considered of importance, for it was assumed "that a good basement plan must be properly related to a good first-floor plan." The heating facilities were judged on adequacy and convenience for normal operation, for the delivery and storage of fuel, and for the handling of ashes. Some of the competitors seemed preoccupied with the problem of ash disposal and incorporated much too elaborate mechanisms for ash disposal. It should be remembered that the average ash of domestic bituminous coal is in the neighborhood of five per cent.

There were obvious errors in smoke-pipe lengths, shapes and locations of coal-bins, coal-delivery hoppers, etc. Each fuel-burning unit should have its separate flue, for many draft troubles develop if two units interconnect in one smoke pipe. Where the space was well organized, and minor changes would correct defects, the jury gave due consideration to such possibilities. Most designs concentrated on provisions for bituminous coal as fuel, on the logical assumption that the use of any other type of fuel would be possible within the area occupied by the coal facilities.

There were numerous suggestions for providing a great variety of useful areas in the basement, in addition to the heating plant. Many were ingenious and attractive, and some were easily convertible to a variety of uses.

On the whole, the jury felt encouraged by the imagination shown and by the lack of stereotyped plans submitted. It was felt, however, that there was need for further study of the more practical aspects of planning for both efficiency and economy.
The plan is simple, straightforward, well-organized, and all major areas face the garden to the south. There is a pleasing relationship between indoor and outdoor activities. The basement plan is well arranged and proportioned, with good recreation space, ample and concentrated storage. Storage is convenient to the stair, to save steps, and a kitchenette with sink is an adjunct to the recreation area.

The hobby and work shop area is placed at the far end of the recreation room and, by means of a folding partition, its floor area can be added to that room as occasion might require. The heating plant is isolated and well thought out for convenience. Coal is delivered remote from living quarters in front of closed garage doors. The ash hoist is simple and well located for the disposal of ashes.
This compact, two-story and basement house, was attractively designed throughout. The central placing of the chimney would make possible almost any type of heating plant—gravity-warm-air, forced warm air, air-conditioning, steam, hot water, or panel heating. It was presumed that the basement would have year-around air conditioning. The recreation room is flexible and serves many purposes. Access to the heater room is necessarily through the recreation area which, while not quite as desirable as the arrangement of the first-prize design, should not interfere with the activities of the recreation room. Coal delivery and ash removal are convenient from the driveway. The drive is more extensive than the first-prize design. The outside stair is a desirable feature.

SECOND PRIZE
$1000 in WAR BONDS

"FLEXIBLE HEATING" COMPETITION
Sponsored by the Bituminous Coal Institute

STEPHEN J. ALLING
Cincinnati, Ohio

Educated at Kenyon College and at M.I.T. where he was a Special Student for several years. Later employed by the Formica Insulation Company of Cincinnati. Active as Architectural Designer for them in New York from 1934 to 1942, then transferred to Cincinnati. Registered architect in New York since 1936. Winner of first prize, General Electric House competition, 1935. Indulges in architectural model making as an avocation.

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KENNETH M. NISHIMOTO
Rivers, Arizona

Graduated from San Francisco High School, and from the College of Architecture, University of Southern California, 1934. Served his apprenticeship in the offices of several Los Angeles architects, and with J. R. Davidson and Paul T. Frankl, designers. Traveled in the Orient, 1936. Received architectural license in 1941 and practiced in Los Angeles.

An interesting one-story house, freely planned. The basement extends only under the west side of the house. An outside play terrace is closed off from the recreation room by an accordion-type door. (Such an arrangement is better suited to southern climates than to northern.) The play terrace could be at grade without major change in plan. Children playing could be watched from the kitchen.

The stair from the first floor leads directly to the recreation room or to the storage space, and the heater room is isolated from the recreation room. The stoker can be operated the year around, supplying only domestic hot water during the summer, eliminating a separate water heater. The placing of the coal delivery chute necessitates an additional length of drive at the side of the garage.
WINNERS OF $100 WAR BOND AWARDS


Lawrence L. Smith, Chicago, Ill. University of Illinois 1939; B.S. in Architecture. Registered architect state of Indiana, and at present employed by Skidmore, Owings, and Merrill, architects, Chicago. Teamed with Lee C. Mielke in this competition.

William G. Moeckel, Wilmington, Del. Architectural education at University of Kansas and at University of Illinois. At present a designer with G. Morris Whiteside 2nd, Wilmington, Delaware.


Frederick W. Stritzel, Columbus, Ohio. Graduated from Ohio State University, 1933. Member of architectural firm of Acox, Maffit and Stritzel, Columbus, Ohio. At present Architectural Advisor and architect for Darin and Armstrong, Inc., general contractors, Detroit, Mich.


A few of the most interesting ideas taken from the 15 designs awarded Honorable Mention ($100 in War Bonds each) are reproduced on these two pages. They range from practical planning to interesting decoration, and the various plans, isometrics, or diagrams are but portions of the designs submitted. Only the present paper shortage prevents the showing of the full designs of each of these successful competitors. A careful study of the drawings on these pages will show both the strengths and weaknesses of the designs. One can see a wide range of solutions to the various problems of space-use, lighting, ventilation, and heating. Many of the solutions are both ingenious and practical, and the ideas can be adapted to many different basement designs. Particularly noteworthy, perhaps, are the ideas for the multi-use of space through the use of movable cabinets, partitions, or screens—and the ideas for the better natural lighting of basements.

The drawings shown are from the competition designs submitted by the following men:
A. Karl Kamrath .......................... Ft. Sam Houston, Texas
B. Frederick W. Stritzel .................. Columbus, Ohio
C. Robert A. Deshon ...................... Ft. Worth, Texas
D. William P. Brower ..................... Glen Rock, New Jersey
E. Frederick W. Westman .................. Milton, Massachusetts
F. Theodore Ludrowski ................... Alexandria, Virginia
G. Lee Charles Mielke and Lawrence Lattin Smith
   Chicago, Illinois
H. Henry Hebbeln ........................ New York, New York
I. Walter H. Gruber ...................... New York, New York
J. Fred van Wageningen .................. New York, New York
K. Charles K. Hirzel ..................... Richmond Hill, New York
L. George R. Russo ....................... Camden, New Jersey
M. Simon Schmiderer ...................... New York, New York
N. Joseph Shilowitz ...................... Jersey City, New Jersey
O. William G. Moeckel .................... Wilmington, Delaware
"RUSTIC MODERN"
DESIGN DICTATED
BY LAKESIDE PLOT

In the environs of Portland, Oregon, home sites have a way of dictating to architects, and challenging them to ever new ways to perch houses on hillsides, to bring views indoors, to integrate rooms with nature's bounties outside. The site for this home, lived in by three professional women, is on a small inlet of scenic Lake Oswego, on a heavily wooded hillside. Originally the site was chosen for a home for only summer use, but the owner's enthusiasm grew until it was decided to build a permanent residence in front of the older summer house. Thus the problem was to build at the foot of a steep driveway, with the lot narrowed and little room for a turn-around.
Lack of frontage required a two-story building, to make possible an outlook over the water for the greatest number of rooms. To minimize the steepness of the driveway at the rear, and to keep the principal rooms at grade level on the lake shore, the main entrance was placed on the rear, at a level half way between upper and lower floors.

All of the bedrooms on the upper floor have outside entrances by way of a balcony, which is reached by an outside stair on the lake side.

Nature of the site dictated the design in what might be termed a modern rustic manner. There is, however, a notable lack of superficial modern touches, or of tricked-
up rustic props. Windows abound on the lake front and on the south side of the house, while they are kept to a minimum on the rear and on the north property line, for privacy. Except for some plastered ceilings, finishes both inside and out are of various woods, all done in their natural tones. Exterior walls are of rough-sawn boards, individually separated by a T & G spline member which accentuates horizontal lines. All window openings, railing and projections are purposely located at continuations of these horizontal "module" points, to emphasize the orderliness of the modern design. The vertical scale of the
building is tailored to the rather small stature of the owner. To the casual eye, the heights of window sills and heads, doors and ceilings, are not noticeably low; one is more inclined to feel the rooms are spacious in horizontal dimensions.

Windows are large sash, those on the lake side opening out and top hinged so that they can be opened up flat against the porch ceiling, to give an open camp-like effect.

The garage, which forms part of the space for the turn-around at the foot of the drive, was left without doors. The interior wall finish is a continuation of that outside.

Interior woods are finished to retain natural colorings. The fir beams and fir flooring (ceiling) are finished with white lead, rubbed out, and varnished. This keeps their light color, which otherwise darkens to orange. Oak floors are similarly finished; hemlock walls get three lacquer coats to retain their natural light tones.
Eventually an architect’s clients may learn to read plans and elevations like veterans, but it is asking a lot of them to enthuse over the most glamorous ideas if they can’t visualize them. For that first presentation, when the clients are eager but doubtful, Mr. Little has found very effective the quick sketch method he has here illustrated. The details are not too important at this stage—they will probably be changed many times anyway—but ideas, quickly visualized, serve to build enthusiasm for the studies yet to come.
NAVAL ARCHITECT'S
SHIPSHAPE HOUSE

Residence-Studio of John D. Atkin,
Noroton, Conn.
William Atkin & Sons, Designers
Designed by a naval architect for his home and studio, this house is novel in both plan and construction. It is economical, too; with all its area the cost was only about $6,000. Originally it was built without a basement, and heated by a kerosene-fired space heater in a "convector room" in the center of the house, but oil difficulties made it necessary to change to coal, which required the construction of a small basement.

Simplicity throughout the house is the keynote of the design. It is of western frame construction, sheathed with 10-in. novelty siding. Roofs are sheathed with pine, overlaid with large composition board sheets. Peaked roofs have V-shaped battens at 2-ft. intervals, alternate ones covering joints. Deck roofs have a second overlayer of canvas. Exterior is painted blue gray, peaked roofs aluminum, deck roofs green.

Interiors are of dry-wall construction, with large-sheet composition board and hardwood plywood and wood staving, the last usually running horizontally. The hard plywood was "found to be so versatile that it
Living room has walls of composition board and "wood staving." Floor is of plywood, top layer of which is birch. Overhead lights are recessed, with stainless steel reflectors was used for the floor in the living room; it is laid in 8 by 4-foot sheets." Instead of trying to cover up seams, it was decided to plane the corners to leave a V-section joint. Floors in dining room and one bedroom are of white pine with black stopped seams and plugs, "ship-like." Others are selected North Carolina pine in 8-in. widths, and "these pine floors have likewise worn without warpage or shrinkage."

There are no window frames; windows are set into the studding, and trim was simply nailed to this to form a finish. There are no window sills inside, and "absolutely a minimum of air leakage." Windows are hinged at the top or one side, to swing out. Storm windows or plastic screens fit inside the windows. The sash were especially designed with two horizontal bars, to carry out the lines of the house.
Built-ins feature interiors—closets, bunks, dressing tables and window seats in bedrooms, also the "sea-fixed" dining room table. The ship's ladder in the dining room is the only stairway in the house, giving access to two rooms upstairs.
CAPE COD, BUT NOT A COTTAGE

Residence for Mr. and Mrs. Jacob Shore, Providence, R. I.

Royal Barry Wills, Architect

While the search goes on for the more efficient, more flexible little house for the mass market, it is well to remember that architects will still be doing houses for people who want them the way they want them. People who like the beautiful Colonials, with huge fireplaces, separate rooms and separate facilities for separate functions, and plenty of space. People who like muntined windows, and big bathrooms, and who like the outdoors kept outdoors. Here is a house by a designer who likes just such assignments, who can build in the luxury items and still do it without wasting space in excessive hallways. This deceptively large house is really very compactly planned. The six huge fireplaces did not exactly simplify the problem, but they fit into this plan very logically.
Right: view of Colonial fireplace corner in the dining room
Below: fireplace end of the study in the downstairs suite

Above: view of bedroom of downstairs suite, toward fireplace
Right: front hall and stairway, as seen from the living room
When the younger generation finally has its chance to acquire homes of its own, an average of one in three will be financed through a Savings and Loan Association.

Replying to SAVINGS AND LOANS, organ of the powerful U. S. Savings and Loans League, some 40 per cent of member associations have signified their intention of building or remodeling. This influential publication has therefore joined editorial forces with ARCHITECTURAL RECORD in a joint building types study. Two of the latest savings and commercial banks are also presented.

OFFICE FOR A TYPICAL "SAVINGS AND LOAN"

By Ely Jacques Kahn and Robert Allan Jacobs, Architects

How build a Savings and Loan Association office of average size—or, rather, how develop the average size that is likely to do some building? In order to find out, Savings and Loans and Architectural Record went where information could be most specific. Among those associations which had reported that they might build when restrictions were raised was the South Bergen Association, at Wood-Ridge, New Jersey. This association possesses a suitable lot in a good suburban location. It has assets close to $3,000,000, near the middle prosperous average.

Conferences were held with the New York architectural firm of Ely Jacques Kahn and Robert Allan Jacobs, and the drawings presented herewith are the outcome. Needless to say, they are in no way binding upon either Mr. Staugaard, the manager, or his board, as an actual building project. Yet the manner of handling the problem was far more realistic than any random shot into the blue with a load of xxxx's.

The first and strongest requisite was that the patrons should find themselves in an atmosphere warm, friendly, and encouraging. The architects did not resort to the obvious expedient of designing a Colonial interior which
might be out of date with the very next swing of superficial fashion. They relied upon more basic factors. For cheerfulness they brought in an even spread of bright natural light through an all-glass front. From the interior this front would also afford a fine view into a handsome park lying across the street. An open counter helps create a lounge-like atmosphere (the safety of this type has been adequately tested in a number of large institutions). In place of small isolated displays, use is made of a large, effective expanse of wall space—a resource which is usually neglected entirely.

On this wall map the patron can spot his own favored location for a house.
MANY ASSOCIATIONS
ARE SEEKING BETTER QUARTERS

By Franklin Hardinge, Jr., Editor "Savings and Loans"

At the very first opportunity, between one-third and one-half of existing savings and loan institutions will move to build, enlarge, or "streamline" their headquarters offices. This was indicated by a survey recently conducted by the United States Savings and Loan League, whose member institutions hold more than 80 per cent of all savings and loan assets in the nation. More than 41 per cent who replied to the questions put by the League said that headquarters construction work was definitely in prospect.

The survey covered a representative cross-section of both large and small institutions in large, medium, and small cities. In *medium cities* (those with a population between 25,000 and 500,000), 44 per cent of the institutions replying stated their intention of modernizing and enlarging their office quarters. In these communities, there are approximately 1,100 member associations of the U. S. League, with assets of more than $2,500,000,000. The replies indicate that approximately 500 of the institutions in this group of cities will be doing some sort of construction work on their offices in the near future.

More than one-fourth (26 per cent) among these institutions reported that their intention was to modernize their present quarters; another 10 per cent are planning to modernize an existing building that they will buy; 3 per cent will build entirely new offices. Another 5 per cent are not decided yet just how they will improve, modernize, or extend their present offices, but they do know that steps must be taken, because present quarters are inadequate.

In *large cities* with more than half a million population, 39 per cent of the savings and loan associations say that they will do some work on their offices. In these cities are found slightly more than 600 member institutions of the United States League, with assets of $1,250,000,000; on the basis of the replies, better than 200 of them will be doing some office modernizing as soon as the bars are down.

The work will be divided in a manner similar to that which obtains in the medium-sized cities. "Modernization" will be the course most frequently taken, with 18.5 per cent of the replying managers indicating their intention to do just this. Another 7 per cent report their plans to build new offices, 2 per cent will modernize an older building which they intend to buy, and 10 per cent are still undecided just which course they will pursue when building or remodeling is once again permitted.

Even in *small cities*, the managers exhibited the same interest in modernization of their offices. One quarter of those replying indicated that they would remodel their present offices, 7 per cent that they would remodel another building that they were planning to buy; 4 per cent hoped to build new headquarters, and 3 per cent were aware of a need without having formulated detailed plans.

Small cities contain 1,850 member associations of the League, with total assets of nearly $1,500,000,000. If 39 per cent of these follow through with the indicated plans, 700 major remodeling or new construction jobs will be involved.

On the basis of the survey, some 1,400 member associations of the League will be doing a major construction or reconstruction job on their offices just as soon as possible. Assets of these associations are estimated at between $2,000,000,000 and $2,250,000,000.
MEETING NEEDS OF SAVINGS AND LOANS

By L. J. Orabka*

Behind the move for new headquarters is the drive of the building and loan associations toward more effective selling at lower operating cost. Up-to-date planning and equipment not only improve efficiency but consort well with an enterprise which is promoting the idea of new construction.

The dual nature of the association—as a cooperative banking enterprise on the one hand, and on the other as a construction headquarters primarily for homes—calls for a unique plan treatment and a special atmosphere. Some of the dignity of a bank is combined with some of the intimacy of a professional consulting room. It is not requisite, however, that the office look just like a home, any more than an automobile financing company need place its offices in a car.

Savings and loan office dispositions vary considerably from those of banks. For example, there are not the same traffic peaks in the lobby. Members make regular visits, have few errands, require less lobby space.

The “bank platform” used by officers need not be placed in the same close juxtaposition with tellers’ counters as in a bank. Members are known; it is necessary for the officers to be able only to “keep a general eye on things.”

Auxiliary rooms should not be misplaced out of a false regard for symmetry or monumentality. The manager’s office, if possible, should be close to the platform, not segregated, though it has to be sound-proof and private. The “closing rooms” are used to consummate mortgage transactions, and also ideally belong close to the platform for smooth, easy conduct of business.

The “directors’ room” should be grouped, if possible, with the manager’s office and the closing rooms. This space is accommodatingly lent out to all sorts of committees; access should therefore be possible from the public lobby without need for crossing the bank space.

Low-height counters look less austere, lessen the teller’s feeling of claustrophobia, and yet provide ample protection because the depth of the counter places the cash drawer beyond outside reach. Tellers must not be skimped in bookkeeping space.

Savings and loan vaults are not usually elaborate because there is only a small volume of cash. A downstairs storage vault is usually necessary for documents which must be retained by law. Safety deposit boxes are sometimes installed for a leased operation.

Lighting is a major factor where people are doing close work indoors. Every teller’s window should be individually lighted below eye level. General illumination is usually provided by means of concealed cove lighting and recessed, not hung fixtures, for lower upkeep cost.

REGIONAL DIFFERENCES are illustrated in these examples. Across page, Home Federal Savings and Loan Association, Chicago, John Sevice, architect; this page, the Miami Beach Federal Savings and Loan Association, Roy F. France, Inc., architect.

Air Conditioning—winter as well as summer—is just about a “must,” even in the smaller offices. Some economies can be effected by heating, cooling and ventilating through the same duct work.

Comfort facilities, seemingly too expensive at the start, pay off faster than is often realized. Year-round air conditioning, adequate lighting, acoustic ceilings to absorb machine noises, comfortable chairs—may mean the difference between getting the work out with minimal staff or hiring new people. This the banks have learned during the war, handling a tremendous increase in volume with fewer employees than ever.

Like other service-type businesses, the savings and loan associations work on a comparatively short margin. Like all business, they face an increasing cost picture. Part of the answer, without doubt, lies in streamlining operations as much as possible. An intelligent step in this direction is to start planning new quarters now, before the expected price rises, for earliest possible use.

* Executive Vice-President, Bank and Equipment Corporation of America.
SAVINGS AND LOANS

"FIRST FEDERAL," NEW YORK

This Rockefeller Center bank room has perhaps more "spit and polish" than other, less metropolitan, situations might warrant; but its main claim to distinction lies in the strong, intimate impression made by its circular arrangement. Patrons can quickly see where all facilities are, can quickly step where their business leads them. An effective element is the clever recessing of all check-writing desks (see plan and picture at right) except the two that are boldly cantilevered on the two central columns. Because this was rental space, planning had to be tight, and additional offices are placed on an upper floor. With assets of $15,500,000, this association is very unusually large.

Carson and Lundin, Architects

Photos, top of page, show (left) the view toward the entrance, (right) the view out from the officers' platform. Despite central location, entrances in actual use are only two: one from the office building, one from street.
Glass shutters make an effective open bank screen (see details). Free-standing columns are furred out, bronze-clad; the check desk, cantilevered from the column, is glass-topped, brass finished.
By its own use of up-to-date materials and equipment, this Chicago office effectively backs the new construction that it sells. Cove ceiling is lined with acoustic plaster, the rest with acoustic tile; fluorescent trougher lights are added to the cove light. Complete air conditioning. Individual conference rooms are eliminated (except for manager’s office) and the space provided on the open platform. In the four corners are situated: the windscreened entrance, manager’s office, vault, machine and mailing room.

* Executed by Chicago Bank Equipment Co.
"WALTHAM FEDERAL"

Waltham, Massachusetts

Thomas M. James Co., Architects

The spacious display room at the sidewalk is an unusual feature of this larger plan. A whole room or small model may easily be set up to suggest the idea of building. The plan is very well articulated for workability. An extra feature worth study is the grouping of conference rooms with easy separate access from the parking lot.
SAVINGS BANKS

SAVINGS Banks are another mortgage lending group, specializing in larger projects. In this St. Louis postwar project, Architect Boulcault plans to "gut" an existing office building, old but structurally very sound, and located on a prominent corner. The juxtaposition of bank and theater reproduces, in miniature, a combination that has been profitable in New York's Rockefeller Center.

BANK IN ST. LOUIS

OFFICE BUILDING

Marcel Boulcault, Architect
New types of banking business have quite transformed the functions of the traditional savings bank. Such items as government bond sales and life insurance bring in a large new popular clientele not accustomed to the formidable older banking palaces, and not likely to feel at home there. The new need is for greater spaciousness to handle the large number of small transactions, and a new business-like simplicity. The simpler interiors also make for easier upkeep and lower operating costs.

This bank adheres to the tradition of the banking "island," which concentrates personnel space rather than customer space. But customer circulation is generous.

THE BRONX SAVINGS BANK, NEW YORK

Cross & Cross, Architects
Picture at right shows view looking toward the huge entrance facing Rockefeller Center. The ceiling rises, in a series of rolls, toward the glass front. Stairs, immediately to left of main entrance in this view, lead down to a second banking room devoted to the new business of cashing pay checks.
COMMERCIAL BANK

CHEMICAL BANK AND TRUST, NEW YORK

This was just about the last new bank building erected before building restrictions were clamped down. It exemplifies the latest executed bank ideas. At a glance the new lounge-like, easy atmosphere of the interior is apparent. In addition to the cove lighting, lens lights recessed in the ceiling above the desks provide ample, even illumination with no need for individual desk lights. There is full air conditioning. In the view below, the gate to the right opens into the special women's department, with ladies' powder rooms immediately behind. Downstairs is a complete second, simple banking room devoted to payroll business, now a profitable factor. The upstairs lounge and dining room are for valued guests.
NEW STANDARD DIMENSIONS FOR
MASONRY AND METAL WINDOWS

JANUARY 1945

Special Note. Standardization and dimensional coordination have long been recognized as essential to efficiency and economy of construction. Much progress has been made recently, the cumulative result of efforts of many organizations and committees. We present herewith, Time Saver Standards developed from the published standards as adopted recently by the Metal Window Institute and released by several leading manufacturers. Recommended masonry-dimensional-coordination standards were developed by the American Standards Association and collaborating organizations, Project A62.

Especially to be noted is the fact that new coordinated dimensional standards for metal windows do not relate to so-called “residential casements,” nor are hinges shown in the diagrams at jambs or heads. As further information is available, or as other new standards are developed, they will be subjects for future Time Saver Standards.

COMMITTEES of various groups in the building industry have held forth for years on the need for standardization and coordination in the dimensions of building products. Here is a case producing tangible results. Perhaps not all details, but definitely tangible.

Dimensions to fit a 4-in. modular system. The news of new coordinated dimensional standards for metal windows comes more specifically from the Metal Window Institute, with assistance of the Modular Service Association, with some progress toward the standardization of basic sizes occasioned by the restrictions of the war, the Committee set out to project this progress into postwar building. The result is an agreement by manufacturers of metal windows, whose total sales represent better than 90 per cent of the business in the field, to make solid sash and double-hung metal windows in a few basic widths and heights, the dimensions coordinated with those of masonry products, as recently adopted by members of the Structural Clay Products Institute.

With both metal windows (except residential casements) and masonry products dimensioned according to the familiar grid pattern of the module system, the architect can draw preliminary layouts on cross-section paper, with assurance that 4-in. grid lines would be sufficiently accurate for both masonry and windows.

Actually there might be slight differences to be accounted for in final drawings, but they have been taken into account in the coordination of windows and masonry, so that there need be no hesitancy about using the simple grid system for preliminary planning.

There are other advantages which dimensional coordination will make possible. Specifications may be changed and alternate materials used without redrawing the layout. Materials will be more readily available because of improved standardization and simplification in specifications. Many special details may be replaced with stock items, so that the designing and detailing for these items will be simplified. Supervision of work will be easier as a result of standard building practice.

The modular system does not necessarily involve making every product come out to even multiples of 4 inches. It would obviously be uneconomic to be rigid about it in lumber sizes, for example, or in a great variety of fittings and equipment. It could not apply rigidly to stud walls, with 2 by 2, 2 by 3, 2 by 4 studs, or to floor thicknesses with various joist dimensions.

The system does suggest, however, that the four-in. unit be considered as an increment wherever possible—door widths might vary by 4 in., or window widths might vary by the width of one light, which might be 16, 20, or 24 in., and so on. In masonry the conception of an increment is similarly applied—the 4-in. unit is not a limit of size, but rather a unit of variation.

In general, then, the idea is that once an adjustment is made for an odd size, further adjustments are not necessary.

Actual brick sizes will not change much from the old standard size of 2-1/2 in. The comparable size is now 2-1/6 in.; thus three bricks plus three 3/8-in. joints add up to an even 8 in. A second size is 2-1/2 in., so that four courses, with joints, come out even at 12 in.

There is also a third thickness, a large 3-1/4-in. brick, which with its joints gives a nominal thickness of 4 in. This would, of course, be the ideal size for easy modular planning, but it might be a radical change from more familiar sizes. (See drawings for standard length and width).

In the case of metal windows, the new standard dimensions are based on a standard glass size as the actual module. This standard is a “nominal glass size of 20 by 16 in. This is the measurement between bar centers; the actual glass size is fractionally less.

Over-all window widths are now limited to five basic units: 20, 40, 48, 60 and 80 in. Four of these use the standard light size of 20 by 16; the fifth (48 in.) provides additional flexibility with 24-in. lights.

There are eight standard heights: 16, 22, 64, 80, 96, 112, 128, and 144 in. (bar centers), all of which use the standard-height glass at 16 in. Obviously these sizes can be combined to give wide flexibility in over-all fenestration.


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MODULAR DESIGN DATA
FOR MASONRY CONSTRUCTION

This study is concerned with the modular system and dimensional coordination as they affect the use of metal windows and masonry products. It does not pretend to show all contingencies, but rather gives a basis upon which an architect may proceed in actual practice.

How Modular System Functions:
The architect can best realize the advantages of the coordination of masonry and metal window dimensions by doing preliminary building layouts on the familiar cross section paper of the module system, each grid line representing 4 inches. He may select any grid line for one side of a window opening, with assurance that the masonry wall could easily be arranged to come out evenly at that line. Window openings would be calculated according to standard metal window dimensions, also falling directly on grid lines. While there would be fractional differences in final, actual dimensions, these have been taken into account in working out the standards.

For example, masonry unit dimensions include masonry joints in the “nominal” sizes; thus the finished wall would be less than grid dimensions by the thickness of one joint. Similarly a window opening would actually be more than unit dimensions by two joint thicknesses, but this difference is taken up by windows, which are actually ⅜ in. wider than “unit dimensions.” Again, windows are fractionally still larger, in order to overlap the window recess (see drawings for details). In special types of windows there are slight discrepancies yet to be worked out, but in general the grid system is workable for layout purposes.

How to Use Modular Brick:
Brick dimensions have been chosen so that wall dimensions come out according to the 4-in. “increment.” In other words, the actual module is some multiple of 4-in.—4, 8, 12, or 16 in. Three bricks in the vertical wall, with their mortar joints, make 8 in. One brick length, with joint, is 8 in.; one width, with joint, is 4 in. In various combinations, perhaps with block or tile back-up, wall thicknesses or lengths or heights come out similarly. (See Figure 1.)

It might be necessary in special instances (special sills, lintels, etc.) to make up a discrepancy of something less than 2 in. This is best taken up in the sill dimension, or it can be done by compressing mortar joints. Also in various bonding systems it might be necessary to use stretchers or closers at corners. Half-and three-quarter stretchers usually make it simple; or in some cases a 2-in. closer might be required in one course. Notice that in using rowlock or soldier brick for sills, etc., the usual vertical dimensions become the horizontal; it will be necessary to check for possible adjustments to small opening dimensions.

The new standard size brick of 2 1/6 in. by 3 ½ in. by 7 ½ in. will permit wall dimensions to fall into the modular pattern. As indicated at left, three courses will make an even 8 inches which then becomes the module for vertical dimensions. Similarly, the 2 1/2 in. brick size will use four courses, joints included, to make 12 in. The 3 ½ in. brick is theoretically correct for the 4 in. modular system, but might be a radical departure from the standpoint of appearance.
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MODULAR DESIGN DATA
FOR MASONRY CONSTRUCTION

Above: note that the mortar joints at every third course are on the grid lines. Above, right: wall intersections may require either half or three-quarter length stretcher units. Notice how grid pattern is maintained regardless of type of courses.

Concrete block dimensions will be 8 in. by 16 in. minus the thickness of one joint in all three directions and, as in the case of brick, will include the use of half and three-quarter length stretcher units to complete corners or intersections.

In the case of compound walls, as shown below, differences in the sizes of masonry units may be taken up by changing the thickness of the joint. In this way, the 4-in. module may be maintained regardless of the backing material of the brick.
WHAT KIND OF A NOISE ANNOYS AN OYSTER?

Whether food—including the oyster—is affected by noise is open to question—but all of us today know that it certainly does affect patrons’ enjoyment! So it is standard practice these days for architects to plan sound control into their restaurant construction—into almost all other construction, too.

For their assistance, National Gypsum Research has developed a complete line of acoustical materials suitable for every job and every budget. These are only a few of more than 150 different Gold Bond products to help you build better. For complete information see Sweet’s or write us direct.

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MODULAR DESIGN DATA
FOR POSTWAR METAL WINDOWS

With metal window sizes standardized in five unit widths and eight unit heights (not including residential and some special case­ments) the layout of fenestration becomes simply a matter of arranging basic units in series. The table on page 109 shows 74 sug­gested combinations of standard width units for windows up to some 55 ft. wide. Two examples are given below (Figure 8) to illustrate the use of units in large windows.

Nominal dimensions of five unit widths are: 20, 40, 48, 60, and 80 in. Actual measurements are, respectively: 1' 8¾"; 3' 4¾"; 4' 3¾"; 5' 7¾"; and 6' 8¾". See scale on Page 109 for standard heights.

Standard mullions keep overall dimensions within minimum and maximum limits (note 1" possible takeup in Figure 7).
Architects are specifying aluminum windows by General Bronze in their postwar schools, office buildings, hospitals and apartments for many reasons. They cannot rust or rot out — thereby eliminating the essential periodical painting expense so costly on other windows. Their weathertightness, their ease of operation, their smart, distinctive appearance—these factors all appeal to your most exacting and economy-conscious clients.

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Buildings keep “modern” looking for years to come when aluminum windows by General Bronze are specified.

The largest producer of non-ferrous windows before the war—and with newly enlarged facilities available after the war—General Bronze will be ready immediately to offer the finest in window construction, in aluminum or bronze, at prices in standard sizes that will make them a “must” for many buildings. For complete information on General Bronze products consult Sweet’s or write for name of our nearest representative.

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FIVE CONSECUTIVE ARMY-NAVY “E” AWARDS
### Possible Combinations of Standard Windows in Series

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**KEY**

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**Widths Scale 1/4" P.O.**

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<th>2 Light Wide 24&quot; Bar Centers</th>
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<th>2</th>
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<th>0</th>
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**Scale for the Five Standard Window Widths and the Eight Standard Heights**

Adapted from Table Published by Mesker Brothers

<table>
<thead>
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<th>Heights</th>
<th>Scale 1/4&quot; P.O.</th>
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**Retained from Old Standards**
REQUIRED READING

GEORGETOWN HOUSES

Anyone who has visited Georgetown and remembers the charm of its old houses, its trees and its gardens, will want to read this book. Likewise, anyone who reads this book will want to visit Georgetown—either again, if he has already been there, or for the first time. For Messrs. Davis, Dorsey and Hall, with the aid of their photographers, have captured the very spirit of Washington's "parent city," and have made of it a truly beautiful book.

Twenty-four of the oldest and most interesting of Georgetown's houses are presented pictorially, some with single exterior views, the majority with several views of both exterior and interior. The photographs are uniformly excellent.

KITCHEN PLAN NO. 19: Nineteenth of a series of successful mass-feeding kitchen plans.

Few steps are wasted in this compact kitchen serving 1,000 in an Ohio factory.

COOKING EQUIPMENT USED:
(a) 1 No. 959 BLODGETT GAS-FIRED BAKING AND ROASTING OVEN
(b) 1 Vegetable steamer
(c) 4 Ranges
(d) 1 Fryer

Designed by S. W. Magnusson, Detroit Office, Albert Pick Co., Inc., Chicago, Ill.

The NO. 959 BLODGETT COMBINATION BAKING AND ROASTING OVEN used here does the double duty of baking and of preparing roasts, vegetables and puddings. There are two 7"-high compartments, and one 12"-high section, in two separately controlled units. Twenty-seven square feet of baking or roasting area are supplied. For details and specifications of Blodgett Ovens, consult your equipment house or write

The G. S. BLODGETT CO., Inc.
53 Maple Street
Burlington, Vt.

Reprints of this new series will soon be available to architects on request.

The text includes a foreword by Nancy McLelland of and for the American Institute of Decorators, an introductory chapter on the historical background of Georgetown, a chapter on its federal architecture, and another on Dr. William Thornton, one of the three great architects of the period. In addition, for each house presented there is a brief historical sketch, and at the end of the book is a list of the structures now standing in Georgetown that were built before 1825. The end papers are reproductions of an 18th century map of "George Town on Potomack."

A CENTURY IN CONSTRUCTION
An Historical Account. James Stewart & Co., 1944. 10 by 14 in. 189 pp illus.

To celebrate the 100th anniversary of their founding, James Stewart & Co. has published the traditional historical record, profusely illustrated. It is a handsome volume, and a proud record: the list of structures erected by the company occupies some two-thirds of the book. Almost every state in the union is represented on that list, in addition to several Canadian provinces, England, Scotland, Australia, Russia, Bermuda and Japan. Every type of construction is represented—monumental, banks and office buildings, hotels, mercantile, educational, hospitals, industrial, railroad, etc., etc. Some very famous buildings are included, among them: New York Central Building, New York City; the Savoy Hotel, London; the Hotel Bermudiana, Hamilton, Bermuda; the Chateau Frontenac, Quebec; Madison Square Garden, New York City; and the U. S. Chamber of Commerce, Washington, D. C.

HOUSING

AUSTRALIA
We Can Do Better: The Commonwealth Plans for Homes. Canberra, Australia (P. O. Box 168 City), Dept. of Post-War Reconstruction, 1944. 5% by 8% in. 20 pp illus

Housing: (1) The Problem; (2) Technical Answers; (3) Administration; (4) The Social Answer. Same as above. 7 pp each.

An "urgent shortage of between 25,000 and 300,000 houses by 1945" is the springboard from which Australia's Department of Post-War Reconstruction takes the plunge into the Commonwealth's acute housing problem. The first of these five pamphlets presents the problem in graphically illustrated style, probes into the causes of the housing shortage and the slums, and offers a plan starting with immediate relief and broadening out into a large scale drive to catch up on building and create a steady building pro-
Large quantities of "Century" Apac were used in the warm air duct installation pictured above. Ideal for this type of work... "Century" Apac can be quickly cut and assembled on the job... is structurally strong... inherently fireproof.

This is just one of hundreds of uses for this versatile asbestos-cement sheet material, in the industrial, commercial and residential fields. Tremendous quantities of "Century" Apac are now serving America's war and consumer industries as siding, roofing and interior sheathing. You'll understand why it has been the most extensively used material of its kind when you check these Apac advantages:

1. Apac, being made of asbestos fibre and portland cement, is safe and durable. It completely resists fire, rust, termites, vermin.
2. Apac is easy to handle, because it comes in convenient sizes, 4' x 8', 4' x 9', 4' x 10'... fastens with nails or screws... can be furnished already pre-drilled if desired.

Prompt delivery is assured. For further information on "Century" Apac, write Keasbey & Mattison Company now.

KEASBEY & MATTISON
COMPANY • AMBLER • PENNSYLVANIA
“BRAINY” WINDOW

A window that automatically closes when it rains is the postwar promise held out by an adaptation of the Lear Actuator, a wartime aviation device developed to control engine cowl flaps, landing gear, wing flaps, etc.

The power unit of the actuator is a small motor connected to the spot where its power is needed by a direct telescopic arm which expands or contracts as desired, or by an arm which moves arcwise where needed. As adapted for automatic window-closing, the actuator is attached to the window sill. Outside the window is a moisture switch. Slight moisture striking this switch starts the actuator, which promptly shuts the window.

The device can be used on any type of window, skylight or transom, the manufacturers report. The power unit can be concealed beneath the window sill, probably behind the radiator covering. One actuator can be used to operate a number of windows in a home, or a bank of windows in a factory. Lear, Inc., Piqua, Ohio.

DISHWASHING SINK

An economy model of the Ebco Dishwashing Top Sink, Model TSJ-32, features a round bowl like a large dishpan built into the sink, and a rectangular, self-draining rinsing compartment equipped with a rubber-dipped wire draining basket. The extra long swing-spout mixing faucet is compactly assembled on the sink’s back ledge, on which an integral soap dish is also recessed. Made of cast iron, finished in either white or ivory porcelain enamel, the sink measures 32 by 20 in.; faucet and dual strainer waste assembly chrome plated. Combination lift-out, cup-type strainer and metal stopper. The Ebco Mfg. Co., 401 W. Town St., Columbus 8, Ohio.

CLOTHES DRYER

An electric clothes dryer has been announced by Westinghouse as a companion to the Laundromat, their automatic-cycle washing machine.

The dryer, externally similar to the Laundromat, contains a large metal tub in which the damp clothes are placed. The tub is rotated at slow speed while a fan circulates a current of air, warmed by electric heaters, that carries away the moisture. The whole operation is automatic, even to turning off the heat when the clothes are dry. Westinghouse Electric & Mfg. Co., Pittsburgh, Pa.

ENAMEL SIGNS

Three-dimensional sign letters, new on the market, combine heavy-gauge porcelain enamel faces with bright stainless steel flanges.

The letters are made of 14-gauge metal porcelain enameled in any color. These faces are then locked into the 18-gauge stainless steel side flanges by use of a special locking clip and spring nut assembly. No bolt heads are visible. Depth of the side flange can be from 1 in. to 8 in. in even-inch multiples.

The faces of all letters are recessed (Continued on page 114)
SUCCESSFUL DESIGN FOR PLASTICS DEPENDS UPON THE CORRECT APPLICATION OF SOUND DESIGN PRINCIPLES. A NEW TWENTY-FOUR PAGE DESIGN BULLETIN HAS BEEN PREPARED BY THE PLASTICS DIVISIONS OF THE GENERAL ELECTRIC COMPANY AND INCLUDES A LISTING OF MATERIALS, DESIGN CONSIDERATIONS AND MOLDING PROCESSES. FOR YOUR COPY WRITE TODAY TO SECTION E-13, ONE PLASTICS AVENUE, PITTSFIELD, MASS.

Hear the General Electric radio programs: “The G-E All Girl Orchestra” Sunday 10 P.M. EWT, NBC. “The World Today” news every weekday 6:45 P.M. EWT, CBS.

Buy War Bonds

CALL A G-E PLASTICS TECHNICIAN FOR SOUND ADVICE

GENERAL ELECTRIC
FOR BETTER BUILDING (Continued from page 112)

NEW COLORS

New colors developed through research work including new decorative finishes in over-all patterns and various colors are being introduced by the Formica Insulation Co. to provide the designer, decorator and architect with a more harmonious group of colors of various values and intensity.

Those colors which proved extremely popular in the prewar color line have been retained, and many new ones have been added. New decorative finishes in over-all patterns and various colors include wood and marble finishes. The prewar linen finish Formica is being carried in the new line with some variation in color.

Sample sets of Formica chips, mounted on a beaded chain and boxed, are available to architects and decorators. Formica Insulation Co., Cincinnati, Ohio.

PARTITION PANELS

Fireproof gypsum Gold Bond T & G Partition Panels, full 1½ in. thick (three ⅝-in. thicknesses laminated together), are 2 ft. wide and 8, 9 and 10 ft. long. A minimum of lumber is required for their erection—a wood runner at the top and bottom, plus a few standard moldings.

The panels come with beveled T & G edges on the long sides and fit tightly together to form a decorative V-edge at all longitudinal joints. No further joint treatment is needed. May be left in the original cream color or decorated to suit. Quickly dismantled, as no nails are driven through the panels. National Gypsum Co., Buffalo, N. Y.

REFLECTOR UNITS

A new line of Superficiency "one-point-five" Lobay Units is designed for general use where the mounting height does not exceed 20 ft. These reflectors are said to provide adequate, even lighting on spacings as great as 1½ times the mounting height above the work. Due to the reflector contour and prism design an output efficiency of 90 per cent is obtained (in the 0°-180° zone), it is claimed, and a shielding angle of 25° effectively eliminates glare.

Three sizes are available, to accommodate from 25 to 300-watt lamp as required. Holophane Co., Inc., 342 Madison Ave., New York 17, N. Y.

BIG LAMP

A new light source, a 3000-watt mercury-vapor lamp, is now offered to provide one answer to the lighting needs of such buildings as blimp hangars, airplane factories and steel mills, where floor areas may be as large as three or four football fields, and ceilings may be as high as 150 ft.

The new lamp is tubular, and approximately 5 ft. long. Delivering a total of 120,000 lumens (40 lumens per watt) as against 33,000 for a 1500-watt incandescent, the lamp is 7½ times the size of the largest air-cooled mercury lamp (400 watt) heretofore available for industrial service. Westinghouse Electric & Mfg. Co., Pittsburgh, Pa.

(Continued on page 116)
All of us have TWO jobs now

It's a long way we've come in the winning of the war... it's still a long way we must go before we may enjoy the fruits of peace.

Today, men and metal and machines are converted to production of war... our first job. Simultaneously... without negligence in performance of this charge... we study and plan and design now for the Tomorrow... our second job.

When wartime America's distinguished service ends... architects, designers, engineers and craftsmen... must all be ready for the projects of post-war victory and peace. The fashioning of a new World for better and more comfortable living... for richer opportunities and higher standards... is a challenge to all.

Then we shall again build Aluminum Chairs, Tables, Desks, Filing Cabinets and other equipment that will give distinguished service to peacetime America.
FOR BETTER BUILDING (Continued from page 114)

INDOOR CLIMATE

New patents for the control of indoor climate in multi-room buildings through a Conduit Weathermaster air conditioning system have been issued to Carrier Corporation.

Chief scientific advances contained in the system, as outlined by Dr. Willis H. Carrier, chairman of the board of the corporation, are:

1. It takes up less room for conditioning equipment.
2. It completely eliminates return air ducts from the rooms, and reduces the air supply ducts to conduits the size of a plumber’s waste pipe.
3. It enables any number of rooms, supplied from the same central conditioner, to be individually heated or cooled to suit the needs or desires of different occupants.

The system is readily installed in existing buildings. Carrier Corp., Syracuse, N.Y.

For Terrace Village Housing Unit No. 2 in Pittsburgh

A total of 83 buildings, comprising 1851 living suites, are supplied with heat and hot water from a central plant, through an underground distribution system containing over 25,000 linear feet of Ric-wil pre-sealed Insulated Pipe Units. High-pressure steam from the plant is piped through Ric-wil steam conduit to six scattered stations where hot water is generated and circulated through Ric-wil conduit to all the buildings, for heating and hot water supply. Thus the project realizes the economy of steam, and the temperature control and convenience of hot-water heating.

Any Community Can Incorporate These Advantages of Central Heating in Their Postwar Plans

- Savings of 15% or better in overall fuel consumption.
- Elimination of furnace or boiler tending by consumer.
- Promotes cleanliness in buildings heated.
- Provides extra room in building basements.
- Decreases fire and explosion hazard.
- Reduces smoke and soot, provides cleaner, healthier community.
- Eliminates private coal delivery and ash removal.
- Gives uniform, clean heat quickly, whenever needed.

For information about Ric-wil, Conduit for central heat distribution, get in touch with your nearest Ric-wil agent or write to us direct for our new Catalog No. 44

RIC-WIL INSULATED PIPE CONDUIT SYSTEMS
THE RIC-WIL COMPANY · CLEVELAND, OHIO

GYPALATH AND PLASTER PARTITION

A new 2-in. gypsum lath and plaster partition dispenses with the use of wood or steel studs, is fireproof, and said to save one-half to two-thirds the space required by the conventional masonry or wood stud partitions. A lath, 24 in. wide and ½ in. thick, in full ceiling-high length, is snapped into place, “framed” and lathed in one operation, then plastered on both sides. Gypsum Ass’n., 43 E. Ohio St., Chicago 11, Ill.

WINDOW INSERT

A Patented Steel Window Insert or mastic surround, formed of galvanized, rust-resisting Armco Ingot Iron, is furnished in two types suited for the two types of concrete window construction. By being attached to the forms before the concrete is poured, it provides a recess in the jambs and across heads of the finished openings in which steel windows are to be installed.

The recess in the surround or insert is filled with a natural colored, stainless, plastic fill which is protected by a rope covering. When the window is to be installed, the window erector removes this rope. The window is then raised until inserted into the plastic fill at the head, after which the jamb of the window is placed into the jamb surround. The Wm. Bayley Co., Springfield, Ohio.

RESTYLED GERMICIDAL UNIT

Recently placed on the market is a new model Hygeaire unit for air disinfection. It differs from the original model in its shape and general appearance, having been streamlined and made more attractive to the eye.

The unit employs a G.E. Germicidal Tube to project intensified ultra-violet rays across living or working areas above eye level. It may be recessed into the wall, or wall or ceiling suspended. American Sterilizer Co., Erie, Pa.; distribution, The Graybar Electric Co. and General Electric Supply Corp.

PROTECTIVE COATING

Butex, a heavy-duty protective coating, is a material which has been developed for the protection of surfaces where conditions are considered too severe for ordinary paints and coatings. A highly refined and specially processed bituminous (coal tar, not asphalt) coating, it is blended and processed with proper plasticizers, weather and water resistant oils and thinners. The finished product is a liquid coating, easy-brushing, quick-drying, paint-like material. Can be brushed or sprayed on.

(Continued on page 118)
More and larger weepholes, cast integrally—high enough so waterproofing won’t cover them.

For your building . . . specify WADRAINS. Here is the drain line that gives you and your client the utmost in value. Architects, engineers, and those practical plumbers who make comparisons, readily recognize the many features of WADRAINS. WADRAINS are scientifically engineered to provide the greatest protection, long life and easy installation. The illustration shows a few of the features of the WADRAIN No. 1100 Adjustable Floor and Shower Drain.

STOP WATER HAMMER . . . with the WADE Arrester

Ends annoyance and damage of water hammer completely, permanently. Easily installed; needs no maintenance or adjustment. Sizes for all needs, all types of buildings. No. 6 illustrated; serves the average home..................$12.00

Quality Products Since 1865

FLOOR DRAINS
ROOF DRAINS
BACKWATER VALVES
GREASE INTERCEPTORS
TRAPS AND CLEANOUTS
SWIMMING POOL DRAINS
AND EQUIPMENT
WATER HAMMER ARRESTERS

WADE MANUFACTURING CO., 77-79 MAIN STREET, ELGIN, ILLINOIS

On the West Coast: WADE-PORTLAND IRON WORKS DRAINS (Fleming Drains)
almost any type of surface—metal, wood, concrete, brick, masonry or cement. Dries dust free in two hours; between coats, 12 hours. Chemicals Enamel Co., 5209 Prospect Ave., Cleveland 3, Ohio.

THERMOSETTING PLASTIC

A thermosetting plastic recently developed and known as Avtex C, is composed of phenolic resin and cotton fiber. Thin films of cotton with fibers running all in the same direction are treated with resin. These thin saturated films are laminated at varying angles or in one direction as strength requirements dictate. Advantages of the cotton fibers over fabric, paper or other materials are said to include: a higher degree of saturation resulting in lower moisture absorption; forms or post-forms liberally over compound curves; can be molded over sharp shoulders without rupture; excellent weight-strength ratio; available with wood surfaces for decoration or gluing. Hood Rubber Co., Division of the B. F. Goodrich Co., Watertown 72, Mass.

NEW STANDARDS

Lead Pipe

Federal Specification WW-P-325 for Pipe, Bends and Traps; Lead (for) Plumbing and Water-Distribution was approved on September 6, 1944, to become effective not later than November 15, 1944.

This new specification follows closely existing standards for these products such as Commercial Standards CS95-41 and CS96-41. In addition, it describes methods of inspection and testing as well as packaging and marking requirements for general application and for individual government departments. Also included are general notes on commercial designations and specification practices and suggestions pertaining to the specification of special sizes, types or weights.

The specification has adopted a new classification terminology for service and supply pipe which is more descriptive and helpful than the terminology heretofore used in the trade. Instead of using the symbols AAA or XXS for pipe designed for maximum working pressures of 100 lb. per sq. in., AA or XS for pipe designed for 75 lb. per sq. in., and A or S for pipe designed for 50 lb. per sq. in. as has been common in the trade for many years, the new specification calls these Class 75 and Class 50 respectively.


Plywood

Recommended Commercial Standard for Western Hemlock Plywood, TS-3836, is now being circulated to the trade for written acceptance.

The standard offers grading rules covering four grades of moisture-resistant-type Western hemlock plywood; a laminated board for paneling, sheathing, cabinet work, and many structural and industrial uses.

TOILET SEAT

A new and improved Model LP20 self-raising toilet seat especially designed for use in public washrooms features a seating area nearly doubled in size, and with pads shaped to follow the contour of the body. Sperzel Co., 911 Hennepin Ave., Minneapolis 3.
That smart drapery is glass—a Fiberglas* fabric woven from yarn made entirely of fine fibers of glass. And, being glass, it is noncombustible—just can’t burn. Another great advantage—these fabrics do not give off toxic fumes when exposed to fire. They are listed by the Underwriters’ Laboratories as “Noncombustible Fabric”.

Primarily because of this unique safety factor—but also because Fiberglas textiles have the brilliant sheen, the luster and sparkle of crystal—architects and designers are using these all-glass fabrics for decorative purposes in hotels, restaurants, theaters, schools, and other places of public assembly.

In addition to being noncombustible, Fiberglas fabrics have great tensile strength. They are unaffected by moisture—will not shrink, stretch or rot. They provide no sustenance for vermin. They resist oil, most acids, heat and cold.

If you are working on the design or redecoration of places of public assembly, you will want to consider the extra factor of firesafety provided by these all-glass noncombustible fabrics. For further information, write Owens-Corning Fiberglas Corp., 1831 Nicholas Bldg., Toledo 1, O. In Canada, Fiberglas Canada Ltd., Oshawa, Ont.

FIBERGLAS


FIRE PREVENTION OFFICIALS WELCOME FIBERGLAS FABRICS

The firesafety of Fiberglas fabrics has won enthusiastic comment from fire chiefs, building commissioners, public safety directors and others to whom it has been demonstrated in cities from coast to coast. Listed by Underwriters’ Laboratories, Inc., as “Noncombustible Fabric”.

PHOTOGRAPHED AT FAMOUS LATIN QUARTER IN NEW YORK CITY, FEATURING DON McGRANE AND HIS ORCHESTRA, KAI VELDEN, DECORATOR.
7. Effect of veterans' loans on the general housing picture.
8. Relation of rural housing and urban rehabilitation to the general housing program.

The record of the committee also includes the opinions assembled since June on basic problems of the industry: factors in building costs, methods for reaching families of different income levels, importance of the industry to the whole economy, etc.

National Housing Administration

An issue being seized on by several of the trade associations in the building field is the future of NHA. While NHA officials urge that a central housing agency is essential, trade groups argue just the other way. They prefer to consolidate within a single organization such units as FHA which they like and with which they expect to deal indefinitely, and to send the public building agencies, which they dislike, into what they consider exile—notably the Federal Works or the Federal Security Administration.

Arguments on both sides, as is frequently the case when discussion becomes heated, lean toward generality. NHA officials cite the fact that housing is after all a single industry of major economic weight, so that, they then imply, central administration is necessary. Spokesmen for various branches of the industry make various points: that housing projects sometimes may be directly connected with other kinds of construction—say airports—so that the same agency must watch over them. Above all, they don't like to see public housing benefit from the prestige in which FHA is held in industrial and financial circles. Loosened of such prestige, they say, and classified with the welfare projects of Interior or FSA, it would be easier to limit.

A subject being pressed by the public agencies is that of housing costs. A large shelf of literature has been accumulated critical of prewar methods of building, particularly as respects the cost of construction after the war, was urged by Douglas Whitlock, president of The Producers' Council, at a recent luncheon meeting of the Council and the New York Building Congress.

The proposal calls for the organization of a National Construction Industry Council to be composed of representatives of all factors in construction. It also suggests that the organization be established under the roof of the Chamber of Commerce of the United States.

"We have learned many lessons in the past," Mr. Whitlock said in making the proposal. "We must profit by them in our planning for the future. This requires unified action and cooperation."

"The unity of the construction industry . . . can do more than merely set up a central meeting place. It also should provide the machinery for cooperation and planning in individual communities to supplement and parallel the national action . . . ."

"Despite the favorable short-term outlook for construction, the need for or-

(Continued from page 12)

For floors that help eyes see better

--- Specify

LIGHT-REFLECTING CONCRETE FLOORS
MADE WITH ATLAS WHITE CEMENT

Many industrial plants throughout the country credit faster, more efficient production to improved illumination. One aid to better seeing is light-colored concrete floors made with Atlas White cement instead of normal gray cement. Such floors act as giant reflectors and distributors of light. This reduces brightness contrast, eye strain and fatigue and helps to lessen accidents, errors, spoilage and shutdown of machines.

Lighting tests in one of Consolidated Aircraft's large plants show that a white-cement floor reflected 61% more light to working surfaces than did a gray-cement floor. Light-reflecting floors, made with Atlas White cement, are as adaptable to modernization or conversion as they are to new construction. You'll value a copy of the book, "Light From Floors." It tells the full story. Write to Atlas White Bureau, Universal Atlas Cement Company (United States Steel Corporation Subsidiary), Chrysler Building, New York 17, N. Y.

HOW ABOUT MAINTENANCE

Experience shows white-cement floors are easy to clean, easy to keep clean, and retain their reflection advantage. Maintenance is simple—frequent sweeping, occasional damp mopping, periodic scrubbing.

ATLAS WHITE CEMENT
For Light-Reflecting Floors

AR-1-21
More than 3,784,320,000 valve-hours
without a shutdown due to valve failure

New York Hospital finds Jenkins Valves unsuited for trouble-free operation and low maintenance

A hospital takes no holidays... every unit of mechanical equipment must be in service every hour of every day, and the valves that control this equipment must meet exceptional standards.

That is why the men responsible for the efficient operation of the New York Hospital plant chose Jenkins Valves for all except services requiring valves of special design.

Mr. W. W. Downey, Director of Engineering, says, "Jenkins Valves at the New York Hospital have operated 24 hours a day, every day, for the past twelve years without a shutdown due to valve failure". Some 36,000 valves are installed, making a total of over 3,784,320,000 valve-hours of trouble-free service, a record that continues to increase daily.

Low maintenance was another reason for the choice of Jenkins Valves. Because of the Jenkins "family" design, a relatively small number of interchangeable parts needs to be kept to repair a large number of valves. Also, fewer man-hours are required for maintenance, an advantage which proved helpful when personnel was lost to the armed forces.

Service records like this prove that the specification of "Jenkins" assures valves that cost least in the long run. There are types, patterns and sizes of Jenkins Valves to completely equip any plant or building.

Jenkins Bros., 80 White St., New York 13; Bridgeport, Conn.; Atlanta; Boston; Philadelphia; Chicago; Jenkins Bros., Ltd., Montreal; London.

JENKINS VALVES

SINCE 1864

For every Industrial, Engineering, Marine and Commercial Service... In Bronze, Iron, Cast Steel and Corrosion-Resisting Alloys... 1/2" to 60" B.S.P., pressures

Sold Through Reliable Industrial Distributors Everywhere.
organization is urgent. We must not be lulled into inactivity by the knowledge that we face a few short years during which the volume of construction will break past records. We have the longer term problem to face and must face it soon. During the next year or two years, the whole pattern of our future will be set in legislative bodies and in the public mind.

"Remember that other groups have been planning the future of our industry. The CIO has a plan. So has the National Association of Housing Officials. Doubtless there are other such plans. Only through a National Construction Industry Council can this industry make certain that its views will receive at least equal consideration with those of other groups."

CONSTRUCTION FORECAST
The volume of new construction during 1945 probably will be about $4.8 billion or 26 per cent greater than in 1944, provided the war with Germany ends early in 1945 or before, the Market Analysis Committee of The Producers' Council reported to the Council's recent semi-annual meeting in New York.

In arriving at the estimates it was assumed that WPB Order L-41 will be either revoked or greatly relaxed shortly after the termination of active warfare in Europe. If, however, the war in Europe lasts until the summer of 1945, the estimates are subject to revision, Wilson Wright, chairman of the Council's committee, explained.

"The committee's estimate places the probable volume of new private construction at $2.8 billion and public construction at $2.0 billion for the 12-month period," Mr. Wright said.

"Although the immediate need and demand for new construction will be greater than the estimate, it is apparent that the supply of building materials and equipment and of manpower will not be sufficient to permit a greater volume during the coming year.

"The indicated volume of non-farm residential construction is $1.3 billion, including about $50 million of war housing, which would mean the building of about 300,000 new dwelling units. This compares with an estimated 200,000 units for 1944 and an average of 970,000 per year forecast by the committee for the 5-year period starting 12 months after the final end of the war.

"New farm construction is estimated at $275 million during 1945, public utility construction at $620 million, and highway construction at $665 million. Private non-residential building will be about $690 million, including $460 million for industrial construction. Military and naval construction is expected to drop to $400 million, a decline of more than 50 per cent from the estimated $825 million for 1944."

NHA NOTES
Housing Must Wait
Urgent new demands resulting from the stepped-up production of arms and ammunition means that all housing activities still must be concentrated on shelter for essential war workers in the months ahead and that other types of residential construction must wait, NHA Administrator John B. Blandford, Jr., has announced.

More than 50,000 war housing units must be built, in addition to those

(Continued on page 124)
While we await the time when new houses can be built freely, let us not forget the needs of our present homes. Many of them require essential repairs now. A large proportion deserve modernization. Revere’s current national housing advertisements (such as the one reproduced here from The Saturday Evening Post) are designed to stimulate the home owner to think about these things and consult the architect, builder, contractor. Many home owners have had unfortunate experiences with wartime substitute materials of poor durability; they will be that much more receptive to your recommendations of enduring copper and its alloys for roofing, flashing, gutters and downspouts, pipe, tube and architectural shapes. Thus all will benefit. Revere will gladly share with you its knowledge about these metals that save money in the long run and make buildings easier to rent or sell. Revere Copper and Brass Incorporated, 230 Park Avenue, New York 17, N. Y.

Chop away the undesirable...

It is true that we need millions of new homes as quickly as we can build them. But, in the excitement of planning for them, let us not neglect the countless millions of sound, sturdy houses already standing, that are the cherished corners of our life. War, and its conservation of materials has left its scars on them. Now is the time to plan to repair this enforced neglect...

And, as you plan, to take advantage of the new developments in home design and equipment!

Here’s what you can do for your home. First, repairs. It is possible today to obtain paint, lumber, even metals for replacement, to stop leaks, to restore the appearance as well as the soundness of your house. See your local contractor now.

Second. Modernization. Perhaps an old wing should be chopped off, a new one added, the bathroom remodeled and an extra one installed, a partition removed to create one big room out of two small ones, a “picture window” put in one wall of the living room, all to make the house fit the needs of the family for pleasure, easy living. The kitchen may need redesign, re-building and re-equipping, to save steps, labor, time. Throughout, many small changes perhaps can reduce housekeeping to a minimum. All this calls for planning. See an architect now. Discuss with him what should and can be done while there is still time.

BUT WAR BONDS . . . Keep them for the future
THE RECORD REPORTS (Continued from page 122)

already under construction, to meet needs resulting directly from the expanded demands from the battlefronts, with the result that any large programs to alleviate general congestion in war-crowded communities may be delayed to be used in conjunction with the expanded demands from the battlefronts, for some time, Mr. Blandford said.

H-2 Housing
A supplemental Form WPB-2896,2, to be used in conjunction with the present application Form WPB-2896 for housing to be constructed in accordance with the H-2 program for congested war areas, has been announced jointly by WPB and NHA.

Instructions on the supplemental form modify instructions on WPB-2896 to the extent that certain paragraphs and sections of the latter are not required to be filled out.

Form WPB-2896.2 requires the applicant to describe certain features of the proposed house by checking a simple outline specification in order to arrive at a determination that the rental or sales price is properly related to the accommodations to be constructed. In addition, the applicant furnishes one copy of the floor plan and one copy of the front elevation, showing general floor layout, over-all dimensions and approximate room sizes.

METAL DOORS RELEASED
Provisions controlling the manufacture and sale of metal doors, metal door frames and metal shutters have been removed through the revocation of Order L-142, the WPB has announced.

Only a small increase in production is expected, as control will still be exercised through quarterly CMP allotments of materials. Demand for these products is limited by restrictions of the construction order, L-41.

CONFERENCE CANCELED
The 14th annual meeting of the National Public Housing Conference scheduled to be held in New York on February 19 and 20, has been canceled at the request of the Office of Defense Transportation.

CALIFORNIA ARCHITECTS UNITE
Working toward the complete unification of all architectural organizations in California, the State Association of California Architects, with the help of the chapters of the A.I.A., has revised its bylaws and set up a new over-all governing body, the California Council of Architects.

The bylaws of the new organization provide that the Council may take the necessary legislative action to become a state corporation empowered to direct all the activities of the profession within the state. This organization would be empowered to regulate the practice of architecture and to levy all fees connected therewith, as well as for assessments necessary for the establishment of an adequate executive staff and assistants whose duty would be to promote the interests and welfare of the profession. Under this corporation all architects would automatically become dues-paying members of district chapters of the Council.

The bylaws also provide for a Northern and a Southern California Association of Architects as the interim organizations set up pending formation of the district chapters. These district chapters will be co-terminous with the present geographical boundaries of the chapters of the A.I.A. Their membership is to be open to all registered architects within the districts, and their representatives will form the Council.

(Continued on page 126)
Typifying the use of standing seam sheet copper roofing over multiple dwelling entrances to impart warmth and color... and to accentuate the structure's individuality.

Anaconda Copper

THE AMERICAN BRASS COMPANY, General Offices: Waterbury 88, Connecticut
Subsidiary of Anaconda Copper Mining Company • In Canada: ANACONDA AMERICAN BRASS LTD., New Toronto, Ont.
The Council is now acting as the coordinating group for the two interim associations. When a chapter of the A.I.A. amends its bylaws to provide for student and draftsman affiliation as well as an equal voice in all matters of state or local nature for all architect members, it will automatically become a district chapter. When all of the chapters are formed, the two interim associations will cease to exist.

The architects of California are recommending this program to the A.I.A. for adoption on a nation-wide basis.

The California Council of Architects, as it is now organized and functioning, is composed of the following officers and delegates: John S. Bolles, president; Robert H. Orr, vice president; James H. Mitchell, secretary-treasurer; Andrew T. Hass, Loy Chamberlain, Vincent Palmer, Charles O. Matcham and E. Allan Sheet, delegates.

How will the post-war bank be heated?

It is our guess that the best bank buildings of 1941 provide the answer.

Take the South Brooklyn Savings Bank, for example. Built in 1941, this building includes general banking space, vaults, offices, lounge and dining rooms, all of which are air conditioned for both winter heating and summer cooling. Three separate zones assure complete flexibility of operation.

Dudley E. Soper, New York architect, specified two H. B. SMITH 34 "MILLS" boilers to supply steam because of their unusual adaptability to this type of modern system.

Let the architect or engineer with a bank building on his boards be guided by existing boiler installations of this type for he can today specify a known quantity in boiler performance.

H. B. SMITH

PERMANENT GALLERY OF ARCHITECTURE

The Museum of Modern Art, New York City, has announced the opening of a small permanent gallery for the joint use of the Department of Architecture and the Department of Industrial Design. Here small special displays will be on view for two or three months at a time. Some will deal with new and timely developments in architecture or industrial design; others will show past achievements and illustrate basic principles. Architectural and industrial design material will be on view at all times.

The first exhibition in the new gallery, opening on November 15, was "Building with Wood," a brief analysis of the major types of wood construction old and new as illustrated in buildings and chairs. Actual chairs and samples of construction were shown.

LANCASTER PLANS

The city of Lancaster, Pa., has awarded a zoning and city planning contract to Michael Baker, Jr., Consulting Engineers, Planners and Surveyors, of Rochester, Pa.

Already under way by the Baker planning division is a study of the physical, social and economic conditions of the city toward the preparation of a practical plan of improvements and recommendations to the city government for the immediate postwar period, together with a long-range development program.

In addition, the sanitary engineering division of the Baker firm has been retained by the City Council to prepare a report evaluating the existing municipal water and sewage facilities and determining the advantages and disadvantages of municipal authority ownership and operation.

COMPETITIONS

Postwar House

Seeking to stimulate the designing of an American postwar "House for Cheerful Living," and to record the trend of architectural thinking in this line, the Pittsburgh Plate Glass Company is offering $10,000 in prizes in a nationwide competition sponsored through Pencil Points.

Architects, architectural draftsmen and architectural students are eligible to compete. The competition is based on designs for a house in the price range of approximately $6500 to $8000 that will demonstrate how flat glass in all of its various forms can add charm and cheerfulness to the surroundings and life of the family.

Prizes will be: first, $2500; second, $1500; third, $1000; fourth, $500; eighth
PLAN FOR... more daylight with
PC GLASS BLOCKS

A unique combination of practical qualities and fine appearance... that's what PC Glass Blocks have to offer the American Home. Exterior panels of PC Glass Blocks are attractive, they admit plenty of daylight, yet preserve privacy. They make homes easier to heat. They are suitable for either modern or traditional architectural styles.

THE light-transmitting ability of PC Glass Blocks is only one of the reasons why they are so generally used in dwellings, factories and office buildings, in schools and hospitals. Panels that harmonize with all designs add distinction, increase comfort.

For PC Glass Blocks also have a distinct insulating value. They exclude distracting sights and sounds, protect occupants from dust and draughts.

In addition, PC Glass Blocks effect worthwhile economies. Less artificial light, less repairs and replacements, less cleaning time—all add up to important savings.

In the many residential and industrial modernizing and building programs now in prospect, PC Glass Blocks will play an essential part in your plans. Now is the time to get full information on the wide range of sizes and patterns, the special functions, of PC Glass Blocks.

Also manufacturers of PC Foamglas.

In all sorts of processing plants, PC Glass Blocks provide floods of daylight. They protect precision machinery and goods in process from gritty dust, prevent condensation, help to maintain temperature and humidity levels.
special prizes of $250 each; and 25
talks of $100 each. The competi-
tion closes at 6 p.m., February 26.

**Automobile Showrooms**

A total of $55,000 in prizes will be
awarded by General Motors Corp. in
an architectural competition for the
design of automobile dealers’ places of
business.

The competition is based on build-
ing plans in five classifications: (1)
average-size passenger and commercial
(automobile and truck) dealerships;
(2) medium-size passenger and com-
cmercial dealerships; (3) exclusively
passenger dealerships; (4) exclusively
commercial dealerships; (5) design de-
tail for structural and decorative adap-
tations.

Prizes will be as follows: five first
prizes of $5000 each; five seconds of
$2500 each; five thirds of $1000 each;
five fourths of $500 each; 20
honorable

**THEY TAKE IT!**

Like the tough little ships that ply the Grand Banks,
Von Duprin latches are made to take the beating of constant
use, and still have reserve strength for any emergency.

Day after day, year after year, in fair weather and foul,
Von Duprins do their job, no matter whether they are the
pre-war types of drop-forged bronze or the sturdy, malleable
iron Victory models of today. Their capacity for punishment
and their tremendous reserve strength come from the funda-
mental soundness of Von Duprin design, and from an unfa-
ttering determination to use only those metals which provide
an abundant safety factor for every working part.

The result of all this is complete assurance that you can
install ANY Von Duprin self-releasing exit device, and
know that it will merit your faith . . . that it always will let
the people out of your building . . . safely, surely, quickly.

**PRIZES ANNOUNCED**

Announcement has been made by
*The Modern Hospital* of the prize-
winners in their recent architectural
competition. The competition was
designed to show how in the future pub-
lic health work, hospital care and
medical services will probably be cen-
tralized in one building to raise the
health level in the small towns and
rural areas of the United States and
Canada.

In the first section of the competition,
for an ideal community medical center
housing a 40 bed hospital, offices for
the community's physicians and den-
tsists, and headquarters for the local
health department, prizes were award-
ed as follows: first prize of $1000 to
Samuel E. Lunden, A.I.A., and Louis
C. Dixon, associated architects, Los
Angeles; second prize of $750 to
Roslyn Ittelson, designer, and Dr.
Leonard Greenburg, health officer,
New York City; third prize of $500
to Fisher and Fisher, architects, Den-
ver, Colo.; honorable mentions of $100
each to Laurence P. Johnston, Chicago,
E. Todd Wheeler, Chicago, and L.
Forstner, Toronto, Canada.

Prize winners in the second section
of the competition, for a 40 bed general
hospital for a small town, were: first,
Fisher and Fisher, architects, Denver;
second, Basil Yurchenco, Harvard
Graduate School of Design; third, H.
P. Van Arsdall, Cincinnati; honorable
mentions, Robert J. Reiley, New
York City, Janet and Milton Caughey, West
Los Angeles, Cal., and George Blumen-
auer and Paul H. Fesler, Oklahoma
City, Okla.

**GOLDEN JUBILEE**

More than 200 members and guests
of the Brooklyn Chapter of the A.I.A.
gathered on November 28th to cele-
brate the Chapter’s golden jubilee.
Among the many speakers on the oc-
casion were Adolph Goldberg, presi-
dent of the Chapter, and Henry V.
Murphy, vice president; Hon. Irving
A. Huie, Commissioner of the De-
partment of Public Works, New York;
Hon. Thomas G. Grace, State Director
of the FHA; Edgar I. Williams, Regional Director of the New
York District of the A.I.A.; Matthew W.
Del Gaudio, State Association Director
of the A.I.A.

A highlight of the celebration was
Heating systems that fit all plans

- Whatever types of homes you may have planned, there's a Janitrol Gas-Fired Heating System to fit each type. Thousands of successful installations—big community projects, private homes and apartments... in basements, attics, closets, kitchens, utility rooms, or walled up out of sight in living rooms—have shown that Janitrol's unexcelled flexibility makes it adaptable to practically every type of heating requirement.

But in all these installations, Janitrol is doing far more than merely meeting Btu specifications. Compactness, cleanliness, automatic operation—all add up to the kind of performance and solid heating comfort we like to call long lasting liveability.

There's economy, too. Quickly responsive temperature control wastes no fuel in overheating. Highly efficient burners squeeze maximum heat from a fuel which in itself is relatively cheap in most areas. Building costs can often be lowered—or more living area provided—because Janitrol requires no basement or fuel storage space.

So specify Janitrol Gas-Fired Heating Equipment to fit every housing plan, and to assure your clients of the long lasting liveability that brings customer satisfaction. For further data, write Surface Combustion, Toledo 1, Ohio.
VENUS Drawing
Pencils are engineered to give you drafting perfection without failure: accurately graded to assure uniformity in all 17 degrees... strong in performance... smooth and clean in action.

Put VENUS to the test on your drawing board. Send us a postcard or a note for two free samples. Specify degrees wanted.

THE RECORD REPORTS

(Continued from page 128)
an exhibition of the works of many of the early members of the Chapter, some of whom are still living.

FIRST I.C.I. CHAPTER
The first local chapter to become affiliated with the Indoor Climate Institute, the Air Conditioning Council of Western New York was inducted into the national organization at a conference in Buffalo on November 14. The new chapter will be known as Indoor Climate Institute of Western New York.

NEW OFFICES
Offices Reopened
The following offices have been reopened:
Mark Anthony, Architects, for the practice of architecture and engineering, at 625 Guaranty Bldg., Cedar Rapids, Iowa.
George Nemeny, architect, at 313 W. 53rd St., New York 19, N. Y.
Arthur N. Starin & Associates, architects, at North Finley Ave., Basking Ridge, N. J.

New Addresses
The following new addresses have been announced:
Joseph M. Leonte, architect, 298 Ridge Rd., Lyndhurst, N. J.
J. Mandor Matson, architect, 430 W. Adams St., Macomb, Ill.

BENJAMIN MORRIS, F.A.I.A.
Benjamin Wistar Morris, senior member of the New York architectural firm of Morris & O'Connor, died on December 4th following a long illness.
Born in Portland, Ore., Mr. Morris was the architect of many well-known buildings in the vicinity of New York. Among them was the Cunard Building on lower Broadway, New York City, and the country home of Joseph C. Baldwin, Jr., at Mt. Kisco, N. Y., for which he received the gold medal of the Architectural League of New York in 1918.

Mr. Morris was chairman of the board of the Beaux Arts Institute of Design from 1922 to 1935, and a member of the National Commission of Fine Arts from 1927 to 1931. He was a Fellow of the American Institute of Architects, a member of the National Academy of Design and the National Institute of Arts and Letters, and a trustee of the Metropolitan Museum of Art, New York.

GAUGE OF ANY BUILDING'S WORTH

THE ENTIRE OPERATION of any modern commercial or industrial building, more than one story high, depends on the efficiency of its vertical transportation system. In postwar construction and its attendant new elevator problems, you can depend on Montgomery for assistance in designing and engineering vertical transportation. Although their original cost is generally lower, for over 50 years Montgomery Elevators have been giving such dependable service that practically no major repairs have ever been required.

MONTGOMERY MANUFACTURES a complete line of passenger and freight elevators, electric dumbwaiters and special equipment for vertical transportation. If you are planning a specific project, Montgomery Elevator Company invites your elevator problems.
Environments for the FUTURE are Soon to Become Those of the PRESENT

- A persistent public ever seeking a higher standard of conveniences, and inspired by promises of a bright future will dictate the environmental treatments for tomorrow's structures. A pre-war trend toward combining utilitarian with aesthetic treatment in toilet rooms for schools, public buildings, and factories has its full development yet before it. Architects, engineers, builders, and manufacturers who will participate in this unfolding stage of progress will be those who interpret this irrepressible urge and prepare to satisfy it. Material and equipment that are likely to result in obsolete environments are to be avoided in the plans and specifications you prepare today for tomorrow's buildings.

Great strides have been achieved in the development of toilet room environments in keeping with the other environmental treatments of a building. Toilet compartments usually dominate a toilet room, influencing the toilet room environment. Toilet compartments for buildings of the future will be fabricated of the ageless and fadeless material, porcelain on steel, as utilized in Sanymetal Porcena Toilet Compartments. Porcelain on steel makes a glass-hard, stainless material that always looks new, does not absorb odors, is moisture- and rust-proof and resists the corroding nature of ordinary acids. The glistening porcelain finish can be wiped clean as easily as any glass-smooth surface.

Sanymetal Porcena Toilet Compartments will be made in several strikingly new designs and colors in two different types of construction. A strictly modern development, Sanymetal Ceiling Hung Toilet Compartments create an element of refinement and promote a high standard of order and cleanliness. The usual standing types of toilet compartments make distinctive toilet room environments. Sanymetal Porcena Toilet Compartments embody the results of over 29 years of specialized skill and experience in making over 60,000 toilet compartment installations. Ask the Sanymetal Representative in your vicinity (see “Partitions” in your phone book for local representative) for further information about planning suitable toilet room environments for modern school, commercial, industrial and institutional types of buildings. For complete information on toilet room environments, refer to Sanymetal Catalog 17.12 in Sweet's Architectural File for 1944.

THE SANYMETAL PRODUCTS CO., INC., 1689 Urbana Rd., Cleveland 12, Ohio
Profit by Controlled Heating

Each day's heating requirements for your building differ. One day may be cold, the next day may be warm. There's only one way you can obtain comfortable heat with rationed fuel—by installing a heating system that is automatically controlled.

The Webster Moderator System of Steam Heating is a controlled system. There's no overheating or underheating.

Continuous, adequate supply of steam is controlled by an Outdoor Thermostat which automatically adjusts the heating rate to agree with changes in outdoor temperatures. For prompt heating-up, balanced distribution of steam, and even room temperature throughout your building, specify a Webster Moderator System.

More Heat with Less Fuel

Webster Engineers have found through thousands of surveys that seven out of ten modern steam heating installations and the great savings they are bringing, specify a Webster Moderator System.

In the Webster Moderator System of Steam Heating there are just four control elements—an Outdoor Thermostat, a Main Steam Control Valve, a manual Variator and a pressure control Cabinet. These controls are an integral part of the Webster System... assuring the highest expression of comfort and economy in modern steam heating.

Your Detroit: A Finer City in Which to Live and Work. Detroit 26, Mich. (601 Water Board Bldg.), City Plan Commission, 1944. 8½ by 11 in. 36 pp. illus. Prepared by the Mayor's Postwar Improvement Committee, this booklet presents the three objectives of the public program: (1) to provide additional facilities; (2) to catch up on the needed public construction postponed
THIS IS AN ARCHITECT trying to figure out how many floor patterns he can create with Kentile's 44 colors, each available in 15 standard sizes plus feature strips ranging in widths from 1/4 to 4". (You're right, we can't make all those colors in wartime, but even with fewer colors you can make millions of patterns!) THIS IS AN ARCHITECT worrying about grease dripping onto floors. He doesn't know that Greaseproof Kentile can't be stained or softened by any animal, vegetable or mineral oil or fat known.

Architects are crazy about KENTILE

THIS IS AN ARCHITECT trying to find a durable floor that costs less than Kentile. (This is a particularly hopeless case).

WOULD YOU BE THIS ARCHITECT?

A client just asked him to specify one floor that has fourteen different advantages and he didn't know the answer is Kentile? Don't you be embarrassed. Know all the remarkable facts about this most modern and most remarkable floor. Write at once to David E. Kennedy Inc., 78 Second Avenue, Brooklyn 15, N. Y., and ask for your architect's file copy of the full-color, informative book of Kentile facts.
and we believe dependable cold process roofs are the key to sound economical buildings. We believe cold process roofs are dependable.

Why Specify an Abesto Cold Process Roof?

1. The laminations of roll roof are always sound, efficient protection for your buildings.
2. An Abesto Cold Process roof will ALWAYS give longer life to your buildings.
3. An Abesto Cold Process roof is ALWAYS sound, efficient protection for your buildings.
4. Specifications for Abesto roofs are ALWAYS sound, efficient protection for your buildings.

Abesto is used.

Types of construction for which Abesto roofs are always sound, efficient protection for your buildings.

1. An Abesto Cold Process roof is always sound, efficient protection for your buildings.
2. An Abesto Cold Process roof is especially sound, efficient protection for your buildings.
3. An Abesto Cold Process roof is always sound, efficient protection for your buildings.
4. Specifications for Abesto roofs are always sound, efficient protection for your buildings.

Abesto is used.

ALWAYS.