We serve you... the Architect

"Variations" by Brown & Saltman

Distributors and jobbers of furniture*
for business, industry and home.
Planners and designers
Connect us on your next project

CARROLL SAGAR & associates • 8833 beverly blvd., los angeles 48
BRadshaw 2-8656 • CRestview 4-2346
POMONA TILE

ROULETTE... BY PAUL MCCOBB

Pomona Tile introduces the second fascinating ceramic tile design in its "Distinguished Designer Series"... Paul McCobb's delightful Roulette. "In designing 'Roulette,'" says Mr. McCobb, "it was my intention to provide a decorative tile with great versatility of application. I believe it is equally effective when applied intermittently or as a repeat pattern." For additional information about Roulette, consult your nearest contractor or visit one of Pomona's convenient showroom locations: Los Angeles, San Francisco, Sacramento, Seattle, Salt Lake City, Long Beach, North Hollywood, Pomona, Phoenix, Denver, Dallas, Fort Worth, Kansas City, Arkansas City, St. Louis, Chicago, Memphis, and Nashville.

DISTINGUISHED DESIGNER SERIES: BASS · LASZLO · LIEBES · MCCOBB · SHEETS
The argument of Pierre Boulez, given exclusive statement, to make it noticeable, as he uses it, holds that the virtuoso disposes only of the works of the past. Yet Boulez scorns gebruchsmusik, music for common use, designed to present no technical problems. His own compositions, as he told me, must be made difficult; in the nature of his medium, his work cannot be easy. To take part in performing his compositions one must have virtuoso training. Thus, although following Boulez’s definition the virtuoso can do without the compositions of Boulez, performance of his compositions requires the participation of the virtuoso. We should perhaps keep a few in training for this purpose. Harry Partch, who trains amateurs to play his specially designed instruments, reading his specially designed notation, can dispense with virtuosi; Boulez cannot. So perish all exclusive arguments.

No, a true virtuoso combines both parts of the definition, special knowledge and taste with mechanical skill. Lacking either he may still be successful, but he is lost. Leadbelly was a virtuoso; Liberace is not. Whether a virtuoso deals in part or wholly with works out of the past or like Leadbelly or Boulez only with his own present, he disposes of ‘works of art and virtu’; he meets the definition. A showman, no matter how good, is still a showman.

And I fear Leonard Bernstein is degenerating into a showman. His Omnibus TV hour devoted to the works of Bach tossed off as many unnecessary as necessary items, including a full blackboard to prove how Bach, by numerology, associated himself with God. Numerological notions are common enough, like skipping cracks on the sidewalk; Schoenberg and Freud were convinced they knew in advance the day of their death—each survived it. I suspect that such explanations applied to Bach may give us a new science, like the decoding of Shakespeare.

But I disliked most, since we are discussing virtuosity good and bad, the way Bernstein’s guiding hands were foggily superimposed on the singing choir, itself vocally foggy, to lead us through the last measures of the Passion choral. The whole conductor idea seems to be going astray towards Stokowskianism in these broadcasts—to say nothing of the bullying of the performers the broadcast began with.

(Continued on Page 6)
CONTENTS FOR AUGUST 1957

ARTICLES

A Century of Modern Design by Edgar Kaufmann (Part I) 16
Design and Human Values by Amiya Chakravarty 22

ARCHITECTURE

Case Study House No. 18 by Craig Ellwood Associates 12
Case Study House No. 19 by Knorr Elliott Associates 14
House by Harry Seidler, architect 18
Brussels International and Universal Exhibition 1958 24

SPECIAL FEATURES

Mirko 20
Music 4
Art 8
Notes in Passing 11
Books 30
Currently Available Product Literature and Information 34

ARTS & ARCHITECTURE is published monthly by John D. Entenza, 3305 Wilshire Boulevard, Los Angeles 5, California. Established 1911. Entered as second class matter January 29, 1935, at the Post Office, Los Angeles, California, under the Act of March 3, 1879. Price mailed to any address in the United States, $5.00 a year; to foreign countries, $6.50 a year; single copies 50 cents. Editorial material and subscriptions should be addressed to the Los Angeles office. Return postage should accompany unsolicited manuscripts. One month’s notice is required for a change of address or for a new subscription.
A+A_1957_08.qxd  21.08.2006  19:55 Uhr  Seite 6

MUSIC
(Continued from Page 4)

A simpler presentation would be both more reverent and more compelling. I question the value of joining St. Matthew Passion in didactic-exclamatory fragments, like a tourist doing Jerusalem in one day. My opinion of these goings-on was pretty well summarized by Bernstein himself, when at the end, eyes shimmering, hanging lock on his forehead once again thrust back, he pleaded with us to give Bach a chance, crying out the virtues of what he then called this "inspired stuff." Need I remind the reader: there is always an audience for the Matthew Passion.

When the Budapest quartet played here for the Music Guild this season, I attended after some doubting. Years ago I had tired of their string orchestra imitations. Lately, however, I had been tiring also of the careful matching of tunes which some quartets have devised as an elegant variation on their routine. And besides, the program included Bartok's Sixth Quartet.

I have always believed that when Joseph Reisman, the first violinist of the Budapest Quartet, is in the mood, almost anything can happen; when he is not, nothing will. He was in the mood, and the playing of Beethoven's Quartet opus 95 which resulted, though ragged, started this thinking about virtuosity. Alexandre Schneider was back in the second chair, giving the quartet the equivalent of two first violinists, and, perhaps not only for this reason, their thinking and method had changed.

Those of you who have heard surviving records of the Flonzaley Quartet will remember the amazing freedom of their playing, always together at the unisons, everywhere else independent. This was the sort of playing we had from the Budapest. Only more so; the independence persisted right through the unisons. Hearing this in the Beethoven, and the raggedness, I reserved judgment.

The Bartok Sixth resolved my doubts. Probably, since they can't possibly proceed the threatening psychic storm towards the end of the Octet and the terrifying finale of the G major, the psychological fugue of the C major Quintet like a man running bedeviled through green fields, (often spoken of in program notes as cheerful folk-dancing) and the B flat Piano Sonata.

Here was individual virtuosity, matched, disciplined, combined, yet completely independent, each part demanding to be heard separately, forcing the ear into four parts, yet never relieved of the final burden that the four should convey one purpose, in every thrust, in every withdrawal, in each unison of impact, in each countermovement. This was virtuosity, the spirit of the art of performed music.

(Continued on Page 32)

---

THE THOMAS DESK

a complete work center in one unit

... planned to meet the exacting requirements of designers, architects, engineers, illustrators and draftsmen, combining beauty, comfort and efficiency ... at your finger tips. Sturdy wood construction ... made by skilled craftsmen. Desk top of durable Desk-lino ... a perfect drawing surface ... stain resistant ... easily cleaned ... with simple, fool-proof, tilt-lift mechanism.

Desk body is available in Blue Gray or Teal Green. Special colors and finishes available at extra cost. $169.00 F.O.B., L.A.

The Thomas Desk

A simpler presentation would be both more reverent and more compelling. I question the value of joining St. Matthew Passion in didactic-exclamatory fragments, like a tourist doing Jerusalem in one day. My opinion of these goings-on was pretty well summarized by Bernstein himself, when at the end, eyes shimmering, hanging lock on his forehead once again thrust back, he pleaded with us to give Bach a chance, crying out the virtues of what he then called this "inspired stuff." Need I remind the reader: there is always an audience for the Matthew Passion.

When the Budapest quartet played here for the Music Guild this season, I attended after some doubting. Years ago I had tired of their string orchestra imitations. Lately, however, I had been tiring also of the careful matching of tunes which some quartets have devised as an elegant variation on their routine. And besides, the program included Bartok's Sixth Quartet.

I have always believed that when Joseph Reisman, the first violinist of the Budapest Quartet, is in the mood, almost anything can happen; when he is not, nothing will. He was in the mood, and the playing of Beethoven's Quartet opus 95 which resulted, though ragged, started this thinking about virtuosity. Alexandre Schneider was back in the second chair, giving the quartet the equivalent of two first violinists, and, perhaps not only for this reason, their thinking and method had changed.

Those of you who have heard surviving records of the Flonzaley Quartet will remember the amazing freedom of their playing, always together at the unisons, everywhere else independent. This was the sort of playing we had from the Budapest. Only more so; the independence persisted right through the unisons. Hearing this in the Beethoven, and the raggedness, I reserved judgment.

The Bartok Sixth resolved my doubts. Probably, since they can't possibly proceed the threatening psychic storm towards the end of the Octet and the terrifying finale of the G major, the psychological fugue of the C major Quintet like a man running bedeviled through green fields, (often spoken of in program notes as cheerful folk-dancing) and the B flat Piano Sonata.

Here was individual virtuosity, matched, disciplined, combined, yet completely independent, each part demanding to be heard separately, forcing the ear into four parts, yet never relieved of the final burden that the four should convey one purpose, in every thrust, in every withdrawal, in each unison of impact, in each countermovement. This was virtuosity, the spirit of the art of performed music.

(Continued on Page 32)

---

S. & H. Furniture

M. FLAX

Artist's Materials & Architectural Supplies
Architectural Books & Magazines, Imported & Domestic
10846 Lindbrook Drive, Los Angeles 34, California
Granite 8-3761 — Bradshaw 3-7004

DIMENSIONS—30' deep, 60' long, 29'/ high. Desk top—48' tilting board, and 12'' island. The spacious storage leg (left side) is 5' wide, 22'/ high, 20'/ deep. Lower drawer is 12' high with removable dividers. Top drawer has sliding tray for pencils, pens and small tools.
problem: Organizing several vast recreation areas, both inside and outdoors, while facilitating unrestricted movement from one area to the other for children at play. This situation would require a virtual removal of conventional walls to provide for complete integration of indoors and outdoors. This is the architects' problem in presenting a design for proposed Youth Centers for U.S. Steel Homes.

solution: Walls would be constructed with sliding glass doors. The resulting proposed design of Youth Centers for U.S. Steel Homes would feature non-load-bearing walls of glass, complete with sliding glass doors by Arcadia.

YOUTH CENTER for UNITED STATES STEEL HOMES
Consulting Architects: A. Quincy Jones, Frederick E. Emmons
Robert A. Little, Rufus Nims

the name for the finest in windows and doors of sliding glass is arcadia

801 SOUTH AGACIA, FULLERTON, CALIFORNIA
National Member Producers' Council, Inc.

HELP BUILD A BETTER AMERICA...SEE AN ARCHITECT
MERIT SPECIFIED FOR THE CASE STUDY HOUSE NO. 19 BY DON KNORR OF KNORR-ELLIOTT ASSOCIATES
MARK ROTHKO

The critics, and the public have been curiously slow to assimilate the significance of Mark Rothko’s work. Less than five years ago, one critic was pleased with Rothko’s fluid, fading color, but lamented the absence of complex elements, of contradiction and multiplicity associated with “greatness” in painting. Yet, Rothko’s steadfast position in the art world has had to be acknowledged. How has it happened that, little by little, people have come to “see” Rothko’s paintings?

If the critic were to analyze these paintings in conventional terms, he might discuss pigment application, composition and color-balance—-a matter of three sentences—and then be faced with a perplexing problem. For the paintings of Mark Rothko cannot be treated as objects for the kind of logical dissection normally practiced by critics.

In fact, the viewer who makes himself available to the unique experience of these canvases tends to fall into silence: the effect is one of inner echo, the mute overpowering emotion that a great symphony can evoke. It would be queer, certainly, to speak of resounding grottos or thundering herds on hearing a crescendo in a Beethoven symphony!

Rothko’s paintings easily suggest parallels with music, but there are important reservations to be made. The form of a work of music can be analyzed in psychological terms of time. Intricacies of recapitulation can be graphed in logical terms, as can the idea of beginning, middle and end.

But in the visual arts today, and especially in Rothko’s work, the idea of time is elusive; beginnings and endings cunningly ambiguous, and scientific structural analyses spurious.

What Rothko does share with the composer is a genius for finding pure symbols of man’s experience, perhaps too subtle for the untaught eye. And pure symbols cannot stand for themselves (be explained) but are themselves. No translation medium is required. His paintings cannot be defended to those who relate sparsity of means to sparsity of content. His drive to cut away everything but the barest essentials—an instinct obeyed by writers, poets and painters centuries do not erase incipient resentment against what appears to be simple and is lauded as profound.

Rothko claims that his is the most violent painting in America to date. One can take that to mean that by supreme effort of will he has harnessed turbulence. He paints the paradox of violence. Those colors which create genuine, immeasurable tensions are grasping among themselves as symbols. That they have been a thousand times refined; all smudgy echoes of everyday life removed; and that they shun all conventional idioms (no word is suggested by them, no sign, no association with past) makes them that much more efficacious and human. These terminal abstractions—color as protagonist of generalized drama—are more implicitly human than any half-worldly, expressionist abstractions. Flesh and specific emotion are deliberately minimized. References are to that experience which transcends specific occasion.

It is this which Suzanne Langer divines about music: beyond the occasion is the complex of reactions which are then generalized from the total experience of man. “For if music is really the language of emotion,” she says, “it expresses the composer’s knowledge of human feeling, not how or when that knowledge was acquired; as his conversation presumably expresses his knowledge of more tangible things and usually not his first experience of them.”

So it is with Rothko’s paintings. One could not, for example, state specifically that there is “impending doom” in this or that canvas. But certain of Rothko’s works with their unspeakable vibrations evoke that experience, that temporary emotional insight platonically called impending doom. (A large mauve field which, in its density magnetizes the eye and draws one into its prison; the expanse of it pushing mightily against brackish greens which threaten to swamp it . . .)

There is an enormous horizontal painting in the back store-room of Rothko’s studio. Rothko said that most people seeing its hortizontal field of yellow and its deep-dyed red edges consider it an optimistic painting. It is, he said, tragedy instead. By its scale alone it verges on the proportions of epic drama. Since the eye must travel through the great desert of seemingly limitless yellow before it hits obstruction and at that, a nearly illusory obstruction because of the fading edges) the experience cannot be immediate and of a piece. For, the very time it takes to reach a visual resting point in regarding the picture creates a faint but undeniable anxiety. Here is a valid parallel with music for the time element is important in the assimilation of Rothko’s large paintings.

It is the greatness of scale, the impossibility of a complete aesthetic experience in one thrust which suggests the element of tragedy and threat.

In some ways the mammoth Rothko canvases are related to Greek drama: to the fatalism, the stately cadence and the desperately controlled shrieks. At times they recall the poised dramas of Aeschylus. “Let no man live uncured by law, nor curbed by tyranny; nor banish ye the monarchy of Awe beyond the walls. Untouched by fear divine, no man doth justice to the world of men.” The “monarchy of Awe” is fully honored by Rothko. There are notes reminiscent of the frenzy of Euripides too, the prophecy he makes Tiresias utter: “Dread not thought is wisdom.” Which, might be stated in modern paraphrase: dread not speakable symbols or “readable” images are wisdom.

The sustained rumble of a kettle drum touches a source of emotion within us which is reached, too, by Rothko’s paintings. The shudder of recognition when one hears the last note of the French horn or the shivering fall of the timpani note is not explicable. In the same way, awe in the presence of simplicity and grandeur in painting cannot be formulated.

There are, of course, certain psychological values present in Rothko’s paintings which can be stated. Horizontality implies rest. Horizontal canvases are thought to be more tranquil than vertical canvases. Purple is a color which, it has been frequently suggested by psychologists, suggests sorrow. Yellow is gay and red sanguine.

There is an enormous horizontal painting in the back store-room of Rothko’s studio. Yellow-red and blue. Among the complex of reactions which are then generalized from the total experience of man. “For if music is really the language of emotion,” she says, “it expresses the composer’s knowledge of human feeling, not how or when that knowledge was acquired; as his conversation presumably expresses his knowledge of more tangible things and usually not his first experience of them.”

So it is with Rothko’s paintings. One could not, for example, state specifically that there is “impending doom” in this or that canvas. But certain of Rothko’s works with their unspeakable vibrations evoke that experience, that temporary emotional insight platonically called impending doom. (A large mauve field which, in its density magnetizes the eye and draws one into its prison; the expanse of it pushing mightily against brackish greens which threaten to swamp it . . .)

There is an enormous horizontal painting in the back store-room of Rothko’s studio. Rothko said that most people seeing its horizontal field of yellow and its deep-dyed red edges consider it an optimistic painting. It is, he said, tragedy instead.

By its scale alone it verges on the proportions of epic drama. Since the eye must travel through the great desert of seemingly limitless yellow before it hits obstruction and at that, a nearly illusory obstruction because of the fading edges) the experience cannot be immediate and of a piece. For, the very time it takes to reach a visual resting point in regarding the picture creates a faint but undeniable anxiety. Here is a valid parallel with music for the time element is important in the assimilation of Rothko’s large paintings.

It is the greatness of scale, the impossibility of a complete aesthetic experience in one thrust which suggests the element of tragedy and threat.

In some ways the mammoth Rothko canvases are related to Greek drama: to the fatalism, the stately cadence and the desperately controlled shrieks. At times they recall the poised dramas of Aeschylus. “Let no man live uncured by law, nor curbed by tyranny; nor banish ye the monarchy of Awe beyond the walls. Untouched by fear divine, no man doth justice to the world of men.” The “monarchy of Awe” is fully honored by Rothko. There are notes reminiscent of the frenzy of Euripides too, the prophecy he makes Tiresias utter: “Dread not thought is wisdom.” Which, might be stated in modern paraphrase: dread not speakable symbols or “readable” images are wisdom.

The sustained rumble of a kettle drum touches a source of emotion within us which is reached, too, by Rothko’s paintings. The shudder of recognition when one hears the last note of the French horn or the shivering fall of the timpani note is not explicable. In the same way, awe in the presence of simplicity and grandeur in painting cannot be formulated.

There are, of course, certain psychological values present in Rothko’s paintings which can be stated. Horizontality implies rest. Horizontal canvases are thought to be more tranquil than vertical canvases. Purple is a color which, it has been frequently suggested by psychologists, suggests sorrow. Yellow is gay and red sanguine. Yellow-red and blue. Among the complex of reactions which are then generalized from the total experience of man. “For if music is really the language of emotion,” she says, “it expresses the composer’s knowledge of human feeling, not how or when that knowledge was acquired; as his conversation presumably expresses his knowledge of more tangible things and usually not his first experience of them.”

So it is with Rothko’s paintings. One could not, for example, state specifically that there is “impending doom” in this or that canvas. But certain of Rothko’s works with their unspeakable vibrations evoke that experience, that temporary emotional insight platonically called impending doom. (A large mauve field which, in its density magnetizes the eye and draws one into its prison; the expanse of it pushing mightily against brackish greens which threaten to swamp it . . .)

There is an enormous horizontal painting in the back store-room of Rothko’s studio. Yellow-red and blue. Among the complex of reactions which are then generalized from the total experience of man. “For if music is really the language of emotion,” she says, “it expresses the composer’s knowledge of human feeling, not how or when that knowledge was acquired; as his conversation presumably expresses his knowledge of more tangible things and usually not his first experience of them.”

So it is with Rothko’s paintings. One could not, for example, state specifically that there is “impending doom” in this or that canvas. But certain of Rothko’s works with their unspeakable vibrations evoke that experience, that temporary emotional insight platonically called impending doom. (A large mauve field which, in its density magnetizes the eye and draws one into its prison; the expanse of it pushing mightily against brackish greens which threaten to swamp it . . .)
Imagination in Fabrics

This design element is from LEAP FROG, a new print in linen and cotton sheer. Write for free correlated swatches.

ANTON MAIX FABRICS
NAT. SALES, 162 EAST 59TH STREET, NEW YORK 22, N.Y.
SHOWROOMS: 48 EAST 53RD STREET, NEW YORK • 444 JACKSON STREET, JACKSON SQUARE, SAN FRANCISCO
144 NORTH ROBERTSON BLVD., LOS ANGELES • S. J. CAMPBELL, SPACE 6-171, MERCHANDISE MART, CHICAGO
LEMLAR adjustable louvers (type VI-24) were chosen to dramatize this new home of the Raleigh Morehead Cardinal NEWS and Observer and The Raleigh TIMES.

**Operating, Maintenance Expense Reduced Annually More Than 25 Percent!**

AIR CONDITIONING equipment cut $15,000 and a $2,000 saving on interior blinds made "first costs" exactly even. Important, too, is the "from now on" operating economy. Operating expense of the air conditioning system is reduced by 25% and maintenance of interior blinds eliminated altogether!

GLARE CONTROL is a cost-free benefit for the maximum comfort and improved productivity of workers. See Sweet's Architectural File, 19e/Le; Industrial File, 7f/Le. Or write for product Catalog and further data. Sun Angle Charts for your locality also available on request.

**LEMLAR MANUFACTURING COMPANY**

Box 352-A8, Gardena, California
DR. ALFRED NORTH WHITEHEAD, the distinguished British-American philosopher once remarked that "Every major advance in civilization all but wrecks the society in which it takes place." I suggest this to be no academic truism, but a truth we see in operation before our very eyes.

Many countries in the world today have an age-old culture of their own which is suffering severe strains and maladjustments because of their need to fit an alien element into their own cultural patterns. That alien element is, in brief, the technological culture of the Atlantic countries. Every society into which it has been introduced has suffered radical change. The society of Western Europe, in the century following the Industrial Revolution, changed almost out of recognition, as the forms and patterns of thought and behaviour were swept away or were deeply modified.

Yet, in Western Europe the new element grew slowly and the process of adjustment was gradual so that in time those societies came to realize that Mankind was in the presence of a tremendous problem and began to grope towards some solutions to it. But what are these solutions whereby men and women in the Western countries sought to make Technology their servant instead of their master?

One of them is Education—the need for a high level of public knowledge. Another is a wide diffusion of technical skill and expertise, so that every schoolchild knows something of the workings of the machine-made traditions in which he is being brought up. Another is the gradual development of new social institutions, and so on—all operating within a framework which still embodies a traditional culture.

But what of the societies where this Technology which originated in the West has been introduced as an alien element? Such a society may have none of the antidotes just described and so the results of an industrial revolution may be terrible. Slums grow up, workers are ruthlessly exploited, the checks and safeguards of the old culture no longer operate and soon the peasant who at least had a place in the old culture and could share in its characteristic ways of thought and feeling, finds himself dispossessed, dismayed and bewildered in the grip of a ruthless system over which he has no control.

Knowing there has come to his country a power which can perform miracles of production, which can create wealth where once there was but swamp and jungle, he may yet be unready to absorb its spiritual implications. The West has had decades to adjust itself to the new way of life. Today the processes of technological infiltration are being vastly speeded up so that the impact of increased material wealth and the raising of standards of living bring in their train urgent problems.

No one can stop this process. No one should wish to stop it. It is a world movement which historians of to-morrow will discern as the dominant feature of our age. It can be described as Mankind's claim to embrace the Rights of Man.

To meet the challenge, economic and technical assistance is being given to under-developed countries on a more systematic scale than ever before. At the same time is there not an urgent need to develop new social forms, new institutions, new skills, which will nurture and cherish the best in age-long traditions and cultures? To quote Alfred North Whitehead again: "The life of Mankind is founded on technology, science, art and religion. All four are inter-connected and issue from his total mentality." Societies, like individuals, cannot live, cannot be happy, if nurtured on the benefits of jet aircraft and television sets alone. It is obvious that we must place more emphasis on fundamental education, on the spread of accurate scientific data, on establishing, through UNESCO, a great clearing house for facts and ideas, in priming the pump for worldwide interest in each other's arts and history, and above all in the unremitting challenge that all mankind is one and must grow closer in oneness to survive. These are all the most profound contributions to peace, and they do the most to prepare the spirit of man for the incalculable changes which the world industrial revolution is bringing about. All these activities must be related to global responsibility. It is right and necessary that this should be so for the readjustment of cultures is the predominant characteristic of our time. All this will happen whether we like it or not, we can only try to make sure it is a triumph and not a disaster for humanity. Highly developed countries have by no means fully mastered applied science or the machine. In these countries, the problems are the same in principle but different in degree and content. The effects of automation, the as yet unrivalled power of atomic energy to serve or obliterate the peoples of the earth, human relations in factory and workshop, the failure of the industrial civilization to create its own distinct culture—these are all pressing problems in the most advanced industrial countries of the world.

(Continued on Page 31)
CASE STUDY HOUSES 18 & 19

As previously announced, ARTS & ARCHITECTURE has undertaken two new Case Study Houses which will be in construction simultaneously. One, in Southern California on a handsome site, overlooking Los Angeles; the other, in a beautifully wooded, sheltered natural area in Atherton, a community south of San Francisco.

While in both instances the designers have been asked to consider specific clients’ problems they have been free to present the projects unrestricted by anything other than their own architectural idiom. With the usual difficulties in such undertakings behind us, we can now anticipate the completion of both projects within approximately four months and hope to have them open for general public inspection in December or early January.

We feel that these latest projects in the magazine’s continuing Case Study House Program will meet our best standards in what we feel has been a distinguished series of contemporary houses. The magazine will, as significant developments occur, carry features on both houses through construction, completion and preparation for exhibition. We present here elevations from the working drawings which will assist the reader in visualizing the intentions and forms of the undertakings.

BY CRAIG ELLWOOD ASSOCIATES
MACKINTOSH AND MACKINTOSH—
CONSULTING ENGINEERS
P. E. PHILBRICK COMPANY—
GENERAL CONTRACTOR

Site preparation for Case Study House #18 is now complete and very soon the steel frame will be in existence. In a previous issue we reported the filled ground condition and the decision to use steel piling to gain bearing into natural soil.

When the subdivision was constructed 25 to 30 years ago, this site, a natural watercourse, was filled with rock, granite rubble, shale and decomposed granite. This uncompacted fill varied in depth from 8 feet to 41 feet and a boring investigation of the soil revealed several voids in the fill. These voids, which were caused by spaces between the rock fill and the decomposition of organic matter, and the presence of loose granite resulted in cave-ins and soil-shifting during the boring operations. Thus the standard solution, the use of reinforced concrete caissons, could not be applied economically to this job. Upon investigation, a steel piling foundation was found to be the most practical solution, economics and site peculiarities considered.

There are 22 10"-WF-42# piling, totaling almost 600 feet, power-driven to depths from 9 feet to 52 feet and to minimum bearing value of 35 tons for each pile.

14" x 24" reinforced concrete girders span 16 feet between steel piling and a 7" thick reinforced concrete slab spans 16 feet between girders. Piling and girder work is now complete and under-slab work, plumbing, electrical and heating rough-ins, is now under way. The steel frame of 2" square tube columns and 2"x5½" rectangular tube beams is scheduled for erection soon and will be featured in an early issue.
Products from the following collaborating companies have already been “Merit Specified” for the project. As these, and others, are incorporated, detailed information will be given in subsequent issues:

STEELBILT, INC. (SLIDING GLASS DOORS)
U. S. STEEL, COLUMBIA-GENEVA DIVISION (STEEL PILING)
THE MOSAIC TILE COMPANY (QUARRY TILE FLOORING, CERAMIC TILE WALLS AND COUNTERS)
HARBOR PLYWOOD CORPORATION (PREFABRICATED WALL PANELS)
WASCO PRODUCTS INC. (SKYLIGHTS & TUB ENCLOSURES)
WESTINGHOUSE INC. (KITCHEN APPLIANCES)
ALTEC LANSING HI-FI SOUND EQUIPMENT BY GILBERT J. GILBERT
CENTRAL VACUUM CORPORATION (BUILT-IN CENTRAL VACUUM SYSTEM)
NATIONAL STEEL COMPANY (STRUCTURAL STEEL TUBING)
The house in Atherton proceeds from the idea of a controlled environment in contrast to the surrounding more heavily planted and textured area which is natural in feeling. The man-made environment will be here defined by a platform elevated 6" above grade. Within this defined area will occur the changes of level, color and texture as indicated on the site plan. Further play of elevation, color, and texture will be gained through existing trees and limited planting in a number of small planting garden areas. A translucent fence will be of rough plate glass to pick up shadows and images of planting viewed from the pool area.

Earth from the pool excavation will be used as material for earth sculpture to the north of the pool, which complemented by planting will serve as a windbreak for this recreation area. An extended adobe wall will serve as windbreak for the fire pit.

The ground floor of the house will be polished "travertite"; the second floor will be carpeted; ceilings will be plaster.
Products from the following collaborating companies have already been "Merit Specified" for the project. As these, and others, are incorporated further detailed information will be given in subsequent issues:

ARCADIA METAL PRODUCTS (SLIDING GLASS DOORS)

U. S. STEEL, COLUMBIA-GENEVA DIVISION

PALOS VERDES STONE DEPARTMENT, GREAT LAKES CARBON CORPORATION

WESTINGHOUSE INC. (KITCHEN APPLIANCES)
Any art is both skill and inspiration. On one hand, the painter's skill and inspiration are highly specialized; on the other, a more common skill and less intense inspiration are expected of potters or weavers. Such useful arts, like all the arts of design, are supposed first to make everyday living safer and easier, and only afterward, more delightful. But that added measure of delight can become a very important factor—it leads to all the gorgeous display the world has ever loved, from “keeping up with the Joneses” to Benvenuto Cellini’s saltcellar and the durbars of the maharajahs. In the modern world the arts that serve everyday life look to new horizons unsuspected by earlier ages. Today’s airplanes have such beauty that the sharpest kayaks or clipper ships must yield, not only in speed but in direct expressive intensity. Our age has put our mark on all its works, from airplanes to ashtrays as well as abstract art.

For example, automobiles are accepted everywhere as typical modern expressions of daily life. Car designs epitomize the artistic ideals accepted by millions of owners just as chassis epitomize their sense of convenience. From the horseless carriage to a Thunderbird is progress in technology; in taste it amounts to a declaration of independence that marks the end of one era and the beginning of another: indeed, to understand where modern design is going, it is necessary to know where and when it began.

Modern design began when mass production elbowed out the ancient crafts on both shores of the north Atlantic Ocean; it is one result of the Industrial Revolution. The Industrial Revolution itself was only one aspect of a far deeper change that science and democracy wrought in man’s way of life opening avenues of freedom, health, security and interchange of experience and hopes, to masses traditionally oppressed. This fundamental change germinated for generations, but it burst on an unprepared world, shattering the matrix of Western tradition.

Reorganization has been relatively fast—the past one hundred years were devoted to it in large part, and the next hundred should be able to increase the rate of integration (if we handle our atoms right). In this new way of life all the arts were shifted toward new duties, with new aims and proportionate shifts in prestige. Through science applied as technology, the concept of skill was utterly transformed, in the arts as in the world at large. Inspiration—once upon a time the grace granted a good artisan from on high—was elevated nearer its heavenly source, as the prerogative of genius. This wide separation of inspiration from skill was nearly lethal for the arts.

In utilitarian arts the damage was early apparent, and reintegration was sought by every major designer and design theorist from the middle of the nineteenth century onward. Only recently their efforts have begun to yield results. This re-birth of the everyday arts warrants pride in design for industry as one of the most modern arts, one where the whole concept of modern life is put to the test. Like Sung potters and armorers in old Milan, our graphic and product designers reveal the character of an age in their output. How did it get its particular, revealing form?

A hundred years ago in clothing, furniture, architecture, in music, painting, sculpture the past was being plundered relentlessly and even the more remote corners of the [then] present were scoured for borrowable forms; “Tudor” dining rooms were separated from “Louis XV” drawing rooms only by “Turkish Corners.” Some eyes could penetrate beyond such surface effects; to these the arts of bygone days or distant peoples were admirably coherent, expressive of unique, inimitable ways of life, their reuse an empty masquerade. “I contend for Greek principles, not Greek things” declared Horatio Greenough, famous classicizing American sculptor, in 1852. About that time Commodore Matthew Perry unlocked the gates of Japan; ever since, her structurally frank and brilliantly austere buildings, evolved in the seventeenth
century according to Zen and Shinto precepts, have fascinated Westerners. The great mid-nineteenth century theorist, Viollet-le-Duc, restorer of France's medieval monuments, wrote "let us employ the appliances afforded us by our own times and apply them without the intervention of tradition." William Morris, his English counterpart, a little later reviving handicrafts amid the 'dark Satanic mills,' believed "what business have we with art at all unless all can share it?" These four examples reveal the earliest fundamental ideals of modern design: principle should govern effects; structure should be directly, clearly expressed; technological advance should be welcomed and put to use; design should serve a wide public. How far these ideals have been realized, what has affected them and how, that is our concern here.

Rationalism is the common factor in all four ideals, and rationalism is seldom if ever active in human affairs without a counterbalance of romanticism. Thus a hundred years ago brilliant engineers were able to live up to the ideal program of modern design without hesitation because their works were not expected to enact traditional roles, whereas designers on the contrary turned to romantic expressions as the most agreeable and understandable links between the arts as they had been and the arts as they had to be. These romantic expressions included, as we have seen, a sharply revised classicism, medievalism and Japanism as well as a growing interest in archaic and folk arts, appreciated for their unsophisticated charm and direct impact. Thus today still, we admire vernacular architecture and crafts, and the arts of savage and primitive tribes.

Romantic designers were by no means ignorant of the engineering around them, inescapably dramatic as it appeared in international expositions from the Crystal Palace to the Eiffel Tower: the influence of engineering on architecture is a feature of this period. But so far, the engineering aspects of products and graphic works remained unexpressed; design leadership lay with the Arts and Crafts movement which sought the virtues of ancient vernacular styles by reviving and re-living the simple procedures of handicraft. From this apparently retrograde activity designers learned to distill precepts of practice basic to all design, whether hand made or mass produced; these precepts remain unchallenged (if not always honored) in our own differently oriented time.

These precepts had to do with the appropriate expression in design of how an object was used and how it was made. A pitcher should look as if it would pour; a page, as if it could be read with comfort. A floor or wall should appear as a surface, not artificially transmuted into bouquets or flowers, ribbons, cupids, and other such trompe l'oeil. Iron should not masquerade as stone nor plaster as wood; hand-hammered textures were considered wrong for machines to imitate, but too perfect a finish was felt to be insensitive in handicraft. The mere ability to duplicate by machine an elaborate effect originated to excite courtly admiration or for the greater glory of religion no longer seemed a justification for furnishing homes as "abbeys" or shops as "salons." Design was seen as a guide to real meaning, a truthful though still poetic expression of the character of a product or building.

Thus fortified by strategy, designers felt ready to cope with mass production and mass markets, hitherto largely aimed to such get-rich-quick, public-be-damned devices as lowest prices, least quality, and apery of elaborate craftsmanship.

The first campaign of modern design was on: avoiding any new outward reminiscences of historical styles, designers reached for a new expression vivid enough to become the accepted style of the modern world, a mark of reliability and quality on all modern manifestations of design. Architects, product designers and graphic artists formed forces to "Art Nouveau," "Machine" (1903), not only stated the situation of modern design with exemplary precision but also voiced the crucial phrase (since then increasingly appreciated) "the wine at the service of man."

These first successes were temporary; academic design in its established might drove back the modernists. For a while around 1910 in most Western countries orders and ogives again ruled the façades while Chippendale, Sheraton and "the Louis" shared the interiors. Then, in Europe the first World War once more shattered large segments of Western civilization. But the setback, serious as it was, proved instructive for the next battle.

In the U.S.A. Sullivan languished almost unused and Wright found his major opportunity as Architect to the Imperial Household of Japan. However unappreciated at home, in the years just before and after the first World War Frank Lloyd Wright was understood in Germany and Holland as the leading prophet of certain major aspects of modern design: spatial flow, emphatic use of natural materials and clear-cut geometric forms. His genius was admired even more than his style; he lifted the prestige of the United States as a cultural source noticeably higher than the poet Poe, the painter Whistler and the architect Richardson had done. Wright alone among these stood uncompromisingly for the future development of all nostalgia, but warmly romantic and individual.

In 1919, after the war, Europe was battle poor, its nations small, in all aspects of design academism was not only successful but bureaucratically entrenched. Modern designers believed they could regain the ground once held by the Art Nouveau and advance further study only with strong alliances. They chose two: economy and the machine; with these lay the immediate hopes of general European recovery. This was implicitly a move toward impersonal expressions, toward the dramatization of collective welfare and of rational technological progress. The second campaign of modern European design was waged in Germany by the Bauhaus; in Holland by De Stijl; in France by l'Esprit Nouveau; all three joining to create an international Machine Style. These three groups were quite differently organized.

The Bauhaus was formed by Walter Gropius as a design school aimed at producing solutions for low-cost housing, urban planning and high quality, utilitarian mass production, all vitally needed in devastated Germany. The Bauhaus nevertheless constantly nurtured imagination and inspiration by emphasizing music and theatricals and in particular painting, under the guidance of Feininger, Kandinsky and Klee. In design, handicraft was considered the natural training device for mass production and the natural technique for experimental models leading to industrial products. In these respects, and in the noticeable playing down of philosophy and other verbal techniques the Bauhaus was the earliest working example of much that is still sought in design education. Its training was rooted in the arts and crafts movement of earlier generations and in Froebel's and subsequent work with children's art, but its vision was firmly fixed on the requirements and potentialities of its day.

A more loosely knit group was guided largely by Van doesburg through a publication called De Stijl. Its mark in product design (as in architecture) was evanescent, but, in large part through its influence on the Bauhaus, it swept the field in the graphic arts where now, a quarter of a century later, sans-serif type faces and "Mondrian" layouts (a layout is (Continued on page 31)
The site is in a bushland suburb with a slope away from the street and a view on the back over a reserve. The orientation is such that the view is against the sun to the south and the street side on the north.

The solution placed on this block a split-level house with the living, dining and kitchen section on the lower portion overlooking the view and the bedrooms on the higher section toward the street and the sun. In order to gain the advantages of northern sun for the lower level living area the two levels were merged by opening the main bedroom spatially into the living area with a continuous ceiling surface and a parapet height wall in the bedroom only. This made it possible to see the view from the main bedroom and yet be perfectly private from vision of the lower floor.

To give privacy to the bedroom glass expanse, a patio of solid and grille brick walls was built which will form an enclosed courtyard when the future third bedroom is built and the north wall of the patio will form the rear of a future garage to be built on the street side.
The plan has a total area of 1200 square feet for the first stage. Economy of construction is achieved by the use of simple standard materials, white painted common brickwork, deep corrugated asbestos roofing with a special feature in the full-height sliding aluminum glass doors to both living, dining and main bedrooms. The fireplace is made of curved sheet steel and is placed free standing against a wall of the living room.

Color is used on the exterior on the patio wall facing the street and the solid portion of the kitchen wall facing the rear, which are both deep blue gray. Other bright color accents are on the front door, which is orange, and various other doors and small surfaces on the interior. The wall opposite the glass doors in the living room is lined with vertical T & G hardwood flooring to match the polished floor of the room itself. This and the facebrick hearth and entrance floor form the only textured contrasts to the otherwise painted and aluminum surfaces.
Before speaking of the plastic idiom of today I should like to
draw an analogy with the spoken language. The special character of
a people depends upon environment and heredity; it is revealed in
that people's ideals and the special meaning it attributes to the vari-
ous aspects of life. The language of a people stands for a complex
system of forms, symbols and words. Plastic language is equally
significant for, within a society, it functions in the same way. Like
words, forms acquire a meaning born of the special feeling they
evoke; forms are organized into schemes and systems and they de-
rive their power from a common emotive potential. Thought does
not need to be expressed in words because it is determined by lines
and surfaces, by contrasts of forms, by strident or sweet harmonies,
by contrapuntal developments, by precipitations and reconciliations.
Plenitude and void become dominant motifs like good and evil,
black and white, the conscious and the subconscious. Like any ex-
pressed thought the plastic idiom has a logic all its own with deep
roots in man's consciousness; it expresses ideas, arouses feeling, re-
veals the life of things and men. But the artist of today is not limited
in his interpretation of the circumambient world by visual percep-
tion; he must learn the laws and the reasons that govern exterior
appearance."—MIRKO
DESIGN AND HUMAN VALUES

Early man in all cultures was already conscious of a vivid, sustaining correlation through which the meaning and significance of life flow. Indeed, the felt experience of relationship between form and function, value and right expression, preceded the analytical approach. Conscious analysis of design in nature and art, interpretations of ceremonials, rituals and behavior patterns have added to our sense of relevant form, though in many cases the primal wonder which alone can validate the search for correlations has often been dispersed by scientific and logical probing. To that aspect of the problem we shall come later. It is necessary to emphasize that minute connections, interior in design, as well as the cosmic outreach touching the grand design of the universe was and is felt by people who are mainly guided by the unitive mystery of creation. Beyond our intellectual grasp there is the picture: in that picture, the starry frame-work is somehow related to the firmament of human events; there is a total perception of a plenum which brings forms and values of life together. Man has created symbols to express this integral feeling. Spontaneous images have arisen in the human mind and guided the artist's fingers. Sea-shells and waving palms have imperceptively entered into temple designs in Orissa, in India, to make the ocean of life and the life on the shore meet in the east-coast architecture, fabrics, and carvings in that part of India. Colors drawn from sea and brown earth, or from objects of life have informed such art with a warmth and directional impulse which have little to do with representation or any apparent concreteness. North Indian art, from primordial times, has been structured in the rocky and dependable sublimity of the Himalaya mountains: Siva, the mythical lord of the mountains, makes the river of life flow from his locks, his tandava dance sets free myriad patterns which combine and recombine life-and-death. Essential form and living reality commune. Whether in interior Africa, or in ancient Mayan art, in Tibetan lamaeries or in cairns of aspiring stone in Druidic West, the immediacy of creative relationship between objects and human feelings, and the attempt to repeat a matrix, as it were which would hold forms in an ordained relationship can be found in man's art and worship. The sketch book of Leonardo da Vinci illustrate a whole range of "sub-conscious" image-making leading up to "articulate" and stylized formulation of structure and anatomy. The thrust of scientific illumination is also there in his pages. The existential cave drawings yet find their kinship in folk-art, and are also then in blended compositions of modern art. We must stress, therefore, that whether in sound patterns, such as the synchronized drum-beats and incantations, or in ritual dance movements, man from the earliest ages explored the convergence of design and the surge of life. We have lost the key to some of the ancient languages of design but new perceptive links have emerged in art, music and literature seeking to capture the same mystery of correlation. It is the pursuit of design and its elusive meaning: it is also an attempt to reach from a known meaning to a satisfying form - - and we are still engaged in the task.

Intellectual efforts, in modern ages, to reach the meaning of life through the forms it incarnates, has led metaphysicians as well as scientists to use "argument by design," to imply that design proves not
only an immediate purpose, but is revelation of a total purpose. There is reason behind phenomena, and the chain of cause and effect is centrally linked to an ultimate truth. The mutually adjusted rhythms of breath and pulsation, the thermostatic control of blood temperature necessary for bodily life, the synchronization of actinic rays with vitality on earth are among the countless examples which challenge and refute the theory of coincidence. “Necessary” design becomes teleological, the Creator’s purpose rushes through the whole fabric of creation. Modern science has sharpened the awareness of vast, though still unexplained, connections and brought earth-bound reality close to an ontology which has to account for life and its background. The argument by design, is no longer a mere speculation of the materialist, it has been enriched by modern research. In the language of art, we are becoming conscious of essential design, as belonging to an essential design; we are unraveling the design of life itself. To religious man, this design reveals the mind of God. The Divine purpose is to be seen in the miracle of creation which is His handiwork. Apart from specific revelations that belong to the faiths, there is a meeting of religions in the common acceptance of the creational revelation of God. While the materialist may insist that the grass is green because it must be and the sky has no choice but be blue, and derive his satisfaction from the fact, the biologist will go further. He will marvel at the retina of the human eye which can hold the image, and which is thus exerting the primacy of human life. With the psychologist he will also agree that without the mind, the image would not be there, and both will stand at the threshold of human consciousness which is interpretative in the activities. Religion postulates divine consciousness: it also realizes the personality of man, of each individual, without which the meaning and design of God’s creation cannot be fully understood. Religion does not discard the argument by design, but lifts it up for spiritual understanding, for realization by the person.

Here we can but barely indicate that the seers, saints and leaders in human welfare are in a sense men who perceived the perfect form, and exemplified it in their own lives. Perfection, of course, involves a transcendence which we do not apply even to great prophets, but we know of them as persons in whom God’s design has become manifest even though such manifestation is not equated with the idea of supreme incarnation. What we can discuss here is that from the finer structure of living, as projected by great characters, we immediately find supporting evidence of great moral beauty, ethical values, responsive humanity. In this light, design becomes more than an adaptation or a continuation, it is dynamic, it is personal, it is a conscious expression of spiritual order through a life made whole.

Perhaps the suppression or rather the neglect of human values, in an age of speed and confusion, has led to faulty designs, in home and workshop and in the area of international relationship. One can easily see war, hate, belligerency, etc., as a violation of form, an instance of our failure to comply with that higher harmony which would make designs run true to our basic humanity. We may trace such failures in terms of spasmodic music, discontinuance painting, discords and irritations set up by friction in the area of social and community life. The objects we use, the noise and jar that we create may reveal a disorderliness or a very superficial and unconvincing application of order. “Argument by Design” becomes very unreal if we show little effort to connect up with the normative value-designs of life, but use the idea as a phrase. From this argument, again, we may draw an important conclusion about design and planning at artistic and useful levels. Good design is not a luxury, it is not confined to a few rare and expensive objects that we may create for select customers. Art can, of course, flourish on rarified heights, and all art is not recognizable as being socially valuable in a given quantum of time or locality. But basically, good design flows out of an environment of culture: it is maintained by standards of excellence. Man himself is largely a result of its workings and it is the responsibility of man to invest all his forms with the same integral beauty and purpose that we see in the handiwork of God, whether we look within, or view the draught-board of the Creator in exterior space.

Although a full definition of design must suggest far-reaching implications, we normally are concerned, in modern society, with the more immediate problems of design within our manufactured environment. Nature is self-operating, but in the "man-made" world of city and factory we have to change and invent, to inform our productions with graceful efficiency. We must find for our creations, whether in clay, enamel, plastic or wood the forms that combine precise utility with aesthetic strength. Skill and quality are really inseparable: a high proportion of both would bring satisfaction to the makers and users of the things we manufacture. While a building must be functional, it must find for its forms with the material, to satisfy the values of refinement, and meet the specific needs of his customer. All this comes fairly easily when the social values and needs of a community are of a high standard, a community to which the maker and the buyer both belong. A technological age is no less answerable to social standards than the earlier patron and worker situation. Actually, in a democracy, however complicated its modern structure, the relationships between members are closer, mutual awareness and cooperation are more easily achieved in such a society. What we need is a redefinition of our values in terms of the new material and new techniques that we must use. That is to say, values will not be sacrificed, neither will machine-skills be spurned; the two can be brought together if we are using experience and are willing to take "creative risks" with our new material. In an earlier age, the handmade product of the artisan usually revealed a certain warmth and personality often left unexpressed by the machine. The advantages of the industrial revolution cannot be denied but one must

(Continued on page 32)
THE
BRUSSELS
UNIVERSAL
AND
INTERNATIONAL
EXHIBITION
1958

In the frame of the International sections, and on an area of 2,500 square meters will be found the pavilion of the European organization for economic cooperation and of the council of Europe.

Dr. Karl Schwanzel is the architect of this building, the roof of which is suspended and stretched between the two exterior supports.
The Universal and International Exhibition to be held in Brussels in 1958 will provide a unique opportunity to compare the various and sometimes contradictory movements which are growing out of the new economic and social relations, of scientific and technical progress, and of the urgent need to give a new direction to the life of man. There is a great anxiety in the spirit of this age. The remarkable advances which have been made in technology have brought with them a dawning realization of a world of wider horizons. The increased pace of social and economic interchange which has resulted upset the equilibrium of separate existences and disrupted the ordered way of life.

In the future it is on a planetary scale that the new structures will rise, but this growing-up process in which the need for a brotherhood is affirmed cannot take place entirely without some damage to our present concepts. The birth of the united world raises enormous problems of adaption. This trend toward the "planetization" of society goes hand in hand with the increasingly noticeable re-assertion of the personality which is only apparently contradictory. The forces which are thrusting humanity forward require at the same time the union and personalization of its constituent parts. The Brussels Exhibition, therefore, finds itself at this turning point in history on the threshold of developments of a prodigious and vast scale; a period of challenge and adventure since a way of life must be discovered that is better adapted to the enormous advances of philosophy and technique.

The project will cover approximately 500 acres with up to the present 42 countries represented in the foreign sections. Each participating on the general theme of the exhibition: "To show to advantage the human factor in technical progress." It will be the hope of this World Exhibition to express the collective thoughts of peoples regarding the problems of this age, and it is intended that it become the most formidable evidence that the world can, at present, give about itself.

The first World Exhibition was organized in London, in 1851, and held at the Crystal Palace where 17,000 exhibitors were brought together. There have been twenty-nine World Exhibitions since then, and, until 1928, any country could undertake this kind of project whenever it chose to do so. While many of them were extremely successful, others were less so, and some of them were more like International Fairs than World Exhibitions. In order to remedy this situation, thirty-five countries signed a diplomatic convention to regulate the frequency and method of organization of World Exhibitions. It was agreed by the signatories to this convention to allow six years to elapse between two consecutive General International Exhibitions with the further stipulation that any one country was only to be permitted to organize one such exhibition every fifteen years.
BRITISH SECTION

The British exhibit consists of three distinct parts: a government exhibit occupying a number of original pavilions, whose roofs and irregular surfaces will be particularly admired; an open-air exhibition in a part of the park that will call to mind English gardens; and a vast industrial pavilion. Six inside posts will support this 12m. high all-glass hall.

CANADIAN SECTION

The pavilion, built on wooded, sloping ground, is a three-level, steel-framed construction, reached by a rising ramp.

The ground floor is partially free space and houses an ovoid auditorium with 800 seats.

THE AFRICAN FAUNA PAVILION IN THE CONGO SECTION.

This will consist of a large dome of special plywood attached to a wooden framework.

Designed by Mr. C. Brodzki, it will have no windows and will rely on artificial lighting. The interior will contain a series of displays representing the chief animals of the Congo in their natural setting. Fishing and hunting scenes and other aspects of bush life will also be shown.
THE CIVIL ENGINEERING PAVILION.

A three-story metal and concrete exhibition hall will be given an unusual feature in the form of a slanting concrete construction soaring to a height of over 98 feet. The base of this element will end in three concrete supports widening into a dome while from the tip a metal foot bridge will be suspended. This bridge will span a vast relief map of Belgium almost half an acre in area and lead to another large exhibition hall 2105 sq. yards in area.

FINNISH SECTION

The Finnish Section will cover 3170m2. In addition to the all-wood pavilion, there will be a “sauna” or steam bath peculiar to Nordic countries, and a small artificial lake.

FRENCH SECTION

The French architects have drawn up very bold plans. The pavilion will have a unique base in the form of a crystal, shown in the foreground of the photo. As this base will be overhanging, the large arrow which can be seen here will act as a weight counter-balancing the whole edifice.

The French section will cover 25,000m2.
JAPANESE SECTION

The symbol of an age-old tradition is represented by the pavilion itself, constructed of wood, paper and bamboo, while modern technique is represented by the overhanging metal roof which is entirely suspended from its central supporting bipod. It is a clear representation of a country where two widely different cultures meet and fuse together.

GRAND DUCHY OF LUXEMBURG SECTION

The Luxemburg pavilion, which consists of two perpendicular buildings, will be particularly free of outlook. It will be raised above ground-level by means of central bases.

This Section will occupy 3,000m² and is situated opposite the Dutch section.

PORTUGUESE SECTION

Portugal will occupy 6,300m². The architecture chosen is sober and modern in line, with vast all-glass walls.
SWISS SECTION

The Swiss architects have chosen a system of small inter-communicating pavilions, thereby giving this section quite a local character. It is situated on a fairly steep site and will cover 10,835m².

AMERICAN SECTION

The American pavilion for the Brussels World Fair has been designed by Edward D. Stone, architect. Developed on a sloping site, the structure is a 381 feet in diameter pavilion with an adjacent auditorium. The great circular steel-columned structure has a compressive rim of reinforced concrete connected to a metal center section by high tension steel cables. The surface of the roof is translucent plastic and the exterior walls a plastic honeycomb.
logical approach to better housing, schools and living conditions is of the present day: housing, schools, hospitals, chapels and crematoria are sympathetic to contemporary architecture. The main portion of the book is devoted as brief background and only to explaining certain characteristics and examples of unusually high standards. The revised edition of SWEDEN BUILDS is no exception.

In examining climate, and its effect on people and architecture, natural resources, architectural inheritances, social conditions, Mr. Smith arrives at carefully observed conclusions on the attributes and weaknesses of Swedish contemporary architecture. Sweden possesses the highest standards in the world today.

Sven Markelius, Sweden's leading planner and architect has written a penetrating article on the urban and suburban planning of Stockholm, "the world's loveliest city." A revelation of foresight and intelligent city planning, as opposed to the runaway, speculative development seen in portions of the world today.

While we are shown examples of vernacular architecture, wonderful old wooden buildings of 16th and 17th century; the handsome 12th century Round Church at Hagby; early stone churches, these are given as brief background and only to explain certain characteristics sympathetic to contemporary architecture. The main portion of the book is concerned with new architecture from Gunnar Asplund's buildings at the Exposition of 1930 in Stockholm to important work of the present day: housing, schools, hospitals, chapels and crematoria, athletic centers, industrial architecture and bridges.

"Esthetics can be in time a style and a dated one, but the sociological approach to better housing, schools and living conditions is a timeless one, and this is the basis of the Swedish attitude. The Swedes, I feel, have accepted the revolution of the new architecture and the mechanized life more completely than any other people. In most countries of the world modern architecture is a cult: in Sweden it is a popular expression."

Recommended to all concerned with better architecture and better planning.

GERMAN PAINTING IN OUR TIME by Gerhard Handler (Rembrandt-Verlag GmbH, distributed by George Efron, 41 West 83rd Street, New York City 24, $12.50).

Dr. Handler, director of the Museum of Art in Duisburg, has prepared a synopsis of the development of German painting over the past 50 years. Seventy painters from the Bruecke, the Blaue Reiter, the Bauhaus, are discussed along with those affected by the Expressionists, through Abstract painting and Surrealism. Amplified by quotations from Kandinsky, Klee, Gabo, among others, Dr. Handler shows the gradual metamorphosis in manifestations of visual reality in art to the changed concept of reality as it has come about in the past 150 years. Representing the various trends and changes during the period 1906 to 1955, are works by Corinth, Kirchner, Schlicht-Rotluff, Beckstein, Nolde, Kokoschka, Beckmann, Karl Hofer, Kandinsky, Marc, Klee, Macke, Jawlensky, Feininger, Schlemmer, Baumeister, Max Ernst; an especially large section is given to the younger artists, with notable examples by Werner Gilles, Werner Scholz, Edward Bargheer, Werner Heldt, Otto Risch, Ernst Wilhelm Noy, Fritz Winter, Hans Hartung, Meistermann, Hans Trier and others. More than 194 plates (45 in full color) are of excellent quality and include not only well-known paintings, but also many reproductions are published here for the first time.

Recommended.

FROM RENOIR TO PICASSO by Michel Georges-Michel (Houghton Mifflin Company, $4.00).

Michel Georges-Michel collects artists as a hobby and writes of many as an O. O. MacIntyre of Montparnasse than a Boswell. His friends and acquaintances over the past fifty years have included practically every artist from Rodin and Renoir, Degas and Lautrec, Monet, the Fauves, Cubists, the artists of the Russian Ballet, Chagall, Picasso, de Chirico, most of the Surrealists and Futurists, up to Bernard Buffet.

His book is not a collection of alleged interviews and fabrications pathologically trumped up for the sake of a stir in the press, but a series of anecdotes, vignettes, thumb-nail sketches, short profiles and conversations with artists he has known—both slightly and well—making a kind of atmospheric history of contemporary painting. That the book is not profound is of no consequence—for it was written in the spirit of pleasure and amusement for the pleasure and entertainment of the reader. There is always fascination in the intimate anecdote that brings the reader in close association with creative, remarkable, or otherwise colorful individuals, and M. Georges-Michel has traveled in a bright set. Included in the text are 50 drawings by the author and artists discussed and the jacket design is by Marc Chagall.

Entertaining.

FIGURE DRAWING COMES TO LIFE by Calvin Albert and Dorothy Seckler (Reinhold Publishing Corporation, $7.50).

This comes as a refreshing contrast to the usual art instruction book filled with pat copy methods and slavish, mechanical renderings. The concepts of Calvin Albert, well-known artist and sculptor who teaches at Pratt Institute, are interpreted by Mrs. Seckler (presently on the editorial staff of Art in America). Mr. Albert stresses "a freedom of spirit that goes beyond style," which stems from a fundamental interest in the creative process. His experiments in 'intuitive' drawing, the scribble figure, geometric interpretation, handwriting the figure, the contour, building with straight lines, the ball of yarn technique, etc., are completely successful and are amply demonstrated by the work of beginning students—175 student drawings are shown against corresponding methods of drawing by old and modern masters and these come off so well that Mr. Albert appears to be a kind of magician. FIGURE DRAWING COMES TO LIFE is the best book on drawing that we have seen since Nicolides' THE NATURAL WAY TO DRAW.

BOOKS RECEIVED (to be reviewed in future issues).

METAL SCULPTURE by John Lynch (Studio-Crowell, $4.50).

ART DIRECTING, edited by Nathaniel Poussette-Dart (Hastings House, $15.00).

HOW TO FIND YOUR OWN STYLE IN PAINTING by Ray Borth (Hastings House, $3.50).

THE ENCYCLOPEDIA OF FURNITURE by Hermann Schmitz (Frederick A. Praeger, $15.00).

MAYA ART AND CIVILIZATION by Herbert Joseph Spinden (The Fal-
And he will suffer as did every other artist in history who vaulted its unforgiving frown, he continues. into the cold regions of future.

and it can be ensured that the developed countries play their part in maintaining their own social health, so that they may help others. At the same time, they must spare some of their best minds and the composition of a page including type areas, illustration and blank spaces) are still flourishing. Mondrian, the painter, was for a while a member of De Stijl, his abstract visual images have served as examples to all the arts, remaining themselves unequalled.

L'Esprit Nouveau was also a publication that voiced the ideas of a group; its most famous member was Le Corbusier, and naturally architecture and urban plans were among its chief interests. In painting it made a mark with Purisme, and, thanks to Le Corbusier's assistant, Charlotte Perriand, striking Machine Style furniture second only to the Bauhaus' best was designed in Paris and widely admired. It is interesting to note that Le Corbusier, while fostering these designs, also continued the Arts and Crafts enthusiasm for archaic and vernacular arts: the Bauhaus on the other hand reached for a synthesis in which all useful objects of a home or office would harmonize in the Machine Style. This search for a total expression had been as typical of the Art Nouveau as had vernacular enthusiasms, of the Arts and Crafts movement. Progressive modernists of the twenties and thirties were more closely tied to their predecessors' ideas than one would suspect when ocularly comparing Machine Style objects to earlier modern designs.

The most beautiful, if not rigorously rational, products of this era are the chair and tables of Mies van der Rohe, some of them revised and revived for today's use. Admirably rational, less graceful, was the furniture designed by Marcel Breuer, much in use before World War II. The most effective graphic artist of those days was Casandre, a French poster designer unallied with any of the groups mentioned but quite in key with their work. Together these groups succeeded in establishing modern design for more securely and widely than before; it was clearly the growing movement.

(To be concluded in the September issue) copyright Harcourt, Brace
Also admit that in its inception it was misunderstood. One saw among other things automobiles that reproduced animal-drawn vehicles and were literally "horseless carriages." Radio sets, when they came along, were sometimes moulded in the form of baroque architecture. Industrial art indulged in mimicry of vanishing art-motifs, though it drained off the real meaning of association or function. Along with this, we witnessed the mechanized extension of mass-produced forms. Instead of the initial industrial stage which used the machine to imitate hand-made objects, we came to the stage of an overzealous purge of all decorations and traditional symbolism. Objects appeared in stark, aseptically sterile forms, with the atmosphere of a surgery. Buildings were erected which suggested a mint or foundry though meant for art and drama, or a home for living. Indian architecture, in that phase of British industrialism, for instance, often looked like packing boxes transferred from foreign back yards of jetties, and cement factories. Side by side flourished railroad stations looking like pseudo-cathedrals, testifying to the Empire-builder's concept of art. The Victoria Memorial is a culmination of false industrial architecture: it stands as an expensive and unproductive ersatz Taj Mahal, at once a memorial of confused power and a warning.

Today, in East as well as West, we may benefit from our errors and from a threshold sense of new arrival at our proper legacy and at the growing edge. While the different cultures of Africa, Asia and the West will uniquely respond to new technical demands, they will as inevitably draw from old, undying roots. Civilization will use and absorb the machine, as it has always done—machines, in less complex forms were there in all stages of human evolution—but the over- all demands of technology will have to be met with a strong sense of what is genuinely satisfying to the cultural personality of a region or a people or a nation. The ultimate stamp of personality will, of course, be that of the individual artist working with freedom and social sense.

The Buddhist stupa of Sanchi, the exquisite Gothic cathedral of Chartres, episcopal Madura architecture, none of these are possible today. But we may find in them or in the graceful spire of an old New England Church, in the domed mosque of Isphahan, or in the delicate silhouette of a Japanese temple the source and inspiration for the new form. Art objects, in all countries may gain insights from the silver winged aeroplane; nylon as well as Chinese silk may be tailored into Indian saris; American designs may be translated in the stitches and old colors of an African carpet. We are poised at an in calculable period of art in the West and the East. New designs in the home will follow the redesigning of our international life; the artifacts and symbols of new civilizations will offer beauteous contours and evocative textures as a direct result of contact with the new machinery or with the old, but recently discovered, jewelry of timeless civilization. There is no reason to believe that industrialization, once the critical period is passed, will seek to standardize art. As a matter of fact, even during the crisis period, art has defied standardization because the human mind cannot be so moulded. It is entirely legitimate to hope that from a door knob to the design of a reading lamp, a new order of beauty is being born. Freed from the inferiority sense produced by wrong use of power, a truly great nation, whether small or big, may achieve an age as advanced as the bronze age was over the stone. But this advance must not be confined to the change from a stone axe to metal one; it cannot be exclusively technological: it must involve the evolution of man himself. The upsurge of the peoples of the world, the creative dignity released in the free, ordinary person, the meeting of such persons from diverse cultures, may result in the expression of new art forms. The human element must be inherent in the true new design.

A paper from the International Design Conference in Aspen, 1957.

MUSIC
(Continued from Page 6)

And to hear the same again, in a different style, listen to the record of Schubert's Octet, played by David Oistrakh with a group of Soviet musicians. Observe the continuous inflection of Oistrakh's tone; observe even more its reticence. Here is no name-player showing off among a group. Observe his deference to the clarinet, a reading scarcely to be equalled, searching at times the tones of an oboe, and to the serene horn.

Well, to get on with it, let me talk about the virtuosity of Myra Hess. Myra Hess has a supreme disregard for the ordinary recital program, which peters out at the end. She begins with Bach, her own sort of Bach, goes on to Beethoven and ends with Schumann, which makes a good evening but throws a great deal of weight on Schumann. This time she had chosen a Bach Prelude in G, which I do not know—it is not in my complete editions; the Second English Suite; Beethoven's last Piano Sonata, opus 111; and the Schumann Symphonic Etudes.

In the Bach the slow movements were eloquent, the fast movements a bit too heavily on the beat. I don't care for accentuated Bach on the piano, but I remarked that the accents, approve of them or not, were falling where they should. I began to be aware that the first movements were holding the shape together, making it her Bach, her solution of a problem otherwise to be solved by altered rhythm, independence among the voices, and embellishment. With the Beethoven I took hold. Instead of carrying the first movement by dynamic thunderings, she was weighting it with carefully located accents and articulating its all too easily confused sections as large differentiated shapes, each having its own manner of expression. If the first movement could have done with more thundering, it could as easily have suffered by it. As for the second movement, apart from a couple of chipped notes, it was the equal of the best I have heard. The first variation may have sagged, but from there on the expression steadily increased, rising to such a heaven of sound among the double trills as I have heard before only from Richard Buhlig. Myra Hess can be ranked among the greatest and far above the contemporary name pianists.

After great Beethoven, if it does not end the program and send me home, as normally I believe it should, I am apt to be indulgent. The Symphonic Etudes are in a manner of speaking Myra Hess's chosen vehicle. I had not prepared myself to discover what she could do with them. No one can save all of them, but no one else can play them like Myra Hess. And to round off my comments on her manner of accentuation, I heard it used in the penultimate variation, the slow movement before the march, as I have heard it from no other pianist.

Over a flowing bass as deep and sonorous as it was soft she raised an air of noble lines, single accents so variously gauged in height, that I was not listening to melodic Schumann. It was as if
a composer with the discernment of a Paul Klee were translating appearances into their causes, showing us, this is how music is made, this is what the art of the piano, liberated from the composer, itself consists of. Piano playing is an art of resonance in depth, of horizontal extension and release, of perspective by the third dimension of infinitely graduated accent. By these means the modern piano makes up for its deficiency in tone, for it can never robe itself so richly in the garment of sound as a magnificently registered harpsichord. Unlike harpsichord or orchestra, the piano does not so much enrobe sound as project it, conveying it by illusion, locating it in dimensions not to be attained by any other instrument. That is why I am so seldom satisfied by a pianist, and when I am satisfied, why I am so completely satisfied.

For encore we were given a little recital, perfectly rounded as the greater program: Beethoven’s Für Elise, as exquisitely turned as by Schnabel; a Mendelssohn Song Without Words; a Brahms Intermezzo; a Scarlatti Sonata (L. 387 K. 14), played just slowly enough, with unhurried attention to every note, to make it seem a triumph of velocity; and the Adagio of Bach’s Toccata in C, the pedal notes vibrant and soft as organ tones.

I tell you, playing the harpsichord has made me listen to the piano with fresh-opened ears. You should try it.

Something comes between me and song, a lack of confidence in voice, my own, that will not strike the pitch happily like a piano. I look at the notation on the page, and for me it does not sing; I look critically. I am like the critic who finds the singer and the free voyagings of the virtuoso. When John Edmunds sent me his settings of the Purcell songs, recovered for our lesser musical intelligence from the single line of continuo that was in Purcell’s lifetime all the voice, my own, that will not strike the pitch happily like a piano. I look with unhurried attention to every note, to make it seem a triumph of appearance into their causes, showing us, this is how music is made, the exact significance of each sound.

I am so seldom satisfied by a pianist, and when I am satisfied, why I am so completely satisfied.

For encore we were given a little recital, perfectly rounded as the greater program: Beethoven’s Für Elise, as exquisitely turned as by Schnabel; a Mendelssohn Song Without Words; a Brahms Intermezzo; a Scarlatti Sonata (L. 387 K. 14), played just slowly enough, with unhurried attention to every note, to make it seem a triumph of velocity; and the Adagio of Bach’s Toccata in C, the pedal notes vibrant and soft as organ tones.

I tell you, playing the harpsichord has made me listen to the piano with fresh-opened ears. You should try it.

Something comes between me and song, a lack of confidence in voice, my own, that will not strike the pitch happily like a piano. I look at the notation on the page, and for me it does not sing; I look critically. I am like the critic who finds the singer and the free voyagings of the virtuoso. When John Edmunds sent me his settings of the Purcell songs, recovered for our lesser musical intelligence from the single line of continuo that was in Purcell’s lifetime all the keyboard artist needed to improvise an accompaniment, variable at each reading, I could only look and admire, nothing in me would sing. Then Marni Nixon, her high voice clear as a boy soprano’s or a high trumpet, read the songs for me, as she only of the singers I have known can read, discovering the songs at sight. My mind was focused on the eloquence of this singing line that takes the voice. I did not hear these songs again until, at one of the Eight O’Clock Concerts, she sang a group of them. How simple it is to sing like that. If one can do it. I have heard many try and fail. Lately I heard songs by Purcell sung by Alfred Deller, a counter-tenor who seems to be in process of becoming an alto, or rather a contralto, English-style, fat, eloquent, and heavy. The music was not piercing but sweet, slow, and impure.

Virtuosity is not in the music alone but in the instrument, the right instrument for the music, the transformation of the written notes in the sound that releases them. To sing well, to perform accurately by instrument, as John Charles Thomas used to do it, these are all admired but not virtuosity. I cannot praise what has been done wrong, no matter how well otherwise it has been done.

Listen to Marni Nixon singing in the record of Stravinsky Chamber Works 1911-1954, Conducted by the Composer (Columbia). She sings three groups of early songs recently reset by Stravinsky for chamber accompaniment, the witty, ditty sweet Stravinsky lyricism one hears seldom in his larger or later works. Hear her in the album of the Complete Music by Webern (Columbia), which I shall review in a subsequent issue. Listening to her in these songs you may hope, as I do, that Marni Nixon will record Purcell also and as well. It is a voice of very individual timbre, pure as a pool, guided by an effortless response to music, a voice peculiarly to be heard in the intimacy of records. There she may win a following as devout as Deller at first deserved.

Richard Robinson sings with her on the Stravinsky record. At the Eight O’Clock Concert Robinson sang a group of four songs, the staple work, by Respighi, floridly Italian, and Beethoven’s song-cycle An die Ferne Geliebte. Robinson has developed an individual but not extraordinary voice with an intelligence of wide versatility. He is at his best in declamation. One does not so much listen to him as with him, hearing the line and inflection of the voice as he projects it. Many tenors are more around but few so directed to the musical sense, the exact significance of each sound.

Together they sang two groups of the always lovely, romantic, humorous duets by Schumann, a rare fortune to hear.

But I must come back to Marni Nixon, who having sung Purcell returned to us with the Quattro Liriche di Antonio Machado, composed by Luigi Dallapiccola. And again virtuosity, a transformation of song into vocal experience, lovely, slender, fleeting, an awareness of pure tone at the edge of silence. These were very different from the dramatic performances of Dallapiccola songs by Magda Laszlo at last year’s Ojai Festival. Laszlo is a striking personality; Nixon makes no obvious effort to impress. Both are impressive. The songs of Dallapiccola will not yield themselves to ordinary voices, to any formal singing. He is already among the supreme song-writers of the ages, and the purest voices of women rejoice in him.

When I went to USC to hear Ravi Shankar, younger brother of the dancer Uday Shankar, I was again dubious. Ravi Shankar has been praised as “the best sitar player in India,” but such criticism can flourish indiscriminately at this distance from the source. In New York he had been sending the best jazz musicians, who flocked, we are told, to hear him. I did not like the build-up for this Liszt of the lute. But he would be playing with Tabla and Tamboura. When I heard a local player in the same auditorium several months ago, I reported that, although he was billed to appear with Tabla and Tamboura, no other instruments were present on the stage. I wondered, lacking further information, whether these might be instruments or modes.

The program was again put on by the Indian Students Association of the University of Southern California. Ravi Shankar was at sitar, Chatur Lal at tabla, and Nodu Mullick on tamboura: the program so stated, as if for jazz.

Dr. Max Krone of the University told us in his introductory remarks that Chatur Lal had been brought to America by the Omnibus TV program several months before to share a piece of the evening with Johnny Jones, who is, Dr. Krone explained, a leading American jazz drummer. If Jones is as good as Lal, I must look him up. It seems the two boys exchanged complicated drum rhythms with ease and pleasure.

The sitar is an immense lute, corresponding to the European chiltern but with resonating sound bowls made of gourds. Shankar’s sitar is made with two gourds, one at each end of the stout, hollow teak neck. It is strung with six main strings and nineteen sympathetic strings. The main strings are plucked by a wire plectrum on the right index finger; the sympathetic strings may be plucked with the little finger. Tamboura may be described as a round, hollow, resonating post strung with four or five strings and having a gourd resonator at
The music begins slowly, in a sort of cadenza which states the theme, the sitar and 'tamboura played at this concert, both magnificent in the bottom. It is played by strumming the strings with the index finger of the right hand at the upper mid-section of the post, the rhythm and pace of the strumming providing the beat for the two solo instruments. The sound is an unchanging drone, which starts when the other instruments begin to tune and does not cease until the improvisation ends. The tamboura player has no melodic notes or any function except to keep the rhythm and sustain the drone. Nodu Mullick, the tamboura player, is also an instrument builder; the sitar and tamboura played at this concert, both magnificent instruments, are his workmanship.

This was my first introduction to extended popular improvisation in a classical style as a living art. Five separate improvisations, including two solos, for sitar and for tabla, each accompanied by tamboura, kept us occupied from 8.45 until 11.30, and the interruptions were brief. Tuning the two solo instruments separately takes time but is so perfectly rhythmical that it is a pleasure to hear. During one round Shankar had trouble with a slipping string; he passed the lead to the tabla while he strummed a single note and tuned. Tabla later did the same, without dropping a beat, Lal interpolating the strokes of the tuning hammer, which loosens or tightens the drumhead, within the hand and finger beat.

Shankar provided lucid comments on the ragas and talas and counted time gracefully with both hands, for the benefit of the audience, during the whole of Chatur Lal's tabla solo. A raga is a scale, usually of 22 tones, including quarter-tones and microtones, and the talal is a fixed rhythmic cycle. In classical style no note outside of the chosen raga may be played or touched; in semi-classical style other ragas and folk-tunes may be worked in. For the first three improvisations the talals were: seven measures 2-2-3; sixteen measures 4-4-4-4; ten measures 3-2-3-2. I did not try to pick up the two later, and Shankar did not announce them. At the start of each rhythmic cycle a new improvisatory round begins on a strong beat. I am not sure how freely ragas and talals may be cross-pollinated, or whether the chosen raga may be played or touched; in semi-classical style the player will be subordinate. Shankar's heavy head must be at a slightly more rapid pace. You can imagine what this means when the players append another ten or fifteen minutes of music a complexity demanding many hearings, and that the virtuosity of the player will be subordinate.

INTERIOR DECORATION—HOME STUDY

(822C) Approved supervised home study training in all phases of interior decoration. Ideal supplementary course for architects, builders, designers, no. classes. No. wasted time. Text and work kit furnished. Low tuition payments. Send for free booklet, Chicago School of Interior Decoration, Dept. 822C, 50 S Division Parkway, Chicago 44, Ill.

NEW THIS MONTH

(306a) Structural Material: New catalog available on Acrylite, an important new material for interior and exterior design. Acrylic sheets in which a variety of designs and textures have been embossed provide new design technique for separate living, dining kitchen, and other areas in a way that room dividers and panels become a central decorative feature in the room. May be coordinated with drapery and upholstery designs, as well as colors. Waseo Acrylite is sold as a panel or by the square foot, with varying thickness, size and design elements. Send for complete information, Waseo Products, Inc., 93F Fawcett St., Cambridge 38, Mass.

LIGHTING EQUIPMENT

255a Lighting Equipment: Skydome, basic Wasco toplighting unit. The acrylic plastic dome floats between extended aluminum frames. The unit, factory assembled and shipped ready to install, is used in the Case Study House No. 17. For complete details write Westinghouse Electric Supply Co., Dept. AA, 4601 So. Broadway, Los Angeles 38, Calif.

NOTE: Literature cannot be forwarded unless occupation is shown.
SASH, DOORS AND WINDOWS

298a Solar Control Jalousies: Adjustable louvers eliminate direct sunlight and skylight at windows and skylights; some completely darken for studio. Choice of controls: manual, switch-activated electric, automatically controlled. In most air-conditioned institutional, commercial and industrial buildings, Solar Control Jalousies are actually cost-free. Service includes design counsel and engineering. Write for specifics, Lemlar Corp., P. O. Box 352, Gardenia, California; telephone Acme 13461.

NOTE: Literature cannot be forwarded unless occupation is shown.

CONTEMPORARY HOMES Sales • Rentals

Featuring

RUTH RIES, Realtor
9001 Beverly Blvd.
Crestview 4-6293

BUSINESS FOR SALE:
A CONTEMPORARY SHOP

long established in Southern California

FULL PARTICULARS, BOX 505a, ARTS & ARCHITECTURE
ANTHONY POOLS

NOW RECOGNIZED AS THE WORLD'S LARGEST BUILDER OF QUALITY POOLS

Outstanding among the reasons for Anthony's success is the unique swimming pool filter system utilized. It has recently been improved to incorporate an all-brass pump and lint strainer, making the complete filter rust-proof.

Another reason so many are insisting on an Anthony Pool is the fact that the firm builds most of the pool parts in its South Gate plant. Anthony also owns all its own equipment, and Anthony's crews do all the various construction phases.

An Anthony pool can be built to any size and shape, with the Gunite method of construction. Anthony also manufactures preformed one-piece Fiberglas pools that can be enclosed as part of the living area—ideal for the smaller yard.

Write for full information on:
- Gunite Pools
- Fiberglas Pools
- Swimming Pool Equipment

Visit our model pools
Many unusual ideas for swimming pool landscaping are featured at Anthony's three model pools in South Gate. Display is open daily until 8 p.m.
You Can Now Specify “Miracles” Too...

with the

ELECTRONIC RANGE

by Westinghouse

NEWEST OF THE FAMOUS BUILT-INS

WITH “SPEED-O-LIGHT” COOKING:

- Blink your eyes and the cooking’s done! A poached egg in 20 seconds, a hot sandwich in even less. A baked potato in 4 minutes . . . even a medium size chicken roasts in 20 minutes, rather than the 2½ hours usually required.

- Foods may be served in the same dishes they’re cooked in . . . eliminates drudgery of scrubbing and scouring pots and pans. Foods don’t spatter, oven’s always sparkling clean.

- Hot Food from a Cold Oven! The only heat generated is in the food itself . . . there’s none in the utensils or the oven. Complete safety, even for children to use.

- No temperatures to remember . . . just dial the proper interval of time and cooking stops at the time set. No danger of overcooking or burning.

WESTINGHOUSE ELECTRONIC RANGE CAN BE BUILT INTO A WALL, SET ON A COUNTER OR BASE CABINET . . . ANYWHERE 220-VOLT SERVICE IS AVAILABLE

SEND FOR YOUR COMPLETE WESTINGHOUSE LITERATURE & INFORMATION TODAY

In SAN FRANCISCO:

Westinghouse

ELECTRIC SUPPLY COMPANY
CONTRACT SALES DIVISION
201 POTRERO AVENUE
SAN FRANCISCO 1, CALIF.
Phone: UNderhill 1-5051

In LOS ANGELES:

Westinghouse

ELECTRIC SUPPLY COMPANY
CONTRACT SALES DIVISION
4601 SOUTH BOYLE AVENUE
LOS ANGELES 58, CALIF.
Phone: LUDlow 1-0281

You can be SURE...if it's Westinghouse
Concerning the price of Mosaic Tile...

With a reputation for luxury often goes the impression of great expense. Actually, while Mosaic ceramic tile is not a low-priced material, its first cost, and only cost, is most reasonable. This is especially true when tile use is planned as judiciously as in the Mosaic Garden Bath. Architect Richard Dornan, A.I.A., created this luxurious setting using only 70 sq. ft. of ceramic mosaic tile, only 100 sq. ft. of glazed wall tile. Total cost, tile and installation, about $390. (may vary slightly in different areas). For your A.I.A. File Folder giving complete specifications and construction data, write Dept. 38-24, The Mosaic Tile Company, 829 N. Highland Ave., Hollywood 38, Calif.

THE MOSAIC TILE COMPANY
Member: Tile Council of America, Inc. and The Producers' Council, Inc.
America's largest ceramic tile manufacturer

For free estimation on Mosaic Tile, see the yellow pages for your Tile Contractor. Ceramic

AMERICA IS ENTERING THE CERAMIC TILE AGE