PROGRESSIVE ARCHITECTURE
PENCIL POINTS

COLLEGE DORMITORY COMPETITION

SMALL HOUSE COMPETITION

APRIL 1946
**How to plan a High Pressure Steam Distributing System**

Another in the series of basic Piping Layouts prepared by Jenkins Bros.

---

**High Pressure Steam Distribution**

Systems of the type illustrated in this layout are frequently installed for the efficient heating of the sprawling, modern type industrial plants, covering a large area, which have been built in increasing numbers during the past few years. The hook-up allows for reduced pipe sizes and takes care of excessive pressure drops due to the long distance between the heating plant and the radiation.

**Substantial Savings** in installation and maintenance costs are effected through the elimination of return lines in many such installations, especially where the heating system takes a small percentage of the steam and treated water. Condensate is collected in vented tanks at the lowest points in the system, and drained off. Check valves prevent back flow from the tanks.

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**Several Types and Pressure Ranges** of Jenkins Valves, other than those shown, can be used for this type of layout, according to the factors involved. Consultation with accredited piping engineers and contractors is recommended when adapting these suggestions to your own requirements, or when planning any major piping installation.

Copies of Layout No. 9, enlarged, with additional information, will be furnished upon request, also copies of future Piping Layouts. Just fill out and mail the coupon.

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<table>
<thead>
<tr>
<th>Code</th>
<th>Quantity</th>
<th>Jenkins Valves</th>
<th>Service</th>
</tr>
</thead>
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<tr>
<td>A</td>
<td>5</td>
<td>Fig. 106-A Bronze Globe</td>
<td>H.P. Shut-off</td>
</tr>
<tr>
<td>B</td>
<td>4</td>
<td>Fig. 106-A Bronze Globe</td>
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</tr>
<tr>
<td>C</td>
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<td>Fig. 106-A Bronze Globe</td>
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</tr>
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<td>D</td>
<td>2</td>
<td>Fig. 106-A Bronze Globe</td>
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</tr>
<tr>
<td>E</td>
<td>2</td>
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</tr>
<tr>
<td>F</td>
<td>2</td>
<td>Fig. 106-A Bronze Globe</td>
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<td>2</td>
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<td>1</td>
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</tr>
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</table>

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makes the big difference
Rich's, Inc. of Atlanta, is more than pleased with the results of its nation-wide $10,000 Architectural Competition in collaboration with Progressive Architecture. The problem, as you recall, was for "a realistic house for a family in Georgia." The winners you will find in this issue.

Many thanks to the hundreds of entrants who submitted drawings. Many thanks to the jury—Thomas Harlan Ellett, F.A.I.A. of New York; Ernest A. Grunfeld, Jr., F.A.I.A. of Chicago; Richard Koch, F.A.I.A. of New Orleans; Ernest J. Kump, A.I.A. of San Francisco; Roland A. Want, A.I.A. of Detroit; Roy F. Larson, F.A.I.A. of Philadelphia; Robert Law Weed, A.I.A. of Coral Gables. Many thanks, too, to Henry J. Toombs, A.I.A. of Atlanta and Kenneth Reid, A.I.A., Editor of Progressive Architecture who acted as professional advisors and to Philip H. Hubbard, publishing director of Progressive Architecture and the entire staff.

And, of course, our heartiest congratulations to the winners. Models of the first, second, third, and Georgia Prize houses will be shown in Rich's GEORGIA BUILDS TO LIVE show, starting April 22.
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**Sizes**: 
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- ½" thickness—2' x 8' with T & G joints on long edges.
- ¾" thickness—4' x 8' and 4' x 10' with square edges.

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APRIL 1946 5
Hints for those who

PLAN TO REMODEL

Look at these photographs. They show what can be done to improve a home, when one has a little imagination and some Insulux Glass Block.

• Note the large glass block panel in the living room. This attractive "light wall," which adjoins the summer terrace, provides an abundance of daylight all through the year. And in the winter—it brings considerable fuel savings because of the insulating value of the block.

• Note the departmentalized bathroom. An Insulux partition, and space divided into four distinct sections—bathroom, toilet, shower, tub, wash stand and dressing room. Think of the advantages!

• Note the glass block partition in the hallway. This is a money-saver, as it borrows needed light from the dining room adjoining.

Panels of Insulux Glass Block are being installed in hundreds of buildings throughout America. In homes, stores, schools, hospitals, offices and factories!

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THANK-YOU NOTE
Dear Editor:
We in Canada really appreciate your making it possible for Canadian architects to enter these competitions. We realize that there must be considerable trouble involved in getting drawings back and forth across the border. Most of all, we appreciate the regularity with which these competitions are held and the fairness in which the entries are judged.

WATSON BALLHARIE
Ottawa, Ontario

THE PROGRAM HELPED
Dear Editor:
The program was interesting to work out since the requirements or limitations on exposure, floor area, climatic conditions, ventilation, occupancy, cost, storage space (this necessary item has long been neglected), site conditions, and design were so carefully and clearly set forth or implied.

Such a program releases the designer's attention at once for study of the fundamental and difficult problems connected with minimum house design, such as room relationship and relative sizes, open planning and multiple use of space, privacy for occupants, waste corridor space, efficient performance of household duties, solar and seasonal orientation, cross ventilation, good natural lighting, facilities for entertainment, and, of course, the production of a timely design of simple dignity for which all prospective small house owners long and to which they are justly entitled.

Thoughtfully prepared competitions of this nature are steps in the right direction toward the solution of real and satisfying minimum housing, and your organization is to be congratulated on the manner in which the whole matter was conducted. I am sure also that the selection of such a reputable jury inspired confidence in the minds of all competitors.

It is to be hoped that the collective results of this competition will have contributed much of real value to the nation-wide problem of the small house.

R. L. ALBERT
Arlington, Va.

THAT JANUARY REVIEW
SETTING THE PACE
Dear Editor:
Your January issue of Progressive Architecture is a fine editorial job. The concept of reviewing the achievements in architecture since the beginning of the war gives you an excellent foundation for an informative and ably presented review.

I particularly like the way you have handled the layout and text and the effective manner in which you have condensed the essential story. The section on Modular Coordination of course interested me most, and is probably the best condensation of this subject that has yet appeared.

Congratulations to you and your staff! I hope this sets the pace for many more fine issues under your direction.

TYLER S. ROGERS
Owens-Corning Fiberglas Corporation
Toledo, Ohio

WHAT'S COOKING NOW?
Dear Editor:
In your article, "Pearl Harbor to Nagasaki," the subject matter of the first ten pages was academic—and seemed to be a dissertation in defense of the past four years of architectural magazines. Who cares? We who have been away for four years, completely detached, are interested only in what's cooking now! Those ten pages could have helped a lot besides the few plates included therein.

The past four years for many of us have been a matter of getting right to the point—the very essence of contemporary architecture. Maybe the four service years can be applied to the drafting board even in such an indirect way?

I must confess the title is very promising, and having hoped to really learn about the progress of the past four years in architecture, after a complete four-year detachment, I find after having read from pages 42-81 no such education. There was mention of the "cavity wall." Well how about a page or so on the cavity wall? Let us in on it and the other items just mentioned. Under "Construction Methods," a very juicy subject, it was polished off by saying, "a great deal of ingenuity was devoted to integrating the architectural conception with specific construction requirements." That calls for a Charlie McCarthy, "Is that so?"

Indeed you may say again the Profession has been misunderstood. The depressing reception given architects in the military profession, especially the Navy, was due solely to the little weight and explanation the senior members of the architectural profession bothered to shoulder and pass on to the public prior to Pearl Harbor. Recruiting officers and the Bureau of Personnel had no idea what architects could do; thus we all ended up a million miles from the profession.

The plate alone of the Rungen School seems to almost make up for the 40 pages in expressing "progress in architecture." It is certainly not only pleasing but seems to possess all the four attributes your article set out to explore, even though you did not define your four elements.

LT. PAUL PIPPIN, USNR
Portsmouth, Virginia

LEADERSHIP POSSIBLE
Dear Editor:
The opinions I shall express will be mine, but I am sure that these opinions are shared by many service men who now contemplate a career in architecture.

In reviewing 135 issues, Mr. Croction has done a most commendable job of analyzing the advancement in architectural esthetics during the war years, and this service is of value to those who have necessarily been out of touch with that progress. He has ably and interestingly traced the undeniable evolution of the architectural magazines' editorial policies and the developing techniques in building.

RALPH DELOS PETERSON, JR.
Ensign, USNR
New York, N. Y.

MISSED THE BOAT
Dear Editor:
In your comparison of the old and the new in your issue of January 1946, I believe you have missed the boat—there is nothing appealing or beautiful in the modern compared with the past.

WILLIAM SCHOMBURY
Architect
New York, N. Y.
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A Modern Raymond Pile Driver
STOP AND THINK
By Lewis Mumford

My chief criticism of Kenneth Reid’s proposal on a home for the U.N.O. can only repeat the advice I would earnestly give the officials in charge of the U.N.O.’s building program: Stop and Think. Mr. Reid’s plea for a competition rests on the assumption that a program for the architectural embodiment of the new organization has already been worked out. That is not the case. The fact is that the Committee on the Selection of Site was sent about its work with only the vaguest instructions as to the size, scope, and purpose of the buildings for which they were supposed to find a site. No committee is the U.N.O. had apparently thought it necessary to take time for a preliminary study of the wide range of possibilities that lies before it, or to define an adequate program.

The first matter to be decided is whether the United Nations will be served best by a small complex of buildings, such as those created at Geneva, or whether, in view of the scope and importance of this new organization, a whole urban community, resting like Washington within its own territory, must not be ultimately built. No site can be selected intelligently until this question is settled. If the answer is the second choice, the site that is now favored is plainly inadequate: a site three times the size of the present one in area should probably be the minimum demanded.

Now, I believe that any thorough canvass of the future of the United Nations Organization, which looks beyond its immediate needs, must visualize its architectural program on quite different terms from, say, Senator Vandenberg: it must look forward during the next century to the creation of a great world capital, indeed, to a series of such world capitals, in which international congresses and international services will be established. Not to provide for such a future growth would be to betray a lack of faith, a lack of political energy, that would handicap the development of the United Nations at the beginning. It would be better to overestimate the need for land and space for future expansion, than to face the possibility of repeating, in the new world center, the sordid confusion and congestion of every existing national capital.

The fundamental postulate for such a center, I submit, is that it is to serve not merely a world organization, but a world community. Hence, in the general conception of the project, in the technical method of its development, in the actual structures to be built, it must give play to the processes of world cooperation. The architectural framework, on this assumption, must express the character of the enterprise in no uncertain terms; so that he who enters these precincts will leave part of his nationality behind him, as the Moslem faithful leave their shoes behind at the entrance of the mosque. From the first, the plan, and the scientific, technical, and architectural collaboration needed for working it out, should be on an international basis. The new building should be part of a new kind of urban community; and this community should be a forecast, in design, in relationship, in harmonization, of the political and social structures that must in time be constructed on a world-wide basis.

As soon as one introduces the notion of a community, one introduces the notion of time. Instead of freezing the whole project into a static form, so that it will look as if it were conceived and executed in the same year—the Renascence concept—the program must allow for change, alteration, progress, transformation—and for the emergence of a fuller unity. Here again the United Nations buildings must have a representative and symbolic character; for the unity to be sought is not an arbitrary, abstract, paper unity, to be imposed at the beginning by a single mind and never departed from, but an organic unity, imperfect as all living things, yet serving as a principle of order. Such order and unity must be the goal of each individual effort, but it must never preclude the further working of time and mind.

This element of time has one further bearing upon the building program: a method of selecting architects must be set up which will not merely further international cooperation among architects, but allow for attempted selection and replacement over a long period of years. The worst way of establishing such continuity and cooperation would be by an international competition, or a series of such competitions: for in view of the work to be done, it is more important to select men, who will develop together and influence one another, than it is to select abstract designs. Here Dean William Wurster’s suggestion seems to be excellent. He has pointed out that the most important function of a competition, the possibility of bringing forth the work of younger men of ability, can be furthered by establishing the rule that a certain percent of each international team should be composed of people under the age of forty.

In raising these issues I have only tried to suggest that the writing of a program for the United Nations center is not something to be attempted after a few hasty weeks of discussion, still less is it something to be done, unaided, by a Committee on Building.

Instead of encouraging the United Nations Organization to make premature decisions and to set in motion second-best or fifth-best procedures, I believe it would be advisable to plead for extending the period for temporary quarters, if need be, in order to provide the time necessary for the research, the reflection, and the discussion essential to prepare an adequate program, and to set up a rational process for choosing the teams of planners, architects, and technicians who will develop the project. In view of the long-term effects of hasty efforts and bad solutions, I say again, with all the urgency I can put into my words: make haste slowly. And first of all: Stop and Think!

We are indebted to Mumford for his prompt statement of opinion contrary to ours (see pages 98-100). Typical prize winners of the League of Nations competition (below) serve as additional warnings; these were the entries of Labro, of Paris (left); Purlitz, Klophaus & Schoch, of Hamburg; and Lefèvre, of Paris (below).

Illustrations by courtesy of the Museum of Modern Art
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(Continued on page 16)
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First and second prizes in the Smith College Dormitory Competition, conducted by the Museum of Modern Art and PROGRESSIVE ARCHITECTURE, went to five young members of the cooperative office, The Architects' Collaborative, in Cambridge, Massachusetts. Norman C. Fletcher, his wife Jean Bodman Fletcher, and Benjamin Thompson (first prize winners), John C. Harkness and his wife, Sarah Harkness (second prize winners), are associated with Dr. Walter Gropius in the recently formed office, and propose to conduct together a general architectural practice. The Fletchers, who also won first prize in the PENCIL POINTS—Pittsburgh architectural competition last summer, went to Cambridge in recent months from Birmingham, Michigan, where they were employed in the office of Saarinen & Swanson. Mrs. Fletcher is an alumna of Smith College and first studied architecture in the graduate school there. She received her B. A. degree from the Harvard Graduate School of Design. Her husband is a graduate of the Yale University School of Architecture, where he also won a fellowship to study regional and city planning. His first professional experience was with PSA in San Francisco under Vernon DeMars, and then with Skidmore, Owings & Merrill, Architects, New York.

Thompson, who also graduated from the Yale University School of Architecture, worked with Donald Deskey, Foley Brothers, Walbridge Aldinger, and the U. S. Army Engineers before he was commissioned a lieutenant, USNR, and served as deck officer aboard the USS Courage, 1942-44. He later served OSS and the State Department, before returning to civilian life. His wife, Mary Okes Thompson, a graduate of Wheaton College, is now studying design, and intends to take her place with the collaborative group as soon as her training is completed. Harkness, co-winner of the second prize, received his M. A. from the Harvard Graduate School of Design and went overseas during the war with the American Field Service, attached to the British 8th Army in Africa and Italy. During that time Mrs. Harkness completed her studies at the Smith Graduate School of Architecture and worked as Boston agent for New York designers. She also was associated with the Museum of Modern Art for a year.

Julius Stein, Roy S. Johnson, and Fred M. Glassbern, winners of the third prize, are in the same age group—25 to 32—as the winners of first and second prizes. They are all graduates of the New York

(Continued on page 20)
Before Tile-Tex Asphalt Tile Gets This OK...

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LOOK TO Tile-Tex IN '46
FOR THE BEST IN FLOORING

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University School of Architecture. Stein has gained experience in New York offices, working for Philip Birnbaum, Fellheimer & Wagner, York & Sawyer, and at present as a designer for S. J. Glaberson. Johnson, who is now a sergeant in the U. S. Army Signal Corps, worked for Edward D. Stone, Hornbostel & Bennett, Fellheimer & Wagner, and S. J. Glaberson. Ginsberg, until recently a lieutenant, U. S. Army Aviation Engineers, also worked for E. D. Stone, P. L. Wiener, and J. L. Sert, and is at present a designer for Horace Ginsberg & Associates. He and Johnson are members of the Building Industry Design Research Group.

Thus, all of these prize winning drawings result from collaborative efforts of younger architects—which suggests the success that can attend the office practice of The Architects’ Collaborative, to which the winners of first and second places belong. They express the objective of their group as follows:

“The whole postwar reconstruction problem, so vast and so complex, hangs upon our ability to cooperate. The architect, as a coordinator by vocation, should lead the way—first in his own office—to develop a new ‘technique of collaboration’ in teams. The essence of such technique will be to emphasize individual freedom of initiative instead of authoritative direction by a boss. Synchronizing all individual efforts by a continuous give-and-take of its members, a team can raise its integrated work to higher potentials than the sum of the work of just so many individuals.”

The winner of first prize in the Progressive Architecture—Rich’s, Inc. Competition, Hugh Stubbins, Jr., is an old hand at competitions. Since his undergraduate days at Georgia School of Technology where he was top man in his class, he has received medals, fellowships, prizes, and other honors with reassuring regularity. Meantime he continued his architectural education at Harvard Graduate School of Design, where he instructed in 1940 and served as assistant to Walter Gropius, and is currently an assistant professor. His architectural practice during the same years has been vigorous, starting in New England and New York, then Birmingham, Alabama, and next in Boston. During the war he was active in designing housing projects—notably the widely-exhibited Windsor Locks, Connecticut, project—and also advised FFHA and USHA. He is secretary of the American Society of Planners and Architects. Last year, he judged some competition entries himself, as chairman of the Pencil Points—Pittsburgh small house competition.

Without formal architectural education, Watson Balharrie, winner of the second prize, became an architect through 17 years’ association with architects of Ottawa. During the war he worked as an architect for the Naval service of Canada and is now practicing under the firm name of Abra, Balharrie & Shore. He had previously received awards in Canadian competitions and entered several conducted by this magazine. He is secretary of A.R.G.O. (Architectural Research Group of Ottawa) and belongs to C.I.A.M. as well as R.A.I.C. and the Ottawa and Quebec associations and architects.

Completing service with the Navy, late last year, Harold Cailhoun lost no time in getting back to his office and architectural activity. He entered the recent competition “to get rid of the cobwebs because I had hardly drawn a line for three years” and reports that winning third place was almost too much for him! Graduating from Rice Institute in 1932, he organized the firm of

(Continued on page 22)
partners in creating

- So clearly and unmistakably are draftsmen able to express their ideas on paper that their drawings have re-shaped the world. Through line, figure and symbol, draftsmen define the work to be done by the labor and machines of a nation. Assisting them to attain precision and clarity are drafting instruments that act almost as living extensions of their own hands...instruments that function figuratively as their partners in creating.

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*US. PAT. OFF.
Wirtz & Calhoun (the present name). He also worked for Robert & Company, as designer, and later as manager of architectural work on the U.S. Navy Air Center at Corpus Christi. He joined the Navy in 1943, went to the Pacific theater, and ended his service as a member of the U.S. Strategic Bombing Survey in Japan.

The winners of the fourth prize, Walter Preston Hickey and Raymond Weber, are both employed in the General Motors Corporation styling section. Both

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(Continued on page 24)
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To make certain that the roofing materials which can't be seen when the roof is completed match the fine, quality-look of the finished job, specify Koppers Coal Tar Pitch and Approved Tarred Felt. These products are as good "on the bottom of the basket" as they are on the top. Roofs built of coal tar materials have records of 20, 30, 40—and even more—years of satisfactory service. They require little or no maintenance.

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APRIL, 1946 27
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APRIL, 1946 47
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LUPTON METAL WINDOWS
TWO COMPETITIONS

We have recently enjoyed the privilege of participating in the conduct of two more nation-wide competitions. As a result of the experience, we are more than ever convinced that the competition is a fair and efficacious method for finding praiseworthy solutions for any given architectural problem, and that it has the further virtue of discovering and encouraging fresh and vigorous architectural design talent. A competent jury, given adequate time, will always discover the flaws in even the most elaborately presented scheme, and conversely, will find and premiate the designs that most satisfactorily meet the program requirements. We have seen it happen again and again. The cream, provided it is there, inevitably rises.

In the competition for the selection of an architect for the proposed new dormitories at Smith College there were ninety-one entries, which turned out, when the envelopes were opened after the judgment, to have been submitted by a rather widely distributed and on the whole competent group of architects. Both well known and unknown firms and individuals were represented and the designs showed clearly that the problem had been well studied by a variety of men, both young and old. The admirably drawn A.I.A. Competitions Code which was followed, with its provisions for maintaining complete anonymity, insured that the judges must reach their verdicts solely on the basis of merit. This they did, according to their lights, and the results are shown on the following pages. Space limitations unfortunately do not permit inclusion of the Mention designs, whose authors were listed in the announcement of awards in February.

The Progressive Architecture-Rich's, Inc., competition for the design of a "Realistic House for Georgia" was a purely educational effort, intended to develop sound ideas and better understanding of the ever-present small house problem. Five hundred and sixty-eight drawings were submitted from every part of this country and even from outside our borders. We can vouch for the fact that the seven able judges worked seriously and thoroughly for three days and that they overlooked nothing in their search for designs deserving the prizes.

In both of these competitions the quality of the competitors was reasonably high, judging from the names afterward discovered on the list of entries. In both of them, however, there were a disappointingly large number of designs that missed the boat. In seeking the reason for this circumstance it occurred to us that there is perhaps too much of a tendency for designers under the competitive stimulus to attempt the "brilliant" solution and overlook the obvious virtues of a direct and unpretentious answer to the program. As a word of advice to future competitors we venture to suggest that any jury worth its salt is going to look these days for the simple solution rather than the complex. The days when épater les bourgeois was profitable are apparently over.

Kenneth Reid
A COMPETITION

to select
an architect
for a proposed
dormitory group
for Smith College

Conducted by MUSEUM OF MODERN ART AND Pencil, Professional Advisory: Richard Neutra, Professor of Design, Cal Tech University
Approved by the Committee on Competitions of the American Institute of Architects

Smith College, located in the Berkshire Hills and the Berkshires is invigorating, with a college, with an enrollment of American Architecture, Medieval Revival to the site to serve an individual in the forming of the site to serve an institutional, a degree of hard and a continuity of forms in future growth. The site of the new dormitory to be occupied by older buildings across Paradise Pond, splendid trees, also a way for pedestrians maintained through the House, to "B," entrance.

REPORT OF THE JURY

Ninety-one projects were submitted. Considering the many demands upon architects at this time, the jury felt that this was a gratifying response to the competition, and were pleased with the general quality of the entries as well as with their quantity. Many were very well thought out and beautifully presented. They were well hung and lighted in a series of rooms in Smith's Tryon Museum at Northampton.

The jury met on January 12th for nine hours. They resumed work on Sunday, the 13th, and completed the awards after a five-hour session.

The jury based their decisions upon the following desirabilities:

1. Preservation and exploitation of the pleasant park-like character of the steeply sloping site;
2. Exposure of students' rooms for sunlight and for view of the lake and the mountains beyond;
3. Well organized floor plans with conveniently grouped activities and easy circulation;
4. Informal, non-institutional appearance, harmonious in scale with the existing buildings and the adjacent residential street.

The prize-winning projects are evidence of the jury's insistence upon this last point. All three divide each dormitory into two or three parts to achieve a friendly, domestic scale. Even though this type of plan tends to be more expensive than more concentrated, more rigid, less personal solutions, and tends to cover more ground area, the jury was unanimous in preferring it for this purpose. Resembles to an urban apartment house or hotel was not held to be desirable, no matter how handsomely contrived.

The First Prize was won by

Norman C. Fletcher
Jean Bodman Fletcher
Benjamin Thompson

Each of the buildings is in two parts: a rectangular dormitory block connected by a bridge with a more freely composed wing devoted to living, dining, and service. The buildings are well placed in the northeast, east, and southeast corners of the plot, preserving an open space where the ground drops sharply to Paradise Pond and retaining as many as possible of the fine existing trees. The building type is so flexible that it could easily be adapted for even better site use and exposure.

Students' rooms face east and west. They are grouped in short corridors and planned for economical construction. Major living rooms face the south and the view and are very pleasantly related to each other. The jury

PROGRAM REQUIREMENTS

The proposed dormitory group will consist of three fireproof units to be operated independently and which may be built at different times. Each unit may differ in order to meet the varying conditions of the site but each must contain the following elements:

A Entrance hall. (For administrative reasons, only one main entrance is desired to each unit.)
B Small booth off entry for person on watch. This space will also serve as a receiving room for mail and packages and message center.
C Students' coat room, 80 sq. ft.
D A waiting room for callers off the entry, about 120 sq. ft.
Guests' laboratories.
E A living room of 750 sq. ft. with fireplace, to accommodate all residents at one time.
F 2 smaller living rooms of 400 sq. ft. to be used for social purposes or reading by smaller groups desiring privacy.
liked the clean but unforced character of plan and elevations, and felt that the designers had developed their forms out of the requirements instead of forcing their rooms into any arbitrarily imposed shape. There was some criticism of the dormitory ramps and the insufficient control of those entering the building through the dormitory wing, but it was felt that these flaws might easily be remedied. The cubage of the scheme is remarkably low.

The jury was particularly pleased with the imaginative, intimate quality of the north and south elevations, and approved the use of material, although they hoped that stucco was not to be used.

The Second Prize was won by

Sarah Harkness
John C. Harkness

This project was particularly admired for its easy-going domestic quality, and for its excellent feeling for the site. Each dormitory is divided into three separate groups of students' rooms, and so arranged that each of these individual rooms faces the south and the view.

The jury liked this division into small, well-oriented units and liked the varied, lively relationship between these units, but felt that it would be considerably more expensive than the arrangement which received first prize. Some members also questioned the feasibility of the relatively tight and sunless courtyard and the obstruction of the living room view by the projection of the front wing.

The Third Prize was won by

Roy S. Johnson
Julius Stein
Fred Ginabern

All the living and service rooms are concentrated on one main floor and on a lower level built into the hill slope. Students' rooms are divided among the two parallel south-facing wings which rise above the main living floor.

The jury liked the excellent ground floor plan and the unpretentious charm of the scheme as a whole. They particularly admired the friendly scale of the elevations and the sensitive use of materials. They criticized the fact that one wing of students' rooms faces the back of another and that the diagonal view from these rooms overlooks the broad flat roof of the living and dining rooms. They thoroughly disapproved the site plan, but felt that this might be remedied without changing the basic scheme.

JURY OF AWARD

William Allan Neilson
Mrs. Alan Valentine
Kenneth Reid
Morris Ketchum, Jr.
Elizabeth B. Mock
Philip L. Goodwin, Chairman

APRIL, 1946 53
FIRST PRIZE
NORMAN C. FLETCHER, JEAN BODMAN FLETCHER, AND BENJAMIN THOMPSON
CAMBRIDGE, MASSACHUSETTS

bedroom unit 1
10 girls per floor
3 floors

step-down service unit
20 girls per floor
3 floors

bedroom unit 2
10 girls per floor
3 floors

flexible adaptation to site conditions

park

social units
south elevation

terraces for outdoor living

entrance is under bridge between buildings
SECOND PRIZE

SARAH HARKNESS AND JOHN C. HARKNESS
MILTON, MASSACHUSETTS
THIRD PRIZE

ROY S. JOHNSON, JULIUS STEIN, AND FREDERICK GINSBERN
NEW YORK, NEW YORK
3 dormitory floors

first floor

basement
REPORT OF THE JURY

The jury was disappointed by the tendency of the entrants to disregard the stated intentions of the program to secure realistic plans for houses that Georgia families of $3000 annual income could afford and in which such families could pursue their normal mode of living, raising children without unnecessary frustration and extra chores. Practically all entries leaned toward complicated plans and extensions which would be wasteful of capital costs as well as undesirable from the point of view of family life, or at least not productive of results commensurate with the investment.

Nevertheless, winners had to be chosen from among the entries submitted. The jury took into account the recent decline of the dollar and agreed that the higher purchasing power which existed at the time the program was written would be adopted in order to grant some degree of feasibility for the entries.

Members of the jury held different points of view with regard to some elements of the program. For example, some jurors strongly regretted the scarcity of good two-story plans because they felt that with the restricted lot size it was desirable to leave as much of it open as possible. Others advocated the one-story house because of its greater convenience for the housewife. Some jurors felt more strongly than others that screened porches are necessary adjuncts to the house, even though contemporary design permits large open areas which give the rooms the same degree of livability that traditionally has been obtained through the use of screened porches.

Some members regretted that relatively few contestants worked out courtyards of satisfactory size, open to the prevailing breeze. It was felt that in the Southern climate and on a restricted lot, a good many family activities might take place in charmingly outlined courts. Most schemes with courtyards required plan and room arrangements too involved for occupants' needs or beyond their financial ability.

There was general agreement that garages should not be at the back of the house or to the rear of the lot because of the wastage of land area for driveways. There was an inclination to regard the garage, or other provisions for parking the car, as the most frequently used entrance to the house; in effect, its main entrance. For that reason, there was much doubt whether the open car shelter close to the street is really an acceptable solution, since the car shelter would normally attract a good deal of clutter, exposure of which is undesirable. This consideration was taken into account in rating entries which required one to pass through the car shelter or along its open side in order to enter the house. There was some criticism of garages (and particularly open carports) that stood detached in front of the house, fully exposed to the street. The jury felt that garages look bad enough in their usual rear location and that if it became general practice to place similar detached structures in the front, the appearance of the streets would be greatly damaged.

There was disappointment over the relatively small number of entries that made use of sloping roofs, since in Georgia the sloping roof is not only conventional and acceptable, but also of great utility for purposes of insulation.

Several entries, regarded highly during discussion, had to be discarded because of features which were proved impracticable upon close examination. It was noted, for example, that some entries staggered walls of first and second floors in relation to each other so that support, flashing, and establishment of proper differences of level between rooms and abutting balconies appeared far too expensive and not too practical. In other cases, excessive cantilevers were required, or furniture items were drawn to substandard sizes which could not be enlarged within the indicated room sizes.

The jury did not entirely reject plans where such minor shortcomings appeared readily curable, but considered them a cause for rejection where their correction would have required major alterations of the plan. Similarly, there were cases where the circulation between living and sleeping quarters depended on screened porches, or passages which of course could have been glazed but if so treated would have raised the total square-foot area of the house beyond the limit.

Among the entries which received Mention, a good deal of discussion was given to the truly "realistic" scheme shown on page 76. It was deeply regretted by the jury that more capable entrants did not select a condensed parti such as this. There was general agreement that the purpose of the program could be more satisfactorily met by such a natural and unsophisticated approach, not only as to costs but as to livability. It was felt that even designs considered more individually attractive might combine less effectively than this one into a satisfactory residential development composed of small houses in close proximity on small lots.

In spite of the above considerations, the jury did not think that it could place this entrant above the Mention level—not because of its very striking similarity to the one which won a Special Mention last year in the PENCIL POINTS-Pittsburgh Architectural Competition, but because of the inadequate further development of that part. In particular, it was held that the kitchen layout was not studied to the point where workability could be assured. The coat closet was lacking in the hall, other storage space was inadequate. The grouping of furniture around the fireplace was inappropriate, bedroom closets came in impracticable conflicts with windows, and the carport was placed in a very casual
manner, while the justification for the large masonry mass in the center of the house could not be discovered. Comments on the Prize designs follow and the captions for the Mention drawings contain the jury’s principal points of criticism, pro and con.

FIRST PRIZE
This entry received favorable consideration because the “breezeway” arrangement is well liked in this region, and is a practical method of obtaining ventilation for the principal living quarters. The exterior appearance was considered as the most charming of those which by their other qualifications received attention for high place. The simplicity of the over-all scheming and the relatively small portion of the property occupied by the house were favorable aspects of the design.

Criticisms of the scheme was limited to such particulars as the minimum dimensions of the car shelter, the none too adequate provision for storage which should have been more accessible from the outdoors, lack of privacy in the dining area, and the relation of closets and window sash in the bedrooms.

SECOND PRIZE
The jury, while not particularly attracted by the external appearance of this solution, commented favorably on many features and felt that its merits as compared to the first place design are not adequately expressed by the proportion of the two prizes. It was pointed out, however, that the separation into two wings was more expensive than the program seemed to warrant.

Favorable comment was made upon the subordinated yet practical placement of the garage, the separation of living and sleeping areas which would assure mutual privacy on account of the location of the entrance centrally between the two areas, provision of combined study and guest room and basement space available for shop use or for play on rainy days.

Questioned were: the location and nature of the fireplace; the arrangement of furniture in the children’s bedrooms; the efficiency of the living room storage space without addition of another door at the narrow end; the effectiveness of the clerestory windows in the boy’s bedroom, situated directly above the adjoining roof.

THIRD PRIZE
This entry was commended because of the simplicity of its roof line and general external appearance. Other favorable comments included: the allowance for through ventilation of the living areas; use of intimate court effect at the entrance; use of a sloping roof and attic for ventilation and storage (although some questioned the convenience of a disappearing stairway in the carport).

Some members of the jury questioned whether two bathrooms were warranted, especially since both were located so that the housewife working in the kitchen, or the maid, would not derive any benefit from the duplication. Also questioned were the cost and maintenance of the fence and car gates which seemed essential to the plan as a matter of appearance and privacy.

FOURTH PRIZE
The split level arrangement of living and sleeping areas was considered practical by the jury. The cohesive living and dining areas with unhampered outlook toward the rear received approval, as did the seclusion of the study and guest room in the semi-basement. Some jurors questioned whether the carport was well placed, being open to the main entry, and whether at least the passage from it to the house entrance should not have been weather protected. It was also regretted that the southwest bedroom did not receive cross ventilation.

The main criticism, however, revolved around the lack of adequate study given to the exterior and to the elimination of such conflicts as seem to arise between the roof over the living area and the gabled end of the bedroom wing.

SPECIAL GEORGIA PRIZE
This solution rated high during the discussion of the jury because it seems economical and realistic in terms of popular acceptance and practical for living purposes. It was one of the entries where the garage was integrated as part of the house, although the opportunity derived from that was not fully exploited. Lack of a direct door from garage to hall, and the combination of the garage and main entrance doors, were criticized as not too successful from the point of view of design. In general, the greatest handicap of the design was what the jurors considered as a lack of distinction in its external appearance.

Thomas Harlan Ellett
Ernest A. Grunsfeld, Jr.
Richard Koch
Ernest J. Kump
Roy F. Larson
Robert Law Weed
Roland A. Wank, Chairman

JURY OF AWARD

PROGRAM REQUIREMENTS
The program for this competition called for the design of a house for a Georgia family of four—father, mother, boy of five, and girl of two. Their income was given as $3,600 a year and they could afford only an inside lot (orientation optional) 60 ft. wide and 150 ft. deep in an established residential section of a still growing city. Their budget limited the house to 1350 sq. ft. of usable floor area exclusive of garage and heater room. Lot restrictions required a set back of 20 ft. from the street and no building within 10 ft. of side and rear lot lines. 900 cu. ft. of easily accessible and well disposed storage space were called for over and above the usual closets and kitchen cabinets. The Georgia climate was described in detail. Emphasis was placed on “realism” in that the house must be economically buildable out of materials actually on the market or known to be in production.

APRIL, 1946 63
FIRST PRIZE
HUGH STUBBINS, JR.
CAMBRIDGE, MASSACHUSETTS

terrace

sliding door replaced by screen in summer

living 18' 6" x 11' 0"

parents 14' 6" x 10' 6"

food store
laundry
drying

trash garbage

kitchen 6' 6" x 10' 6"

sliding door replaced by screen in summer

dining - play
4' 9" x 10' 6"

high window

entrance garden

garage

one quest

bed

ln.

boy 8' 6" x 10' 6"

girl 8' 3" x 10' 0"

64 PROGRESSIVE ARCHITECTURE • Pencil Points
SECOND PRIZE

WATSON BALHARIE
OTTAWA, CANADA
THIRD PRIZE
HAROLD CALHOUN
HOUSTON, TEXAS

EAST ELEVATION

SECTION

SOUTH ELEVATION
FOURTH PRIZE
WALTER PRESTON HICKEY AND RAYMOND WEBER
BIRMINGHAM, MICHIGAN, AND HUNTINGTON WOODS, MICHIGAN

A REALISTIC HOUSE FOR GEORGIA
PROGRESSIVE ARCHITECTURE • RICH'S INC. COMPETITION

GARDEN ELEVATION

SIDE ELEVATION
MENTION AND SPECIAL GEORGIA PRIZE

WILLIAM EWART WILLNER
ATLANTA, GEORGIA

A REALISTIC HOUSE FOR GEORGIA
PROGRESSIVE ARCHITECTURE RECYCLING COMPETITION
ROBERT L. ALBERT, Arlington, Va.—Good points: second floor layout with cross ventilation for all bedrooms; design of carport and entrance; handy disposition of storage; use of sloping roof and exterior design readily acceptable in locality; saving in ground area by two-story scheme. Criticized for long and inward extension of living room; lean-to roof over garden end of living room seemed affected.
BILL ATKINSON, Bloomfield Hills, Mich.—Good points: simplicity of structure as shown by drawing; pleasant opening of living quarters onto well-developed adjoining courts. Criticized for length of house which absorbs most of property; location of children's closets in hall; entrance directly into dining space; amount of paving in front yard for car maneuvering; apparent necessity for two rows of porch columns to support roof.
DICK BARRY, Cambridge, Mass.—Good points: borrowed an excellent parti which came perhaps closer than any of the entries to meeting the purpose of the program in calling for a realistic house for a $3,000-a-year family. Criticized for inadequate development of idea; inadequate kitchen; lack of storage; unjustified masonry mass in center; inappropriate furniture grouping; conflicts between bedroom closets and windows.
A REALISTIC HOUSE FOR GEORGIA
PROGRESSIVE ARCHITECTURE RICH'S INC. COMPETITION

ARTHUR O. DAVIS, JR., Atlanta, Ga.—Good points: compactness of plan and simplicity of massing; easy access from entrance to all parts; heater room and storage located to take up dark space; adequate kitchen and good exposure of principal rooms to breeze. Criticized for lack of cross ventilation in bedrooms; distance from front of house to main entrance; necessity for passing open carport; cold exterior appearance.
JEAN W. DEYOE, Manhattan, Kans., and JOHN F. GRANSTEDT, Kansas City, Mo.—Good points: openness of living space and long view of property from front end; adequate kitchen; fireplace and furniture grouping; main entrance has good access to all parts. Criticized for costly carport; entrance through carport; opening of service entrance into dining room; lack of separation between kitchen and living space.
PROGRESSIVE ARCHITECTURE
RICH'S, INC.
COMPETITION
A REALISTIC HOUSE FOR GEORGIA

C. WILMER HEERY, Athens, Ga.—Good points: relatively short bedroom hall, with provision for cross ventilation of bedrooms; well combined garage and storage, with sheltered entrance to house; screened porch well placed for multiple use and dining room easily accessible from service area; acceptable exterior appearance. Criticized for too many complications of plan with jutting corners.
A REALISTIC HOUSE FOR GEORGIA

JOHN HIRONIMUS, Jackson Heights, N. Y.—Good points: simplicity of conception; length and openness of living quarters; good location of screened porch which would enlarge living area in summer; provision for rainy day play space in children's rooms. Criticized for lack of cross-ventilation in all three bedrooms; a rather stiff elevation toward the street.
PHYLLIS HOFFZIMER, Brooklyn, N. Y.—Good points: cross ventilation of living area; direct approach from carport to service area and house; accessibility to play yard from children’s rooms. Criticized for no service yard near kitchen-laundry; inadequacy of folding doors for winter use with none indicated for separating terrace from corridor; abrupt entrance into living area; lack of cross ventilation or breeze in children’s rooms.
A REALISTIC HOUSE FOR GEORGIA
PROGRESSIVE ARCHITECTURE - RICH'S, INC. COMPETITION

DAVID K. KUECHLE, Oakland, Calif.—Good points: extensiveness of living quarters when thrown together; usefulness of activities room for play or gay parties; enclosed garage with direct access to house; good massing and appearance. Criticized for attenuated shape of living area and its use for passageway; excessive length of house absorbs property; master bedroom opens directly on living room necessitating two bathrooms.
A REALISTIC HOUSE FOR GEORGIA

PROGRESSIVE ARCHITECTURE RICH'S INC. COMPETITION

AMES W. LARSON, Portsmouth, Va.—Good points: cross ventilation of all bedrooms and living room; entrance well related to service, living, and sleeping quarters; enclosed garage. Criticized for long corridor-like structure of garage and storage; abruptness of entrance into living room; depth of living room from court and view side.
A REALISTIC HOUSE FOR GEORGIA

PROGRESSIVE ARCHITECTURE
RICH'S, INC.
COMPETITION

LT. DAVID M. LEAF, Fort Belvoir, Va.—Good points: excellent plan; closed garage with good accessibility to living quarters; short bedroom hall with direct exit; extensive living area with cross ventilation at guest and dining corners; storage room at strategic point. Criticized for forbidden street appearance; lack of full utilization of breeze; small bedrooms made to look larger by indicating under-sized beds.
CARTER H. MANNY, JR., Michigan City, Ind.—Good points: compactness of plan for house proper; consolidation of living areas into sizable open space; shortness of bedroom hall. Criticized for open carport at entrance; excessive pergola a costly effort to improve appearance from front; location and narrowness of basement stairs; kitchen wider than necessary but too narrow to permit eating.
progressive architecture—rich's, inc. competition
a realistic house for georgia

GEORGE MATSUMOTO and GYO OBATA, Bloomfield Hills, Mich.—Good points: simplicity of plan; possibility of roofing in different ways if desired; handling of garage; spacious living room suite; possibility of eaves ventilation detailed. Criticized for cold, mechanical appearance; bedrooms too near street noises, particularly sleeping porch; main entrance rather distant from front.
DAVID G. MURRAY, Tulsa, Okla.—Good points: pleasant exterior appearance; protected circulation from carport to main and service entrances; pleasant openness of living areas. Criticized because children's rooms lack cross ventilation; bulk storage inadequate; food service across hall on social occasions; hall would appear long to persons entering house.
A REALISTIC HOUSE FOR GEORGIA

I. M. Pei, Cambridge, Mass.—Good points: very great charm of arrangement and appearance; use of interior courts would make for pleasant living; suppression of carport with sheltered connection to house. Criticized for smallness of courts necessitated by adoption of a relatively complicated scheme for this size of lot; excessive roof and lattice work; main living space pocketed; long halls in bedroom wing.
BARBARA and WILLIAM PFOUTS, Pittsburgh, Pa.—Good points: simplicity of plan and mass; openness of living area. Criticized for entrance directly into dining space; absence of fireplace; use of living room as passageway; use of one solid living room wall for storage cabinets; excessive distance from master bedroom to bathroom.
MENTION

A REALISTIC HOUSE FOR GEORGIA

PROGRESSIVE ARCHITECTURE RICH'S, INC. COMPETITION

JOSEPH ELLIOTT PHILLIPS, JR., Atlanta, Ga.—Good points: compact plan; service portion well related to dining area and family entrance; easy access from entrance to all parts of home. Criticized for necessity of passing through car shelter to enter; inadequacy of dining space; skewed corridor near master's bedroom; failure to plan for exposure to southwest breeze.
A REALISTIC HOUSE FOR GEORGIA

PROGRESSIVE ARCHITECTURE – RICH'S INC. COMPETITION

RICHARD R. RHODES, Balboa Heights, Canal Zone—Good points: simplicity of construction and massing; openness of living quarters and view; multiple-use area in place of bedroom hall. Criticized for lack of adequate cross ventilation; subdivision of bathroom; costly stone and lattice work; loss of space inside main entrance in conjunction with provision for coat closet.
JOSEPH SALERNO, New York, N. Y.—Good points: openness to prevailing breeze; adequacy of kitchen and provision of front lavatory; study and guest corner well related to living space; entrances well placed. Criticized because kitchen too open towards living room; children's bedroom away from breeze; unnecessary large glass areas in hall; inadequate fenestration on north; lavish use of stone; girl's room small and lacks closet.
Hugh Stubbins, Jr., Cambridge, Mass.—Good points: pleasant living quality of house itself; sheltering of entrance; possibility of throwing guest-study corner into living space; good placement of fireplace; compactness of sleeping area. Criticized for semi-open garage near street; excessive use of plot for relatively small home; costly stone wall essential to design; interior bathroom questioned by some.
LYLE REYNOLDS WHEELER, West Los Angeles, Calif.—Good points: original and striking appearance; subordination of parked car; utility of living quarters on two floors separating noisy and quiet activities. Criticized for lavish use of stone and other expensive materials and construction, including skylight glass, lattice work, and wide cantilevers; sloping windows considered tour de force.
LYLE REYNOLDS WHEELE, West Los Angeles, Calif.—Good points: possibility of very simple construction; good massing and expression; thoughtful planning. Criticized for expensive manner of handling carport; extensive formal paving near street; inadequate storage space; cramped study and guest provisions; lack of cross ventilation for sleeping rooms; capricious furniture treatments.
CHARLES D. WILEY, Chicago, Ill.—Good points: admirably simple construction; use of bedroom corridor as part of play space; extent and flexibility of living space. Criticized for somewhat forbidding appearance with sequence of shed roofs; excessive height and openness of car shelter; lack of front lavatory; questionable type and location of fireplace; placement of master's bedroom in relation to play room.
J. FLOYD YEVELL, New York, N. Y.—Good points: agreeable domestic character; opening of entire house toward prevailing breeze; pleasant shape of living room and its cross ventilation; enclosed garage and front lavatory; study-guest room gains space from hall. Criticized for tendency toward costliness; excessive paving more or less required for court; location of storage room; abruptness of entrance into living room.
A HOME FOR THE U.N.O.

The people of the world are determined that the United Nations shall succeed in organizing the first successful cooperative movement on an international scale. The architects of the world must see to it that this organization is housed in the finest group of structures that the best designers in the world can produce.

Progressive Architecture continues actively to urge an international competition, properly conducted, as the only reasonable method of determining who shall design the U.N.O. headquarters, and to make sure that the best possible design is accepted.

Cables and letters have been sent to the leading architectural magazines and the professional societies in the member nations of the U.N.O., asking them to support, in what ways they are able, the concept of an international professional competition. Within the United States, we have urged a definite stand in favor of such a competition on the members of the A.I.A. advisory committee. We have pointed out to President Truman, Edward R. Stettinius, Chairman of the American Delegation, and the proper U.N.O. committee the importance of a competition. We are printing the replies so far received on page 100.

Simply accepting the word "competition" will not be enough. The architects of the United States, with their established methods of fair, professionally conducted competitions free from political or individual pressure, have a definite responsibility to make sure that the result will be the most fit, the most progressive, the most handsome structures that our age can produce. There was a "competition" for the buildings at Geneva, too. Let's not fall into the same trap.

The most important immediate consideration will be the development of the program. This statement of needs must not be narrow, rigid, or inflexible. It must call for a headquarters unit which can grow and develop as the move toward international amity grows and matures. It must not
be a rigid description of a few buildings needed at the moment, but a description of those immediate requirements as part of an organic world capital capable of logical growth. With a program thus carefully studied, with a jury intelligently selected, with competitors chosen by the best possible means within each country, an international competition should succeed in producing a design which would rise above stylist and dated clichés. We cannot conceive of any other means of selection which would be free of design prejudices and political pressures.

Progressive Architecture will continue to do everything within its power to promote the right kind of competition. Every architect who feels the importance of the matter should make his position clear.

The Le Corbusier design, only one of the nine which could be built for the stated cost, was copied in many respects in the final building.

A monument to architectural compromise, the final building was not significant. It typified a world organization which also hesitated, compromised, and died.
I am very much in accord with the idea of a competition for planning the U.N.O. headquarters. Kenneth Reid is quite right; the problem is, who are the jurors, who is the professional adviser?

I suggest that the jurors should each be paid for, and work out, a solution himself, to be checked by the professional adviser or advisers before judging the actual competition. Any juror who does not fulfill the conditions of the competition should be cut and not paid.

This method would give us at least a jury which is thoroughly familiar with the problem (a desideratum which we nearly always miss, even with the "best" jurors).

Of course the projects of the jurors could not be entered in the competition or used later.

Marcel Breuer, A.I.A.
Cambridge, Mass.

Thank you so much for sending me the editorial on the U.N.O. selection of an architect. I believe the case is correctly and splendidly stated. I think an international nominated committee for invited participants might be helpful, but nobody—invited or not—should be excluded from participation at his own cost and risk.

Richard J. Neutra, A.I.A.
Los Angeles, Calif.

I am glad to hear that you favor a competition for the U.N.O. headquarters, and I am pleased to see PROGRESSIVE ARCHITECTURE taking the lead in the organization of such a competition.

Such a group of buildings should inspire a real religious movement in architecture. The religion would be democracy. It has never been expressed in architecture, but today I believe that there are a lot of us to whom such an opportunity is a real inspiration. I think that such an expression should be one of the requirements set forth in the program. As such, this program would be the means of teaching the functions and potentials of democracy which, after all, I believe is one of the functions of the U.N.O.

Alden B. Dow, A.I.A.
Midland, Mich.

I am very glad to have your views with regard to the buildings for the United Nations and I am making your telegram available to the appropriate officials of the United Nations.

Hathaway Watson
Assistant to Mr. Stettinus
Washington, D. C.

We are entirely in accord with your conviction that the only possible way an architect can be selected for the U.N.O. buildings is through a well regulated, well paid, and well organized international competition.

John W. Root, A.I.A.
Chicago, Ill.

May I add my own endorsement to your editorial suggestion that an international competition be held to select an architect for the permanent home of the United Nations Organization.

I believe that a preliminary selection of each national group of competitors could be held either by an open competition within each country or by government appointment. These chosen groups of competitors could then enter an international and final competition.

Morris Ketchum, Jr. A.I.A.
New York, N. Y.

Thank you for your letter of February 13. Curiously enough, my President, Sir Perry Thomas, wrote several weeks ago to Mr. Noel Baker, Minister of State, who was one of the British representatives at the United Nations Assembly, urging that the British Government should make representations for the holding of an international competition for the design of the headquarters, and we heard from Mr. Noel Baker saying that he would bring the proposal forward.

I will lay your letter before my Committee at their next meeting to see whether they think it is possible for us to take further action.

C. D. Spragg, Secretary
Royal Institute of British Architects
London, England

I have read with interest Ken Reid's editorial concerning the national competition for U.N.O. headquarters, and I think that basically it is very sound if the mechanics can be worked out satisfactorily.

It appears to me, however, that if each nation designates a limited number of its top-flight architects for its entrants it might end up with a creditable group of competitors with an inadequate jury. Possibly the most important part of the competition would be the determination of a jury of caliper and insight into architecture that would be most beneficial to the determination of the correct competitive results.

In this instance I might suggest for your pondering that a group of architects selected by each country be a pool from which both jurors and competitors be selected, the pool of architects, of course, to be the top-flight members of the profession in each nation, as suggested by Ken Reid.

In any event, I am wholeheartedly behind the basic premises outlined in the editorial for the forthcoming competition.

Ernest J. Kump, A.I.A.
San Francisco, Calif.

There can be no doubt whatever that an international competition is the only possible way for selecting the architect for U.N.O.—or should one say architects, about which more later. PROGRESSIVE ARCHITECTURE should be commended for having taken an uncompromising stand.

As to the details, a good deal more discussion will be necessary than can be even remotely indicated in a letter. But at any rate, it is time to start free-for-all discussion—and for land's sakes, let us not restrict it to professional journals. With all respect to PROGRESSIVE ARCHITECTURE and its fellow-publications, let us get it into the papers which are read in Congress and in the State Department.

Roland A. Wank, A.I.A.
New York, N. Y.
C. B. & Q. RAILROAD STATION, Burlington, Iowa

HOLABIRD & ROOT, Architects
PAMPHLETS, MANUALS


Mr. Schunk has written this pamphlet to serve as a guide to public library planning—an easy introduction rather than a detailed text. The responsibi-
lities of the members of the planning "team" (library board, librarian, and architect) are outlined and discussed with an eye to obviating the difficulties and errors of inexperience. "Selling" the project, library remodeling, and moving share equal consideration with the problems of planning new units.

The first section of the pamphlet presents pointers for the general development of the building project: section two presents pointers for detailed planning—service spaces, finishes, hardware, equipment, etc.

The appendix contains a very useful section of reference data. Over-all costs, book collection capacities, book sizes, floor areas, reading room dimensions, shelving requirements, lighting, heating, and ventilating requirements are specified and dimensioned.

A selected bibliography refers the reader to more detailed working texts for library planning.


Mr. Weitz, illuminating engineer with G. E., here presents a semi-technical discussion of the development and design of fluorescent lamps. Graphs and tables illustrate fluorescent lamp utilization of energy, efficiency losses, phosphor coating characteristics, current utilizations, lamp size efficiencies, and temperature and light variations.

TECHNICAL ARTICLES


Despite the belief of some building owners, managers, and painters that new "water-thinned" (resin-oil emulsion) paints are merely a wartime expedient, available information and test data show that there are many places in building decoration and maintenance where water-thinned paints can be used to excellent advantage.

This article reports that water-thinned paints have excellent tint retention qualities and may be satisfactorily applied to most surfaces without primers or sealers (metal surfaces should be oil paint primed). The new paints go on very quickly and easily and most brands are odorless and dry within the hour. These paints are sold in a variety of tints and finishes.

Mr. Faulhaber states that the water-thinned paints may be applied without fuss or muss over wallpaper, paint, or plaster, but in conclusion remarks that careful preliminary steps and surface preparation will assure a better job. No information is provided on the application of wallpaper or other finishes over surfaces painted with water-thinned paints.


Mr. Couzens, research engineer and author of a recent book on plastics, has a most refreshing attitude toward the loudly heralded "Plastic Age." Claiming that most promises made, and some have been made by Mr. Couzens himself, were grossly exaggerated, he makes a strong plea for cooperation between the designer and the producer. Plastics, have, to date, been classed largely as substitutes; Mr. Couzens asks that they be classed as plastics, not ersatz, and used as such by designers. They are, essentially, non-structural, and should be employed as auxiliaries, in which field they have enormous value. Structurally, laminates have been tested and proven successful and the speaker makes a strong point of the difference between true plastics and those materials which have been laminated with plastic adhesives.

In speaking about design of plastic articles, Mr. Couzens brings up the well-worn complaint about plastics looking "cheap." He suggests that such articles be thicker; that if an appearance of solidity is put into plastics there will be a gain in marketability.


This article briefly discusses and outlines testing procedures for the following properties of porcelain enamels: fusibility; thermal expansion; thermal shock resistance; adherence; hardness; and resistance to abrasion; opacity; acid resistance of vitreous porcelain enamels; alkali resistance of vitreous porcelain enamels; weather-resistance of architectural enamels.


Mr. Bevan emphasizes the point that fire grading is concerned with the establishment of standards, and, while he does not suggest the method of attainment of such standards, he does maintain that no adequate fire prevention codes can be enforced without a broad standardization within the building industry. By first categorizing fire hazards (classification of occupancy, personal, and community hazards), Mr. Bevan is able to set up a rather clear-cut set of necessary precautionary measures. Limitations set up for the various classes include height and size, and surroundings.

Editor's Note: The Materials and Methods section is abbreviated this month because the pages ordinarily devoted to technical articles had to be made available for presentations of competition results.

Incidentally, last month considerable space in these columns was given to a review of the first issue of a new French technical-architectural magazine, "L'Homme et L'Architecture." That was an excellent first issue!
MANUFACTURERS' LITERATURE

Acoustics
1-35. Burgess Acousti-Booth (Bulletin 459), 4-p. illus. folder on a doorless all-wood telephone booth equipped with sound-absorbing acoustic material; for industrial use. Burgess-Manning Co.
1-39. Zonolite Acoustical Plaster, 4-p. illus. folder on a sound-absorbing, fireproof plaster applicable with a trowel to old or new, flat or irregular surfaces. Universal Zonolite Insulation Co.

Airport Equipment
1-40. Announcing Bayley All Metal Prefabricated Tee Hangar, 4-p. illus. folder describing features of a prefab, low-cost, T-shape hangar of easy single or multiple erection. Suggested plan for small airport. William Bayley Co.
1-41. Low Cost Housing for Small Airplanes, AIA File 91-B, 8 pp, illus. Features wood hangars, suggested layouts for construction in single or multiple units, repair shops, large commercial hangars. Timber Engineering Co.

Air Conditioning

Air Treatment
1-42. AAF in Industry (Form 502), 32 pp, illus. Discussion of general dust problems in industry and suggested applications of air filters and dust control equipment. American Air Filter Co., Inc.
1-44. Disinfectaire Ultraviolet Germicide Equipment (Cat. 845), 20 pp. Brief discussion of germicidal ultraviolet electronically applied to air disinfection. Energy output distribution curves and tables of requirements. Data on and photos of types of units usable for upper and lower air disinfection, for air-duct installations, for industry and product application. Reference list. Art Metal Co.

Color Values in Vision

Concrete
3-61. Concrete Floors, 12-p. illus. booklet. General information on concrete floor construction; recommended specifications for heavy- and normal-duty floors; advantages of "Incor" 24-hour cement; test data. Lone Star Cement Corp.

Concrete Block

Connectors

Doors

Fireplace Equipment
6-61. Bennett Fireplace Supplies, 8-p. illus. booklet. Information on a fireplace-air heater unit applicable to any outside fireplace design; heating data; dimensions. List of fireplace accessories—grilles, dampers, spark curtains. Bennett-Ireland, Fireplace Div.
6-57. The Modern Fire Screen, Bennett-Ireland, Fireplace Div. Reviewed March.

Floors, Coverings

Floor Finishes
6-62. Roach Repellent Cement, 5-p. reprint of an article by P. O. Hazard on "Hubbellite" cupreous magnesite cement; tests and results of repelling effect on various kinds of roaches. H. H. Robertson Co.

Furniture
6-60. The Arnot Sleeper, Arnot & Co. Reviewed March.

Garage Equipment

Glass

Gypsum Products

Hardware
8-87. Solid Brass and Bronze Hardware, 16-p. illus. booklet (8x10½). General historical discussion of brass and bronze hardware; data on hardware designs by Sargent, Schlage, Stanley, Corbin. Copper & Brass Research Assn.

Heating Equipment
8-81. Ratings and Installation Guide (Form 869), Burnham Boiler Corp. Reviewed March.
8-82. Coleman Gas Floor Furnace, Coleman Lamp and Stove Co. Reviewed March.
8-75. Assured Economy in Automatic Heat (Form 242), Hershey Machine & Foundry Co. Reviewed March.
8-78. Preferred Unit Steam Generator (Bulletin 1006-B), Preferred Utilities Mfg. Co. Reviewed March.
8-79. A Practical Plan, for Incorporating Central Heating and Air Conditioning in a Proposed Suburban Apartment and Housing Development, Ric-Wil Co. Reviewed March.

Insulation
9-46. B-H No. 1 Insulating Cement, 4-p. illus. folder on a plastic insulating cement especially suitable for maintenance purposes. Baldwin-Mill Co.
9-47. PC Foamglas Insulation for Tanks, Towers, Ducts, and Breeching (G5711) 24 pp, illus. Information on "Foamglas"—its properties, uses industrially, thermal conductivity; details and specifications. Pittsburgh Corning Corp.

Kitchen Equipment, Commercial
11-99. Case Histories of Successful Mass-Fedding Operations, 14 pp, of plans for large-scale kitchens (hospitals, industrial plants, schools, Army and Navy buildings); list of cooking equipment used. G. S. Blodgett Co., Inc.

Laboratory Equipment
12-41. Laboratory Equipment (Bulletin 498), 10 pp, illus. Data on corrosions-resistant chemical stoneware; laboratory sinks, stands, outlets; table troughs, tops; pipe (fittings, traps, floor drains); diluting sump tanks, cement-asbestos pipe, ventilating equipment, paint, floors, etc. Dimension tables. U. S. Stoneware Co.

Library Equipment

Lighting Equipment
12-52. Lighting with Corning Fluorograde, 4-p. illus. folder on 2 types of lighting—incandescent and fluorescent—"waffle" panels and Pyrex round and square "Lenses." Sizes; specifications. Corning Glass Works, Lighting Div.
MANUFACTURERS' LITERATURE

PROGRESSIVE ARCHITECTURE—Pencil Points, 530 West 42nd Street, New York 18, N. Y.
I should like a copy of each piece of Manufacturers’ Literature listed.

We request students to send their inquiries directly to the manufacturers.

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PLEASE PRINT

NAME

POSITION

FIRM

MAILING ADDRESS

HOME BUSINESS

CITY

STATE

4/46

From General Electric Co., Lamp Dept. Reviewed March.
12-56. Super Service With Light (Y-546) (service stations).
12-57. Wall-to-Wall Lighting for Tomorrow’s Office (Y-547).

Marble
From Vermont Marble Co., reviewed March:
13-30. Individualizing the Store Front, AIA File 8-B-1.

Metals
13-31. Wrought Iron for Sewage Treatment and Disposal Installations, 28 pp., illus. Installations of sewage disposal plants. Technical bulletin on: heating coils in sludge digester tanks; gas handling; sewer outfall lines; air lines; distributor arms; waste heat boilers; vent stacks; bar screens; creek crossings, etc. A. M. Byers Co.
13-33. Expanded Metals, 22-pp., illus., on advantages and industrial uses of variations of sheet steel mesh: reinforcing, catwalks, carwalks, safety guards, storage bins, etc. Technical data, standard accessories, partition details, design and load test data. U. S. Gypsum Co.

Office Equipment

Point

Portions

Photomurals
16-82. From Blank Walls to Pictorial Epics with Kaufmann & Fabry Photomurals, 12-p. illus. brochure presenting installations of enlarged photos (available in color) for wall covering or décor. Kaufmann & Fabry Co.

Plastics
16-90. Plastics, The Story of An Industry, 36 pp., illus. (6x9). Non-technical resume of plastic progress: definitions, classifications, processing, manufacturing; information on the plastic industry, employment opportunities, list of educational facilities. Committee on Plastics Education, Society of the Plastics Industry, Inc.

Piping Equipment
16-85. Duriron Acid-Proof Equipment, AIA File 29581 (Bulletins 702), 12-p. illus. booklet on pipe and drainage equipment made of acid-proof, silicon iron alloy, especially manufactured to handle corrosive liquids and fumes. Duriron Co., Inc.
16-86. Better Drainage Made Easy, illus. folder (3¼ x 6) on perforated fiber pipe for septic tank filter beds, drainage, irrigation, foundation drains. Fibre Conduit Co.

Pump Equipment

Refrigeration, Industrial
From Worthington Pump and Machinery Corp., reviewed March:
18-23. Bulletin C-1100-B-19A.

Steel

Trims. Metal

Welding
23-59. Airco Arc Welding Accessories (Cat. 139), 12 pp., illus. List of accessories for all types of arc welding machines and operations (electrode holders, graphite electrodes, welding cable, cable connectors, cable lugs, etc.). Air Reduction Sales Co.
23-60. The Welding, Flame Cutting, and Flame Dressing of Wrought Iron, 24-p. illus. information bulletin. Data on plastic and fusion welding of wrought iron, fittings, physical properties of welds, etc.; tables, tests. A. M. Byers Co.

Windows. Wood and Metal

APRIL 1946 109
...THERE MUST BE A REASON!

Charting the progress of development of contemporary building materials and equipment is a most baffling occupation. One so bold as to essay it must be willing to winnow a huge mass of ridiculous chaff in hope of finding a few sublime grains; to hold in the back of a confused mind the current grim struggle for world power, speculating as to its effect on an American economy of which building construction is so important a part; to wonder at the tenacity with which we Americans cling to outmoded building codes and other practices when we have just seen—during a war emergency, of course—how much better a job we can do when freed from such restrictions; and eventually to arrive at a reasonable evaluation of the accumulation of developments in building products and their use. To compress all this into a few inches of type is a Herculean job in reverse, but we're stuck with it.

GRAINS OF REASON

With that off our chest, we report that certain logical trends are in the process of developing into action. Unnoticed in the whirl of news were a meeting on Sept. 27, 1945, of an A.S.T.M. Administrative Committee on Simulated Service Testing, and another of building industry representatives held at the National Bureau of Standards. Result: A proposal for formation of a new A.S.T.M. Committee on Methods of Testing Building Constructions (italics ours), for which L. J. Markwardt of the Forest Products Laboratory would be temporary chairman, J. H. Courtney of American Standards Association, temporary secretary.

A setup to test complete constructions, including as the proposal does the three primary elements of materials, engineering design, and fabrication details, should be heartily welcomed by code officials, building designers, and all others concerned in building. Both new and old developments could be assessed on the score of safety, and approved or disapproved, if such a procedure were in operation. Perhaps some day we will evolve a similar method of pre-evaluating a building's success in providing a healthful, amenable, happy, productive environment for the simple routines of living and working. Then, indeed, the millennium will have arrived.

We can't resist this: At the same time, A.S.T.M. received a recommendation from its Administrative Committee that the Society's present Committee on Fatigue of Metals be reconstituted as a Committee on Fatigue.

Gordon Lorimer's slide film on Modular Coordination is being shown at professional and commercial meetings and schools of architecture all over the country. (We presented an inadequate preview of it last January.) A staggering number of publications, associations, manufacturers, and individuals are enthusiastically backing the modular program. The need now is for a concise, simple explanation for use on drafting boards—nothing verbose or intricate because one of the virtues of Modular Construction is its simplicity. We come across increasing evidence of its acceptance abroad; just the other day a friend newly in from Sweden told us how many million kroner the Swedes expect to save on door construction alone if they can put across their ten-centimeter module; and the British technical press is following developments here closely. There's more than a hint that Modular Coordination may become an international standard.

SPIRALING COSTS

Coordinated or not, we hear a lot about the short supply of building materials. They are short—and, despite attempts at controls, expensive. According to American Builder, a St. Louis firm of real estate analysts found materials to be more costly last October than at any time since 1913, with the single exception of 1920, judging by costs of building a typical 25,300 cu ft suburban house. At the same time, labor costs involved were substantially higher than in any recorded year. Since October, if anything, both costs have probably...

We promise to be very restrained about this adaptation of Fiberglass batts and cloth to acoustic purposes in the ceiling of a business executive's office. The manufacturer's release which accompanied the photos gave explicit directions for pulling the pleated glass-cloth ceiling tight. Apparently the installing mechanic experienced some difficulty in getting a flat ceiling. However, the material is undoubtedly acoustically excellent.

The Glenn L. Martin Co. must be preparing to market many of the developments which it found satisfactory in producing war-planes. Recently it announced the impending release of a liquid photographic emulsion which can be brushed on any surface—an outgrowth of the war practice of photo-printing drawings directly on materials to be fabricated, called "photo-lifting." Metal, wood, cloth, leather, plastic—any material—can be transcribed to a girl friend's picture directly on the wall, or Pop can decorate the living room with homemade photomurals; bill posters may have to learn a new trade. Martin calls it the tintype up-to-date.
risen. In addition to the generally recognized factors behind the situation are two to which less attention has been paid: building codes and labor supply.

**AS TO BUILDING CODES . . .**

On codes, George N. Thompson, Chief, Division of Codes and Specifications, National Bureau of Standards, has stated that a need for cooperative action is generally recognized throughout the building industry, and that some kind of a national base, to which local codes can be compared, appears indicated. Rather than a "national" code (which could hardly encompass such diverse local needs as earthquake-resistance in California, cyclone-resistance in Kansas, and snow-loads in Maine) he suggests establishment of a reference base, which might take the form of national building standards. Illustrations are the excellent, recently issued Bureau of Standards publications, *American Standard Building Code Requirements for Minimum Design Loads*, and *American Standard Building Requirements for Masonry*. Others have been issued or are in preparation.

**. . . AND LABOR . . .**

On labor, the U. S. Chamber of Commerce is anticipating a shortage even

(Continued on page 111)

**THIS MONTH'S PRODUCTS**

**AIR TREATMENT**

Precipitrion. Electrostatic air cleaner for homes; refrigerator-sized unit installable with duct work of an air conditioning or central warm-air heating system; said to remove up to 90% of dust particles. Westinghouse Electric Corp., 40 Wall St., New York, N. Y.

Evapotrol Unit. Odor control and air freshening in enclosed spaces by mechanical or natural volatilization of "Airkem"—complex group of aromatic substances from plants and activated charcoal. (Not an air conditioner.) W. H. Wheeler, Inc., 7 East 47th St., New York, N. Y.

**COMMUNICATIONS SYSTEMS**

Home Inter-Com. 2-way inter-com appliance for home use, operates on 110 volts, A.C. or D.C. Executone, Inc., 415 Lexington Ave., New York, N. Y.

**DRAFTING ROOM EQUIPMENT**

S & J Quadrangle. Adjustable plastic triangle (4" x 11") with 8 drawing edges, pitch scales to 24/12, angles to 90°, nine or cosine functions. Stewart-Jackson Instrument Co., A. G. Bartlett Bldg., Los Angeles 14, Calif.

Layout Protractor. Ruled lines, on underside of quarter-inch beveled glass, in actual contact with layout, for fine readings, accurate marking. Universal Engraving & Colorplate Co., Inc., Engineers Specialties Div., 980 Ellicott St., Buffalo 8, N. Y.

**ELECTRICAL EQUIPMENT**

Aireon Circuit Breaker. 15-35 amp circuit breaker designed to keep electrical contacts approximately 1" apart when overload occurs; operable any position; front or back connection. Aireon Mfg. Corp., Kansas City, Kansas.

**FLOOR COVERINGS**


Floor Mat. Synthetic rubber mat for heavy duty use; available in color, corrugated or pyramid surface, with or without perforations. United States Rubber Co., Rockefeller Center, New York, N. Y.

**FURNITURE**

Arnot Sleeper, Model 12. Hotel sleeping unit, used as living-room divan, convertible by push button to full-size single bed; self-counter-balance principle. Arnot and Co., 200 W. Saratoga St., Baltimore 1, Md.

**GAGES**

Pressure Gage. New bellows type, low-range, bronze gage to indicate draft pressure or any low pressures of gases or liquids not corrosive to bronze. Type 1188 P ranges from 10" of water to 10 lbs pressure; Type 1188 V from 10" of water to 20" mercury vacuum. Manning, Maxwell & Moore, Inc., Bridgeport 2, Conn.

**HARDWARE**

Authitone "Suburban" Chime. Brass door-knocker with automatic, ivory chime box mounted on inside of door; no wiring, battery, etc. Auth Electrical Specialty Co., 422 East 53rd St., New York 22, N. Y.


Doormaster. Aluminum, spring-loaded doorstop, with bullet catch and rubber foot, for "rugged" use. Swallow Airplane Co., Inc., Wichita 1, Kansas.

**HEATING EQUIPMENT**

Heat-O-Meter. Celluloid calculator to measure radiation for steam and hot water heating systems. Heat-O-Meter, 424 West 42nd St., New York 18, N. Y.

**KITCHEN EQUIPMENT**

Rolling Door Cabinet. Enameled steel kitchen cabinet (18" and 24" widths) with roll-up

(Continued on page 112)
worse than the existing squeeze. In cooperation with the Society of Civil Engineers and other associations, the Chamber has prepared a pamphlet, Opportunity Unlimited, for distribution through local chambers to veterans and others interested in being trained in skills needed in construction. Miles Coleen, in a series of articles in Banking magazine early in the war years, pointed out the postwar labor shortage; now the U. S. Chamber says "... it has long been evident ... that, once building activity is under way in substantial volume, the next shortage will be one of skilled men, both professional and construction and building workers." A bit late, that statement; the labor shortage has been with us for some time. Ask any architect who's tried to hire a draftsman since V-E Day.

. . . . AND SUBSIDIES?

In view of these high costs, we cannot help but side with Wilson Wyatt in his fight for subsidies for building materials production. We need inexpensive houses. Materials and labor cost too much to make such houses possible. Cutting labor costs is impossible. Ergo, stimulate the flow of building materials until they become available, at low cost, to consumers. The forces which, professing sympathy for houseless veterans and others, nevertheless cannot see the validity of such direct reasoning, have successfully blocked Wyatt's straightforward appeal for materials subsidies. But Wyatt is a resourceful man. There are probably indirect ways of attaining the same end; in spite of Congressional defeat, in spite of recantation by the National Association of Home Builders of its endorsement of the subsidy idea, he will find a way.

FOR A CLEANER WORLD

Westinghouse, through Automatic Laundry Distributors, Inc., is pushing a new, coin-in-slot, automatic, Laun-dromat-equipped planned laundry for apartment houses. A.L.D., Inc., has had some years of experience; now, with Westinghouse backing, it has offices in a few key cities and plans to license operators in many others. Under the usual agreement the landlord provides space, rent-free, in consideration for the additional service provided for tenants; A.L.D. pays installation, maintenance, and current costs. Another, older outfit, Telecom, Inc., offers a similar service.

door, 2 shelves, fits under regular wall cabinet; does not interfere with counter below. Mullins Mfg. Co., Warren, Ohio.


Electric Ranges. New line with 5 heat-control positions; also combination fuel-electric model for room heating as well as cooking. Westinghouse Electric Appliance Div., 306 Fourth Ave., P.O. Box 1017, Pittsburgh 30, Pa.

Home Freezer. Upright home freezer with front and inner sectional doors; to be available in 6, 16, and 25 cu ft models. Westinghouse Electric Appliance Div.

Home Refrigerator, B-7. Increased frozen foods storage capacity, adjustable shelves to hold new square milk bottles; other efficiency innovations. Westinghouse Electric Appliance Div.

Dishwasher. New automatic design, capacity increased 1/3 over prewar models. Westinghouse Electric Appliance Div.

LAUNDRY EQUIPMENT

Laundromat, Model 3-B. Portable automatic washing machine, self-draining and draining, adjustable for 60" to 160" F water temperatures; washing time control. Westinghouse Electric Corp.

LIGHTING EQUIPMENT

Fluorescent Fixtures REC-240, 340, 440, 2, 3, and 4 light recessed, hinged fixtures featuring "telescopic" frame fitting flush to any uneven ceiling. All-Bright Electrical Products Co., 391-75 N. Kedzie Ave., Chicago 18, Ill.


Guth PFC-100, 4' white plastic diffuser reduces brightness 30% but is more efficient (82% T.F.) than glass diffusing panels; can be snapped on 40-watt (T-12) fluorescent lamps. Edwin F. Guth Co., 2615 Washington Blvd., St. Louis 3, Mo.

Luminaires 3003, 3004. Commercial, for 2-40 and 4-40 watt lamps, surface or suspension mounted: 48" x 5 7/8" x 12"; Tulamp ballast, 110-125 V., 60 cycles A.C. and higher. Mitchell Mfg. Co., 2525 Clybourn Ave., Chicago 14, Ill.

LOAD TRANSPORTATION

Small Power Truck. For lifting and transporting loads to 3,000 lbs in limited areas; equipped with horizontal non-swivel boom. Elwell-Parker Electric Co., 4205 St. Clair Ave., Cleveland 14, Ohio.

Fork Attachment for Power Trucks. New fork and ladle attachment for industrial trucks, for quick and safe transport of hot or cold materials. Elwell-Parker Electric Co., 4205 St. Clair Ave., Cleveland 14, Ohio.

Handy-Roaster. Light, steel production tool to fit any manufacturing process requiring lifting and transporting of tools and material; mounted on roller-bearing wheels. Lewis-Shepard Products, Inc., 245 Walnut St., Watertown, Mass.

PLASTICS

Marvinol. Elastol polyvinyl resin which, when compounded, has chemical resistance, wearability, is waterproof; will vary from rigid to rubbery state; has complete color range. Now marketed in white powder form for fabricators and converters. Glenn L. Martin Co., Baltimore 3, Md.

PLUMBING EQUIPMENT


Pipefitte-strict. Compound in stick form for lubricating and sealing pipe joints. Withstands gasoline, oil, butane, Freon, air, water, acid, brine, etc.; vibration, temperature changes, pressure, etc.; prevents rust. Lake Chemical Co., 607 N. Western Ave., Chicago 12, Ill.

REFRIGERATION EQUIPMENT

Farm and Home Freezer. Capacity 12½ cu ft; dimensions 28½ x 36 x 63". Ben-Hur Mfg. Co., Milwaukee 12, Wis.

Blowers for Low Temperature Cooling. New line of steel-housed cooling blowers equipped for different air speed velocities, for use with all refrigerants. Rempe Co., 340 N. Sacramento Blvd., Chicago 12, Ill.

SEALANTS

Firsto. Wood sealer and self-wood hardener; resin-and-aliq product for preventing face checking, for laying "wild" grain, for providing even foundation to keep grain from showing through finishes. United States Plywood Corp., 55 West 44th St., New York 18, N. Y.

VALVES

Hazzock Weldvalve. New lightweight, high-pressure steel valve in gate, globe, angle designs, 600-2500 lb standards. Manning, Marcell & Moore, Inc., Bridgeport 2, Conn.

WALLPAPER

Wallpaper With DDT. Ready-to-paste cedar closet wallpaper with top coating containing 5% active DDT insecticide. Triniy Co., Inc., Merchandise Mart, Chicago, Ill.

WATER RESISTANCE


WELDING

Airo 312 Electrode. All-position mild steel electrode for preventing underbead cracking in welding hardenable steel. Air Reduction Sales Co., 60 East 42nd St., New York 17, N. Y.

WINDOWS

American Home Metal Window. Residential casement sash, "packaged" unit, glazed or unglazed, prefinished with wood surround and exterior trim, installable in 5 min. Automatic operators; 100% venting. Snap-on metal storm sash, inside screens, space for Venetian blinds; can be cleaned from inside. Mesker Brothers Iron Co., 424 S. 7th St., St. Louis 2, Mo.
Ordinary glass can be subjected to two types of treatment to increase its strength and offset its brittleness. One process is lamination with sheets of transparent plastic, which produces safety glass; and the other is heating the glass, which produces tempered glass. Tempered glass can be incorporated in safety glass, but safety glass cannot be tempered. Both products have been widely tested in civilian use, and bullet-resisting glass has been further developed for military purposes during World War II.

SAFETY (LAMINATED) GLASS

DESCRIPTION. All types of safety glass (including bullet-resistant, for which see below) consist of multiple layers of glass bonded together with controlled heat and pressure to interlayer of transparent plastic. Safety glass, in common trade practice, ordinarily has two layers of glass, one of plastic; bullet-resisting glass has more than two glass layers. The glass layers may fracture, but the splinters or granules will ordinarily adhere to the plastic membrane instead of flying off. With the comparatively recent introduction of improved plastics and new methods of combining the materials, most types of safety glass now available will "dent" rather than puncture under impact at reasonable velocities.

Physical characteristics and properties are tabulated elsewhere on this sheet. In most respects, the properties of safety glass are the same as those of homogeneous glass of the kind used in the glass laminations, except that, due to the plastic layer, safety glass will withstand prolonged exposure to high temperature (max. one hour at approx. 175°F, or longer at approx. 150°F). In some types of safety glass, the plastic layer is held to the minimum thickness that will fulfill its function—a few hundredths of an inch. The plastic used is a tough, transparent, stable polyvinyl plastic, which is resistant to strong acids and alkalis, and which will not support combustion. Maximum sizes available in the various thicknesses vary according to the manufacturer (see table) and are governed primarily by the maximum flat dimensions of the sheet plastic interlayer. However, larger sizes can be obtained by butt-joining the plastic.

Glass used in safety glass may be picture-framing quality, single or double strength glazing quality, or various thicknesses of plate glass. Combinations of single and double strength are also available as a standard product. On special order, safety glass may be obtained with one or more glass laminations tempered (see below). Bent safety glass may be obtained, but is comparatively expensive because each layer must be bent individually (or in pairs) before lamination. Greater tolerances than normal are required. Bends are limited to dimensions and types available in the particular kind of glass from which the safety product is made. Bent safety glass is obtainable in sizes whose projected area or dimensions do not exceed those of the flat safety glass.

USE. Depending on the quality selected, safety glass is useful for glazing automobiles, airplanes, railroad cars, buses, etc.; for air-conditioned prestigious buildings; for all purposes subject to impact hazards, such as glazing for toll booths, protective shields or glassing in laboratories, pressure chambers; for garage glasses not subject to excessive temperature; for animal cages in zoos or aquariums; and for glass-top tables, other furniture, screens, doors, windows, etc.; particularly when there is likelihood that glass breakage might cause physical injury.

Safety glass may be worked in shop or field (cut, drilled, ground, etc.) with little difficulty if manufacturer’s directions are followed. However, safety glass containing tempered glass cannot be worked after manufacture (see “Tempered Glass”). Ordinary glazing putty or mastic cannot be used with safety glass because it will affect the plastic adversely. Special compounds and sealings are used. For unusual conditions consult manufacturers.

“FLEXSEAL” is a special laminated safety glass produced only by one manufacturer. It consists of two panes of glass with, between them, a much thicker, tougher layer of plastic than ordinary safety glass contains. The plastic layer is purposely larger in extent than the glass, so that a plastic rim surrounds the product. This plastic rim may be any desired thickness and may be machined to any desired contour; the rim may be clamped into the channel or other frame, and, being

<table>
<thead>
<tr>
<th>Kind of Glass</th>
<th>Total Thickness</th>
<th>Thickness Tolerance</th>
<th>Max. Area Per Light*</th>
<th>Not Wt. Per Sq Ft</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thin (photo)</td>
<td>5/32&quot; x 1/32&quot;</td>
<td>1.62 7 sq ft</td>
<td>1.75</td>
<td></td>
</tr>
<tr>
<td>Single</td>
<td>3/32&quot; x 1/32&quot;</td>
<td>1.62 7 sq ft</td>
<td>1.75</td>
<td></td>
</tr>
<tr>
<td>Combination</td>
<td>5/32&quot; x 1/32&quot;</td>
<td>2.63 11 sq ft</td>
<td>2.64</td>
<td></td>
</tr>
<tr>
<td>Double</td>
<td>7/32&quot; x 1/32&quot;</td>
<td>3.00 15 sq ft</td>
<td>3.08</td>
<td></td>
</tr>
<tr>
<td>Plate</td>
<td>3&quot; x 1/32&quot;</td>
<td>3.00 15 sq ft</td>
<td>3.34</td>
<td></td>
</tr>
<tr>
<td>Heavy Plate</td>
<td>4&quot; x 1/32&quot;</td>
<td>3.00 15 sq ft</td>
<td>3.44</td>
<td></td>
</tr>
<tr>
<td>Flexseal</td>
<td>varies</td>
<td>40&quot; x 80&quot;*</td>
<td>varies</td>
<td></td>
</tr>
</tbody>
</table>

Note: All kinds consist of two laminations of glass, one of plastic. *
* Where two areas are given, upper figure is standard for Libby-Owens-Ford Glass Co., lower for Pittsburgh Plate Glass Co. ** Under special conditions, up to 80° x 100°. *** 20" x 40" if in multiple thicknesses. **** 20° x 40" if in multiple thicknesses.

Bullet-Resisting (Laminated) Glass

DESCRIPTION. Bullet-resisting glass is built up of more laminations than safety glass, and the glass employed is plate; otherwise its characteristics are those of safety glass. Research by the Libby-Owens-Ford Glass Co. (Aluminum Technical Bulletin BS-62, L.O.F) indicates that “unbalanced” laminations, in which a thicker layer of glass is used for one interior lamination, will provide maximum protection for a given over-all thickness provided the thicker layer is near the outside of the unit. For instance, a typical unbalanced unit has individual lights 1/4", 1/4", 1/4", 1/4", 1/4", 1/4", 1/4", 1/4".
BUILDING PRODUCT FACTS

HIGH-STRENGTH GLASS (cont'd)

1/4", 1/4", 1/4" thick, made from outside (source of danger) to inside; the resulting glass would be nominally 1 1/2" thick. The same report states that, for any given over-all thickness, the resistance to penetration decreases as plastic is substituted for glass; in other words, for resistance to the impact of a bullet, the plastic films must be as thin as possible. Thin glass is used for outside layers; this reduces the amount of glass splintering or dislodgment off the inner surface due to bullet impact.

Transparency, or visible light transmission, varies from 70% to 85%, depending on amount and type of glass and plastic contained in the assembly. Bullet-resistant glass should satisfac-
torily withstand temperatures as low as minus 40C, hot, humid air, and ultra-violet radiation without cracking, separation of pieces, or formation of bubbles in, or dissolution of the plastic interlayers. Bent bullet-resistant glass is obtainable in cil-
drical sections with a minimum radius of 15" and a height between 60 and 90 degrees of arc, depending on radius and thickness. Spherical or two-way bends are not yet obtainable. Thickness of individual glass layers should not exceed 1/4" if glass is to be bent.

Use of tempered or semi-tempered glass does not improve bullet-resistant glass; stresses in a bullet impact are too high and too concentrated.

**TEMPERED (HEAT-TREATED) GLASS**

**DESCRIPTION.** Almost any type of glass (excepting such products as laminated safety glass and wire glass) may be tempered. The process consists of reheating the manufactured product almost to the softening point and then chilling it sud-

<table>
<thead>
<tr>
<th>TEMPERED GLASS—Properties: Compared with Plate Glass</th>
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<tbody>
<tr>
<td><strong>Property</strong></td>
</tr>
<tr>
<td>Tensile Strength (Mod. of Rupture)</td>
</tr>
<tr>
<td>Strength (Rupture)</td>
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<tr>
<td>Hardness (Moh's Scale)</td>
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<tr>
<td>Heat Resistance (Average temp. diff. at ruptured end)</td>
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<tr>
<td>Impact Resistance (Critical height for dropping)</td>
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<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Max. Load</td>
</tr>
</tbody>
</table>

*Regardless of superficial area, the greatest uniformly-distributed load which any square inch of glass is capable of supporting on all 4 sides, will support. Strength of glass varies as the square of the thickness. Strength of a square pane may be obtained from the formula:

\[
P = \frac{3M^2}{A S}
\]

in which \( P \) = pressure in lb/sq. in., \( M \) = modulus of rupture, lb/sq. in., \( A \) = glass thickness, in., \( S \) = factor of safety, usually 20 for higher loadings, 5 for lower, including wind.

**USES of tempered glass include frameless entrance doors, partitions subject to reasonable impact or thermal shock, port-
holes, gage covers, shelving, furniture tops, showcases, enclosures in zoos and aquariums bath struders, stair rail, kick plates, institutions such as hospitals, jails, or asylums; and for steel structures where high or suddenly changing temperatures are encountered, such as fire screens lamp covers, sterilizers, cook-
ing ovens, etc.

**SPECIAL CONSIDERATIONS.** Because any kind of working subsequent to tempering would rupture the stressed skin, special shapes, drilling, cutting, decoration, etc., must be submitted to the manufacturer for approval and execution in advance of tempering. Tempered glass is obtainable in circles, squares, rectangles, curves, special shapes pre-cut to pattern. It can be sandblasted providing the design is simple and the depth of cut is limited to 3/4" maximum; complicated designs must be approved by the manufacturer. Sandblasting weakens the product somewhat and tends to increase bow, particularly if on one side only.

Holes (circular) must have a diameter at least equal to glass thickness up to 1/2" thick, or 1/16" greater than glass thickness over 1/2" thick. Minimum width of lights containing holes is 8 times glass thickness. Distance from edge to rim of hole must be at least 3 times glass thickness up to 1/2" thick; 4 times if over 1/2" thick. Holes near corners must have nearest edge at least 6-1/2 times glass thickness from tip to corner. Non-circular holes must have rounded corners, radius at least equal to glass thickness. Requirements for large or numerous holes, and for unusual notches, cutouts, etc., should be submitted to the manu-

**SOURCES OF SUPPLY**

Abbreviations in the list below refer to the following: American Window Glass Co., Pittsburgh, Pa.; Libby-Owens-Ford Glass Co., Toledo, Ohio; Pittsburgh Plate Glass Co., Pittsburgh, Pa.; Blue Ridge Glass Corp., Division of Libby-Owens-Ford.

**Trade Name**

**SAFETY GLASS**

| 5/32" | Hi-Test Thin Safety |
| 7/32" | Hi-Test S.S. Safety |
| 1/4" | Hi-Test Combination Safety |
| 1/4" | Hi-Test Safety Plate |
| 1/16" | Hi-Test Heavy Safety Plate |

**BULLET-RESISTING GLASS**

| Armor-Lite | 3/4" to 2"—Bullet-Resisting Glass |
| 1/2" to 1 - 1/8"—Super Multiplate |
| 1 - 1/2"—Hi-Resist Multiplate |
| 3/8"—Hi-Power Multiplate |

**TEMPERED GLASS**

| Hercutile | Semi-Tempered |
| Secure | Tut-Flex |

**Manufacturer**

Libby-Owens-Ford Pittsburgh, PA.
Libby-Owens-Ford Pittsburgh, PA.
Libby-Owens-Ford Pittsburgh, PA.
Libby-Owens-Ford Pittsburgh, PA.
Libby-Owens-Ford Pittsburgh, PA.
American Window Gr.
American Window Gr.

---

*Dimensions indicate nominal thickness.*
Adlake Aluminum Windows offer many advantages for so little more. Elimination of excessive air infiltration, finger-tip control, no warping or sticking—thanks to an exclusive combination of nonmetallic weatherstripping and serrated guides. What's more, they're beautifully designed for lasting architectural appeal and efficiency. We believe you'll find it well worth while to get full information about Adlake Windows before specifying or detailing any window.

THE ADAMS & WESTLAKE COMPANY

ALSO WINDOW MAKERS TO THE TRANSPORTATION INDUSTRY

ESTABLISHED 1857   ELKHART, INDIANA   NEW YORK • CHICAGO
Future changes in laboratory layout easily possible with these
Johns-Manville Walls · Ceilings · Floors

ACOUSTICAL CEILINGS—With high coefficients of sound absorption and light reflection, Johns-Manville Acoustical Ceilings are proved aids to concentration and working efficiency. Demountable units give ready access to wiring, etc., in the suspended space, and allow quick relocation of the ceiling if desired. An exclusive Johns-Manville patented construction system permits interchangeability of flush-type fluorescent lighting and acoustical units.

MOVABLE WALLS—The keystone of flexibility in Unit Construction is the J-M Transite Wall. Can be disassembled and relocated as needs require. Made of fireproof asbestos and cement, practically indestructible materials, the movable panels form rigid, double-faced partitions, 4" thick. Can also be used as interior finish of the outside walls. Removable Transite panels permit ready access to concealed pipes and wires. Special brackets and supports, easily attached to the steel studs, provide unlimited flexibility in arranging shelves, piping services, etc.

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For Research Laboratories
in the expanding new world of Industrial Science

Johns-Manville Unit Construction provides flexibility
to meet ever-changing needs...

Since industrial progress depends more and more on scientific research, architects today are faced with the problem of developing techniques of laboratory design.

Johns-Manville Unit Construction offers a system of flexible construction—walls, ceilings, floors—especially designed to accommodate laboratory needs and facilities.

The system makes possible endless revisions of space use! Laboratories can be economically rearranged, enlarged, reduced, or even relocated according to the inevitable shifts and changes of future needs.

Three Johns-Manville materials are combined in Unit Construction:

1. Movable Walls... 100% salvageable. Made of fireproof asbestos-cement Transite panels, easily erected or dismantled, yet endowed with all the qualities of permanent construction. Laboratory service piping may either be concealed in the Transite Walls or carried externally on demountable brackets which are supported by the steel studs of the wall construction. Shelves can be located where needed by use of a unique type of bracket.

2. Acoustical Ceilings... reduce noise. Demountable units can be easily taken down and relocated.

3. Colorful, Resilient Floors... quiet, long-wearing, comfortable underfoot. Small units permit easy extension or repairs.

These component parts are integrated into a single inclusive system, Unit Construction. You write one specification... place undivided responsibility on one manufacturer.

Yes, the finest achievements of Johns-Manville research can now benefit Research Laboratories themselves!

Send for the complete details of this important advance in laboratory design and construction. (Separate brochures also available for each of the three materials in Unit Construction.) Write Johns-Manville, Dept. PA-4, 22 E. 40th St., New York 16, N. Y.
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A HOLLOW WALL
THAT IS COMPLETELY
HOLLOW!

GOLD BOND SYSTEM
WITH NEW METAL BASE
INCREASES ADAPTABILITY
AND DECREASES COSTS!

THIS new Gold Bond Hollow Wall System
is highly recommended for fire resistant
partitions where service piping and air ducts
are to be concealed and where special con-
sideration must be given to sound insulation.

The patented and exclusive Gold Bond Ceiling
Runner and Metal Base Clips compensate for
irregularities in floor and ceiling construc-
tion. This system being completely hollow has
no cross ties or obstructions to interfere with
installation of service piping. The Gold Bond
Hollow Wall offers an underwriter’s fire rat-
ing of one hour and sound insulation rating
of 49.5 decibels.

Another advantage—and this is of vital
importance to architects—all materials needed
in the construction of this system are Gold
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There is a new trend in store design

Alfred Shaw’s conception of a Café Bar...

"The sidewalk café and the indoor bar are unified by the triangular shaped Plate Glass partition, through which the decoration carries from the outside to the inside areas. The exterior material is gray Carrara Glass.

"The interior is divided into two spans, and the center partition of mirrors encloses structural columns.

"The unique feature and unusually interesting use of glass in this suggestion is the repeated conservatory design, with large growing plants prominently displayed. The tops of these units, as well as the sides, are of glass, so that light is admitted through triangular openings, giving a brilliant illuminating effect."

You can safely recommend “Pittsburgh” Products to owners of retail properties. An infinite variety of design is made possible by versatile, adaptable Pittsburgh Glass and Pittco Store Front Metal.

In 21 leading retail magazines, Pittsburgh Plate Glass Company advertising is encouraging merchants to build new sales-pull into store fronts and interiors, and recommends that they consult their architects now about modernizing plans.

A nation-wide system of “Pittsburgh” branches and dealers assures you of prompt and helpful service.

SEND FOR THIS FREE BOOK

It contains 41 designs, submitted by leading architects, for stores, restaurants, service stations, theatres, etc. Every architect, designer and student will want to own this up-to-date reference book of ideas for building or modernizing retail stores. Send the coupon for your free copy of “There is a New Trend in Store Design.” It will be sent without obligation.

Pgh. Plate Glass Company

Please send me, without obligation, a free copy of the book, "There is a New Trend in Store Design."

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City... State...

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ACME BREWERIES built

SAN FRANCISCO, CAL.

THE EASIEST THING FOR A BUILDER TO FORGET...

Floors are what a building is for!
The owners wanted to anticipate that this building might have a change of occupant. Change is always a threat to any building. Q-Floor, however, takes all the bugaboos out of changing electrical layouts.

The steel cells of Q-Floor are crossed over by raceways. This construction makes it possible to set up an electrical outlet on any six inch area of floor. And it takes an electrician literally only a few minutes. No trenches. No mess.

The floor under the Acme machinery could sprout a hundred office-type outlets overnight. The arrow points to hand-hole to main raceway. Any six inch area of the floor can be tapped for an outlet. You avoid all the grief of anticipating partitions and outlets when you specify Robertson Q-Floor.

AND THEY MADE POSSIBLE FOR R. J. H. FORBES, contractor

20 to 30% reduced building time

Construction features of Q-Floor appeal to every client, also. Two men can lay 32 sq. ft. in half a minute and the Q-Floor immediately becomes a clean, dry, noncombustible platform for all other trades. From thousands of installations, Q-Floors have been shown to reduce building time 20 to 30%. Time saved is easily interpreted to your client as money saved or earlier revenue.

The noncombustible nature, the light weight, the lack of forms and shoring to cause accidents and fire are qualities which provide you fast construction with a variety of financial advantages that can be best summed up as greater client satisfaction. And don't have any illusions about cost. Q-Floors are made to sell and they sell well. Cost is right in line. For details, call a Robertson representative. For Q-Fittings see a General Electrical construction materials distributor.

H. H. ROBERTSON COMPANY

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Pittsburgh 22, Pennsylvania

Offices in 50 Principal Cities
World-Wide Building Service

APRIL, 1946 121
Louis Justement sees the picture whole. He knows that no city plan can go beyond the economic limitations that beset its acceptance, and he also knows that any plan which wholly accepts those limitations is not worth anyone's consideration. He discusses in detail the working out of the following essential elements, the adoption of which in some form is a precedent to action:

1. Continued adoption of urban redevelopment laws by the various states and amendment of existing laws to contain the following provisions:

2. Redevelopment shall not be undertaken in a haphazard, piecemeal fashion but shall be done on the basis of a master plan for the entire city.

3. In order to facilitate the execution of such a plan, the municipal authorities will determine the areas to be redeveloped and the order in which they shall be reconstructed.

4. The assemblage of land for redevelopment will be undertaken by the city or a municipal realty corporation acting on behalf of the various municipal corporate units within a metropolitan urban region.

5. The land thus acquired by the municipality will be leased to private developers. It may be sold only in the case of projects consisting entirely of individual houses for sale.

6. When such land is leased, the term of the lease shall not exceed fifty years.

7. In order to permit adequate city planning without unnecessary disturbance of existing property relationships, the condemnation laws shall be modified as follows: The price paid by the city for land and existing improvements shall be based on the fair market value of such land and improvements as of the date the legislation implementing a general urban reconstruction program is approved.

8. In view of the time that may elapse between condemnation of individual properties and the start of reconstruction, valuations may be made in advance of actual acquisition by the municipalities; in any event, due allowance shall be made for fluctuations in the purchasing value of the dollar as well as for depreciation of improvements.

Thus condensed there is nothing that is particularly new: The virtue of the book lies in the extremely well-reasoned analysis which supports the need for these steps, the reasons for the need, and the results of getting them. The chapter on "A Retirement Plan for Buildings" is the best "time zoning" proposal I have yet seen; the series of suggestions for legislation and administration are forward looking and provocative. There are many things to disagree with, as there should be; but disagreement can be based on principle and logic, and not on emotion.

Nor do I want to overlook the fact that this book is written by an architect of wide experience with business and government, and that it therefore comprehends the physical world in relation to those basic facts of our economy which underlie all city-planning efforts: the multiple ownership of land and the need for control, the complications of the tax structure, the impact of subsidy, costs, and the "business cycle." Justement's point is that these are the things, as they affect city planning, we must resolve, and his program is aimed at their resolution in relation to city planning. Planning can then become a reality instead of merely a statistical collection of difficulties without solution. His "case study" of Washington

(Guaranteed Air Distribution)

Data based on complete tests enable us to recommend exactly the right outlet for any condition and GUARANTEE results. You are assured of uniform, properly diffused air of the desired temperature at specified level, with required air movement and elimination of hot, cold, or draughty areas. For further details, see your Barber-Colman representative.

(Continued on page 124)
Hard to believe, but this beautiful lawn is actually the roof of an apartment garage! It's a modern roof, covered with luxurious grass and shrubbery. Putting valuable roof space to work is typical of the new architectural trend—not only as garden areas but for practical utility as well. Sunny, safe areas for schools; storage and heavy traffic roofs for factories—yes, even roof parking lots are a practical possibility today, not just something to be hoped for tomorrow!

Proved-in-performance specifications—worked out by Ruberoid engineers—are available now for all these recent roof developments. Ruberoid Approved Roofing Contractors, located in principal cities and towns, are ready to give you assistance in planning and executing them. No matter what type roof you may have in mind—Asbestos Felt and Asphalt, Coal Tar Pitch and Tarred Felt, or Asphalt Felt and Asphalt—call a Ruberoid Approved Roofer. His assistance, based on long experience and backed by a complete line of materials—all from the same source—assures you of the right roof for any job!

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FREE ON REQUEST!
REIEWS
(Continued from page 122)

presents a physical interpretation. We could not have his replanned Washington today, but we could have it tomorrow if we wished.
The hope this book is as widely read as it should be, by professionals and laymen. We are not going to rebuild our cities either into Road Town or The City of Light, nor are we going to rebuild them by street-widening and mere analysis. Justement indicates an approach to the compromise we must some day reach, a socially—and therefore economically and politically—ac-
ceptable framework for urban planning within which a creative imagination can find play. He makes it seem not altogether impossible. It is unfortunate that his plan studies of Washington, excellent as originals and so important to the second part of the book, are so incredibly badly reproduced.
HENRY S. CHURCHILL

FATHERLY PEP TALK
Architecture Arising. Howard Robert-
son, F.R.I.B.A. Faber and Faber, 25
125 pp. $2.50
The first impulse for a modern archi-
tect after reading this book would be to
rename it from an anagram of the title
and call it "Architectural Arsenic."
The opening paragraph gives the reader a clue to the author’s conception of contemporary architecture. He states,
"Even the most advanced and en-
lightened contemporary critics of archi-
tecture still, in the main, assess the merits of buildings on the basis of their external effect." That statement and
further expansion of it in later chapters of the book place the author in that
group of architects who consider con-
temporary architecture "just another
style." Even the most casually in-
formed student in any of our progress-
sive schools would take exception to the
above quotation and to many others
that follow.
Howard Robertson, the author of this
book, is an architect and educator of
some note in Great Britain. One of his
previous books, The Principles of Ar-
chitectural Composition, may be rec-
called as having some influence in this
country several decades ago. In that
book he attempts to set down rules
and formulae—the modern Vignola.
It is therefore not surprising to read his
new book and to find it mainly a fatherly pep talk to the young men en-
grossed in the modern movement in
architecture.
The author is conscious of the turmoil
going on in architecture and tries to
analyze it without understanding it
basically. He regrets that the client
must often make the difficult choice be-	ween a traditionalist and a modernist.
He dubs the architect as a man suffer-
ing from schizophrenia. He makes the
architect a tricker in styles—a pan-
derer. He believes it is necessary for
an architect to nail his flag to the mast as it is for a politician to make up his
mind early in life about basic ques-
tions. Robertson shows a lack of pro-
fessional integrity in his method of
making the client happy and his plea
leads to a prostitution of the profes-
sion. Rather than make the architect
a man of principles he would make him
a fence straddler, one who goes with
the wind. He does not realize that all
great and good things have been done
through the leadership of men who did
believe in basic questions and funda-
mentals. What has made America
great, if it has not been the fact that
its leaders have believed in the funda-
mentals of democracy and liberty? What will make the good architecture
if it is not that same devotion to funda-
mentals?
The book is dangerous because it is
filled with double talk and contradic-
tions. A superficial reading of the
stated platitudes could mislead the
reader into the belief that the author is
pleading for a progressive and dy-
namic architecture.
Such statements as "An artist who
works down to a low level of public
taste is not going to produce the best

(Continued on page 126)
Changing the Plant Layout?

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Frank Adam
ELECTRIC COMPANY

Makers of Busduct
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BOX 357, ST. LOUIS, MISSOURI

APRIL, 1946 125
that is in him,” and “The attraction of Le Corbusier is his new aesthetic, the plea for a contemporary expression based on the conditions and needs of the age” are, of course, sound advice. The illustrations for the text are often good and indicate that the author himself knows a good contemporary facade when he sees it, but his criticism and analysis of it show a lack of comprehension. His book states the terminology of the professional field but not the fundamental facts.

The good statements are negated by such tripe as “There is nothing against eccentricity, but if eclecticism is once admitted, it should be frankly recognized in principle as contributing to the richness of the architectural vocabulary.”

And, as he goes on to say, “But it is undeniable that there exists a school of contemporary designers whose reputations would scarcely survive the production by their drafting rooms of a building with arcaded fenestration.” On the contrary, there is no first-rate school of designers who deny any of the basic structural systems if they are used with honesty of expression and structural integrity, but to use the arch as a sentimental tour de force is contrary to the fundamental honesty of any good contemporary designer. Roberson overlooks that fact.

This book is not a wholesome book nor is it honest. It is, however, interesting in that it shrills the cacophonous death rattle of the eclectic school of architecture. He bitches his discussion of the basic problems of the architect. The evidence he uses to support his argument is suspect. The indictments are not valid.

Prof. Henry L. Kampfhoenfer, A.I.A.
University of Oklahoma

DELYED-ACTION BOMB


The publication of an English language version of Camillo Sitte’s book on City Building According To Its Artistic Fundamentals was long overdue. Eliel Saarinen (who contributes a note on the author to the present volume) had analyzed Sitte’s contribution to town planning rather thoroughly and perspicuously in his book, The City, and other critics and students have, according to their views, belittled or extolled the value of Sitte’s influence a half century ago. For the most part, however, architects and city planners of the century, if they even knew that such work existed, have been hazy about its argument.

In 1889 Sitte, a Viennese architect, disgusted with the stalitl formality and the lack of either taste or imagination in the city plan typified in Huynemann’s work, wrote his book which, as the translator says, “burst like a demolition bomb on the city planning practices of Europe.” His thesis was that the studied application of formal design rules to the planning and building of cities had forced a neglect of fundamental principles—those very principles, he claimed, which resulted in pleasant, naturally organized, socially useful cities in the classic period and in the middle ages.

Those principles for which Sitte was seeking, and in the defense of which he wrote his book, were, first, informality (as opposed to symmetry), second, the treatment of squares and open areas in the city plan as specific enclosed spaces (as opposed to considering them merely termini of formal avenues), and finally, a pleasant, as well as usable, arrangement of buildings which, he contended, would result from an “artistic” correlation of buildings aided by broken street fronts and bent axes (as opposed to the forced regularity of buildings planned on a rectangular street pattern).

It is easy to contend that Sitte’s observations were made at a time when neither skyscrapers nor automobiles had been conceived. It is also easy to point to signs of limited vision in his

(Continued on page 128)
Corbin Unit Locks chosen for Boys' Town building program

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REVIEWS
(Continued from page 128)

Theories of design (in his insistence on the use of arcades to "embellish" ornamental buildings, for example). Nevertheless, his conception of a city as a place in which to live happily, his recognition that details, if not principles, of city planning will change as social requirements change ("the principal architectural elements of cities have greatly changed since antiquity"), and his clear recognition that over-all planning is needed and that "under no circumstances should the building parcels be given over to the unrestricted use of the purchasers," but that "an obligation should attach to every parcel requiring development without essential departure from the established plan—these attitudes indicate a rational method of thinking about the building of cities which is as valuable today as it was in 1889. Ralph Walker contributes an introduction to the present volume in which he commends Sitte's emphasis on "human comprehension and scale," and Arthur Holden append a supplementary chapter devoted to an analysis of present-day usefulness of Sitte's principles, illustrated by possible improvements, had these principles been observed, in one specific instance in New York City, and one in Washington.

—THOMAS H. CREIGHTON

PARADOX REFLECTED

The war, which is now almost finished, has been a paradox from its very beginning to its end. It was foreseen and planned—it came unexpected and unexpectedly. It brought suffering and it brought alleviation (from unemployment). It was fought for and by democracy and the issue finally at stake for termination of hostilities was—monarchy. It killed and taught how to fight and defeat death. It destroyed and it caused planning. It broke off ties by force—reinforcing to greater strength the imperceptible and, thus far, unrealized ones. Its death, suffering, and destruction were at the same time growth, strength, and new beauty.

That, in very brief, is the background against which we see Mr. Bromberg's book Doenigmat Bouwen En Wonen ("Appropriate Building and Living"). This book, too, is paradoxical and, as such, typical of World War II. Written by a Dutchman in the Dutch language—unknown to most of us—it is published by a New York firm, printed, bound, and illustrated in the United States. Written during the war, it deals with what was then postwar housing in the Netherlands. Prefabrication sets the tone. The "pre" it speaks of in time of destruction, becomes the light and the solution for the "post," then not fully known as to conditions and needs.

The appearance of this book, however, is far from being pre-post-erous. It is of greater significance than the contents alone. The author and the publisher agreed that it would be nearly impossible to publish any new books in Holland during the first year of liberation. Total lack of paper and paper manufacturing facilities, as well as the absence of printing presses and heavy rationing of electric power, have postponed the distribution of much needed information for a considerable period in Holland and other countries. By the time it is resumed at normal capacity, many factors will have changed, particularly in the field of housing.

We may consider it a very hopeful indication of future trends that under such difficult circumstances a publisher can be found in an entirely different part of the world. Obviously, it points very strongly towards another factor in the abolishment of frontiers and international differences. In the future, the little notation "Printed in the U. S. A." may well become a weapon more powerful than atomic energy.

As to the contents of the book, it is not
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KINNEAR
ROLLING DOORS

(Continued from page 128)

only words, words, words. There are many illustrations. Upon this, one may reflect how much more internationally minded the eye is than the isolationist ear.

Both text and pictures deal with the various types of prefabrication and touch upon details of building construction which are superior to those commonly used in Holland. The prefabrication methods are closely tied in with the immediate needs of housing in the Netherlands after the liberation. At the time of writing, those needs came, I am sure, to the attention of the author in an indirect way, via underground channels. As such, it is of course written without complete knowledge of what was, and would be, on the drafting boards of the architects in Holland. Moreover, a correct analysis of the needs and demands must have been difficult under the circumstances.

The author assumes optimistically that the Dutch people will be open-minded toward new things coming across the Atlantic. Whether they will accept new ways for immediate housing relief (comfort), or whether they will prefer to bear somewhat longer the discomforts of the past five years in order to have things back in the “good established ways,” remains to be seen.

As a whole, the technical part—the “doelmatig bouwen,” “appropriate building”—is a good exposé of the best in prefabrication methods and could well serve as an elementary textbook on the subject, comparing newer and older methods in America and some other countries. The contemplated English translation will be valuable and usable on that basis. In its present Dutch edition, the compilation of photographs and sketches could well serve for a quick survey of the most important phases of the process.

In the second part of the book, Mr. Bromberg deals with the “living inside.” The contents are typical of his own way of working and of Dutch residential architecture. In a way, it contradicts the first part of the book where new ways of thinking in form as well as in methods and equipment were assumed to exist. There, prewar values are taken as a basic departure.

For many years immediately prior to the war, Mr. Bromberg was the leading designer of interiors in Holland. Much of his work was done for and with the wealthier owners of mansions and castles all over this minute but polished country. Eventually, his designs became the religion of the interior elite. Occasionally, of course, he directed some of his abundance toward the less prosperous homes in the form of publications meant to educate the middle classes in the field of comfortable living.
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Reviews

(Continued from page 130)

To make a long story short, when Mr. Bromberg came to the United States in 1939, he must have been thoroughly astonished by the number of comfortable realities in our medium priced homes. So he decided to do a little more educating of the unfortunates in Holland who have no knowledge of deep closets with light in them, or of two-way swinging doors between kitchen and dining room, or kitchens with planned work areas, or of the efficient use of a large room with built-in furniture.

Presenting these facts, many of which are merely correctly designed conveniences, brings out the need of realizing what can be done with a house in certain cases to make it more livable.

Because the people for whom this book is written plan to go back to prewar standards, it is a valuable and highly desirable, much needed expose of what may be called "minimum standards for simple living."

If, in the past five war years, new ways of thinking have finally found acceptance—imposed at first by force, later by necessity—it will be helpful in crystallizing that thinking and applying it to the building of homes. The future English translation will obviously have to be altered in some places but will prove as helpful to home planners in the less streamlined parts of our own country.

Johan C. Kromhout

"FORERUNNER" OF WHAT?


Cheaply printed booklets on home building are being rushed one after another in quick succession to newstands, drugstore racks, chain-store counters, everywhere. Such publications will probably be profitable for their publishers and more than probably will influence many small home planners.

The authors of Your Future Home Guide offer 50 house plans and colored elevations as a guide for the prospective home owner, real estate operator, and builder in making their needs more easily known to the local architect "for final preparation of working construction drawings."

The plans are given, for reasons not developed, such names as Honeymooner, Foremost, Package Cottage, Smart Set, Visionary, Bountiful, Meteor, Forerunner, Lady Forbes.

The whole is a discouraging collection of inferior draftsmanship and poor writing. It can hardly be expected to improve the present general poor esthetic standards of the low-priced home.

Lawrence E. Mawn

(Continued on page 138)
The Point is—

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REVIEWS

(Continued from page 134)

STRENUOUS HOBBY

Make Your Home Your Hobby. Walter J. Coppack, Antioch Press, Yellow Springs, Ohio, 1945. 92 pp. $1.50

The author intends that the ideas of this book and a few good tools be combined by a person of average mechanical aptitude to finish his own home in spare time. Necessary aptitude can be determined by tests; reference is made to the Revised Minnesota Paper Form Board. It is assumed that skilled workmen will have built the principal parts of the house.

The author, a registered engineer, has had practical experience as building contractor and as workman on several of his own homes. He writes with evident sincerity and his ideas are generally sound. They relate to such features as stair design, roofs, floors, foundation walls, windows, air conditioning, wall paper, sheet plaster, heaters, laundry drying rack, trash chute. The home can be a strenuous hobby!

Three of the author's house plans are described in a room-to-room tour: "Leaving the kitchen we cross the hall and go up the stairs landing near a large window. To the left is a peach-cobred tiled bathroom with shower on the left, next a small blue-green pappered bedroom with built-in dressing table with glass top and large mirror and with three large drawers on each side..." Specific instructions for building special features such as the dressing table are not given.

The photographs of the author's present home suggest that it is well constructed, but certain architectural gaucheries mar the design.

This book, in common with too many books on architecture and building, suffers from an evident lack of editing. The material needs reorganization, elimination of irrelevant and repetitions detail, addition of detail elsewhere. Some of the grammatical constructions will disturb the sensitive reader as much as construction inaccuracies or one-eighth inch flooring cracks rightly disturb the author.

LAWRENCE E. MAWN

PLANNING PAMPHLETS

Reviewed by

Davidson-Soell

Comparative Analysis of the Principal Provisions of State Urban Redevelopment Legislation. The National Housing Agency, Office of the General Counsel, 1600 Ege St., N.W., Washington 25, D. C., 1945. 74 pp., mimeo. (Also

(Continued on page 138)
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REVIEWS

(Continued from page 136)


Urban Redevelopment Legislation in the United States. A Comparative Analysis. Prepared by the American Society of Planning Officials, 1313 East 60 St., Chicago 37, Ill., 1945. 7 pp. $2.00


These comparative compilations on urban redevelopment by the ASPO and the NHA are supplementary surveys, best used together. They will facilitate reference to existing state urban redevelopment legislation. The ASPO arranged more than 75 provisions of redevelopment legislation and related them state by state in an easy-to-use seven-page table. On the other hand, the NHA’s study, which is more extended, classifies these statutes in three main groupings: (1) legislation intended to encourage private enterprise to assemble, clear, and redevelop an area; (2) legislation which places responsibility for assembly and clearance upon municipal bodies; and (3) legislation which places responsibility for land assembly and clearance upon the local housing authorities.

The ASPO also has prepared a summary of planning legislation adopted in 1944 and 1945 which brings up-to-date the society’s earlier report, Planning Legislation-1943. This compendium includes statutes on city, state, county, and regional planning, as well as urban redevelopment, zoning, airports, subdivision, housing, public works, roads, and parking.

PERIODICALS

Reviewed by MAUDE KEMPER RILEY

JOURNAL OF THE R.I.B.A.
66 Portland Place, London W. C. 1, England

DECEMBER 1945

What part architects played in the preservation activities of the British-American fighting forces as regarded its Monuments, Fine Arts, and Archives division, is told by Lt. Col. Sir Leonard Wooley, architect, in a paper delivered before an informal meeting of the R.I.B.A. in London.

Why protective measures were issued from High Command; why it was that damage to listed buildings was made a military misdemeanor; why armies were not always effective in protecting them; where architect-aid was of most value (principally after a town had been taken and emergency repair was in

(Continued on page 140)
PETRO SYSTEMS ARE

"first-rate in every way"

... the reason why another architect will continue to specify Petro in new building plans.

Expressing the opinion of an ever-growing number of architects and engineers, Mr. Fred A. Webster frankly acknowledges the significant economy, efficiency and simplicity of oil burning systems in industrial and commercial structures. He is equally frank in endorsing Petro Systems in particular... not only because of the excellence of Petro equipment but also because of the cooperation Petro engineers provide in carefully selecting such equipment and then coordinating it into a precisely engineered oil heating installation.

It is this service and painstaking attention to detail that is the architect's and engineer's best assurance of consistently reliable performance and economy for which Petro Systems are known and widely recognized.

Fred A. Webster, well known architect of Waterbury, Connecticut, has designed many outstanding structures in that city. In the past he has used Petro Burners in a number of industrial and commercial buildings. He expresses these ideas on Oil Burning Systems...

"Now that architects are planning the building of the future it seems to me that economy, efficiency and simplicity will be musts for the type of heating that will be used, and oil heating encompasses all of these requirements... I will continue to specify Petro Systems for they are first rate in every way, and Petro engineers are always ready to cooperate in the selection and installation of the right equipment in its proper place."

INDUSTRIAL MODELS: #5 or #6 fuel oil; automatic, semi-automatic or manual operation; 8 sizes to 450 bhp. "Thermal Viscosity" preheating.

DOMESTIC MODELS: #3 or lighter oils; "conversion" and combination-unit types; 7 sizes. "Tubular Atomization" (Patented).

FULL DATA on Petro Industrial Burners are in Sweet's and Domestic Engineering catalog files. Details on Petro domestic burners available in separate catalog. Copy of either sent gladly on request.

PETRO Cuts Steam Costs

PETROLEUM HEAT AND POWER COMPANY • STAMFORD, CONNECTICUT • Makers of Good Oil Burning Equipment Since 1903

APRIL, 1946 139
Use a facing of prefabricated thin Architectural Concrete Slabs to bring out the lines and mold the character of your building.

The Slabs, made with Atlas White Cement and reinforced with steel, are only 2" or 2 1/2" thick and range in size up to 100 sq. feet or more. Returns, cornices, sills, lintels and lugs for anchoring usually are cast integrally with the slab.

Slabs also may be used as outer forms for structural concrete. When a good bond is obtained between the slab and the structural concrete, half the slab thickness may be considered effective structurally.

Send for booklet and list of slab manufacturers. Write to Atlas White Bureau, Universal Atlas Cement Company (United States Steel Corporation Subsidiary), Chrysler Bldg., New York 17, N.Y.

REVIEW

(Continued from page 138)

order). The division was active in directing local builders at the expense of the country where damage was done; in preventing troop occupation of palaces and museums wherein valuable objects were housed.

"The total of buildings destroyed in Europe and North Africa beyond hope of repair is relatively small," Woolley reported; although, he said, a reading of the buildings hit contains name after familiar name of historic monuments and places.

The Building Research Station erected at Queens Park, on a platform which lies between a steam line and an electric line, a section of a railroad station. It was a research problem undertaken by the architects of the London & Midland & Scottish Railway—a neat little station house, shed and platform, during the building of which man-hours were charted for each operation to determine adjustments of design where time-saving would result. Robust materials and finishes were sought; steel timber and concrete were used; ceramic glazes were studied in view of the slight and smoke which usually ruins the appearance of a station-house; enameled steel was considered for lower section exteriors to withstand abrasion. The findings are published in a seven-page study of the problem.

JOURNAL OF THE R.A.I.C.
57 Queen Street West, Toronto, Canada
JANUARY 1946

Winners in the General Motors design competition for automobile dealer establishments are shown. The needs of four stock types of dealerships are illustrated. Publication of the buildings, and accompanying comment upon their winning properties, illustrate the wisdom of the four solutions.

DESIGN AND CONSTRUCTION
JANUARY 1946

The Atom City at Oak Ridge, Tennessee, which in a space of four years grew from nothing but a ridge to a city of 75,000 population, presents a modern solution for multiple (emergency) housing, as well as town planning for a complete community. To build a city one by six miles, skilled planning was wedded to high-speed, specialized-crew construction. As the town grew faster than had been initially planned for, buildings became of less permanent nature as construction continued. Trailers and even tents were allowed for overflow of workers. Still under construction in marginal areas, Atom City totals 10,000 family units, 5,000 dormitory units, more than 5,000 trailers, 16,000 hutsments and barracks. One of the best high schools in the U.S.A. was de-
A look at the past gives you a look into the future for aluminum windows. Their superiority is constantly being demonstrated in buildings of all types.

For example, take the building illustrated here. After 14 years, its 3100 Alcoa Aluminum windows operate just as smooth as the day they were installed . . . and they've never been painted.

Check some aluminum windows yourself. Ask about their maintenance cost. We believe you will convince yourself that windows of Alcoa Aluminum belong at the top of your list for the buildings you are now planning.

ALUMINUM COMPANY OF AMERICA, 2198 Gulf Building, Pittsburgh 19, Pennsylvania.

**With Alcoa Aluminum Windows You Can Count On . . .**

- Low maintenance
- No painting required
- No rust
- Easy operation
- No warping
- Low installation cost
- No staining
- Maximum glass area
- Better appearance

Reviews

(Continued from page 140)

Imdaed by highly-paid resident professionals. Hospitals, community centers, theaters, restaurants, shopping centers are convenient to the residential sections and far from the three huge manufacturing plants, guarded and forttressed, the raison d'etre of the city.

Hospital Review
13 East Division Street, Chicago 10, Ill.
1945

Situations facing hospitals as a unit are presented in the second section of the 1945 bulletin of the American Hospital Association: "Our avowed purpose is caring for the people—not some of the people but all of them."

Notices

Theo BalloU White announces the reopening of his office for the practice of architecture at 215 S. 16th St., Philadelphia, Pa., after service in the Corp of Engineers, U. S. Army.

Barnet Glickler and Samuel K. Schneidman, Architects, announce the opening of their new office for the practice of architecture at Room 407-b, 1600 Walnut St., Philadelphia, Pa.

J. Roy Carroll, Jr., announces that John T. Grisdale is now associated with him for the practice of architecture under the name of Carroll & Grisdale, Architects, 1700 Walnut St., Philadelphia 3, Pa.

Olindo Grossi has opened an office at 542 Fifth Ave., New York 10, N. Y., for the practice of architecture.

Celine & Willson have opened an office for the practice of architecture and engineering at Suite 3, Gibson Bldg., 125 S. Green St., Huntsville, Ala.

Frederick R. Louis and A. Rea Henry, having returned from military service, wish to announce the partnership of Louis & Henry, Architects, 1271 Starks Bldg., Louisville 2, Ky.


Mackie and Kamrath, Architects, have reopened their offices at the temporary address of 2500 River Oaks Blvd., Houston, Texas, having returned from service with the Army Engineers.

Manoug Exerjian, Architect, announces the opening of his new office at 140 S. Middle Neck Rd., Great Neck, N. Y.

E. Ellsworth Giles, Architect, announces the opening of his office at 113 Morrissetown Rd., Bernardsville, N. J.

(Continued on page 144)
RECESSED CABINETS

Important factors in planning the modern hospital—
Specify Scanlan-Morris

Typical of the trend in the planning of modern hospitals are these photographs of Scanlan-Morris recessed cabinets built into St. Nicholas Hospital, Sheboygan, and St. Alphonsus Hospital, Port Washington, Wis. In addition to the cabinets shown, other Scanlan-Morris cabinets in these hospitals are:

1. Recessed combination cabinet for storage and for warming of solutions and blankets—in main corridor of maternity department near Central Service Room and delivery rooms.
2. Recessed supply cabinets in unsterile work room, Central Service Department, surgical floor.
3. Recessed supply cabinet in surgical corridor.
4. Recessed cabinets in splint room, surgical floor—three equipped with swinging type harness hooks for splints and fracture equipment; others with metal shelves and plaster barrel compartments.
5. Recessed cabinets, counter type, in unsterile work room of Central Service Department—stainless steel counter tops.
6. Counter type cabinets for soiled utensils, equipped with double sink—in maternity department.

Scanlan-Morris recessed cabinets, each cabinet custom built from plans and specifications covering the individual requirements of the hospital, are installed in many leading hospitals.

The cabinet bodies are made of 20 gauge furniture steel. All corners are made with double lapped and sweated seams, insuring dust-proof construction. Frames are flat weld, electrically welded to insure maximum strength and rigidity. The cabinets may be finished in any color to harmonize with the color of walls and other equipment. Fittings are finished in nickel plate or chromium plate, as specified.

Years of designing and manufacturing experience and contact with surgeons, hospital superintendents, engineers and architects, qualify our Technical Sales Service Department to give valuable assistance and authentic guidance in hospital planning. Suggested layouts supplied without obligation.
NOTICES

(Continued from page 142)

PHILIP BARNUM, for three and one-half years an architect for Pan American World Airways, has returned to private practice, having formed a partnership with W. STUART THOMPSON, with offices at 125 E. 46th St., New York, N. Y.

CHARLES W. ELIOT, 415 South Hill Ave., Pasadena 4, Calif., is prepared to provide consulting services on community development and city and regional planning to public and private agencies and individuals.

HENRY J. TOOMBS announces a partnership with WILLIAM J. CREIGHTON, for the practice of architecture under the name of TOOMBS & CREIGHTON, Architects, 7 Peachtree St., Atlanta, Ga.

FAISON E. LOTZ, Architect, announces the opening of his office at 12 E. Pleasant St., Baltimore, Md.

WALTER SANDERS and ARTHUR MALSH, Architects, have moved their office to 425 Fifth Ave., New York 16, N. Y.

WILBUR A. MEANOR, Architect, announces that a partnership has been formed with ROBERT PRESTON GRIFFEY and ROBERT HOUSE DALEY, which is now doing business under the name of MEANOR, GRIFFEY & DALEY, 306 Payne Bldg., 811 Lee St., Charleston 1, W. Va.

GEORGE NEMENY, Architect, has moved his office to 14 E. 39th St., New York 19, N. Y.

JOHN W. CROSS and his son, H. PAGE CROSS, announce the opening of a firm for the general practice of architecture at 730 Fifth Ave., New York 19, N. Y., under the name of CROSS & SON.

MORRIS LAPIUS, Architect, is remodeling a brownstone house at 256 E. 40th St., New York, and expects to move his offices to this location shortly.

F. HERBERT RABY and CLARENCE L. MACNELLY, Architect and Engineer, 101 N. Seventh St., Camden, N. J., have combined organizations in order to render more complete professional service to their clients.

J ohn Poe Tyler, JACKSON P. KETCHAM, and ROBERT E. MYERS have announced the formation of a partnership for the practice of architecture, temporarily located at 10 E. Lexington St., Baltimore 2, Md.

AARON COLES and CHARLES G. ETTER announce the formation of a partnership with offices at Architects Bldg., Philadelphia 3, Pa.

Returned from the Armed Services, JOHN VINCENT ANDERSON announces the reopening of his offices for the practice of architecture in the Builder's Bldg., at 228 N. LaSalle St., Chicago, III.
Radiant walls point a trend in illumination...

A new technique in lighting is a feature of the Plexiglas "Dream Suite," a three-room "apartment-of-tomorrow" currently touring leading department stores and architectural centers. In warm-colored walls, artistic patterns "etched in light" glow softly with realistic three-dimensional effect.

These radiant walls of edge-lighted Plexiglas have a richness and visual appeal never before approached. With the overall, glare-free illumination they provide, the "low-brightness contrast" so long sought by lighting engineers finally is achieved.

Would you like to know more about the possibilities of the plastic that "pipes" light? Just write our nearest office: Philadelphia, Los Angeles, Detroit, Chicago, Cleveland, New York. Canadian Distributor: Hobbs Glass Ltd., Montreal.

Only Rohm & Haas makes PLEXIGLAS . . .

PLEXIGLAS is the trade-mark, Reg. U. S. Pat. Off.

ROHM & HAAS COMPANY
WASHINGTON SQUARE, PHILADELPHIA 5, PA.

Manufacturers of Chemicals including Plastics . . . Synthetic Insecticides . . . Fungicides . . . Enzymes . . . Chemicals for the Leather, Textile, Ceramicware, Rubber and other Industries
The horse that grew out of a bottle

A bottle of Higgins American India Ink, of course — for when Paul Brown, distinguished depicter of the sporting scene, does his vivid illustrations, he relies on Higgins Inks as his medium.

Why? For the excellent reason that Mr. Brown, like other top-ranking artists and designers, knows that, for control and accuracy of line, for precision performance and facility of use, Higgins American Drawing Inks are unsurpassed. Ask for this item by brand name for your protection.

HIGGINS INK CO., INC.
271 NINTH STREET, BROOKLYN 15, N.Y.

The Harbor that moved indoors...

Three miles from the Orrington Hotel in Evanston, Illinois, lies the picturesque Wilmette Harbor... but not for the guests of the Orrington's modern dining room... for their enjoyment this local scenic spot was brought indoors in full natural color through the magic of Kaufmann & Fabry Photomurals!

K & F Photomurals, today's decorative motif, are approved by leading architects everywhere... and are readily available without priority restrictions... let them serve you!

FREE Handsome Brochure illustrates many interesting applications of Photomurals. Write for your copy today.

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425 SOUTH WABASH AVE. • CHICAGO 5, ILL.
NOW... Rustless Piping for even the Smallest Home!

TODAY, there is no reason why any new home, no matter how modest, should be equipped with water lines that rust. For Anaconda Copper Tubes assembled with Solder Type Fittings can be installed at a price competitive with rustable pipe.

Such a system provides a clean supply of rustless hot and cold water, and guards against trouble and premature piping replacement.

Anaconda Copper Tubes are made from specially deoxidized 99.9+ % pure copper. They are furnished soft in sizes up to and including 1¼" in 30, 45 and 60-foot coils; also hard and soft in 20-foot straight lengths. Larger sizes are supplied hard or soft in 20-foot straight lengths only.

In addition to their use as water lines, Anaconda Copper Tubes provide long, economical service for heating lines, garden and lawn sprinkler systems and as tank-to-oil-burner, bottled gas and other connections.

For detailed information, write for Publications B-1 and C-2.

Anaconda COPPER TUBES
THE AMERICAN BRASS COMPANY
General Offices: Waterbury 86, Connecticut Subsidiary of Anaconda Copper Mining Company
In Canada: ANACONDA AMERICAN BRASS LTD.,
New Toronto, Ont.
Penicillin—the wonder drug of the year—can well stir the imagination...far from the lowly mold of ordinary earth comes a life sustaining substance so potent that through its healing power, ravaging diseases become powerless and almost incurable persons are made whole once more. But the production of Penicillin is still another story, for the problems of culture and control on a large scale basis were far different than obtaining a drop or two from a mold.

To the men who designed and created this great modern laboratory-type building—home of Penicillin at Lederle Laboratories, Inc., Pearl River, New York, goes the lasting appreciation of a grateful people who have already seen the wonders this drug has performed since it has been available in quantities. Here is a building unique in construction, in which every material, equipment and product used had to measure up to a standard that tolerated no compromise with the perfection of control so necessary to the specialized production of Penicillin. Proud that Josam drains and other products were used throughout, Josam has still greater pride in the part that it contributed to the means by which new hope is given to so much of humanity.

One achievement deserves another...to be sure, put Josam on the job!

Josam DRAINS again met every requirement

LEDERLE LABORATORIES, INC.
Pearl River, N. Y.

A DESIGN for PRODUCTION

Construction: Steel and brick, daylight lighting provided through multi-window installations. Total space 120,000 feet.

Temperature control: Third and fourth floors almost entirely filled with incubators with temperature maintained at 37° F; fluctuation allowance—1°

Peak employment—500.

First building of its particular type, devoted to the production of Penicillin on a commercial scale by the flask method. Penicillin, as a result is now available for general use as the need for it arises.
FIELD RESEARCH PRODUCES DATA ON TRENDS IN RETAIL STORE DESIGN

For more than three years the Armstrong Cork Company has been presenting a series of color pages in The Saturday Evening Post, Time, and Newsweek on "Ideas for Store Modernization." From a variety of sources—trade associations, staffs of leading business magazines, manufacturers, and successful merchants in every section of the country—we have uncovered a good deal of information that we believe is of special interest to architects.

By stimulating interest in the whole subject of store modernization, we have sought to render a service to architects and the building industry in general—and thus, in the end, to increase the market for Armstrong Floors. The accumulation of basic information on merchandising trends has been an interesting by-product of the effort. A brief summary of our findings follows.

Druggists Stress Prescription Sales—Today's druggist is putting greater effort behind the development of his prescription business than ever before. There is a strong movement afoot to give the prescription department more space . . . to put it in a more prominent spot. In some instances, it is being moved to the very front of the store.

Grocers Swing to Self-Service—Wartime conditions have strengthened the position of the independent grocer in many communities, but the thinking of most of these merchants is dominated by the self-service merchandising methods of the chains. Consequently, the trend in all types of retail food outlets is toward less over-the-counter selling, more self-service.

Restaurants Seek to Cut Labor Costs—High labor costs are strongly influencing the restaurant owner's thinking about design. Step-and-labor-saving devices, ideas for more efficient arrangement of tables and counters—any and all design features that help cut the cost of preparing and serving meals—are greatly needed.

Florists Go in for Drama—The trend in florist shops is toward more dramatic display of merchandise. Fully aware that most flowers are bought as gifts, florists are striving to give their shops less of the "greenhouse" look, more of the atmosphere of a smart specialty shop. Full-view glass fronts are replacing the customary bloom-packed window.
Departmentalization in Shoe Stores—In shoe retailing, as in many related fields, the trend is toward departmentalization within the store. Women’s and men’s shoes are being sold in different sections, by different personnel. Store design to emphasize departmentalization is wanted.

Trends in Meat Merchandising—Many meat dealers today are putting in packaged frozen food departments as a profitable adjunct to the shop’s regular line of edibles. There is some trend toward self-service, particularly in sales of pre-packaged meats, but the dealer continues to put major emphasis on cut-to-order business.

New Approach to Jewelry Display—There are some significant changes going on in the retail jewelry field. Trend in most stores is away from mass displays of merchandise. Small show windows are replacing the traditional large store-front window. Interior display cases are smaller. Objective is to show jewelry individually or in small ensembles rather than in the mass.

Men’s and Women’s Apparel Shops—The trend in men’s and women’s apparel shops is toward more “visual” selling and “pre-selection” of merchandise. Conventional in-line rows of counters are being supplanted by display units that dramatize the merchandise, help the customer make his own selection.

Atmosphere Important in Bakeries—In a number of retail fields—the baked goods industry in particular—research indicates a strong demand for the “atmospheric” type of interior. Many bake shop owners expressed the feeling that what they regard as the “modern” store interior has become too stereotyped, lacks the distinctive character that they want in their own stores.

Group Demonstrations Sell Appliances—Most appliances have to be shown in actual use before they can be sold. In addition to individual demonstrations, dealers have found group demonstrations—to bridge clubs, service clubs, and other women’s organizations—an important factor in building sales. Many dealers plan to set aside a specific area for these demonstrations.

Resilient Floors Hold Favor—As the makers of a complete line of resilient floors, we were naturally gratified to discover that the preference for floors of this type is stronger than ever. Linoleum is found on more shop floors today than any other material. The use of asphalt tile and its favorable reception have increased greatly in the past few years. In many quarters, particularly high-end merchandising, there is a demand for the “luxury” floors, Linotile (Oil-Bonded) and rubber tile, which again are being produced in Armstrong’s factories.

Low Cleaning Costs a Factor—Our surveys revealed that economy of maintenance is a most important factor in the widespread preference for resilient floors. Store owners, confronted by rising labor costs, are anxious to reduce overhead wherever possible. Merchants have found that resilient floors, in addition to their beauty and durability, offer a worthwhile saving in maintenance.

If you would like additional information concerning our surveys in these retail fields, write Armstrong Cork Co., 8904 State St., Lancaster, Pa.
Firedaire is a practical and economical heater adequate to the requirements of houses from 3 to 7 rooms on one or 2 floors: compactly housed in a handsome, all-steel cabinet style mantel or wood mantel built to architect’s specifications. Connects to any 8-inch flue without damage to brickwork or interior walls. Burns any fuel; holds fire over night. No exposed smoke pipes. Cool air enters at grills in base of mantel, passes completely around heating unit and is delivered at desired temperature through registers or ducts.

Firedaire is available in a complete range of sizes and models, all moderate in price, ready for easy installation by any handy man. Ideal for low-cost housing...for vacation cottages...recreation rooms and for living quarters not adequately served from central heating system.

For details see Sweet’s Architectural Catalog
Write for A. I. A. File No. 5-H-4.

THE EDWARDS MANUFACTURING CO.
314-324 EGGLESTON AVE. CINCINNATI 2, O.

No Mortising...No Deep Cuts
Only a Shallow 13/4 inch Notch is Needed

Phantom View Illustrating Construction and Parts of the Russwin Unit Lock Set.

for RUSSWIN UNIT LOCKS

These sturdy locks—perfected by Russwin years ago—have, as usual, the extras for which Russwin Hardware is noted. For example...

Instead of laborious mortising or deep door-weakening saw cuts in the stiles, only an inch-and-three-quarter notch and a single small hole for the knob is necessary. The entire unit is slipped into place—a quick and permanent job!

Another extra is the safety devices—auxiliary latch to guard against outside manipulation and deadlocking plunger to guard the latch and prevent operation of the stops when the door is closed.

Wherever the need for a smooth-performing, long-service lock—for home, apartment, office, school and public building, communicating and toilet doors—choose from Russwin’s broad line of Unit Locks. Russell & Erwin Mfg. Co., New Britain, Connecticut.
In learning . . . IT'S STUDY

In ceramic glazed structural tile . . . IT'S ARKETEX

ARKETEX FOR Budget Beauty

Even the budget committee will like this fine tile for the first cost is the only cost! No periodic painting or refinishing of walls is necessary with Arketex. It is not affected by steam, water, ink, or the action of acids and alkalis which would ruin the appearance of ordinary walls. The everlasting colors are protected by a finish which won't mar, scar, crack, or craze, and which requires only soap and water washing to keep its luster. Arketex is a permanent wall and finish all in one, available in enough sizes, colors, and textures to allow the architect innumerable opportunities for variety. Be sure that buildings will maintain their orderly appearance years after construction. When planning schools, hospitals, offices or factories, specify Arketex — first with the finest in ceramic glazed structural tile.

A PEACETIME PROMISE

Arketex' continuous achievement in the ceramic glazed structural tile field assures you the finest in workmanship. Arketex . . . the standard of textured tile.

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School Furniture that meets every specification for Serviceability and Design

American Seating Company's school equipment is built to the very highest standards of service and durability—with advanced designs for correct posture, hygienic comfort and sight conservation.

Over 50 years of laboratory research and testing by the world’s best seating engineers are your assurance of quality and value when you specify American seats and desks for classrooms; auditorium chairs; tablet-arm chairs; portable assembly and steel folding chairs; or tables and chairs for libraries, study halls or cafeterias.

We suggest that you get in touch with us in order that our Specialized Seating Engineers may help you in the practical development of your plans for classroom, auditorium, school library, or other seating requirements. Write today for full information.

Ben Franklin found a cure for Smudge

In 1756, dissatisfied with the usual soot-encrusted globular lamps, he devised a new type "composed of four flat panes with a long funnel above to draw up the smoke." The glass stayed clean; the light stayed bright; and Philadelphia streets were better lit with less fuel.

"PRE-TESTED" is a cure for Smudge

In this "PRE-TESTED" drawing pencil, the graphite is so highly refined and firmly compacted that it draws opaque, black lines, free from excess 'dust'. Your hands stay clean; the paper stays white; and your designs are better drawn with less lead.

For clean lines, for strength, for smoothness, for wear... "PRE-TESTED" Ben Franklin outshines them all. Write for your free sample, naming this magazine and the degree desired, and prove it in your own hand.

Made in 17 degrees—68 to 90

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World’s Leader in Public Seating

Manufacturers of Theatre, Auditorium, School, Church, Transportation and Stadium Seating

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154 PROGRESSIVE ARCHITECTURE • Pencil Points
Whether your design is ultra-modern, modern or traditional, there are two types of floors that you can count on for complete floor satisfaction. Both types are made with Medusa White Portland Cement.

For beautiful white cement floors having high light-reflecting value—floors that are smooth and clean... ideal for hospitals, schools, food and other manufacturing plants—specify Medusa White. These floors can be laid over the top of old concrete.

The same Medusa White is unsurpassed in making terrazzo floors. Used as a matrix, this White Cement brings out the beauty of the marble chips. And only White Cement can give the exact color in pastel tints or brilliant, strong tones when pigments are used. Terrazzo floors are lifetime floors with no upkeep. Write today for a copy of the booklet, "The Beauty of Terrazzo" and information on White Cement floors.

MEDUSA PORTLAND CEMENT CO.
1015 MIDLAND BLDG. • DEPT. A • CLEVELAND 15, OHIO
Keep control of the lighting in proper hands! Guard against unauthorized tampering with lights in schools, hospitals, theatres, auditoriums, hotels or any other building used by the general public.

The Lock Switches pictured here are no ordinary switches with locking device. They’re time-tested H & H Rotary Snap Switches, operated only by turning the key in a Corbin Pin Tumbler Lock.

No. 1281 is standard type, single pole, available also in double pole, 3-way and 4-way. No. 1281-WP is weatherproof, with cadmium-finish screw cap plate fitting on a weathertight rubber mat. No. 1291 is a master lock switch, reciprocating type. After inserting key in lock, switch may be turned to right or left—ON or OFF, but key cannot be removed from switch in ON or OFF position. Write for specification data on this complete line.

Hart & Hegeman Division
Arrow-Hart & Hegeman Electric Company, Hartford 6, Conn., U.S.A.

40 feet of Swartwout AIRMOVER Ventilator on roof of heat treating room.

Swartwout
Industrial Intake Louvers

let abundant fresh air into your buildings at ground level—make your natural ventilation system really work . . .

- When contaminated air rises to roof ventilators to be expelled it must be displaced by cool fresh air. Swartwout Intake Louvers provide the ideal modern method for providing fresh air in commercial and industrial type buildings—avoid the drawbacks of opening window sash. Sturdy welded construction, adjustable up to 90% clear opening. Range of sizes to suit any need.

Ideal Combination with Swartwout AIRMOVER Roof Ventilators...

Swartwout’s low height, big-capacity ventilator, the AIRMOVER virtually opens your roof to the sky. Highly efficient economical equipment that harmonizes with any building style. Write for complete information on AIRMOVER and Intake Louvers.

THE SWARTWOUT CO., 18649 Euclid, Cleveland 12, O.

Swartwout
The Airmover Line
EQUIPMENT FOR EFFECTIVE ECONOMICAL VENTILATION OF INDUSTRIAL BUILDINGS
A BUILDING

WITHIN A BUILDING

... air conditioned with "FREON" for Safety

One of the outstanding features of the new, fully air conditioned Research Laboratory of the Firestone Tire & Rubber Company, Akron, O., is that it is actually a building within a building.

In designing the structure, Voorhees, Walker, Foley & Smith, New York architects and engineers, took another pioneering step. They were guided by the scientific need for positive control of temperature and humidity. The two-in-one theme was accomplished by arranging the Research Laboratory rooms in a prefabricated framework. This formed an inner building. Daylighted executive offices, stairs and library were built on the perimeter or outer shell of the structure.

"Freon" safe refrigerants are used exclusively for air conditioning in the 100,000-sq.-ft. structure through a unique system of design which completely exhausts all air. None of the air is re-circulated after it begins its one-way route from outside the building to the conditioning plant. From offices, the air passes through louvers in corridor doors...travels along hallways into and through laboratory rooms to center pipe drafts, where it is expelled.

Refrigerating equipment consists of a 200-ton Worthington centrifugal compressor located in the basement of the building. Firestone engineers specified the refrigerant must be SAFE... recommended use of "Freon" in all systems installed within the entire plant. The Avery Engineering Co., Cleveland, did the installation work.

"Freon" refrigerants are ideal for industrial, commercial and residential air conditioning systems. They are non-toxic...non-flammable...non-explosive and odorless. The low moisture content and other characteristics of "Freon" eliminate risk of corroding the equipment...assure long life and satisfactory performance. Write for technical data for your files. Kinetic Chemicals, Inc., Tenth and Market Streets, Wilmington 98, Delaware.
80 Dimensionally accurate aluminum moulding shapes, expertly designed in matching groups to fit any installation, illustrated in the new full-color CHROMTRIM Catalogue No. 2. Also features many unique installation possibilities.

Follow the new trend—give home-making women the gleaming beauty—the modern neatness—the easy maintenance they want in the homes you plan to build (or modernize). Specify CHROMTRIM for kitchens, bathrooms, attics, etc.

IMMEDIATE DELIVERY

R. D. WERNER CO., Inc.
Manufacturers of Metal and Plastic Products
325 FIFTH AVENUE • NEW YORK 16, N. Y.

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