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CONTENTS FOR FEBRUARY 1948

ARTICLES
Mobiles, Harriet Janis 26
Maracci 34, 35

ARCHITECTURE
House by Alexander Ban 29
House by Office of Sumner Spaulding, F.A.I.A.
John Rex, A.I.A. 36
Case Study House No. 18, Rodney Walker 38

SPECIAL FEATURES
Painting on Wood, Alexander Girard 32
Dining Table, Charles Eames 33
International Competition for Low-Cost
Furniture Design 10
Music 18
Notes in Passing 25
New Product Literature and Information 8
Merit Specifications—Case Study House No. 18 46
Editors note: This is a classified review of currently available manufacturers' literature and product information. To obtain a copy of any piece of literature or information regarding any product, list the number which precedes the item about it on the coupon which appears on this page, and give your name, address and occupation. Return the coupon to Arts & Architecture, and your requests will be filled as rapidly as possible. Items provided by a dot (•) are not available.

CABINETS, COUNTER TOPS

(399) American Central Division, Aveo Manufacturing Corporation: 16-page, 4-color brochure one of best contemporary designed lines kitchen cabinets in stainless steel; all edges corners rounded; very little visible hardware; brochure shows sample kitchen.

(119) Formica Insulation Company: Folder Formica cabinet tops; colorful, spotproof, durable, sanitary; does not chip, peel, flake; not injurious to all, col, fruit acids, ordinary alkalies; withstands 275 degrees Fahrenheit; with lists, range, price.

(400) StorageWall, Inc.: Brochures, data StorageWall, new kind partition composed of variety of standard cab-

Electrical equipment

(449) Cannon Electric Development Company: Folders, information Canon Pathfinder Light design, to illuminate driveways, gar-

Floor coverings

(433) Bigelow-Sanford Carpet Company, Inc.: Information Lok-weave Grooveprint carpet; tufts are locked in, cannot pull out; no sewn seams, dam-

Fabrics

(301) Brunschwig & Filz: Information one of best sources of contemporary fabrics; wide variety of textures, colors, designs; Worth appraisal.

(428) Cheney Brothers: Information contemporary line textured fabrics; new emphasis on modern textured weaves, colors.

(459) Frannie Dressel's Studio: Information one of best sources fabrics hand printed to specifications of architects, decorators; fab-

APPLIANCES

• (56) Continental Water Heater Company: Conceal gas storage water heaters; installation, specification data; good working information rating line.

• (469) Coordinator Corporation: Brochures unusually well designed, engineered 85% cubic foot refriger-


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FURNITURE

• (412) Aalto Designs: Information one of oldest lines contemporary furniture required in the home; made in Sweden; available several West Coast, Eastern outlets.

• (311) Barker Brothers: Information Multi-Unit Pacific Modern furniture; built-to-unit measure, fits any floor plan; budget priced; definitely worth investigation; good approach to contemporary furnishings.

• (413) Breuer's: Information every line contemporary furniture available through "modern center" in Oakland and East Bay region northern California.

• (455) Drexel Furniture Company: Information new line contemporary furniture designed by Edward J. Wormley; living room, dining room, bedroom; forty pieces, well integrated.

• (321) Dunbar Furniture Manufacturing Company: Catalog 1947 line contemporary furniture by manufacturer exclusively modern.

• (313) Ficks Reed Company: Catalogue contemporary Malay Modern and Amber Ash furniture; versatile, good especially for recreation rooms; indoor quality; one of best lines informal furniture.

• (324) Franke Brothers: Information top retail source best lines contemporary furniture; designs by Charles Eames, Alvar Aalto, Gilbert Rhode, Isamu Naguchi, George Nelson; complete contemporary interiors service; upholstery and drapery shop.

• (436) Functional Furniture Manufacturers: Illustrated brochure new functional line tables, chairs using molded plastic and glass production basis; clean, strong, light.

• (315) Glenn, Inc.: Information original contemporary designs at reasonable prices; particularly good designs tables, chests, case pieces; western manufacturer.

• (316) Herman Miller Furniture Company: Information top lines contemporary furniture designed by Isamu Naguchi, George Nelson, Charles Eames and George Nelson; reflects one of most important design program in furniture industry.

• (437) Knoll Associates, Inc.: Information one of best lines authentic contemporary furniture; chairs, tables; string, stax, fabric upholstery; wood or metal chair frames.

• (317) Leo Lipton: Information custom-made leather works; Formica-top tables, chrome chairs; specializes in residential installations.

• (319) Rattan Stylists, Inc.: Catalog rattan designed by Paul Langan upholstered, airfoam cushions; armchairs, sofas, coffee tables, end tables, dining tables, dining chairs, sections, bridge tables, custom designs.

• (460) Everett Sehring Furniture: Unusual brochure illustrating beautifully designed line of low contemporary tables; large single tables or groups of small tables assembled into one large table; wide range finishes; surfaces wood, cork or leather; also incidental pieces; sold direct to consumers only.

• (321) Andrew Szeoke: Information custom-built cabinets, lamps, accessories; craftsmanship at its best; remarkable inlays, finishes, design; one of best sources of top cabinet work.

• (328) Thoaut Brothers, Inc.: Illustrated catalog new clean-cut line modern furniture; chairs particularly well designed.

• (322) H. H. Turchin Company: Illustrated catalog contemporary glass furniture; heavy glass tops; well designed, engineered.

• (323) Van Keppel-Green, Inc.: Information complete line contemporary metal, wood furniture; designed by Hendrick Van Keppel, Tyler Green; available nationally.

GENERAL

(6) Libby-Owens-Ford Glass Company: Well illustrated brochure solar anti-glare glass; fundamentals of planning "open" houses; gives good examples; technical data.

(433) Pacific Shop: Contemporary accessories for the home; jewelry by modern designers and craftsmen; one of best sources in Northern California.

HARDWARE AND FIXTURES

• (393) American Cabinet Hardware Corporation: Folder, data sheets American cabinet hardware; Beauty-Seat platings, matched ensembles, easy-working catches; includes semi-concealed hinges, friction catches, pulls, snap latches, hasp locks; full technical, installation data.

• (430) Bennet-Ireland, Inc.; Illustrated folder Flexscreen fireplace metal curtain; hang in folders, easily opened, closed; one of best contemporary lines fireplace equipment.

• (405) Custom Cast: Information remarkably good andersons custom design; fronts cast bronze, log rests iron; weight per pair 30 pounds; fronts in aluminum, yellow brass on special order; reasonably priced; information.

• (366) Grant Pulley & Hardware Company: Data one of best lines sliding door hardware; makes large areas of glass slide with finger-tip pressure; quiet, efficient; this data belongs in all architectural files.

• (451) Marsh Wall Products, Inc.: Folder new Marsh line bathroom accessories; clean design, chrome finish, die cast, non-rusting, installation, technical information.

• (325) Parlyn, Ltd.: Brochure remarkable new finger-tip push-pull control Parlyn door lock and latch; light finger pressure opens or closes door; contemporary design; zinc alloy; no visible screws.

• (408) Sargent Company: Folder new Sargent Intergralock; well designed, knop keyhole, pressure formed metals; available in number of bronze, brass chromium finishes; full technical details.

• (372) Security Lock Corporation: Brochure new keyless push-button combination lock; locked by push of lever, opens by pushing proper combination four small buttons.

• (326) Soss Manufacturing Company: Remarkably well prepared 24-page manual on Soss Invisible Hinges; permit streamlining door by eliminating visibility of hinges; gives full details of construction use.

HEATING & AIR CONDITIONING

• (381) Allison & McEve: Information on radiant heating; firm engineers, (continued on page 43)
Now... because fabrics become an integral part of
the new architectural outlook, the name CHENEY
grows increasingly more important

TAKE CASE STUDY HOUSE #20

...in it, Richard Neutra specified CHENEY Fabrics
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This is just another of the small details that all add up to satisfied clients.

For free help in planning modern, built-in telephone wiring, call your local telephone company number and ask for “Architects and Builders Service.”

The Pacific Telephone
and Telegraph Company

---

International competition for low-cost furniture design sponsored by the museum of modern art and museum design project, Inc.

The need for low-cost furniture

Low-cost home furnishing and housing are among the most important factors in the national economy and the general welfare of the peoples of all countries. Governments and industry the world over are making every effort to find a solution for the housing problem but have as yet paid only scant attention to the design and production of good inexpensive furniture.

To serve the needs of the vast majority of people we must have furniture that is planned for small apartments and houses, furniture that is well-designed yet moderate in price, that is comfortable but not bulky, and that can be easily moved, stored and cared for; in other words, mass-produced furniture that is integrated to the needs of modern living, production and merchandising.

The Museum of Modern Art and a group of leading furniture retailers have been greatly concerned with this problem. They are united in the belief that the means for its solution are available now. The spectacular advances of technology have given us new materials, tools, and production methods that have already been successfully applied to many important branches of manufacture. Individual progressive furniture designers in many countries have done brilliant experimental work but have found it difficult to find ways to translate their ideas into reality.

Furniture needs studying from many viewpoints, among which are size, function, price, available materials and manufacturing techniques. The problems of shipping and stock storage also have not been solved as completely as is desirable. These problems interlock, and their joint solution would produce furniture new both in technique and in appearance.

In order to solve the problem and to provide a powerful stimulus for designers and technicians in all countries to increase their efforts, the Museum of Modern Art and Museum Design Project, Inc., a non-profit organization set up by representatives of the trade, are sponsoring an international competition for the design of low-cost furniture.

The sponsors of the project believe that this competition will draw the attention of designers and technicians from all over the world to this important problem and that it will produce handsome fresh designs leading to the manufacture and wide distribution of a new type of furniture for today’s homes.

The scope of this competition

This competition is intended to develop ideas for low-cost furniture suited to the living rooms, bedrooms and dining areas of present-day small homes. Many such homes combine living and bedroom functions in the same area, requiring dual-purpose furniture. The many specialized kinds of furniture needed in homes group themselves into main categories of seating, table and storage pieces. The design of good seating and storage pieces is more complicated than the design of tables, and for this reason prizes will be given to designs for seating and storage pieces from which entire groups of furniture (including tables) can be developed.

Designs of two kinds are eligible: (1) Seating units for one or more persons, such as upright and lounge chairs, sofas, daybeds, benches and others; (2) Storage units for household or personal effects or for both.

Pieces adaptable to more than one use are eligible. Competitors may submit entries for seating units or storage units or both, and there is no restriction on the total number of entries one competitor may submit.

Dates

The competition opens with this announcement and closes at midnight October 31, 1948. Entries postmarked later than this will be rejected.
America's finest genuine East Indies Rattan Furniture. Entire new line featuring 100 outstanding designs for living room, dining room and bedroom.

- Write for beautiful 1948 catalog

As featured in March issues of HOUSE BEAUTIFUL & HOUSE AND GARDEN

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CINCINNATI AND NEW YORK
Earl Lackman, of the Basin Builders, has been in the building business for 25 years. Here's what he says about adequate wiring:

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"The owner of these apartments figures that there will be new electric improvements for easy living in the years to come, so that the tenants will use more electricity than they do now. So we're giving them wiring that's adequate for the present, and for the future, too."

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---

Prizes will be awarded to designs which are capable of being developed into furniture groups for living rooms, bedrooms and dining areas.

Best design for a seating unit: First prize, $5,000; second prize, $2,500; third prize, $1,250.

Best design for a storage unit: First prize, $5,000; second prize, $2,500; third prize, $1,250.

Special research teams, described in the section headed "Who May Compete," will be required to submit reports, and a special Research Report Prize of $2,500 will be awarded to the team submitting the best report.

The jury retains the right not to award any of the prizes if it finds no entries of sufficient merit.

Designs winning awards are subject to conditions listed in the section headed "Manufacture and Sale of Prize-winning Designs."

The jury

The awards will be made by the jury within two months after the closing of the competition. Winners will be notified promptly by telegraph. The jurors will meet in as many sessions as are needed for careful judging. The decision of the jurors will be final.

Who may compete
The competition is open to designers in all countries. Employees

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2 years ........................ $9.00
3 years ........................ $12.00
of the Museum of Modern Art and of Museum Design Project, Inc., are not eligible to compete.

In addition to individual competitors, not more than ten design-research teams consisting of outstanding designers working in collaboration with technological laboratories will be selected by the Museum of Modern Art and given a research grant. These teams will be asked to submit a research report to supplement the regularly required entries.

the originality of entries
All designs submitted must be the original creation of the competitor and his exclusive property. A design is ineligible if it has previously been produced for sale, or if any manufacturer, distributor or any person other than the competitor has any rights to it. A design is still eligible if experimental models of it exist which have been seen by only a small number of people.

presentation of entries
All drawings shall be submitted on 20 by 30 sketch boards or the equivalent. Drawings on tracing paper or other paper may be mounted on boards of this size. Drawings may be in any medium, and arranged in any way on the boards. Each piece must be shown in sufficient drawings (plans or half-plans, sections, elevations, details of construction, etc.) so that the piece can be built from these drawings. Scale of drawing is left to the competitor’s discretion, and may vary as he sees fit. It is suggested that in general the scale of 3”=1’0” be used. The scale of every drawing must be clearly indicated. All important dimensions must be shown and materials clearly specified.

In addition to the technical drawings, each piece must be shown in a colored perspective or isometric at a large enough scale to give an accurate idea of the appearance of the finished piece. Competitors are required to send in a working model of each seating or storage unit submitted, not less than ½ full size.

All material entered in the competition must be marked only with the competition number; see section headed “Anonymity of Entries.” Suggested Additional Material (not required): Photo-
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The Adequate Wiring program, in operation in Northern California, includes the presentation of this impressive certificate to the owner of each qualifying home.

It is tangible evidence of electrical adequacy, assuring your client that nothing has been overlooked in the wiring plans, and providing added value for loan or re-sale purposes... all factors which contribute toward the owner's satisfaction with the home you have designed.

The Adequate Wiring program offers you, without charge or obligation... a complete wiring layout service, to aid you in furnishing your clients with electrical plans and specifications. For detailed information, consult your local utility office or this Bureau.

NORTHERN CALIFORNIA ELECTRICAL BUREAU
1355 MARKET STREET SAN FRANCISCO 3

graphs of models or of actual furniture, samples of construction and finishes may be submitted but are not required; they must be marked with the competition number and no other identifying mark.

anonymity of entries
Submissions shall bear no identifying name or symbol. Each design submitted shall have the competition number of the competitor printed clearly in figures one inch high on the upper right hand corner of the sheet. The competition number shall be clearly marked directly on each model and on each piece of additional material submitted. The number on each submission will be the only means of identification; and other indication of identity will disqualify the entry. A competitor may submit any number of separate entries; each entry will carry the designer's competition number in the manner stated above.

The Museum of Modern Art cannot take any responsibility for entries sent in without numbers or for entries whose numbers are not firmly attached and clearly legible.

sending entries to competition
Entries may be sent prepaid by Parcel Post or Railway Express. Entries must be addressed to: Edgar Kaufmann, Jr., Director, Museum of Modern Art Furniture Competition, % Manhattan Storage & Warehouse Company, 801 Seventh Avenue, New York 19, New York.

Entries may also be delivered by hand to the Manhattan Storage & Warehouse Company from 9 to 12 o'clock and 1 to 4 o'clock on weekdays, up to and including October 29, 1948.

return of entries
Prize-winning drawings and related entries will become the property of the Museum. Competitors should indicate on the Entry Blank in the designated space whether they wish to have their submissions returned if they fail to win a prize. If requested, such entries will be returned to their owners within a reasonable time by Railway Express collect unless the Museum requests and

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*A brochure completely illustrated with photographs showing all SEBRING pieces together with suggestions for their use is yours for the asking. Send for it today.

See these pieces at Case Study House 18 or at Sebring Studios, 1009 E. Green St., Pasadena 1, Calif.
obtains permission to retain them longer for exhibition purposes or inclusion in its collection. Entries whose return is not requested will be destroyed after six months. While the Museum will exercise every reasonable care, it will not be responsible for loss or damage to designs entered in the competition.

design ownership
All designs submitted to this contest will remain the property of the designers with the limitation on prize-winning designs specified in the section headed “Manufacture and Sale of Prize-winning Designs.”
The drawings and related entries of prize-winning designs will become the property of the Museum of Modern Art. The Museum may ask permission to retain drawings and related entries of other than the prize-winning designs for exhibition purposes and possible inclusion in its collection.

manufacture and sale of prize-winning designs
Museum Design Project, Inc., a sponsor of the competition, will endeavor to arrange for the manufacture and sale of the prize-winning designs in the United States.
Each designer who wins an award in the competition agrees that during a period of six months after the award of prizes he will negotiate for the use of his prize-winning designs in the manufacture and sale of furniture with such United States manufacturers only as are designated by Museum Design Project, Inc. Museum Design Project, Inc., agrees that in any negotiations for the manufacture and sale of furniture based on prize-winning designs the basis of compensation to the designer shall be a royalty of not less than 3% on all sales of such furniture or a flat amount agreed to as equivalent to such royalty.
In order to maintain the essential character and integrity of the prize-winning designs, the Museum will arbitrate controversies arising from any changes suggested during the process of realizing the designs. The designs as finally produced must be approved by the designer and by the Museum, and only designs so approved may be identified with the name of the Museum of Modern Art or with this competition. No design based on competition entries may be identified with the name of the Museum or with the competition without specific approval of the Museum.

exhibition
The Museum will exhibit the winning entries and the manufactured furniture if this latter is realized in a form satisfactory to the designers and to the Museum. It may also exhibit additional entries of merit which did not win prizes. Several other museums, and stores cooperating with Museum Design Project, Inc., are expected to hold exhibitions in the United States and in other countries. These exhibitions will be based on and limited to the material selected for exhibition by the Museum of Modern Art.

questions
Questions about the competition and applications for entry blanks may be sent to the Competition Director: Edgar Kaufmann, Jr., Director, Department of Industrial Design, Museum of Modern Art, 11 West 53 Street, New York 19, New York. No questions postmarked later than midnight April 30, 1948 will be answered.
To answer these questions one bulletin will be issued to all competitors who have registered. This bulletin will contain all official changes in the rules of the competition as originally announced.

about the sponsoring merchants
Museum Design Project, Inc., was founded by a group of prominent forward-looking retail furniture merchants. Its steering committee, under the chairmanship of Harry Fish, includes Nathan S. Sachs, Harry I. Stern, Harry M. Epstein and Harry Coplan. Representing leading merchants throughout the United States, Museum Design Project, Inc. is working for the improvement of low-cost furniture through encouragement of design talent and research activities, as exemplified in this competition. The retail stores in 160 cities that have so far contributed to this activity, and others in other cities that may join them, will naturally be the outlets through which all designs executed as a result of this competition will first be made available to the American public.
CONSULTANTS FOR THE INTERIORS OF CSHOUSE NUMBER 18

FEBRUARY 1948
Sunday evening, December 14, at the Coronet Theater, the friends of Hanns Eisler presented a concert of music by this, until recently, little known specialist in motion picture music. A sense of fear was in the mind of every person who attended to take part in this musical tribute, the fear of the ordinary somebody who wonders whether what he is doing may be misunderstood by the neighbors or perhaps officially interfered with by the police. This was not the sort of defiant attendance at a meeting which marks the emergence of a new line of opinion, a new would-be party. It was not a gathering of protest, full of shouting propaganda and determined speeches. There were no speeches, no recriminations, for that matter, no noise. The evening was given over to Hanns Eisler and his music, beginning with pieces for solo instrument and ending with compositions intended to accompany films. Hanns Eisler, a friendly man, whose mental attainments rise to the surface of appearance only in a rather more than ordinarily decisive nose, sat in the midst of the small gathering and, I hope, enjoyed himself as much as his manner seemed to indicate.

Until recently Hanns Eisler was, as I have said, a little known composer of the twelve-tone persuasion, who has specialized in what is generally considered the unrewarding field of motion picture music. Several years ago he managed to get safely out of Germany and came to the United States, where he was admitted, in spite of a dossier in the State Department, when he declared that he has never been a Communist. Once in the country he retired into the professionally active quiet of a man who has received a grant from the Rockefeller Foundation for researches in film music, who teaches at a university, and who is...
The Saflex lighting control system—at no additional cost—makes it possible to provide the home owner with more convenient and more flexible control of lighting.

Because the Saflex system operates on 24 volts, A.C., it eliminates the necessity of installing electric metallic tubing to the control switches. Since it is a multiple system utilizing three wire control it eliminates the use of 3 way or 4 way switches. It is, therefore, economically practical to install light control points at every entrance to every room.

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regularly called upon to produce scores for a variety of motion picture films.

For the Rockefeller Foundation he has now completed a small book, Composing for the Films*. It is sharp but friendly criticism of the technical apology for an esthetic practice which passes in the picture industry for a sound way of doing business. This unimaginative, antiaesthetic, pseudo-realistic wardrobe of rule-of-thumb, inchoate habits is given a practical going over by an expert, who wastes no time on gibes or insults, because he can hit quite hard enough with direct statements. The casual reader is likely to be interested in its many pointed, debatable observations about music.

Testimony to Eisler's value as a teacher was offered by the concert itself, organized by several of his friends and pupils. His outstanding work as a composer of film scores, though widely recognized in the industry, has earned him no general fame or distinction. At no time while engaging in any of these activities, which must have consumed the greater part of the waking hours he has spent in this country, has he been charged with acting as a political propagandist.

All would doubtless have gone well with Eisler, as it has with nearly all of the European composers of any importance who have come to this country, if it had not been for a brother and sister, who have long engaged in loud, public ideological disagreement. Sister denounced brother to a Congressional committee; and brother, who had been obscurely passing the days doing who knows what, ended up a blaze of publicity in contempt of Congress.

During this patriotic flurry, the sort of thing that draws public attention away from the more private backstairs dealings of the politicians, the newspapers discovered that Hanns Eisler, the composer, is also a member of the family. Overnight he became a center of the newspapers a menace. He was hustled to Washington and grilled, as some describe it, by what is called the Committee on Un-American Activities. Many mild citizens have not hesitated to describe this as the Un-American Committee, particularly in the way it goes about its business. It is legally constituted by Congress, however, and mild citizens are expected to submit to it as to other acts of Congress. Their only recourse is the polls, where they have shown on more than one occasion their real opinion of this committee, by refusing to reelect Congressmen of several of its former members.

In the course of the discussion it came up that Hanns Eisler, when requesting admission to this country, declared that he has never been a Communist. The question is still not fully decided, but, to judge by the noisy commentaries, this is not the real question. What Hanns Eisler is really being accused of is the fact that he was born into the same family as his sister and brother. Mildly he has pointed out on several occasions that the family disagreement is unfortunate, that he regrets it, but that, except as a family matter, he really has no part in it. There are several other aspects of the press handling of the subject that are altogether, too mean-spirited to discuss. Immigration hearings will be held, and, if it is determined that Hanns Eisler was actually at some time affiliated with the Communist Party, he will probably be deported. Fortunately, an interesting job, to write music for a film production of Alice in Wonderland, is already awaiting him in France. By the time he gets there he should have a fellow-feeling for Alice. Meanwhile he has been completing the score for a reissue of Charlie Chaplin's beloved comedy, The Circus. The program of Eisler's music began with a Piano Sonata, written in 1943, an indeterminate composition of no particular interest, well played by Leonard Stein. Mr. Stein then accompanied Brunetta Mazzolini, soprano, in a group of five pale but appealing songs to words by Bert Brecht, selected from a collection of 120, entitled Song Diary, written during the years 1943-45, which is soon to be published in Vienna. Mimeographed translations handed out to the audience and also read from the stage contained no dangerous thoughts. Then Manuel Campinsky, again with Leonard Stein, played a Sonata for Violin and Piano, composed in 1938. Like the Piano Sonata it contained little material of importance.

Up to this point one might have concluded that the program, though a gesture of goodwill, would offer little of musical sig-

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using the exact instruments, except voice, which Schoenberg used for Pierrot Lunaire. The picture shows a rainstorm in the city of Antwerp. It makes extensive use of water images. Eisler's score, Fourteen Ways to Describe Rain, is a suite in fourteen movements of varied character, less evocative and slightly more descriptive than the children's suite. One hearing cannot enable the listener to describe it in extension. He can say in general that it is entirely satisfying as music, that it complements the film action without intruding on it, that it is as a whole more interesting than the film, and that the general audience, watching the film, would scarcely be aware of this fact. Water images, pattering, splashing, coiling in whorls, provide the thematic material but not with the graphic insistence of Strauss’s emptying bathtub. For one who has read Eisler's treatise this music is a convincing exposition of his methods.

To have sympathy with Hanns Eisler in his present predicament one need be neither a Hollywood intellectual red nor a pink of the swimming-pool set. Yiddish, a language richer in psychological expletives than English, probably contains a term to describe folk who profitably serve and enjoy a way of life which they claim to despise. Actually, I see no reason to suppose that they do despise it. Toynbee, in A Study of History, has sympathetically described the type at length under the term intelligentsia. But when these people, or a busy creative artist like Eisler, are made the excuse for arousing in simple folk like myself a sense of fear, by threatening to penalize us for friendly association with or admiration for any other inhabitants of this country, whether or not we disagree with them, then it is time for citizens to protest. There is nothing in our system of government, in our present economic persuasion, there is no one in Congress; there is no specially privileged group in the American commonwealth which is above criticism or improvement. Precisely that is the meaning behind every document in the Freedom Train. I resent and deeply resent the fact that in attending this friendly concert of music to express my interest in Hanns Eisler, the composer, I should have been made to feel, as a result of many cowardly threats and representations in our newspapers and our Congress, a sense of fear, an unavoidable trembling, as in the presence of that worst of human evils, mob violence.
...completing the housing picture

gorge nelson designs

herman miller

zeeland, michigan
"The American Way" is much too important a publication to be dismissed as merely interesting pictorial political history of America, or because one resents the fact that it has to cost ten dollars. It presents in very sharp focus and with wonderful simplicity, the greatness, the naiveté and the raw-boned greediness of our rich political background. Of course, such a book is always full of parallels, and one is constantly amazed at the durability of trends and attitudes; the constant cyclical recurrence of sheer boobishness. But one is more impressed by the strong persistent line that runs firmly through from our very beginnings. One is proud to recognize it as the party line of democracy.

There is the feeling of looking through an old album in which all the ladies wore funny hats, and the sign of prosperity in the white American male was a large belly behind broadcloth and a gold watch chain. One is not sad because all that is gone, but there is a feeling of comfort in it and a feeling of conviction. One is less confused by the villains because they are real villains, and the wickedness is apparent, and the greediness is obvious, and the goodness is strong and loud and full of crusading vigor.

This political past was very strong in flavor, and looking back upon it one feels that a choice could be made without too much indecision. Gradually and inevitably, of course, the pattern of our politics has become more complex, with an infinity of overlapping currents and cross-currents of public and individual interest. And now, in its maturity, we find ourselves with a political science enormously specialized and, at its highest level, completely unemotional.

Perhaps the greatest change of all is in the nature of the lie as a device in politics and its refinement as an instrument of persuasion until its sharp point disappears into the upper regions of philosophy. This new type of lie is a precision instrument, measurable in micrometers and carefully orchestrated to numb the sense or to arouse emotion without the slightest regard for the human being it is designed to debase. Whether we learned this nasty trick from bad little boys in the neighborhood of the world, or whether it is a sophistication that comes naturally to all people, it is still a seed of destruction and, for us in particular, it is the most malicious and the most dangerously paralyzing device that has ever become a part of the kit and caboodle of our political tool box. As with the individual who is destroyed by the lies he tells himself, a nation destroys its inner strength by the sheer fabrications it creates within itself.

We have all talked too much of democracy as a holy crusade. We have too glibly generalized about it, we have merely insisted that it is a pretty wonderful thing. Only now we begin to realize that it is also a very expensive thing; expensive not alone in our precious "treasure" but in its demands made upon the human mind and spirit.

We have talked about the gift of freedom without really admitting that a full freedom is never given. Freedom is fought for and constantly renewed—freedom is life—freedom is movement—freedom is a progressive, active, virile, human experience. Freedom is not vegetative, it does not grow upon exhausted, barren ground nor find its home in the hearts and minds of frightened men. Freedom, like everything else that is living, goes to seed if it is unattended. And, above all things, freedom is not a lie, nor can it live with deception.

One becomes terribly aware that the merely expedient can be a persuasive lie, that the threat of consequence can also be a lie, that inability to accept or defend principle, whatever the cost, is doubt created by the lie that masquerades as policy.

The slam-bang school of catch-as-catch-can politics was a kind of game easily played and easily forgiven, but those were our salad days of school yard furies and raw-boned adolescence.

It is the consequence of what we believe now, or what we are persuaded to believe that will form the pattern of our world for God knows how many years of the future. And it most important to realize that we are not alone an embattled people but that, with the other people of the world, we face an enemy armed with weapons far more terrible than guns and bombs and bacteriological contamination. Our own indcision is the enemy which with unlimited devices to terrorize through confusion, self-pity, prejudice and wishful thinking, strikes for the final destruction of the conscience.

We have isolated the chemical elements of which our material world is composed. We have devised a system of mechanics and invention that can create miracles almost at will. The sense of illus ion and fantasy is rapidly being dispelled by our vastly growing knowledge of reality. But the greatest victories in human understanding can never be ours until we destroy that creature of distrust created by the lies that men tell themselves about themselves.
The mobile, in the broadest sense a moving sculpture or aesthetic object, adds to contemporary concepts of form the effect of actual movement in real space. Modern sculpture, creative objects and constructions, that have been endowed with the power to move, are usually works of art in their own right while in a quiet state, but their aesthetic effect is infinitely enhanced when they are in motion.

In these works, all kinds of movement fascinate the beholder, who, freely and spontaneously employing after-image and visual memory, participates in and thoroughly enjoys the special poetry of the mobile. Speed, slow motion, tense vibration, motion that is humorous in its implication, swinging, rotating or gyrating movement, sequential movement, countermovement, all may be found there. Movement may also create essential form or augment emotional experience.

Mobiles depend upon any one of several types of construction. The object may be operated by motor or require manipulation by hand. The suspended construction sometimes needs air currents to begin the action. It would seem that every device and technique short of remote control have fed the imaginations of artists making mobiles, and perhaps only the expense of preparing the mechanism has prevented the construction of a mobile operated on the principle of the electric eye.

There were functional mobiles in our environmental past—the weather vane, the water and windmill, the rocking chair, children's small toys and games. Today we live in the midst of functional mobiles in which the excitation of movement, particularly speed, is a prime factor. Industrial machines, machines of transportation, advertising devices and display objects, electric light mobiles, amusement park paraphernalia, motor-driven and hand-manipulated toys of mechanical complexity, including that serious toy, the model airplane, provide the sights and sounds and rhythms we live by. If cinema is our popular art form, it is equally pertinent that other contemporary aesthetic media employ motility.

Nowhere does there exist any general consideration and evaluation of the mobile in twentieth-century art. Because of the obvious relation of the kinetic construction, aesthetically conceived, to the machine, it is somewhat surprising that such a valid facet of contemporary art should be neglected. Artists have been using three-dimensional movement since 1913, and here in America at least there are many artists currently incorporating actual movement in their work.

In our century the concept of the mobile art form may be considered to stem aesthetically from the circulating viewpoint as it had developed earlier in cubism (Pl. 1). We now know that this device (a completely basic departure from the fixed viewpoint in accepted use since the Renaissance) permitted the cubist painter to move from one perspective point to another while he delineated a fixed object. Thus we had the new concept of simultaneous presentation from these several angles. The artist was free to paint a composite frontal view and two side views of a given object, or, for that matter, any other combination of viewpoints. Picasso, who developed the technique of the circulating viewpoint, (from Cezanne's first tentative use of it) still employs this inexhaustible device, having used it with great freshness, vitality and power. Strange enough, however, it remained for others to transform the implied motion into actuality in a work of art. Motion has its antecedents in 19th century art, especially in Cezanne's composition construction, so novel and insistent that almost singly he re-published the established laws of static perspective. Motion, emphasized beyond the common gestures of figures in action, appears in one form or another throughout the history of art. Even story development by means of progressive episodes shown in one picture, as in the pre-Renaissance paintings of Sassetta, offers a fascinating variation of the idea of movement in painting.

It was not, however, until the 20th century that motility as an end in itself became a recognized phase of the contemporary art scene. Although the circulating viewpoint of cubism frequently made the object seem in motion, it was actually the artist that moved, while the object (or model) was in repose. The futurists visualized the object itself as being in motion. Of the various means they employed to achieve this, the most popularly known is stroboscopic progression, a body represented in a continuity of advancing, though separately static, positions. The idea is interesting theoreti-
of view, were effective when the futurists transformed the static object into a less tangible one diffused by its movement through space; transposed motion experiences into visual images; or visualized the effect of moving objects upon each other.

Boccioni (Pl. 2) in his Manifesto of Futurist Sculpture (1912) formulated the logical and important premise that physical motion should be incorporated in sculpture, but there seems to be no record that he or any other futurist ever made a mobile sculpture. Nor are they known to have made objects or constructions, even static ones. Though futurism articulated the theory, cubism provided the actual physical steps away from the canvas and toward the mobile. For cubist painting led in 1911 to collage (Pl. 1), the pasting of newspaper and other materials into the composition to take the place of painted areas. Collage in turn led in 1913 to pictures composed in relief, partly from pieces of sawed wood or parts of machine-made items, such as the cross-sectioned chessman that appears in Picasso’s Wood Construction (1913). The next step was to free reliefs from the background so that they became full three-dimensional constructions, and Gabo is credited with having made a head in this manner in 1913.

To Marcel Duchamp goes the distinction of creating the first mobile. Duchamp’s interest in motion had preceded this event in several paintings culminating in The Coffee Mill (1911). This picture, partly futurist in feeling, proved the immediate point from which Duchamp, by progressive steps, began to pursue the theme of movement, his first mobile, never titled, was made in 1913 in Paris—a historic but unpretentious piece consisting of a bicycle wheel set on a pedestal. Manipulated by hand, it provided an active type of movement. The reproduction, (Pl. 3), Bicycle Wheel is a replica made in 1916 in New York. Following the original bicycle wheel of 1913 was one of Duchamp’s series of Ready-Mades—manufactured articles titled and presented as works of art, made so, obviously, by the artist’s selectivity and personalized emphasis. Named in the Dada manner before the inception of the Dada movement this piece was called In Advance of the Broken Arm (1915). A snow shovel, it was hung from a hook as it might have in a store where the prospective buyer examining it by touch would accidentally set it swinging. By 1920 he advanced still further the idea of the Bicycle Wheel. Rotating Glass Plaques, of this year is a mechanism, this time entirely made by Duchamp. On four glass blades he painted black and white lines that spiralled when the wheel provided for spinning the object was turned. The blades, on four different levels in space, produced a flat pattern on one level, when the object was in motion. Rotating Hemi-sphere (Pl. 8), which followed in 1925, was operated by a motor and made further research into optical illusion. Additional variants of rotating motion appear in Duchamp’s film Anemic Cinema (1926), and in the Rotoreliefs (1935). The latter were on flat disks of cardboard which produce illusions of movement when revolved on the turntable of a phonograph.

The step by step progression represented by these works had been interrupted as Duchamp reverted from time to time to the use of suspension, an idea which has since been employed by many artists and remains one of the basic types of mobile construction. In 1920 Rodchenko made a construction resembling an armillary sundial, hung from the ceiling. It was exhibited at Moscow the same year. Isamu Noguchi made several suspension constructions in Paris in 1927, and these were exhibited the following year in New York. He still occasionally uses this method for parts of an object. Alexander Calder has employed the method since his first mobiles in 1930; Giacometti has used it on occasion (two carved wood pieces were suspended in the construction titled Peace at 4 A.M., 1933), as have David Hare the imaginative young American surrealist sculptor, and others. Xenia Cage, many of whose abstract constructions are composed of metal screening and thin strips of balsa wood, has made a series of delightful suspension mobiles in which the play of moving rectangular planes is similar to that in the Japanese hanging objects made of strips of glass. On the same principle, but with very much different effect was the series of mobiles made in 1942 by the Chicago artist, Gretchen Schöniger. Made of roofer’s tin suspended from wires, the forms served as excellent light reflectors and threw moving patterns of light and shadow against nearby surfaces. To return to the chronological continuity: Tatlin, approaching closely to the idea of a complete construction and a mobile, made an interesting object in Moscow (1914-15) that was not quite either. This object (Pl. 4), a three-dimensional counter-construction, was still a relief since it was solidly cradled across a right angle corner of a room from one wall to another and did not stand freely in space. Even if a certain limited flexibility of tensions is implicit in this type of construction, motility itself was not intended.

Nahum Gabo made an object which he titled Kinetic Sculpture (1922, Pl. 6). A metal band with a small weight at the head, it was operated by a clockspring, producing torsion in an intense, sustained movement. (David Hare uses tense vibration in several of his sculptures today, though for direct emotional impact.) Gabo, who is at present in this country, reiterates his previously expressed theory of the use of movement in constructions to create form, and is now working from blueprints long extant, further demonstrating this point. He considers the object before it is in motion aesthetically unimportant, after it is in motion it must reach the level of a work of art.

During the Twenties, Bauhaus instructors and their students in Germany made a number of mobile constructions and advertising displays. The individualist, Constantin Brancusi’s slender, elongated Fish (Paris 1923) appears to balance on a narrow part of the ellipse, but there is actually a peg which fits into an opening and permits the sculpture to be turned. Particularly interesting and important stage sets inspired by constructivist
and deStijl principles were invested with movement during the Twenties. The constructivist, Popova, designed a set for a production of The Magnificent Cuckold (1922), in which a wheel and the fins of a windmill turn to coincide with climactic moments in the play. The same year and the following saw the introduction of Frederick Kiesler’s inventive stage sets. Consistent with the character and spirit of the play were his sets for R.U.R. (1922). One act gave prominence to a huge mechanical construction, belt driven, and containing an iris which opened for the showing of motion pictures which synchronized with the plot, as well as a screen and mirror device with microphone sound, which produced the effect of television. (By this last means, characters in the play who wished to enter the robot plant could be viewed unknowingly on the small television screen by executives and by the audience. Having gained admission to the plant they would then appear full scale in dramatic contrast upon the stage.)

The second set, a chemical laboratory, constituted a light mobile. It was composed of a battery of mirrored domes or reflectors placed along the footlights and on which spotlight played as well as spiral and other types of neon light constructions which moved and went on and off in rhythm. For The Emperor Jones in 1923 Kiesler solved the problem of motion with psychological and emotional emphasis. A slowly timed and subtle shifting of the scenery from backstage (Pl. 7) changed the visage of the jungle to keep pace with Jones’s frantic and lost wanderings, carrying the audience graphically through the situation. This set, without curtain, started and ended like a peepbox; the three walls of the stage, its floor and ceiling, as well as the lighting, participated with the action by the performers to produce a fully realized time-space continuity. The set was in the abstract idiom. The effective theories laid down in these early stage mobiles still provided basic principles when, in 1946, Kiesler again created from them the set for the Broadway production of Jean-Paul Sartre’s Existentialist play, No Exit. Jimmy Ernst, at the same time he began his career as a painter in 1942, made two ingenious mobile pictures of Dada character, based on continuously shifting planes. In each of these pictures, the planes, manipulated with extreme slowness by the movement of an eight-hour clock, changed position imperceptibly. Suddenly looking at the picture after an interval of time, one had the startling feeling of viewing a completely changed composition. Bauhaus members, the deStijl group, and the constructivists, like the futurists before them, regarded movement as a technique intrinsic to the modern point of view. Therefore mobiles did not become the exclusive activity of the artist, but part of a wider activity in which many advanced techniques were employed to accomplish varied results. Similarly movement had not dominated Duchamp’s work. He investigated it, nevertheless, with such conclusive logic that, after inventing the mobile, his subsequent works containing actual movement constitute a fully realized phase of his broad creativity. David Hare and Joseph Cornell, each in his own way influenced by Duchamp, use movement in sculpture and objects respectively. Though each appears to employ motion as a secondary element, they are so entirely personal and creative in its use that both must be considered with Duchamp and Calder for their individual aesthetic contributions to the development of the mobile. Employing this medium consistently and imaginatively for the past sixteen years, Alexander Calder’s name has come to be synonymous with the mobile. This title itself was given Calder’s work by Marcel Duchamp almost from its start in 1930. His production, however, has heretofore been erroneously credited with being preceded only by Gabo’s Kinetic Sculpture (Pl. 6), an unnecessary misconception given circulation in all previous references to and writings on Calder. Though this accurate information does not change the value of his work per se, it alters his position historically, for he cannot be regarded in these circumstances as the virtual inventor and originator of the mobile. However, to work with motion is almost a natural process with Calder, and this type of activity predated the making of his first mobile. His wire Circus of the mid-Twenties, to which he owes his first acclaim, was peopled by diminutive caricature performers whom he sent perilously and enchantingly through familiar circus routine. Charm, humor, and imaginative mechanics were all present in a less developed degree in the circus.

Calder’s gift lies in the method rather than in the form. This accords with Gabo’s definition that the object is unimportant until set into motion—that the form is form-in-movement. Calder’s mobiles are seldom of compelling interest when quiet, (Pl. 91), but once set in motion, a world of true poetic ingenuity and fantasy is revealed (Pl. 101). A comparison of the still photograph and the brilliant stroboscopic photograph of a Calder registers the trajectory of movement far beyond the capacity of the human eye. Perhaps the most personal contribution of a Calder is in the sequential movement of many of his works activated by hand. The cause-and-effect behavior, part to part, of these constructions establishes a chain of movement depending to some extent upon the accident of the touch that starts them, and the cross rhythms and different speeds develop with corresponding variety and complexity. Tactile gratification, sounds of a thin metallic nature emerging from the scarcely touching forms, and the shifting and changing shadows belong to the aesthetic effect of Calder’s manipulated constructions. (continued on page 56)
This house of 4500 square feet with car port and patio at one-half measure is placed advantageously on a site of one acre. Particular attention was given to relating the house and grounds in order to effect an intimate outlook protected by the orange and avocado trees.

The spatial development of the house resulted from the owners' need for a house that would provide uninterrupted quiet and restfulness; a place for periods of solitary recollection guarded against the intrusions of everyday distractions. The architect has achieved a maximum of privacy for the two children, the owners, and guests by separate outside entrances for all three units of the house. All wings are in turn united by the living room and are all in close relation to the out of doors. Additional spaciousness is gained by opening the study-bedroom at the end of the living room. The front of the house faces south and all bedrooms face east. The use of glass emphasizes the indoor-outdoor relation, for the average window is 8 feet in width. Panels of unframed glass move on ball bearing tracks.

Construction is wood frame and stucco with the
Looking across built-in bench from dining corner to windows curtained in pale yellow gauze.

Behind built-in bench at right angles to fireplace is dining area and bar which can be closed when not in use.

Fireplace detail of extreme simplicity with glass panels on each side.

A. Study-bedroom at end of living room shows wide glass areas with no muntins to break flow from inside to outside. Draperies are dark green with pale yellow gauze curtains.

B. View from living room to terrace.

C. View to terrace showing overhang of roof on east bedroom side and trellis.

D. Kitchen has plastic rolling-up case doors and wide expanse of glass over sink; drainboards are tile and floor is of rubber tile.

exception of the flagstone car port. The floor is a concrete slab with an overlay of Bruce block natural wood flooring. Roof is mopped asphalt with crushed dolomite top. All interior and exterior wood has been left natural but was given a protective plastic treatment. Redwood, Douglas fir, and Ponderosa pine were used throughout the house. All doors are of birch slab. Plastic case work has been used extensively in the kitchen.
The house is beautifully integrated to its site and the enclosed areas are remarkably free of clutter. The space generously used, creates its own richness and quiet freedom. The main living area receives from the occupants rather than insisting on its own importance.
Charles Eames has added this metal legged dining table to his collection of furniture. Designed to fold for storage and shipping, it is nevertheless entirely sturdy. The thin edge of the plywood top is in the same spirit as his molded plywood chairs, and the emphasis of the thin flat plane is made more apparent by the black lacquer treatment of the under-surface.
They wanted dancing of the "hot stuff, brassier and bloomer" school. When you add a pair of castanets you have exactly what I can't do. I tried to dance a people whose dignity and sorrows are more important than a "sous of the border" conception of Spain. But when the local programs are booked and the manager is ignorant of the fact that it is the Goya war drawings that are to be done, he is likely to have "The Lady in Red" played by the local band as "mood music" and his confusion by saying that, after all, he really didn't want you anyway. Of course the audience never knows until it is too late, and the result is not only unfortunate for them, but a misery for the participating performers. The audience usually pays to be amused or entertained and comes of its own free will. Nothing is done to warn them that there is to be an attempt to arouse, provoke, inform or awaken them in some, no matter how small, way.

There was no curtain; it was cold because of the ice hockey show on the previous night's bill. We wandered out in black costumes and as soon as we got into position the heterogeneous aggregate of 14,000 people moved and squeaked in its folding chairs. There was a shattering quarter of a minute on the platform and then, horribly, incredibly, they began to giggle. And the giggling rose wildly to unprovoked derisive laughter. Surely they were not responsible but neither were we, and now I know what the local manager meant when he said he didn't really want us anyway. It was only possible to call an end to the hostilities—run with rage and humiliation and sorrow, or rather it was the rage and humiliation and sorrow that ran and carried us with it.

Very few dancers love touring, even if they specialize in Nut Cracker asinities. One wants to say the names—one wants to tell more, but this is poor ethics, because it isn't pleasant to know these conditions, this pattern is the only method under which you can live at all, much less work. So I have to speak only about events, as if people were not in control, and as if I am the only one who can afford identification. It's like being booked—not theatrically speaking, but penologically. As a matter of fact, one might say one was booked on suspicion; the suspicion arising from the fact that the manager sells you against the questioning judgment of a local booking agent.

I can't give the whole list of reasons why people tour or never tour or tour one year and don't tour the next year, but it seems obvious that when people accept bookings they do it because they have to and, in some cases, want to, and if they are not engaged, perhaps the questions should not be asked of the artist, but rather of the person who does the managing and the arranging of the big "destiny" billing. I feel a strong cold lust should be sufficient to explain away what seems to me, self evident. I am told that the last word, the latest cliché, the most daring—these should be part of my performance, but so far have not been. Now, the question arises, what would I prove if I hadn't stopped this performance! That the young ladies and myself could take it, perhaps! Well, at least, the excuse of the St. Paul disaster should not have been used as a reason for dropping options. Some other excuse could be found. Perhaps the confusion lies in the separateness; what the critics say; how much money you have for propaganda in large black print; your own personal struggles; the manager's hope that the critiques will sell; your personality; your acceptable themes plus inner conflicts even down to your digestion. These make for misunderstandings and the need for explanations.

Now, actually, it isn't that you hunt for something "safe," you just find yourself, in this age in conflict with many complicated factors, perhaps intellectually rational, but composed of certain elements that work from the "inward" instead of the "outward." But if both are approached honestly, neither one is commercially "safe," but both schools, in essence work to what I feel all artists need to find and to discover; in finity, to arrive at one's fullest exposé of one's self in relation to others, and the exposé of others in relation to one's self. We do not begrudge this necessity; we gain richly from it. Now I want to say it is only that such an exposé is in no way possible for audiences interested only in watching performing steps—not innermost inner subjective questionings but merely the satisfaction of anatomical hungers. This sounds anguished, sarcastic, personally miserable, but it's true. I know too well and I don't like it, which only goes to prove that the subjective or the objective is, by the last analysis, the revolutionary. In the outward, the artist loses himself in his magnanimous, yet personal gloom—in the inward, he is concerned equally unless he so places himself, alone; and then he is exalted and large enough to remain, alone. This is what Goya did or we would never have seen his war drawings. The revolt was inward but not without outward thrust, because without the horrors of war he would have had no means of being so honestly and powerfully disturbed.

I am I suppose, unfortunate, yet for me I feel fortunate to be so disturbed. You cannot be inwardly disturbed alone in a world of interconnected misery.

photograph by Gjon Mili
HOUSE BY SUMNER SPAULDING, F.A.I.A
JOHN REX, A.I.A. & GORDON DE SWARTI
ARCHITECTS
ENGINEER

[Diagram of house and site plan]
The clients, retiring from the rigors of eastern business life, devoted considerable time and thought to the selection of a site in Southern California. They chose a hillside of approximately six acres, sloping to the northeast toward snow-covered mountains with citrus groves and clumps of eucalyptus trees in a picturesque foreground. It was their desire to live informally in a reasonably ordered community where they would have easy access to the sea. They desired contemporary planning and a frankly considered life of ease.

Having secured the property, consulted the architect, and arrived at a solution, they found that the project submitted for the approval of an Art Jury set up to enforce existing regulations that permitted only the most traditional architecture. The Jury, however, realized the distinct change in attitude toward a way of living in 1948 that did not coincide with the 1928 restrictions. The problem then was how to reconcile and harmonize the appearance of the buildings with regulations defining traditional architecture. Actually, the proposed house did no real violence to the original restrictions, but in this attempt to reconcile them, certain very definite inconsistencies in the original documents became painfully obvious.

Previous experience had taught the Jury that defining the "type" of building in architectural terms did not always guarantee satisfactory results, and it became painfully evident that such restrictions were no protection against bad taste. By the strict letter of the law, it was felt that contemporary architecture had no place in the area. On the other hand, no one could deny that, by all the rules of logic, people should be permitted to live there and take the fullest advantage of the outdoor recreational life available.

The first decision was to turn down the original plans, and for several weeks the clients were pressed between the devil and the deep blue sea—either to build a traditional house or to live elsewhere. Their conviction that this was the precise place in which they wanted to live, and also that they had to have a contemporary house, got them nowhere. Intense discussions ensued between the clients and the Jury. The former made certain concessions as to color, material, and general location of the house—the latter, after duly considering the problem, at last concluded that the house as first conceived did not really violate the spirit of the way of life designed for the area, and decided to revise the original negative decision.
A high meadow with a view of the ocean has been chosen as the site for six future Case Study Houses. Followers of the program, watching progress on these examples of modern houses, will at the same time have opportunity for repeated enjoyment of a naturally beautiful tract. Case Study House No. 18, the first of this group to be completed stands at the southeast curve of the property. Thus it has a site with full, unobstructed view both south and east. With the principal view to the south it was possible to face the main glass areas in this direction in order to take advantage of the sun for light and warmth. If the orientation of the site has been made clear, the reader will see further that loss of privacy, a problem usually to be reckoned with where there are large glass areas, is not a consideration in this case. High above the ocean, the privacy of the open south and east exposures of Case Study House No. 18 can be threatened only by an occasional sea-gull. With the main view coinciding with the unobstructed southern exposure and privacy assured, the only drawback of the site was the noise rising from busy beach traffic at the foot of the cliff. These noises were avoided by placing the house back from the rim as far west and north as the size of the lot permitted.

Decisions to this point were impersonal ones for regardless of who was to live in the house, best solutions were still southern orientation and location to north and west of the lot. At the moment consideration of the layout began, it seemed best to approach the problem as though there were a specific client problem. Thus decisions could no longer remain impersonal, and solutions were arrived at in terms of a proposed owner's requirements.

A couple in their early thirties was assumed as clients. They would have two dogs and would...
CASE STUDY HOUSE 18

RODNEY WALKER, DESIGNER

INTERIORS BY FRANK BROTHERS

photographs by Robert C. Cleveland
expect to entertain frequently; the husband, an engineer, with an interest in drawing and small machine shop work; the wife, with an interest in horticulture and the design of clothes.

Around these individual requirements the layout of the house was made. Shop space was allowed in the garage. A dog run was planned adjacent to the service yard. Besides opportunities afforded by the large, nearly level lot with its beautiful setting, a garden room was placed indoors to give additional scope to the wife’s horticultural interests. The guest room is given maximum privacy by placing it at the opposite end of the house from the master bedroom. This room serves also as a sewing room. The 24 feet of wardrobe in the master bedroom make ample provision for the results of the wife’s interest in designing clothes.

The layout is a simple, straightforward solution of the client’s problems. Other considerations were the orientation of all principal rooms to the ocean view and favorable solar exposures. No room was to be used as a passage-way. Perhaps the outstanding feature of the layout is the fluidity of the east wing, complete openness being possible throughout the dining room living room inside and outside garden areas and the main bedroom.

A feeling of openness and informal spaciousness in the living room contributes to ease in frequent entertaining. This effect is emphasized by the high ceiling (11 feet) with open beams; the south wall, entirely of glass, opens to the ocean view; the northern and eastern clerestory windows, admit cross light and cut glare; the sea-foam green carpet contrasts with the polished dark walnut walls; and, particularly the relationship of the living room to the garden room. The living room and garden room are divided only by the two-way open fireplace. This fireplace, while dividing the two rooms, serves also to unite them, and forms the principal decorative feature of each. Structurally the fireplace is experimental; it is copper-faced both for appearance and to enable heat rays, usually lost up the chimney, to radiate into the room.

The bricked garden room, open as it is to the living room and divided from the main bedroom only by a transparent wall, adds spaciousness to both rooms, and gives to each a pleasant transition to outside living areas and outside views. The unity with the bedroom is emphasized by the blue wall at the east that continues through the glass partition into the bedroom. The south wall is glass, and additional light comes through the skylight at the glass partition between the garden room and the bedroom. The wide sliding door that forms half of the east wall opens to a brick terrace outside.

The large master bedroom, of sitting room size, has a glass south wall looking through the garden room to the ocean view. Draw drapes across this glass wall give the room privacy when required. A nine-foot sliding glass door to the east canyon view opens to a private grass terrace separated by planting from the adjoining garden room terrace. The unusually long closets with built-in drawers were dictated by the wife’s hobby of designing clothes. The master bath in gray and yellow, opens into the room. Gray, yellow, blue and dark rose are used in the bedroom.

Since bedroom 2 is intended for guest use, it is placed at the other end of the house from the master bedroom and has its own bath. It is paneled in natural cedar with white trim and has a long south window which looks out over the dining terrace to the ocean view. Obscure glass has been used in the north windows to admit additional light while shutting out the service area.

A natural wood effect is achieved by the use of Formica “Realwood” on cabinet doors in the kitchen. Plain chocolate brown Formica is used on the sink, work spaces, splash, stove and laundry backings. The ceilings and other painted
Case Study House Number 18 is now open for public inspection and will remain open through April 15. Visiting hours are 2 to 4 p.m. Tuesdays through Fridays, and 1 to 5 p.m. Saturdays and Sundays; closed all day Mondays. To reach Case Study House Number 18 go west on Sunset Boulevard to Pacific Palisades, turn left on Chautauqua Way and proceed for a half mile. The address is 199 Chautauqua Way.

Products specified for use in Case Study House Number 18 will be found listed on Page 46.
areas are soft gray-blue. Kitchen and laundry equipment share this area, and the latter is concentrated in the north end of the room. The glass door at the south end brings the ocean view to the kitchen. The window bank on the west looks over the dining terrace to eucalyptus trees.

The house presents a low, informal exterior of clean design. The combed water-proof plywood, painted a natural wood-brown with soft blue-green trim, fits into the background. The principal glass areas with wide overhangs are on south and east. A bricked terrace, curving around east, south and south-east, takes in the outdoor patios that open from master bedroom, garden room, living room and the dining terrace. On the north the main entry and adjoining service entry are separated by a plywood wall which extends to the garage. Obscure glass on the north wall gives privacy to the entry.

The house is constructed on a three-foot module system. 4 x 4 posts are joined with dowels every three feet to ceiling plates and floor plates. Each three foot section contains a fire block and two diagonal braces. Framing for doors and windows is unnecessary since in this system the space between posts becomes 2' 8", the standard door and window width. Joists and posts automatically line up over each other. Fixed window glass is slipped into grooves in the posts and puttyed. Interior plywood is jointed in various ways, a different method being used in each major room. The module system was employed because of the strength inherent in such a structure, the absence of waste, the speed with which it can be constructed, and symmetry.

One other item which calls for explanation is the experimental heating system used in the living room. A metal duct used over the large southern glass area spreads hot air evenly from openings in each rafter bay. The air is channeled by the rafters themselves to air inlets on the north wall, making an open plenum of the entire ceiling. The hot air kept at the ceiling will warm the ceiling which in turn radiates heat to the room below. Thus no hot air is brought to the living level. Because of its experimental nature, this heating method is used in the living room only, a conventional hot air system being installed for use in the other rooms.
FEBRUARY 1948

CURRENTLY AVAILABLE PRODUCT LITERATURE AND INFORMATION

(continued from page 8) installs systems in Los Angeles area; one of best sources of practical information, installation services.

(171) American Radiator & Standard Sanitary Corporation: Brochure new board baseboard radiant heating panel; 8" high, hot, "radiant comfort," can be painted; worth investigation.

(390) A. M. Byers Company: Practical, factual booklet covering study of 1,000 radiant heating jobs in last ten years; gives engineering; preference methods, materials mostly used; geographic statistics.

(414) Chase Brass & Copper Company: Full color brochure on bronze and copper in residential planning; emphasizing copper tubing for radiant heating, best sources of hardware, screen, roofing products.

(257) Day & Night Manufacturing Company: Concise folder Panelry radiant infra-red vented gas wall heater; designed, single or dual units; with or without thermostat controls; 10,000 to 40,000 BTU; 50%-60% x 33-1/2" to 1711/16" specification, charts; merits appraisal.

(281) Hammel Radiator Engineering Company: Folder Comforaire winter air conditioner, summer ventilator; all technical information; centrifugal blow, motor mounted; suspension and rubber; four sizes, 66,000 to 120,000 BTU.

(258) Hammel Radiator & Engineering Company: Information new Karel Air Ever Full vent cap; make it possible to set vent pipes almost flush with roof and still maintain even flow.

(320) Lenox Furnace Company: Brochure Lenox Aire-Flo gas residential furnace; provides warmed, filtered, humidified air; set of units, available; cabinets remarkably well designed.

(260) Leslie Welding Company: Folder new series vented loungers for attic wall installations; flanged, self-framing, with no wood frame or trim required; detachable screen in rear; five sizes, galvanized iron.

(415) Minneapolis-Honeywell Regulator Company: Brochure, folders new automatic electric clock thermostat to regulate heat output of any kind of controlled heating; automatically turns heat down at night, up in morning; well designed, highly efficient.

(87) Naco Manufacturing Company: Brochure, folders Pacific Thermolators, vented console heaters; good design, available immediately; also information Pacific floor, dual register furnaces, suspended units, duct furnaces.

(224) Naco Manufacturing Company: Folded metal supply pipe for floor, fully vented; no basement, ducts, pipes; manual control, automatic piping instruction available.

(330) Penn Electric Switch Company: One of best manuals showing wiring diagrams for heating systems; loaded with technical data, diagrams for all types of systems; this is "must" for all files.

(446) Payne Furnace Company: New cooler Air-Evaporating cooling unit for residential and commercial cooling; 14 major innovations and features; Fiberglas evaporative filter; true air delivery from 2,300 to 8,000 CFM claimed.

(373) Payne Company, Inc.: Authen­ tic brochure residential ventilating fea­ turing Fan-Ele-Col electric ventila­ tor; removing cooking odors, steam; full technical data.

(331) Revere Copper & Brass: Speci­ fically good non-technical discussion radiant panel heating in 36 well-illu­ strated pages; this is a down-to-earth manual and no architectural file is complete without it; can't be recommended too strongly.

(333) Superior Fireplace Company: Excellent brochure on fireplaces, featuring Superior Hearth fireplace units, grilles, accessories; one of best fireplace booklets; worth file space.

(447) Williams-Wallace Company: New catalog Metalbestos gas vent and flue pipe for gas appliance venting; patented pipe - within - a - pipe construction; full technical information, including cut-away drawings.

INSULATION AND ROOFING

(395) Alumaluxx Company, Inc.: Folder Alumaluxx Bermuda-styled aluminum roof; light, rust and corrosion proof, soundproof, easily fabricated, durable, reflective, fireproof, watertight, reason­ ably priced; presents pleasing appearance.

(334) Babcock & Jones, Inc.: Brochure, data on Ferro-Therm Steel Insulation; exceptionally good with radiant heat; reflects 90-95% of radiant heat; vermiculite-proof, no mold; installed; one of best new products and merits study.

(18) Celetex Corporation: Folder roof plates, including information for use in portico portions of buildings; full specification chart for built-up roofs.

(19) Celetex Corporation: Sound conditioning brochure Celetex products, featuring Acousti-Celetex, Murforite, Acoustic, Q-T duct liner; construction details, application selector.

(220) Gladding, McBean & Company: Series folders, brochures Zenolite insulation; insulating fill, insulating concrete, insulating plastic; thermal, acoustic; full details uses established, proven product.

(221) Gladding, McBean & Company: Brochure Zenolite concrete insulation; interesting for use in portico portion of slab below radiant heating pipes; prevents heat loss into ground; normal concrete should be used above pipes.

(226) Kimberly Clark Corporation: Brochure 20 pages, two colors; Kim­ mill blanket-type insulation; moisture, fire, vermin, insect; good design; 8" wide, flexible; four widths; three thicknesses; specification tables, installation data; well illustrated.

(95) Pioneer-Flintkote: Information; 120-page manual built up roof specifications; invaluable detail, source material; features P-F Built-up Roofs, answers any reasonable question with graphs, sketches, technical data.

(97) Simpson Industries, Wood Fiber: Division; Brochure (8 pages) new Simpson insulating board products; sheeting, installed tiles, insulated board, insulating plank, installing decorative tileboard; full description, tech­ nical, installation data.

(98) Simpson Industries, Wood Fiber: Division; Information-packed illustrated folder new Simpson acoustic tile made from fibers Douglas fir; high sound ab­ sorption, 404 clean-drilled holes; easy to clean, level finished, high light re­ flection, can be repeatedly painted; three thicknesses, two sizes.

LIGHTING EQUIPMENT

(448) All-Bright Electric Products Company: Folder unusual fluorescent fixtures with overall height only 3 1/2; makes for clean con­ temporary design; bottom glass panel on either side permits easy servicing; can be mounted to ceiling, single or continu­ ous rows; good new product.

(417) Cannon Electric Development Company: Folder Pathfinder lights for outside paths, steps, gardens; nice high, neat, reflects light down; preci­ sion made.

(101) Century Lighting, Inc.: Com­ plete line of best contemporary lighting fixtures; fully illustrated, complete technical information.

(461) Day-Brite Lighting, Inc.: Data packed 44-page brochure Day­ Brite recessed troffers for fluores­ cent lighting; full technical informa­ tion and prices; also charts for figuring fluorescent intensities.

(116) General Lighting Company: Brochure (14 pages) complete contemporary lighting fixtures; one of best available lines.

(337) Globe Lighting Products, Inc.: Very complete 56-page catalogue complete contemporary fixtures; one of best sources in Southern Cali­ fornia.

(462) Lamps, Ltd.: Information good line of contemporary lamps; well designed.

(356) Lightolier: Folder wide range Lightolier lighting fixtures; good con­ temporary design featuring built-in dimmers; well illustrated.

(375) Payne Company, Inc.: Ilustr­ ated bulletin Pyrites, complete line recessed lighting fixtures, including specialties; multi-colored dining room lights, automatic closet lights; adjustable spots; full technical data.

(380) Ruby-Philite Corporation: Brochure, price list good line fluorescent fixtures, recessed reflectors; all types of units, including wall and re­ ceptor; especially good spotlighting fix­tures.

(392) Swoot-Holman Company: In­ formation newly designed Zenith lumin­ aire; Polysyntene plastic side panels ribbed to permit proper distribution while reducing surface brightness to minimum; certified ballasts, start­ ers; individual mounting; opens either side for servicing.

(418) Sunbeam Lighting Company: Catalog new line fluorescent lighting fixtures; contemporary and standard design, side range applications; full technical, installation, service data.

(270) Supreme Lighting Company: Comprehensive 23-page catalog well de­ signed line fluorescent fixtures; hang­ ing, op - extreme; unusual glass; recessed fixtures with egg crate bower or dif­ fusing glass; industrial, reflector, win­ dow types, strip, circle; kitchen fix­ tures, vertical mirror lamps, bed lamps.

(339) Kurt Versen Company: Infor­ mation one of best lines contemporary lighting fixtures and lamps; have long been leader in contemporary field.

MISCELLANEOUS

(386) Diryley Company of America, Inc.: Full color brochure "How to Set a Beautiful Table" featuring contem­ porary-designed solid alloy flatware color of polished gold; company re­ quires 15 cents in stamps; good pre­ sentation of subject.

(301) De Patta: Information contem­ porary jewelry at its best for an ever increasing minority; available in Monte­ rry, Los Angeles, San Francisco, Port­ land, Chicago, or direct.

(475) Tony Hill-Wilmer James: Full information full line contemporary equipment; glass, brass, glazes; beautifully fired; also lamps with ceramic bases; used in CSHouses 11, 18.

(312) House of Hospitality: Brochure built-in cabinet to go beside toilet in bathroom to hold magazines, ash tray, smoke, toilet paper, etc., inci­ dentials; very practical, indeed.

(174) Modern Designers: Full information good lines ceramic trims, brasses, copper, brasses, and lamps; well known contemporary designers; available through selected retail outlets; used in C-S House Number 18.

(454) Rotir Company: Literature Rotir Kabob skewers; stainless steel, immediately available; in sets of five with brackets to fit Rotir port­ able outdoor barbecue; also in vary­ ing lengths to fit all other barbe­ que.

(190) Sandbreeze Engineering Company: Information stainless steel barbecue unit; can be built in or used as port­ able unit; widely published.

(355) Zeitlin & Verbrugge: Catalogs bar - on - the - fence, industrial, domestic, new, out-of-print.

PAINTS, SURFACE TREATMENTS

(465) Americoat Division, Ameri­ can Pipe & Construction Company: Information new Americoat vinyl coating which is a pigment vinyl
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Lumite will solve your clients' screening problems once and for all. This amazing, war-proved screening is virtually indestructible. Woven of Saran, product of Dow Chemical Co., it is rustproof, can't corrode, rot, or stain. It is unaffected by sun, rain, or salt spray. Even industrial smoke and acid fumes leave it completely unchanged. It never needs painting. Nothing like it has ever been developed before.

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LUMITE DIVISION
Chicago Manufacturing Corporation
47 West Street, New York 13, N.Y.

(continued on page 48)

resin dispersed in water; resists most dilute acids, is unaffected by alkaline cleaning compounds; wa-

(364) The Kay-Tite Company: Information, color charts Kay-Tite, Portland cement based membrane coating; curbs moisture penetration terproof, white and solid colors, porous masonry; available in seven colors and white.

(366) National Lead Company: Folder painting specifications "Dutch Boy" white lead, paints, varnishes, enamels; chip form color samples available; valuable information for treating exterior, interior surfaces.

* (457) Frederick O'Brien Paint & Varnish Works: Folders O'Brien Pen-chrome wood finishes; remarkably good plywood finish in modern blonde tints; available clear or in colors; preserves wood, allows grain to show; cheaper than paint or enamel; color card available.

(112) Pittsburgh Plate Glass Company: Exciting, informative, factual 35-page full-color brochure color dynamics, scientific utilization of energy in color to promote efficiency; authentic study.

(347) Sherwin-Williams Company: Brochure (20 Pages) giving architectural specifications for painting, varnishin, finish with Sherwin-Williams paints, varnishes; undoubtedly one of best reference manuals on surface treatments.

(465) Wesco Waterpaints, Inc.: Well prepared four-color folder with color samples on Rockkite one-coat cement-base paint for stucco, cement, rough concrete, unglazed tile, etc.; comes powder to mix with

merit specified

used in C. S. H. Program

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Mail the coupon for complete information.

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Armorply* (metal-faced plywood)

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MERIT SPECIFICATIONS—CASE STUDY HOUSE NO. 18

Editor's Note: The following products and services were merited specified for use in Case Study House Number 18, featured in this issue. More complete information regarding most of these products and services will be found in the Currently Available Product Literature and Information section, beginning on Page 6.

Andirons—Custom Cast, 40 East Elm Street, Chicago 11, Illinois.
Bath Accessories—Harvey Machine Company, Inc., One Hundred Ninetieth Street and Western Avenue, Los Angeles 22, California.
Bath Heaters—Thermador Electrical Manufacturing Company, 5119 District Boulevard, Los Angeles 22, California.
Bath Scales—The Berg-Erickson Corporation, 469 East Ohio Street, Chicago 11, Illinois.
Blankets—Portland Woolen Mills, Portland, Oregon.
Bowl and Refrigerator Covers—Kennedy Bag & Car Liner Corporation, Lancaster, Pennsylvania.
Bricks—Gladding McBean & Company, 2901 Los Feliz Boulevard, Los Angeles, California.
Cabinet Hardware—American Cabinet Hardware Corporation, Rockford, Illinois.
Cabinet Tops and Cabinet Fittings—Fornica Insulation Company, 4630 Spring Grove Avenue, Cincinnati, Ohio.
Carpet Sweeper—Blues Carpet Sweeper Company, Grand Rapids 2, Michigan.
Circuit Breakers—Square D Company, 8317 Valley Boulevard, Los Angeles 32, California.
Chronotherm Heat Regulator—Minneapolis-Honeywell Regulator Company, 2747 Fourth Avenue, Minneapolis 8, Minnesota.
Dishwasher—Kaiser-Fleetwood Sales Corporation, 1254 Broadway, Oakland, California.
Door Chimes—Ono-Tone, Inc., 931 East Thirty-first Street, Los Angeles 11, California.
Draft Blocks—Miller Dial & Name Plate Company, 781 East Washington Boulevard, Los Angeles, California.
Drapes and Spreads—Menlo Textiles (designed by Henning Watters-John), Menlo Park, California.
Drapery Hardware—Kirsch Company, Sturgis, Michigan.
Finish Hardware—Parlyno, Limited, 707 South Broadway, Los Angeles, California.
Furniture—Van Krell-Green, Inc., 9529 Santa Monica Boulevard, Beverly Hills, California; Herman Miller Furniture Company, Zecol, Michigan; Everett Sebring (tables), 1050 East Green Street, Pasadena 1, California; Hans G. Knoell Associates, 601 Madison Avenue, New York 22, New York; Harris Furniture Manufacturing Company, 401 East Fifty-fourth Street, Los Angeles 11, California.
Gas Range—Western Stove Company, 8386 Hays Street, Culver City, California.
Garage Door Hardware—Tavart Company, Ltd., 124 West Fourth Street, Los Angeles, California.
Glass-Libbey-Owens-Ford Glass Company, Nicholas Building, Cleveland, Ohio.
Glass Oven Utensils—McKee Glass Company, Bullitt Avenue, Jeannette, Pennsylvania.
Heating Plant—Hammel Radiator & Engineering Company, 3340 Motor Avenue, Los Angeles 34, California.
Interiors—Frank Brothers, 2400 American Avenue, Long Beach 6, California.
Ironrite—Irwin's Incorporated, 121 South Alameda Street, Los Angeles, California.
Kitchen Appliances—Sunbeam Corporation, 5500 West Roosevelt Road, Chicago 50, Illinois.
Lamps and Ceramics—Modern Design, 7513 Melrose Avenue, Los Angeles, California.
Landscaping—Evans & Reeves, South Barrington Avenue at Sunset Boulevard, Los Angeles, California.
Lighting Fixtures—General Lighting Company, 8336 West Third Street, Los Angeles, California.
Louvres—Leslie Welding Company, 2943 West Carroll Avenue, Chicago 12, Illinois.
Mattracx—Box Springs, Comforters and Pillows—Burtong-Dixie Corporation, 2024 South Racine Avenue, Chicago, Illinois.
Paint—Frederick O'Brien Company, 2710 East Slavon Avenue, Huntington Park, California.
Pathfinder Lights—Common Electric Development Company, 3209 Humboldt Street, Los Angeles, California.
Refrigerator and Freezer—Colderator Company, Duluth, Minnesota.
Rooftop Material—Pioneer-Flintkote Company, 5500 South Alameda Street, Los Angeles, California.
Rugs—Kleenflax Linnen Looms, Inc., Duluth, Minnesota.
Table Flatsware—Diralte Company of America, Inc., 1142 South Main Street, Kokomo, Indiana.
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(continued from page 41)

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(274) Douglas Fir Plywood Association: Data-packed architectural catalog Douglas Fir plywood; selection chart for grades, table of types, suggestions for uses, installations; every fact needed to properly use plywood panels for construction, exteriors, interiors; best source of information.

(275) Douglas Fir Plywood Association: Excellent 16-page brochure paneling suggestions for Douglas Fir Plywood; how to panel for interiors of industrial, commercial residential structures; practical ideas well illustrated, explained; merits study.

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+ (218-A) Gladding, McBean & Company: Detailed brochure (8 pages) Hermosa Tru-Joint wall, floor, drainboard tiles; wide range colors, shapes; full suggested tile specifications, tables; suggested uses kitchens, baths, etc.

+ (129) James Kenkle Mills: Information collection contemporary wallpapers; designs, by 15 leading contemporary artists; custom designs available; definitely worth investigation.

+ (42) Kawneer Company: Announcement Zourite, aluminum panel with tongue and groove joints; decorative, practical exterior, interior material; full technical, application data.

+ (140) Laverne Organic: Contemporary wallpapers; bold primaries, seqiues, pastels, muted tones; matte or baked plastic finish.

+ (425) Tile-O-Chrome Corporation: Information two new types all-metal wall tiles, chromium plated zinc and colored aluminum; chromium in stripped, bright, checked, satin finishes; aluminum in ebony, gold, maroon, royal blue, sage green; precision made, easy to install.

+ (54) United States Plywood Corporation: Folder on Decorative Micarta, laminated plastic surface material; will not dent, chip, crack, break, splinter, warp, stain; easy to clean, never fades or need refinishing.

+ (49) United States Plywood Corporation: Good 16-page handbook uses Welswood, plywood, allied products for exterior, interior.

+ (382) United Wallpaper, Inc.: Information Varlar stainproof wall covering, in price range good wallpapers; resists grease, oil, fingerprints, lipstick, crayon, vermin; restored soap and water; 90 patterns, designs by Dorothy Liebes.

+ (476) Val-Porter Company: Brochure Acoustipulp plastic sound absorption acoustic plaster; applied same as any plaster, comes in most any color; fire resistant, vermin proof, sanitary; about same cost and weight as ordinary plaster; used in CSHouse Number 20.

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(30) Ceco Steel Products Corporation: Data-loaded Pacific Coast catalog covering residence casements, package windows, projected windows and scores of correlated products, commercial and industrial as well as residential.
(242) Ellison Bronze Company, Inc.: New 12-page booklet Ellison balanced doors; well illustrated, detail drawings, specifications, list of installations; complete technical data.
• (416) J. Royden Estey & Sons: Folder Alumix putsyless glazing skylight, single or double pitch; extruded aluminum roof glazing; makes long spans possible; full technical, installation data; illustrated.
(354) Fire Door Institute: Catalog new Tru-Fit Douglas Fir Doors; all types, including flush; factory fitted, self stripped, precision made; full specification, technical data.
• (141) Ingersoll Steel Division, Borg-Warner Corporation: Factual booklets KoolShade Sun Screen, "window insulation"; screen is series of miniature slats slanted to repel 90% sun heat; no painting; wind resistant, good visibility, ample light.
(32) Knieper Company: Brochure on structural details of full vision, free standing, narrow line and standard line entrance doors, frames, trim.
• (424) Kirsh Company: New 32-page booklet "Smart Window Styling" illustrating 85 different window treatments; features Kirsh drapery hardware, venetian blinds.

SASH, DOORS AND WINDOWS
(452) Master Metal Strip Service: Folder Master No-Draft sash balance, combination sash balance and weatherstrip; uses spring instead of cords; gives finger-tip control, eliminates weights and pulleys; prevents binding and sticking; worth investigation.
(379) Metaluc, Inc.: Data, information one of best lines aluminum sash, sliding doors; thin lines, light, very good design; western manufacturer, immediately available; this is good tip.
(391) Pittsburgh Plate Glass Company: Booklet new metal door-frame assembly for use with Herculite glass doors; shows 12 available styles suitable practically any type business, commercial building; variable dimension tables, typical section views.
(144) Pittsburgh Plate-Glass Company: Information folder Twinwalls, insulated glass; hermetically sealed air space between dual panes; reduces heating cost, permits larger windows.
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(24) Ceco Steel Products Corporation—Technical brochure, 24 pages, on Ceco open web steel joists, giving construction details, standard specifications, steel joint loading tables. Also explains the use of Ceco open web joists used as purlins with necessary technical tables.


* (41) Celotex Corporation—Review of all Celotex home building materials with full application data. Products include sheathing, insulation lath, interior finishes, siding, anchor lath, plaster, wallboards, rock wool, roofing, hard boards and Cemento.

(479) Permanente Cement Company: Booklet on "Cement Types and Uses" based on Permanente High Early Strength Portland Cement; conforms to ASTM specifications C-150 Type III and Federal specifications SS-C-192 Type III; especially good for rush jobs; well worth study; good data source.

(163) West Coast Stained Shingle Company: Full color folder Olympic pre-stained sidewalls; roofs; red cedar shingles, vertical grain; color, specification charts; also data shingle stains.

**MOBILES**

continued from page 28

Interesting too, is the sound of his motor-driven contrivances. The droning of the slow-speed motor underscores the advancing and crossing planes, and the mechanical click punctuates effectively, the end of the rhythmic statement. Yet these works are more limited by reason of repetition than the type of mobile discussed above. Duchamp's motor-driven object (Pl. 8), while also using a repeating motif, avoids such monotony. A concentric spiral moving back in deep space and returning forward so that it appears to spiral three dimensionally out of the object toward the observer, is so persuasive a motif that it is almost hypnotic. The necessity of the observer to participate actively in the optical play circumvents any possibility of exact repetition and keeps him under the spell of the motion.

The young sculptor, David Hare, had previously made a series of "chemical paintings" by treating and diffusing exposed photographic color negatives with chemicals before printing. His works today are neither the objects nor constructions of the many artists already referred to but are in the category of sculpture.

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wardly influenced by Max Ernst and Alberto Giacometti, the spirit, as already noted, derives from Duchamp—admirable source material that he has merged with his own personality. Though they seem quite abstract, these sculptures are suggested by humans, (Pls. 11 and 12), animals, or still life which are stamped as strange and new by deletion, distortion, and re-emphasis. The process, a hollowing out and whittling down, results in a counterpoint between corporeal reminiscence and surreal experience. Vanity, tenderness, or submissiveness in woman, arrogance and aggressiveness in the male, the battle of the sexes, these seem to be his themes. Almost all of his sculpture embodies movement, and this is usually specifically related to the emotional overtones, in an opposition of tenderness and fierceness. Motion of small parts of the sculpture or of whole figures, or even countermovement of both, express these qualities, but within a restricted orbit that suggests the tensions of psychic forces, never with the free, outwardly natural play of a Calder. Some of the large, almost life-sized figures made of magnesite or other synthetic stone, vibrate from the base, seeming almost too brittle to sustain the staccato motion and imparting a feeling of hazard more dangerously imminent than that in Duchamp's use of glass.

Votive objects in a poetic sense, the objects of Joseph Cornell attest to an esoteric communion between the artist and the material he uses. The materials of a Cornell object: old engravings, vials of colored powders or liquids, mirrors, broken wine glasses, bits of crushed tinfoil, an assortment of odds and ends with tawdry glitter and faded allure, become illuminated by an innermost secret life. Through them, he projects the nostalgia of reminiscence, the spiritual sadness of remote desire. In such an atmosphere, that pervades all of his objects, the elusive and invocational memories of childhood must inevitably play a part. It is not surprising to find that the mechanisms which animate these ceremonial works are frequently carried over from children's toys and games. Boxes, which are treasure chests and private worlds for children, are legion. Cornell has made a compartmentalized box covered with glass through which one gazes at tiny relics that occupy and

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move about in separate cells. A box lined with black velvet and fitted with a mirror-like a magician’s case contains crystal squares which may be lifted out and set at angles. From here the mirror reflects them in a burst of changing light facets. Many will recognize the game in part responsible for another box, across whose floor colored sands shift in chance patterns as the manipulator tries his skill in getting a metal ball into the center of a moving spiral clock spring. A noise-maker box that mooes like a cow when turned upside-down provides a novel use of movement; this time the movement itself plays no part, its sole object being to produce sound. Still another box has a mask with separate apertures through which one may view many wonders as bright colored balls speed down a causeway and set in motion and sound the realistic or abstract inhabitants of the apertures. This box means exhausts Cornell’s inventiveness in creating movement in works of art.

Though perpetual motion is continuously fascinating to man, there are people who, for whatever obvious psychological reasons, repudiate the idea of movement altogether. Such people have an irrepressible desire to stop a moving object, and now and then will confess to the impulse to stop a mobile as on a repellent insect. There are artists, too, who express this idea of repudiation, and in this connection one cannot help first remembering Man Ray’s *Object of Destruction* (Pl. 14), a metronome which he has immobilized, or his much earlier *Ceinture* (1917) in which he used two old-fashioned push buttons inverted like turtles on their backs. In this latter, a painting with applied objects, sound is suggested by staff lines and clef, but the bells are silenced by disassembling. The young artist, Richard Lippold, theoretically rejects movement even though its presence hovers over his work. His wire and rod constructions, sensitive and cleverly contrived, have considerable flexibility and by their very nature invite participation. Movement, however, does not figure as part of the experience this artist intends to convey. Yet his conceptions are in the tradition of the mobile; movement is imminent in the taut and tempered wires. However, the artists expressing rejection of movement are few. Robert Howard (brother of the painter, Charles Howard), of San Francisco, creates movement that is brusque and unexpected yet very witty, in a series of mobiles made of wood forms, rods and wire.

Herman Cherry’s mobiles are frequently pictographs incorporating motion. His first influences were from Calder; his late work has considerable variety based on realism and sometimes on realistic movement. *Explosion*, 1946 (Pl. 13) is more abstract in effect than most of his work, and employs less mobility. An empty egg, before and after spiralling off into space and being shattered to bits, suggests action which amusingly and intelligently makes the feeling of movement more acute. No Starters, 1937 (Pl. 12), creates movement that is brusque and unexpected yet very witty, in a series of mobiles made of wood forms, rods and wire.

Illustrations for plates 1, 2, 4, 6, 9, 10, and 14, courtesy of the Museum of Modern Art; for plates 3, 5, and 8, courtesy of View magazine; for plate 13, courtesy of Weyhe Gallery. Plates 9 and 10, Hanging Mobile, collection of Mrs. Mary Callery, photographs by Herbert Matter.
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