Annual Progressive Architecture Awards

Jury Report, Class 1: DOUGLAS W. ORR

Award: ERNEST J. KUMP COMPANY

Class 1 Mentions:
ERNEST J. KUMP COMPANY; BUSH-BROWN & GAILEY, P. M.; HEFFERNAN & R. L. AECK; ARTHUR FEHR & CHARLES GRANGER; ALONZO J. HARRIMAN, INC.; CARL L. MASTON; KETCHUM, GINA & SHARP; ROBERT LAW WEED & ASSOCIATES; CLYDE C. PEARSON & FARROW L. TITTLE, PARKER A. NARROWS & JOHN H. HANCOCK

Jury Report, Class 2: DOUGLAS W. ORR

Class 2 Mentions:
FRANK GRUYS & L. E. McCONVILLE; GORDON DRAKE; E. H. & M. K. HUNTER; RAPHAEL S. SORIANO; KENNETH N. LIND; RUNNELLS, CLARK, WAUGH & MATSUMOTO; JOHN C. CAMPBELL & WORLEY K. WONG; JOHNSON & WHITCOMB

Runners-Up.

Office Practice: Your Legal Status During Construction

Sensible Detailing in Wood: HORNBOSTEL and TROCHAUD

Fixturepanels: GUY G. ROTHENSTEIN

Store: Display Screen

Selected Details

House: Window

Office: Desk
### Concrete Check Chart

Following are qualities sought in concrete work. Pozzolith, the concrete man's most useful tool, is widely used to improve these qualities.

Three of these — Minimum Shrinkage, Maximum Strength, Maximum Economy — are available **only with Pozzolith** ... because only Pozzolith’s cement dispersion puts all of the cement to work, cuts water-cement ratio 15%.

<table>
<thead>
<tr>
<th>Quality</th>
</tr>
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<tbody>
<tr>
<td>Good Plasticity</td>
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<tr>
<td>Easy Placeability</td>
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<tr>
<td>Pumpability</td>
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<tr>
<td>Good Cohesiveness</td>
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<tr>
<td>Minimum Bleeding and Segregation</td>
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<tr>
<td><strong>Minimum Shrinkage and Cracks</strong></td>
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<tr>
<td>Speed in Stripping Forms</td>
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<tr>
<td>Minimum Finishing</td>
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<tr>
<td>Density</td>
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<td><strong>Maximum Strength</strong></td>
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<td>Good Appearance</td>
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<tr>
<td>Watertightness</td>
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<tr>
<td>Great Durability</td>
</tr>
<tr>
<td><strong>Maximum Economy</strong></td>
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</tbody>
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Authoritative method for concrete design is American Concrete Institute's "Recommended Practice for the Design of Concrete Mixes" — ACI (613-44) ... based on the water-cement ratio law. Pozzolith used with this procedure produces the best, most economical results.

Write for bulletins giving this method ... also new Pozzolith booklet.

---

*The Aluminum Co. of Canada, Ltd., Arvida, Quebec.*

---

**Pozzolith gave pumped concrete increased workability, easy place-ability, good cohesiveness. Milwaukee Sewage Disposal Plant.**

**Pozzolith increased strength, minimized shrinkage and cracks, increased pour 200 cu. yds. per day. Matilija Dam, Ojai, Calif.**

**Serious segregation overcome, time and money saved — with Pozzolith. The Aluminum Co. of Canada, Ltd., Arvida, Quebec.**

**Pozzolith produced good appearance, watertightness, durability in this New Brunswick, N. J. Sewage Treatment Plant, now 10 years old.**
Mr. Samuel Ogren  
Box 746  
Delray Beach, Florida

Dear Mr. Ogren:

We have your letter asking if we know of any place where you might take a "busman's holiday" this summer. You say, "I am looking for a place in some cool wooded area . . . where instruction and criticism are available." We don't know of any place, but we recently made a suggestion to the A.I.A. Committee on Education that just such a summer seminar be established for professional men.

We herewith offer the idea to any architectural school that wants to pick it up. Why shouldn't a school in pleasant surroundings run a critical seminar during the summer? Attendance could be limited to practicing architects, each of whom would submit as an "entrance thesis" a project under study in his office. The discussion would be a constructive, thorough analysis of the work submitted by the "students." Seminar leaders could be outstanding educators and architects recognized as competent critics in all aspects of architecture.

We are sure such a discussion would help provide that greater competence which the P/A Awards Jury Report in this issue calls for. It would be, for the group that attended, the "self-searching analysis" which the Report on page 49 points to as necessary "to undergird our planning and design." As the Awards Jury met recently to make its decisions we wished that the architects whose work was being judged could have been there to join and profit from the discussion. A seminar such as we suggest, analyzing certain specific projects, would accomplish that for its participants.

We think you and we have a good idea. We hope some of the schools will see it as a practical one.

Sincerely,

The Editors
Kawneer offers a complete line of doors, frames, and trim for stores, theatres, and commercial buildings of all types.

Doors should make people want to enter—and this Kawneer Free Standing Entrance fulfills this function. It draws attention because of its location and because it is completely surrounded with glass.
This Free Standing double-door offers a compelling and friendly invitation to enter. The entire front—sign, showcases, and walls—were designed to bring out the entrance as the main point of interest.

The Fenyo, Catty Patty, and Gregory Stores were designed by Kelchum, Ginó and Sharp, Architects, New York City. The Bakeshop was designed by the Design Department of the Kawneer Company.

To handle Gregory's large volume of traffic, two Full Vision double-doors are placed in a prominent location where they are quickly seen, yet they do not interfere with the internal operation of the store.

PROMPT SHIPMENT OF STOCK UNITS!

Four different styles of entrances—Full-Vision, Free Standing, Narrow Line, and Standard—are included in Kawneer's complete new line of entrance doors, frames and trim.

The popular Narrow Line Entrances are now carried in stock sizes and are immediately available. They are shipped as complete units, factory-fitted, with overhead checks and hardware applied.

Kawneer Entrances bring maximum display of the interior—along with the many advantages of metal-glass construction. The close, precision fit between doors and jambs protects interiors against drafts, dust, soot, and rain. It also helps prevent the escape of warmed air in the winter and cooled air in the summer.

Kawneer Entrances have been styled and engineered to meet the highest standards of modern architecture. Write today for the construction details of this outstanding new line.

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It's truer today than ever before. Servel is the best refrigerator investment you can make... whether it's for apartments, multiple housing developments, or private homes. That's because the Gas Refrigerator's freezing system is different, simpler, more modern... and operates at amazingly low cost. It has no moving parts. There's no machinery to wear and lower efficiency... to break down and need fixing. A tiny, silent gas flame does all the work. That's why operating costs for each succeeding year remain as low as they were the first year. Repair and replacement bills are at a minimum.

Servel is modern in features... modern in design. It has all the worthwhile, up-to-date cabinet features, including a spacious frozen food compartment... moist cold, dry cold... roomy, flexible interior... large ice cube trays... and many other advantages and conveniences.

Servel's outer shell is made of heavy gauge, premium steel... finished with lustrous Newtone. Cabinet lining is seamless, one-piece steel with rounded corners. For all the facts, figures, and features, see your Sweet's Catalog... or write to Servel, Inc., Evansville 20, Indiana.
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"OUR BRAND NEW 1948 SERVELS...
installed only a few months ago—have already convinced me that Servel is my best refrigerator investment...by far!"

PAUL LIVOLI
Fairfield Gardens
Watertown, Mass.

HERE'S WHY
Servel stays silent
...lasts longer

The Gas Refrigerator operates on the simple, continuous absorption principle. The small gas flame circulates the refrigerant that supplies the constant cold needed to preserve food and make ice cubes. Not a single moving part (no motor, no pump, no compressor) is used in the entire freezing operation.
Bronze and Nickel Silver

accent I. Magnin Stores in California

Nickel silver in combination with bronze provides striking beauty and lasting dignity in the new I. Magnin Stores in Beverly Hills, Los Angeles and San Francisco.

Illustrated on these pages are views of the Beverly Hills Store, exemplifying the treatment worked out for all ornamental metal work in all three stores by the late Timothy L. Pflueger, Architect. Exterior work for this store was executed by A. J. Bayer Company, interior by Cochran-Izant Co. The general contractor was The William Simpson Construction Company.

Entrance trim, doors, show window framing and handrail and balustrade shown in front and rear entrances above are of extruded nickel silver. Base mouldings are of nickel silver sheet.
Nickel silver extrusion from Anaconda die 21354A forms handrail over nickel silver balustrade at rear entrance.

At left, screens on the first floor are formed of glass panes in extruded architectural bronze frames, while showcases and shadow boxes (display cases let into wall at left) are also executed in extruded bronze.

On the second floor, extruded nickel silver shapes were used in the base moulding around the entire floor, in the display cases, mirror trim and in framing glass screens and archways between departments.

Such ingenious use of bronze and nickel silver forms a lasting tribute to the artistry of both architect and fabricators. Their selection of Anaconda Architectural Shapes for their work is a tribute not merely to the Anaconda reputation for quality and uniformity, but to the variety of shapes and quantities that are readily available.

Nickel silver extrusion from Anaconda die 21354A forms handrail over nickel silver balustrade at rear entrance.

Display case frames are nickel silver and include extrusions from Anaconda dies 2917A and 13037A.

Base mouldings are built up of nickel silver extrusions from Anaconda dies 3650K and 7970K.
Dear Editor: After reading your April P/A, my face turned the color of the cover.

HENRY L. BLATNER
Albany, N. Y.

Dear Editor: It was good to see Henry Churchill’s statement in the April P/A. It would have been better had you included the fact that Churchill has been voicing this richly realistic approach for some time, fairly alone. More power to clear heads, and may more architects join Churchill in talking sense, out loud!

JOHN RANNELLS
New York, N. Y.

Dear Editor: Despite Mr. Churchill’s lip service to the importance, to city planners, of knowledge of economics, of potential employment, and of future population “and all the rest,” (April 1948 PROGRESSIVE ARCHITECTURE), it is clear that he suffers from a lack of understanding of the true nature of city planning and of its truly social nature.

I would do nothing more than quote to him Sir Patrick Geddes’ own words from Cities in Evolution (quoted in H. V. Lanchester’s preface to Patrick Geddes in India, edited by J. Tyrwhitt, Lund Humphries, London, England, 1947): “. . . We must not too simply begin, as do too many, with fundamentals as of communications, and thereafter give these such aesthetic qualities of perspective and the rest as may be, but, above all things; seek to enter into the spirit of our city, its historical essence and condition of life. Our design will thus express, stimulate, and develop its highest possibility and so deal all the more effectively with its material and fundamental needs. We cannot too fully survey and interpret the city for which we are to plan—survey it at its highest in past, in present, and above all, since planning is the problem, foresee its opening future. Its civic character, its collective soul, thus in some measure discerned and entered into, its active daily life may there be more fully touched, and its economic efficiency more vitally stimulated.”

JOSEPH TAMSKY
New Haven, Conn.

Dear Editor: From the April issue of P/A, page 53: “Most of the buildings built during the fascist regime were chiefly notable for their ideological symbolism and pomposity. Here and there among them, however, the architect managed to produce progressive work in spite of the outrageous sponsorship behind it.”

On the same subject, from Le Corbusier: “And modern architecture . . . recognized but by Mussolini!” (Mona Lisa’s Mustache, by T. H. Robsjohn-Gibbings, Alfred Knopf, Inc., New York, N. Y., 1947) Who is right? P/A or one who presumably should know what he is talking about?

A. P. DE ALBUQUERQUE
School of Engineering and Architecture
University of Kansas
Lawrence, Kans.

Dear Editor: I have been interested in the critical attitude you have been employing—the only magazine in the field to do this. It is a valuable part of our approach and we need much more of it.

JAMES D. MURPHY
Boston, Mass.

Dear Editor: Your review of our manuals, Planning Standards, is very much appreciated. The reproduction of some of the drawings from our manuals is a very progressive way of reviewing a publication. You may be interested to know that most of the illustrations for these manuals were done by Mr. Adolphus Sager, assistant planning engineer, who is a subscriber to PROGRESSIVE ARCHITECTURE.

We received orders for the manuals, chiefly from New York City and vicinity, yesterday. Most of the orders included checks for $2.25 for the manuals. Our charge is $75 per manual for separate sales, or three manuals comprising a set for $2.00. We would appreciate your stating the reduced price for the three manuals.

GLENN HALL
City Planning Engineer
Sacramento, Calif.

Dear Editor: Your sincere sympathy expressed to us is an added thread of perspective and the rest as may be, but, above all things; seek to enter into the spirit of our city, its historical essence and condition of life. Our design will thus express, stimulate, and develop its highest possibility and so deal all the more effectively with its material and fundamental needs. We cannot too fully survey and interpret the city for which we are to plan—survey it at its highest in past, in present, and above all, since planning is the problem, foresee its opening future. Its civic character, its collective soul, thus in some measure discerned and entered into, its active daily life may there be more fully touched, and its economic efficiency more vitally stimulated.”

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GLENN HALL
City Planning Engineer
Sacramento, Calif.

Dear Editor: Despite “RECOGNITION”? your editorial on competition in the May issue of PROGRESSIVE ARCHITECTURE.

JOSHUA D. LOWENFISH
New York, N. Y.

Dear Editor: Am in complete agreement with your editorial on competition in the May issue of PROGRESSIVE ARCHITECTURE.

JOSHUA D. LOWENFISH
New York, N. Y.

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GLENN HALL
City Planning Engineer
Sacramento, Calif.

Dear Editor: First a gripe; then a question: (1.) Regarding your comment on page 75 of 4/48 issue concerning Mr. Belluschi’s little cottage remodel job at Sherwood, Oregon. You state “In sum: good contemporary design applied to the problem of the small house. Unusually direct and pleasing handling of wood as a structural and surfacing material.”

As far as I can see from what you publish the whole thing is extremely ordinary. I believe most of the good carpenter here in my town could do as well building by ear without plans. The only contribution is the beam supported roof framing; everything else is commonplace including the fireplace which looks like a “before” picture. One thing is actually bad and wasteful; the fetish of using the dab of mitered siding on the corner mullion in place of a simple casing. Who else could get a thing like this published but Belluschi?

(Continued on page 10)
It's the Tops that take the wear

DECORATIVE MICARTA — made by WESTINGHOUSE — gives you a durable, economical, ever-beautiful surface for table tops, bars, booths, walls.

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Flemaned
Weldwood Glue* and other adhesives
Welders* (striated plywood)
Decorative Micarta
Flexwood*
Flexglass*
Finize*
(Continued from page 8)

(2.) Regarding your P.S. editorial comment entitled "An architect's reaction to his own work is always interesting." You mention here the man who said of a complete building, "That's another street I can never walk down." I have had this same sort of idea expressed to me by another man and it has given me considerable cause for thought. I have not been able to determine completely the meaning of this reaction but I have explored these possibilities. (a.) Perhaps these individuals have developed considerable temperamental emotional) reaction to their design drawings and fail to visualize the cold reality of the completed project until it is built; then in seeing it they do not get that emotional reaction which their drawings give, but a reverse emotional reaction in most cases. (b.) Quite a different thing is experienced by those who can't or don't draw well and who are impatient with making drawings, wishing to rush out and build. This sort of person gets so much temperamental reaction from anything taking form that he minimizes to himself the imperfections of the work. Some men fit this general category to the extent that after the last workman has left the premises and the job is ready for its use, the whole thing suddenly goes dead and interest fades. To this man there is no repulsion during construction, even when it is full of flaws, and no particular joy after completion even when it has good points. (c.) Then there is another type of temperament which responds to the personalities of the client or builder and who can't bear to go near the job if the client or builder relations ended up badly, because the building becomes a neurotic stimulus for the emotions aroused during conflict. This person avoids the structure after completion.

FRANCIS R. WALTON
Daytona Beach, Fla.

HELPFUL INFORMATION

Dear Editor: Have been following your articles in PROGRESSIVE ARCHITECTURE on "Streamlined Specifications" and think it is a good move and the information you are putting out is very helpful.

John C. Kerr
Plainview, Tex.

THE RELAXED PAST

Dear Editor: We've just thumbed through our bound copies of Pencil Points for 1926-28. We're heart sick when we compare them with your 1947-48 version. Then it was a "watty" magazine. For us, for draftsmen, for any client who thumbed through it. Something of real interest then, to all. Architectural and human. Beautiful color plates. Beautiful reproductions of etchings, engravings, renderings. Here and there humor and pathos. Inspiration from articles by real architects, for younger, less talented ones. For draftsmen seeking culture, knowledge, yes, understanding. Then, one could relax with Pencil Points. Could dream. Of Egypt, Greece, and the ancients. Could dream of Rome. Plain Work, achievements to come. Or, one could become intensely absorbed in the present world about him. Yea, verily! It was a journal for the drafting room. A letter of beseech by,

WILLIAM G. RAMMEL
Fort Wayne, Ind.

P. S. Two hundred years ago, it was

(Continued on page 12)
A. Outer course of Certigrade Shingles or shakes.
B. Under course of low grade cedar shingles.
C. Building paper.
D. Solid or spaced sheathing.

**NOTE:** Weather exposure—12" for 16" shingles and 14" for 18" shingles. Top course is laid ¾ lower than under course. Use two nails per shingle space 2" from butt and ¾" from edge with a third nail in shingles wider than 8". Under course may be stapled.

---

Centuries of preference for genuine red cedar shingles attest to their acceptance as "quality" roof and sidewall material. Double-coursed sidewalls of cedar shingles are economical because double application allows greater wall thickness at wider exposure. 16" shingles, laid double, allow 12" exposure, while 18" shingles may be exposed up to 14". This flexibility in design permits a wide range in scale and proportion. The use of economical "undercoursing" shingles minimizes cost.

Send for free double-coursing estimating sheets and specification blueprints.
born. American architecture. Suckled on the breasts of old world ideas and beauty, on the new world's necessity and ambition. Two hundred years of trial and error. But each year a step forward, upward. American architecture. Colonial, Georgian, Cape Cod, just American. Skyscrapers, symmetrical mass, beauty. At last, nearing culmination, it is being permitted to crumble. Must make way for the new American. Progressive architecture! The American Renaissance. Two hundred years! Upward and forward; two hundred years, from log cabin to flat-roofed cow shed. Ah, Progress. Ah, Architects of America. Ah, ye Editors who publish and praise so much of this hogwash! Followers instead of Leaders! No? You're wearing tan shoes with gray or dark blue suits, aren't you? Design for Living! Are you? Modern Swedish, German brought to these shores. Ever succeed in blending nature's gifts to man with Modern? Satisfied with the way trees, shrubs, a pond look alongside of some American Modern? Try groupings of convolute stainless steel or plastic spirals, especially at the corners of your pride and joy. Oh, pardon me! Corners are rounded now. Try a grouping of pot-bellied herring barrels. At least the smell would blend.

Yes of course, profound apologies to those architects who have done some remarkably excellent modern stuff. Who have a feel for it. As they would for anything good in art. Would that we had more modern-day Jeffersons, Goodhues, Whites, Magonigles. Two hundred years hence, we will. Such is faith.

W. G. R.

NOTICES

NEW PRACTICES. PARTNERSHIPS

RAYMOND BARGER (RAYBAR CORP.), 167 Brown Ave., Stamford, Conn. RAYMOND BARGER STUDIOS, moved to same address.

WILLIAM E. BRACKETT, JR., MARION McD. BRACKETT (WILLIAM E. BRACKETT, JR.), Technical Bldg., Asheville, N. C.

WILLIAM E. CAMPBELL, JR., affiliation with HUDSON & GILMORE (new firm name HUDSON-GILMORE-CAMPBELL), 203 Bartlett Bldg., Montgomery, Ala.

CHARLES W. ERTZ, MORGAN H. HARTFORD, OTTO J. KUETTNER (ERTZ, HARTFORD & KUETTNER), 1205 S. W. 18th Ave., Portland 5, Ore.

H. EVERT KINCAID, GEORGE A. HUTCHINSON, (COMMUNITY PLANNERS), 111 W. Washington St., Chicago 2, Ill.

ARNOLD LAWRENCE, Orford Bldg., 869 Main St., Manchester, Conn.

WALTER RAYMOND, CHARLES A. PEARSON, JR. (RAYMOND & PEARSON, Architects), offices in Pearisburg, Va., and Radford, Va.

MILTON SHERMAN, 141 N. E. 3rd Ave., Miami 32, Fla.

HERMAN M. COLE, FRED L. LIEBMANN (COLE & LIEBMANN, ARCHITECTS), 415 Lexington Ave., New York 17, N. Y.

FREDERICK M. MANN, JR., EUGENE E. D. CRAWFORD (CRAWFORD & MANN, ARCHITECTS), 134 Eldridge Ave., Mill Valley, Calif.
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• LONG LENGTHS
• LOW COST
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NEWARK NEW ORLEANS NEW YORK PHILADELPHIA PITTSBURGH PROVIDENCE ROCHESTER SAN FRANCISCO SEATTLE ST. LOUIS WATERBURY

JUNE, 1948
PLANNING—TO LOWER SCHOOL BUILDING COSTS

Architects from some 50 firms known for their school buildings in New York State met late in March for a two-day seminar at Syracuse University, sponsored by New York State Association of Architects, and re-examined accepted school planning standards with a view toward pushing ahead the billion-dollar state school program now blocked by high construction costs.

Frankly told by several speakers that there is no immediate prospect of any lower prices or wages in the construction industry, the architects exchanged ideas about cheaper buildings that will still meet the needs of the present generation of school children. The urgency of the school building shortage, the damage done to financing as well as construction schedules by inflated costs, and minimum requirements for the modern school were discussed with a series of panel groups by Dr. Lewis A. Wilson, Deputy Commissioner of Education for New York State; Dr. Don L. Essex, Director of the Division of School Buildings and Grounds, and Thomas H. McKaig, architect-engineer, of Buffalo, N. Y. Specific economies in site selection and development, plan layout and space requirements, structure and finishing materials were recommended to the meeting by John C. B. Moore & Robert S. Hutchins, architects, of New York City, citing examples and experiences in their own practice. Possible savings in simplifying or omitting some mechanical equipment customary in school buildings were considered at a dinner meeting, when D. Kenneth Sargent, architect, of Syracuse, presided.

There was apparent satisfaction in the free discussion of school planning problems, on which many of the architects present had worked alone for years, and in comparison of data and findings. School spokesmen expressed most interest in good performance of buildings—suggesting that most have been too expensive and “too well built.” Younger architects present agreed and cited complaints of school boards backing this viewpoint. But engineers present demurred at “taking chances” and some architects defended top quality construction at any cost. As experimental buildings exploring better lighting, simpler heating, and cheaper structural materials were presented, the audience was divided.

(Continued on page 16)

ONONDAGA COUNTY WAR MEMORIAL—SPORTS ARENA

FIRST PRIZE. Edgerton & Edgerton, Syracuse, New York

SECOND PRIZE. Fred B. O'Connor, Syracuse, New York

THIRD PRIZE. Harry & F. Curtis King, Syracuse, New York

An examination of the prize winners in the recent competition at Syracuse for design of a sports arena—with provisions for theatrics, meeting rooms and a memorial to those lost in World Wars I and II—reveals that the plans are of a consistently higher standard than the elevations shown here. The first and second prize buildings are based on a rectangular structure, with the arena and seating surrounded by subordinate facilities. The plan of the third prize is circular but the arena and seating remain rectangular, the segments serving as lobbies front and back (with balcony seating above) and subordinate facilities located in the wing at right. That the third prize, despite its unfamiliar appearance, reached the final stage with the two above indicates heartening progress in jury acceptance.
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To stimulate thinking and action in the direction of providing America with quality home construction and design at the lowest possible cost. The editors of PRACTICAL BUILDER believe that the building industry has the tools, materials and ingenuity to meet the great need for an "Economy House"—a good, substantial home priced to fit the average local paycheck.

We believe that no new inventions are necessary—that the problem can be solved without any revolutionary manufacturing or building techniques. We think a new approach to the design problem, with new ideas, based on materials and equipment now available, plus the utilization of economies inherent in modern materials and techniques can produce the true "Economy House."

But, the benefits will not stop here. Inevitably these ideas and economies will find their way into higher priced homes, also.

Ideas submitted must embody sound construction and employ practical methods. They need not be in accord with any building code, FHA restrictions or labor practices. The ideas probably will not be in use today, even though the materials are. The house submitted may be "minimum" but cost reductions should not be achieved by omitting essential features or merely reducing the size.

The rewards to the winners are more than monetary. There is national recognition for the winners, with national publicity. There is personal glory and pride of achievement which cannot be measured in dollars.

RULES OF THE CONTEST

1. This competition will continue until midnight, September 15, 1948.

2. The competition is open to anyone in the building industry except employees of Industrial Publications, Inc., publishers of PRACTICAL BUILDER, members of the PB Staff, and members of their families.

3. Entries must be submitted in the form of outline house plans with construction details, where necessary, of the important contributions to cost savings. You need not submit an idea for a wholly new kind of house, but the idea you do submit should be incorporated in a definite house design.

   Entries should be accompanied by an explanation of the idea or ideas submitted telling also why and how you think it will result in cost savings not to exceed 500 words.

4. While drawings, sketches and descriptive material need not be in finished form, they must be in such condition as to convey the ideas clearly and quickly.

5. All entries must be postmarked not later than midnight, September 15, 1948. Entries to be returned must be clearly so marked and accompanied by sufficient postage to defray costs.

6. The decision of the judges is final. Awards will be made upon official announcement of the winners in the December, 1948, issue of PRACTICAL BUILDER.

7. In case of a tie, duplicate awards will be made.

8. All winning entries become the property of PRACTICAL BUILDER.

9. PRACTICAL BUILDER reserves the right to purchase at regular rates publication any entries which do not win an award.

10. PRACTICAL BUILDER reserves the right to use any of the entries in any news releases, announcements or promotional work it chooses, giving proper credit to the contestants who submitted that idea.

LIST OF PRIZES

A total of $2,500 will be awarded by PRACTICAL BUILDER on the following basis:

<table>
<thead>
<tr>
<th>Prize</th>
<th>Amount</th>
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<tbody>
<tr>
<td>First Prize</td>
<td>$1,000.00</td>
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<tr>
<td>Second Prize</td>
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<tr>
<td>Third Prize</td>
<td>250.00</td>
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<tr>
<td>Fourth Prize</td>
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<td>Next Two Prizes, Each</td>
<td>125.00</td>
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<tr>
<td>Next Three Prizes, Each</td>
<td>100.00</td>
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<tr>
<td>Tenth Prize</td>
<td>10.00</td>
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JUDGES OF THE CONTEST

The following nationally-known leaders in the building industry will serve on the Jury of Awards.

HENRY K. HOLSMAN
Holsman & Holsman & Kiekamp, Chicago, architects

WM. H. SCHEICK, Director
Small Homes Council
University of Illinois
Urbana

LAURANCE H. MILLS, President
Mills & Sons, Inc., builders
Chicago

NICHOLAS F. MOLNAR, builder
Cleveland, Ohio

DAVID S. MILLER, President
Producers' Council
Washington, D. C.

MRS. MAXINE LIVINGSTON
Family Home Editor
Parents Magazine
New York City

TO ADVERTISERS AND AGENCIES

Any person, manufacturer, or advertising agency whose client sells to the building field, has a big stake in the ultimate value of this contest. Talk up the contest—tell your friends in the industry about it—show them this announcement.

The HOW-TO-DO-IT Magazine
Serving the Building Industry

PRACTICAL BUILDER
5 South Wabash Ave.
CHICAGO 3, ILL.
systems had been discussed with interest during the seminar, Paul Robison, mechanical engineer, asked the architects to consider also a “guinea pig” school where architect and engineer might both be relieved of the contractual “guarantees” to experiment freely with many ideas for heating and ventilating.

An account of experiments and a full-scale classroom model constructed by Henry L. Blatner, architect, of Albany, during design of his Clarksville elementary school, which also was described in detail, held the attention of the school architects and resulted in a free question-answer session. Following this, Dr. Essex was asked to “give the minimum and recommended facilities to be included in school buildings.” He said, in part:

“We have finally adopted new Commissioner’s regulations on lighting, which you have not seen. They are very general—extremely so. They are primarily to conform to standards. The fact that they are general gives the Education Department very wide discretionary powers to accept new things, new ways of doing things, new types of construction. One of the regulations on construction says ’that no material will be used and no type of construction will be permitted which will endanger the health, safety, or welfare of the child.’ The way is open for trying a lot of new things.

“We are not concerned about the fire hazards. We will approve wood buildings. We will approve something very different if you want to specify it. Get up to two-story construction and all we are going to say is that it should be fire-resisting material. We don’t want to tamper with the lives of these children.”

There seemed to be quiet reluctance among architects whose plans and structures have satisfied many school boards, when the new ideas for schools were outlined. Monumentality was not defended, in such an economy-minded seminar, but approved plans and practices withstood attack. Someone offered to produce a “modern exterior” if wanted by a school board. And there may be some ordered, in view of the great backlog of school construction waiting in the state.

The obligation for architects and engineers to find means of producing cheaper school buildings in the face of higher construction costs was stressed by Dr. Wilson, with the warning that a stoppage of three to five years would seriously affect the educational facilities provided for children. He revealed that health facilities and vocational training are given increasing weight in school programs, in turn affecting school planning. He took the opportunity to chide school architects who indulge in “tremendous roofs, dor­mer windows, deep basements, and rooms totally unsuited for any kind of educational program.” He urged that they “get the buildings out of the ground” and appealed also for efficiently-planned mechanical plants and adequate lighting in classrooms. Dr. Wilson explained that the school authorities are interested primarily in the school that will serve children best.

In resolutions adopted at the closing session, the school architects asked that the N.Y.S.A.A. seek to enlist general contractors and labor in a joint effort to finance Education Department school building research; that the N.Y.S.A.A. urge appointment of a Legislative committee to study public school building needs and financing; and that architects explore possibilities of adequate
A Mechanical BRAIN that precisely controls admission of heat to continuously circulating water—in amounts to exactly offset heat losses

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When the Control Valve is closed, continuously circulating water by-passes the boiler without withdrawing heat. When water has lost heat, as noted by the Water Temperature Bulb, the Comfort Controller slowly opens the Control Valve, permitting hot water from the boiler to enter the circulating stream. When sufficient hot water has been admitted to restore the proper temperature to the circulating water, the Valve is closed by the Controller. This cycle repeats automatically in anticipation of weather changes.

HOFFMAN SPECIALTY COMPANY, Dept. PA-6 1001 York St., Indianapolis 7, Ind.
school facilities at lower cost—including simpler, nonfireproof structures where their use is feasible. Evidence that the group felt repaid by the seminar discussions was offered in a final agreement to conduct another school planning seminar the day before the N.Y.S.A.A. convention opens in Albany this fall.

NOTICES

APPOINTMENTS

PRENTICE BRADLEY, architect, a member of the firm of Bradley & Gass, Pittsfield, Mass., has been named technical consultant to the Producers' Council. Mr. Bradley will assist the Council in the further development of modular coordination and in the engineering of typical buildings, and will advise on research and technical matters.

RAYMOND F. LEONARD has been appointed acting executive director of the Philadelphia City Planning Commission. Formerly he was chief of the Land Planning Division of the Commission. His appointment follows the resignation of Executive Director ROBERT B. MITCHELL, who left to accept the post of research professor at the Institute of Urban Land Use and Housing Studies at Columbia University. Mr. Mitchell plans to continue his participation in the work of the Philadelphia Commission on a part time consultant basis.

NATHANIEL A. OWINGS, of the firm of Skidmore, Owings & Merrill, has been appointed chairman of the Chicago Plan Commission for a four-year term. Mr. Owings is the first architect to hold this position.

RALPH WALKER and JULIAN CLARENCE LEVI, New York architects, have been chosen to represent the American Institute of Architects at the First Congress of the International Union of Architects, June 28 through July 1 in Lausanne, Switzerland.

COMPETITIONS

W. C. Muchow, architect; D. R. Knorr, architect and sculptor; and Matt Kahn, painter and sculptor, all members of a team of students from Cranbrook Academy of Fine Arts, have been awarded first prize of $200 in the 21st annual collaborative competition sponsored by the Association of the Alumni of the American Academy in Rome. Second prize of $100 was awarded to a team from Cornell University composed of Richard H. Schreiber, architect; Henri Jova, landscape architect; Paul Jova, painter; and William B. Doan, sculptor. Among those receiving Honorable Mentions were teams from Cooper Union Art School, Cornell University, University of Notre Dame, and a joint team from Cleveland School of Art and Western Reserve University.

Twelve finalists, representing six universities, competed recently in the final stage of the 1948 LLOYD WARREN SCHOLARSHIP (PARIS PRIZE) COMPETITION. This year's competition was the 36th of the series which has twice been interrupted by world wars, and carried a combined prize of study at the Ecole Nationale des Beaux Arts in Paris and extensive travel. Institutes represented were Princeton University and University of Illinois, with three men each; Georgia Tech and University of Pennsylvania, with two men each; and Western Reserve University and Cranbrook Academy of Fine Arts, with one man each. Announcement of the winner will be made shortly.
HENRY HOHAUSER, prominent Miami Architect, puts out the WELCOME MAT for CASTELL THE DRAWING PENCIL OF THE MASTERS

America’s Modern Masters—men who are responsible for the country’s creative progress—are delighted with the return of CASTELL after a wartime lapse of 8 years.

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Henry Hohauser & Associates are known as one of the originators of modern architectural design in the Miami area, having done approximately $22,000,000 in construction during the past 15 years. This comprised some 60 hotels, 476 apartments, 212 residences and 131 commercial structures.

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JUNE, 1948 21
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JUNE 1948
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When making selections, refer to your copy of "Crane Service for Architects," or ask your Crane branch to supply one. Of course, not all fixtures are immediately available everywhere... check your requirements with your Crane branch or wholesaler.

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FENCRAFT INTERMEDIATE STEEL WINDOWS

JUNE, 1948 27
Smart appearance — smart merchandising. This wide-open photo shop extends an invitation to come in and buy. The *Tuf:flex* tempered plate glass door completes the visual effect of the entire front. Architect: Wallace A. Stephen, Burlingame, Calif.

The manager of this store reports 85% more sales since his new shop opened—sure evidence of client satisfaction. Cadet blue and peach *Vitrolite* flanks the large plate glass window. A low bulkhead virtually eliminates any visual barrier between pedestrian and sales floor. The diagonal front leads directly to the attractive *Tuf:flex* door. This powerful 24-hour salesman is only 20 feet in width. Architect: Horace Wachter, Toledo.

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ANNUAL PROGRESSIVE ARCHITECTURE AWARDS

FOREWORD: As all readers at least one year old are aware, Ernest Kump (Ernest J. Kump Company) was an Award winner in the initial PROGRESSIVE ARCHITECTURE Annual Awards program conducted last year (see P/A for June 1947). That he could win a second time running (above and page 50), and this in the face of three times as many entries and a totally different but equally top-flight jury, is cause for wonder—and sincerest congratulations. Almost incred­ibly, the Kump office’s other entry in this year’s program also received a citation (page 51).

Chairman of this year’s Jury was Douglas Orr, president of the American Institute of Architects. His distinguished colleagues were: Henry S. Churchill, architect and city planning consultant; Joseph Hudnut, dean of Harvard University’s Graduate School of Design; Antonin Raymond, internationally known New York architect; and Paul Weddige, engineer. P/A’s editor, Thomas H. Creighton, served as Professional Advisor. It took two crowded days for the jury to analyze the 157 entries and select those buildings completed during 1947 that “best exemplify sound progress in design.” The winner and all jobs awarded Mentions appear on the pages immediately following; on pages 58-73 we show the merest sampling of the other work reviewed by the Jury.

As you will discover, the jury made no Award this year in the private-house classification. From the bulky sheaf of entries, they winnowed out eight houses that they found very good; but after long, painstaking study, they concluded that no one of these could be fairly lifted from the others and called supreme; instead, all eight received Mentions.

Kump’s two-time winning streak was surely the highlight of the judgment. But almost equally phenomenal was the fact that all three of last year’s other winners—Gordon Drake (page 61); E. H. and M. K. Hunter (page 62); and Kenneth Lind (page 64)—again found their way into the top-Mention bracket. Special congratulations to these consistently good designers. And plaudits and thanks to all entrants.
The 1947 Progressive Architecture Awards judgment was held at the Architectural League, in New York, on Monday, March 22, and Tuesday, March 23, 1948. The Jury approached its task in the spirit of the program for the judgment, which stated that the work premiated must show “demonstrable progress in fitness, strength, beauty, and purpose.” The Jury was instructed to “give consideration to the appearance, plans, structure, use of materials, site arrangement, community plan, and community needs.”

The number of exhibits was encouraging, but because of the number the task of the Jury was extremely difficult. It was interesting to note that the submissions came from many places scattered throughout the country and were not confined to any few specific areas. There were a number of extremely interesting projects, and there was evident a genuine endeavor on the part of many architects to find a new expression. The Jury felt, however, that despite the many entries, well representing the country geographically and by types of buildings, the submissions were somewhat disappointing in that there were comparatively few examples indicating that knowledge and certainty so necessary to produce a really distinguished piece of work. The Jury felt, as one, that the architecture produced in our contemporary work should be freed of copyism and should be a natural, native architectural expression—simple, competent, and with beauty. Beauty there must always be; we cannot shed our flesh and sit around in our bones. Our general reaction to the work submitted for the judgment was therefore as follows:

First, there is progress in technical competence and facility in arrangement of functions. Ingenious use of materials, interesting and useful experiments in construction systems, sensible and well functioning plan arrangements were evident in a large number of the entries. For example, the Jury admired apartment house schemes, restaurants, bus terminals, stores, and many other types of buildings that marked progress in planning and technical ability over the buildings we have become used to in those categories. However, in finished, over-all design, the report is not so favorable. There appears to be a groping uncertainty and often a lack of sensitivity in the handling of the design problem. Perhaps the wheel of evolution is starting up from the bottom of the turn; certainly some of the submissions showed understanding and ability in the handling of forms and materials. Yet many instances demonstrated that the designers were influenced by copy and by reliance on forms already developed. It would appear that imitation is not a vice limited to traditionalists. Architecture, to be really significant, should lack self-consciousness and should be a straightforward expression of its time, just as all great architecture
has been in the past. It would seem that the profession stands in need of a much more self-searching analysis in order to develop greater competency in our work. It would appear that we must secure a much greater knowledge of an adequate philosophy with which to undergird our planning and design. As Dean Hudnut expressed it, "We have taken away one tradition and are striving to find another."

Finally, it was interesting to note the number of the country's offices which are striving to develop contemporary work in their own areas. The Jury recommended highly the efforts of architects who had accomplished work which must have been extremely difficult to initiate. The results were not always as gratifying as they might have been, and the Jury wished there were more evidence of the development of that native architecture which might well become regional in a country as large as the United States. There were few instances of regional expressions based on native criteria.

The Jury reviewed all of the private houses first and by careful analysis and a process of elimination set aside those which were to be given further consideration. A similar process was followed in connection with the entries in Class 1 (buildings not private residences) until all entries likely to receive an Award or a Mention had been set aside and a conclusion had been reached, as described below.

### CLASS 1

The Jury reviewed carefully all of the 100 entries in this classification. Eventually nine buildings were left for consideration, all of which seemed worthy of at least a Mention. By further elimination, three final competitors for the Award in this class were selected—the Airport Building in Merced, California, by Ernest J. Kump Company; the School in San Mateo, California, by the same architects; and the Grandstand for the Georgia School of Technology, by Bush-Brown & Gailey, architects, with Heffernan & Aeck, associates. After more analysis and discussion, the Award was given to the Airport Terminal Building and the others were given Mentions. In addition to the eight Mentions in this category (listed on this page), two projects were cited specially for excellence which almost won them Mentions (See pages 68 and 70; top, left). The Jury's comments on the individual buildings are presented with the buildings on the pages which follow.

(Continued on page 59)
AWARD

ERNEST J. KUMP COMPANY, Architects

UNITED AIR LINES AIRPORT TERMINAL, MERCED, CALIFORNIA

JURY COMMENTS

"The Jury was unanimous in feeling that the Merced airport building for United Air Lines is an excellent piece of design with a feeling for its purpose, competently planned and developed to meet the function for which it is intended . . . an altogether distinguished work."

Editorial Note: Fully published in the August 1947 issue of PROGRESSIVE ARCHITECTURE. Interestingly enough, the job was submitted to the P/A Awards by United Air Lines officials.
PROGRESSIVE ARCHITECTURE AWARDS: CLASS 1

Trilateral light; all-glass north wall; high window strips on south wall; diffused central skylighting.

MENTION

ERNEST J. KUMP COMPANY, Architects

ELEMENTARY SCHOOL, SAN MATEO, CALIFORNIA

JURY COMMENTS

"Highly complimented by the Jury. The school exhibits obvious understanding ... of the life of children and education. The structure might be said to have a 'human quality.' It is also outstanding in technical advance."

Editorial Note: Published in Jan. 1947 and 1948 Architectural Record.
The new grandstands were built out from and above existing bleachers, increasing seating by 10,000.

MENTION

BUSH-BROWN & GAILEY, Architects
P. M. HEFFERNAN & R. L. AECK, Associates
J. J. POLLARD, Structural Engineer

GRANDSTANDS, ATLANTA, GEORGIA

JURY COMMENTS

“There was considerable discussion with regard to the third entry held until the final judgment. The Grandstand for the Georgia School of Technology was felt to have verve, directness, and energy, but to be somewhat lacking in finesse.”

Editorial Note: This project was shown in detail in the April 1948 issue of P/A.
On a reinforced concrete slab, a structural grid of pipe columns supports the 5-in. concrete flat slab roof.

**JURY COMMENTS**

“The Clinic was considered to be an excellent building in its particular, important class, with a well-organized plan. It was felt to be an honest piece of work, well studied, not exciting, but more than competent.”

*Editorial Note:* To be published more fully in a later issue. The site is adjacent to a small park at the edge of a residential district so the exterior was designed to meet standards of the existing neighborhood.
The factory workmen built the plant with their own hands—to replace one destroyed by fire. Timber throughout.

MENTION

ALONZO J. HARRIMAN, INC., Architects-Engineers

BOX FACTORY, WEST BATH, MAINE

JURY COMMENTS

"The Bath Box Company Factory was felt to have a real feeling for design. It is simple and straightforward, with particular merit because of the texturing of the walls and the handling of fenestration. It is extremely simple in its structural solution and well adapted to location and climate. Usually this type of building is handled in a horrible way."

Editorial Note: To be published fully in P/A.
PROGRESSIVE ARCHITECTURE AWARDS: CLASS 1

CARL L. MASTON, Architect
APARTMENT HOUSE, LOS ANGELES, CALIFORNIA

JURY COMMENTS
"Commended for attempting a solution of a rather difficult and complicated problem. While the over-all design is not outstanding, it was felt that the apartment has originality, and the effort to develop a better type of apartment building in the face of standards and restrictions is praiseworthy."

Editorial Note: Designed to meet the competition of speculatively built apartment buildings.

Good orientation, light, and air on an average city lot.
The building's light steel frame is laterally braced by the wood framing of the butterfly roof.

**MENTION**

**KETCHUM, GINA & SHARP, Architects**

FACTORY ADMINISTRATION BUILDING
BERKELEY, CALIFORNIA

**JURY COMMENTS**

"The Kawneer Company's factory administration building was thought to be well planned and dignified, simple in basic conception, and worked out in a sophisticated expression . . . There is a certain know-how about its whole design."

*Editorial Note: P/A will publish this building in detail in the July 1948 issue.*
PROGRESSIVE ARCHITECTURE AWARDS: CLASS 1

Reinforced concrete frame; concrete-block filler.

First structure completed in line with a new master plan.

MENTION

ROBERT LAW WEED & ASSOCIATES, Architects

CLASSROOM BUILDING, UNIVERSITY OF MIAMI
CORAL GABLES, FLORIDA

JURY COMMENTS

"Considered laudable; the classroom plan in particular was a direct, straightforward solution; the flexibility of the unit was considered good. It appeared to offer a new development, in university design, worthy of commendation. Unfortunately, the designer was evidently intrigued into developing a central unit which was not consistent with the design as a whole. The central unit appeared to be largely scenic architecture."

Open galleries serve as circulation between classrooms.
Each block is but one apartment deep, the units connected (on upper stories) by balconies and cross bridges.

MENTION

CLYDE C. PEARSON & FARROW L. TITTLE, Architects
PARKER A. NARROWS & JOHN H. HANCOCK, Associates

APARTMENT BUILDING, MONTGOMERY, ALABAMA

JURY COMMENTS
"Commended for its clarity of plan and adaptation to site and climate . . . Restrained and reasonable but a little repetitious in design . . . as a whole, however, a real advance in this particular type of structure."

Editorial Note: To be published in P/A at a later date.

Seventy apartments make up the group. A laundry for tenant use occurs on the roof of the central block. Concrete with masonry wall.
JURY REPORT

CLASS 2

Upon completion of judging the work in Class 1, the Jury returned to give additional study to the eight houses which had been set aside for further consideration. After reviewing the entries again it was decided that no design stood out sufficiently to deserve the Award. Hence the eight (listed on this page) were given Mentions.

It was agreed that there was a good level of general accomplishment in these residences and that, compared with the ones eliminated, the standard was high. It was agreed also that the submissions as a whole indicated progress being made, and that the presentations showed a search for a new understanding. However, it was felt that our domestic work has not yet reached a really fine design level. The designers are laboring over every problem in an effort to find a new worth-while tradition—a laudable and praiseworthy effort—but as yet no definite concept of values and criteria has been established.

The Jury sensed a new form of expression emerging, and that is most encouraging. Since architecture is a dynamic process—constantly moving as times and understanding change—it is not to be expected that a final tradition will be established, but rather that much more successful solutions will develop by evolution. It is evident that this must be accomplished without a general standardization, for we should have individual expressions and not, as one juror said, "architectural Coca-Cola." There is a striving to use materials in new ways, but there is not always a feeling for their organization or their true usefulness. For example, there was much discussion among the Jury about the use of glass in contemporary house design; there was agreement that much of its present use is for purely esthetic reasons.

Rather than comment on the individual houses, the Jury would like to use this opportunity to commend the searching and the progress that are evident, but also to issue an appeal for greater individual and regional expression and a warning against clichés and imitations. We believe that our new tradition will unfold rapidly when the profession develops a greater depth of understanding and feeling for locale, use and organization of materials, and basic form development without dependence on stylistic tricks. It is, of course, historically true that the work in all great architectural periods has had that type of general resemblance which has made a style, or characterized a period. This has been true, no matter how widespread the work has been geographically; the regional differences have been within a proper framework. The Jury wants to point out that its warning against clichés is not a condemnation of those characteristics of our time which result naturally from programmatic needs or use of materials. It is the self-conscious effort to use eccentric forms, or to overemphasize such things as the use of glass or cantilevers where they are not called for—in other words, a straining after effect—that is to be condemned.

It might be added that the practicing members of the Jury hurried back to their offices to review their own work and get out their erasers to rub out the clichés.

Douglas Orr, Chairman

TO THE ARCHITECT of the private residence, constructed during the year in the United States, which best exemplifies sound progress in design.

MENTS

FRANK GRUYS & L. E. McCONVILLE, ARCHITECTS:
PAIRED HOUSES, LOS ANGELES, CALIF.

GORDON DRAKE, DESIGNER:
HOUSE, LOS ANGELES, CALIF.

E. H. & M. K. HUNTER, ARCHITECTS:
HOUSE, HANOVER, N. H.

RAPHAEL S. SORIANO, ARCHITECT:
HOUSE, VAN NUYS, CALIF.

KENNETH N. LIND, ARCHITECT:
ROW HOUSE UNITS, SANTA MONICA, CALIF.

BUNNELL, CLARK, WAUGH & MATSUMOTO, ARCHITECTS:
HOUSE, NEAR KANSAS CITY, MO.

JOHN C. CAMPBELL AND WORLEY K. WONG:
(Designer) (Architect)
HOUSE, FALLEN LEAF LAKE, CALIF.

JOHNSON & WHITCOMB, ARCHITECTS:
HOUSE, DEDHAM, MASS.
Private outdoor living for adults (paved terrace off living room) and for children (sandbox within lawn area).

MENTION

FRANK GRUYS & L. E. McCONVILLE, Architects

PAIRED HOUSES, LOS ANGELES, CALIFORNIA

Identical houses (with a third to be added) worked out to come within G.I. loan budgets. Skillful provision for privacy in row units. Frame and stucco. P/A will publish.
Living room and bedroom open out to a sitting terrace and balcony overlooking the view to the east.

MENTION

GORDON DRAKE, Designer

HOUSE, LOS ANGELES, CALIFORNIA

The designer of this house, presented in full in P/A, January 1948, was co-winner of last year's Progressive Architecture Award in Class 2. Perched on a steep canyon slope, the house was planned to provide as much openness as possible for the living area. At the lower level are a car shelter, laundry, storage and service units; also a garden and recessed open living room. Structure is post and girder system, with plywood used as structural diaphragm of the floor and roof. The upper level is anchored to the hill at one end, supported by the chimney masonry at the other.
Light steel beams carry a gypsum plank and composition roof on open-web joists. Floor slab contains radiant heat system.

MENTION

E. H. & M. K. HUNTER, Architects

HOUSE, HANOVER, NEW HAMPSHIRE

Co-winners in Class 1 of last year's Progressive Architecture Awards, this talented husband-and-wife team here has produced a house cited for its candid use of brick and wood and glass. A steel frame was used (at no extra cost over wood) to facilitate future expansion, the wood walls being, therefore, simply curtain walls. Brick walls are at right angles through the house for wind-bracing and stability. This house will be published fully in P/A at a later date.
Within the simple rectangle, space is freely organized, resulting in near ultimate in indoor-outdoor relations.

MENTION

RAPHAEL S. SORIANO, Architect

HOUSE, VAN NUYS, CALIFORNIA

Framed in light steel (3-in. pipe columns and open-web expanded studding; 8-in. expanded joists; 1 3/4" x 6" decking), this house (October 1947 Forum) has continuous glass wall areas. Foundations: concrete; interiors: plywood and plaster.
Grouped garages and communal laundries at rear of the deep site are accessible by passage walk between two rear houses.

MENTION

KENNETH N. LIND, Architect

ROW HOUSE UNITS, SANTA MONICA, CALIFORNIA

The architect of this group of small houses aligned either side of a landscaped entrance court was co-winner of a last year's Class 2 P/A Award. The jury particularly admired the standard unit employed for six of the houses, wherein movable wardrobe units, with plant boxes at top, allow flexibility of arrangement; also the privacy for outdoor living in the individual fenced courts. The offset entrance walks seemed a trifle complex in plan. Structure is of light wood frame.

The glass wall overlooks a sheltered patio.
Local stone masonry; "fairly standard framing" on a 4-ft. module.

MENTION

RUNNELLS, CLARK, WAUGH & MATSUMOTO, Architects

HOUSE, NEAR KANSAS CITY, MISSOURI

Designed by a new, young firm, this house is built directly on a rocky woodland ledge. Specially commended were plan orientation and calculation of roof overhangs for sun control. Dry construction throughout. To be published fully in a later issue of P/A.
The site is a steep, rocky hillside immediately above the lake. This view is taken from the water's edge.

MENTION

JOHN C. CAMPBELL, Designer
& WORLEY K. WONG, Architect

HOUSE, FALLEN LEAF LAKE, CALIFORNIA

This ingenious vacation home developed from a standard "Quonset 20" was fully published in the September 1947 P/A. A frame porch angled to dramatize the lake and mountain view was added to the windowed end of the house. Wood-framed window walls dropped within the curved ribs provide three vertical walls in the living-dining room. Plan subdivision works out compactly and efficiently.
This suburban house utilizes a mill-fabricated structural system adaptable to mass production. Common framing lumber is used in a system of posts, floor and roof beams, wall panels, and sash units of identical size and shape. Trim is eliminated, and materials were selected to assure a sound, weather-tight house. P/A will present this house fully later.

**MENTION**

**JOHNSON & WHITCOMB, Architects**

**HOUSE, DEDHAM, MASSACHUSETTS**

The house is built on a level site. The rectangular shape was dictated by strict adherence to the structural system.
RUNNERS-UP

WEST

Except for the Winner and the Mentions, the only submissions specially cited by the Jury were the motor hotel designed by William Dreiss (at left) and the Kansas City Art Institute group shown on Page 70. On these six pages, however, the editors decided to share with readers a look at a few of the other outstanding jobs submitted for this year's Awards.

SPECIAL CITATION: WILLIAM T. DREISS, Designer. Motor Hotel, Long Beach, California. A group of landscaped rental units worked out in wood construction. P/A to publish fully.

OAKLAND, CALIFORNIA: Contractor's Office and Shop. Francis Joseph McCarthy, Architect. Good architecture in a field that has needed it. P/A will publish.

BEVERLY HILLS, CALIFORNIA: House. Alexander Ban, Architect. Frame and stucco house with huge, sliding, glazed wall panels that open to sheltered outdoor space.


SPECIAL CITATION: RUNNELLS, CLARK, WAUGH & MATSUMOTO, Architects. Class Rooms, Studios, and Shop Building, Kansas City Art Institute. This remarkable structure, arranged in a pavilion scheme, will appear in full in a later issue of P/A.


SOUTH BEND, INDIANA: Restaurant. Andrew A. Toth, Architect. This remodeling job won The Institution magazine's 1948 First National Honor in the Restaurant Division.


MILWAUKEE, WISCONSIN: Photography Studio-Shop and Apartment. Fritz von Grossmann, Architect; Willard E. Fraser, Designer. The owners have their apartment upstairs.


GLENVIEW, ILLINOIS: House. David Searcy Barrow, Architect. This directly planned suburban frame house has exterior walls of vertical boarding and brick.

NEW YORK, N. Y.: Office Building. Kahn & Jacobs, Architects. Column spacing of only 9'-8" results in small column sections at wall, hence almost continuous glazing. April 1947 Forum.


CANDLEWOOD LAKE, CONNECTICUT: House. William Lescaze, Architect. Frame with redwood siding and local fieldstone chimney. All main rooms face the south view.
GREAT NECK, NEW YORK: Restaurant. Herman H. Siegel, Architect. Brick building, with interior finished in redwood, perforated acoustic material, and leather.


DISPUTES
Most construction contracts provide that the architect shall interpret the drawings and specifications "as to their true intent and meaning." Usually they provide also that the architect shall determine all matters in dispute—or certain matters particularly specified in the contract documents. However, if there is not a clear and unmistakable statement that the architect's determination shall be conclusive and binding upon the parties, his decision will not be deemed final.

The idea which once prevailed almost universally that the architect's determination should be absolute yielded eventually to the belief of those who prepared the standard General Conditions presently in use. Under those General Conditions the architect's decision is not absolute and final except as to matters relating to "artistic effect" and except, further, as to other questions which are expressly mentioned in the contract documents. This stems from a belief that the best way to eliminate and avoid disputes is to dispel any appearance of arbitrariness. Hence the standard General Conditions provide for a review of substantially all disputed items by arbitration.

If the contract documents do provide specifically that the architect's word is final and conclusive, there remains the question whether the owner or contractor who may be adversely affected by the architect's decision can impeach its validity or correctness. The attitude of the courts has been frequently illustrated. The general rule is that where the contract documents have a clear clause to that effect, the architect's determination is conclusive.

A typical example of the application of this rule appears in an action tried in the New York courts some years ago. A heating subcontractor sued a general contractor to recover a balance claimed to be due under a contract which specified that "all concealed heating risers and radiator connections" should be covered with a nonconducting covering. The subcontractor claimed that the word "concealed" was limited to heating risers and, therefore, the subcontractor was bound to cover all radiator connections whether they were concealed or exposed. The architect ruled in favor of the subcontractor. The contract documents provided that his decision should be final. The court refused to overrule the architect's determination, holding that it was final and conclusive.

It is important to note that the above general rule does not apply where the architect is guilty of fraud or acts in bad faith. Where his decision or action is arbitrary, or avows an erroneous construction of the contract between owner and contractor, or is not supported by any reasonable basis, or is patently erroneous, it is the equivalent of bad faith and will not be binding.

CERTIFICATES
Where the contract provides that the certificate of the architect is required before the contractor can recover any balance claimed, the courts have upheld this provision. An exception would be in the case of death or physical infirmity of the architect. However, it is equally well settled that where the architect refuses a certificate unreasonably or in bad faith, its production is not essential for the contractor to be paid what is due him.

An interesting case in which this principle was applied was decided by the New York Court of Appeals. The MacNight Company contracted to furnish all labor and materials to make watertight a boiler room, in conformity with plans and specifications prepared by representatives of the defendant, the City of New York. The MacNight Company followed the plans and specifications in every detail but the boiler room was not made watertight. The proof established that the difficulty arose through defects in the plans and specifications and was not due to any faulty workmanship or defective materials. The court held that the MacNight Company was entitled to recover payments notwithstanding the refusal of the superintendent of the Department of Public Works to give a certificate, required by the contract as a condition precedent to payment. Under the circumstances the nonproduction of the superintendent's certificate was excused on the ground that the refusal to issue was unreasonable. In short, a recovery by the contractor will never be defeated because of the nonproduction of the architect's certificate where such a result would be manifestly unjust to the contractor and a reproach to the law.

One other thing should be kept in mind. Just as the
refusal or failure to furnish a certificate may not necessarily preclude recovery by the contractor, so the fact that a certificate has been given is not always conclusive against the owner. If a warranty has been required and its terms have been breached, the owner may recover damages even though a certificate has been issued by the architect or engineer.

In an action brought by a contractor to recover an unpaid balance of the contract price for the construction of a refrigerating plant, the defendant-owner counterclaimed for damages for breach of warranty. The contractor guaranteed that the refrigerating plant would have a certain capacity and effectiveness. The contract provided that the architect's final certificate was to be conclusive evidence of the performance of the contract. The contractor contended that since the architect had issued a final certificate, the owner could not claim damages for an alleged breach of warranty. The court upheld the conclusiveness of the final certificate but held that the owner's right to claim damages for breach of warranty was not barred by the issuance of the final certificate. The court ruled that there was no hostility between the final certificate and the express warranty; that each provision had its own result: the certificate, that the plant should be constructed and delivered to him in substantial accord with the requirements of the contract; the warranty, that the plant should subsequently operate with the stipulated efficiency.

LIABILITY

The professional man rarely considers that he may be sued by his client. Yet the records of the courts are replete with actions brought by clients against their professional advisers. Sometimes such suits are justified; more frequently they have no valid legal basis. Experience has proven that clients will sometimes resort to extreme measures, including distorted, misleading, and false evidence, in an attempt to defeat the professional man when he wishes to collect compensation justly earned.

In one case a well known architect was charged by a client, for whom he had designed a large country house, with negligence supposedly indicated by various leaking parts which had caused damage. The client's butler testified that on a certain day during a rainstorm he was obliged to use 136 of his employer's $5.50 towels to absorb the water. The case finally exploded when it was established that on that same day other residents in the same community, who did not have so many or such expensive towels, were obliged to use pumps to get the water out of their homes—for on this day a hurricane had occurred!

An architect, like a doctor or lawyer in his professional capacity, holds himself out to the public as being possessed of average ability in his profession. The law implies that he contracts with his client (1) that he possesses the requisite degree of learning, skill, and experience which is ordinarily possessed by his profession and which is usually regarded as necessary and sufficient to qualify him to engage in his profession; (2) that he will use reasonable care and diligence in the exercise of his skill and in the application of his knowledge; and (3) that he will use his best judgment in exerting his skill and applying his diligence. If the architect has seriously lived up to these commitments, he has nothing to worry about. If he is not competent, or if he does not exercise "reasonable care and diligence," he should realize that he may very well be held liable if trouble develops.

One thing to remember is that the architect's liability is not diminished or avoided by the fact that the building has been accepted by the client.

Another point to bear in mind is that even if he has been negligent in the preparation of drawings, the architect will not be liable if the owner has made a material departure in the mode of construction of any part of the building which might have caused the damage complained of. In this case the architect would be exonerated from liability on the theory that deviation by the owner had resulted in a new contract, to which the architect had not assented.

SUPERVISION

In the supervision of construction the architect endeavors to guard the owner against defects and deficiencies in the work of contractors. He does not guarantee his client the performance of construction contracts, but he must still exercise "reasonable care and skill" in supervising construction, to see to it
that the materials used are of proper quality, and that the work is done in the manner called for by the plans and the specifications.

His duty does not stop with mere inspection. It must be borne in mind that when an owner employs an architect to supervise the construction of a building, he has a right to rely on the architect to exercise active vigilance. The architect not only possesses the right, he has the duty to condemn improper workmanship or materials or other deviations from the contract documents.

In a leading case decided many years ago in New York which has been consistently followed to the present date, the court described the duty and responsibility of the supervising architect in the following language: "The counsel would not contend that the architect is an insurer of the perfection of the mason work, the carpenter work, the plumbing, etc. He is bound only to exercise reasonable care and to use reasonable powers of observation and detection, in the supervision of the structure. When, therefore, it appears that the architect has made frequent visits to the building, and in a general way he has performed the duties called for by the custom of his profession, the mere fact, for instance, that inferior brick has been used in places does not establish, as a matter of law, that he has not entirely performed his contract . . . An architect is no more a mere overseer or foreman or watchman than he is a guarantor of a flawless building, and the only question that can arise in a case where general performance of duty is shown is whether, considering all the circumstances and peculiar facts involved, he has or has not been guilty of negligence. This is a question of fact, and not of law."

In other words, the law accepts the fact that supervision by an architect means general periodic supervision as distinguished from continuous personal superintendence. The architect, under the normal contract, is not required to spend all his time at a building which is being constructed under his personal care, to avoid blame for any negligence or fraud which may be committed by any contractor or anyone else. Yet if the architect has been negligent, the responsibility is his. The question remains—what is negligence?—and in the words of the court cited above, that is a matter of fact, not of law. Since, in the final analysis, the question of negligence is one of fact, the burden of proof rests upon the client. Because of this I make the following recommendations: (1) the architect should visit the job as frequently as is reasonably possible; (2) he should keep written detailed records of his inspections and supply the owner with copies; and (3) he should keep records of all interviews with the client—including telephone conversations. Proof of frequent visits and the retention of detailed records of inspection are cogent evidence of care and vigilance and ordinarily will persuade a jury that the architect has done everything that any reasonably prudent professional would do under similar circumstances.

In summary, the matters for an architect to keep in mind, in order to avoid legal pitfalls in the performance of his duties, include:

1. The architect's decisions ordinarily are final if the General Conditions so state.
2. If there is no specific statement to that effect, the architect's decisions are not final and binding.
3. The architect's decisions have no validity if he can be proved guilty of fraud or bad faith—which includes arbitrary, erroneous, or unreasonable decisions.
4. The architect's certificate, if required in the contract, is necessary for contractor's payment.
5. The architect's certificate is not conclusive if "fraud or bad faith" on his part can be shown.
6. The owner can recover under a warranty unfulfilled, even if the architect has issued a certificate.
7. The architect can be held liable when trouble develops, if he has not indicated professional competence, reasonable care and vigilance, or good professional judgment.
8. Acceptance of a building by the client does not free the architect from liability.
9. Material changes made by the owner without the architect's consent, and which might have caused the damage complained of, do free the architect from liability for the negligent preparation of drawings.
10. The architect has the right and the legal duty to condemn improper workmanship and materials.
SENSIBLE DETAILING IN WOOD

HOUSE, SYOSSET, NEW YORK
CALEB HORNBOSTEL, Architect
JEAN P. TROUCHAUD, Designer
ROOF VENTS: two saw cuts, a chisel blow, one auger hole, and a piece of screen per vent.

SENSIBLE DETAILING IN WOOD

In this house, done expressly for Mr. and Mrs. Donald C. Little, Hornbostel and Trouchaud incorporated many details designed to employ wood rationally. They wished to reduce waste without forcing unfamiliar techniques upon the carpenters, and with due consideration for the effect of many details upon the house as a whole. The experience behind this house's design included that gained when the architects operated as the Dweltech Corp. in designing, financing, and building houses for sale in very competitive parts of Long Island.

In spite of the difficulties of using wood well today, the average American small house remains a wood structure. Hence it should be profitable to examine a house in which the architects have concentrated upon refining methods of using wood, aiming at the type of economy which would assist—rather than hinder—their maintaining reasonable standards of performance and esthetics.

The house plan has some excellent features and a few that are questionable. The building sits well back from a secondary road; this situation combines with the placement of the bedroom and garage wings to afford maximum privacy for the large solar window in the living room. When landscaping is completed privacy from the road can be increased. The garage door is placed off center to gain storage space without increasing the garage size. Notice in the plan that the organization of living room, dining area, and bedroom hall is such that the number of windows necessary is reduced to a minimum: the fixed solar window in the living room and paired double-hung metal sash in the dining area. While the living areas are actually small, they are so organized and surfaced that, upon entering, one is pleasantly impressed with their light airiness. One means to this end is the simple wood bookcase suspended between hall and living room. Only immediately at the entrance door is the plan cramped. Duplication of entrances almost side-by-side here is curious; and yet when one passes through this bottleneck the apparent roominess of the interior is enhanced.

Scale of the details and simplicity of wall treatment have much to do with this. Interior window and door trim consists of a flat lattice strip, 1/4" x 1/4" actual size, which is unobtrusive, is sufficiently flexible to take up inevitable irregulari-
ties in construction, and simplifies housework. It is also the minimum size for covering the joint between jamb and wall surfacing. The base throughout is stock 1" x 4" (\(\frac{3}{4}" x \frac{3}{8}" actual size), flat, with a quarter-round floor mold. There is not a fussy, hard-to-clean surface in the house. Interiors are faced with gum plywood, T & G cedar boarding, and in some cases plasterboard covered with wallpaper.

To use sheet materials intelligently, the designers laid out the plan on a 4-ft. modular basis, with windows and doors located to minimize wastage of the panels. Depth of interior door jambs is set by the thickness of a wall surfaced with \(\frac{3}{4}" plywood on one side and \(\frac{1}{2}" plasterboard on the other; this to some extent determined the choice of wall material. Wherever it was possible, each door or window was located either quite close to a corner, so that the regular trim would completely fill to the corner; or far enough away from the corner to eliminate the difficult cutting and fitting of small pieces.

In both general construction and exterior detailing the same criteria apply. The house is of ordinary frame construction,
Medicine cabinet and fluorescent lights are built into a preassembled window unit. This makes possible more efficient utilization of bathroom space, provides good face-lighting by day or night, and since the architects have used the same detail in several houses a number of the units could be made up at the same time.

SENSIBLE DETAILING IN WOOD

with studs 1'-4" on centers, covered with insulating, asphalted sheathing board. Roof framing is likewise 1'-4" on centers. The obvious reasons dictated this spacing: familiarity, the fact that it is convenient for sheet materials, etc. As for exterior details, the exterior door and window trim is stock 2" x 2", which works well with both brick veneer and wood siding as the drawings show. The sunshade over the solar window might have been overly heavy in appearance—it is supported by the extended roof framing—if the projected rafter ends had not been tapered to meet the slender cornice piece that is used all around the house.

The roof has fill insulation and is vented at the eaves for coolness. The vent detail shown was laid out for ease of cutting on the job. The carpenter's procedure here was systematized: first the position of the saw cuts was marked on the 2" x 6" (or 2" x 10" where wood siding was used) and, with a power hand saw, all the cuts were made. Next the carpenter knocked out the waste between cuts with a hammer and chisel; he bored all the vent holes, tacked a square of screening over each, and the member was ready for priming and erection.

The designers, in every case, worked with their materials rather than fought them. An instance is the detailing of the plywood walls. Scarcely an architect who has used plywood hasn't worried at the joint problem in an effort to minimize it, to make a continuous surface of a discontinuous material. Hornbostel and Trouchaud had half-licked this difficulty by using framing, plan, and window placement that were all modular; they disposed of the remainder by frankly separating the panels. The plywood is cut to such sizes that a joint occurs at the level of the door and window heads. On one wall of the living room, for example, the panels are 2'-8" wide by 3'-4" high, to fit both stud spacing and door height. The left-overs from each plywood sheet fill the space between door head and ceiling, and also supply the strips used to back the joints. Admittedly this cutting of standard plywood sizes was an "extra" operation, but it possessed several advantages: it permitted use of a panel pattern of scale compatible with room dimensions; it permitted small irregularities in construction to be compensated more easily than would have been the case with the larger sheets of more inflexible dimension; the panel pattern creates an interesting wall surface that is not fussy. And when the plywood was all in place, there was very little waste.

Two other ingenious developments are worth noting—the bathroom window-cabinet-lighting fixture combination; and the shutter front used on the kitchen cabinet drawer, which, without creating any problems for the cabinetmaker, eliminated the need for drawer pulls. Both these details are easily comprehended from the drawings.

Materials and Methods
SHUTTER FRONT on kitchen counter drawers eliminates the usual drawer pull without complicating the work of craftsmen.

PANELING, of gum plywood, fits both the framing studs and the door height. Joints are emphasized just enough to make a virtue of this necessity. Door itself is stock, covered on the job with the same plywood.
THE SUSPENDED BOOKCASE takes full advantage of the lateral strength of plywood; the shelves brace it effectively against bending.

SENSIBLE DETAILING IN WOOD

DINING AREA has one wall faced with the same cedar boards that surface the ceiling.

PLYWOOD WALLS in bedrooms are constructed like those in living rooms, with the omission of one horizontal joint.

Materials and Methods
FIXTURE PANELS

GUY G. ROTHENSTEIN, Designer

Prefabricated bathroom units: Fixturepanels are vertical, usually angular, wall panels combined with plumbing fixtures. Fitted together with connection panels they may form any desired type of complete bathroom or other sanitary installation. They are not to be confused with utility cores or other complete units whose use is restricted to certain plan arrangements; Fixturepanels are expected to be useful in many types of buildings in addition to houses and are suitable for innumerable types of plans.

A, front view of a model showing fixture (dressing table, lavatory, toilet, etc.). B, rear view showing preassembly, with pipe stubs projecting. C, rear view, corner and connecting panels joined, piping connections as completed on the job. D, front view, corner and two connecting panels with pipe space behind, showing access doors, fixture, accessories, water-repellent wall covering, storage space.

Patents pending
The irrationality of many building materials and construction techniques has been attacked by numerous competent designers and architects; we have had put to us many proposals for utilizing industrial methods to produce larger building units, more precisely put together than they could be on the job, of materials that are inherently better suited to their ultimate purpose than those customarily employed, to provide better buildings at lower cost. Familiar examples range from doors complete with casing and hardware to entire bathrooms, to "mechanical cores" and complete houses. Each has had some drawback: one might be suitable only for houses, neglecting other types of buildings; another might limit design possibilities; another might require installation procedures foreign to established labor practices.

Guy Rothenstein, New York architectural designer, has conscientiously explored the bathroom problem from all these points of view, seeking to rationalize both the materials and the techniques applied to this essential, usually expensive installation. The Fixture-Panel is his solution: a combination of water-repellent wall panel and fixture, plus all the usual accessories, to be made in a factory, of sheet materials, in units large enough to effect substantial savings yet small enough and in sufficient variety to facilitate handling on the job and to make them suitable for any type of building. His conclusions on fixture design, only a portion of which can be illustrated here, appear sound indeed when, for instance, he can increase elbow room at a lavatory by designing the fixture as an integral part of a corner panel, or increase the interior length of a bathtub by 6", both without increasing the bathroom area. In this redesign all finish dimensions are based upon Le Corbusier's "Modulor" system which coordinates measurements with the various portions of man's anatomy.

Fixturepanels possess distinct advantages. They could afford great flexibility in the layout of any type of sanitary installation, they are well suited to alteration work, they conflict with no building codes or labor practices, and the economies possible in use of materials, in storing, shipping, and time of installation should be obvious. The standard of sanitation possible with Fixturepanels is high, maintenance and cleaning costs low. The comfort with which a Fixturepanel room could be used results from careful designing in regard to shape, size, spacing, and location of fixtures and to the relationship of fixtures and accessories. A seeming disadvantage is the necessity for longer piping runs than are needed when conventional fixtures are placed close to a group of risers. Yet the designer estimates that a Fixturepanel bathroom could be made enough smaller than a conventional bathroom (without reducing the amount of free space below that available in a comparable conventional installation) to offset any additional piping cost. The first reaction of architects, builders, and the plumbing trade has been very favorable. General interest points toward a mass-production program, although no license for fabricating has yet been given to any particular manufacturer.

Installing Fixturepanels should be a simple process. Top, after rough piping is in place, corner unit is set up; next, piping is connected through access panel; then adjacent connection panels are installed; bottom, completed corner installation (which is repeated for different fixtures in other parts of the room) showing access panel open.

Materials and Methods
WE STILL HAVE SHORTAGES

We aren't quite positive about the right or wrong of the recent soft coal rumpus, but we do know that any bituminous coal shortage aggravates a serious situation in iron and steel production; that fact makes it our business. Months ago, a chap whose job it was to keep a finger on building materials production told us to watch sheet steel. Last January, in our annual products issue, there was an undertone of uneasiness in the reports of manufacturers of such equipment as shelving, heating units, etc.

Now comes a definite statement by the National Warm Air Heating and Air Conditioning Association. "In view of the current iron and steel situation," says the Association, "prospects for supplying all the heating equipment necessary to meet the demands of new home completions are very grave indeed ... Approximately one out of every four new houses built during 1948 is going to ... lack adequate heating equipment ... These figures are based on a recent survey of manufacturers in the warm air heating industry conducted ... by Dun & Bradstreet ... including manufacturers of furnaces, pipe and fittings, registers, blowers, controls and filters ... Direct causes ... are the current shortages in supplies of iron and steel which have forced cut-backs in production . . . ."

If manufacturers could, by scrabbling furiously, possibly obtain steel in the "gray market," retail prices would zoom farther up; but rather than produce at such a price that their markets are killed, many manufacturers have curtailed production and one has already closed down. Apparently there is serious competition for the available steel both within (from manufacturers of all types of equipment) and without (from such heavy users as automobile manufacturers) the building industry. The Association observes, with a curious nostalgia: "... how substantially the supply of iron and steel improved during those quarters of 1946 and 1947 when government priorities and voluntary allocations were still in effect . . . ."

On the other hand, we recently had a release from a shower-stall manufacturer who said he could obtain all the sheet steel necessary, and that any other material used for that purpose was strictly ersatz.

ADDING FUEL TO CONFUSION

But that's not all! If this year's shortage of oil and gas fuels continues there will be greater demand for coal furnaces, which require more steel and iron. And in part, the fuel shortage is due to lack of pipe lines, says the American Gas Association. In 1947, gas utility companies allocated more than a billion dollars for this purpose, but "because of shortages, principally steel, actual expenditures were about 780 million dollars." So the steel shortage interferes with gas distribution, which increases the demand for coal furnaces, whose production is hampered by the iron and steel shortage. Stop twisting my neck!

—OR CHANGING FUELS IN MIDWINTER

Chrysler Airtemp has come up with a new line of furnaces whose very existence is a wry comment on the times: their new compatible, all-fuel furnace which can be changed from hand-fired coal, to oil, to stoker-fired with the greatest ease. Grates can be removed or installed, says Chrysler, in a matter of minutes. Four sizes, for houses of from 5 to 12 rooms, are to be available, and two models, gravity and forced warm air.

RESILIENT, RADIANT-HEATED FLOORS

For three years Armstrong Cork Co. has been testing resilient surfacing materials to be used over radiant heated floors. Results indicate that most resilient flooring can be used without special preparation, provided the radiant heating installation is "typical"; that is, if the floor surface temperature does not exceed 80 to 85°F (which means, usually, a water temperature not over 120°F). Higher temperatures would probably cause excessive indentation, especially in asphalt tile. Linoleum, linoleum tile, and rubber tile should be applied only on floors with at least an 18" ventilated air space beneath; floors directly on grade require asphalt tile. The tests also proved to Armstrong that ordinary furniture rests and cups can be used satisfactorily to protect resilient floor materials used over radiant floors. When there are unusual heating conditions (i.e., high temperatures generally or locally) the flooring manufacturer should be consulted, says Armstrong.
Institutional and dormitory uses: plans compare scheme for a veterans' hospital developed by Skidmore, Owings & Merrill, architects, in a unit of two single rooms with connecting toilet, and a solution that might have been reached using Fixtuepanels. Note reduction of pipe space, increased roominess, all in same total area. Fixtuepanels could be used similarly in apartments and hotels, in prefabricated and individually designed houses, in ships, planes, or trains.

Suggestion for a lavatory in a restaurant or hotel.

More space available in a given room enclosure with Fixtuepanels: in the conventional bathroom fixtures are grouped for piping economy and a pipe chase is employed. Fixtuepanel bathroom, using corner fixtures, affords more usable space, provides larger individual fixtures (Fixtuepanel tub is 2'-2" x 5'-6", inside rim, compared to 2'-0" x 5'-0" for a nominal 5'-6" conventional tub).
The Subscriber and the Plumbing Fixture Manufacturer—Continued

Last March we published a note concerning a subscriber's hunt for a lavatory for building in, equipped to take a pop-up drain; we had heard from the persevering subscriber, Joe Shoaff, that at last he had found a place to buy one. Thinking to do others a good turn, we passed on to you the word that Mansfield Sanitary Pottery, Perrysville, Ohio, manufactured this type of fixture. In about a week we received the first of the following letters. Read, and please take an aspirin for us:

March 12, 1948

Dear Editor:

In view of the article published under P/A Products in your March 1948 issue of Progressive Architecture, we wrote to the Mansfield Sanitary Pottery, Inc., at Perrysville, Ohio, and are hereewith enclosing a copy of this letter in response to our request for a built-in lavatory.

T. Richard Shoaff, Architect
Fort Wayne, Indiana

Enclosure:

March 10, 1948

Dear Mr. Shoaff:

We have your communication of 3/2/48 and are sorry that we cannot serve you since we do not have this type of lavatory in stock and will not have at any future date. We are sorry for this decision and wish to thank you for your patronage.

Mansfield Sanitary Pottery, Inc.
W. R. Hainer, Sales Manager

(Ordered: 1 lavatory for building-in to a counter top with pop-up drain fitting, size 20" x 16").

So we wrote Joe McCarthy again:

March 16, 1948

Dear Joe:

... Have you any answers to the points which the enclosed letters ...

(Enclosures: photostats of preceding letters.)

And Joe replied:

March 22, 1948

Dear Editor:

Here we go again ... all I can say in regard to Mr. Shoaff's letter is ... I am enclosing a letter in which (Mansfield Pottery) informed me that (they) did not make a rectangular unit, but only the oval one. I am also enclosing the advertising cut out so as to show it. These P.O. bowls are available in San Francisco, size 19" x 16" with a 1 1/2" outlet ... it is getting a sink or lavatory unit with a 1 1/2", and not a 1 1/2" or 2", outlet, that is the catch, as only 1 1/4" will take pop-ups.

Francis Joseph McCarthy, Architect
San Francisco, Calif.

Excerpt from enclosure:

January 21, 1948

Dear Mr. McCarthy:

... We are sorry to state that we do not manufacture a rectangular unit ... We make only the oval one ...

Mansfield Sanitary Pottery, Inc.
W. R. Hainer, Sales Manager

Description of second enclosure:

Advertisement from page 88, October 1947 issue of "Domestic Engineering," in which appears, among other products of Mansfield Sanitary Pottery, Inc., the oval "lavatory basin" which Joe informs us he has obtained in San Francisco, which will take a pop-up, and can be built-in.

We sent photostats of everything to Mr. Shoaff. Just now we received another:

May 6, 1948

Dear Editor:

... Standard Sanitary has gone back to manufacturing P.O. bowls ...

Francis Joseph McCarthy, Architect
**Manufacturers’ Literature**

Editor’s Note: Items starred are particularly noteworthy, due to immediate and widespread interest in their contents, to the conciseness and clarity with which information is presented, or to some other factor which makes them especially valuable.

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**AIR AND TEMPERATURE CONTROL**

1. Air Recovery (Bul. 105-A Form S-182), 16-p. illus. bulletin on activated carbon canisters, installed in air conditioning equipment, which remove odor and fumes. Typical assemblies, dimensions, framing details, capacities, resistance curves. Other types of air purification units. W. B. Connor Engineering Corp.

Two 4-p. booklets on hot water and steam generators; cyclonic combustion, horizontal, two-pass firetube construction. May be operated with any gaseous or liquid fuel. Dimensions, ratings. Cyclotherm Corp.: 1-177 Cyclotherm to Meet Every Steam Need. 1-178. Heat.

1-179. Glomaster, illus. leaflet describing an electric space heater giving both infrared radiation and convection heat. Advantages, installation directions. The Firan Co.


1-182. The V & E Water Tube, 4-p. folder on an oil burning heating boiler. Steel construction; down draft, fully automatic. Advantages, ratings, specifications. V & E Products Co.

**CONSTRUCTION**

3-1. Temprex Duo-Pane, 16-p. illus. catalog on self-supporting structural glass blocks which can be assembled without any cementing agent to form picture windows, inside walls, partitions. Properties, typical installations, details. Appleman Art Glass Works.

3-2. Fenestra Panels for Up-to-Date Houses (HP-2), 4-p. illus. booklet on steel panels that combine joist, bridging, and sub-flooring, and their use in connection with radiant heating. Standard sizes, installations, details. Detroit Steel Products Co.

3-3. Laminated Arches and Beams, 12-p. booklet on arch frames, segment arches and beams, developed from wood laminae, glue-welded into solid forms. Selection information, dimensions, details. Unit Structures, Inc.

**DOORS AND WINDOWS**

4-130. Hope’s Lok’d Bar Steel Sash (Pub. No. 76B), 28-p. catalog on pivoted and commercial projected steel sash. Dimensions, diagrams, sections of frames, muntins, Mullions; details of pivoted and projected ventilators, hardware details, applications. Hope’s Window, Inc.

4-131. Store Fronts, 27-p. illus. brochure on construction of store fronts; also description of new facing material, Zourite. Typical details, sections of sash, bars, trim, ventilators, etc. Indexed. The Kawneer Co.

4-132. Durall Aluminum Tension Screen, 6-p. illus. catalog on a new screen with special tension design and patented devices which eliminate side frames, permit window washing without removal of screen. Description, installation directions, sizes. New York Wire Cloth Co.

**ELECTRICAL EQUIPMENT AND LIGHTING**

5-121. The Executive Luminaires, leaflet on four types of fluorescent lighting fixtures, each with an over-all depth of only 3½". Watt and volt chart; dimensions, advantages. All-Bright Electric Products Co.

5-122. General Lighting Company, AIA 38a-10, 12-p. illus. catalog on incandescent, fluorescent fixtures and accessories, including reflector lamps, luminaires, rotating incandescent ceiling unit, showcase strips, spotlights, etc. Contents table, dimensions, photographs, color filter chart. General Lighting Co.

5-123. Port-O-Keel, 4-p. leaflet on a portable lamp equipped with reel to hold 75-, 100-, 125-, or 150-ft extension cord. Features, diagram. Industrial Electrical Works.

**FINISHERS AND PROTECTORS**

6-123. Smooth-On No. 7 Iron Cement, 4-p. leaflet on a cement used to seal masonry joints, leaks in concrete, brick, or stone walls and floors. Applications. Smooth-On Mfg. Co.

Two 4-p. folders on two paints, one of which prevents rust, is applicable to any metal surfaces; the other, a sealer and wood preservative especially adapted for wood buried under earth surface. Speco, Inc.: 6-124. Speco Woodtrem (P & P-1006). 6-125. Speco Rustrem Paint (P & P-1002-A).

**INSULATION**

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trial Mineral Wool Institute.)
9-96. Sound Control (AC 35A), 16-p.
ilus. catalog on sound absorbing units
of perforated enameled metal, contain-
ing rock wool pad; and held in place by
special tee bars. Typical installations,
construction details, data chart. Also

MATERIALS OF INSTALLATION
13-65. Loxit Mouldings (Cat.
3-48), 70-p. illus. catalog on alu-
minum, steel, bronze, moldings
and accessories, including comprehen-
sive line of tools. Index, dimensions,
descriptions. Loxit Moulding Co.

13-69. Here's a Better Way to Build!,
4-p. leaflet on the application of Trip-
L-Grip framing anchors to industry-
engineered houses. Application, de-
tailed construction diagrams. Timber
Engineering Co.

SANITARY EQUIPMENT. WATER SUPPLY.
AND DRAINAGE
19-221. Crestlyn Stainless Steel Sink
Tops, loose sheet on single, double bowl
sink tops; bowls die-drawn from stain-
less steel sheets, bonded to sink tops
with continuous weld to eliminate
seams. Specifications, advantages.
Douglas Distributing Corp.

19-222. Are You the Victim of Water-
Stealing?, AIA 29-H-3, 6-p. illus. folder
on shower equipment, including a new
balanced pressure shower mixing valve
that can be applied to flat or curved
surfaces. Uses, method of installation,
specification form, colors, types, and
cuts. Also genuine leather in roll or
tile form for wall or floor surfacing.
U.S. Plywood Corp.

TRAFFIC EQUIPMENT
20-234. Pow-R-Truck Elevators, AIA
33E-1 (B-705) ($410), 8-p. illus. book-
let on standardized freight elevators
especially designed to take heavy pun-
ishment from power truck loading,
where the truck may weigh 8,000 lbs.
or more. Design, safety features, struc-
tural requirements, sizes and capacities.
Otis Elevator Co.

19-227. Tile, 4-p. folder on wall
and floor tile, based on U. S.
Dept. of Commerce standards.
Also tile trimmers and trim shapes.
Descriptions, tile classification, uses, sizes,
colors. Tile Council of America.

19-228. Flexwood, 4-p. folder on Flex-
wood and Flexglass, two flexible deco-
orative surfacing materials made of
wood veneer and glass, respectively,
that can be applied to flat or curved
surfaces. Uses, method of installation,
specification form, colors, types, and
cuts. Also genuine leather in roll or
tile form for wall or floor surfacing.
U.S. Plywood Corp.

REVIEWED MAY '48

AIR AND TEMPERATURE CONTROL
1-171. Axeman-Anderson Anthra-
tube, Axeman-Anderson.
1-172. Homease Economy Heat
Maker (Bul. 4P-3C-SX11), Bogue
Electric Co.
1-173. Airjet, AIA 30-D1, C. R. Gel-
ert Co.
1-174. Walton Industrial Humidifica-
tion Systems, Walton Laborator-
ies, Inc.
1-175. Fuel Conservation Handbook
(Form LO-452-15), Williams Oil-
O-Matic Div., Eureka Williams Corp.

DOORS AND WINDOWS
4-126. Alumidor, AIA 15A, Alumi-
dor Corp.
4-127. Electronic Serviceman, Fed-
eral Industries, Inc.
4-128. Universal Knock Down Hous-
ing Frames (Service Sheet No. 85),
Richmond Fireproof Door Co.
4-129. Ware Aluminum Windows,
AIA 16S, Ware Laboratories, Inc.

ELECTRICAL EQUIPMENT AND LIGHTING
5-117. The Light of Tomorrow . . .
Today, AIA 31-F-2, Catho-Lite Co.,

5-118. Stran-Steel, Stran-Steel Div.,

5-119. Modernize Your Lighting with
a Louverall Ceiling, Louverall Light-
ing Corp.

5-120. Spectacular Focal Lighting (KV
170), Kurt Versen Corp.

FINISHERS AND PROTECTORS
6-120. Florocrete, Camp Co.
6-121. Maintenance, Cleaning, Fin-
ishing and Coloring of Copper, Brass
and Bronze, Copper & Brass Re-
search Assn.
6-122. Fight Water, AIA 7 (10M-7-
47), Sika Chemical Corp.

INSULATION (THERMAL ACOUSTIC)
9-93. Roof Insulation (11-18-845),
Armstrong Cork Co.
9-94. Kimsul Insulation, AIA 37B
(Reform KLB 12-12), Kimsul Div.,
Kimberly-Clark Corp.

LOAD-BEARING STRUCTURAL MATERIALS

12-148. Stran-Steel, Stran-Steel Div.,
Great Lakes Steel Corp.

MATERIALS OF INSTALLATION
H-108), Hazard Insulated Wire
Works Div., Okonite Co.

NON-LOAD-BEARING STRUCTURAL MATE-
RIALS
14-60. Glass, AIA 26-A (MC1146),
Libbey-Owens-Ford Glass Co.

SANITARY EQUIPMENT. WATER SUPPLY.
AND DRAINAGE
19-209. Briggs Beautyware (Cat. F),
Briggs Mfg. Co.
19-210. The Ross Sprinkler Co. (Cat.
5), Ross Sprinkler Co.
19-211. Bath Tub Hanger, Titewall
Hanger Co.

SPECIALIZED EQUIPMENT
19-212. Planning for Home Tele-
phones, American Telephone & Tele-
graph Co.
19-213. Erco Bronze Tablets, Erco
Mfg. Co.
19-215. The Exhaust-Water Spray
Fire Protective System for Well-
ways, AIA 33E-1 (Otis File No.
B-705), Otis Elevator Co.

SURFACING MATERIALS
19-216. Danbury Rubber Tile, Dan-
bury Rubber Co.
19-217. Textolite Laminated Plastics
(CDP-548), General Electric Co.
19-218. Heavy Duty Finishes, Maple
Flooring Manufacturers Assn.
19-219. Marlite, AIA 23-L12, Marsh
Wall Products, Inc.

TRAFFIC EQUIPMENT
19-220. Folding Stairway, Precision
Parts Corp.
YOUNG SYMBOL
OF SAFETY

This unretouched photograph of a young man leaving his work shows how easily safe exit is achieved.

Once Von Duprin devices are installed on the doors... safe, quick exit is always available to even the smallest children.

The surfaces may tarnish, the doors may be neglected, but the simple, sturdy, precision mechanism which is fundamental in Von Duprin design continues to provide the same assurance of safety as when new.

VON DUPRIN DIVISION
VONNEGUT HARDWARE CO., INDIANAPOLIS

Von Duprin
HAZARD HOUSE
Syracuse, New York

SARGENT-WEBSTER-CRENSHAW & FOLLEY
Architects
Newest member of the Pittco De Luxe line of store front metal is this flush type sash (No. 17). It was designed primarily for use where the architect wishes to have the ceilings of canopy and store on the same plane, apparently joining each other without interruption. It can also be used at the sides. Of special importance is the fact that this new sash is self-adjusting to allow for a certain amount of deflection in beam or canopy ... there are no obstructions between the edge of the glass and the inner member. The extruded construction of sash No. 17 assures sturdy strength and a rich, smooth finish, and it can be used in combination with all other Pittco members, whether De Luxe or Premier.

The creative thinking that went into the design of this new sash is only one example of the careful planning that has won so many friends for both lines of Pittco Store Front Metal. Sturdy construction, distinctive styling, ease of installation, and a rich finish have made Pittco De Luxe an outstanding leader for high quality store front installations. Pittco Premier satisfies every requirement for a lighter weight, more moderately priced metal which can be set easily and quickly.

PITTCO
STORE FRONT METAL

"PITTSBURGH" stands for Quality Glass and Paint

PITTSBURGH PLATE GLASS COMPANY
How the REXALL DRUG COMPANY uses asphalt tile in its building and modernization program

By Fred Schmid, Vice President
In Charge of Construction and Design, Rexall Drug Co.

Asphalt tile has many uses in our building and modernization program primarily because of its low initial cost and its adaptability to changing store conditions. We have found it especially suitable when installing new floors in existing drug stores because the speed of installation insures a minimum interruption of store business.

Our experience, furthermore, has been that asphalt tile is a sturdy, long-wearing floor material. It is not as resistant to wear as certain types of cement-finished floors, of course; but this one factor is more than compensated for by the wider group of colors available in asphalt tile, the infinite number of patterns and designs which can be worked from this all-purpose flooring material, and its resilience and safety under-foot.

The ease and low cost of maintaining asphalt tile is of particular interest to us as chain store operators. To assure maximum service and to protect the beauty and surface of the material, our Maintenance Department is careful to furnish all of our store managers with the simple instructions necessary for maintenance of asphalt tile floors.
USES FOR ASPHALT TILE IN THE REXALL DRUG COMPANY CONSTRUCTION PROGRAM:

New Store Construction: Asphalt tile is used in a new store when we have a comparatively short lease, or the location does not warrant heavy construction expenditures, because the material is economical from an installation and maintenance standpoint and still has long life. The tile is installed over the entire store area to save the additional expense of extra flooring in the aisles behind counters. Asphalt tile has proved to be a comfortable walking and working surface for employees who spend long hours on their feet. By covering the entire area we also eliminate the need for floor alterations or repairs when it becomes necessary to change the layout of counters or showcases.

In flooring a new store where both a long lease and extremely heavy store traffic must be considered, we usually specify terrazzo because of its greater resistance to wear. Even here, however, a greaseproof asphalt tile is used behind the soda fountain. It is easier underfoot and isn't affected by food greases.

Modernization of Existing Stores: For upgrading drug stores at low cost we give an old store a "new look" by improved lighting, interior repainting and, where the existing floor is worn out, old fashioned or in need of repair, a colorful, new asphalt tile floor. One of the big advantages of using asphalt tile is that we can usually install the floor overnight without interfering with the business of the store.

Store Expansion: When we have the problem of enlarging an existing store already floored with asphalt tile, we find it's a simple and inexpensive matter to cover the new area with a matching tile. If, for one reason or another, an entirely new floor is needed, it's important to our plan of operation to know that here, too, we can easily cover first the new then the old area without curtailing operations in the existing store.

Independent Stores: The benefits of our experience with asphalt tile and other flooring materials used in Rexall's 480 company owned drug stores are passed on to the almost 10,000 Rexall independent agents! As part of the service furnished them for planning, building and equipping their stores, we suggest wall colors, ceilings, store fronts, lighting—in fact a complete design-decor plan. Asphalt tile, in colors that tie in with the overall decorative scheme, is specifically recommended to them as the ideal floor covering material.

Office Buildings: The offices and corridors of our new world headquarters building in Los Angeles are floored with asphalt tile. The material when used in offices offers many of the same practical advantages it does for store use. Moreover, it's a good flooring for office areas because of its resiliency, pleasing colors and sound deadening qualities. Acoustical ceilings are used throughout our headquarters building which makes the need for overall sound deadening an important consideration.

Many, many thousands of retail establishments throughout the country, selling every imaginable kind of merchandise, handling widely varying traffic loads, and catering to both class and mass patronage are today surfaced with Tile-Tex® Asphalt Tile! Whatever your problem in flooring, look first to this quality asphalt tile—thoroughly proved in almost a quarter of a century of serving America's flooring needs. For more information concerning this all-purpose flooring material or reprints of this article, write The Tile-Tex Company, Inc. (subsidiary of The Flintkote Company), Chicago Heights, Illinois. Sales offices in Chicago, New York, Los Angeles and New Orleans.

The TILE-TEX Company
CHICAGO HEIGHTS, ILLINOIS

*REGISTERED TRADEMARK OF THE TILE-TEX COMPANY, INC.
Specify STANLEY floating*

Garage Door Equipment

You'll Find Just the Right Type and Size to Fit the Job — and the Owner's Pocketbook!

Large city residences or small country cottage — liberal or modest hardware allowance — Stanley Floating* Door Equipment meets the whole range of style and price! Four floating types are easy operating, weather-tight, long-lasting, easily installed. All are priced within a few dollars of ordinary, old-style garage door equipment. Worth looking into, isn't it?

Stanley Floating* Door Equipment is stronger-built, better assembled, and backed by the greatest name in door hardware! Try one on your next house. See for yourself. Sold by your local Stanley dealer. Folders on request. The Stanley Works, Garage Door Division, New Britain, Conn.

1. "ECON-O-MATIC"— The economical, automatic hardware equipment for lightweight doors up to 150 lbs. A twist of the handle and the door "floats" up and over.

2. "SLIDE-UP"— A bargain in convenience. Can be applied to old or new doors. A simple weight-box, sand-filled, balances the weight of the door.

3. "SWING-UP"— Simple pivot principle swings the door up effortlessly. For doors up to 250 lbs. and any size up to 8' x 8'. Excellent for converting old, hinged doors into a smooth working unit.

4. "SWING-UP" (Heavy Duty)— Deluxe hardware equipment, its rugged construction handles heavy 8' x 8' doors. By substituting heavier springs this set will swing up doors up to 16, wide weighing up to 700 lbs.

THE GREATEST NAME IN DOOR HARDWARE!

For Any Residential, Commercial or Industrial Door That Lifts — Slides — Swings — Rolls — Or Folds.
Sanymetal Normandie Type Toilet Compartments impart a moderately streamlined effect to a toilet room environment. Streamlined design wedded to utility fulfills all requirements. Unadorned utility no longer satisfies a public accustomed to bathrooms embodying varying degrees of modernity and elegance. Available in three finishes: (1) "Porcena" (porcelain on steel); (2) "Tenac" (baked-on paint enamel finish over galvanized, bonderized steel); (3) baked-on paint enamel finish over regular furniture finish, cold rolled steel. "Porcena" (porcelain on steel) is available in a variety of standard colors.

Sanymetal Academy Type Toilet Compartments provide a certain distinctiveness. This type of partition is the only one in which all the dignity and distinctiveness of standard flush type construction, unmarred by posts, is appropriately combined with headrail. These toilet compartments are available in three finishes: (1) "Porcena" (porcelain on steel); (2) "Tenac" (baked-on paint enamel finish over galvanized, bonderized steel); (3) baked-on paint enamel finish over regular furniture finish, cold rolled steel.

Sanymetal Century Type Ceiling Hung Toilet Compartments are particularly appropriate for schools, institutions, public buildings, office buildings, hotels, clubs, industrial plants, and theatres. They impart dignity, refinement, and cheerfulness to the toilet room environment. They make up into a rigidly fixed installation. Available in three finishes: (1) "Porcena" (porcelain on steel); (2) "Tenac" (baked-on paint enamel finish over galvanized, bonderized steel); (3) baked-on paint enamel finish over regular furniture finish, cold rolled steel.

Sanymetal Catalog 85 illustrates several typical toilet room environments.
Use all 3 products—Walls, Ceilings, Floors—
for Johns-Manville Unit Construction...

With this new method of interior construction, you can meet the problem of ever-changing space needs.

You can provide for endless revisions of space-use—at low cost. You can keep expanding, converting, or subdividing rooms as often as conditions require... with little or no interruption to routine activities!

Moreover, the J-M Unit Construction system now makes the complete interior available under one specification, one manufacturer's responsibility.

Three Johns-Manville materials, described at right, are the basis of this revolutionary development. The asbestos Transite Walls are movable, 100% salvageable. The Acoustical Ceiling Units are demountable..., can readily be taken down and relocated as desired. And the Asphalt Tile Floors consist of small units which permit easy extension of the floor to meet changing conditions.

Write for colorful brochure, giving full details on the remarkable flexibility of J-M Unit Construction.

... for Offices

... for University Lecture Rooms

... for Laboratories
Interiors today that provide for tomorrow!

1. TRANSITE WALLS—Movable!
Rooms when and where you want them... that's the magic of Johns-Manville Transite Walls—the attractive and sturdy asbestos walls that are movable. Now you'll never again need to send partition walls to the dump every time space changes are required!
With the least inconvenience—almost overnight—you can enlarge, decrease, or rearrange areas as often as your needs require. Transite movable panels are easy to handle, readily assembled, interchangeable, and can be used over and over again. Made of asbestos and cement, Transite Walls have all the qualities of solid and permanent construction. They provide rigid, double-faced partitions, and can also be used as the interior finish of outside walls.
To make sure your interiors will provide for change, write for booklet, "J-M Transite Movable Walls."

2. ACOUSTICAL CEILINGS—Quieter!
There's a Johns-Manville acoustical material to give you the best in sound control, no matter what the type of interior.
To assure you the maximum in noise-quieting, Johns-Manville not only provides the correct acoustical materials for each specific condition, but follows through by installing the materials properly with its own construction crews. In other words, you get "J-M materials installed by Johns-Manville" for best results. That's the all-inclusive service... the undivided responsibility Johns-Manville gives your projects.
For further details, send for brochure, "J-M Sound Control." Describes such J-M acoustical products as demountable Sanacoustic, Fibracoustic and Fibretone, Transite Acoustical Panels, and special materials for Broadcasting Studios.

3. ASPHALT TILE FLOORS—Colorful!
You spend no more to have quality floors like these —attractive and resilient... extra-long wearing... reinforced with indestructible asbestos!
That's the kind of flooring you get with Johns-Manville Asphalt Tile. It's easy on the eyes, easy on the feet, and easy on the budget, too.
Yes, you'll like everything about this modern flooring, including the unlimited range of color combinations—from striking patterns with strong contrasts to solid fields of marbled colors.
J-M Asphalt Tile does not originate dust... stays fresh and unmarred with practically no maintenance. Individual units permit easy repairs.
For areas exposed to oil or grease, use J-M Greaseproof Asphalt Tile. Send for full-color brochure, "Ideas for Decorative Floors."

Production of Johns-Manville Building Materials has now been greatly increased to meet unprecedented demands. So the chances are better than ever that you can get the materials you want when you want them. Write Johns-Manville, Box 290, New York 16, N. Y.

Johns-Manville
Walls - Ceilings - Floors
Big, small, or in-between—any retail store or shop can have the extra customer appeal of modern air conditioning by Carrier. There's an efficient, economical Carrier Weathermaker for every size installation—from the small drug store or beauty shop to the large specialty shop or variety store.

For the small shop where all available space is given to sales, there's an attractive packaged Weathermaker to stand right out in the sales area. It may be used with or without duct work . . . and blends harmoniously with any interior or fixture styles.

A larger self-contained unit for medium-sized stores can be concealed behind a partition or in a service area. Both of these self-contained unit types—from 3 to 15 horsepower—have a factory-assembled refrigerating system, ready for building service connections.

Where space and larger load call for central refrigeration, Carrier offers the System Weathermaker units. These may be used singly or in groups with remote location of refrigerating equipment. There's a wide range of capacities to meet any need. And, like every Carrier product, they are backed by the longest experience in the air conditioning field. Carrier engineers have worked closely for years with architects and consulting engineers to provide the finest in air conditioning. They are always glad to supply data on fitting Weathermakers into the plans for any store. Carrier Corporation, Syracuse, New York.
People are “At Home” with Formica*

...and Beauty Bonded Formica is always at home with people... be it the Luxury Liner's “showplace” Salon or the clean, colorful charm of Mrs. America's own kitchen and dinette. Or her living room, with coffee and occasional tables topped with cigarette-proof Formica Realwood®. So carefree... and so easy
to care for... never minding the careless smoker or the spilled Manhattan. As easy to own and use as it is to live with. You offer your Clients a new hospitality when you specify the livability and charm of Beauty Bonded Formica. Formica, 4633 Spring Grove Avenue, Cincinnati 32, Ohio.


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It's as easy as ordering a table d'hote dinner

... and works much the same way

Good restaurants cater to many different tastes, offer many courses, many choices. Yet the table d'hote system lets you select a complete meal quickly and easily.

In much the same way, Lockwood's "Simplified Specifications" gives you a selection of Finishing Hardware for Schools, Hospitals, Apartments, Hotels, Residences and Industrial Buildings. Just one Unit Number specifies *all* the hardware—from lockset to kickplate—for any given door . . . *with alternate choices of design and finish.*

The entire catalog is streamlined to ease your specification writing. But best of all, it recommends Lockwood Finishing Hardware that's beautifully executed inside and out to make lasting impressions — all ways.

You'll find "Simplified Specifications" in Sweet's Architectural File for 1948 — or write for a free copy of your own.

---

Lockwood HARDWARE MANUFACTURING CO.

Division of Independent Lock Company • FITCHBURG, MASSACHUSETTS
ABOVE. Truscon, world's largest manufacturer of steel building products, supplied the structural steel, Ferroplate Siding, Ferrobord Steeldeck Roof, Pivoted Steel Windows with Mechanical Operators, and electrically operated Vertical Lift Canopy Doors, for this Lockheed Hangar Building, MacArthur Field, Long Island, New York. Practically your entire steel building products needs can be supplied by Truscon—see SWEET'S Catalog, or write for complete literature.

Lockheed Hangar Building Illustrates Wide Scope of Truscon Steel Building Product Service

ABOVE. A view of the Truscon Structural Steel in the Lockheed Hangar, with the Ferrobord Steeldeck Roof above it, and the Pivoted Steel Windows, mechanically operated, at the left. Write for complete illustrated literature on these products.

AT LEFT. One of the electrically operated Truscon Braced Vertical Lift Canopy Doors installed in the Lockheed Building. Truscon can supply efficient steel doors for any type or size of hangar installation. Write for illustrated literature describing the entire Truscon line.

ABOVE. Detail view of the Truscon Ferroplate Siding, an innovation in hangar building construction. Offers the advantages of economy, quick construction, rigidity, future application of insulation, and many other desirable features. Write for complete detailed description of this new industrial steel siding material.


TRUSCON STEEL COMPANY
YOUNGSTOWN 1, OHIO • Subsidiary of Republic Steel Corporation
How Well Do You Know This Flooring?

How does it rate today?

Linoleum was the first of the practical resilient flooring materials. Although other types of resilient flooring have been developed in recent years, more linoleum is being made and installed today than ever before. During the growth of linoleum's popularity, changes have been made in its manufacture which have improved the appearance and quality of the material. Also new types of backing material have been developed. As a result, today's linoleum has a much smoother surface and brighter, lighter colors.

What types of backing are used today?

Three types of backing are used in the manufacture of Armstrong's Linoleum today. Burlap, the original backing material is used now only on Heavy Gauge Linoleum. Armofelt, a specially designed backing, is used on all Armstrong's Standard Gauge Linoleum. This backing material, recently developed by Armstrong, is composed of fresh-fiber felt made with threads obtained from new, unused cloth and impregnated with a clear saturant that will not mar walls during installation. Light Gauge Linoleum is backed with an asphalt saturated rag-type felt with a "Safety-Back" feature. Installation of linoleum over wood subfloors requires the use of lining felt when burlap-backed material is used. The use of lining felt over wood flooring is optional when the linoleum has "Safety-Back" or Armofelt backing.
How many types are available?

Armstrong's Linoleum is made in five different types. They are: Marbelle®, Plain, Jaspe, Embossed Inlaid, and Straight Line Inlaid.

MARBELLE

The non-directional graining in this type of linoleum tends to conceal footprints and dirt. As a result, it is especially practical for floors exposed to constant traffic. Armstrong's Marbelle Linoleum is made in three gauges—Heavy, Standard, and Light.

PLAIN

These colors are related and contrasted to make them especially suited for insets and custom designed floors. They also are styled to harmonize with the colors in other types of Armstrong's Linoleum. Armstrong's Plain Linoleum is available in two gauges—Heavy and Standard.

MARBELLE

EMBOSSED INLAID

This type of linoleum is distinguished by the clear cut, sharp edges of the blocks, tiles, and other design elements which make up the pattern. Many of the patterns in which it is made simulate the appearance of a hand-set custom designed floor. It is made in Heavy, Standard and Light Gauges.

JASPE

Linoleum of this type has a multiple tone striated appearance. The uniformity of the striated lines helps to make seams virtually invisible. Armstrong's Jaspe Linoleum is made in two thicknesses—Heavy and Standard.

PLAIN

In what thicknesses is it made?

Armstrong's Linoleum is made in three gauges. Heavy (¼” or .125”), Standard (⅛” or .092”), and Light (⅛” or .070”). For gauges in which various patterns are made, refer to Sweets; Section 13c, Catalog 2. The term "Battleship Linoleum" frequently is used to designate certain dark plain colors in Heavy Gauge Linoleum. This term also was applied to extra Heavy Gauge (⅛” or .148”) Linoleum which has not been made for several years.

What about cost?

While linoleum is a comparatively low cost flooring material, its initial cost depends greatly upon the type of installation desired and the gauge selected. For example, a standard gauge floor using intricate designs which require both additional labor and material will have a finished cost equal to or higher than a heavy gauge floor with little or no custom designing. However, the cost of any type linoleum floor installation is generally considered moderate when its length of service and its low maintenance requirements are taken into consideration.

What are its limitations?

Linoleum should never be installed on concrete subfloors in direct contact with the ground on grade or below grade. The alkaline moisture found in such floors attacks the binders and color pigments and causes the linoleum to deteriorate. All five types of linoleum are recommended as a flooring on all types of well-ventilated, suspended subfloors in commercial, institutional, and public buildings, as well as in residences and small shops. Architects wishing samples, literature, and specifications for the installation of linoleum are invited to write to any Armstrong district office or directly to the Armstrong Cork Company, Floor Division, 8906 State Street, Lancaster, Pa.
FROM THE TECHNICAL PRESS

FROM OTHER PUBLICATIONS


An excellent article on the design and construction of modern power stations highlights this issue. A number of major central stations have been built lately in Britain or are projected. The designs are strong and refreshingly free from ornament. Some have the entire upper walls of glass.

A brief account of the restoration of the 90-year-old British Museum dome reveals that the original copper covering was still sufficiently soft to enable the seams to be made to the new pieces without annealing the original metal. This dome suffered a direct hit from an oil bomb in 1941 but was damaged only slightly in the resulting oil fire, due to the high melting point and excellent thermal conductivity of copper.

An "International Digest" is a regular feature of this publication. In this issue the results of an "Ideas Competition" for adding an office annex to the Stockholm Town Hall are illustrated by photographs of several competitors' models. Three first prizes were awarded by the jury, two second prizes and three others were "purchased." All prize winners will be invited to participate in a further limited contest to obtain a final project.


Valuable advice from the Chief of the New York City Board of Education's Heating and Ventilating Division, covering boilers, fuel, heating systems, and detailed treatment of the various types of rooms.


An excellent review of the history of air conditioning of theaters and description of present general practices.


This paper, read before the Institute on Feb. 24, states a strong case for teamwork between artist and scientist. The author reviews briefly the long, arduous separating out of the scientific attitude from the natural emotional approach to human problems, which has resulted at last in an apparent incompatibility between the artistic outlook and the scientific. (Yet both the arts and the sciences are manifestations of the same human spirit, employing the same five

(Continued on page 110)
Planning Hospitals?

GET THE WHAT...WHERE...AND WHY

ON MAJOR HOSPITAL EQUIPMENT

FROM MEN WHO OUTFIT MANY HOSPITALS

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SCANLАН-MORRIS STERILIZING EQUIPMENT

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As developers and manufacturers of a great variety of equipment used in hospitals, and with years of experience in contacting hospital management and staffs, "Ohio Chemical" is qualified to supply valuable assistance and engineering data to hospital architects.

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City __________________ State __________

JUNE, 1948  109
(Continued from page 108)

The scientist must be rigorous. He cannot allow himself to make subjective patterns and then persuade himself that subsequent sense data can be filled into the patterns that he has made. At last, after thousands of years, science has established its own pure technique. Perhaps, now, science can admit art into partnership again?

Architecture partakes of both science and art. The architectural attitude may point the way for creative use of both. A beginning has been made (in Britain) by combining architects and scientists in research work related to human needs, the architects taking the lead in initiating subjects for study, the scientists leading in exact formulation of problems.

The scientific method becomes (for the architect) an instrument of design, in color, dimensional coordination, acoustics, structure, materials. In the words of Mr. Thomas, the architects "give the work the purposeful creative whole view that at the present time only architecture can provide." Thomas covers in detail the recent developments in all these fields and then goes on to relate this to architectural education, which goes in, at present, for too much "study of technology and gadgets . . . that the student should learn is what science is about, when he should make use of it and above all how to think methodically."

Mr. Thomas ends with a plea for "architectural science" which can "create a scientific expression in harmony with the needs of architecture and so narrow the unfortunate gap at present obtaining between knowledge and practice in architecture."

We very much need, on this side of the water, more of the kind of thinking displayed by this paper. Our response might be as ready, given the stimulus, as the British Institute's.


This paper, read at a meeting of the Architectural Science Board, is the "practical" counterpart of the more "theoretical" paper reviewed above. Together (with the subsequent discussions) they give a pretty complete view of the role of the architect in Britain today (and here too, for the most part). Services integrated in the structure (heating, plumbing, water supply) are at least as old as imperial Rome. In recent times they have been mostly "tacked on" to buildings. In between (in the Dark Ages and Renaissance too) there were no services in either the ancient or modern sense.

In present-day planning the sum total of services is a main concern of the architect, almost outweighing the provision of space for use. The architect becomes the arbiter and referee between the conflicting aims and methods of the various engineers, with the "tact and patience to keep the peace between the specialists . . . qualities which alone, in these days, enable the architect to continue in practice and not to retire to uninterrupted contemplation of the services of a mental hospital."


French architectural magazines reflect the scarcity of new building between the Straits of Dover and the Pyrenees. This issue of L'Homme et l'Architecture, however, claims the architect's attention because it presents, among other things, an exhaustive treatise on noise, and an interesting collection of photos and drawings of new work outside the French borders.
Isn't it about time to get on with it as a common sense means of Fuel Conservation?

The ability of the United States to assure its security and maintain its position of leadership in the world depends ultimately upon its fuel reserves. Misuse of these vital resources can mean decline and disaster.

Nearly 99% of this country's known fuel reserves is in the form of coal. The United States has all the coal it needs for many generations to come. The reserves of other fuels, however, are being exhausted at an alarmingly increasing rate, largely because they are being used to do certain jobs which coal can do as well or better.

One of the major causes of this unsound state of affairs is the public demand for convenient, "push-button" heat that is clean, efficient and labor-free. To meet this demand, non-solid fuels are being extravagantly misused in ordinary heating in spite of the fact that they are urgently needed for other essential purposes. Coal, properly used, can provide everything the public demands in the way of "push-button" heat.

Central Heating is the solution—using steam or hot water distribution from centrally located heat generating plants serving entire communities.

For the vast majority of people in this country space heating is by far the most costly of utility services, indeed more costly than all other essential utilities combined. Certainly, an economic system which has been able to provide our communities with water, sewers, gas, electricity and telephone service—certainly, that same economic system is no less able to provide this even more basic service of Central Heating at a cost attractive to consumers and at a profit equally attractive to investors.

With a realistic appraisal of our fuel resources in the light of conditions which exist in the world today, and with the end in view of a better and stronger United States of America, secure in a way of life made possible by private enterprise fostered and bulwarked by governmental institutions—isn't it time to get on with it now?
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• Somebody changed his mind a few times, or maybe the tracer was having a bad day. Just why isn't important. The point is the tracing had to be done over, because erasing had given it a distinctly "scrub happy" look. Arkwright would have saved all this. Erasures mean little to Arkwright. It takes erasure after erasure without wearing through, without line feathering when you re-ink.

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Reviews

The article on Sounds and Noises, taken from a manuscript by Dr. Pierre Winter, concludes that doctors and acoustical engineers should collaborate to furnish detailed data on different kinds of noises to designers and manufacturers of noise-producing agents; and that legislation should be considered which will impose sound and noise limits in various fields of activity. Dr. Winter discusses the physiology of the human ear and gives numerous tables, statistics, and case histories that indicate our noise problems are growing more serious daily as the machine civilization advances.

The Role of Steel in Building is the title of an illuminating article which claims that French industry could produce, and certainly could use, 12 million tons of steel annually; but that because of coal and coke shortages, the 1947 total is something under 7 million tons. Some new structural sections are being rolled, which correspond generally to the I-beams, channels, angles, and T's familiar in this country.

The following items of recent architecture outside France are presented with photographs and drawings:
(2) Design for a concert hall in Buenos Aires, seating 3500, by Amancio Williams. Unusual mushroom-shaped structure.
(3) Restaurant Yacht at Berne, Switzerland. Architect, Werner Hauser. Skillful remodeling of an old narrow house.
(4) Design submitted by Entwistle for the creation of a Culture and Recreation Center in London to replace the old Crystal Palace destroyed by fire in 1937; with a page of comments by Le Corbusier.
(5) Apartment houses in Holland by Zwaagstra. Three and four room units in an 11-story building. Plenty of cross ventilation and more storage and porch areas than is common in America.
(6) Airport on an artificial island in Buenos Aires by Amancio Williams and Assoc.
(7) Houses from California, the Alps, and Argentina.

Among the book reviews is a half-column summary of the recent Reinhold publication by Isadore Rosenfeld, Hospitals—Integrated Design.

Pricilla O. Dalmas

(Continued on page 114)
This picture shows two important things...

This picture shows two things that, in six months, caused architects to specify 25 million square feet of the new Celotex Preseal Roof Insulation on major jobs throughout the country—

1. "PRESEAL" REDUCES DANGER OF MOISTURE
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JUNE, 1948
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AIR EXPRESS, A SERVICE OF RAILWAY EXPRESS AGENCY AND THE SCHEDULED AIRLINES OF THE U.S.

Reviews

(Continued from page 112)


An excellent study of the changing pattern of our cities as affected by retail trade and the effect of retail trade on urban transportation and land use patterns. Given originally before the Great Lakes District Seminar of the A.I.A. last October, this paper has been supplemented as a result of the subsequent discussion.

Well worth study by all city planners and all architects concerned with store work. The Michigan Society of Architects is doing itself a service by the full publication of this paper. It should receive broader publication.

LIGHTING


The recent development of "brightness engineering" with its primary emphasis on ideal visual environments has put "foot-candle engineering" somewhat in the shade. Yet the candle power or light distribution measurements are still fundamental and calculation of foot-candles and judgment of brightness conditions stem from this basic data.

Tables of utilization factors (coefficients of utilization) for different types of equipment are extremely useful to the illuminating engineer but must be used with judgment, as equipment of a particular type may vary greatly between different manufacturers.

This paper brings out the importance of fully understanding the factors affecting utilization and explains them thoroughly.


Fundamental data enabling the average lighting man to make illumination calculations for reflector and projector lamps. (150 and 300w R-40 spot and R-40 flood and 150w PAR-38 spot and PAR-38 flood). Table of coefficients of (Continued on page 116)
GET BETTER BRICKWORK
WITH BRIXMENT!

Good workmanship requires that all head joints in both face brick and back-up work be completely filled with mortar, by any of the three methods pictured below.

Method 1. Plenty of mortar should be thrown on the end of the brick to be placed.

The brick should then be pushed into place.

So that the mortar comes out at the top of the head joint.

Method 2. A dab of mortar should be spotted on the corner of the brick already in place.

Then plenty of mortar should be thrown on the end of the brick already in place.

So there will be more than enough mortar to fill the joint completely when the next brick is pushed into place.

Method 3. A full trowel of mortar should be thrown on the wall.

Then the brick should be shoved into this deep bed of mortar.

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BRIXMENT permits the bricklayer to do the kind of work pictured above. It does not stiffen up too fast, when it hits the brick. It remains rich and plastic long enough to allow the bricklayer to place the brick, easily and accurately.

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LOUISVILLE CEMENT COMPANY, Incorporated, LOUISVILLE, KENTUCKY
utilization for the several lamps and various shielding conditions with various reflection factors for walls and ceilings.

An Analysis of Reflected Glare. William G. Darby, January.

As a rule, reflected glare reduces the visibility of an object by reducing the brightness contrast between it and its background. For any given task, the reflected glare effect is a function of the brightness of the source, the candle power of that source area contributing to the effect at any one point and the foot-candles on (brightness of) the task. Experiments and observations show that reflected glare which lowers brightness contrast (and so reduces visibility of the task) can be ameliorated by working with the above factors. For example, if the level of illumination (task brightness) is held constant and the brightness of the source of reflected glare is reduced the reflected glare effect is reduced. This generally requires greater source area. Another example (using vertical drafting boards instead of horizontal) increases visibility by largely eliminating glare source and reducing task brightness.

The analysis and subsequent discussion of the effects of glare on binocular vision brings a new subject into focus. The Illuminating Engineering Society's practice of publishing discussions with its papers tends to bring all interested parties into the picture and stimulates further work on such subjects as this.

Correlation of Brightness Ratios and Decoration. H. W. Kahler and J. A. Meacham, February.

The purpose of this paper is to show how the fundamentals of good decoration compare with brightness ratio recommendations of the Illuminating Engineering Society, particularly in commercial interiors (offices, schools, etc.) where prolonged seeing tasks are involved. The authors have coordinated some of the fundamentals of both lighting and decoration in order to foster better understanding of the problems, techniques, and limitations of each.

Brightness distribution studies for a typical office are described with various lighting schemes (direct, indirect, direct-indirect). Various effects of color decoration are described (relationship of color-power and relative area, brightness vs. area, effect of contrasting colors on adjacent colors, etc.). It is unfortunate that the color illustrations had to be diagrammed in black and white. May we hope that Sherwin-Williams, who shared in preparation of the paper, will make this valuable material available to architects and illuminating engineers in a color reprint?

(Continued on page 118)
More and More Maple Now Available

Although Northern Hard Maple has been in short supply, more and more of this fine flooring is now becoming available.

To architects who have specified it regularly, Northern Hard Maple means smooth, hard surfaces—easy to clean, easily and economically maintained... durability to withstand heavy traffic, day in, day out, for years... warm, resilient comfort underfoot... and lasting beauty.

That's why this remarkable wood is the ideal flooring for schools, gymnasiuems, factories, textile mills, bakeries—or any other building whose floors have to be durable, attractive, easily maintained and modern.

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(Continued from page 116)

Ten Years of Fluorescent Fixture Development. R. G. Mauroette. March.

The fluorescent tube has not only brought about new fixtures but a whole new level of illumination and with it new study and understanding of "seeing." This paper is concerned only with the "F" type of lamp fixtures, particularly the interplay between lamp development and fixture development and application and the establishment of acceptable fixture specifications.


This paper presents a method for successfully operating fluorescent lamps in a flashing circuit (by keeping the cathodes continually heated and using suitable ballasts) without unduly affecting lamp life.

BOOKS

MANY-SIDED DESIGNER


As its first demonstration of reform since its renunciatory change of name to exclude the newly unpopular word "modern," The Institute of Contemporary Art in Boston held a springtime exhibition of the architecture and painting of Le Corbusier. By way of giving emphasis to this event, or a certain kind of immortalization perhaps, the Institute published in conjunction with Reynal & Hitchcock a book generously illustrated in offset which distributes plans and paintings by the celebrated visionary almost equally throughout its pages. Le Corbusier's own somewhat abandoned writings form the text.

Altogether, it is here with recorded that inspiration is a large part of architecture—at least for one who, as foremost consultant for ambitious architectural projects, need not depend for renown and a degree of success upon the execution of all his projected buildings. By painting pictures, which it appears is a constant activity, the architect has kept his designing line fluid. And his distribution of accented values is more dar-
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(Continued on page 118)
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Reviews

(Continued from page 120)

same pictorial material, the editor has assorted it under its separate functional headings and invited accompanying articles by Harvard's Dean Hudnut, Dr. S. Giedion, the painter Fernand Leger, Architect J. L. Sert, and Critic James Thrall Soby. Le Corbusier is himself given a say, but this is kept at a minimum, and Papadaki adds charts and a statement about The Modulor. Le Corbusier's scale for harmonic measurements of space.

So, pay your money and take your choice. The Macmillan book has perhaps more reference value in spite of being testimonial in character with its complimentary contributions from all sides. And the section on town planning and "cases" such as Algiers, Paris, Rio de Janeiro, and La Palisse is effectively presented in a rather impressive unit of ten pages or so. Coated stock is used and this makes it all seem clearer somehow. Perhaps the Reynal & Hitchcock book comes closer to revealing the manner in which Charles Edouard Jeanneret-into-Le Corbusier actually works.

MAUD KEMPER RILEY

OXFORD REPLANNED

Thomas Sharp. Published for the Oxford City Council by The Architectural Press, 9-12 Queen Anne's Gate, Westminster, S. W. 1, London, England, 1948. 224 pp., illus., maps. 15s

In a remarkably handsome book—in deed, as fine a piece of bookmaking as this reviewer has ever seen in a volume devoted to planning—the eminent town-planning consultant Thomas Sharp presents his cogently argued report to the Oxford City Council. Some 150 excellent illustrations, some of them full-color reproductions of old drawings and prints, give an admirable impression of both historical and contemporary Oxford and highlight the traffic congestion that threatens to strangle the venerable university city unless vigorous measures are taken to relieve the pressure. Not the least of the city's difficulties is the presence near-by of two flourishing industrial plants, enormously expanded during the war, which Sharp politely, but unequivocally recommends be transferred elsewhere. Numerous fold-out plates and maps are pure pleasure to study and make it possible even for someone totally unfamiliar with Oxford to understand the problems and follow the argument. The final proposals inevitably disturb a few (surprisingly few) sacred cows, but it is difficult to see how it could be greatly otherwise if the charm of the old city, the vitality of the new, and a healthy future alike are to be insured.

G. A. S.

FOR SAFETY

The above photo is one of the operating rooms of the Los Angeles Monte Sano Hospital, showing the use of the Cannon Electrostatic Grounding Intercoupler. Bead chains (noted by arrows) ground patient, table, nurses, attendants, etc. Why these precautions? Why this particular apparatus?

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(Approves in full color in the Saturday Evening Post May 22nd.)

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JUNE, 1948 127
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Use the new Trane Unit Ventilator wherever ventilation air under close temperature control is needed. Offices, hospitals, hotels, public buildings need it, as well as classrooms. Ask any one of the 200 Trane Sales Engineers for further information, or write The Trane Company, La Crosse, Wisconsin.
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By David R. Graham
Structural Engineer
Tulsa, Oklahoma

Many new advancements in structural design are now made possible costwise through arc welded construction. Longer column-free spans, increased structural strength, greater building serviceability, are achieved at lower building costs. The multi-purpose building constructed for the Wright Recreation Company, Tulsa, Oklahoma, is designed for arc welded construction and serves to illustrate these structural advantages. This building, at present used as a skating rink, is so designed that it can be converted easily to a large warehouse or factory building.

With a length of 180 feet and span of 80 feet, this building has a maximum clearance height of 29 feet from floor to roof members. The rigid frame construction used produces an entirely unobstructed interior highly desirable for sports arenas or for unpredictable future conversion requirements. All roof trusses and interior columns are eliminated. High side walls, normally needed in conventional construction to obtain greater floor to roof clearance, are avoided by this all-welded rigid frame design, thus reducing structural costs.

The arch frames (Fig. 1) are designed by the usual rigid frame formulas allowing the entire structure to support an evenly distributed snow load of 25 pounds per square foot. The design analysis also allows for wind velocities up to 70 miles per hour.

The arch frames are built from flame-cut steel plates to which inside and outside plates and ribs are fillet-welded with "Fleetweld 5" electrode. All arch frames are shop-fabricated and hauled to the site for field-weld erection. Gable members are fabricated from 16" WF beams. Haunches and legs are welded from flame-cut steel plate.

The bar joist purlins are 5/8" steel bars, arc welded to the roof members as shown in Fig. 2. Although steel bars are a little more costly per pound than channels, they are considerably lighter, thereby reducing dead weight in the building frame.

A building of similar design, but 80 feet by 100 feet in size, is being built for a gymnasium at Kiefer, Oklahoma.

Fig. 1. Arc welded arch frame showing connections of bar steel purlins.

Fig. 2. Building framework for the Wright Recreation Company, Tulsa.

Fig. 3. Inside view of building showing completed brickwork and roofing. Fabrication and erection by the Saxon Steel Co., Tulsa, Oklahoma.

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JUNE, 1948 135
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<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>WEIGHT</strong></td>
<td></td>
</tr>
<tr>
<td>Density (lb. per cubic foot)</td>
<td>approx. 20.0</td>
</tr>
<tr>
<td>Weight per tile (lb.)</td>
<td>approx. 21.0</td>
</tr>
<tr>
<td>Weight per square foot (lb.)</td>
<td>approx. 4.5</td>
</tr>
<tr>
<td><strong>STRENGTH</strong></td>
<td></td>
</tr>
<tr>
<td>Average modulus of rupture</td>
<td>175 lb. per sq. inch</td>
</tr>
<tr>
<td>Average modulus of elasticity</td>
<td>160,000 lb. per sq. inch</td>
</tr>
<tr>
<td>Average compressive strength</td>
<td>500 lb. per sq. inch</td>
</tr>
<tr>
<td><strong>INSULATING VALUE</strong> (Btu/square foot/hour/°Fahrenheit)</td>
<td></td>
</tr>
<tr>
<td>&quot;K&quot;—for inch thickness</td>
<td>0.62</td>
</tr>
<tr>
<td>&quot;U&quot;—for standard tile (2 ½ inches)</td>
<td>0.20</td>
</tr>
<tr>
<td>&quot;U&quot;—for standard tile plus built-up roofing</td>
<td>0.19</td>
</tr>
<tr>
<td><strong>FIRE RESISTANCE</strong></td>
<td></td>
</tr>
<tr>
<td>Kaylo Insulating Roof Tile is fireproof. Units tested separately have withstood building fire temperatures as defined by the standard A.S.T.M. fire curve for one hour. (This is a test of a material only and not of a construction.)</td>
<td></td>
</tr>
<tr>
<td><strong>LIGHT REFLECTIVITY</strong></td>
<td></td>
</tr>
<tr>
<td>Light reflection factor</td>
<td>approx. 80%</td>
</tr>
</tbody>
</table>

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JUNE, 1948  151
ON MY LATEST SWING AROUND THE COUNTRYSIDE I FOUND THAT ARCHITECTS GENERALLY ARE STILL VERY BUSY. There is complaint and worry about high prices, but several instances were reported to me of final bids coming in lower than the preliminary estimates. It's the first I've heard of that for a long time.

ARCHITECTS EVERYWHERE NEED DRAFTSMEN. Soon the swollen classes in the schools will begin to graduate and relieve the situation, but right now the story is the same from coast to coast—"We need men." Good men, of course, as well as design principles. On the other hand, I hear constantly from draftsmen and designers who are hunting for good places to work. One result of the present situation is that a really competent architectural employee can be discriminating—he can pick the sort of office he wants to work in. And the younger men, of course, want to work in progressive offices, as the younger men always have. The most irresistible appeal I've received is that reproduced below, with the signature withheld. If any of you want to know who he is, I'll tell you, but don't let our Jobs and Men Department know that I by-passed them.

LOUISVILLE IS INTERESTING FOR A NUMBER OF REASONS besides being the home of the Derby. In the first place, the architects in town drop everything and begin drinking cokes (to start with) in the middle of the morning when a stranger stops in, a habit which I find rather disconcerting but very pleasant. In the second place, practically all architects there are named Fred (Elswick, Erhart, Hartstern, Louis, Morgan). Those who aren't—for instance, O. P. Ward and James Ingram—have had to overcome that handicap by hard work and extraordinary ability. It seems to me that I remember some excellent work also—a department store and an insurance building, among others.

THE INDIANA SOCIETY OF ARCHITECTS HELD A TWO-DAY MEETING IN SOUTH BEND at the same time that the architectural school at Notre Dame was celebrating its fiftieth birthday. (F. W. Kerwick, head of the school, has been there forty years, which must establish some sort of record.) I was privileged to sit in on some of the Society's business meetings and I enjoyed seeing how this group, which has often raised embarrassing but important questions within the profession, really digs into matters which elsewhere might be passed over as routine.

Most impressive is the way the architects in the state, in an organized manner through the Civic Design Committee of the Society, have come to the aid of Coatsville, which was leveled by a tornado on Good Friday, March the 26th. Setting up a Disaster Committee, the architects offered their services in replanning the town, services which were enthusiastically accepted by a resolution of the Town Board. Recommendations were made regarding improvement of traffic facilities, development of the business area and parking spaces, location of public buildings, zoning, and the expeditious construction of new homes. The assistance is not merely a gesture, nor is it a solicitation of business—it is a sincere attempt to pool the specialized abilities of architects for the good of the community in a time of disaster. Would that it could be done more often under ordinary conditions!

IN CHICAGO, I HAD A CHANCE TO GO THROUGH THE INSTITUTE OF DESIGN, where Serge Chermayeff has taken over the presidency since Moholy-Nagy's death. I had heard good things about the school from many sources, and I wasn't disappointed. The significant contribution it is making is the integration of all design techniques—the first three semesters are devoted to a "foundation course," which is required of all students, whether their later application will be in architecture, product design, visual design, or photography and film work. Students seem interested and hard-working, and results are excellent. Incidentally, the school has a fine exhibit explaining its approach, which is now traveling and can be had by interested groups.

LAST WEEK WE RECEIVED A RELEASE FROM THE PUBLIC ADMINISTRATION CLEARING HOUSE, about birds on buildings. It seems that the American Municipal Association is very much disturbed over this question; they quote a city official in Kansas who petulantly exclaims, "Our city is plagued with an overabundance of pigeons. We have pigeons on city buildings, churches, schools, and business establishments." Another man, from Virginia this time, reports unsuccessful warfare: "We are troubled with hordes of starlings and blackbirds. So far we have been unable to drive them away by using shotguns, firecrackers, fire hose . . ." Means that have failed in other towns include traps, "fake owls with luminous eyes," and hydrogen-filled toy balloons.

We sent a research man out as soon as we got the release, to study the architectural aspects of the problem, and we now have his report. Classic Revival buildings are the best nesting places; to go into further detail, Composite capitals are better for our feathered friends than Doric, Ionic or even Corinthian. For some reason pigeons prefer the pediment—even sculpture on the tympanum—while starlings make for the buttress pier. Several Gothic structures in town (built during the second, or Brooklyn-Goth invasion) provide satisfactory nesting places (as on top of buttercup piers, but the Romanesque buildings seem to be unsatisfactory. As for the more recent contemporary structures, the birds fly right past with a disdainful eye. No doubt this is a serious set-back for modern design. Yet another segment of the population casts its vote for the enriched eclectic architecture.
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