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The Modern Institute of Art in Beverly Hills closed on March 31 not to be reopened as scheduled in May unless more public support can be immediately forthcoming. This has been one of the best organized efforts of its kind ever attempted in the Southern California area. An active movement is on foot to help establish the Modern Institute of Art on sound financial footing by memberships and contributions, and it is not too late to make it possible to help continue its very successful activities in the field of contemporary thinking.

For fourteen months the Modern Institute of Art has conducted a series of exciting exhibitions, concerts, lectures and film programs, that have proved to have the widest appeal to the general public and to have been a focal point for the best kind of art activity. The contribution of this organization has been very real and has received an enormous response from professionals and laymen and students. It is not in any sense a mere stylish amusement or "little civic ornament" to be discarded without serious thought.

All memberships and gift contributions should be addressed to the Modern Institute of Art, 344 North Rodeo Drive, Beverly Hills, California. Student membership $2.00; others from $10.00. All donations will be returned if this campaign is unsuccessful, but a concerted effort on the part of all those really interested can make possible the continuation of this very necessary enterprise.

SAN FRANCISCO

PAINTING TODAY was the subject for a round table discussion held recently at the California School of Fine Arts under the joint sponsorship of the Artists' Council and the Women's Auxiliary of the San Francisco Art Association. The attendance being limited to members of the San Francisco Art Association did not prevent an intermingling of artists and laymen, for the organization is composed of both artist and lay members. Artists and scholars made up the panel, the moderator being Dr. Lynn White, president of Mills College. The speakers were Ernest Mundt, instructor of Esthetics and Cultural History at the California School of Fine Arts, Dorr Bothwell, San Francisco Artist, Jean Varda, instructor in Figure Composition at the California School of Fine Arts and Walter Horn, professor of Art History at the University of California.

The stated object of the round table discussion:... to clarify the nature of today's painting. To interpret some of the major categories of Modern Art such as surrealism, expressionism, objectivism and non-objectivism, was not completely realized. However, something of the life-spark in contemporary painting was projected. Reference was to have been made to several paintings borrowed from the California Palace of the Legion of Honor and from the San Francisco Museum of Art. And, though there were fine examples of six contemporary painters (Tanguy, Masson, Leger, Klee, Stumfig, Helion), only two entered directly into the discussion. Klee's work provoked the most thought, while Leger's painting was considered to some degree toward the end of the evening.

Douglas MacAgy, Director of the California School of Fine Arts, speaking in retrospect, was enthusiastic about the panel discussion. He felt that this "proved itself effective in communicating ideas of a group of people on matters of Modern Art to the interested public of this community." He added that..."the San Francisco Art Association has a unique function in San Francisco of bringing artist and layman together in common cause."

It occurred to me, as I sat in the audience, that a play was being enacted. In spite of the fact that the studied art of the theater was replaced by unrehearsed words, these actors knew their lines well. And their previous work-performance in the visual arts gave conviction to their delivery. Though the participants might have disagreed rather sharply on some of the issues at another time,
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their answers to the questions put to them by the moderator indicated more harmony than contrast. Moderator—Dr. Lynn White; Panel—left to right: Dr. Walter Horn, Darr Bothwell, Jean Yarda, Ernest Mundt.

PAINTINGS DISCUSSED: "Nearly Hit" by Paul Klee; "Still Life" by Fernand Leger.

Moderator: There is a quality of conflict in Modern Art. And the objectives and methods of those practicing it do not agree. The more developed the practitioners, the less they agree on the question: What is art? How then is the layman to understand? How different it was in the Middle Ages! The high development of craftsmanship allowed for no concept of "genius" to separate and individualize. There was a unified approach to art among the artists and laity.

(Turning and pointing to the painting "Nearly Hit" by Klee) for example, what does this painting mean?

Mundt: We may compare the apprehending of this picture, or any work of art for that matter, to the apprehending of humor. Humor is like painting that it must be sensed; its essence cannot be explained and analyzed. One should ask, what does the painting do to me? "Nearly Hit" is a visual statement of a narrow escape, of being nearly hit. To apprehend painting, a way of seeing must be developed so that the senses are opened to visual experience.

Horn: It is a painting of being nearly hit, a representation of a psychological state, not a representation of a man. The displaced, off-parallel lines denote a startled perplexity, even amusement.

Bothwell: The content in this picture is an experience. It is a back-track in one's mind, to recall the emotion and feelings pertaining to a particular experience is Klee's idea. He examines and projects an ephemeral state of mind by visual means. A rapid state of mind is held within a pictorial image. He isolates one tiny, emotional moment; he doesn't allow this sharp moment to fade out.

Moderator: What is the function of a picture in our society, in our time?

Varda: Painting is a philosophical instrument of life. Art is food for the soul, as basic and fundamental in its relationship to the human being as the relations between man and woman, man and space, man and sound . . . A painting has a cosmic reason for being; its creation is the result of the eclectic moment at the peak of clarity in vision.

Horn: Painting is a response to life in a durable material. It is not necessary to ask what is the final function of a work of art. The form and content of art are in life.

Varda: I repeat, art is food for the soul. If we are not thus fed we are afflicted with psychological asthma or boils. The artist is of primary importance. He is indispensable. The most important thing is to continue and enlarge art production in the community.

Mundt: If art is food for the soul, what if some of the art-food is indigestible?

Bothwell: Assimilation of the food depends upon the universals in the work. All of us are searching for a way of communicating with each other. A feeling of belongingness is primary to mankind.

Mundt: Paul Klee contributes to our sense of well being in "Nearly Hit." He gives a descriptive, positive answer in visual terms to the challenging experience of nearly being run down at an intersection. Klee shows us first, how we feel when we experience a narrow escape, then how we meet the experience. He prescribes...
a medicine for the difficulty. He assists us in maintaining our
equilibrium.
Moderator: How is the layman to understand that this really is
medicine? There are such complex problems to be met in our
everyday living. Are we also to ponder on the obstruse meanings
of modern art?
Mundt: We are all laymen in front of a work of art—you, me, . . .
Varda: Layman is a statistic, and therefore an abstraction. Statis-
tics are more deadening than atomic bombs.
Horn: I disagree, the layman is very real, he is not an abstraction.
He could be a threat to freedom of expression; he is dangerous
because he is desperate. If he does not understand, he is vicious
in his grudges.
Moderator: Work was performed for a particular place in the
Middle Ages. Art was not esoteric then. Part of the difficulty of
Modern Art, I think, is that it is not produced for a specific place,
for a particular function. Content and context is not specified.
The layman is cut off. The artist is isolated from the public now,
whereas in the Middle Ages the artist, being humbler, accom-
modated himself to his patron and to his colleagues. There was
a tacit agreement between the laity and the craftsmen. Art was
all about, and it was understood. It had a civic function and a
religious function.
Bothwell: The layman is disturbed if anything is presented to him
that is new. He mistrusts anything that does not coincide with
his preconceived ideas of what should be said and how it should
be said.
Moderator: There was no conflict between the layman and the
artist in the Middle Ages.
Bothwell: Today's layman is anybody. There has been a demo-

cratizing of opinion since the Middle Ages. Anyone with eyes to
see, feels qualified to criticize.
Horn: The world today is more complex than the world of the
Middle Ages; therefore, the art is more complex. We must accept
the challenge of today's world and express it in its own terms, in
all of its profundity and diversity.
Varda: I have thought of a machine that would bring aesthetic
appreciation to the layman. If a beautiful receptionist would press
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factory in spite of the airplane, radio, etc. They are confusing to human contact. We communicate less with each other today than previously.

Mundt: We should consider today as a dynamic set-up as opposed to the static set-up before. The dynamic rhythm of events is the subject rather than a static statement of facts.

Horn: The lack of understandability of the world is carried over into the layman's approach to art. He trembles in fear of the complex world.

Varda: Diversification is natural at this time. We cannot expect to have homogeneity in expression or interpretation in today's world.

Horn: There is an intensification of separateness now. In the 12th century, there was a unity between subject matter and its handling. And the uniform concept of esthetics called for a uniform response.

Mundt: Two kinds of knowledge are necessary to apprehend the nature of the physical world: scientific and artistic. And there is a separation between these ways of knowing the world—i.e. between reason and feeling. Yet our rationalism frowns upon direct reaction to art stimuli. The majority of contemporary observers must first "recognize," afterwards react. They do not want to look the fool, or to get hurt. They prefer to sit on the fence. Whereas, art is not a scientific pursuit; recognition is not primary. The observer who insists upon such an attitude is out of luck if he would experience art.

Horn: Indeed, we must feel a work of art to respond to it. But the main difficulty is the same as with the totality of the world. No one man can integrate and digest the accumulated knowledge that we have at hand. Today's knowledge is compartmented. The layman should not blame the artist if the work is not intelligible at times.

Varda: A work of art is the result of a condensation of experience through ecstasy.

Mundt: Yes, that is true. We may learn more and more about less and less. We must express felt reality.

Horn: Do not forget that we live in a rational age!

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Bothwell: The future tree is today’s seedling. Though the inner character of creation and our human module of contemplation endures, each age has its own direction. The artist reflects his environment.

Modulator: The layman must participate, and he is frightened by the contemporary manifestation of art. In order to make the necessary emotional adjustment for the assimilation of painting, he must have many questions answered as well as subject himself to much looking at works of art.

Music

PETER YATES

Music for prepared piano, a technique invented and brought to a remarkable degree of creative expression by John Cage, lies between the outright noisemaking of such tentative composers as the Italian, Marinetti, and the tonal dissonance that emerges from the German tradition in the work of Schoenberg. Like a percussion orchestra the prepared piano combines in one entity tone and controlled sound. The controlled sound is produced by damping the piano strings at specific points with metal, rubber, or fibre: a procedure no less practical, scientific, or reasonable, though it seems so, when one describes the metal resonators as ordinary bolts, some complete with washer and nut, the rubber as semicircular halves of fruit, jar rings, and the fibre as scraps of composition board. The remaining notes of the piano are used without preparation; but since the prepared notes interpenetrate all octaves, normal scales are avoided.

The sound of this fortuitously developed, experimental, transitional instrument has been arrived at by ear, by sensitive adjustment and experiment, and that sort of genius which reaches a new point in creative experience through a sort of exclusive innocence, a virginal unwillingness to accept traditional esthetic domesticity, a stub-

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The music that John Cage has written for his prepared piano is an exploration of this central creative idea or, in the case of works for more than one keyboard, an enlargement upon it. The Sixteen Sonatas and Four Interludes, which are his principal composition in this medium, are intended to be heard as a single unbroken experience, interrupted by a pause after each group of four sonatas and one interlude. Like many another American creator Cage reaches out towards the Orient, while to some extent putting aside the accepted Western musical inheritance. Like several other composers of his generation he was first directed to the principles and philosophy of Oriental music through the teaching, compositions, and personal propaganda of Henry Cowell, that untiring benefactor and liberator of our still derivative musical thought. In the Oriental manner Cage conceives of one arrangement of tones and prepared sounds as the medium of one composition. Modulation, the chief structural means of modern Western composition before Schoenberg, is accordingly excluded, both by the nature of the new medium and by its method. As Schoenberg in his later music begins with the equal twelve tones of the octave, undistinguished by key tonality, Cage begins with the whole sound ing body of his prepared gamut, still undifferentiated by internal forms.

This gamut of prepared and unprepared tone differs strikingly in heard effect from the normal experience of Western music. Prepared tones several octaves apart on the piano keyboard may be less than a semitone apart in audible fact, while normal semitone intervals may be either enlarged or transformed into quite unlike sounds, one resembling perhaps a woodblock, another possibly a gong. The overtones of the various prepared strings are altered by the quality of the damping material, its length in some instances, its position between the strings, or by some other extraneous factor. A sound produced by insertion between two of the piano strings leaving the third string free may be quite altered by the use of the soft pedal, shifting the hammer to strike only the two damped strings.

To improvise on the prepared piano is an enchanting experience, like playing on one and then another of the instruments of a small orchestra, blowing, drawing, or striking a tone from each; and since the control is a piano keyboard, the player in effect has the pleasure of sounding at will several different instruments at once. For the amateur, whose use of the normal piano is seriously restricted by lack of training in harmony and modulation, playing a prepared piano is like being let loose into a new world of sound. To explore and set in order this new world of sound is the
work of the composer. His notation is that of the conventional piano keyboard, but his reading of it must be modified by ability to hear and correctly anticipate the unexpected qualities of the prepared gamut. Modulation, the directive principle of modern Western structural music, having been eliminated, the composer must necessarily define his forms or measure them by rhythm. Modulation in general operates against a fixed recurrent pulsation, which by accurate division, shifts of emphasis, and occasional stretching or pressing of time produces variable rhythm. With modulation removed, the recurrence of beat as a structural factor becomes unnecessary. Instead, there is the recurrent and subtly varied phrase, an overlaying of rhythmic textures in greater or less prosodic variety. The rhythm is given directive emphasis by displacement and alteration of tones and by a general principle of tonal balance. This position in the breakdown of the classical-romantic system had already been reached by Debussy in that phase of his art most influenced by French prosodic impressionism and by Erik Satie.

The principle of tonal balance is to the effect that more highly pitched sounds tend to unrest and sounds of lower pitch to rest. Instead of a dominant and tonic pair of final chords, Cage may repeat the same group of simultaneous sounds, emphasizing first the higher registers as a dominant and then the lower as a tonic, a very reasonable and satisfactory ending process. Many variations of this principle enliven the sonatas. Other means of structure are found in the balance between movement and non-movement, between sound and silence, between the hurrying of many tones at one level of sound and the slow fall of single sounds upon another level, the two interpenetrating but never mingling as chords. These means, present in all music, assume more prominence by the removal of harmonic modulation.

In improvising on the prepared piano one finds very soon that the sound body lies between two sets of recognizable extremes, one resembling the chiming of the Javanese gamelang orchestra, the other very closely resembling the extra-harmonic melodies and tone-combinations of Schoenberg's Six Little Piano Pieces. It is a striking feature of Cage's ability to deal with his medium that he has avoided the obvious mannerisms of each extreme. Only in one sonata is there a definite, extended, imitative reference, to the fifth of the Little Piano Pieces. This provides an interesting comparison between what Schoenberg accomplishes with tone and Cage with prepared sound. The results are not dissimilar, but the Cage version is by far the longer, less defined and more embellished. References to the gamelang orchestra depend as much on the manner of playing as on the arrangement of the successive sounds.

A pupil of Schoenberg and a follower of Cowell and Varese, whose musical experiments include a variety of non-derivative combinations, John Cage has now gone far beyond his masters and is himself the leader in the field of extra-tonal sound. Both in his earlier experiments with percussion orchestras and in his present field of musical individualism he has shown an unusually practical ability to bring his oddest compositions to performance before interested audiences, to obtain favorable reviews and widely disseminated publicity. His air of a gentle prophet, innocent of worldly ways, covers a rugged determination to drive through to a fulfilling conclusion whatever interests him. Whether the prepared piano is a temporary and transitional means is to him of no immediate importance; he makes the most of what he has. In the back of his mind is a plan to work out some sort of electronic keyboard instrument, capable of extremely variable registral effects for each note. This rather than the prepared piano is the ultimate instrument of his ambitions. There is some reason to hope that the means to develop it may be provided.

In his own medium he reflects qualities resembling those of Debussy, Schoenberg, and of that interest in sound-coloring as an art in itself that comes down from Berlioz and Liszt. He joins company with two other masters who avoided the traditional Western structure, two prosodists who composed in rhythms of overlying or successive non-thematic phrases, Erik Satie and Anton von Webern. Like theirs his music reaches to the future, to the unknown second half of the Twentieth Century in which Schoenberg, Bartok, and Stravinsky will be no longer strange and revolutionary but known, fixed, and classic.
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As a world of people we seem to be living from hand to mouth within an enigma surrounded by anachronisms placed neatly beyond our own self-constructed eight balls. While from time to time we seem to solve the problems of the moment, we are left, as now, vaguely uneasy as to the realities of the final results. Perhaps we make the mistake in seeking our solutions in terms of things and not in terms of people.

Of course, no one is foolish enough to disregard the necessity of material balances. However, neither can any one exist without a deep awareness of human scale values which possess a power beyond the control of our most precise science. This is not to say that we must deal in mystiques but only that we must recognize the inherent nature in man that tends to defy laboratory techniques and that forces decisions on the basis of matters beyond the reach of merely logical mechanical devices or political systems.

Oddly enough we have always been aware of this. The whole history of thinking man has in one way or another generalized about it. Until now, however, we have never been forced to cope with it aside what we mean and what we want, the hard facts of every day existence. Perhaps, we have had too much to do in the physical world, too many bits and pieces to put together in order in some way to control the rigors of our environment.

Certainly, it is the better part of human wisdom to really recognize and do something about man not only as a material and political animal but also man as a social animal. It is a natural tendency to seek a panacea within the framework of political systems, but political systems in themselves can never become more than instruments through which the needs of mankind achieve reality. It is in the largest social sense that man must consider his adjustment to an environment that can only partially be of his own creation. Perhaps a small part of the answer can be found in a recognition of his own limitations that can only be changed or rearranged or modified in ways not yet known or by means not yet perfected.

Perhaps we have felt too secure in our control of the most obvious environmental limitations without realizing that in these factors we have only prepared the way for the larger problems that exist deep within ourselves. We have for too many years nodded agreeably at the phrase "the proper study of mankind is man" while steadfastly refusing to do very much about it. Such a study or even the willingness to undertake it must presuppose an objective attitude toward all the major and minor hypocrisies that, often out of necessity, have been built up in order to create our culture system. There is little comfort in the fact that the reasons were apparently sound at the time, but the real point is that we are well beyond that time and there is not enough comfort and security in what we have done. It is a weary thought that the future comfort and security of mankind must depend almost totally upon what we have yet to do.

Certainly we cannot find our way in this new strange modern world with the out-dated road maps chartered by instincts that have been conditioned through unnumbered years of protective colorations. Perhaps real safety remains in those certain generalities that do nothing more than point a direction. We can no longer live by systems of thought that are not conditioned by the nature of our time any more than we can be efficiently transported by systems of conveyance that no longer have any reality in a world of unlimited power.

As social animals it is difficult, but necessary, that we realize the difficulties of dealing with the complex fabrications of our physical environment. We are at last forced to admit the limitation of our ability to run beyond exhaustion and to fly beyond breathing. In some way we must recognize ourselves as a part of an inter-nationality possessing a common denominator in all human beings, even though we find ourselves in the uncomfortable position of denying the validity of some of our cherished concepts.

For ourselves we have chosen democracy as the objective through which the world can achieve its best balance. We are preoccupied in securing what we consider the first principles of freedom as against others, in bitter opposition, equally convinced that they too are securing the same first principles of freedom. Somewhere within the maze of this controversy surely there is a truth upon which we can all agree in terms of what constitutes a kind of liberty that has nothing to do with either the means by which it is to be administered or the methods by which it is to be achieved. If we can decide what we mean and what we want, then it would seem that the world has pretty well demonstrated its ability to work out procedures.

Having done so much it would seem that man should be able to do this little more without recourse to catastrophe or bloodshed. At the moment, however, it seems that we are all wandering in a morass and not seeing the light of reason for the trees of politics that surround us.
I like to work in any medium where I am free to do as I choose. Of course, I wish I had invented this medium of Mural-Scrolls myself, but as I didn't—the Orientals having been doing this for many centuries before me, I have no reason to regret about enouraging somebody's wall. I would neither wear it, as Metta, nor collaborate it, as Miro, but just put on the back of it, and stick it up where it can best give pleasure, or diminish gloom. —CALDER

Mural-Scrolls offers the possibility of reproducing, without hindrance, the great qualities of mural art, bringing to all, the work of those artists worthy of this project. —HENRI MATISSE

I am happy to collaborate with Mural-Scrolls which presents a possibility of going beyond the pure speculation of easel painting, and of working in the diuuersities of color, etc., so as to work more freely and expressively, addressing oneself in a more direct way to men in the collaboration, so humble and so full of grandeur, of the painter, the artisan and the technician, and in that state of splendid anonymity which marked the great epochs of antiquity.—MIRO

One should wear a Mural-Scroll like a woman wears a dress. It is to hang oneself, in full color, upon the wall, as a sunny day. Remember yourself, forget yourself, thus every wall hides a love. —MATTA

Katzenbach and Warren, Inc., presents this series of silk-screen murals known as Mural-Scrolls from original designs by recognized non-commercial artists. The first four, by Calder, Matisse, Matta and Miro, are presented here. Others will be announced later. The first Mural-Scrolls are printed in the exact color by silk-screen process. In full-scale they will be on canvas and published in limited editions of two hundred copies, available by advance subscription. Each will be from six feet to ten feet in length and from four feet to six feet in height. They are intended either for application to the wall like a scenic wallpaper or for hanging in scroll form like a Chinese ancestor painting.

The influence of living artists on interior decoration has been immense, but very often it has been formed by other hands through commercial filters which have taken the good out of it—and the taste. The clean Dutch flavor of Mondrian's art becomes gritty in linoleum designs borrowed from his research. The biomorphic shapes of Arp are copied everywhere for display counters and coffee tables, but only casually and with insufferable loss of pride. The idea is to reduce to a minimum any intervention between the artist's discoveries and their execution in reproducible media. A decorated wall, whether painted or printed, asks a different kind of concentration than an easel picture. It is less dependent on minute subtleties of tone and stroke; its virtues are more often strength and boldness than precision or delicacy of matter.

Of course, any art project, however, ingenious, can only be as good as the artists involved. These four men have repeatedly proved their talent for large-scale decoration, and are certain to know silk-screen's limitations and advantages. This is not to deny the usual supremacy of the original work of art, but only to suggest that we should encourage honest attempts to extend the range and availability of media in which the artist can create by his own plan and choice.—James Thrall Soby

FOLLOWING PAGE:
Above: Sun-Dice by Matta Echaurren. The full-scale reproduction measures 4 feet in height by 6 feet in length. Below: Arbre En Fleur by Henri Matisse. The full-scale reproduction measures 5 feet in height by 6 feet, 3 inches in length.
The small house with its many amenities both aesthetic and practical is too often, in actuality, a juxtaposition of toys and stumbling people, children and spots on living room rug, impatience at the bathroom door, a mother trying to be in four places at one time and a father in search of his temper. Certainly these precepts must be part of the philosophic basis upon which interior living space is organized. Unfortunately present-day planning of the small house reflects too little understanding of home life in terms of the family situations in all their prosaic details. We have planned homes around abstract, though seemingly practical, concepts of "outdoor living," "space relationships," etc.

Probably the most important of all solutions is a resolution of those differences and conflicts that normally exist between adults and children. Modern architectural logic has been absorbed with the liberation of space. Technical improvements have enabled the modern architect to prove that more aesthetic homes can become a reality if one has the necessary money and also an appreciation for the finer (but more expensive) things of life. For the average person the hiring of a modern architect and the building of a modern home is too often a snare and a delusion of the slick magazine. For them the architect becomes a swami of space well beyond their practical reach. The post war period has seen a succession of models of mass produced small houses which were to have opened new horizons in the housing of families in the average income groups. From the Buckminster Fuller circular house on, each has great merit in technical innovations and presumable low cost. For numerous reasons they are falling by the wayside, and the average small house remains the responsibility of the average architect. As planners of small houses we have frequently been absorbed with the problem of the back-to-back bath and kitchen. This would save a two inch stack and presumably bring the small plan within reach of the person who otherwise could not afford one. In factory produced units this would be an item, but with field methods, costs are still based on the number of fixtures, and many an architect has personally spent many times over in study of plan any moneys he might have saved the client through using this device. Its very use complicates the many insolubles in planning. As long as small homes are not stamped out in giant factory fashion, with single or double deck bunks having storage drawers underneath. The sleeping use is approximately ten hours and major use is other than sleeping. It should therefore be so planned. A continuous counter with desk section and cabinets for personal linens and toys will add to the efficient use of the children's area. This space can be planned so that it will contribute to the self-sufficiency of the young and growing child. It can become their responsibility to maintain it and thus help in the general cooperative effort of living in a home.

A bath and a half should be minimum equipment for any well-planned small house, but additional plumbing is still prohibitive in cost. A practical solution, providing needed flexibility and multiple use, results from the addition of a small amount of space and some doors. The placing of the parent's bedroom off the living room is important to all, as it takes children away from parent domination and protects parents from over-demanding children. Some may consider that this bedroom is too far away from the children's room. In general, sound travels very easily at night. When the child is still in a crib it can be wheeled into living room for the night (sleeping in same room with parents is not approved by child psychologists). For those requiring them there are intercommunication systems to maintain contact with the children. The parents' bedroom could of course be set up as a study or a part of the living room, depending on taste. The living room, instead of being a catch-all for toys, food and furniture, can be set up for family relaxation. Because of the convenience and use of the other areas this room will have an atmosphere distinct from the bustle of the rest of the house. Family musical participation, fireplace, stories, occasional dining and similar social activities will be a complement to the general activity of the family living.

The garage, storage, or workroom and service connections are always subject to site conditions. The play yard with its equipment near the main living view, and the adjacent living room terrace, a cooperative vegetable and flower garden, etc., could be the subject of another article. The arrangement indicated allows for 1050 sq. ft. of living area. It explains a viewpoint which could be expanded and varied in scope depending on personal requirements and economic limitations. We do not presume to have solved parent-child relationships. We do attempt to indicate a direction toward the offsetting of certain problems of frustration, security and friction which have not ordinarily been considered in terms of space organization.

Finally, those problems of financing which pertain to lending institution or governmental approval units and agencies, and which tend toward limiting in this type of plan to those with higher cash reserves, might be more readily solved when this direction is recognized.
A STUDENT PROJECT

Housing for a faculty or student couple was the project chosen by several students for study and possible construction. The group set 1000 dollars as ceiling for the material cost of the unit to be equipped with studying, sleeping, bathing, and light cooking facilities for two. The site slopes south and east and is bound on the north by a road and on the south by a rock stream. Cost estimates and drawings were presented to the Board of Fellows. With their approval and 1000 dollars from a friend of the college, work began in November, 1947. Aluminum, stone, wood, and glass enclose the area of 400 square-feet. Still a low-cost project, it was completed last summer and occupied by two of its builders, satisfying the original requirements.
In a practical sense function in jewelry has little application or the safety pin would have taken care of everything long ago. Actually, the true function of jewelry is to appeal through the age-old business of attracting attention and admiration. This purpose of jewelry rarely changes but the form it takes shifts according to the taste of the designer and the trends of the day. Simplicity that creates a pleasure when a thing is seen in clear orderly design is neither cold nor impersonal. Then we have ornament which is a thing in itself adding quality to a costume instead of a confusion of vague gobs of glit and glitter. This simplicity comes through logical consideration of materials, and it is most important that the designer be conscious of the "good" and "bad" qualities of the material, for in them is to be found the richest possibilities of design. Understanding how much the material itself can do is a first necessity, and understanding how much the designer has a right to do to the material without destroying its quality is the second. Pleasing shapes combining metal and leather or wood or stone or enamel can be exciting in themselves, but if engraved and tooled and carved and distorted, the excitement is too often lost in the confusion of an overdose of techniques. Tortured materials usually result in the designs of the same nature, but good design always remains as fine as the day it was created.

Of course, this all comes down to the basis for one's own personal satisfaction and frankly this jewelry is designed as it is because I am fond of it that way and hope the people who wear it and see it will be fond of it also which is, I think, as good a reason as any and better than most.—Betty Cooke
This studio, designed for a photographer, was planned for a typically narrow commercial city lot. A two story structure, it is set back from the street through the use of a landscaped fore-court facing the street itself, with a glass wall used for display purposes. A handsome reception office is actually an extension of the open court entered by way of a covered and sheltered walk-away from the street. The enclosed space is simply and richly treated through a direct use of building materials. Exterior walls are exposed concrete; interior is plaster. Wide window areas are framed in aluminum steel sash. Insulation is acoustical ceiling tile, and partitions are metal lath and plaster. Illustrations show the reception room from the forecourt and the street from within the reception room itself.
This house was planned in the years immediately following the war and subject to all the limitations and scarcities prevalent at the time. These were the considerations that forced an extremely minimum house of the simplest construction.

The plan arrived at contains approximately 900 square-feet yet fulfills all the living requirements of the client. Inasmuch as the view is a primary consideration the house has been literally built around it. Situated in an old wash on a mountain slope, there are unobstructed vistas of Pasadena on the south and forested mountains to the west.

The living room, facing due south, has the advantage of a wide free view and during the winter gains solar heat. Living and dining areas are combined but visually separated by a free-standing screen providing space for books, records and magazines. The fireplace, with its raised hearth, provides added sitting space and informal table service.

Main traffic is restricted to one end of the room permitting a free arrangement of uninterrupted space.

The kitchen, although small, is an economical arrangement of space with more than adequate storage. A central hall connects the living room with the bedroom, bath, laundry and child's room. Large windows in the bedroom take full advantage of the view of the nearby mountains.

The child's room opens to the southern view and becomes a removed, quiet space for play and rest. Next to it is a small studio and a covered shop area.

The final result was a small well-planned completely adequate house coming well within the original budget and planned without the too-often sterile limits of the necessarily restricted small house.
This house is in direct participation with its site, with the living area following the grade down five steps from sleeping area. This interrelationship makes for the extension of space feeling and intimate association with its environment. With the panoramic view of wooded ground and harbour inlets to the north east, it was possible to face the main glass areas in this direction in order to take advantage of the sun for light and warmth. Roof overhangs control penetration of sun's rays. The early morning sun streams into bedrooms; noon sun in winter gets well across all rooms; while the hot noon summer sun does not get in anywhere; the uncomfortable parallel rays of the west sun are prevented from entering entirely by the solid masonry wall.

Exterior materials used are common brick; wood trim painted pale cream, natural stone fireplace and wall; roof is built up with roofing felt and asphalt with crushed crystalline limestone bonded into asphalt. Being white it reflects the sun's rays, and each piece throwing a shadow will keep the roof at least 15% cooler than other types of roofing.

Interior finishes will have large areas of natural wood; over-all built-in storage units, with natural wood. (continued on page 60)
These houses in the Central Zone of Chile, 34° south of the Equator, are for a temperate climate very similar to Central California. They have been designed for the laborers on the experimental farm of the Chilean National Agricultural Society, an institution whose objective is to maintain investigations in all the fields of agriculture and in raising the standards of living among its workers. These homes are located within the farm in streets near the main buildings, which house a market and the administration offices where the workmen are assigned their jobs.

Taking into account the size of the average Chilean agricultural workman's family (larger than the families in the United States), it was decided that building units of 2, 3, 4 bedrooms each were the most satisfactory.

The plan opens on three sides around a patio where the majority of household chores are carried out. The common wall dividing the two units of similar floor plan provides ample privacy, as each unit faces the opposite way, the plumbing facilities being within this one wall of each two of units. A covered porch facing the patio is accessible to all main rooms. A covered passage leads to a garden where each family may grow its own vegetables.

LABORERS HOUSE DEVELOPMENT IN CHILE—HORACIO ACEVEDO, archi tect
Problem: The design of a three-bedroom residence, with servants' quarters, on a lot sloping steeply from northeast to southwest. The lot led to the development of the house on a three level scheme. The kitchen and service area, breakfast room, dining room, living room, children's rooms, and servants' quarters are arranged on the second (or garden) level. The master bedroom, bath and dressing room comprise the third level.

The client requested, and the site dictated, that the house be completely zoned. As a result, the living and activity areas have been placed to the north, while the dining area and the master bedroom have been oriented to the south insuring maximum view.

The living room has been zoned into two areas, separated by the fireplace. Both areas open directly to the living terrace which is partly under cover and is directly adjacent to the swimming pool and garden area.

The children's bedrooms are directly accessible from the entrance hall and stair. The stair is unusual in that it is held free of the glass wall area directly behind it. The master bedroom gives the feeling of unlimited space due to the use of floor to ceiling glass on two sides, insuring both maximum privacy and exposure.

The primary exterior material is redwood, natural finished. Good texture contrast is found in the living room through the exploitation of glass, textured brick and wood walls. Maximum privacy from adjacent properties has been effectively solved and the development of the three-level scheme led to a play of the three basic planes in a harmonious relationship with the site.
General Contractors: Lamport, Cofer & Salzman

photographs: Robert C. Cleveland
Arts & Architecture's case study house for 1949 is truly a study of logical use of materials and integration of spaces. Materials long used in common practice, by the very directness of their application here, take on a new freshness. The results will be provocative to many and, for all we know, might be one of the small steps toward the development of a building idiom for our time.

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1321 East McDowell Rd., Phone: 3-9775, Phoenix, Ariz.
The new building housing the general offices of the General Petroleum Corporation is one of the largest in the Southern California area. The architects have achieved an almost completely fluid floor plan through the use of a 7 foot basic module. This space has thus become almost completely interchangeable through a system of movable partitioning and can be rearranged or readapted as the usefulness of one system is superseded by another.

The structure is 13 stories high subject to a local code limitation and contains 504,000 square-feet, all but three and one-half floors of which will be used as the home offices of the Corporation. The over-all exterior is beige terracotta with vertical "fins" of alumilite-finished aluminum. A light-weight structure of maximum strength was achieved.
through the use of materials such as pumice, vermiculite and rocklite.
The architects basic module provides an air conditioning outlet, control thermostat, lights, window and the necessary plumbing for wash stand cabinets. All hallway doors fit the modular system. Partitions can be removed and rearranged in a matter of hours to change space relationships as needed. More than 12 thousand tons saved through the use of light weight materials, permitted the engineers to design the steel structure as an unusually light framework.

To facilitate the general flexibility an underfloor duct system can be tapped every five feet for telephone, light and inter-communication outlets and portable lavatories in closet units can be installed at every second module.
The aluminum "fins" reach from the third to the 13th floor on three sides of the building and are effective in the control of the air conditioning. The architects' responsibility included not only the building but extended to furnishings, color schemes and fixtures.

The building is in the central business district of Los Angeles and extends a full city block from Sixth Street to Wilshire Boulevard on a site 272x148 feet. A 30 foot steel superstructure on the roof provides a frame for roof signs and conceals the cooling tower. A top-and-bottom waterproofing seals the 90,000 square feet of roof area and provides a five-coat seal from underground water for the basement floor and basement walls.
The water system filters and softens enough water each 24 hours to supply a city of 5,000 people.

Rest rooms are so designed that all equipment, fixtures, and partitions are suspended from the ceiling or walls providing complete and easy access to the tile floors for cleaning. Prefabricated office cabinets contain washstand, mirror, medicine cabinet and cloak rack. The cabinets can be moved from place to place without replastering. Plumbing hooks into pipes concealed in vertical columns adjacent to interior walls.

Seven passenger elevators, each with a twenty person capacity, travel 700 feet per minute. A 400 foot per minute freight elevator can lift 8000 lbs., and has an eight-foot by ten-foot floor area. A 500-lb. capacity "dumb waiter" is used for distribution of mail, messages, teletypes, etc., eliminating inter-floor trips by messengers.

Office lighting is accomplished by 3500 fluorescent fixtures, each with three tubes. About 35 candlepower reaches desk level through diffusing glass which sets flush to the ceiling. Corridors are lighted with 774 square fixtures. Interiors of the building's 1000 plus offices are a soft gray.

photographs: Ari Streib
Warm, finely-grained woods, glass and aluminum set the interior decor. Elevator lobbies are paneled in red birch with a gray "driftwood" stain. Corridors are two shades of green. Clear glass panels and fluted frosted glass are used on each floor. Large photo murals are used on upper floor reception room walls while the main floor lobby, which is done in bleached teak, has two large display windows.

Doors throughout the building are of matched birch veneer numbering over 1500. Their changing natural patterns provide a contrast to the solid colors of the corridors and office interiors. The pre-fabricated office cabinets are of the same finish.

The walls of the 25x85 foot main elevator lobby are in bleached teak with solid panels carrying up 12 feet from the floor. The elevator entrances are blocks of aluminum with ribbed surfaces in order to minimize light reflection. The lobby floor is of green stone with a gray-green tone. Ceilings are of mirror tiles. The wall facing the entrance is a three-quarter relief mural carved from black walnut depicting the basic area of activity in the oil industry. The sculpture units are by Bernard Rosenthal and are continued on page 60.
Illustrations of some specified materials and products on this page may be identified by the reference legend in the text beginning on the following page.
**principal materials specified in the construction of the building**

The last stronghold of structural "dead weight"—office buildings has been attacked by Wurdenman & Beckit, architects; the J. L. Walker Company, general contractor; and Murray Erick Associates, structural engineers, in the construction of the new 13-story General Petroleum building in Los Angeles, the 504,000-plus square feet of floor space of which makes it the largest office building in Southern California.

Desert Materials Corporation supplied controlled, high-grade pumice, a puffed up volcanic glass, which was substituted for sand and gravel to yield a concrete 1,400 pounds lighter for every cubic yard used. This cut 8,300 tons from the skeleton load of the building and added considerable insulating qualities.

SAVES 2,800 TONS

Although concrete was used to form the corners and in the construction of a blank wall, the use on the three other sides of hollow wells consisting of a two-inch layer of light-weight concrete on both sides of a four-inch light-weight steel core saved 2,800 tons of dead weight, and engineers say the system is stronger than an 8-inch wall of solid heavy concrete.

A placement of windows was designed which permits a two-foot, 10-inch space between the line of each floor to the light-weight steel truss, covered with steel mesh and a "gum-tape"-applied layer of light, crushed-blue shell concrete called "rock-lite," could be used instead of a solid concrete block.

**LIGHT JOISTS USED**

Further use of lightweight vermiculite concrete is made in the placement of the steel joists supporting the floors permitted the substitution of lightweight steel joists for heavy beams. The vermiculite, supplied by Gladling, McBean & Company, is a mass containing millions of air cells and weighing only 6 to 8 pounds per cubic foot as compared with 100 pounds for steel, but it provides twice the fire protection of ordinary concrete around the joists.

On individual H-beams installed beneath floor areas where exceptional weight would be necessary, an individual "over-cut" of 1% of vermiculite was applied. For every lineal foot of these beams—and there are 117,300 feet of them in the building—not one steel floor beam was made, with an additional money saving in the addition of concrete-pouring forms by the use of a previously patented joist handling by the Johnson-Western Company.

**VERMICULITE USED**

Vermiculite was also used as fireproofing in the building.

stairs, shafts and around dry stand pipes, and, although it was coated with hard surface plaster wherever it would be exposed to use, it saved weight in plaster by reducing the number of coats used. At certain levels, a steel plate was installed in a saving of 1,000 tons in the building's dead weight.

In the placing of the first concrete, the 2,800 tons saved with hollow walls, and the 100 tons saved with vermiculite lightweight concrete, and the 8,300 tons saved with hollow well studs, the total saving was made, with an additional money saving in the addition of concrete-pouring forms by the use of a previously patented joist handling by the Johnson-Western Company.

**USG TRUSSTEEL STUDS**

Trussteel studs, manufactured by the United States Gypsum Company, (photo 14–left, page 46) were specified for all hollow, non-bearing partitions in the building supplied through the Security Materials Company, Los Angeles building material dealers. Trussteel studs were specified because they permit fabrication of hollow partitions of remarkable stiffness and fire resistance. The finished partitions weigh only 13 to 17 pounds per linear foot, five feet of ray felt saturated with asphalt, and a double surface of gravel.

The same protection was given the building with the use of special structural framing. The Pioneer Roof Company, Los Angeles, covered the 90,000 square feet of roof area with roofing which one engineer described The roofing consists of a two-inch layer of cork insulation, five layers of ray felt saturated with asphalt, and a double surface of gravel.

The protection of the "gunite" process, handled by the Pioneer-Flintkote Company.

**PENN METAL STUDS**

In addition to the 65,000 square yards of vermiculite plaster used in the building, about 65,000 yards of United States Gypsum's RED TOP (photo 7 below, right) was applied by the C. F. Balster Company,athing and plastering contractor.

**HAUSERMAN REMOVABLE PARTITIONS**

Building changes and rearrangements of offices will be a relatively simple matter in the building because of the use of these "removable partitions" in the building. By using 100 horsepower of weather-making equipment, the building becomes a "weather factory".

The offices of Ralph E. Phillips, consulting mechanical and electric engineer, solved the problem of Southern California weather, which may require simultaneous heating and cooling, by a twin-duct system. One duct brings cooled air and the other heated air to all portions of the building. The Browne Folding Window is relatively new to the West. Only two other important windows of this type have been used, but they have been widely used elsewhere. Originally manufactured in steel, the Browne Folding Window in aluminum was brought to Los Angeles just before the recent war. In aluminum the Browne Folding Window will save about 40% less. About 200,000 pounds of aluminum were used in fabricating the 1600 windows.

**USC FIRE PROOF WINDOWS**

The 50-ton vertical aluminum solar fins shade 1,600-old windows, catching the heat of the sun's rays and piping it up to the top of the building where it is released. It will save an estimated 100 tons of refrigerants annually. The fins are so integrated into the ceiling, that a casual observer would think they were for decorative purposes only. On the south side, in fact, they are. But on the south and west, extending 129 feet from the third floor level of the building up to its thirteenth floor, the fins perform their cooling function and the summer sun hits with full impact.

The fins are 6 inches wide and stand 4 feet 2 inches out from the building's sides. They are formed from a rolled aluminum sheet, .010 thick, Sealed Fluxed Aluminum, welded to the framework in the base of light of the sun and eliminate glare. The same protection was given the building by a twofold system, which prevents any non-discoloring, non-oxidizing and virtually permanent finish.

PERMITTED TO EXPAND

About 190,000 pounds of aluminum were used in the fabrication of the fins, which are manufactured at the facility, were fabricated, perforated to provide for the upward passage of the warm air inside the fins. Exclusive of the 6 feet 2 every 6 feet long fins to the expand as they absorb the sun's intense heat. But new extrusion processes used in the fins' manufacture retain a "tailored" appearance and prevent "waving" or buckling, holding sharp shadow lines. Though the fins were prefabricated and fact-
These smart modern windows never rust, never rot, never wear out . . . and they never need painting!

Made of heavier aluminum extrusions than most windows, with integrally flash-welded joints and corners, they are sturdy and storm-tight, yet operate easily and with finger-tip inside controls.

Write for details or consult SWEET’S.

WARE LABORATORIES, INC.
1827 Delaware Parkway, MIAMI 35, FLA.
New York: 21 West St. Whitehall 3-6860

Aluminum WINDOWS

Choice of sturdy Ware Butt Hinges or convenient Extension Hinges.

SPECIFIED MATERIALS • GENERAL PETROLEUM BUILDING

A minimum of 6 and an average of 8 complete air changes hourly are provided by the 48 fan rooms, 4 of which are located on each floor from the second to the top floor, and each of which may be operated independently from an instrument board in the basement when only parts of the building are in use. This instrument board gives the building engineer the complete picture of the efficiency of the temperature control system of the building at a glance. At the top are precision temperature recorder-controls manufactured by the Brown Instrument Division of the Minneapolis-Honeywell Regulator Company. They record and control temperatures of three giant water chillers, supplying the cooling medium for the building. There is a master recorder-controlling panel for the top battery of instruments. A strip chart recorder gives simultaneous records of outdoor wet and dry bulb temperatures and the water temperatures in and from the cooling tower on the room. This provides permanent hour-by-hour records of the control system’s efficiency.

SERVE 20 ROOMS EACH

Each fan room serves approximately 20 rooms and contains heating and cooling coils and a 3-horsepower electric fan flowing 7,500 cubic feet a minute. The fan draws about 25 per cent outside air to mix with about 75 per cent re-used air which has been passed through a sound filter and past a bank of 5 General Electric 3636 Gernicidal sterilizing tubes (photo 12—above, page 46). This process, together with additional duct filters, is expected to reduce colds and other infections and keep the interior free of expensive and damaging dust. The calls for hot and cold air are located in separate chambers, and the hot coil chamber is automatically controlled at a level required by the heating load, which enables the system to provide a high delivered air temperature during warmup periods and periods of extreme heat demand.

HEAT THROUGH AIR DUCTS

The moderate climate plus the insulated construction features of the building make possible the heating of the building entirely by the hot air ducts. Heat conservation is aided by the use of a double ceiling above each floor, one formed by Acousti-Celotex (photo 11—right, page 46) and containing the lighting fixtures and air conditioning ducts, and the other formed by ventilating plaster. Interior aluminum venetian blinds also act as insulation to keep exterior heat absorption down. To keep overhead space usage to a minimum, ducts were designed only 3 inches in depth. More than 200 tons of galvanized steel were used in fabricating the twenty miles of ducts in the building.

Connecting the fan rooms with the central heating and the refrigeration plants in the basement are risers which would have much smaller than those which have been required if separate fan rooms had not been used. This brings a consequent reduction in fire hazard.

REFRIGERATION PLANT PROVIDED

The refrigeration plant of the building consists of three 300-horsepower centrifugal compressors with a capacity of 335 tons each and using “Freon 11” refrigerant. Four chilled water pumps, each serving one group of fan rooms, drive the refrigerant through the building. Condensers are located on the roof of the building, and, for appearance, are completely surrounded by a sheet steel superstructure. The Worthington Pump & Machinery Corporation manufactured the three centrifugal systems, two condensing units and five self-contained air conditioners.

The centrifugal systems cool 2,500 G.P.M. of water from 84°F to 44°F using 3,150 G.P.M. of 80°F water through the condensers. One condensing unit is used to cool drinking water for the building, and the other for the air conditioning system for the auditorium. The 5 self-contained units are used for air conditioning separate offices when individual conditioning would be uneconomical on the main system.

BARBER-COLMAN EQUIPMENT

Barber-Colman engineered air distribution products were selected for installation in the building after careful analysis. More than 700 Venturi-Flo ceiling outlets were used, together with Uni-Flo supply grilles and return air Multi louvre registers. The selection of Barber-Colman equipment was based on flow characteristics, rapid diffusion, aspirating efficiency and the use of greater temperature differential, with minimum pressure drop and lower noise level. Venturi-Flo ceiling outlets and the Uni-Flo sidewall grilles and registers combine design simplicity with pleasing appearance.

The electrical contractor, The R. R. Jones Electric Company, chose Nepco duct, (photo 7—below, right) manufactured by the National Electric Products Corporation, Pittsburgh, for the floor electrical distribution system and installed 103,000 feet (more than 191 miles) in the floors of the building to carry power for lighting, fans, controls, telephone wiring, signal and buzzer wiring, etc. Nepco duct is a strong, rigid and durable steel raceway with 1 1/4” pipe threaded connections at outlets every 24” at floor surface. A steelgrounded system, Nepco duct automatically shields telephone, television and radio wires from outside interference.

BRINGS WIRING TO FLOOR SURFACE

The 1st raised outlet brings wiring right to floor surface, so that service fittings for light, power, telephone and signal services, may be established quickly and without interruption of office occupancy and at minimum expense of time. Wires are brought through the duct opening into the service fitting, then in a wide-radius sweep and connected to the receptacle, buzzer or device. Companion Nepco duct service fittings and floor boxes were also produced for the job by National Electric.

A source of pride to General Petroleum, is its modern general wash rooms and their concealed cabinets in the individual offices. Durability, styling and renewability of working parts were given prime consideration in the selection of plumbing brass goods. Mueller Herit Line Lavatory Combinations (photo 9—below, low, right, page 46) were selected because of their many exclusive features—especially in the faucets.

Since the washer lifts and closes vertically without turning on the stem, it precludes any possibility of the washer dripping off and eliminates all grinding, abrasive action on the washer or seat. An internal spring provides effortless operation and gives a positive, non-drip closing without facing. The fitting itself, need never be removed as all working parts can be replaced as a unit when necess
sary. The extra heavy, all bronze construction of the body, has thick chromium plating which assures long life with a lasting, mirror-like finish.

KAWNEER ALUMINUM DOORS
Kawneer interior welded, mirror polished, aluminized finished, extruded aluminum doors were used in many of the executive offices and these were set in extruded aluminum frames of the same finish. Lightness of weight as well as beauty recommended their use. An "L" style of Kawneer flush setting for plate glass was used in both the main building and garage. A new type extruded Kawneer division and corner bar was employed. Velvet smooth finish, standard with Kawneer metal, was specified on all aluminum trim.

The building is beautifully color styled and decorated. The G. C. Hewitt Company, the painting contractor, assisted in preparing the surfaces and furnishing the painting and decorating as well as material finishes, bleaching and staining as employed throughout the building on the various hardwoods, all of which has entailed the work of 25 to 30 men for over a year. The company introduced to the Southern California area for the first time the new spider staging on the General Petroleum Building, which simulates the act of a spider suspending itself on a single line and provides a scaffolding from which a painter can work.

The main fasing of the building was done in ceramic veneer, and it was the job of McFarland & Company, Seaporal Architectural Porcelain contractors, to match this material bath in color and texture on the so-called sign structure and at the same time to give a permanent and lasting job of high quality. Ceramic veneer is a ceramic (or better, glass) on clay. Seaporal Architectural Porcelain (photo 1--above, page 46) is a ceramic on steel. Therefore, it was easy to match both colors and textures. The material was erected directly on an open steel framework, no additions or finishing with metal or porcelain.

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Editors note: This a classified review of currently available manufacturers’ literature and information. To obtain a copy of any piece of literature or information regarding any product, list the number which precedes the item about which you want information; your name, address and occupation. Return the coupon to Arts & Architecture, and your request will be filled as rapidly as possible. Items preceded by a dot (.) indicate products which have been merited specifically in the Case Study House Program of the magazine. Items appearing for the first time this month are set in bold-face type.

CURRENTLY AVAILABLE PRODUCT LITERATURE AND INFORMATION

CABINETS, COUNTER TOPS

- (564) Berger Manufacturing Division, Republic Steel Corporation: Folders, literature of contemporary design endless combinations of units full specification service available.
- (493) Hotpoint Inc.: Hotpoint kitchen and laundry furniture, complete manual illustrated to show proper ways of affixing Hotpoint cabinets and of connecting Hotpoint appliances in a kitchen, particularly valuable to architects, builders.
- (468) Mutschler Brothers Corp.: Complete literature of Mutschler Hardware Kitchen Cabinets; same precision construction as steel cabinets with all advantages of wood; continuous counter sink tops, rotating corner sinks, recessed sink fronts; any color; comes ready to install; a remarkably good product meeting close study.

APPLIANCES

- (550) W. R. Ames Company: Information Ames revolving shelves for kitchen cabinets, sturdy aluminum construction; easy to install without rebudding cabinets; turns at a touch, eliminating stooping, climbing, rummaging; sanitary, ant-profil; sizes for all cabinet units, coolers, refrigerators.
- (669) Blackstone Corporation: Brochure, folders, data sheets Blackstone Combination Laundry; washers, dryers, ironers automatically; counter height, counter depth, requires only six feet of wall space; rated best by Consumers Union; very good design; should be included in specifying kitchen cabinets.
- (469) Coolerator Corporation: Brochures unusually well designed, engineered 8½ cubic foot refrigerator; gives maximum storage space, including 40 # built in frozen food locker, 5 ice trays, fully automatic household food freezer; thermostat controlled temperature 5 degrees below to 5 degrees above zero; includes 5 year food insurance policy; both used in CSHouse Number 18.
- (364) Ecko Products Company: Data, specifications, triple-filtering cleaning; has no dust bag; is good looking.
- (760) Westinghouse Company: Folders, literature of permanent construction as steel cabinets with all advantages of wood; continuous counter sink tops, rotating corner sinks, recessed sink fronts; any color; comes ready to install; a remarkably good product meeting close study.

DRAFTING ROOM EQUIPMENT

- (468) Clearprint Paper Company: Information new Papercloth as substitute for tracing cloth; masked stability under all atmospheric conditions, resists stretching, shrinking, buckling; takes ink, pencil well, erases easily; not damaged by folding; samples available.
- (462) Cavendish Industries: Folder E.Z.C. Scale value size of cigarette package with 6 flexible tape with built-in flashlight to illuminate it; snap-back rule, etched figures; interesting product.
- (483) Listo Pencil Corporation: Information new drafting pencil with new principles of high-suction, triple-filtering cleaning; has no dust bag; is good looking.

(702) Magic Chef: Catalogue new Magic Chef line, different models illus; with mention of individual features, dimensions and operational data.
- (426) Howard Miller Clock Company: Information contemporary clocks by leading designers, including George Nelson; probably best approach to application of contemporary design to clocks.

PIONEER WATER HEATER COMPANY: Folder Pioneer water heaters; Grayson controls, fiberglass insulation, oven-baked washable gloss finish; steel tanks electrically welded, galvanized.
- (367) Servel, Inc.: Complete set brochures, folders, data Servel gas refrigerators, including information "twins" dual 13-cubic-foot model; no noise, no moving parts; merit specified in CSHouse Numbers 11, 15, 17, 19, 21.
- (365) Sunbeam, Inc.: Data, information most complete line kitchen appliances; Mixmaster, Wallmaster, French Master, Sunbeam Toaster; well designed, highly efficient.
- (793) Thermodor Electrical Manufacturing Company: Folder reviewing Thermodor electrical appliances for filler living, interesting kitchen layout suggestions for Bil-in electric ranges; review of heaters and cooling fans; prices listed.
- (565) Utility Appliance Corporation: Brochure Gifford & Slater gas ranges, all sizes; automatic low-temperature oven control, no-tilt racks; sizzle-roasting broiler; triple-click top burner controls; divided top with griddle; CP; well in the needed, designed; merit specified CSHouse Number 1.

BOOKS

- (491) Kurt L. Schwartz: Catalog of fine and rare books; early editions of literary, artistic and scientific importance; choice collection of unusual interest.
- (658) E. C. Scale value size of cigarette package with 6 flexible tape with built-in flashlight to illuminate it; snap-back rule, etched figures; interesting product.

MANUFACTURERS’ LITERATURE CURRENTLY AVAILABLE

ARTS & ARCHITECTURE

- (461) Finders Manufacturing Company: Brochure, folders line of Hollywood electric table appliances, including grill, broiler, waffle-iron; well designed, will engineer, merit specified for CSHouse Numbers 1, 5, 20.
- (460) General Electric Company: Electric wall space; rated best by Consumers Union.
- (587) Ironmaster, Sunbeam Toaster; well engineered, designed, compact, easy to install.
- (586) Kaiser-Fleetwin gs Sales Corporation: Information new Kaiser Timasave Sink, unit combining Kaiser powered-dishwasher and Kaiser disposal unit in 48 steel cabinet to retail: $599.50; porcelain work surface, four access doors; dishwasher and disposal unit will still be sold separately.
- (584) Kaiser-Fleetwin gs Sales Corporation: Brochure, full information new automatic food waste pulverizer; includes; compact, disposal, safe; disposes of bones, fruit pits, fibrous foods, fits sink drain; manufactured in west and readily available; used in CSHouse Number 18.
- (585) Kaiser-Fleetwin gs Sales Corporation: Brochure, full information new automatic food waste waste pulverizer; includes; compact, disposal, safe; disposes of bones, fruit pits, fibrous foods, fits sink drain; manufactured in west and readily available; used in CSHouse Number 18.

FILL IN COUPON TO OBTAIN

MANUFACTURERS’ LITERATURE CURRENTLY AVAILABLE

ARTS & ARCHITECTURE

Please send me a copy of each piece of Manufacturer’s Literature listed:


NAME ADDRESS CITY ZONE STATE

OCCUPATION

NOTE: Literature cannot be forwarded unless occupation is shown.
Ten Carloads of ACOUSTI-CELOTEX were used in effectively sound quieting, for better hearing throughout the entire building of GENERAL PETROLEUM.
wood, wallboard, plaster, glass, and stone surfaces practical and useful solution to many problems.

Pantoscope Corporation: Free swatches, information Pantoscope coated upholstery fabric; vinyl vinyl; wide color range; new product worth investigating.

Reg-Wick Hand Woven Or­iginals: Information custom designed handwoven upholstery, drapery fab­rics; colors dyed to order; good contemporary designs, fabrics; several national awards; worth investigating.

Ben Rose: Information one of best designed lines hand-printed contem­porary carpeting for easy maintenance; also Mohawk Mills Avalon temporary furnishings.

Textileather Corporation: Bro­chure Tolex upholstery, wall covering plastic leathercloth; tailors well, cleans worn areas easily replaced with leftover pieces.

Pantoscope Corporation: Information Lok-weave Gro­ve; definitely worth study, file space.

Bigelow-Sanford Carpet Com­pany, Inc.: Information Lok-weave Gro­ve.; tufts are locked in, cannot pull out; no sew seams, damaged, worn areas easily replaced with leftover pieces.

Klearfax Linen Looms: Cata­logue, brochures probably best known line contemporary rugs; exceptionally wide range colors, fabrics, textures.

Oregon Flax Textiles, Inc.: De­scriptive brochure Flax-text all-llinen rugs; unique texture from "twist-tite" strands fine flax; long wearing; seven warm colors, no patterns.

Paralleline Companies: Pleasant 4-color brochure "Floors the Mod­ern Home," suggests treatments for floors of all rooms in house; practically suggests colors, patterns.

The Roberts Company: Four­color brochure for sales purposes, shows by comparative photographs the more attractive appearance of smooth-cont­emporary applications as compared with other carpet installation methods.

Shelly's Floor Coverings: In­formation one of best retail sources con­temporary rugs, carpets from foremost looms; new weaves, textures, colors.

Alexander Smith & Sons Carpet Company; Well executed 24-page four­color brochure on Alexander Smith & Sons rugs, "Colorama," Clara Dudley's color idea book; emphasizes, explains colors, textures, patterns over most widely known lines; many good plain colors; definitely worth study, file space.

Tile-Tex Division, The Flist­kote Company; Printed color charts, 4" x 4" samples Tile-Tex asphalt tile, featuring new line of colors; colors based on national survey by color ex­erts to determine color preferences; wide range of colors immediately available, including plain and neutral col­ors; a good source of data.

ZANDT CARPET COM­PANY: Information long-wearing carpeting for easy maintenance; featuring "Hooksets" and "Lock­set" type footproof-proof wool construction with nap extending through to reverse side of carpeting; also Mohawk Mills Avalon Guillette Seamless Carpeting for luxury.

Aalto Designs: Information one of oldest lines contemporary furni­ture; made in Sweden; available sev­eral West Coast.

Barwa Associates: New illus­trated catalogue of one of America's most revolutionary chairs, the Barwa; winner of three design awards in 1947-48; merit specified in CSHouse Pro­gram; worth investigation.

Ben Rose: Information one of oldest lines contemporary fur­niture; definitely worth investigation; good approach to con­temporary furnishings.

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Cabaniss of Denver: Informa­tion source of good contemporary furni­ture in five Rocky Mountain states, in­cluding Aalto, Eames, Van Kessel­Green; also lighting fixtures by Versen, ceramics by Beatrice Wood, fabrics by Ben Rose.

Certified Chrome: "A-Just-Rite" chrome dinette chair, adjustable by a flip of the wrist to a four-inch -higher level; ideal for growing children and workshop usage; test-proven upholstery, no sharp edges.

Claywood Design Products: Brochure line inexpensive modern fur­niture for houses, offices, stores, clubs, institutions; tables, chairs, desks, woods finished in hard clear lacquer or solid colors; designs by Clayton Lewis; western manufacturer; immediate de­livery.

Drexel Furniture Company: In­formation new line contemporary furniture designed by Edward J. Worm­ley; living room, dining room, bed­room; forty pieces, well integrated; charge made of 10c.

Dunbar Furniture Manufac­turing Company: New booklet covering modern furniture, decoration featuring Dunbar furniture designed by Edward J. Wormley; considerable attention to accessories; requires 25 cents in stamps for delver;

Edgewood Furniture Company: Catalogue of the William Armbruster collection of modern furniture "design­ed by an architect—for architects" lists specifications and prices; gives small paste-up pictures for architectural lay­outs; deserves file space.

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.

Frank Brothers: Information contemporary Malay Modern and Amber Ash furniture; designs by Charles Eames, Alvar Aalto, Gilbert Rhode, Isamu Naguchi, George Nelson; complete contemporary interiors service; upholstery and drapery supplies.

Functional Furniture Manufac­turers; Illustrated brochure new func­tional line tables, chairs using molded plywood on mass production basis; clean, strong, light.

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Customer-Approved CALIFORNIA RUBBER TILE

Architects, Review these Features! • Seventeen colors—deep to pastel. A floor to establish or complement any color scheme.
• Rich gloss . . . resilient . . . quiet, warm and clean underfoot.
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or 414 P Street Ph. 4-2065

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ARTS & ARCHITECTURE
and aluminum. Colonial rim locks. Special pulls, custom-Flo, operate for structural glass and other entrance doors.


(698) Latching Corporation: Informa­tion new self-latching, self-aligning cupboards, etc., permitting hardware and labor savings up to $71.94 for sev­en-room house; practical new develop­ment.

(708) Magic Mirror Door Detective: New safety device for doors, utilizes two-way glass which permits observer on the inside to scrutinize visitors but prevents only a shiny mirror surface to those on the outside; modestly priced.

(710) Maximoff Research: Recoll Door Bumper with self-engaging holder that keeps doors open; designed for beauty and serviceability, can never wear out; merits investigation.


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

• (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.

(722) Sturdee Steel Products: New 1949 line "Easy to Lift" overhead gar­age door hardware, standard and lo­head jambs, pivot and commercial track types, merit specified for use in Case Study House.

(727) Tulsa Distributing Company: Illustrative folder new Tulsa Sliding Hinge; saves space, eliminates gap left by conventional hinges, presents new possibilities in furniture design, streamline features, galleys and built-ins; good new idea.

HEATING & AIR CONDITIONING

• (381) Horace F. Allison: Informa­tion on radiant heating; firm engi­neers, installs systems in Los Angeles area; one of best sources of practical informa­tion, installation service. Un­able to service inquiries from other areas.

• (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.

(572) Philip Carey Manufacturing Company: Brochure Carey duct all as­bestos air conduit for heating, ventilat­ing, air conditioning; is both conduc­tive and insulation; hushes fan noises, per­mits higher air velocity due to flush joints; easily installed, economical; worth study.

(414) Chase Brass & Copper Com­pany: Fold-over color brochure on brass and copper in residential planning, emphasizing copper tubing for radiant heating; also covers hardware, screen, roofing products.

(700) Chase Brass & Copper Com­pany: Radiant Heating pamphlet gives reliable and interesting data for the layman; nicely done and informative.

(509) The Firan Company: Brochure Glamaster bath heater featuring direct infrared heat radiation; one piece dis­assembled aluminum alloy reflector; well engineered, designed; worth investiga­tion; uses convection flow of air.

(510) Fraser & Johnson: Brochure new Lo-Boy shallow model furnace, dual or floor; 5%; deep overall; dual models feature "hi-flu" register head, eliminating floor grilles; single rod con­trol valve; streamlined heating element of pressed steel; gas fumes cannot es­cape into room.

• (329) Lennox Furnace Company: Brochure Lennox Air-Flo gas resident­ial furnace; provides warmed, filtered, humidified air; completely quiet; cabinets remarkably well designed.

(759) The Lunkenheimer Com­pany: Guide for selecting valves, boiler mountings and lubricating devices; valves grouped according to steam pressure and special ap­plications; used in boiler and heating system installations; wide vari­ety of models; engineering serv­ice available in solution of steam­line problems.

• (681) Minneapolis Honeywell: Pam­phlet discussing zone control for various
types of heating systems, suggests various domestic applications of Minneapolis Honeywell control units, making recommendations for maximum safety and comfort.

- (541) Montag Company: Electric furnaces, manual and circular, provides continuous filtered all-year ventilation; M-H modulating thermostatic controls for eight blower speeds, 12 heating steps within two degrees of room temperature; full data available.

- (542) Payne Furnace Company: Information new Payne Pandair forced air wall heater; occupies floor area of only 29"x59".; room air drawn in near ceiling, discharged through outlet grilles at floor level into one or more rooms; built in thermostatic fan controls provide two-speed fan operation; 55,000 Btu; worth investigating.

- (466) Payne Furnace Company: Felder new Cooler Air evaporative 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.

- (667) Radiant Heat Engineering, Inc.: Brochures and folders complete radiant heating engineering and installation service in Southern California; firm thoroughly experienced by many major installations, now installing radiant heating CS House Numbers 8, 9; good source of information.

- (331) Revere Copper & Brass: Spectacularly good non-technical discussion of radiant panel heating in 36 well-illustrated pages; this is a down-to-earth discussion of heat transfer, conduction and costs; can't be recommended too strongly.

- (699) L. N. Roberson Company: Information, installation methods, materials and costs radiant electric heating with Roberson Heatron Cable, special applications for green houses; practical for low power rate areas.

- (755) Security Valve Company: Pamphlet presenting the Wardlow automatic, low-pressure, shut-off valve for both high and low-pressure applications: provides absolute shut-off of fuel when supply pressure fails; will not leak, seep or re-open until reset manually; a great savings device for industrial applications.

- (750) Tennessee Enamel Manufacturing Company: Introduction of Temco Gas Heaters, a new design trend in gas heaters; radiant and non-radiant circulators; vented and unvented models available, new cabinets designed for harmony with home furnishings.

- (400) H. A. Thrush & Company: Well prepared and illustrated brochure Thrush forced circulating flow control hot water heat; emphasis on radiant heating, with good technical data simply presented; equipment used in new house by Frank Lloyd Wright; worth study, file space.

- (64) Trade-Wind Motorfans, Inc.: Folders Trade-Wind small room ventilator that installs in the ceiling; easily cleaned blower, totally enclosed motor, quiet air inlet, partition keeps greasy air from motor; built-in conduit box, plug-in receptacle; includes hood of good design over stove when used in kitchen.

- (599) The Trane Company: Solutions of special problems in air conditioning and residential heating; piping diagrams and heat calculation graphs included.

- (649) Trane Company: Fifty-four page brochure "Merely a Matter of Air" featuring Utrane air conditioning for multi-room buildings; one of the best presentations of air conditioning; good descriptive, technical matter, well illustrated with drawings; simply written; worth having.

- (564) Utility Appliance Corporation: Brochure Utility forced air furnace, gas fired; provides complete forced air circulation, fully automatic temperature control, glass fiber filters; modern compact cabinet design; well engineered; full dimensional, performance data; merit specified CS House Number 1.

- (565) Utility Appliance Corporation: Brochure Utility Wall-o-omatic built-in circulating heater, gas fired and vented; can be used all types construction, installation remarkably simple; fitted into any standard 4" stud wall without furring; high velocity discharge assures over-all room heating; well designed; merit specified for CS House Number 1.

- (566) Utility Appliance Corporation: Brochure Utility Wall-o-omatic built-in circulating heater, gas fired and vented; can be used all types construction; installation remarkably simple; fits into any standard 4" stud wall without furring; high velocity discharge assures over-all room heating; well designed; merit specified for CS House Number 1.

- (567) Utility Appliance Corporation: Brochure Utility Central Air Conditioning; full dimensional, performance data; merit specified for CS House Number 1.

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- (569) Utility Appliance Corporation: Brochure Utility Central Air Conditioning; full dimensional, performance data; merit specified for CS House Number 1.

- (570) Basalt Rock Company, Inc.: Folder for architects, builders on Streetscape roof and floor slabs, telling what they are, how they are made, and what they will do; well presented material, worth file space.

- (574) Phillips Carey Manufacturing Company: Brochure specifications Carry-built-up roofs; one of best sources roof information, including tables, architectural and construction sketches, application data; good service material by one of oldest national manufacturers.

- (221) Gladys, Inc.: Brochure Zonolite concrete insulation; interesting for use in portion concrete slab below radiant heating pipes; prevents heat loss into ground; normal concrete should be used above pipes.

- (716) Infra Insulation, Incorporated: "Simplified Physics of Thermal Insulation" brochure giving a good, thorough discussion of heat transfer, conduction and density, radiation and reflection, condensation and temperature calculation tests; discusses advantages of aluminum foil insulation; gives installation details.

- (691) Johns Manville Products: Sound control pamphlet gives construction methods for Sanacoustic units, fluorescent lighting with Sanacoustic units, thistone noise traps, transfer acoustical materials and special installations for broadcasting studios and industrial noise problems.
Plan for telephone service where the users will spend most of their time. It’s wise to locate telephones away from busy halls and doorways where noise and distractions are greatest. And be sure to plan a resting place for the telephone... and the user.

Modern home planning calls for extra outlets and built-in conduit. The cost of concealed wiring is small, customer-acceptable. For free help in planning, call your local Pacific Telephone office and ask for "Architects and Builders Service."

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Put built-in telephone facilities in your plans

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Compactness that saves space in basement or utility room... plus exclusive advantages that add up to more dollar-for-dollar value... earn Aldrich Boiler-Burner Units a place in your plans for a single home, a commercial building, or for a vast new development.

Aldrich vertical-tube-type boilers are made in sizes 118,000 to 608,000 BTU an hour rating, oil or gas fired; available with or without pilot burners and with or without water make-up boilers. Boilers built to highest commercial standards... serviced when specified; all is from Underwriters' approved gas burners A.G.A. approved. Write now for specifications: detailed descriptions.

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Subsidiary of Crown Corporations, Inc.

(565) Cannon Electric Development Company: Folder, new Cannon colored utility pilot lights for signal, warning, decoration, general illumination applications; from one to four lens on plate 1/2" wide to necessary depth; lens in five colors of unbreakable plastic.

(718) Century Lighting: Folder introducing new "Dramalite" designed by Oliver Landquist, practical for office and home installation; good, adaptable, carefully engineered product in a variety of attractive models; prices given.

(704) Corning Glass Works: Bulletin on engineered lighting; discusses merits of direct, semi-direct, semi-in-direct, and totally luminous ceiling lighting systems, control, brightness determinants, and basic data included.

(547) Day-Brite Lighting, Inc.: Bulletins 20-A and 20-B recessed troffers; all standard types listed with full technical data, including sketches, tables, installation data, foot-candle intensities charts. Also includes information incandescent boxes for flush installation; well worth file space.

(771) General Electric Company: "Fundamentals of Light and Lighting," very thorough discussion of light engineering, gives light calculation charts; beautifully illustrated; excellent reference text solving general as well as special problems; should be on "required reading" list.

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

(748) Gotham Lighting Corporation: New booklet Gotham Architectural Lighting; demonstrates pendant and surface mounted lights, describes Model flat, curved, diffusing and louved lenses; lamp types shown for household and commercial use; specifications given.

(590) Guardian Light Company: Information Guardien kitchen counter light, 8 or 15 watt fluorescent fixtures for easy installation under top cabinets to flood work areas with indirect light; portable or permanent; sensible product; merit specified for all current CSIHouses.


(650) Lighting, Inc.: Series folders, brochure Philite fluorescent lighting fixtures, incandescent reflectors for residential, commercial, industrial use; includes interesting equipment for subtle spotlighting, flood lighting; particularly illustrates provides full technical data, prices.

(657) The Miller Company: New revised edition "Ceilings Unlimited," illustrating and describing 60 distinctive styles of residential and commercial lighting fixtures, including one of best lines contemporary recessed fixtures; available only through electrical jobbers; this line worth investigating.

(375) Payne Company, Inc.: Illustrated bulletin (AA2) and catalogue sheets 42 distinctive styles of residential and commercial lighting fixtures, including one of best lines contemporary recessed fixtures; available only through electrical jobbers; this line worth investigating.

(392) Smoot-Holman Company: Information newly designed Zenith luminaires; Polystyrene plastic side panels, ribbed to permit proper light distribution to minimum; certified ballasts, starters; individual or continuous mounting; opens either side for servicing.

(782) SUNBEAM LIGHTING COMPANY: New two-color catalog Sunbeam Fluorescent Luminaires; compact, inclusive; tables of specifications; a very handy reference.

(270) Supreme Lighting Company: Comprehensive 24-page catalog contemporary designed line fluorescent fixtures; hanging, open and glass covered; recessed fixtures with translucent lenses or diffusing glass; industrial, reflector, window types; strip, circular; kitchen fixtures, vertical mirror lamps, bed lamps.

(696) The Wiremold Company: Outlets for fluorescent lighting fixtures on wire raceways for continuous runs of line-swall; good wiring system for drafting rooms, showrooms and other spaces requiring special lighting.

MISCELLANEOUS

(726) The Kemode Manufacturing Company: Information new Quik-Shot Sanding Irons, inexpensive and easy-to-use interchangeable tips from 3/8" to 1" or more, heated by package heat element in 5 seconds; has no breakable parts. Good idea.

(592) The Homer Laughlin China Company: Full color folders Jubilee Dinnerware; simple design, pleasant color selection; simplicity allows accessories to make table settings formal or informal; light in weight; merit specified for CSHouse Numbers 20, 1 and 3.

(436) Howard Miller Clock Company: Information contemporary clocks by Howard Miller, designed by George Nelson; probably best approach to application of contemporary design to clocks.

(474) Modern Designers: Full information good lines ceramic trays, bowls, incidentals, and lamps; well known contemporary designers; available through selected retail outlets; used in CSHouse Number 18.

MOTION PICTURE EQUIPMENT

(512) Bell & Howell Company: Brochure new Filmsonic projectors for use in homes, schools, churches, industry; gives full technical information regarding equipment, installations, use, operation; practical, interesting sensible.

PAINTS, SURFACE TREATMENTS

(725) Gordon Chemical Products: Gordon's 101 Sealer provides natural wood beauty while providing greater color control, prevents grain raising, color bleeding through surface, filler shrinkage and stain bleeding; provides absolute sealing.

(729) Libun Corporation: Suggestions for inexpensive, luxuriat-looking, "business as usual" applications of Amberwood rustic paneling; comes in even widths 6" to 12" and even lengths of 8" to 16'; provides a wide variety of patterns.

(703) National Electrical Manufacturers' Association: Standard for Laminated Thermosetting Decorative sheets; explains standard wear, heat, stain, light, moisture and expansion tests for laminated sheets, and gives recommended method for application.

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SHEET METAL WORK ON
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(516) Beneke Corporation: Series twofold folder Beneke water closet covers; white, mahogany, oak for any size, any bowl; simplicity of design; seamless kiln dried hardwood; full specifications available.

(668) W. A. Case & Son Manufacturing Company: Information regarding Case contemporary bathroom fixtures, including T/N Water Closet, floor mounted and non-overflow fixture; also lavatories with dry shelf space, built-in soap dish, concealed float overflow; towel bars, wall hung or with legs; merit specified for several CS-Houses.

(126) Crane Company: Brochure (24 pages) presenting complete 1949 Crane line of plumbing fixtures; features Drake's metal illustrates model bathrooms, powder over windows, imitation bowling; ideas packed.

(771) Mueller Company: Information Mueller Merit Line Lavatory Combinations with special features; gridding, abrasive action on washer eliminated; positive, non-drip closing without forcing; working parts can be replaced as a unit when necessary.

(701) Altec Lansing Corporation: Specifications new AM/FM Toner and Amplifier for home use, utilized tuned radio frequency circuit, said to be free from distortion.

(350) Motorola, Inc.: Information, brochures Motorola FM/AM radio-phonograph in cabinets of good contemporary design; shadowless record changer, automatic shut-off; push-button tuning; dark or blond; worth investigating.

ROOFING
(529) E. K. Wood Lumber Co.: Full information several of best lines of sash, doors; includes Drought metal doors, windows, Super-Vent awning type windows, Harvey sliding door hardware; Win-Dor integral hardware for jalousies; Schneider Fenso Board roof insulation, Grand Rapids Invisible sash balance, Woodlife wood preservatives; Truscon residential steel windows, Tint aluminum windows, Retractable tension window screens, and interior combination screen and storm doors.

SASH, DOORS AND WINDOWS
(510) Alumination Corporation of America: Information new type combination screen-storm door in aluminum; extruded hollow aluminum sections; screen, storm inserts immediately interchangeable; comes with aluminum frame in all sizes for quick installation; good product.

(712) Arcadia Metal Products: Side sliding steel sash and doors for residential and commercial use, high quality, factory assembled, ready for installation; standard types and sizes illustrated and installation details given.

(664) Glide Windows, Inc: Attractive brochures new line Glide aluminum windows, doors; one of best, most practical solutions for wide areas of sliding glass; size limited only to size of glass used; full details; this brochure is one of best printed, product equally good.

(758) Premanente Products Company: New Kaiser aluminum shade screening, combines in one product the cooling action of an awning, the shading value of a veneer blind and the insect protection of a fine wire mesh screen; interesting new product.

(754) Rice Engineering Company: The Rice 3-Way Hinge, door closer and door check especially adapted to all-glass and glass-and-metal doors, simplified installation of heavy doors; completely adjustable; requires no special preparation; excellent new solution to old problem; deserves investigation.

(745) Reddix Plywood Corporation: Reddix Flush Door, smooth, modern, finished in beautiful veneers, adaptable to any interior design; permanent Reddix door construction guarantees long life and lasting beauty of fine woodwork; Architects and designers should acquaint themselves with this excellent modern craftsmanship.

(782) RollerScreen Company: Four-color brochure on Pella Casement Windows; gives suggestions for handling large window areas, many good ideas attractively presented, stock sizes listed, installations diagrammed.

(550) Steelbilt, Inc.: Folder Steelbilt steel horizontal sliding doors, windows; wide range of stock sizes permit unrestricted contemporary design; narrow mullions, muntins; outside screens; western manufacture, immediately available; one of best items of kind; merit specified CHouse Number 1.

(406) Super-Vent Company: Brochure contemporary Super-Vent sliding type window that is cleaned from inside; permits dust-free ventilation; screens on inside as well as storm window.

(775) Truscon: Two-color brochure "Truscon Steel Doors for Hangars and Industrial Buildings," excellent source of technical information for the architect and engineer engaged in commercial and industrial installations; extensive specifications, thoroughly illustrated.

(776) Truscon: Brochure "Truscon Residential Steel Windows," double-hung and casement types; provide a distinctive glass quality for any house without adding to its cost; smart appearance, efficient control, weather-tight and inexpensive; fine installation details; deserves file space.

(777) Truscon: 87-page catalog Steel Windows and Industrial Doors; extensive illustrations of window types and installations, including jams, mullions, hardware and screens; fine reference file material for architects and engineers.

(770) Universal Corporation: Featured in the General Petroleum Building, broccoli monumental Folding Type Windows can be washed 13 percent faster than other types and entirely from inside, reducing insurance rates; "Alumilite" finished frames require no paint, do not tarnish or discolor.

(356) West Coast Screen Company: Brochure Hollywood Junior combination screen, metal sash door; provides ventilating screen door, sash door, permanent outside door all in one.

SPECIALTIES
(748) Barber-Colman Company: Unit-Flo grills, registers and accessories illustrated and demonstrated in catalog; engineering principles detailed.
Among the Famous Firms We Now Serve in the General Petroleum Building

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- California Portland Cement Co.
- Seaboard Oil Company of Delaware

Specially engineered for functional operations, Dictograph Specialized Communications Systems save time—labor—motion—reflecting a definite profit contribution for these—and tens of thousands of large and small organizations the world over. Let us show you how you may make this saving. Write or phone—

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General Petroleum's new building using lightweight aggregate Gunite by Johnson Western makes the most of the many advantages of this method; i.e., lower form and labor cost, lighter weight and accompanying structural savings, plus faster construction time. Gunite construction; either with lightweight or regular aggregates, may be used to equal advantage on your next job. Call Johnson Western for information or estimates.

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A PERMANENT OUTSIDE DOOR
A VENTILATING SCREEN DOOR
COMBINATION SCREEN ond METAL SASH DOOR field!

A sturdy dependable door, constructed of quality materials. HOLLYWOOD JUNIOR'S EXCLUSIVE PATENTED FEATURES have outmoded old fashion and other doors of its type entirely.

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3666 Hyde Park Blvd. Los Angeles 44, California
For information write—or call AXminster 7167

HOLLYWOOD JUNIOR COMBINATION SCREEN and METAL SASH DOOR

The "WEATHER-WISE" DOOR!!

A VENTILATING SCREEN DOOR
A SASH DOOR
A PERMANENT OUTSIDE DOOR
ALL 3 IN 1!

Discriminating home owners and architects have chosen Hollywood Junior as the TRIPLE DOOR VALUE in the COMBINATION SCREEN and METAL SASH DOOR field!

The Doubly Dependable Door, constructed of quality materials. HOLLYWOOD JUNIOR'S EXCLUSIVE PATENTED FEATURES have outmoded all-fashions screen doors and other doors of its type entirely.

IT GUARANTEES YOU YEAR ROUND COMFORT, CONVENIENCE and ECONOMY

WE ALSO MANUFACTURE A COMPLETE LINE OF SHUTTERS, C. C. DOORS, SCREENS, SCREEN DOORS, LOUVRE DOORS

WEST COAST SCREEN CO.
1145 EAST 63rd STREET • • • LOS ANGELES, CALIFORNIA

LABORERS HOUSE DEVELOPMENT

continued from page 37

This passage also serves on rainy days as a workshop. The bedrooms and living rooms face the north (towards the sun in this hemisphere). This orientation is maintained on either side of the street, which runs east and west. Therefore, the only difference in floor plan of units is the covered passage and corridor which are aligned to the living room wing in one unit and to the bedroom wing in another so that it will always be located adjoining the vegetable garden of each unit.

THE NEW GENERAL PETROLEUM BUILDING

continued from page 45

set directly on a background of tawertine. The combination of wood and aluminum is carried out in the elevators themselves with a panel of teak forming the rear wall and ceiling of the 14 passenger cars.

The reception and elevator lobbies of all floors of the building are paneled in red birch finish with a red driftwood stain. Ceilings are painted a natural gray.

A glass wall separates the elevator area from the receptionist area. An 8x14' photo mural of oil industry scenes covers one wall of each reception area while the opposite area is of fluted glass back-lighted with fluorescent tubes. Large glass doors connect all reception areas with office corridors.

Floors of these elevator lobbies are in black marble with touches of green and cream. Black rubber tile is used in all corridors. All corridors are finished in two shades of gray-green with ceilings of acousti-Celotex tile. The standard office decoration is in warm neutral gray with ceilings of the same tile. Windows are covered with light gray aluminum venetian blinds.

Offices of the principal executives of the company are individually decorated with a variety of woods, principally bleached walnut and bleached red oak. Carpets in six shades were used to suit the preference of each executive.

The board of directors room is finished in bleached red oak with an elliptical massive table of the same wood. The room is fully carpeted in beige with one wall entirely of glass looking out on a terrace finished in red tile.

A separate building has been erected to provide parking facilities for approximately five hundred automobiles. A six-story structure, it consists of a gently rising enclosed spiral ramp continuous from basement to roof providing two central traffic lanes and parking on both sides. After parking the driver descends to street level by elevators located in the central core of the spiral. A complete service station is located on the roof of the building.
JOHNSON - WESTERN COMPANY: Information gunite application of concretes; faster, lower form and labor costs, lightweight aggregates possible; deserves investigation.

Marble Institute of America, Inc.: "Stores Modernize with Marble" gives many commercial uses of marble, gives installation drawings for applying exterior marble veneer; valuable file information for architects and contractors engaged in commercial construction work.

Pacific Coast Aggregates, Inc.: Information, folders variety of building materials distributed Northern California; includes acoustical, concrete, insulating, masonry, plaster materials, paints, precast units, wallboards; good source of supply.

Marble Institute of America, Inc.: "Stores Modernize with Marble" gives many commercial uses of marble, gives installation drawings for applying exterior marble veneer; valuable file information for architects and contractors engaged in commercial construction work.

Meilink Steel Safe Company: Hercules furnace-tested closet vaults for private homes, a small, fire-proof, theft-proof safe, easily installed; a wise investment.

Timber Structures, Inc.: Folder "Timber True and Arch Data" on bowstring trusses and glued laminated structural members; prefabricated for jobsite assembly and erection and designed for almost any commercial or industrial building; open a new field to the architect; can be molded to wide range of forms.

Permanente Products Co.: Installations of Kaiser Aluminum ductwork, recommended specifications for construction and installation noted; FHA requirements given.

Meilink Steel Safe Company: Hercules furnace-tested closet vaults for private homes, a small, fire-proof, theft-proof safe, easily installed; a wise investment.

TRUSCON: Folder illustrating Truscon steel joists, ferroboard, steel deck, reinforcing and metal lath; gives construction details, dimensions, loading tables; essential information for steel construction work.

Wailes-Bageman, Inc.: Booklet (8 pages) Wall-Bloc building blocks designed for 4" modular system; mass-producer of light weight aggregate; weight 40% less than concrete blocks; home or commercial use; full details.

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.

West Coast Lumbermen's Association: A Director of West Coast retail outlets for Douglas Fir, West Coast Hemlock, Sitka Spruce and Western Red Cedar; lists additional reading matter.

ZONOLITE COMPANY: Two-color brochure giving details on vermiculite insulation and lightweight aggregates; demonstrates applications for purposes of insulation, weight saving, acoustics and fireproofing; and excellent development, efficient, easy to handle, deserves widespread usage.

WALL COVERINGS

Inez Croom, Inc.: Information on one of best lines of contemporary wallpapers done by silk screen process.

Timbertone Decorative Company, Inc.: Information Timbertone Structural Veneer Papers for decorative uses; heavy kraft paper, stained and finished, applied paper hanging manner; wide variety of wood patterns and colors; easy to handle, clean; flexible, comes in rolls; good product; merit specified CSHouse Program.
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