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note from new york

Manhattan, of course, is an island; but unless one views it from the air, or from the top of the Empire State Building, it is difficult to comprehend this geographic aspect. However, the insular nature of New York makes itself felt in quite another way—in what might be alluded to as its psychological emanations, its "state of mind," its attitude toward itself and life as a whole. The over-all picture which is presented has interesting ethnologic parallels. One is reminded of anthropologic studies of people isolated from main streams of cultural exchanges and developments in whom is to be found a firm belief that all beyond their frontiers is inhabited by barbarians. To be sure there is no denying that New York occupies a unique position both in America and in the world outside. But this special nature, which can only be described in the most extreme superlatives, scarcely seems to warrant the remarkable assumption, implicit in current thought attitudes, that New York is the center of the universe! Every city has its particular attractions —sometimes real, sometimes only in the myths of those who by choice or circumstance dwell within its limits. But there appears to be a peculiarly seductive quality about New York which places it in a different category—a quality somewhat suggestive of the snake which charms the bird; or, to use another simile, having the fatal fascination of a precipice—a magnetic pull. He who gets too close or looks too long becomes a willing victim!

Actually, this magnetic pull is operative outside as well as within New York. To thousands, perhaps hundreds of thousands, it is as Mecca—the cultural capital of the United States, second only to Paris in a world hierarchy of the arts. But can it be said that what is here is culture? Rather is it not that there is an industry which markets certain of the forms normally associated with culture? New York is far more the business man’s Paradise than the artist’s. Failure on the part of most of the natives to recognize this is undoubtedly due to the spell which has been cast by a myriad number of factors, including the illusion that vastly diversified activities is synonymous with purpose. For similar reasons it appears to be equally impossible for those who have entered into this strange marriage to recognize that the principles of commerce rather than art exert subtle but nonetheless unrelenting influence upon their work. 57th Street is a business, and however much the artist may rationalize the necessity of a dealer to act as middleman between himself and the public, it is the dealer in the end who calls the tune.

Nothing is ever so clear-cut that it is all black or all white, and it would be foolish to assert that no exceptions to the rule exist. But how many Willard Galleries are there that present artists who are swimming against the current? Indeed, an excellent example of the insidious domination of dealer standards currently in fashion was well illustrated in the response of New York artists to the Morris Graves’ exhibit. Graves, who lives at the other end of the continent, and who might reasonably be said to be as remote from the 57th Street influence as any artist in the country, has committed the unforgivable sin of painting in a manner contrary to the prevailing “abstracted” expressionism now in vogue. Unquestionably, Graves presents a disturbing element—a threat to the protective insulation which has been built up over a long period. The nature of the criticism leveled against him seems highly significant, for in spite of the fact that modern art has "borrowed" from, or been inspired by all manner of prehistoric and ancient art, Graves is accused on the ground that he has done likewise. What then is the cause of antagonism? For one thing, his objective source was not the extensively accepted African, Polynesian of Amer-Indian forms, but that of Ancient China. Save for the brief and superficial influence of Japanese prints on Impressionism and subsequent developments, the art of the East has been bypassed by the Modern Movement. This again has its significance, for it becomes increasingly evident that it is the form, and not the spirit underlying the form which has been the basis of attrac-
...infinite variety

in authentic modern

top group
- van keppel-green divan
- nelson slatted bench, noguchi table
- h. g. knoll chairs

right group
- herman miller chair
- nelson drop leaf table, miller cabinets

left group
- h. g. knoll chair
- jaeger divan, martiné table
- eames chair
tion among the moderns for primitive arts. Oriental art is far too subtle, complex, and metaphysical to provide easy access. But then, all "primitive" art is likewise metaphysical. It is merely that most of the moderns have chosen to overlook this fact, finding only psychological interest in what was originally intended to have cosmological and ontological import. The violence of the reaction against Graves' new development, however, is only superficially because of his form, or even his source material. The crux of the matter lies in the fact that he offers a spiritual challenge to every artist who has forgotten that "art" without meaning is not art at all.

What is said here is by no means an attack upon the integrity of all New York artists or those influenced by New York. Contact with many of them reveals them to be as sincere in their intentions as is fitting to the creative man. But sincerity or "good intentions" (with which it is said the road to Hell is paved) is scarcely the criterion of art. Every artist must be prepared to answer—or rather see to it that his work can answer—the question: "What does it mean?" It is all very well to have met this insistent and often embarrassing query by the counter demand addressed to the spectator: "What do you mean?" But this is begging the question. More disastrously, it has built up the implication that art does not have to mean anything!

Like everything else in the contemporary world, art is in a critical condition. The perennial devotees of representationalism need not be considered here. They will go on more or less as they have always done since the Renaissance until the system to which they give allegiance collapses. But among those who have already made some effort at revolt against this system there is grave need of re-evaluation. Modern art since its inception has been on the defensive. However, looking back on the situation at the time of the Impressionists and as late as the Cubist, Constructivist and even Dadaist positions after World War I, there is ample evidence that the Modern Movement then contained a vitality which grew out of its intense faith and belief in the rightness of its course. No such positive position can be detected today. Rather it is a losing battle to hold the ground gained a generation or more ago. At present this is being reflected in the controversy aroused by Boston's Institute of Modern Art changing its name to the Institute of Contemporary Art. It is unquestionably a victory for the forces of reaction. The pity is that the "Moderns" do not understand why it happened. They do not understand that somewhere in their evolution most of them tossed out as excess baggage the meaning that rightfully belongs to all true art, ancient or modern, abstract, non-objective or "contemporary."

This weakening of the position of Modern Art is also to be detected in such institutions as the Museum of Modern Art and the Museum of Non-Objective Art. In spite of the occasional additions to its collections selected from among the work of younger contemporaries, the Museum of Modern Art is primarily devoted to what might be termed the "old masters" of the modern idiom, and thus is essentially conservative. It proves itself the weakest in the very place where it should show the greatest strength: the charting of a course in terms of a living and meaningful art. Were such a policy established one would not find so many works in their collection taken from the back waters, the stagnant pools of contemporary expression. A museum, no less than an individual, cannot maintain an impartial point of view without descending to the level of a professor required to present all sides of the question. Even under such circumstances preferences and prejudices are operative. To make choices is not only a human capacity but a human obligation. To attempt to find some good in all modes of art expression is to negate the idea of good entirely, since we only know that which is good by knowing that which is bad. It seems time for the Museum of Modern Art to do some serious evaluating on such subjects as the "art" done by those who have "taught themselves;" on the proper meaning of "magic" in art; on romanticism and expressionism; on industry in art—and particularly on

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We live by the adage that half a loaf is better than none. If so, then perhaps we should be grateful for what the Museum of Modern Art has accomplished. On the other hand one cannot help but regard the loss of what could be valuable guidance through the bewildering and contradictory developments of art in the 20th Century. The half a loaf which is to be received here, however, must be considered as manna from Heaven when compared to the myopic glasses with which the visitor is presented on entering the Museum of Non-Objective Art. When one again comes into the daylight there is the sensation of having just left a house of death. Whatever value Kandinsky may have had is now swallowed in the vanity of persons who have plundered his form without ever having penetrated to his substance. In no better place than here can the lesson be learned that it is the spirit and not the form which animates art. And none more than the moderns of today need to learn this lesson. New Yorkers are not without opportunities to study from authentic sources something of the nature of meaningful art as it existed in traditional cultures. But how many artists avail themselves of the magnificent pre-Columbian exhibits at the Museum of Natural History or the Brooklyn Museum? How many have studied the Egyptian, Babylonian, Etruscan art at the Metropolitan, or the Oriental collections which may be seen in each of these places? Surely 57th Street reflects little of such knowledge. Rather 57th Street, and that which overflows on either side, is like Heinz 57 varieties. Whether it is soup or pickles, it is all finned or bottled—made ready for consumer use.

But—will it be said—does not art, in order to function, have to have a "consumer?"

Certainly. The answer to this, however, is contained in a more fundamental consideration: on what the artist bases his first principles, his reason to work, his objectives to be striven for. Contained in the answer is the entire problem of values and purpose in life, and on such will be determined the nature of the results. Either we believe in the monstrosities of this "civilization" which we have helped to create, and live by its standards, or we recognize their basic contradictions and fix our sights on other goals. There is a point in the life of any structure when demolition is necessary before reconstruction can begin. A house may be repaired for just so long; then it must be torn down. The shelter which some dwellings seem to provide offers a false security against the elements. We must estimate the fury of the storms ahead. Today "The Rock" on Puget Sound, which is the home of Morris Graves, appears to have far greater capacity to weather the blasts that are to come than any of the piles of gravel which make New York the most spectacular but surely not the most enduring of cities.

ART NOTES FROM SAN FRANCISCO
CLAIRE FALKENSTEIN

The stimulation and satisfaction of our aesthetic sensibilities may come about through the immediate surroundings of the home, of the street and shop window, as well as through the museum. With this idea, I went to San Francisco, eyes wide, senses receptive. The general excitement that the city induces as one approaches it from the Bay Bridge, its "amphitheater setting," its concentration of much in little space, keys one for contrast, for quiet. I came off the Fifth Street ramp, drove west on Harrison, and within the first block something attracted my attention. An event was taking place there; an outdoor mural was being executed on the recently completed building of the regional headquarters of the Peterson Tractor and Equipment Company. The fact that the architects found an outdoor wall surface available for a mural was gratifying. The building, because of its simplicity and space planning, seemed isolated in the midst of the chaotic surroundings. I pulled to the curb to view the work more closely and to talk to the artist, Don Clever, who was painting. One of the most interesting points to me, and I hope to the reader as well, was the technical problem presented and met. The artist explained that he was painting with oil tube colors, thinned with turpentine, on an eight ounce duck canvas. The canvas was laid on the cement.
wall with white lead and hung in the manner of wall paper. There were seams, of course, but they were imperceptible. Though the work is beneath a deep cantilevered roof, it is subjected to bright sunlight, moisture from fog and rain with the consequent expansion and contraction of the surface; as it was planned to last for twenty years, a maintenance job would be necessary. Mr. Clever said that he intended to varnish the whole wall lightly at first, then, after a few months when the oil would be absolutely hard and set, he would varnish the work again heavily. On top of this would be placed a mixture of transparent, cooked-up corn starch; by means of which, grime and dust from the street would be removed periodically. Its ease of application and removal would leave the work intact and clean.

Continuing on, I found that certain general conclusions could be made concerning a tour of the museums and galleries, one being, that the museums and galleries reflect the malady of the city and shop windows: overcrowding. The senses are pummeled rather than led through suggestion. Let us ask for more storage space, even at the expense of exhibition space, so that we may put things away and exercise the principle of "little is more." One thing, well shown, is a delight; many competing things, no matter how fine, are so fatiguing to look at—are not really seen.

At the deYoung Memorial Museum one thing is shown in the Egyptian Gallery which alone would be capable of vitalizing the whole room. It is a new acquisition in Egyptian sculpture of the sacred bird IBIS from the XXVI Dynasty (663-525 B.C.). The wood and bronze of the sculpture is a beautiful combination of materials. The bronze is green with age, and the warm gray wood is eroded into a ridging texture. The restraint of the clasping tense curve covering the contours gives power to the form. The neat balance of weights produces a response in us that must be comparable to that produced in the artist's contemporaries.

Among the current exhibitions at the California Palace of the Legion of Honor, there are three of special interest. The work is diverse: ancient glass, gouache paintings, home furnishings. Aside from the creative quality of the work, the effectiveness of these shows is due, in no small measure, to the dramatic presentation. The first, an exhibition of ancient glass from the centuries 200 B.C. to 200 A.D. for the most part, gathered from various places in the Roman Empire, is from the collection of Faiz Omar Kayyem of Los Angeles. The darkened room, with the material in lighted cases, frees the observer from other visual stimuli, thus letting him concentrate on each case in turn as he moves around the room. The glass is composed of small bottles for daily domestic use, ewers, perfume bottles, wine jars and flasks. One thrills to the shapes and to the iridescence. The use of artificial light emphasizes the rich colors. The second, is an exhibition of gouache paintings by Milton Cavagnaro. The space relations in the arrangement of the work in the gallery itself are more than satisfying. The use of natural material as part of the exhibition—drift wood, shells, dried leaves and branches—makes for a friendly atmosphere both to the art and to us. As panoramic enlargements of minutiae, with a range of motifs and a spontaneity that is refreshing, the paintings would be marvols points of departure for textile designs. The third, entitled FOR MODEL INTERIORS, is a grouping of furniture, fabrics and ceramics in the Central Hall, down stairs. The furniture was designed by Charles Eames, Van Keppel-Green, George Nelson and the Design Workshop. Of the fabrics, the one entitled Cactus by Ben Rose, was particularly nice. Ceramics by Whitney Atchley Edith Heath and Perla Lein were chosen with taste. All of this being worthy of a museum showing implies that contemporary useful objects may be works of art also. Further, that a museum is an institution for living art and that gathering together of such home furnishings offers an invaluable educational opportunity.

The private galleries in San Francisco are showing a variety of work, and as every art object is conceived and executed by a person, a variety of persons is represented. The observer is led through technical and aesthetic avenues to communicate with thoughtful and profound persons, or with gay and even with superficial or dishonest ones at times. At the Raymond and Raymond Gallery, John Langley Howard's gentle nuances, in value and color in the small drawings and watercolors he is now exhibiting, are
contrasted to the angular, strident, bright-hued, large oils of André Moreau at the Rotunda Gallery, City of Paris. Also represented in the Rotunda Gallery are Marie Crues, Ruth Armer, Jean Varda and Ernest Mundt. Marie Crues, in her paintings, cuts space into depth pieces, then holds them tightly bound to the picture plane; whereas in the paintings of Ruth Armer, the shapes are freed so that, even though they remain within the rectangular area of the painting, they float. The glorious, singing color of Jean Varda's collages and the witty wire forms of Ernest Mundt conclude this group showing.

The Jewelry of Caroline Gleich Rosene and the weaving of Siminoff are combined at the Lucien Labaudt Art Gallery. Both are better than adequate craftsmen. Mrs. Rosene is playful in her attack on form; Siminoff shows tender feeling in her use of texture and her choice of low saturation colors.

At this writing, the forthcoming group exhibition to be held at the Gregor Duncan Gallery, California Labor School, has not been hung. However, I had the good fortune to see some of the paintings and sculpture to be included. The fluid, fired enamel painting of Sargent Johnson was especially provoking of attention. His is an adventurous technique.
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new values which are constantly being criticized by standards applicable only to subjective art. As developed in this book, however, it would appear that abstract art is the logical if not the only possible direction for modern art to take. Such conclusions would not restrict art if what Dr. Dorner says is true, that, "Esthetics has run its course as 'form' experience.'"

The second section of THE WAY BEYOND 'ART' is a study of the industrial designer, Herbert Bayer, who, Dr. Dorner says, "as a painter evolved beyond the 'artist' stage."

In his desire to drive home the necessity that functionalism in art keep abreast of our age, the author places Bayer on a pyramid already constructed by Michelangelo, da Vinci and their peers, when, in reality, Bayer could sit on his own well-constructed pyramid as one of the foremost designers of today, whose influence on the graphic arts makes him worthy of serious study. The numerous illustrations of his work in this book could keep commercial artists and advertising agencies in ideas for the next twenty years.

That Dr. Dorner should feel compelled to coerce art into a theory of functionalism is a result of his primary concern with science. He has shown with exceptional clarity the parallel between science and art. In merging the two fields for the sake of a theory, he has substituted a material science for the essence of art. When art ceases to be an intuitive expression, its contribution to culture will be, as shown in the work of Herbert Bayer, design. To urge the reader's acceptance of Bayer's work as "fine art," Dorner insists that abstract art is still imbued with the characteristics of a dying world, whereas Herbert Bayer has devoted his efforts to a closer inter-action between his work and everyday life.

Perhaps the best appraisal of the book and of Dr. Dorner's theory can be stated in the words of John Dewey, to whom the book is dedicated and who has written its preface. "In the confusion that marks a period of conflict of an overlaying old with the incoming new, it is extremely difficult for one who is sensitive to both to find secure lodgment."

MUSIC

PETER YATES


Here is a book I have been waiting for, and I must confess that I am disappointed in it. At a first glance one finds, more glorious than prints of Titian or Velasquez, reproductions, not of passages and phrases, but of entire compositions by masters whose names the world has too readily forgotten. Some of them are acquaintances whom I have known only by a few works, some of them, strangers. Willi Apel, the author and compiler, has devoted a large part of his career to the rediscovery of these ancients. But the chapters leap ahead from period to period and, though the selection still remains pertinent, I wonder why so much space has been given to reproducing the "Sixth French Suite" of Bach, surely no stranger to anyone who would care to read this book. Here in due course comes Haydn, a sonata out of the common way I must admit; an astounding set of variations Mozart wrote when eight years old; a passionate boyhood sonata by Beethoven; then pages of Chopin, Schumann, Brahms; an interesting late "Elegy" by Liszt; Debussy, oddly represented by his "Sarabande"; and finally the piano music of our time, a study as diverse and needful to be made as Willi Apel's revival of the ancients.

Around these rewarding examples is wrapped a series of eight lectures, the brief survey, which will be followed, according to announcement, by a larger and more thorough history of keyboard music. Looking forward to this feast one learns to the taste one would sip a cocktail in anticipation of a dinner that is being prepared. In the first chapter, one learns that the oldest of keyboard instruments, the organ, dates from at least 250
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B.C. At that time a Greek engineer living in Alexandria built an instrument known as the "hydrailis," using water pressure to force air through the pipes. A clay model is shown of a similar organ from Carthage.

The second chapter, "The Late Middle Ages," begins the recorded history of keyboard music. Here a little dance in parallel fifths from the fourteenth century Robertsbridge codex shows by its first and second endings that it cannot have been an isolated phenomenon. The whole composition, says the author, is rather extended. I know only one more part, which is in another Apel collection. After this example of music vital today, though harmonized in a manner archaic at the time when it was written, the tale by necessity jumps a hundred years to the first surviving pieces of early German keyboard music. Though an advance in style, this is a retrogression in effect. The little pieces by Illeborgh, Paumann, and Baumgartner are historical relics, having small appeal for modern listeners or players.

The chapter ends with a statement, which I quote because it is the truest generalization in the book: "... The activity of such composers as Schoenberg, Stravinsky, and Hindemith... have made it abundantly clear to us that the tonal system of major and minor is no divine institution, as it was considered as late as thirty years ago. It was a man-made conception which began to appear in the sixteenth century and became firmly entrenched after 1600... The modern hearer, who more or less readily accepts the dissonances of present-day music, is well equipped to understand the musical language of the Middle Ages. ..." I might add that the modern listener who does not accept these dissonances is in an esthetic rut and had better get out of it. If he cannot go onward as he should, he might with the help of this book try going backwards. Since the subject has come up, why does Apel fail to recognize Bartok's unique contribution in linking together the pre-harmonies of ancient folk-music with the post-harmonies of Debussy's impressionism to get clear of the seven-tone scale and establish in his own manner the equivalence of all twelve tones?

The next chapter, "The Renaissance," introduces Arnolt Schlick, grandfather of German keyboard art. Two examples are given, the second "Maria zart" being the original of all the later chorale-preludes on hymns in the vernacular. Thus German music began to find its way clear of the cantus firmus. The remainder of the chapter deals with the highest period of early keyboard writing. Honor, long overdue, is given to the blind Spanish organist Antonio de Cabezón, first master of the keyboard. Though several obscure Germans turn up in the text, no mention is made of Cabezón's contemporaries, the sixteenth century Spanish organists and their devout, passionate fantasias. Andrea Gabrieli and Claudio Merulo, originators of Italian keyboard music, are carefully exhibited. Then follows one of the miracles of music history, the "Hornpype" by Hugh Aston, a sweeping virtuoso composition as alive today as when it was written, which testifies in its unique survival to the prodigies of improvisation that must have occurred at the court of Henry VIII of England. Thus grandly entering into the greatest period of English music one comes upon "The Carman's Whistle" by William Byrd.

Nobody enjoys "The Carman's Whistle" more than I. As a set of concert variations, with something of the character of the scabrous ballad of its thematic origin, it has not faded; but it is not a good example of the native style of Byrd. To supply the one is given the familiar and charming, though nearly the least, of Byrd's pavans, "The Earl of Salisbury," followed on the next page.

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by the magnificent pavan of the same name by Orlando Gibbons — part of which is also shown on the dust-cover of the book. This is not fair. If Apel had chosen more thoughtfully he might have set together for comparison the opening variations by Byrd and by Gibbons on the familiar tune "The Woods So Wild." It is the difference between Mozart and Sebastian Bach. Apel has actually done such a thing in setting together the openings of the "B flat Sonatas" by J. C. Bach and Mozart. The resemblance in this case may be more deliberate, a somewhat overwhelming compliment by Mozart to the idol of his boyhood, at the time of their last reunion, after many years, in Paris.

My own selection for a single work of Byrd, to stand beside the great pavan by Gibbons, would be the "Hexachord," from a Paris manuscript, which after a proud opening springs with wit and fantasy into a pair of folk-tune variations. This is a concert work that needs to be revived and royally played. The omission of any sample of Gibbons's fugal fantasies may be excused; the big pavan carries a great deal of their character. To omit an example of Bull—or for that matter Purcell, Blow and Field—while including a Mendelssohn "Song Without Words" and four portions of Schumann must be reckoned proof of a Germanic bias. Being already in the course of a digression I should like to know why "The Carman's Whistle" and the Byrd pavan are shown ornamented, while the Gibbons pavan is not. As is usual in modern editions, the number of beats is reduced by half in shakes that Gibbons went to the trouble to write out and the engraver of "Parthenia" to print. I never can get the hang of scholars who swear by the ur-text and rearrange the notation in their editions as they please. For that matter, the book contains, except a couple of slight footnotes, no information about the playing of the embellishments.

The fact is that Willi Apel's eight lectures on the history of keyboard music are too brief, casual, carefree, and indiscriminate to be fully useful to anyone who knows enough about keyboard music to wish to read the book. What has been given here tries to do for a history and cannot. Fragments of valuable information turn up in each chapter. One learns that in Mr. Apel's opinion the Frescobaldi fugues are not by Frescobaldi, a purely musicological judgment with which so eminent an editor of this music as Alfredo Casella would appear to disagree, since he includes these fugues in his edition. I suspect Willi Apel is right. It is a loss to Frescobaldi enthusiasts but not to music, though snobs may now disregard these fugues. One discovers with interest that Froberger did not confine himself to writing preliminary contrapuntal exercises to be improved on by Sebastian Bach; he could as romantic as Schumann. The example is a "Lamentation on the most unhappy death of his Imperial Majesty, Ferdinand third." Yella Pessl's recent collection "The Art of the Suite" contains Froberger's "Complaint written in London to get rid of the Melancholy."

I do not agree with Apel's characterization of Francois Couperin as decadent in comparison with Chambonieres and D'Anglebert. The "Passacaglia" from Couperin's "Eighth Order" as well as the "Movement in Passacaglia, L'Amphibie," from the "Twenty-fifth Order" should bear out this contradiction. Neither Chambonieres nor D'Anglebert wrote anything larger, more restrained, or nobler. This is like the old notion that Beethoven's late sonatas must be decadent because they do not fit the rules of nineteenth century pedantry. Will some patriotic French publisher do me the great favor of issuing solid collections from the many keyboard works of these two earlier masters, and those of Louis Couperin.

On the subject of New Music the author says so many foolish things I hesitate to know where first to take issue with him. Many of the examples are well chosen. Scriabin and Schoenberg are wisely represented. A fragment of Stravinsky's great "Concerto for two pianos" is given, supplemented, oddly enough, by the "Waltz" from "The Soldier's Tale"— not a keyboard work. Of Bartok, by all adds the greatest keyboard composer of the century, only a fragment of "Allegro barbaro" is given, with the comment that it shows the influence of African music. If one is to look continued on page 56
CASE STUDY HOUSE NO. 13 DESIGNED BY RICHARD J. NEUTRA

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Hope, springing eternal, sometimes has a bad habit of sticking in one's throat or flying in the teeth of one's friends. Hope of heaven on earth has been well up in the noble thought department for, lo, too many years! It is, of course, true that we have realized much of it and succeeded in charting out wide areas to be filled in later with man's own growth and experience of a greater wisdom about himself.

But we have all been very, very sure about the "good" world without taking any too much trouble to find out exactly what kind of a "good" world it would be if we could ever really get our hands on it. Most of us in our various ways seem pretty sure about what goes into the making of a "bad" world, and, having settled that for ourselves, we are inclined to be rather smug about what exists outside of our own personal dimensions. Being completely satisfied with our own standards, we are likely to be rather irritated if they are not generally accepted, though realistically we know damn well they are not. Perhaps it is because any "good" world can only become true in terms of other human beings and that we can only help it come about if we can learn to measure values that are outside our own experience. Otherwise we are neatly trapped within the center of our own moral and political judgments, and we are likely to destroy much more than we can ever hope to create.

Peace has come to mean not a sensible judgment of human need upon an international basis. Peace, for most of us, has come to mean merely rest and a little quiet for a change. The peace that too many of us visualize is a static suspension existing in a gentle vacuum that is held together by nothing more than the connective tissue of wishing to be let alone. We have developed a bad way of dismissing peace with high style nobility and letting ourselves be irritated immensely that it cannot be sustained by reverence alone. Faith and justice are very fine words indeed, but they must be used with a greater economy and a more sincere intention. Faith and justice must have at least as much practical meaning and sense of personal involvement as meat and potatoes. These are real words in a real world, and from here on in, when we use them, they must be used with meaning and conviction.

Peace in a modern world is a complex dynamic that moves with the same inexorably consistent force as its opposite. It must be maintained constantly in balance with every other element that creates what we call the human society. Peace, by the very nature of our time, can no longer be considered as the status quo. Like freedom, peace is a fluid, everchanging element in human affairs, and because it is a part of life, it must grow and change and take its form from the nature of life.

Perhaps if we could be more willing to consider this a time of urgency and of necessary adjustment, we could see with greater clarity our place in history and understand that this time is one for which the past has been preparing us but can no longer solve for us. And, more important, we could perhaps be better able to judge the extent of adjustment necessary to bring balance to the human community. First, of course, being very sure that we understand this necessity of participating in the full sense of "human community." Surely we must know, in order to assess the values of our time, that truth is the basic economic element of freedom. It is an attempt to arrive at such truth that has become the principal purpose of the United Nations Educational, Scientific and Cultural Organization.

This international body is set up to function as a "people's agency" to analyze and to define the best and the most reasonable means by which an honest balance can be brought into the disorder of man's society. It attempts, at the highest international level and certainly at the best intellectual level to bring together those who are equipped to find the most reasonable means by which we can continue to exist as human beings. UNESCO deals particularly with communication, education, cultural interchange, human relations and the natural sciences. It exists for the principal purpose of developing an international vocabulary to be used as a means by which man can fully understand mankind. It would seem that here we can have a very real hope unconditionally and unequivocably directed toward a real peace. But in this case hope must do much more than merely spring eternal. Hope must become an amalgam of man's aspirations welded into an instrument powerful enough to make itself heard above the din of chaos.
design and the machine
by jan de swart

A most rewarding project, both from a practical and an inspiration-
al viewpoint, is an intensive, explorative study of the machines in-
volved in the making of objects. The more familiar the machine, the
more likely we are to find that it has been invested with a very
limited repertoire. An experimental approach alone can yield in-
sight into its manifold potentialities and clarify its limitations and
compulsions. A study of the bandsaw is one example that illus-
trates this point.

Characteristically, the bandsaw cuts a straight or curved line, leav-
ing an unfinished saw-marked surface. The process of setting the
saw-teeth, even when done mechanically, leaves some teeth pro-
truding farther than others, so that the wood is torn rather than
cut apart. By experiment it was found that by using two carborun-
dum stones and pressing one gently against each side of the blade
so that it does not vibrate, the protrusions can be eliminated. At
the same time the saw is sharpened to such a point that it pol-
ishes as it cuts. Since the hand-finishing of a saw-cut surface,
particularly an intricate one, is by far the most tedious and time-
consuming step in making a study, it is a decided advantage to
let the machine, with its speed and precision, do this work.

A second experiment concerns the tilting table. This is ordinarily
used to cut a piece of wood on a certain angle, an operation bear-
ing no relationship to the reassembly of the segments. By tilting
the table at various degrees the taper of the cylinder cut out of a
block, and its protrusion from that block, can be controlled. When
the table is level the cut-out cylinder is separated from the original block. When the table is tilted the cylinder becomes a cone. This is only partly released from the original block because its taper limits the movement outward. The greater the degree of tilt, the less is the protrusion of the cut-out part. With this technique one can "explode" a block into any number of related segments. Their fit is so perfect and their seams are so invisible that the effect of a solid mass can be retained.

As many as twelve compositions can be made from the fragments of a single block. The various segments may be assembled unglued so that they can be interchanged to invite the creation of new designs. Care should be taken in the original cutting that each piece is a beautiful form separately, as well as a beautiful part of a balanced composition. A simple way of accomplishing this is to repeat the design in different sizes. Harmony, results, no matter how intricate and small the segments. An astonishing phenomenon is created by gluing the various fragments into an interesting composition, then taking this to the bandsaw and again cutting it into segments.

The complexity of such studies is overwhelming. And yet the method is so simple that a boy of fourteen with clear instructions can succeed in a project like the following: On the top and one side of a block of wood, mark two circles, one larger than the other. Set the tilt of the table so that you create a cone instead of a cylinder. Enter the blade with the grain of the wood so than an invisible glue-joint can later be made. Now follow the marked circle with the blade. Remove the blade through the same cut you used to enter. Before cutting the next circle, decide whether to remove the cone just cut or to wedge it into the block, eliminating the slight space the saw-cut has made. Two completely different effects are possible. If the wedge is left in, and the second circle is cut in the same manner, the two cones, when removed from the block, will pierce each other and leave an intricate inversion of their forms in the hollowed block. The results of this simple cutting along two lines is a group of three interrelated separate pieces which seem to be carved out of one block. The whole project does not take more than ten minutes. Its variations are unlimited. Its effect on the boy is astonishing: his interest captured instantly, his ingenuity challenged. The perfection and professional appearance of the result give him a feeling of mastery that could be acquired from handicraft only after long and laborious apprenticeship. Any teacher who has despaired of finding a program that can compete with the diversions which threaten a creative impulse today will realize the value of this stimulus.

To me, as a designer, such studies are more than a persuasion... they are a revelation. Thus, when I cut into a block, linear continuity becomes an adventure in the third dimension. I am catapulted into a realm of space and volume, line and shadow, where I am released completely from all that is limiting and binding. The harmony that emanates (continued on page 55)
This is a restudy and new solution of Case Study House Number 1, as proposed by J. R. Davidson, and is the ninth in the continuing series of Case Study Houses being presented by the magazine, Arts & Architecture. Construction is now in progress on a 100’ x 125’, moderately level lot in a centrally located neighborhood in North Hollywood.

The house is planned for a hypothetical family consisting of a couple in early middle age, both active in careers which keep them away from home frequently. It has been developed with special consideration for an abundance of light and air, easy housekeeping and minimum maintenance, with emphasis on indoor-outdoor living. The rear property line is formed by a row of high eucalyptus trees, which, combined with the 12’-above-street-level elevation, give the property a natural privacy. Other existing trees will become a part of the over-all landscape development. By orienting the house diagonally, a better exposure to the sun is gained, as well as an easier driveway. The garage floor is 4’ lower than that of the house, and is connected to it by steps combined with a low incline ramp.

Ample provision for ease in entertaining large gatherings of friends, both indoors and outdoors, is an important consideration. A garden adjacent to the master bedroom and separated from the main garden by a high circular fence affords a quiet area for sun bathing and rest. Two bedrooms are separate but connected by a combination bath. A 7’ wide passage divides the guest quarters from the house, both units being under one roof. Maximum garden area is assured by placing the service yard on the street side and making it an architec-
tural part of the exterior design: first, by using the same material chosen for the wall treatment of the recessed main entry; second, by extending the roof across the service yard with the greater part of the overhang open.

The structure is standard wood frame on a reinforced foundation with water-proofed reinforced concrete slab floor. Exterior is of the new aluminum siding. Interior finish is painted plaster except the north wall in the dining room, which is paneled in hardwood ply. Floors, carpeted throughout the living areas and bedrooms; asphalt tile in bathrooms, kitchen, laundry, breakfast alcove. All north walls and ceiling are well insulated. Roofing, built-up type. All soffits of the overhang, as well as the ceiling in the passage and outdoor eating porch, are of waterproof plywood. All working surfaces in kitchen, breakfast counter, lavatory tops, including splashbacks, are covered with formica. Color, either integral to surface material and furnishings or pigments applied, is to be an important feature. Among the special features is the use of "all gas" equipment—forced air gas-fired heating, evaporative air cooler, range and water heater. Lighting is indirect with concentrated strong downlight over working and reading spaces.

Construction schedule calls for the completion of Case Study House No. 1 this fall. At that time it will be placed on exhibition, completely furnished and equipped. A partial list of merit specified products will be found on page 57 of this issue.
This small modern two unit apartment was designed to relieve an urgent living problem for a family of three. The solution began with the clients' acquisition of a typical city lot 50' x 124' in an already built up neighborhood. Inasmuch as the zoning in the area permitted income units, it seemed wise to plan a two family house. With a preliminary floor plan the clients approached a contracting firm which was able to give an estimated bid making the project a possibility. The price was possible first, through a regard for the greatest economy and planning of sanitary installations; second, the simplest possible structural methods; and, third, no interference on the part of the designer for any special detailing. While this last might have resulted in perhaps a more finished result, inevitably it would have added to the cost which was a primary consideration. Beyond the general specifications everything was more or less left to the responsibility of the contractor whose intelligence and interest made it possible to approach the project simply and economically. The square foot area of the entire two unit house, including the garage and work shop in the service yard is approximately 2600 square feet, which, in the final analysis of the completed building cost, came to approximately $8.50 per square foot.

Orienting the 2600 square foot structure on a building lot of 6200 square feet became quite a problem, and in the beginning it was felt that the rear apartment would have less value than the one fronting the street. But upon completion, it was this unit, because of its simplicity and removed privacy, that seemed the most desirable to the clients. On completion of the project it was found that no further expense had been added to the original estimated cost, and this at no sacrifice to the high standard of construction. The floors in living areas are either carpeted or are of hard wood, showers and bathrooms are tiled, the kitchen has asphalt tile floors and marble table tops.

The rear apartment which will be owner-occupied has the advantage of much window area, one of them being 36 feet long from ceiling to floor; two bathrooms, many closets, an enclosed garden and work shop. In the economics of such a project it has been found that the income from the rental unit would be enough to cover the approximate amortization and interest expenses of both apartments.
1. Living Room
2. Dining Area
3. Bed Room
4. Bathroom
5. Stall Shower
6. Kitchen
7. Service Closet with Hot Water Heater, Washing Machine, and Laundry Tray
8. Incinerator
9. Service Patio with Open-Air Breakfast Table
10. Covered Terrace and Main Entrance
11. Light and Telephone Pole
12. Terrace
13. Two-car Garage
14. Tool Shed and Hobby Shop, in connection with
15. Tommy’s Play Yard
16. Garden, completely enclosed
17. Entrance Patio for the Back Yard Apartment
18. Rock Garden
19. Neighboring Property
20. Existing Buildings
21. Street Entrance to Front Apartment
22. Street Entrance to the Marshall Home.
While the architect, Konrad Wachsman, whose principle interest is concentrated in the industrialization of building construction, felt that such a house built from finished machine made parts would give better results from the point of view of speed and price, the limitations of conventional construction were extremely interesting to him under the necessary restrictions of individual building projects under present conditions.

In arrangements for the duplication of this structure, small refinements and slight changes are contemplated which will in no way add to the cost. But having experience with the first unit, it is anticipated that those to follow will solve a living problem in contemporary terms for the limited budgets of those who nevertheless desire good modern housing subject to the inevitable restrictions of conventional construction methods.
I don’t feel too much impulse to set "human" (in the best sense of the word) against "formal" (in the best sense of the word).

If human is considered identical with redwood all over the place, or if it is considered identical with imperfection and imprecision, I am against it. Also, if it is considered identical with camouflaging architecture with planting, with nature, with romantic subsidies.

If international style is considered identical with mechanical and impersonal rigorism, down with international style. Anyway, the word is an unhappy one—just as unhappy as functionalism.

However, all this controversy was in order, I am afraid, about twenty-five years ago. Since, many things have happened. For instance, just as Sullivan didn’t eat his functionalism as he cooked it, Corbusier didn’t build his machine for living. Much less so than the some three thousand family housing developments of the West Coast, for instance, the same pseudo-prefabricated houses hill up, hill down, in rigid rows, or in rigid curves. Though quite redwoody.

Many things happened, as I see it, which some prefer not to see, because they want to prove, or better to create, a fifty-year-old original, native and modern California style full of humanity.

"Human" seems to me more than just a pleasant forgiving of imperfection, and an easy-goingness as to precision of thinking, as to quality of planning, as to consequences of materials, details and construction.

God knows, I am all for informal living, and for architecture in support and as background for this, but we won’t side-step the instinct towards achievement, a human instinct indeed. The most contrasting elements of our nature should be brought to happiness at the same time, in the same work, and in the same definite way. The drive towards experiment is there, together with and in contrast to the warm joy of security at the fireplace. The crystallic quality of an unbroken white flat slab is there, together with and in contrast to the rough texturey quality of natural wood or broken stone. The perfection of construction and detail is there, together with and in contrast to simplicity, broadmindness of form and use. The courage of conception is there, together with and in contrast to humble responsibility toward the client. The sensation of man-made space, geometry and architecture is there, together with and in contrast to organic forms of nature and of man.

"Sol y sombre" as the Spanish say. Sun and shadow—not sun or shadow.

From a statement made during the Museum of Modern Art Symposium, February 11, 1948
To the casual observer it might seem that any handle with which one may grasp or carry an object would fit the hand.

This exhibition demonstrates how a study of hands has led to a new concept of efficiency in handles, and how this resulted in a new design, handsome and adaptable.

Hands and brains are more flexible and productive in Man than in other animals. Largely through these two organs we have gained preeminence in our world, conquered nature in an unusual degree, and created an extensive environment of our own. Yet it is only recently that Man began to examine and analyze hands and brains, and to apply the knowledge gained thereby. The Wedge-Lock handle is such knowledge applied. In tests, compared to conventional handles of many types, it shows great advantages in firmness of grip and comfort; fatigue and strain are notably reduced.

The Lamb Wedge-Lock handle is shown here because it is an exceptionally clear example of the best modern approach to design; a careful evaluation of human needs and capacities led the designer to a fine original form capable of wide application.

Made of plastic, metal and wood and other materials, an average Wedge-Lock handle is five or six inches in length, approximately an inch thick and varies from an inch and a half in width. At first glance it resembles a piece of abstract sculpture, but it derives its form from a combination of scientifically designed contours, curves, angles, divisions and wedges which, in addition to providing natural gripping surfaces which tend to distribute and equalize gripping tensions, utilizes the full power of the thumb. As the handle is reversely symmetrical it fits either right or left hand equally, and doesn’t slip, roll or slide in the hand.

Material from Museum of Modern Art exhibition, photographs by Soichi Sunami
This vacation house is located on a large tract of land in northern California. The site slopes toward the south and commands a view of Tamalpais mountain across Fairfax Valley.

It was necessary to solve the problem in terms of vacation living by developing the patio for summer and the balcony for spring and fall. Consequently, the enclosed space is subordinate in importance and is instrumental only to the needed facilities for holiday living. The entrance doubles as dining space and guest bedroom, and all rooms join in a continuous gallery open to the southern view. The room below the balcony serves as storage space for garden furniture. To minimize gardening and yet provide flowers the balcony has been edged by a continuous redwood box, which is watered by the perforated pipe railing.
The accepted standard for viewing all products of design is natural illumination. This is so fundamental that even stage designers who are committed to the use of artificial light instinctively relate most of their visual effects to natural sources of illumination. A look back stage at the vast quantities of lighting equipment reveals how impractical it is to try to reproduce naturalistic effects outside the theater. Yet most designers—in this artificial lighting age—continue to design interiors as if by some magic they were to be seen only under natural illumination.

A developing sense of the functions and characteristics of light—artificial light—esthetically and physically, and a broadening acquaintance with technical means available today for using it are as essential to the designer as the knowledge necessary to use any structural or decorative material. The manufacture and development of equipment for the control of light are an engineering problem, but the determination of its use lies entirely within the province of the designer. The complicated technical aspects demand an evolutionary development which implies a sympathetic partnership between engineer and designer, but lighting is first a problem of design. It is the most blatant form of wishful thinking to expect the engineer—even the average illuminating engineer—to be a first rate designer. The designer has a great responsibility that few realize today.

Primarily light gives visibility. Without it nothing can be seen. The eye has evolved under natural illumination so that at first appraisal any use of artificial light should at least approach these conditions. In the matter of color this is quite possible; in terms of distribution it is ordi-

by Stanley McCandless

Mr. McCandless is Associate Professor of Lighting, School of Fine Arts, Yale University, and Consultant to Century Lighting, Inc.
norily more difficult because the designer seldom considers the problem of using available equipment to give the effect of low general and strong directional illumination; but in attempting to produce amounts of light similar to those experienced under the optimum conditions of natural illumination, there appear to be no practical means available today. Fortunately the eye is so adaptable that good visibility can be provided with only a small fraction of the amount ordinarily experienced under natural illumination.

Adequate as natural illumination is, when daylight wanes or where it cannot penetrate, we are forced to resort to artificial sources. Until recent years this was considered to be the only expedient, but we are beginning to realize that by designing lighting we can provide seeing conditions with even a greater element of comfort than that given by the uncontrolled conditions of natural light. Natural light discloses all things with unselective equality. At times it throws objects into shadow when it is most important that they be seen, or creates a glare that makes it equally difficult to see them. Research indicates that the eye sees more comfortably under increasing amounts of light than are usually specified for threshold (minimum) visibility so that the pathological aspect has become increasingly more important. We are awake to the problem of avoiding glare and promoting comfort. This might well be classed as a new function of lighting—to provide comfort in seeing.

Probably the designers major effort consists of the selection and arrangement of visual elements in a definite composition. Design for the uncontrolled conditions of natural illumination has been the standard for so long that it is difficult to grasp the scope of the extended opportunities, when the brightness, color and distribution of the visual medium, light, can be selected and arranged in conjunction with the more familiar elements of design. Furthermore, a good composition for one purpose can be altered to be equally satisfac-
tory for another simply by changing one or all of the above qualities of light to suit the new conditions.

With artificial light it is possible to reveal objects, details, or colors in proportion to their importance in the composition. It is possible to brighten, dim, and even to change the appearance of pigments, to accent or suppress forms, to create shadows or eliminate them, to throw a graded wash on flat surfaces, and if desired, to project the intricate patterns of a mural or stained glass window. All the benefits and beauties of natural light can hardly equal the great advantages of controlled artificial illumination in the hands of the designer.

Many a good design has been brought to completion only to find that it gives the wrong effect. It lies deeper than the abstract motive of composition. It has to do with a feeling, something akin to the thing we find or expect to find in the theater. Here it has been long known that after a careful selection of the style and colors of the scenery, costumes and properties, the lighting in the final analysis must contribute the mood quality to the stage picture. The audience must be put in the proper frame of mind as soon as the curtain goes up on the scene. After all, is this very far removed from the problem of creating the impression on an individual as soon as he enters a room, or sees an object which has been designed to cause a definite reaction? The natural coupling of certain words such as bright and gay, dark and sad, colorful and exciting, sparkling and vivacious, indicate how closely related lighting and feeling are. Lighting certainly serves the function of creating atmosphere and any designer who is unaware of it either shirks his responsibility or misses his opportunity.

These four functions — visibility, comfort, composition, and atmosphere — form the foundation upon which the design of all lighting is conceived. In the broadest sense these form the basis for all visual design and have been from the beginning of time, but now that light can be created in great quantities, economically, and modeled like any plastic material, the importance of the last two functions places lighting in the position of a modern design element such as steel and concrete were in architecture a generation ago.

Identification of the illustrations shown will be found on page 56.
Individually designed and individually constructed houses are almost negligible, numerically, in relation to the total of all houses built. The great majority of houses being erected today are the product of operative builders, who provide the lot as well as the finished house to purchasers who have little or no active part in expressing their preferences, or in determining the character of the structure. Most operative builders, like most radio writers and most movie producers, assume that they know "what the public wants;" and their assumption is usually insulting to the public's intelligence. This is not surprising, since the object of most construction is a quick and profitable sale, rather than the genuine satisfaction of a common general need. To the typical operative builder, a house is a commodity,
an object to be bought and sold. But the word commodity has another and equally correct definition: "the quality or state of being commodious; convenience; accommodation; benefit; advantage" (Webster).

The architects chosen to design the subdivision illustrated on these pages were at first incredulous, then delighted and stimulated to find that their client thought of his contemplated tract in terms of the broader and more human definition of the word commodity. This subdivider proposed to build a hundred houses for a hundred average veterans' families. These houses, with a floor area of approximately 1050 square feet on more or less average lots, were intended to bring to the typical home buyer the advantages of modern planning: full use of necessarily limited area; removal of living room from the main line of traffic through the house; direct connection of the living room with garden area away from the street; ease of maintenance, etc. It was required, moreover, that the plan satisfy the practical and realistic requirements of the Federal Housing Administration, and of the Veterans' Housing Administration.

To achieve maximum economy, through the efficiencies of standardization and repetition, it was decided to employ a single basic house type, allowing for considerable variety in exterior appearance by recourse to different relationships of garage to house. Further variety was produced (at the request of the lending institution), by turning some of the houses at right angles to the street.
Since the street pattern was largely predetermined by existing adjacent streets, the major problem resolved itself into establishing a floor plan. No one of the hundred hypothetical average families could be presumed to be really "average;" the house plan must be flexible, and adaptable to varied family compositions. Hence the liberal use of sliding partitions.

The two smaller rooms (most probably children's bedrooms) can be readily converted into a single larger room by rolling the intermediate partition alongside a blank wall in the hallway. Similarly, the room adjacent to the living room (normally the parents' bedroom, study or den) can be opened to and made a part of the living room. And one half of the width of the wall between living room and kitchen can be opened or closed at will. When opened (the normal position), the family eating space is accessible from both sides, and the housewife in the kitchen can participate in social activities in the living room. The plan finally developed is normally a five-room house, which can be advantageously converted, for different uses, into a four room, three room, or two room house.

The project (now under construction in the Mar Vista district in Los Angeles) employs the post and lintel system of construction, allowing generous window areas with no interruption of structural framing. Exterior and interior wall surfaces will be cement plaster. Asphalt tile on a cement slab provides a dry, resilient and easily washable floor only one step above the garden level.
HORIZONTAL SLIDING STEEL DOORS and WINDOW UNITS

Plans for Arts & Architecture's Case Study House Number 1 call for wide areas of floor-to-ceiling horizontally sliding glass... said designer J. R. Davidson, "I merit specified Steelbilt sliding steel windows because they impose almost no limitations in designing the proportions of windows to harmonize with the lines of the building; the simplicity of operation in opening and closing is an asset; and they are manufactured in stock design with 'built-in' track for roller and guides — in short, are delivered as a 'package deal.'"

WHERE LARGE GLASS AREAS ARE DESIRED, THESE DOOR-WINDOW UNITS WILL FULFILL EVERY REQUIREMENT -- DOORS SUSPENDED ON BALLBEARING ROLLERS
CURRENTLY AVAILABLE PRODUCT LITERATURE AND INFORMATION

Editors note: This is a classified review of currently available manufacturers' literature and product information. To obtain a copy of any piece of literature or information regarding any product, list the number which precedes the item about it on the coupon which appears below, and give your name, address and occupation. Return the coupon to Arts & Architecture, and your requests will be filled as rapidly as possible. Items preceded by a dot (•) indicate products which should be specified in the Case Study House Program of the magazine. Items appearing for the first time this month are set in boldface type.

APPLIANCES

• (469) Coolerator Company: Brochures unusually well designed, engineered 8½ cubic foot refrigerator; gives maximum storage space, including 40 # built in frozen food locker, 5 ice trays; also 15 cubic foot heavy duty home 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.

• (564) Ecko Products Company: Data, information complete on weight and size of air conditioned kitchen parts; well designed, engineered and dimensional data; belongs in contemporary kitchens, are used in all CSHouses.

• (480) Electrodry Mold Company: Folders, new inside domestic gas-fired incinerator, Gar-Disposal; neatly designed, well engineered; three colors; 12 pages, 8½ × 11; high, 20" deep, 20" wide; uses dehydrating downright action, eliminating all garbage, rubbish with no odor; A. G. A. approved; worth study.

• (470) Health-Mor, Inc.: Brochures, full information Filter Queen vacuum cleaner, exclusively merit specified for all CSHouses; no bag—instead cellulose filter in spacious metal container; empties easy as waste basket; 42 ounce and full size accessories, including paint sprayer and waxer; efficient, sensible.

• (61) Ingersoll Steel Division, Borg-Warner Corporation: Brochure (16 pages) in line CSHouse Number 18 providing kitchen, laundry, bathroom, heating, plumbing, electrical lines, installation, specification data.

• (472) Kaiser-Fleetwings Sales Corporation: Brochure, new information—just the right amount of technical, installation, specification data on new automatic food waste pulverizer; odorless, bug-proof, safe; disposals of boxes, fruit pits, Strophens food, sink drain; manufactured in west and readily available; used in CSHouse Number 18.


• (426) Howard Miller Clock Company: Information contemporary clocks by leading designers, including George Nelson; probably best approach to application of contemporary design to clocks.

• (492) George D. Roper Corporation: Excellent 76-page full color brochure new lineRoger range gases; beautifully designed four and six burner ranges with many creative innovations; these are gas and electric; full information and dimensional data; belongs in all files.

• (177) Southern California Edison Company: Brochure, well illustrated, idea-packed booklet electricity in house plans; full information electric appliances; one of best sources information.

• (365) Sunbeam, Inc.: Data, information complete list kitchen appliances—Mixmaster, Wafflemaster, frommaster, Sunbeam Toaster; well designed, highly efficient.

• (535) Utility Appliance Corporation: Brochures Gaffers & Cottrell range gas ranges, all sizes; automatic low-temperature oven control, no-filt racks; sizzle-roasting broiler; triple-click top burner controls; divided top with griddle; CP; well engineered; designed; merit specified CSHouse Number 1.

• (187) Western Stove Company, Inc.: Brochures, folders all Western-Holly ranges, including Town & Country eight-burner custom built; good contemporary design, well engineered; available immediately.

BOOKS

• (491) Kurt L. Schwarz: Catalog of fine and rare books; early editions of literary, artistic and scientific importance; collection choice of unusual interest.

• (345) Zeitz & Verbrugge: Catalogs books on architecture, art, imported, domestic, new, out-of-print.

CABINETS, COUNTER TOPS

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

• (119) Formica Insulation Company: Folder Formica cabinet tops; colorful, spotproof, durable, sanitary; does not chip, crack, break; not injured by alcohol, fruit acids, ordinary alkalies; withstands 275 degrees Fahrenheit; wide color range.

• (526) Frank Brothers: Full information Morton and American lines metal kitchen cabinets; good contemporary design endless combinations of units full specification service available.

• (493) Hotpoint, Inc.: Hotpoint kitchen and laundry installation manual; complete manual illustrated to show proper ways of affixing Hotpoint cabinets and of connecting Hotpoint appliances in a kitchen, particularly valuable to architects, builders.

• (481) Mutschler Brothers Company: Brochures, “No-Shok” electrical outlet receptacles merit specified in all CSHouses; snap-back guard close receptacles when plug is pulled out; protects against shock through inserting metal articles in plug slots; also guards against dust, dirt, water; keeps children safe; definitely worth investigation.

• (397) Southern California Edison Company: Brochure new remarkably well designed, engineered Customized Tracy Kitchen by largest manufacturer stainless steel sinks; double-thick baked enamel on rust-proof steel; ample toe, knee space; stainless steel pulls, tops, sinks; full cut, dimensional data; this is a must for all files.

DRAFTING ROOM EQUIPMENT

• (458) Clearprint Paper Company: Information new Papercloth as substitute for tracing cloth; marked stability under all atmospheric conditions, resists stretching, shrinking, buckling; takes ink, pencil well, doesn’t stain; easily removed; not damaged by folding; samples available.

• (482) Cowig Industries: Folder E.Z.C. Scale rule 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 full vision at point; leads propelled through spring tension point which prevents turning, wobbling, slipping; has colored top to indicate degree of hardness of lead being used; only one operating part; good drafting tool.

• (484) Rapidene, Inc.: Information new detailer template containing all most commonly used plan and side view hexagon bolts, nuts, screws; circles from 3/16” to 1” diameter, 9” scale graduated in 32nds; plastic.

• (495) Triple “E” Products Company: Information new pencil sharpener with bell-hearing indicator cap producing any kind of point from long-point blunt to long-point sharp; Bakelite plastic with hollow-ground blades; portable, size of salt shaker; handy gadget.

ELECTRICAL EQUIPMENT

• (245) Charles E. Barnes & Son: Brochure new Barnes Wire-Hiway baseboard wiring arrangements; provides wiring facilities; covered wires carried rear panel; front panel simple baseboard; outlets anywhere; foot switch to eliminate wall switches; good product.

• (308) Bell Electric Company: Folders “No-Shok” electrical outlet receptacles merit specified in all CSHouses; snap-back guard close receptacles when plug is pulled out; protects against shock through inserting metal articles in plug slots; also guards against dust, dirt, water; keeps children safe; definitely worth investigation.

• (449) Cannon Electric Development Company: Folders, information Canon Pathfinder Light designed to illuminate driveways, gardens, steps, pathways, etc.; light below eyenevel is thrown downward; well designed, engineered; practical.

• (466) Emerson Electric Manufacturing Company: New master catalog Emerson fans, ranging from table fans to kitchen and restaurant exhaust fans; 32 pages give design, construction specifications, full technical, installation data; one of top lines in field well presented.

• (398) Executive, Inc.: Factual, well illustrated folders Executive intercommunication systems for house, office, commercial, industrial use; technical, installation data; one of best sources of information; included information on paging systems; worth study, file space.

• (537) Fluorescent Fixtures of California: Literature new Allbright of California “Litemaster” fixture designed for continuous mounting; surface or drop; made for two, four, eight slimline tubes; spotlight units for accent lighting; heavy gauge metal chassis, cast aluminum ends.

• (528) General Electric Company: New 46-page catalog GE wires and cables; all GE thermoplastic, braided, leaded building wires and BW, entrance, Braid X, PXV cables listed, along with many other wires and cable products; information National Code requirements; NEC tables printed in full.

• (533) Illg Electric Ventilating Company: New “work book” on kitchen ventilation; complete treatment modern kitchen ventilation; remarkably well prepared, giving full data of requirements for kitchen ventilation, ventilation other rooms; features Illg built-in, portable and “packaged” units and stand-type ventilating fans; “must” data.

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Modern Kitchens are planned for utility. Here is a new revolving shelf that makes cabinets and coolers more convenient, more sanitary. Made of high grade aluminum, these sturdy shelves turn at a touch, making the entire cabinet space front cabinet space. Easy to install... quick to clean... 100% ant-proof... eliminates stooping, climbing and rummaging. Sizes for all standard coolers and cabinets. Write for descriptive literature and prices.

AIDS & ARCHITECTURE

W. R. AMES COMPANY
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(1) National Electric Products Corporation—Four-page booklet illustrating installations of Lopo-Trim, a hollow steel raceway for telephone, buzzer, and intercommunication wires; may be used as toe plate on the top of a baseboard, or as finish trim.

(402) Northern California Electrical Bureau: Data-packed 16-page, two-color brochure electricity in house plans; check lists, suggestions for every room, typical floor plans, adequate wiring information; practical, factual, best type of information.

(72) Square D Company: Full color folder Square D multibreaker; guards electrical systems against overload, short circuits; details wiring to use of multibreakers; good.

* (300) Square D Company: Well prepared folder new Square D Saflex Servicecenter Switchboard; three different size switches in four different potential ratings in one uniform size cabinet; safe and flexible; good new product by old manufacturer; worth investigation.

* (538) Square D Company: Brochures Safeflex low voltage control system making it possible to turn on all lights in house at once from one or more control points; reduces wiring cost, increases utility; small magnetic switch controls 120 volts, is operated by less dangerous 24-volt system; used in all CSHouses.

(497) Westinghouse Electric Corporation: New 12-page booklet wiring diagrams and kitchen layouts; plans for both L-shaped and 2-story feature houses meet recommended cabinet, counter surface requirements; gives specifications, dimensions for refrigerators, sinks, ranges, water heaters, cabinets, other equipment; valuable data.

FABRICS

* (485) Bolton Products Sales, Inc.: Information and samples Boltsafe, all-plastic upholstery fabric blending quality, toughness; good colors, soft to the touch, spectrum of 51 colors; will not crack, chip, peel, stain under normal conditions, stretch, sag; good product worth study.

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

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

(549) Frannie Dresser's Studio: Information one of best sources fabrics hand printed to specifications of architects, decorators; fabrics have won solid recognition contemporary circles.

(302) E. J. dePont de Nemours & Company: Brochure Fab Créte, new synthetic resin plastic-coated fabric for upholstery; resists cracking, abrasion, edge wear, tackiness, exposure, fire; wide color range; good product by big manufacturer.

* (429) Goodall Fabrics, Inc.: Information contemporary fabrics; wide range textures, patterns; colors; from handloom Dorothy Liebes; original, imaginative.

* (486) Greelf Fabrics, Inc.: Information wide line exciting contemporary fabrics; interesting textures, designs, colors; merit specified for CSHouse Number 7; definitely worth investigating.

(303) Boris, Kroll: Information good contemporary line textured fabrics; available Beverly Hills, San Francisco, Chicago, New York; interesting weaves, colors; worth investigating.

(430) La France Industries: Information Chic La France upholstery, modern texture and design from winning entry national fabric design competition; fiesta red, siesta green.

(558) Laverne Originals, Inc.: Information wide line of fabrics by 1947 AID award winners; 12 patterns, wide range color combinations; sturdy fabric, wide range textures; co-ordinate nicely with wallpapers by same designers; can be ordered from stock combinations or special colors; immediate delivery, moderate price.

* (407) Lumite Division, Chiepee Manufacturing Corporation: Brochure, samples Lumite woven plastic fabrics that can't fade, stain, scuff; wide range colors homogeneously integrated, many weaves, patterns; ideal for furniture upholstery, especially garden furniture; handles easily and does not "cup."

* (431) Menlo Textiles: Information, samples handloomed contemporary fabrics designed by Henning Watterston; textured upholstery, drapery fabrics; natural or custom-dyed.

(305) Pantasote Corporation: Free swatches, information Pantasote coated upholstery fabric; virgin vinyl; wide color range; new product worth investigating.

(539) Reg-Wick Hand Woven Originals: Information custom designed handwoven upholstery fabric; virgin vinyl; wide color range, new product worth investigating.

(444) Ben Rose: Information one of best designed lines hand-printed contemporary fabrics; intelligently handled, good colors, textures.

(306) Textilewharf Corporation: Brochure Tolex upholstery, wall covering plastic leathercloth; tailors well, cleans easily, stain resistant; wide color range.
These pieces may be ordered in any color to harmonize and complement interior design. Ceramic bowls, ashtrays and accessories available. Lamps begin at $25.00 retail.
Is Each Home You Plan a "GOOD RISK"?

Banks and other home financing institutions, experienced in home construction values, agree that a poorly wired home is not as good a "risk" as one with adequate wiring.

Homes, new or remodeled, which lack a sufficient number of circuits and convenience outlets, or which utilize wire of insufficient size, are handicapped for loan or resale purposes...and also fail to provide the efficient electrical service the modern family requires.

Make sure the homes you plan give your clients maximum value...financially and in the comforts and convenience of electrical living...by specifying certified Adequate Wiring.

Your local utility office will be glad to assist, without cost or obligation in the preparation of wiring layouts.

NORTHERN CALIFORNIA
ELECTRICAL BUREAU
1355 Market Street
San Francisco 3

FLOOR COVERINGS
(453) Bigelow-Sanford Carpet Company, Inc.: Information Lok-weave Gro-point carpet; tufts are locked in, cannot pull out; no sewn seams, damaged, worn areas easily replaced with leftover pieces.

(498) Cork Insulation Company, Inc.: Attractive full color folder Corinco high density cork tile for floors, walls; almost non porous, highly resistant to abrasion, wear; neutral color, available in strips or blocks; muffles noise, durable as hardwood, easily installed; is particularly adaptable to contemporary design.

(219-A) Gladding, McBean & Company: Folder Mission Red Floor Tile; hard burnished, smooth texture; ideal for paving patios, terrace, walls, ledges, facing walls, garden seats, stair treads and risers; 12" x 12"; western manufacturer, available.

• (309) Klearflex Linen Looms: Catalogue, brochures probably best known line contemporary rugs; exceptionally wide range colors, fabrics, textures.

(499) Mastic Tile Corporation of America: New four-color folder M-T-T asphalt tile flooring; homogenized pigmentation; 22 colors, patterns to harmonize with any interior; one of best sources good plain colors, flecked patterns; also available in greaseproof tile.

(434) Oregon Flax Textiles, Inc.: Descriptive brochure Flax-lex all-linen sources good plain colors, flecked patterns; exceptionally line contemporary rugs; unique texture from "twist-tie" and cashew patterns; also available in greaseproof tile.

• (388) Paraffin Companies: Pleasant 4-color booklet "Pabco Floors the Modern Home;" suggests treatments for floors of all rooms in house; practically suggests colors patterns.

(310) Shelley's Floor Coverings: Information one of best retail source contemporary rugs, carpets from foremost looms; new weaves, textures, colors.

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

• (744) Tile-Tex Company, Inc.: Brochures Tile-Tex asphalt tile, Muria-Tex plastic walls, Flexa-chrome plastic floors; well illustrated in full color, with full descriptions, color charts for all products; one of best lines by one of best manufacturers; well worth file space.

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

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

• (413) Breuner's: Information several lines contemporary furniture available through "modern center" in Oakland and East Bay region Northern California.

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

• (312) 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 delivery.

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

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

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

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

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

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

(488) Jens Risom, Inc.: Information interesting line contemporary furniture, accessories; simple, clean lines; good construction; one of best in field.

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

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

(540) Tappan-Keal: Brochure well designed line contemporary Cali-furniture; includes photographs, records, cabinets, buffet, bookcases, tables, desks, desks, night stands; one of best West Coast lines; price lists included.

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

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

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

GENERAL

(6) Libber-Owens-Ford Glass Company: Well illustrated brochure solar houses, 24 pages of fundamentals of planning "open" houses; gives good examples; technical data.

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

HARDWARE AND FIXTURES

* (393) American Cabinet Hardware Corporation: Folder, data sheets American line contemporary cabinet hardware; Beauty-Seal plating, matched ensembles, easy-working catches; includes semi-concealed hinges, friction catches, pulls, ash lifts, ash locks; full technical, installation data.

(439) Bennet-Ireland, Inc: Illustrated folder Flexscreen fireplace metal curtains; hang in folds; easily opened, closed; one of best contemporary lines fireplace equipment.

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

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

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

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

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.

* (77) American Radiator & Standard Sanitary Corporation: Brochure new baseboard radiant heating panel; 8" high, replaces baseboard, can be painted; worth investigation.

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

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

(257) Day & Night Manufacturing Company: Concise folder Panalux radiant infra-red vented gas wall heater; well designed, single or dual units; with or without thermostatic controls; 10,000 to 40,000 BTU; 59½" high x 13 3/16" to 17 11/16"; specifications, charts; merits appraisal.

* (489) Dele Valve Company: Bulletin Thermo-Matic Register for controlling individual room temperature in houses using forced air systems; regulates warm air input from each register in direct ratio to heat loss from each room; thermostatically controlled; eliminates easy-to-heat and hard-to-heat rooms; deserves study.

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

MODERN BUILDER PACKAGES

Electric APPLIANCES WITH HOME

Mr. Leo A. Paige, builder of approximately 150 modern homes and apartments since 1938, has found that home owners want as many electrical appliances as they possibly can afford.

Mr. Paige has been very successful, not only because he holds to a high standard of construction, but also because he includes electrical appliances with the financing of the home. In this, Mr. Paige's newest development, each home purchaser gets an electric refrigerator, electric range, electric dishwasher, electric garbage disposal unit, electric clothes washer, and electric water heater with his home. Many more electrical appliances will be added in the years to come. So, in every home he builds, Mr. Paige installs ample electric outlets to provide not only for the present, but also for the future.

Low cost electricity, combined with long-term financing, puts modern electrical living within the budget of every home owner.

Be sure every house you build has Adequate Wiring. Our Adequate Wiring Specialists will be glad to help you plan your wiring specifications. This service is free to all Los Angeles architects, builders and contractors. Please phone Michigan 4211, Station 2637, or write Los Angeles City-Owned DEPARTMENT OF WATER AND POWER, 207 South Broadway, Los Angeles 12.
(510) Fraser & Johnston: Brochure new Lo-Boy shallow model furnace, dual or floor; 28½" deep overall; dual models feature "bull" register head; eliminating floor grilles; single rod control valve; streamlined heating element of pressed steel; gas fumes cannot escape into room.

(254) General Controls Company: Exceptionally good 28-page catalogue general heating; gas controls for air conditioning, heating equipment; automatic electric clock thermostat to heat down at night, up in morning; forced air wall heater; occupies floor area of only 29½" x 9½"; room air drawn in near ceiling, discharged through outlet grilles at floor level into one or more rooms; built-in thermostat fan controls provide two-speed fan operation; 55,000 btu; worth investigating.

(84) Hammel Radiator Engineering Company: Folder Comfortaire winter air conditioner; summer ventilator; all technical information; centrifugal blower; motor mounted spring suspension; good design, available immediately; also information Pacific floor, dual register furnaces, suspended units, duct furnaces.

(542) Payne Furnace Company: Information new Payne Panelair forced air wall heater; occupies floor area of only 29½" x 9½"; room air drawn in near ceiling, discharged through outlet grilles at floor level into one or more rooms; built in thermostat fan controls provide two-speed fan operation; 55,000 btu; worth investigating.

(446) Payne Furnace Company: Folder 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.

(330) Lennox Furnace Company: Brochure Lennox AireFlo gas residential furnace; provides warmed, filtered, humidified air; completely quiet; cabinets remarkably well designed.

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

(541) Montag Company: Electric furnace; 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.

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

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

(511) Surface Combustion Corporation: Twenty-six pages of specifications for Janitrol gas boilers for radiant, hot water, steam heating; includes ratings, dimensions, engineering data, illustrations; good source material.

(490) 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 Kaufmann house by Frank Lloyd Wright; worth study, file space.

(543) Utility Appliance Corporation: Brochure Utility evaporative air cooler; cleans and cools air and distributes via blower; efficiently engineered; full dimensional, installation performance data; merit specified CSHouse Number 1.

(544) 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 CSHouse Number 1.

(545) Utility Appliance Corporation: Brochure Utility Wall-a-Matic 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 CSHouse Number 1.

INSULATION AND ROOFING

(546) Acoustical Materials Association: New brochures on sound absorption coefficients of architectural acoustical materials and theory and use of architectural acoustical materials; data-packed, well illustrated; undoubtedly best source of information; worth file space, study.

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

(18) Celotex Corporation: Folder roofing products, including information flat roofs; good specification chart for built-up roofs.

(19) Celotex Corporation: Sound conditioning brochure Celotex products, featuring Acousti-Celotex, Mullitone, Acoustic, Q-T duct liner; construction details, application selector.
(220) Gladding, McBean & Company: Series folders, brochures Zonolite insulation; insulating slab below radiant heating pipes; pre-sul blanket-type insulation; moisture, tic; thermal, acoustic; full details makes establishment, proven product.

(221) Gladding, McBean & Company: 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.

* (226) Kimberly Clark Corporation: Brochure (20 pages, two colors) Kimberly-Clark concrete blanket-type insulation; moisture, fire, vermin, insect, fungus resistant; non-setting, light, flexible; four widths, three thicknesses; specification tables, installation data; well illustrated.

(226) Kimberly-Clark Corporation: Home insulation booklet, 12 pages, two colors, for architects, builders, engineers; over 40 illustrations, charts, tables giving concise technical exposition general principles home insulation, including radiant heat loss, air stratification and drafts, variable exposures, coolness balance; many other informative features.

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

* (97) Simpson Industries, Wood Fiber Division: Brochure (8 pages) new Simpson insulating board products; abasing, insulating lath, insulating building board, insulating plank, insulating decorative tileboard; full description, technical, installation data.

* (98) Simpson Industries, Wood Fiber Division: Information-packed illustrated folder new Simpson acoustical tile made from fibers Douglas fir; high sound absorption, 484 clean-drilled holes; easy to clean, bevels finished, high light reflection, can be repeatedly painted; three thicknesses, two sizes.

LIGHTING EQUIPMENT

(448) All-Bright Electric Products Company: Folder unusual fluorescent fixtures with over-all depth only 3½"; makes for clean contemporary design; bottom glass hinged on either side permitting easy servicing; can be mounted flush to ceiling, single or continuous rows; good new product.

(101) Century Lighting, Inc.: Complete catalog one of best lines contemporary lighting fixtures; fully illustrated, complete technical information.

(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.

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

(337) Globe Lighting Products, Inc.: Very complete 56-page catalogue complete line incandescent, fluorescent fixtures for all uses; of particular interest are new decolour fixtures producing multicolored effect.

(338) Edwin F. Guth Company: New booklet emphasizing importance and value good lighting by pointing up effects of bad lighting; good four-color thumbnail study.

(268) Hollywood Lighting Fixture Company: Information contemporary lighting fixtures, stock and custom; one of best sources in Southern California.

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

(500) Lighting, Inc.: Series folders, brochures Philite fluorescent lighting fixtures, incandescent reflectors for residential, commercial, industrial use; includes interesting equipment for subtle spotlighting, flush lighting; profusely illustrated, provides full technical data, prices.

(269) Lightolier: Folders wide range Lightolier lighting fixtures; good contemporary design featuring built-ins readily available.

* (375) Pryne Company, Inc.: Illustrated bulletins Prylites, complete line recessed lighting fixtures, including specialties; multi-colored dining room lights, automatic closet lights; adjustable spots; full technical data.

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

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

(270) Supreme Lighting Company: Comprehensive 23-page catalog well designed line fluorescent fixtures; hanging, open and glass covered; recessed fixtures with egg crate lower or diffusing glass; industrial, reflector, window types; strip, circular; kitchen fixtures, vertical mirror lamps, bed lamps.

* (339) Kurt Versen Company: Two brochures on exciting contemporary residential lamps, fixtures and focal lighting, for commercial, residential use; both very well prepared, copiously illustrated, data-packed; one of best sources of information contemporary lighting; firm has been leader in field for many years.

MISCELLANEOUS

(340) De Patta: Information contem-
porary jewelry at its best for an ever increasing minority; available in Monte-
rey, Los Angeles, San Francisco, Portland, Chicago, or direct.

• (475) Tony Hill-Wilmer James: Full information full line contemporary ceramics; unusual glazes, beautifully fired; also lamps with ceramic bases; ceramics; unusual glazes, beautifully

permanent jewelry at its best for an ever

• (453) W. P. Fuller & Company: Sixty pages of specifications for paint products featuring Fuller paints, related products; specifications range from best possible to least expensive jobs; completely covers subject of paint; one of best prepared specification books available; belongs in all files.

• (501) McCloskey Varnish Company: One of best brochures treatment of floors and their finishes; based on Gymsel, Tungseal, Penetrating Floor Sealer, Terrazzo Seal, Wood Sealer; penetrating but simple analysis how to treat, maintain wood, terrazzo, cork, concrete, magazine wool composition floors; well worth study.

• (274) Gladding, McBean & Co. Face Brick: Ruffled Face Brick provides greater flexibility of design. Dimensions are:

- ROMAN: 1 1/4" x 1 1/2" x 3 1/2"
- NORMAN: 2 1/8" x 1 1/2" x 3 1/2"
- STANDARD: 2 1/8" x 1 1/2" x 3 1/2"

• (440) Laverne Originals: Contemporary wallpaper; bold primaries, segius, pastels, muted tones; matte or baked plastic finish.

• (514) Marsh Wall Products, Inc.: Attractive new 1958 catalog complete information Marlite, plastic-coated wall board; shows uses, specifications; includes color chips; also contains information Marsh aluminum Presdwood plastic mouldings and new line Marsh bathroom accessories; good presentation of good products.

FACE BRICK... for smart modern architectural lines

Gladding, McBean & Co. Ruffled Face Brick is made in elongated Roman and Norman sizes... interesting building units as well as smart horizontal lines. These new longer shapes provide greater flexibi-

- TEXTURE AND COLOR • Gladding, McBean & Co. Face Brick has an interesting ruffled texture that's as ideal for interiors as for exteriors. The warm, mellow colors... Old Gold, New Red and Variegated Rose... are truly beautiful in themselves... never require any additional finish.

- MODULAR SIZE • Elongated Roman and Norman Face Brick provide more in-

- NO MAINTENANCE • You can specify Gladding, McBean & Co. Face Brick without in-
creasing the first cost of many types of jobs. Your client can forget maintenance because Face Brick is a permanent, time-tested finish.

For specification data, write or visit your nearest Gladding, McBean & Co. office.
Hidden in the walls of an adequately wired home is an added value that means much to its owners. Though unseen, for the most part, it makes itself known in many ways. Electrical appliances operate at top efficiency, bring a maximum of comfort and pleasure.

there is WEALTH within the walls of the home with ADEQUATE WIRING

Adequate wiring fits a home for living enjoyment, now and in the future. Its owners will find that new appliances can be installed without inconvenience, and at less cost in time and money. Should they decide to sell, they'll find the market value high, because a house stays modern longer with this wealth within its walls.

Information on Adequate Wiring is yours for the asking through your nearest Edison office. An Adequate Wiring Advisor is at the service of owners, architects and contractors anywhere in Edison territory, without cost or obligation.

Southern California Edison Company
ROOFING
SASH, DOORS AND WINDOWS

sliding action of bar in cup; well designed; no mortising required; of applying wood shingles on roofs and

interchangeable; comes with aluminum

frame in all sizes for quick installation; old problem.

Company: Information new unit

Company: Information new type com

num; extruded hollow aluminum sec

tion; adjustable to various door

sash; standard and special sizes; con

temporary design.

• (507) Grant Pulley & Hardware Company: Folder new line Grant dra

perty, curtain hardware; inconspicuous, streamlined, durable; precision-made, won't bind or jam; made by company which manufactured top sliding door

hangers for many years; good product, worth investigation.

• (141) Ingersoll Steel Division, Borg-Warner Corporation: Pictorial booklet "KoolShade Sun Screen, "window insula

tion"; screen is series of miniature slats slanted to repel 90% sun heat; no painting; wind resistant, good visibility, ample light.

• (519) Aluminum Building Products Company: Information new type combination storm-screen door in alu

minum; extruded hollow aluminum sections; screen, storm inserts immediately interchangeable; comes with aluminum frame in all sizes for quick installation; good product.

• (30) Eco Steel Products Corporation: Data-loaded Pacific Coast catalog covering residence casements, package windows, projected windows and scores of correlated products, commercial and industrial as well as residential.

• (520) Detroit Steel Products Company: New 8-page catalogue residential steel casement windows; literally illustrated with architectural drawings; includes plans, perspectives of houses; a good working piece of literature.

• (521) Druhwit Metal Products Company: Data, sketch packed brochure Druhwit metal windows, doors, both stock, custom built; nearly all types of metal windows, doors, including case

ment, sliding, pivot, store front window;

good source technical information.

• (522) Gate City Sash & Door Company: Brochure Gate City Awning Windows for homes, offices, apartments, hotels; controlled by worm and gear drive operating two sets of raising mechanisms distributing exterior force to both sides; standard and special sizes; con

temporary design.

• (507) Grant Pulley & Hardware Company: Folder new line Grant dra

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SPECIALTIES

(551) B B & C Manufacturing Company: Full data Johnson Safety Vault home and business safes; build-in models for floor, walls; flush swinging doors, double action sliding hinges, combination dial or key locks; all safety features; good product, worth investigation.

(560) Colart Cement Tile Company, Inc.: Folder interesting Colart cement tile; available in any color to specifications; colorfast, lime-proof, water-repellent; section on modern baths, kitchens; commercial applications well illustrated.

(378) Lumite Division, Chicago Manufacturing Corporation: Samples, brochures Lumite plastic insect screen cloth; remarkable improvement in screen cloths; no wear, can't bulge, no paint, easy to clean; comes in colors.

(523) Marble Institute of America: Brochures, information uses of marble for homes; includes suggestions for floors, stairs, fireplaces, counter tops, shower stalls, flagging in gardens, and many others; worthwhile information.

(467) Master Metal Strip Service: Information well engineered, fabricated weatherstripping sections, thresholds; also remarkable No-Draft sash balance; latter eliminates pulleys, weights; prevents air, dust inleakage; permits greater area of window space, finger-tip control of windows; products merit investigation.

(534) Minnesota-Honeywell Regulator Company: Information new "plug-in" clock thermostat that can be installed by householder in less than five minutes; replaces manual thermostats, can be used all types automatic heating plants; automatically changes temperature at predetermined times; good product well worth investigating.

(524) NuTone, Inc.: Attractive brochures probably best line contemporary door and door-clock chimes, exclusively merit specified in all CSHouses; single to eight note chimes, self-contained or with brass tubes; worth investigating.

(360) Pacific Telephone & Telegraph Company: Information for architects, builders on telephone installations; features built-in telephones; definitely should be in all files.

(396) Rohloff & Company: Folder Kemiko permanent concrete stain; penetrates to full depth of pores; 12 natural colors; guaranteed not to crack, peel; will not fade; ideal for exposed concrete slab floors, eliminates need of coverings; can be used inside, outside; folder gives color chart, application data; applied to concrete floors of any age.

(552) Superior Accessory Company: Brochure new Rite-a-Note doorway accessory; note pad, pencil concealed in brass case mounted in doorway; when cover is lifted to write note "hello" tab clicks up to leave indication note is there when cover is closed again; well designed.

(441) Tropicraft: Folder woven wood screens, ¾ x 8 high by 77 long; natural finish or colors; also 2⁵/₄ slats and smaller overall dimensions; good for screens, shades, draw drapes, etc.; best contemporary treatment.

(525) Western Pine Supply Company: Attractive new catalogue Ponderosa pine moulding patterns available in Northern California; company one of largest wholesale distributors Ponderosa pine mouldings.

STRUCTURAL BUILDING MATERIALS

(24) Ceco Steel Products Corporation — Technical brochure, 24 pages, on Ceco open web steel joists, giving construction details, standard specifications, steel joint loading tables. Also explains the use of Ceco open web joints used as purlins with necessary technical tables.

(41) Celotex Corporation—Review of all Celotex home building materials with full application data. Products include sheeting, insulation, lath, interior finish, siding, anchor lath, plasters, wallboards, rock wool, roofing, hardboard and cemento.

(552) Marble Institute of America: New handbook providing complete information for specifying interior, exterior marble; describes, illustrates classifications, finishes, uses, recommended setting materials, procedures; probably best source information on subject; lists members of MIA in various localities.

(455) 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.

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

... production geared to

WESTERN LIGHTING REQUIREMENTS

OFFICES IN PRINCIPAL WESTERN CITIES • BRANCH AND WAREHOUSE IN SAN FRANCISCO

Smoot-Holman quality lighting equipment is western-designed and western-made exclusively for western use. Your lighting problems are quickly, efficiently and economically solved when you specify Smoot-Holman.

FLUORESCENT... INCANDESCENT...

Smoot-Holman Planned Lighting by

INGLOWOOD, CALIFORNIA
HI-BOY GAS FURNACE

A new concept of living comfort for those who desire the best in safe, modern, automatic gas-fired heating equipment. Lennox exclusive design of burner and concentric type heat exchanger, combined with quiet blower operation sets new standards of efficiency and comfort. The furnace is fully approved by A.G.A. and by Underwriters Laboratories for zero clearance against combustibles.

LENNOX FURNACE COMPANY, Inc.
World’s Largest Furnace Manufacturer
PACIFIC DIVISION—974 SOUTH FAIR OAKS AVENUE, PASADENA, CALIFORNIA

As Featured In
CASE STUDY HOUSE NO. 7
In San Gabriel

• (531) Permanent Metals Company: Detailed information new types aluminum roofing, siding for residential construction, includes full color photographs of applications, full data and illustrative material on installation; remarkable saving in handling, erection, nails, paint, elimination of waste; well worth study, file space.

(160) Pittsburgh Corning Corporation: Brochure (20 pages) PC glass blocks; illustrates typical installations; technical, installation, performance data; lists types, accessories available; layout tables for glass block panels based on modular coordination.

(456) Stained Shingle & Shake Association: Informative material use and advantages stained shingles and shakes; can be effectively used in contemporary design; provide interesting colors, textures.

(397) Timber Structures, Inc.: Folder “Engineering In Wood” on glued laminated structural members; provide “moulded” load-bearing components to fit architectural lines, greater slender- ness, curvature, taper; structural forms virtually limited only by integrity of designer; specification data.

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

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

WALL COVERINGS

(530) Imperial Paper & Color Corporation: Good 24-page Color Harmonizer booklet explaining in detail how to obtain room color harmony; contains eight color harmonizing charts with full instructions for effective use; one of best sources of information; requires 25 cents in stamps to obtain copy.

(556) Laverne Originals, Inc., Information new group wallpapers designed by creators of Marbalia and other special effects papers; new patterns coordinate with fabrics by same designers, which won top 1947 award; unlimited color range, hand prints, washable papers.

(557) Laverne Originals, Inc.: Information new Span Glass, fire-proof textured wall covering in Marbalia and abstract designs; semi-rigid material which can be bent; is now in traveling exhibition of AID 1947 design awards; good product well worth investigation.

• (468) The Pantasote Company: Brochures in color remarkably practical new wallcovering called Lifewall; comes in rolls, applied with special cement; is vinyl resin, will not crack or peel; in abatement, fade resistant; impervious to all ordinary stains; wide range or plain colors; this product merits appraisal.

NOW YOUR CLIENTS CAN HAVE

LUMITE*

the miracle insect screening!

Lumite will solve your clients' screening problems once and for all. This amazing, war-proved screening is virtually indestructible. Woven of Saran, product of Dow Chemical Co., it is rustproof, can't corrode, rot, or stain. It is unaffected by sun, rain, or salt spray. Even industrial smoke and acid fumes leave it completely unchanged. It never needs painting. Nothing like it has ever been developed before.

In industrial regions and sea-coast towns it is the only screening to use... regardless of price. But you can save your client's money when you specify Lumite in other areas as well—for it is moderately priced, yet outlasts all others. Replacement costs are practically eliminated. No more repainting of stained sills and sidewalls. For complete information and samples write: LUMITE DIVISION
Chicopee Manufacturing Corporation
47 Worth Street, New York 13, N. Y.
from these clear lines, from these pure curves, clarifies one's thinking and transmits itself inevitably to the problems of the drafting table.

Such explorations are invaluable to the industrial designer from a practical point of view. When he is designing an item to be made on a machine the first important thing is to know what that machine can do. If he is assigning more to the machine than lies within the orbit of its possibilities the engineering staff must reject the design. If, on the other hand, he does not utilize the potentialities of the machine completely, he is designing for yesterday. When he lets the machine make a contribution to the character of the design and proves that it can be made before it is put on paper, he is assured of a product that properly fuses function and production.

We are now organizing such studies of various machines, including wood-working, metal, and plastics machines, to make them generally available. An ideal arrangement would be to have a permanent collection of these studies... a library of techniques... from which artists, architects, and designers can draw when they are searching for a certain construction, textural effect, or spatial solution that can be achieved on the machine in the simplest possible manner. Engineers and chemists would add their valuable contributions to such a project. If all the various forces of sincere exploration could pool the facts they discover the result would be a treasury of ideas which might become an important factor in developing a rich vocabulary for this age of the machine.

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Prescription

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Identification of illustrations of material for "Lighting" on pages 35, 36 and 37:

2. Rendering showing a fluorescent lighting system by The Miller Company, 90 Center Street, Meriden, Connecticut. Allen and Edward Kramer, Architects.
4. An effective downlight designed to use the efficient reflector lamp by Century Lighting, Inc.
5. Ceiling installation in display room by The Miller Company.
6. Rendering showing the interesting use of Miller Fluorescent Troffer Lighting System with extensive use of glass—The Miller Company. Designed by Jose A. Fernandez, architect.
7. Permanent: Rigid and flexarm wall type spotlight units, especially designed for store displays by Century Lighting, Inc.
9. A compact exposed housing for the reflector lamp line, a display spotlight by Century Lighting, Inc.
10. Suspended fixture by Lighting, Incorporated, 183 South Figueroa Street, Los Angeles, California.
12. Ceiling arrangement of light for small jewelry store designed by Serge Chermayeff, architect, for The Miller Lighting Company.
13. A flush two lamp fluorescent louvred troffer—four foot unit by Century Lighting, Inc.
15. Flexible wall bracket of stainless steel by General Lighting Company, 8336 West Third Street, Los Angeles 36, California.
16. Indirect Ballite bulb introduced by Sylvania Electric Products, Inc., 500 Fifth Avenue, New York 18, New York, for which any lamp can be adapted.

MUSIC

continued from page 20

for a parallel of Picasso's "Les Demoiselles d'Avignon" in music, one had better begin with Stravinsky's "Rite of Spring." One of Poulenc's "Mouvements perpetuels" takes the place of, say, a Szymanowski "Mazurka" or a Chavez "Prelude." No American composition has been admitted.

The final paragraph, a lament over the public acceptance of Addinsel's so-called "Warsaw Concerto," is as absurd as if a nineteenth century musicologist had prophesied the decline of musical taste because of the popularity of Thalberg. A musicologist, if he is to be more than a researcher of old documents, must learn to see the present as well as the past in accurate proportion and perspective.

Having said my say to the full of the available space, I must add that, with all its faults, its dispersed information, its uneven judgments, this book is a necessary purchase for any student of keyboard music, if only for the musical examples.
Listed below are major merit specifications written so far by R. Davidson, designer, for use in Case Study House Number 1, showing in sketch form in this issue on Pages 26 and 27. Construction has been started and further merit specifications will be announced progressively.

- (515) Air Cushion Sales Company: Air Cushion Armorer to stop water hammer in plumbing pipes; separates air from water entering home system; reduces wear on washers, valves; merit specified in all CS Houses.

- (393) American Cabinet Hardware Corporation: Amerock cabinet hardware, Streamlux design in matched ensembles; sold through leading jobbers and dealers; pulls, catches, knobs, hinges; merit specified in all CS Houses.

- (208) Bell Electric Company: No-Shok electrical outlet receptacles; snap-back guard closes receptacle when plug extracted; keeps children safe, guards against dust, dirt, water; merit specified in all CS Houses.

- (378) Chicospe Manufacturing Corporation: Lamint plastic insect screen cloth; no wear, can't bulge and needs no paint; comes in several colors; merit specified in all CS Houses.

- (386) Dirilyte Company of America: Golden-hued Dirilyte flatware and holloware stores nationally.

- (536) Ekco Products Company: Well designed, weighted kitchen tools, knives, can openers; also pressure cookers; merit specified in all CS Houses.

- (119) Formica Insulation Company: Formica plastic cabinet and counter tops; colorful, does not chip, crack, break, not injured by alcohol, fruit acids, ordinary alkalies; merit specified in all CS Houses.

- (507) Grant Pulley & Hardware Company: New line Grant drapery hardware; precision made, won't bind or jam; runs on rollers; merit specified in several CS Houses.

- (426) Howard Miller Clock Company: Contemporary portable and built-in clocks designed by George Nelson; first sensible approach to contemporary design in clocks; merit specified in all CS Houses.

- (427) Kaiser-Flewwings Sales Corporation: New automatic food waste pulverizer; odourless, clog-proof, safe; disposes of bones, fruit pits, fibrous foods; fits sink drain; merit specified in all CS Houses.

- (562) Kaiser-Flewwings Sales Corporation: Kaiser aluminum hydraulic dishwasher which works on water-power; well designed, efficiently engineered, widely accepted; merit specified in all CS Houses.

- (415) Minneapolis-Honeywell Regulator Company: Chronotherm automatic electric clock thermostat to regulate heat output; automatically turns heat down at night, up in morning; merit specified in all CS Houses.

- (350) Motorola, Inc.: Motorola FM/AM radio-record changers, televisions sets; shadow-silent changers, push-button tuners; well designed contemporary cabinets; merit specified in all CS Houses.

- (152) NuTone, Inc.: Built-in clock door chime for front and back doors made by world's largest maker of door chimes; neat design, pleasant chime tone; available readily through all good electrical equipment outlets; merit specified in all CS Houses.

- (161) Revere Copper & Brass Incorporated: Revere Leadex lead-coated copper flashing and Revere sheet, strip and parallel edge strip copper for gutters, conductor pipes, skylights; merit specified in all CS Houses.

- (538) Square D Company: New Saflex low voltage control system making it possible to turn on all lights at once from one or more control points; reduces wiring cost, increases utility; merit specified in all CS Houses.

- (72) Square D Company: Square D Multi-Breaker, modern device for protecting electrical system of house; displaces fuses, restores current by tripping lever; no live parts exposed; merit specified in all CS Houses.

- (365) Sunbeam Corporation: Sunbeam electric appliances, including Mix-master, toaster, Wall-fremaaster, Coffeemaster, Ironmaster, Shavemaster; well designed, available in all good stores; merit specified in all CS Houses.

- (544) Utility Appliance Corporation: Multi-Breaker, modern device for protecting electrical system of house; displaces fuses, restores current by tripping lever; no live parts exposed; merit specified in all CS Houses.

- (562) Utility Appliance Corporation: Utility Wall-O-Matic built-in circulating heater; gas fired and vented; thermomatic control; high velocity discharge assures over-all room heating, eliminating drafty corners.

- (544) Utility Appliance Corporation: Utility forced air furnace, gas fired; provides complete forced air circulation, fully automatic temperature control, glass fiber filters; well engineered.

- (543) Utility Appliance Corporation: Utility evaporative cooler; cleans, cools air; quiet operation, no air turbulence; well engineered; available through heating, air conditioning dealers and contractors.

- (415) Minneapolis-Honeywell Regulator Company: Chronotherm automatic electric clock thermostat to regulate heat output; automatically turns heat down at night, up in morning; merit specified in all CS Houses.

- (350) Motorola, Inc.: Motorola FM/AM radio-record changers, television sets; shadow-silent changers, push-button tuners; well designed contemporary cabinets; merit specified in all CS Houses.

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