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When Arturo Toscanini failed to awaken from sleep those of us who had felt his leadership through the most difficult years of modern times had little more to say. Let the obituaries summarize the legend. We knew, from the hour when he left the podium refusing to return, that he would not come back. We could trust the emotional authority which had never deserted him as artist or as man. The "infallible conductor," the "prodigious memory," the faithfulness to the score meant little to us. The unequalled musical technician never let us down. It was not for that we loved him but for our knowledge that when a particular emotion excited him he could draw from the well-trained orchestra a response unique to the occasion; for his unfailing, detailed, determined craftsmanship, the discipline imparted during his first seasons with the New York Philharmonic-Symphony by three years of unremitting rehearsal to achieve a Jupiter Symphony; for the years of miraculous workmanship with that orchestra until the heartbreaking mastery of the Ninth Symphony with which he bade his orchestra and his devoted millions of radio listeners farewell. More than any other man Toscanini symbolized good music, music as an art to be respected, not to be laughed at, among the country-clubbers, the bridge-players, the homebodies, the younger generation awakening through the rough years of Depression to the necessity of music. Through the radio he, more than any other, built the American awareness of serious music as a necessity of life. When he returned to lead a new orchestra, it was not quite the same; but he spoke for us, as no other could do it, of the long agony of Europe in an unforgettable reading of Beethoven's Solemn Mass and again, after the signing of the peace treaty with Japan, when the radio turned from that ceremony to hear him lead his orchestra in the Eroica Symphony. At the end he left us his greatest works, above all his unequalled Ninth Symphony, his beloved Verdi, in records defined not by perfection or by peculiarity but by his unequalled emotional authority, transmuted as whole forms, his own. For much music he was not the best conductor; we did not expect that he should be. What he did best was imperishable in our memory. His few notable actions outside music were as worthy: he turned his back on the Nazis; he defied Mussolini in Italy. Through his long life he never abandoned the composers or the works he loved or those works which spoke for him of Italy. His greatest achievement was the wakening of America to music. Let it be remembered that he, longer than any other, made music in America, not accepting the standards of our popular culture but imposing on us his standards; and we loved him for leading us. He stood upon the height of orchestral and operatic music, arriving not too early and leaving not too late.

A COLLECTION OF REVIEWS

Here for a change is a collection of reviews, a cross-section of the concerts and recitals I attended early in the season.

At the Hollywood Los Feliz Jewish Community Centre the current season opened with a recital by George Neikrug, cellist, accompanied by Florence Merkin. Mr. Neikrug offered material enough to make a program and a half, opening with a Sonata by Locatelli to show off the instrument and Three Fantasy Pieces by Schumann to settle the audience in its seats. The bore and acoustically unadorned hall was pocked, the audience revealing its musical inexperience by loudly applauding the first piece after every movement. I enjoy an inexperienced audience. It demands as much...
CONTENTS FOR FEBRUARY 1957

ARCHITECTURE

Two Commercial Buildings by Craig Ellwood Associates 10

Hillside House by James Durden 12

House in Texas by Neuhaus and Taylor, architects 13

A Suburban House by Thornton M. Abell, architect 14

Modern Plant by Welton Becket and Associates, architects 18

Experimental House X-100 by A. Quincy Jones and Frederick E. Emmons, architects 20

Structural System by Horacio Acevedo, architect 22

House by Kolb Associates, architects 24

Builder’s House by Robert B. Marquis 26

SPECIAL FEATURES

The Shape of Things by J. Bronowski 16

Music 4

Notes in Passing 9

J.O.B. Opportunity Bulletin 32

Currently Available Product Literature & Information 36

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**MUSIC**
(Continued from Page 4)

of the performer as an experienced audience and may be less tepid; it is the more responsive, if he knows his business. And there is usually a sufficient component of good listeners to assert leadership when the player raises the level of the proceedings.

Mr. Neikrug did raise the level with the third number, the Concerto by Samuel Barber, a big, bold composition that starts well in each of the three movements and each time runs down for lack of direction. Barber begins in medias res with what appears to be the development of his first subject, leaving nowhere to go when the proper time for a development arrives. Being unwilling to end the movement so soon after its beginning he resumes with a scholastically melodious second subject, a type of material that is good for contrast but incapable of carrying the real weight of all that must somehow follow after. What began as drama subsides to charm and then to labor. The second movement undoes itself by dwindling to a kind of sicilienne. From these two changes of direction the third movement does not recover. Borrowings of Bloch and Bartok only emphasize Mr. Barber’s unwillingness or incapacity to go the whole way with his mentors. For all that, the Concerto will sustain a good few performances before wearing thin. The Concerto was played all out, deserving the applause it was given.

Instead of relaxing after what might have been the big work of the evening Mr. Neikrug returned to perform the Sixth Suite in D for solo cello by Bach. I had heard him play the Suite before but not so capably as on this occasion. The cello suites are the nearest any composer has come to pure instrumental speech devoid of extraneous emotional suggestion. In the playing I might cavil at some failures in the niceties of embodiment, but as a whole I was thoroughly persuaded. Mr. Neikrug subordinates notes to phrases and dovetails the phrases with a feeling of long line and rhythmic relief. Only in this can the feeling of polyphony be obtained from this music, which is essentially non-polyphonic. He derives tone from the compression of the line, instead of altering or attenuating the design, as is often done, to suit the competence of his instrument. The audience, at its several levels of capacity, was as pleased as I was.

Having now offered more than a full recital he closed the evening with small pieces by Schubert, Ravel, and Popper, each fresh in my experience, plus a pair of encores which I wish he had left at home. Apart from these, I could not ask for a less hackneyed selection from the all too limited repertoire for cello.

At Hancock Auditorium of the University of Southern California the annual Koldofsky Memorial Scholarship Concert was played by Miss Heinitz and Alice Ehlers. Miss Heinitz is an accomplished performer on viola da gamba, using the correct style of bowing, as for string bass, which throws the arm out from the body in a very graceful gesture. She does not tie up frets on her gamba, a correct practice I have yet to see or hear. I wonder why gambists hesitate to go all the way with their instrument.

The program included three works by the French composer Marin Marais (1656-1728), one of the principal composers for the gamba: a Suite in A minor, Couplet des Folies d'Espagne, another of the hundred or more sets of variations by many composers on this unfaillingly attractive melody, and a Tombeau for M. Lully. The Suite has all the charm of its period, comparing very favorably with the Pieces en Concert by Francois Couperin which closed the recital. The Couplets are as refreshing as the more familiar variations by Corelli, so often abused by violinists. The Tombeau, a type of free lament popular at that period, lasted slightly longer than my attention, which may or may not have been the fault of the playing. This is a style of writing, recently revived by Hindemith in his Funeral Music for King George V and by Stravinsky with his Elegy for Onnou, both composed for solo viola. This style of free elegy deserves more use.

The two performers wallowed, I use the word sadly, through the Sonata in D major by Bach. Miss Heinitz alone made an interesting display of the Adagio ed Allegro in D minor for solo viola da gamba by Carl Friedrich Abel, and Mme Ehlers set forth Bach's Chromatic Fantasy and Fugue in her customary authoritarian manner. An overflow audience kept me sitting on the floor in an anteroom until intermission, proving again that Mme Ehlers conveys to many, if not...
always to me, the pleasures of the harpsichord.

The second of the Monday Evening Concerts consisted of Summer Wind, opus 31, for wind quintet, by Samuel Barber, and Youths, for wind sextet, by Leos Janacek, played by the Bovard Ensemble, Roger Stevens, flute, Burt Gassman, oboe, Kalman Bloch, clarinet, Merritt Buxbaum, bass clarinet, Norman Herzberg, bassoon, and Sinclair Lott, horn. Between these two pieces Eudice Shapiro, a violinist I have often praised, and Andre Previn played Beethoven’s Kreutzer Sonata and the Sonata for violin and piano by Ravel.

Eudice Shapiro needs a strong pianist to support her powerful and incisive playing. Given such a pianist she is capable of responding with a true classic obbligato in the manner not favored by the general run of concert violinists, who wobble between the illusions that the piano in a Beethoven sonata should be heard only as an accompanying instrument and that it should be heard scarcely at all. When Miss Shapiro is not properly supported, or led, by the pianists, she feels the need of carrying the burden of the sonata by herself. If the pianist is a good accompanist, this can be done. With a pianist who wishes to assume his share of the responsibility but is not capable of doing so, the result is often lamentable and at best laborious. Last year and this Miss Shapiro was chosen to perform major classic sonatas with inadequate support. Mr. Previn, who makes a career in jazz and motion picture studio conducting, is the sort of pianist who gets over the keys at the expense of sound and phrase. In the Kreutzer Sonata he was unable to distinguish between piano and forte, the least that must be expected of anyone who attempts playing Beethoven. His trills burbled and fluttered; the piano solo at the beginning of the second movement lacked grasp. In the Ravel Sonata, a work not unattractively reminiscent of Gershwin but more polite and better put together, several interesting jazz effects were worked out, to the pleasure of the audience, with an unfortunate disregard for the confusion caused by them in the organization of the movements.

Samuel Barber has a natural affinity for string instruments. His Summer Music appears to have been composed with strings in the head, though scored for winds. Janacek’s Youth, composed 150 years after his seventy-fifth birthday, is a different matter. Every part is designed for the instrument that plays it; the parts combine in great variety without losing instrumental distinction. Light and almost playful in intent, the work gains force by an unerring musicianship, that choice of the right note or the right phrase that holds the ear rather than the mind. The performances in each case were all the music allowed.

At the fourth of the Monday Evening Concerts the American Chamber Players offered a Piano Trio in E major by Haydn, the Quartet for Piano and Strings composed in 1950 by Aaron Copland, and the Piano Quartet in C minor by Brahms. Dorothy Wade, violinist, William van den Burg, cellist, and Ingolf Dahl at the piano made up the trio, joined by Milton Thomas, violist, for the quartets. The Haydn Trio is one of several in which Mr. Dahl has slightly rearranged the parts, borrowing from the piano to amplify the cello. Mr. Dahl’s awareness of harpsichord style was evident in his reading of the piano part, rather dry but free of pianistic romanticism. I am not sure that in trying to recapture the style he has not taken a wrong direction. The Trio is not a harpsichord piece, nor does it welcome the white sound of the heavily strung modern piano. The tone requires the utmost richness and a minimum of percussion, soft, clear, not light yet not hard struck. To hear the orchestral amplitude of Haydn’s keyboard writing, you should play the early keyboard sonatas on the clavichord for which they were written. The higher overtones, simulating winds and brasses, bridge the audible gap between Haydn’s keyboard and his orchestral writing. But this trio is not for clavichord either, and a Stein piano or one of its modern counterparts is not to be borrowed in Los Angeles.

(There is or was in Los Angeles an authentic, handsome Stein piano. It was stored in the basement of the County Museum, on loan but not displayed, it strings in a tangle. The owner picked up small fees by renting it to motion picture studios to play the part, visibly, of a harpsichord. It should have been bought, repaired, correctly restrung, exhibited and used for playing Haydn and Mozart in the Museum chamber music concerts. Such an instrument would be a more worthy and valuable exhibit than a number of the tawdrier counterparts is not to be borrowed in Los Angeles.)
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MUSIC
(Continued from Page 7)

The Trio is all good Haydn, as astonishing as are many of these trios all of them delightful, yet, because of the small part allotted to cello, seldom played. Mr. Dahl's enlargement of the cello part is unexceptionable, in no way disturbs the balance and adjusts the work more attractively for ensemble playing. He has been, if anything, overcautious. No one has explained satisfactorily Haydn's failure to write as fully for the cello in these trios as for the violin. It may be that he expected in the cellist a good continuo player's ability to supplement his part from the bass line of the piano. The continuo habit was not yet broken, not indeed until the last three trios by Mozart. There are good objections to this argument, but it suggests a method of approach. In the second movement of this Trio, a type of passacaglia, which opens with an extend piano solo, the addition of the cello playing the bass line should enrich the sound while in no way detracting from the delayed violin entrance. To start pushing around a classic is asking for trouble. Better to play it than admire it silently. If well-thought rearrangement of parts can bring these trios back into performance, let it be tried daringly and without shame.

A Stein piano would have improved the Haydn; it would have been no less welcome in the Copland Piano Quartet where much of the time the piano, despite the overlying pianistic layout of the parts, is simulating a linear instrument. I should like to hear the Quartet tried, even, with harpsichord. For keyboard music requiring higher overtones the harpsichord or the Stein piano, though ancient, would be good modern instruments. Oh, there he goes on his latest fad, someone grumbles—so no more about that.

This is Copland's third try with a tone-row. A similar eleven-note row with serial development was tried by Copland during the later twenties in an experimental Song, the text a poem by e. e. cummings. The Song was soon followed by the great Piano Variations, where among other devices, a four-note row is manipulated according to serial principles. Copland's use of the row method is less canonic and less consistent than the recent row works by Stravinsky. Like Stravinsky he retains definite, if dissonant, tonal references. The first movement of the Piano Quartet sets up the general style of a syncopated fugue with occasional somewhat arbitrary accompaniment. The second movement stretches the tempo—it must be played relatively slowly to sound fast enough—as well as the tempos of the instrumentalists. It is a display piece which interests rather than convinces. The third movement, rather dragging and remote, aims for the emotional stratosphere but soon gives up, short of breath. The descending three notes of the original row reappear in their pristine form as the piece tries, even, with harpsichord. For keyboard music requiring higher overtones the harpsichord or the Stein piano, though ancient, would be good modern instruments. Oh, there he goes on his latest fad, someone grumbles—so no more about that.

The preceding spurt of information about Copland and the tone row, indicates that I have been reading Aaron Copland by Julia Smith, published by E. P. Dutton. Julia Smith is fascinated by the dangling participle, which she dangles like a bangle regardless of the word it presumably, if not grammatically modifies. This is the best book yet written about Copland and makes up in information, if not in depth, what it loses in grace. Here one learns that the Three Blind Mice figure has appeared several times in Copland's theses; in bare notation it seems to have a meaning for him that he has not troubled to explain to his biographers. He deserves better biographers than he has been granted.

The final work, the Brahms C minor Piano Quartet, has been described as tragic and as a masterpiece. It aims at tragedy with a birdshot of notes which it almost tragically fails to master. The themes do not stand up or develop; the big cello solo introducing the slow movement is dry and will not sound. I don't doubt that the structure will support visual analysis. Brahms failed as often as he succeeded in chamber music. He succeeds when he emulates later Beethoven and is most sparing of notes. To this I will allow the exception of the G minor Piano Quartet.

I did not go to hear the pianist Geza Anda, presented by the Music Guild. His broadcast the previous Sunday, with the New York Philharmonic-Symphony, confirmed my earlier notion that he is a sort of boy prodigy, rather like our own Leonard Pennario, who has

(Continued on Page 28)
There are two essential qualities of a good newspaper—freedom and responsibility.

Neither is exclusively dependent upon its Editor and controllers. Both depend also upon the acceptance by Governments and officials of all kinds, of their public obligation to make fully and freely available all the facts required for the full and impartial reporting of public affairs. And there is also the obligation to permit full and free comment on those facts.

Nor is this all. Freedom and responsibility are not qualities which grow of themselves. They require the support and stimulation of a public opinion which recognizes their value. Newspapers are as good as their readers make them. The quality of news depends as much upon those who read it as those who write it.

It is obvious that neither of these circumstances exists in all parts of the world. Over great areas newspapers are regarded as the instruments of Governments to report only what is acceptable and useful to those in power and to comment only as officialdom requires. In many other areas where the press is nominally free, the obstacles that stand in the way of full and honest reporting are formidable—obstacles in some cases of legal prohibition, in others of official attitude.

Nor is a public opinion which is ready to accept—still less to demand—honest and impartial reporting and objective comment, by any means universal even in those countries where newspapers are nominally free, and democratic institutions a part of the constitution. Where political development is in its early stages, and where education is restricted and illiteracy high, public opinion, although it may nominally embrace the need for a free press, is unlikely to be much interested in a responsible one. The price of circulation and with it of economic survival in such circumstances may be not responsibility but irresponsibility.

It is necessary to say this since it is unrealistic to write of the quality of the news without appreciating that many of the circumstances which make quality in news reporting possible are wholly or partially non-existent over large areas of the world.

The basic principles of good journalism may be universal. The factors which make possible their practical application are far from being so.

Even where such principles are theoretically accepted the means to translate them into positive terms do not exist in considerable areas of the world—a fact which those who look at the problems of journalism from levels of sophistication made possible by the existence of mature press systems need to bear in mind.

I believe a first essential to be the separation of news from comment. It is part of the responsibility of a newspaper to comment on what is important in the news of the day; it is no less a part of its responsibility to leave the reader in no doubt as to where reporting ends and comment begins.

Stated thus baldly the issue seems clear and simple—a mere matter of restricting the reporting of events and policy developments to the news pages and the comment on them to the leader page. It is far from being so in fact.

In the first place it is impossible for any newspaper serviced by a highly developed and mature system of national and international news collection to print all the news that flows into its office from all parts of the world almost every hour of the day and night. There must be selection—especially so where newsprint is scarce and costly and newspapers are severely restricted in space.

And the very fact of selection implies comment. There is no comment more absolute than the decision to exclude a piece of news as unimportant.

Nor does the comment implicit in the inevitable exercise of editorial judgment as to the relative importance of the news available end with the decision to print or not to print. It finds hardly less significant expression in the placing and presentation of the news selected—the decision as to whether it shall go on the front page or on an inside page, at the top of a column or at the bottom, shall have large headlines or small.

Such indirect comment is inevitable. But it has been made more emphatic with the development of modern techniques of newspaper make-up.

These tend to concentrate immense resources of typographical skill on making the appearance of a page attractive even at the expense of a lack of balance in the treatment of the news itself.

The only safeguard open to the reader in such circumstances is that of a choice of newspapers. With such a choice he can at least elect to buy the newspaper whose editorial judgment of news values experience has shown to be nearest to his own or whose bias in the selection and presentation of news he is aware of and can consequently be on watch against. And if he is wise he can buy a second paper against which to check the first.

Objectivity is one of the most difficult of all virtues. In the nature of things journalists—like other men—are subjective thinkers. They are writing for readers who are also subjective thinkers. A policy decision which to the supporters of the Government making it may quite honestly appear wise and statesmanlike may no less honestly appear to its opponents as shortsighted and foolish. It is almost impossible to avoid some reflection of this in the treatment and headlining of news.

(Continued on Page 31)
This structure is located on a 50'x110' corner lot adjacent to a building owned by a client who desired to increase his studio facilities and to provide rental offices for related professions.

The ground floor plan provides parking for seven automobiles, photography studio/storage and one rental area. The second level provides two rental areas, one of which is over the carport. The studio required a 15-foot ceiling height, thus a fourth rental area, a penthouse, has been placed above the studio.

The exposed structure will be steel frame with panel walls of lightweight concrete block, paint, glass and porcelainized sheet metal. The building will be air conditioned and finish materials include wood paneling, 2'x2' composition tile flooring and acoustical ceilings.

Below:
A building for an independent bank in a small beach community. The building size is 52'x132' and the structure is inverted tapered steel girders and 8WF17 steel columns at approximate 17-foot centers. The steel girders span 50 feet and lateral forces are controlled by a rigid steel frame within the structure, 30 feet from the face

(Continued on Page 31)
TWO COMMERCIAL BUILDINGS BY CRAIG ELLWOOD ASSOCIATES

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12. PUBLIC TELEPHONE
13. SAFE DEPARTMENT
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17. FREEDOM
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19. INVENTORY LOANS
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FIRST FLOOR 6000 sq. ft.
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TOTAL 7500 sq. ft.
HILLSIDE HOUSE BY JAMES DURDEN

IWATA AND JENKINS: STRUCTURAL ENGINEERS

The site is a piece of land dropping sharply away from the curving road. There is a commanding view of city and ocean. By restricting parking to a sheltered deck, 10 x 40 feet, parallel to the house, it was possible to make all rooms face the best of the view without increasing the size of the foundations or the height of the subfloor. Since the grade was very steep, with considerable fill at one side, the footing wall was poured around the perimeter as a continuous concrete beam, supported by concrete caissons at the upper and lower walls. The subfloor walls were then braced by diagonal wood sheathing and the lower and upper floors were framed so that balconies and canopies could be cantilevered.

The house was planned as a single family residence with the future possibility of being converted into two separate and private units. Both floors are similar in plan: living and dining space, guest room and bath occupying the upper level; a studio and workshop, master bedroom and bath on the lower level. A sheltered space beneath the parking deck is open at both ends as a breezeway and is protected from harsh sun and strong wind, and will be used as a garden room and service area.

Sliding aluminum doors open to the balcony from the dining area and the bedroom. There was no natural gas in the immediate area. All appliances are electric. A radiant electric heating system, "Ceil-Heat," was installed in the plaster ceilings. All plumbing is along one wall, with an automatic laundry and linen storage in a closet across the hall from the bath. The place is concrete block; wood frame construction is used throughout the house. Except for exposed wood sheathing at the subfloor, all exterior walls are stucco. Interior walls and ceilings are plaster with the exception of the outside perimeter of the kitchen and bath unit which are to be paneled in wood.
Site: 130' x 150', flat, heavily wooded.

Problem: The design of a contemporary residence, for a young couple with two children, which would be suitable for entertaining with large informal parties, taking advantage of the natural beauty of the site, yet maintaining privacy from the neighbors.

Solution: The basic house was designed around the swimming pool and play yard, on a basic 4' x 4' module expressed in the terrazzo floor used throughout. The necessity of saving large oak and pine trees dictated the basic "H" shape of the plan. The drive-through porte-cochere is framed with four 36' laminated arches inclined at approximately 45° and roofed with 1" decking spanning in both directions which forms a warped shell type roof. This shape was used primarily for design relief of the severe brick exterior after determining that it was structurally and economically feasible.

The exterior walls are 10" brick and glass. The fixed sash is set into routed 4 x 4 posts, and the fence picks up the same pattern by the use of 1½" transite set in a similar manner.
A SUBURBAN HOUSE BY THORNTON M. ABELL, ARCHITECT

Location: A large gently-sloping site at the edge of a canyon, with wide distant view of ocean, channel islands and mountains. There are several large oak trees and the site has outcroppings of natural rocks.

Requirements: A house for a young family including three children, two boys and a girl. With limited budget but maximum requirements, the problem was to develop a scheme with utmost economy of structure and greatest usable space. With children in the family, it was important that the kitchen be well integrated with a family room. It was equally important that there be a study space in the parents' bedroom, to escape television when necessary. With so close a budget, there had to be some part of the house that could be postponed, if need be, without materially reducing the accommodations. The plan is so arranged that the parents and each child have a bedroom. The children's bath has outdoor as well as indoor access. The laundry is purposely located near the bedrooms, the source of linens and clothing. There is a toilet and lavatory near the living and family end of the house. If it should be necessary to postpone a part of the house, the living room could be delayed without inhibiting the use of any other space.

Materials: Concrete slab, with either radiant or perimeter heating; finish floor, vinyl asbestos tile; wood post and beam framing with plank roof deck; board insulation and composition rock-surfaced roof; wall finishes, T & G red cedar and drywall; counter surfaces, Formica; shower walls and wainscots, sheet vinyl; paint, vinyl emulsion type.
I should like to speak of the fundamentals of art, in industry and even outside it. What I have to say is, frankly, about aesthetics.

For two or three years now, my mind has been much occupied with problems of aesthetics. I set out some of the principles which I have reached in a lecture recently to the Royal Institute of British Architects; and it will help me to develop and you to follow my argument if I begin by stating these principles again.

In choosing to speak of these principles to a body either of architects or of designers, I imply at once that I do not regard aesthetics as a remote and abstract interest. My approach to aesthetics is not contemplative but active. I do not ask, 'What is beauty?' or even, 'How do we judge what is beautiful?' I ask as simply as I can, 'What prompts men to make something which seems beautiful, to them or to others?'

This is a rational question and it deserves a rational answer. We must not retreat from it into vague intuitions, or side-step it with hymns of praise to the mystical nature of beauty. I am not talking about mystics; I am talking about human beings who make things to use and to see. A rational aesthetic must start from the conviction that art (and science too) is a normal activity of human life.

All the way back to the cave paintings and the invention of the first stone tools, what moved men either to paint or to invent was an everyday impulse. But it was an impulse in the everyday of men, not of animals. Whether we search for the beginnings either of art or of science, we have to go to those faculties which are human and not animal faculties. Something happens on the tree of evolution between the big apes and ourselves which is bound up with the development of personality; and once our branch has sprung out, Raphael and Humphry Davy lie furled in the human beginning like the tools, what moved men either to paint or to invent was an everyday impulse.

But it was an impulse in the everyday of men, not of animals. Whether we do not think that we can talk sensibly about practical design without them. Indeed, they have a special relevance to industrial design. The industrial processes have been the busy liberators of man in the last two hundred years. They have themselves sprung from a most human impulse; the impulse to use and, in order to use them, to make tools. Benjamin Franklin at the beginning of the Industrial Revolution called man the tool-making animal; the modern tool, the machine, is a characteristic human invention. In turn, the machine gives man an enlargement of freedom, and that in two ways. It gives him the choice of making new things, and thereby it opens up new uses for the things he makes. The new machine or process, the new material, and the new use: each is a work of exploration, a feeling-out of the freedom which each creates.

Let me give an historical example. In 1779 John Wilkinson, with the help of another great ironmaster Abraham Darby the younger, for the first time built a bridge of cast-iron parts, at the place which is still called Ironbridge in Shropshire. This may seem a modest technical advance. But in fact, it was a break with the centuries of timber, of stone and of brick—a break-through into a new dimension of the possible. It opened a new boldness in design; for example, the bridge had a semicircular arch. It invited new uses for the material, and in 1787 John Wilkinson launched the first boat made of iron. When he died in 1805, he had himself buried in an iron coffin.

Wilkinson’s contemporaries felt as I do, that the iron bridge was a true enlargement of human freedom. This is why of all men Tom Paine was enthusiastic for it. Paine had no interest in bridges for themselves. His interest was in American Independence, in the coming French Revolution and its echoes in England, and in the Rights of Man. Yet, in these crises of liberty, Tom Paine found time to make and exhibit a model of an iron bridge for London; and this for the same reasons, in the same search to widen the human vision, which might prompt him today to speak up for ram-jet aircraft or the paintings of Georges Braque or the odder implications of quantum physics.

And the exploration of the bridge did not end with these pioneers. Kingdom, Brunel designed or an invention is beautiful, because the mind in them is free and exuberant. And you will now see why I framed my opening question so oddly; for it is not the thing done or made which is beautiful, but the doing. If we appreciate the thing, it is because we re-live the heady freedom of making it. Beauty is the by-product of interest and pleasure in the choice of action. These are the principles in which, I believe, an active and living aesthetic must be rooted. I have developed them once again, and in detail, because I do not think that we can talk sensibly about practical design without them. Indeed, they have a special relevance to industrial design. The industrial processes have been the busy liberators of man in the last two hundred years. They have themselves sprung from a most human impulse; the impulse to use and, in order to use them, to make tools. Benjamin Franklin at the beginning of the Industrial Revolution called man the tool-making animal; the modern tool, the machine, is a characteristic human invention. In turn, the machine gives man an enlargement of freedom, and that in two ways. It gives him the choice of making new things, and thereby it opens up new uses for the things he makes. The new machine or process, the new material, and the new use: each is a work of exploration, a feeling-out of the freedom which each creates.

To my mind, the cave painting as much as the chipped flint tool is an attempt to control the absent environment, and both are created in the same temper; they are exercises in freeing man from the mechanical drives of nature.

In these words, I have put the central concept of my aesthetic. It is founded in the knowledge that evolution has had, for man, the direction of liberty. Of course, we do at times act from motive, and it is good for us to do so. But we know them to be men when their actions have an untroubled liberty; when children play, when the young find a pleasure in abstract thought, when we weigh and choose between two ambitions. These are the human acts, and they are beautiful as a painting or an invention is beautiful, because the mind in them is free and exuberant. And you will now see why I framed my opening question so oddly; for it is not the thing done or made which is beautiful, but the doing. If we appreciate the thing, it is because we re-live the heady freedom of making it. Beauty is the by-product of interest and pleasure in the choice of action. These are the principles in which, I believe, an active and living aesthetic must be rooted. I have developed them once again, and in detail, because I do not think that we can talk sensibly about practical design without them. Indeed, they have a special relevance to industrial design. The industrial processes have been the busy liberators of man in the last two hundred years. They have themselves sprung from a most human impulse; the impulse to use and, in order to use them, to make tools. Benjamin Franklin at the beginning of the Industrial Revolution called man the tool-making animal; the modern tool, the machine, is a characteristic human invention. In turn, the machine gives man an enlargement of freedom, and that in two ways. It gives him the choice of making new things, and thereby it opens up new uses for the things he makes. The new machine or process, the new material, and the new use: each is a work of exploration, a feeling-out of the freedom which each creates.
There are people who acknowledge this physical expansion, but who refuse to see in it what I also stress, the growth of the mind and the widening of appreciation. To them, the technician is a gadgeteer but not a liberator. On the contrary, he seems to them constantly to impose limitations on what they would like to believe possible. 'You cannot do this with the material,' the technician may say, 'such a thing is beyond your reach; or, worse, it must not be done.' They take a simple view of human life, and it is this: that the artist is indeed a liberator, but that the scientist more and more bounds and constrains it. And lest you should think that this view is held only by dilettanti and by dealers in antiques, let me remind you rudely that it is the commonplace view, which does duty for thought, and lightly springs to the lips, whenever a non-scientist today lays down the law about science. I should have hoped, for example, that the Society of Industrial Artists would, by the nature of its work, have been wiser than this. Yet at your recent ball on Guy Fawkes night, the ominous figure of the villain was a scientist with a hypodermic, and the designer explained that his ritual burning was a protest against the coming of a scientific society.

It is of course true that the freedom which a new discovery brings is not boundless. Iron and concrete, steam and electricity, printing and television, each new potential has its limitations. But those limitations are not imposed by the scientist; they are found by him, and by the artist, slowly as they explore the virgin field. And neither can work in the new field alone. For knowledge which another man supplies is always a constraint; it constrains it. And Jest you should think that this view is held only by dilettanti and by dealers in antiques, let me remind you rudely that it is the commonplace view, which does duty for thought, and lightly springs to the lips, whenever a non-scientist today lays down the law about science. I should have hoped, for example, that the Society of Industrial Artists would, by the nature of its work, have been wiser than this. Yet at your recent ball on Guy Fawkes night, the ominous figure of the villain was a scientist with a hypodermic, and the designer explained that his ritual burning was a protest against the coming of a scientific society.

The industries which make them are pioneers, making new things in new ways; and the new problem, the unheard-of adventure of flying through the air, influences design in two ways. First, of course, it liberates the designer from convention; and second, it comes nearest to determining of itself the logical structure and with it the shape of the thing made. This is why the pioneer industries are leaders in design; because we sense that the things they make conform not to history but to logic. And this has been so in the past whenever a new technical advance has been made; the slung carriage, the yacht, and the cooling tower imposed their own designs, and were

(Continued on Page 29)
MODERN PLANT

BY WELTON BECKET, F.A.I.A., AND ASSOCIATES, ARCHITECTS AND ENGINEERS

MAYNARD WOODARD, DIRECTOR OF DESIGN
FURMAN MYERS, AL PETERSON, PROJECT ARCHITECTS
MEL BOGART, INTERIORS

This new building for one of the largest greeting cards companies was designed to take full advantage of the great mass of earth and rock that had led many manufacturers to consider the seven-and-one-half acre plot completely unsuitable for construction. It was economically unsound to level the terrain. It was, therefore, decided to incorporate the mound in the plan and to build over and around it, minimizing the amount of excavation. The top floor of the building overlays the entire mound area with the descending floors decreasing as the building nears the ground level. There are street level docks on each of the seven levels which permit deliveries of raw materials and shipment of finished goods, or transshipment of goods in process from any floor in the building. Two of the streets framing the site have steep grades and provide the new building with virtually ready-made ramps, and by following these perimeters it is possible to drive a car or truck to any level, including the roof on which there is a parking area for 500 automobiles.

The building is designed to provide great efficiency in work flow with raw materials entering the building at the seventh floor, moving down to the other floors for the various manufacturing processes. The top floor houses the general offices and its art staff. The north wall has been constructed of glass to admit light for the work requirements. A roof featuring skylights in saw-tooth arrangements provides north light. Roof gardens and patios have been planned for employees. The structure is of reinforced concrete and encloses 750,000 square feet.

"The introduction of the inverted design of a structure such as the Hallmark offices and factory could well be the preview of an entirely new conception of the utilization of hillside property. Heretofore such sites were thought to be practically useless regardless of their location. However, this comparatively new approach to architectural design in relation to hillside sites can make available to many manufacturers a vast number of production advantages uncommon in conventional-type structures. The inverted-type industrial building allows manufacturing operations on every level with the additional asset of a street entrance at each level. In the majority of situations a large top-level area allows for greater flexibility of production, plus adequate space for raw materials and shop operations. The gravitational flow of the product to the lower levels permits less expensive processing, order filling, and shipping."—Welton Becket, F.A.I.A.
EXPERIMENTAL HOUSE X-100    A. QUINCY JONES AND FREDERICK E. EMMONS, ARCHITECTS

Two installations in kitchen of surface units. Top-of-the-range cooking unit installed in counter with “Thermal Eye” thermostatic control for constant heat control. Special burner with “Vari-speed” control will heat to full red heat in 26 seconds.

No walls or partitions are structural. Interior partitions treated as furnishings more than mere walls or boundaries of rooms. Formica colors and treatment of partitions are conceived as integral part of both architectural design of structure and design of the interior. Objective is to create overall feeling of home rather than single out a wall here or a piece of furniture there.

Builder: Eichler Homes

Structural Design: William R. Mason, C. E.

Landscape Architect: Douglas Baylis

Interior Designer: Anne K. Knorr

Sculpture and Special Art: Matt Kahn

Accessories: Gump’s of San Francisco

PHOTOGRAPHS BY ERNEST BRAUN
This experiment in building, just completed by Eichler Homes and designated as X-100, has been designed and built as a public service in order to display the newest and most workable ideas in the modern house. While the builders are aware that, for one reason or another, some products and practices are not practical unless modified, it was the purpose of the project to develop from the early stages of research the use of materials most practical and useful and the most advanced structure. It was not intended that this house be a production model itself, but many of the features which proved most workable will be included by Eichler Homes in their new development now under construction.

ARTS & ARCHITECTURE has followed the program of this undertaking since its inception. (See ARTS & ARCHITECTURE, November 1956) and we now present the finished product which has been opened for public inspection.

Skylight over revolving fireplace between living room and entry garden 8' x 21'.

Four additional Skydome installations, each two feet square, are located for specific light needs. One is over the built-in Thermador top-of-the-range cooking unit in kitchen; another is over laundry area of utility room; two are located in bathrooms.

The latter two, one in each bath, are located over the lavatory counters at the opposite end which is lighted by the long, 32' skylight. This provides a skylight over each end of the bath wall which has two lavatories and means that light comes from both directions.

Lateral rigidity of building is taken through the columns as cantilevers from footings. Steel appears in stock sizes only; no special sizes in house.

For further comments on structure and materials please see page 32.
This prefabricated structural system was developed for an oil company faced with the problem of placing service structures on strategic sites available for relatively short periods of time. The architecture indicated is designed on a module of 8'-5" characterized by its 100% recoverability being completely prefabricated and featuring extremely simple assembly, making it possible for the whole structure to be taken down and reassembled on another site.

The structure of pillars, beams, bracings, is made totally of steel, designed according to locally marketed stock sections emphasizing economy in fabrication. The walls are formed of panels of two kinds which slide into "V" grooved slots in the pillars. One glazed in a steel frame; the other, 3" solid panels of expanded cement so saving 50% in weight. These cement panels have tongue and groove points top and bottom which are weather sealed on assembly. They are generally finished for painting "in situ" except when required for washdown, greasing or toilets in which case they are surfaced in the factory with glazed tiles. The ceilings are constructed with asbestos sheets that screw directly to the bottom chord of the truss (Havemeyer type). The parabolic roof panels of corrugated asbestos were specially designed so that the corrugations eliminate all intermediate support between trusses. The edges of the panels are received by the top chord of the truss, and are simple to install, thus again achieving economy. The main structure has been designed and engineered to act

(Continued on Page 31)
Interior cases and dividers are built of perforated steel tubes and reversible plywood panels bolted together with brass bolts. Any panel may be used vertically, horizontally, or perpendicularly. With four sizes of panels and three sizes of tubes a wide variety of shapes fulfill all the needs of the interior. All units are painted or varnished. Designed by Horacio Acevedo and Peter Sinclaire.
Project: One family dwelling with large living room, kitchen, terrace, 2 bathrooms, children's playroom, bedrooms for 3 children and master-bedroom, all built-in wardrobes.

The lot is situated on a hill bordered by a road, with rock formations under the natural terrain.

Solution: To eliminate blasting and excavating in the rocky terrain, the lot required that plan of the house be developed with its full length parallel to the road. Little excavating was necessary to have crawl space under the house and a cellar under half of the living room. Besides the 8'x8' thermopane windows the living room has 2 louver windows for cross ventilation. The fireplace stands free in the living room and is open from both sides with the hearth raised. The kitchen is a separate round element which also stands free in the living room. All utilities in the kitchen are standard equipment, built into a half-round Formica countertop. On the ceiling is a plastic dome with built-in fan. One side of the round kitchen wall opens with 2 half-round doors to expose a countertop with 3 bar stools underneath, which can be used as breakfast bar or bar. From the kitchen one door leads to the screened terrace for outdoor eating.

Construction and Material: The building is brick and from the corners there are brick walls continued to eliminate the boxy look. All 8'x8' glass panels are thermopane. In the bathrooms and kitchen is a plastic dome with electric fan for ventilation and light. The inside walls in the living room on the northwest and southeast sides are natural brick and also the 2 bearing walls of the fireplace. All other walls in the living room and the kitchen wall are ash plywood with natural finish. The floor is hardwood with plastic lacquer coating and all ceilings are painted white.

Heating: The heating is oil with forced hot air and can in summer be converted to complete air conditioning of the whole house.

All furniture and lighting fixtures are designed by Kolb Associates.
This is one of a group of builder's houses as opposed to the tract house. It is undertaken on the basis of four or five units done by the builder in an already established urban community. It contains 1650 square feet of actual living area. The central kitchen is sky-lit by a Wascolite plastic dome and is open on one side, over a serving counter, to the dining room and the view beyond, on the other side it opens to the all-purpose area and the children's play yard. Circulation on either side of the kitchen core makes it possible to avoid passing through the living room to reach bath, kitchen or bedrooms. Conversely, one can go anywhere in the house without passing through the all-purpose room.

Exterior finish is re-sawn vertical redwood; inside finishes are sheetrock and 4" vertical hemlock siding in the living room. The slightly sloping roof is constructed of 4 x 6 rafters on 4-foot centers with enclosed plywood sheathing.
MUSIC (Continued from Page 8)

preserved to a mature age the advantages of an unripening precoc­itv. The fingers and memory function capably, unhampered by intelligence.

During the period covered by the preceding reviews I took part in two discussion panels. The first, at the Sierra Madre Public Library, had for subject, Is Jazz Music? The second, a special event offered to the subscribers of the Monday Evening Concerts, proceeded out of the embarrassing title, or proposal, Let Us Lead You by the Hand through Modern Music. The former panel was set up in the usual style of such affairs, the speakers sitting behind a table facing an audience and rising one by one to give forth their ideas. The other conformed more nearly to my belief that in such a discussion the prepared voices should not be separated from the unprepared. We clustered facing one another near a piano key­board, closely surrounded on three sides by audience.

I am modest about my attainments as a listener to jazz, believing that I need not seek it, since it will surely find me out. The event proved me wrong. Having arrived first I was given the choice of openings and elected to fire first. To clear up the historical side, I found jazz rhythm in Machaut's hocquet (or hiccup) and through­out Beethoven. I have been especially aware of it in Elizabethan dances, when these are played as dances instead of as concert pieces. Copland would perhaps question this general opinion, based on the presence of offbeat and cross-rhythm, if I am to believe Julia Smith, who quotes the types of rhythms Copland holds to be funda­mentally jazz. I pointed out how Mozart simplified and subtleized the art of popular improvisation by developing a method of relative­ly uniform progressive variations.

Critics rather commonly dismiss these keyboard variations as a low grade of music, at least for Mozart. Critics prefer to dwell at the level of the confirmed masterpiece. Tovey, who first brought to attention the unerring accuracy with which Mozart solved the problem of the piano concerto, fails to remark the similar decisiv­ness of Mozart's improvised variations on a theme. I am not speak­ing of large composed pieces, such as Bach's Goldberg Variations, or the sets by Beethoven and Brahms.* Nor do I mean such large special inventions as Bach, Handel, Scarlatti, Beethoven, and Mozart turned out at request; we have some of the products but not the formula. Mozart's keyboard variations are the formula to perfection, at every period of his style.

Then I went to Africa, mentioning a few excerpts from one of the best radio shows I have heard, a history of jazz. This history began with African native music—I recall particularly a tribe in which the only music is made by women splashing water rhythmically with their hands, a pleasing effect, if limited in range. Then it went on to Cuban drumming, to a wonderful ancient record of an old New Orleans band, when New Orleans bands still played band music; then to King Oliver; up to Chicago and Bix Beiderbecke; and the next thing you know we were into the commercial bands, which I call the dead end and decay of jazz. Afterwards the broadcast showed what happened when the Cuban drummers were imported for a new commercial kick; then, going back to Africa, what happened when American jazz returned to Leopoldville in the Congo. There a group of newly acculturated jazzmen were given five minutes to look over The Battle Hymn of the Republic, then turned it loose on their horns. That was jazz.

Panelist number two deprecated some of my remarks and offered for demonstration a few recent records—what they call "cool jazz". Here again was the Battle Hymn, turned out, so help me, with vibra­phone, full of soulful pauses, in the harmony of Ethelbert Nevin. Here was Andre Previn, whom I mentioned playing at Beethoven. Now he was playing at Hummel in the name of "jazz." This is what jazz has come to, something a little sweeter and less articulate than Muzak, if I am to believe my fellow panelists. They believe in it. Only one record, supplied by the third speaker, had enough rhythm to be what an old alumnus of Fletcher Henderson might call jazz. In it a solo clarinet seemed to be borrowing tricks from the shakuhachi. No, I didn't hear Brubeck or Mulligan. I hesitated to mention them, after what had been said by my fellow-thinkers about Gershwin, Whiteman, and other sweet and venerable names.

Tonight I put on Robert Craft's record of Schoenberg's Suite for seven instruments and found it packed with jazz. It used to be said, by Virgil Thomson for one, that Schoenberg had mastered every art of music, except rhythm. Thomson must have had in mind the earlier works still in or near the Viennese style of Brahms, Richard Strauss, and Mahler. Oh well, I'm cranky and opinionated!

It's not up to me to tell the public, or earnest devotees, what jazz is or should be. But I'll bet none of the music, so-called, I heard that evening will stand in the company of King Oliver, when Gabriel borrows Armstrong's Golden Horn.

For the other panel I had been invited, at my own suggestion, to play the role of Devil's Advocate, the pious monk who must search the record for sin and human frailty when a new saint comes rolling in. The elect on this occasion were Aaron Copland and Pierre Boulez. Speaking for Copland, represented by his Piano Quartet, in mild row style, was Ingolf Dahl; for Boulez and his Flute Sonata, an ext­reme row, Leonard Stein. Lawrence Morton acted as moderator.

The talk started mildly enough, but before the evening ended blood had been shed. Leonard Stein shed it for Boulez. Copland's sanctity had been doubtfully regarded; Boulez had lost his halo. The audience mixed in delightedly. At the end each of the principals offered a few words in favor of listening to new music, no matter what anybody thinks about it.

It was also suggested, as usually occurs on such occasions, that no new work can be heard properly, or heard at all, if one is to believe the more fanatic voices, until it has been listened at many
times. This pious qualification was repeated in the ensuing conversation over coffee and cakes.

I disagree. Qualitative opinions, which my fellow speakers denigrate as mere misinformation, are the digestive juices of the arts. If the ordinary listener, as my friends insist, is to be forbidden to make up his mind about a piece of music, that is, form a qualitative opinion or say what he thinks about it, until he has heard it an indefinite number of times, he might as well be deaf or stay home and accept what the radio brings him.

A good listener, whatever he may think, reacts. His reaction, rationalized in words, in his opinion. Fortune defend the artist from an audience that won't react! Better any reaction than none. A tepid piece, an acceptable piece, even a piece that brings forth thunder, will temporarily sear the listener at a first hearing and continue reacting in his memory, and then it is the present, their art the present assumption. This negative comment may be superstitious. The notion that a great work of art must be heard and comprehended in one take is a matter of time-insult. A listener reacts violently at a first hearing and continues reacting for years to come.

The economical style parodies Brahms. As I listened I thought how surely the future opens it with a sure sense of direction. For a long time they are lonely, their art the present assumption. We are now distressed by protuberances on an electric car or a piece of furniture, not because we want either to fly through the air, but because machines that fly through the air have taught us to question the purpose of such decorations. To be. In this way, the pioneer industries create a unity of appreciation, and bring home to us that no design can be made or judged in isolation from others. The boldness which they teach becomes a model for all design.

The Shape of Things by J. Bronowski (Continued from Page 17)

Beautiful in their day, exactly like the jet aircraft and the delta wing today.

Because the pioneer industries are fascinating and satisfy us, there grows from them a custom in the eye which forms our taste for other things. There is for example a good deal of banter about the word 'streamline,' and designers are asked why an electric car should be made to look as if it could fly through the air. The streamlining of such things is of course an echo of functional design which was appropriate in aeroplanes and, rather less so, in motor cars, where it began. But it is not therefore inappropriate to other things, to which it extends the taste which has been trained elsewhere. We are now distressed by protuberances on an electric car or a piece of furniture, not because we want either to fly through the air, but because machines that fly through the air have taught us to question the purpose of such decorations. In this way, the pioneer industries create a unity of appreciation, and bring home to us that no design can be made or judged in isolation from others. The boldness which they teach becomes a model for all design.

Even the pioneer industries do not conform to the fallacy of the iron tower. There are many makes of motor car; and the Farnborough Air Show in any year shows that it is possible to make the most modern aeroplanes in a dozen shapes, all of them dazzlingly handsome. What is true, however, is that in the pioneer industries the technical needs determine the design more nearly than in others. The chief determinant in the traditional industries is history; but in the pioneer industries, the chief determinant is logic. Here the layout of the process and the mutual arrangement of the functions impose an order of their own, which makes some overriding demands of structure. The logical relations imply certain spatial relations: above all, they imply that the important element in the design shall be the shape.

We have grown used to the notion that what is to be designed is the shape of a thing, and it now seems to us self-evident. But in fact, it is a revolutionary notion. The Victorian designer was not asked to shape things but to decorate them. Ours is not the first age to be preoccupied with shape, of course: the Greek sculptors were,
and the Gothic masons. In recent history, however, the trend of art for long was away from the logic of structure in space, and we should recognize our own preoccupation with it for what it is, a new and radical approach to the world about us.

This approach is not confined to industrial or, for that matter, to any other art. The streamlined iron and the Scandinavian chair are expressions and, more, are explorations of a universal interest in the shape of things, as much as the sculpture of Brancusi and Henry Moore. This new interest, and the shift from Victorian interests, is as striking in the sciences.

For the sciences equally have changed their preoccupation. A hundred years ago, it was the pursuit and manipulation of exact measurements. The great advances in physics and chemistry in the nineteenth century rested on this, and so created the picture (it is still the popular picture) that science is wholly concerned with quantity. But the concern of science today is very different: it is with relation, with structure, and with shape.

Today we hardly ask how large space is, but whether it is open or closed on itself. We say that rubber stretches because its atoms are strongly held in chains, and a diamond does not because the atoms are locked in a closed pattern of rings. We believe that the enzymes in the body fit the chemicals which they rebuild as a key fits a lock. And when we are asked why bacteria absorb the sulpha drug on which they cannot grow, we answer that the drug deceives them: its molecules have the same shape as the body chemical which the bacteria seek.

The most striking example of this geometrical way of thinking, as it were, is in the researches of the last years on the nature of life itself. How are living things able to reproduce themselves in exact copies? We have had our first inklings in recent work on the structure of the nucleic acids which are important in all living things. The molecule of a nucleic acid appears to consist of a pair of spirals, each wound round the other and held to it by cross-links. If one spiral of a pair splits away from the other, it seems likely that new atoms can only join it at the links in such a way that they form a spiral precisely the same. And the arrangement seems designed to reproduce itself, and we glimpse the reproductive process in the very shape of its parts.

These examples illustrate that, wherever we think in our society, we express logical relations as structure, and we express structure in shape. The interest of the industrial designer is part of the interest of our whole society and, in the pioneer industries, he leads this interest. Such an interest is natural in an age of discovery, when new tools, new materials and new uses crowd round us and carry us headlong to new ways of ordering our lives. Our age is, like all great ages, an age of transformation: this is why, like other great ages, we are still looking for our own taste, and will go on doing so until the great days are over. In an age of transformation, it is clearer than ever that a sound aesthetic must grow from the actions that are practiced and the things that are used, the characteristic actions and the new things, every day.

It is easy for us, living in this thought, to blame the Victorians for their indifference to aesthetics in the things they made. But of course the Victorian indifference was an aesthetic—a bad aesthetic, but a positive one. Their furniture and hardware are often thought to have been bad because their taste in pictures was bad. This is not so; it is the other way about; the Victorian taste in pictures was debased because it was not founded on a bold and active taste in the things they made. A taste of an age is a unity, and if we want to avoid the monotony boredom of the Victorians in painting and literature, we must first avoid making mud huts in modern materials.

I should like to end with some reflections on the fine arts, and to do so I ought first to glance at the place of decoration in industrial art. After all that I have said, why do we take pleasure in the decoration of things which adds nothing to their use? The engraved glass, the silver candlestick, the painted cart have already solved all their functional problems before they are engraved, chased or painted. If the maker does not stop at the formal solution, it is because the very handling of the materials fills him with a desire for more. He is conscious of pleasure and of exuberance. The freedom which the materials give him makes him boldly stretch and reach; and his ease in them makes him, as it made the baroque architect, gay and extravagant. Each of us can picture this feeling best in his own profession, and since my profession is mathematics, I will sketch it for you there.

Mathematics is a language: the language in which in the first place we discuss those parts of the real world which can be described by numbers or by similar relations of order. But with the workaday business of translating the facts into this language there naturally goes, in those who are good at it, a pleasure in the activity itself. They find the language richer than its bare content; what is translated comes to mean less to them than the logic and the style of saying it; and from these overtones grows mathematics as a literature in its own right. Pure mathematics grows from what began as an application.

I am by temperament as well as by profession a pure mathematician. It is natural therefore that I like literature better than the newspapers, poetry better than prose, and the imaginative film better than the documentary. To tell you the truth, I like pure art better than industrial art. But for just this reason, I am alive to the importance of applied mathematics and the newspaper, of prose and the documentary film and industrial art. No true appreciation of pure mathematics or of poetry can grow except from these strong roots. And if you neglect the seed-ground of a lively industrial art, then all art withers.

We can see these origins plain, I think, in modern painting. The rise of abstract painting is, of course, a part of the universal interest in structure and shape. Indeed, the phrase 'significant form' was used by Clive Bell before abstract painting was regarded, when the main influence was that of the Impressionists. There are critics who believe that the appreciation of these forms is inborn in men, as a sensuous pleasure in abstract shape. I do not share this belief, which I think is contradicted by the art of many earlier ages. To my mind, pleasure in abstract structure is part of the thought of our age, as much as the scientific speculations which I have quoted. And the structures, the shapes, which give us pleasure take their significance from our own experience: from the delta wing and the Meccano set, and from biological research and our growing understanding of the patterns which make plants and animals work.

While I was preparing this oration, the Minister of Education, Sir David Eccles, opened an exhibition at which he spoke of a rising
taste in industrial art. Twenty-five years from now, he said, it will be difficult to sell an ugly object; and he based his hope on this ground (among others), that television will do for the visual arts what radio has done for music. I should take the Minister’s prophecy more seriously if I could take his analysis seriously. But you will notice that, characteristically, it approaches industrial art by way of the fine arts. Men are to learn what they should ask of the things they live with by looking at a screen in the dark, passively, as they might listen to music.

By contrast, I have presented an active aesthetic, in which pure art grows from practical art. To me art and science belong to the everyday of human action, and are essentially human because they explore the freedom which man’s intelligence constantly creates for him. Because ours is an industrial age, this freedom is expanding fast, in new tools, new materials and new uses. The designer must understand their techniques at first hand, for they form the logic for his design. It is characteristic of our age that we express logic as structure, and structure in shape. This is striking in the designs in our pioneer industries, where logic comes nearest to fixing the shape, and which therefore form our taste. Yet even there, the techniques do not wholly fix the design, because no design exists in isolation from others. There is a unity among the things we make, a unity of purpose and of action, which shapes their design towards the image of an age. The practical artist expresses, and at his best he leads, the utilisation of our age, in which its growing points and its intellectual monuments become one. This is why I regard the work of the industrial artist highly and critically; why I see in his struggle with the shape of things the preoccupation of all thought today; and why I have made this oration the occasion to trace what I believe to be the profound basis of his work.

STRUCTURAL SYSTEM—HORACIO ACEVEDO

(Continued from Page 22)

as a rigid frame anchored to concrete piers.

The pillars have a Maltese cross section and are placed at 45° to the wall line allowing many possible combinations at the wall intersections, the base of the pillar is a square plate for bolting to the foundations and the capital is "U" shaped to receive the truss. The truss is rigid frame anchored to concrete piers. The beam is a double unit of parallel structure enabling the panels to slide between when assembling the walls, the height of the beam (12”) permits a fairly long run of gutter. Drain pipes being on the outside of the walls, the positions of the gutters depend only on the way the roofing is placed.

NOTES IN PASSING

(Continued from Page 9)

Gross bias can be avoided by the exercise of normal professional standards of accuracy and fairness. Bias of a less obvious kind is almost impossible to avoid because it may be no more than the reflection of the impact of the news upon the editor or sub-editor himself or represent his almost instinctive professional appreciation of how the news will strike his particular readers.

I said earlier that ideally there should be a complete separation of news and comment. Yet within this ideal there are, I think, certain exceptions which, so long as they are made open can be useful.

The increasing complexity of much international and economic news is such that it is difficult for the ordinary general reader to find what is report and what is comment in his article.

It seems to me, therefore, that in such fields the quality of news may not be reduced but enhanced where an experienced correspondent—diplomatic, political, economic or whatever the subject may be—not only reports the facts but himself interprets and even comments upon them. What is essential is that it should always be made clear that he is doing so and that he himself should plainly differentiate between what is report and what is comment in his article.

The means to collect and distribute news; acceptance of the responsibility to report the facts—not necessarily all of them, for that, indeed, would often be physically impossible, but enough of those that are significant to give a fair and balanced picture; as clear a discrimination between news and comment as the inherently subjective nature of most human judgment makes possible—all these are necessary if the quality of news is to be maintained.

But more still is needed—continuity of reporting. This is a quality not always to be found even in many otherwise excellent papers.

In the recent survey of news treatment by seventeen major dailies made by Unesco in the publication “One Week’s News” the conclusion was reached that although most of the seventeen papers referred to all major events in one form or another the news was seldom presented in a systematic way. This is true of almost all newspapers of large circulation. It is becoming not less but more so with increasing emphasis on display and headline treatment.

“The reader consequently,” continues the Unesco report, “has to make an effort to inform himself. If he really wants to know what has occurred his close attention is required even for papers which are intended to be read quickly and superficially.”

Although this absence of systematic reporting is a defect of modern journalism and one to which those who are professionally concerned about the quality of news need to give their most serious consideration, its indirect effect may not be wholly bad. If it should, indeed, bring the reader “to make an effort to inform himself” then its ultimate consequences are likely to be excellent. In the last resort the quality of news depends upon the reader not less than the writer. The wise reader is the one who knows what his newspaper has to offer, not as a final statement on events, but as raw material from which to fashion an independent judgment of his own.—UNESCO. FRANCIS WILLIAMS.

TWO COMMERCIAL BUILDINGS BY CRAIG ELLWOOD ASSOCIATES

(Continued from Page 10)

of the building. Earthquake and wind loads are transferred to the floor system through the roof sheathing diaphragm.

The structure is unique and original in its use of aluminum grilles for courtyard screen walls. The all-glass exterior wall of the building and the entry doors are recessed 12 feet back from the screen walls. The waiting area and the president’s conference room will each overlook a garden court. The aluminum grilles will effect privacy from the street and control the western sun without restricting light. Overhead protection from the sun in the courts will be accomplished with canopies of blue heat-absorbing wire glass.

Exterior panel walls between the exposed steel columns will be 8”x8”x16” lightweight concrete blocks. Flooring will be terrazzo. Special features include air conditioning, perforated asbestos-concrete panel acoustical ceiling and two drive-in teller windows.

TONY HILL CERAMICS • 3121 WEST

JEFFERSON • LOS ANGELES 16

Enamelled metal cage with diamond shapes choice of color

44"hall

retail price

approximately $45
Prepared and distributed monthly by the Institute of Contemporary Art as a service to manufacturers and to individuals desiring employment with industry either as staff or consultant designers. Commencing with the next issue, March 1957, charges will be made for subscriptions and advertisements. Any information as to rates and charges will be sent to you by mail. If you would like to be placed on the calling list for J. O. B. or know of any others who would like this service, please let us know.

J.O.B. is in two parts:

I. Openings with manufacturers and other concerns or institutions interested in securing the services of artists, architects or designers. We invite manufacturers to send us descriptions of the types of work they offer and the kinds of candidates they seek. Ordinarily the companies request that their names and addresses be kept confidential.

II. Individual artists and designers desiring employment. We invite such persons to send us information about themselves and the type of employment they seek.

Please address all communications to: Editor, J.O.B., Institute of Contemporary Art, School of The Museum of Fine Arts, 230 Fenway Street, Boston, Mass., unless otherwise indicated. On all communications: please indicate issue, letter and title.

I. OPENINGS WITH COMPANIES

A. ADVERTISING ARTIST-MECHANICAL DRAFTSMAN: Large manufacturer in Boston area seeks candidates for position combining machine and assembly drawings with advertising layout of brochures, fliers; requires good mechanical background, imagination, good color sense.

B. ARCHITECTURAL DESIGNER: Well known producer of aluminum, architectural and metal wall panels, seeks man with 5-10 years' experience in architectural design work. Person selected will head up design section in metal wall operation. A ground floor opportunity which should develop tremendously with expansion of company's metal wall activities.

C. ARCHITECTURAL-INTERIOR DESIGNERS: Interior design organization, located in New York City, seeks designers, draftsmen and project managers with office layout experience. Excellent opportunity for permanent association. Salaries commensurate with experience and capability.

D. ART DIRECTOR of active municipal Art Center to carry on lively program of exhibitions, classes, and community programs. Applicants should have thorough educational background, some knowledge or experience in museum field, and strong desire to participate in community projects. Salary open. Applicants should send letter of application with educational credentials, photograph, and recommendations to President, Art Center Association of Sioux City, Sioux City Art Center, Commerce Building, Sioux City, Iowa.

E. ARTIST for industrial design organization, located in Ohio, seeks capable all-around male designer to enter company as assistant to present Director of Design and to carry out responsibilities in product design, silk-screen decoration, and packaging problems. College degree desirable but not essential. Applicant should have 27-35 years old and have some industrial experience. Good starting salary and unlimited future in company for right man.

F. ARTIST-DESIGNER: Teaching position, possible rank of Asst. Professor, in Art Dept. of large Eastern university, for painter or printmaker also interested in continuing professional career. Required: experience as commercial designer as base for organizing and teaching course in lettering, typography and layout.

G. ASSISTANT TO DIRECTOR OF DESIGN: Major manufacturer of machine-made glassware, located in Ohio, seeks capable all-around male designer to enter company as assistant to present Director of Design and to carry out responsibilities in product design, silk-screen decoration, and packaging problems. College degree desirable but not essential. Applicant should be 27-35 years old and have some industrial experience. Good starting salary and unlimited future in company for right man.

(Continued on Page 34)
aggregate concrete in garden rooms has radiant heated floors.
Armstrong Floors of cork, 1/4" thick, 12" x 12", over concrete slab.
Circular discs of varying sizes provide floor area of texture and interest in two garden rooms.
Planted areas among discs are within ground terrazzo dividers.
Cork floors adjoining garden rooms fit to the concrete discs; juncture made by use of metal.
Glazed with 3/8" plate glass. Master bedroom sliding glass door electrically operated.
Wardrobe, utility and coat doors slide horizontally and are faced with Formica.
Built-in stationary dining table with movable top has Formica surface.
First showing of new “Bilt-in” Refrigerator, slightly more than 14 cu. ft. Relationship of refrigeration compartment and freezer area determined after consumer market research. Refrigerator of 10.2 cu. ft. with freezer of 4.0 cu. ft. Freezer, located under refrigerator, will handle 140 pounds frozen food. Self-contained unit, automatic defrosting unit, integrated thermostat. Stainless steel doors.
New “Bilt-in” double oven with two large ovens, one equipped with three-spit rotisserie. Stainless steel.
On-the-table cookery possible with two-burner unit built into the dining table. Convenient for warming and cookery. Table top closes over Thermador unit when elements not in use.
Latest model in long, successful line of Waste King garbage disposal. “Super Hush-Cushions” provide more silent operation than ever. Lifetime Grind Control designed to give efficient, practical unit which takes garbage without sorting or waiting. Garbage can be scraped into drain and flushed away instantly.
First major installation of new commercial type washing action developed after 5 years of research. Undercounter unit with stainless steel door, easy to load. Handles complete service for 8 and all pots, pans and bowls for meal preparation. Silent, economical unit has contour racks for odd-shaped dishes, controlled high temperature final rinse, humidity-free drying. Dishes and silver come out spotless and sterilized, ready for shelf storage.
Built-in undercounter washer-dryer, all electric. Located in central plumbing core in the approximate center of house, accessible from bedrooms, baths and kitchen, the immediate sources of soiled goods.
Soiled clothes come from machine dryer ready for shelf storage or ironing. Although designed for “one-operation” laundry, the combination machine allows flexible stopping and altering of cycle for either washing or drying operation, as desired.
Automatic “Permaglass” water heater, “heated with gas, stored in glass.” Glass lining specially developed by A. O. Smith provides protection against nearly every known corrosive substance. Dependable and constant hot water at all times. Located in central plumbing core which houses all plumbing facilities for entire house.

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Levator Cleanout with Adjustable Storilated Top

Series No. Y-320
Cut-Off Female with Brass Storilated Cover

Series No. Y-180
Brass Access Box with Hinged Cover

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(Continued on Page 34)
AND FREDERICK E. EMMONS

(Continued from Page 33)

Steel treated with General's Rustmaster Flash Dry, a newly developed paint for steel which displaces moisture, absorbs any rust. Noted for its unusual penetrating quality. Finish coat of beams, columns are General's Trend Tones flat paint; ceiling is non-glare flat enamel.

Exterior columns, steel frames of Arcadia sliding glass doors are finished with L. & S Portland Cement Paint from General.

Concrete block wall is covered with Exterior Faze—General's breather plastic emulsion that is resistant to alkalies in new concrete.

Shopsmith equipment designed for home use. Located in workshop which opens to carport. May be locked when not in use. Arcadia sliding glass door which separates shop area from open carport allows light into work space but permits room to be locked.

Walls of shop covered with pegboard for storage of tools.

Skydome provides 96 sq. ft. of skylight for natural overhead lighting of interior. Plastic used in Skydome product is light in weight, yet durable and maintenance-free.

Skylight 32' continuous length in approximate center of house extends from entry garden room across bathrooms and into all-purpose garden room.

You should know about Steelbilt's many exclusive engineering and construction features. They are detailed in our new brochure. Write for it.

STEELBILT, INC.
Gardena
California

X-100—BY A. QUINCY JONES
AND FREDERICK E. EMMONS

J.O.B.
(Continued from Page 32)

H. ARTIST-PACKAGE DESIGNER: Male or female; experience necessary; strong on design, lettering and layout. Immediate availability important. Package design studio, designing mostly food and textile packages. New York City.

I. CONTEMPORARY FURNITURE DESIGNER: Unique opportunity to develop new lines of wood and steel office furniture with design firm located in New York City.

J. DESIGNERS: Industrial design firm in New York City seeks talented designers with experience in industrial, package, graphic, furniture or interior design, although staff designers do not specialize as such and all work on many or all aspects of a design program.

K. DESIGN TALENT: Large international corporation in Detroit area invites inquiries and applications from individuals 20-45 years of age with unusual design talent for full-time, staff employment in various departments including product (appliances), graphic, display and exhibit, interior, automotive styling, color, engineering, drafting and model making. Excellent salaries (plus overtime), inspiring facilities and working conditions. If records and portfolios show real promise, company will fly candidates to Detroit for interview.


M. DESIGNER-DRAFTSMAN: Large Boston department store needs as designer-draftsman someone with creative and proven ability. 4-5 years experience in department and specialty store interiors, fixture design and detailing essential. College graduate with architectural or industrial design degree preferred. Liberal employment benefits and opportunity for growth in a store with large expansion program.

N. DESIGNER-SALESMAN: New England industrial design consulting firm invites inquiries from individuals (male or female, age 25-50) with design or art training and experience to fill full-time client relations position, working out of Boston, any part of New England or New York City, to increase firm's business and provide high standards of service.

O. DESIGNER-STYLIST: Nationally known gift wrapping firm in Boston area seeks designer to style annual line of papers and ribbons. Designer will also assist in packaging of products, label layouts, etc. Small amount of nationwide travel will be necessary to promote line with our resident salesmen, interrogate buyers, etc.

P. DIRECTOR OF INTERIORS: Internationally known Southern California architectural firm seeks outstanding man to assume position of Director of Interiors. Must have interior design experience combined with proven administrative ability. Commercial and industrial experience preferred. Department store, furniture manufacturing experience helpful. Excellent starting salary; opportunity to grow with progressive firm.

Q. DISPLAY DESIGNER: An outstanding international corporation in Boston area seeks candidates for full-time staff position in growing company design department, for large and small scale store display designs. Modest starting salary with excellent future growth possibilities. Should have working knowledge of basic materials and interest in merchandising.

R. DRAFTSMAN-DESIGNER: Small progressive office in Central New York State with large and varied practice seeks senior draftsman and designer. Salary commensurate with capacity and experience.

S. DESIGN COORDINATOR: Progressive midwestern manufacturing concern needs a Design Coordinator. He must be experienced with an industrial design background, knowledge of window display and merchandising techniques. This is a newly created position in an important product development program. A good opportunity for a qualified man.

T. FREE-LANCE DESIGNER: Progressive distribution organization in New York City interested in services of designer to develop well-detailed, contemporary seating pieces.

U. FREE-LANCE DESIGNERS OF GREATER BOSTON AREA: Manufacturer of building material, acrylic plastic panels using decorative embeddings, has need for several free-lance designers with flair for decorative effects and imaginative approach to use of unusual natural and synthetic materials.
V. FURNITURE DESIGNER: Famous U. S. manufacturer of fine furniture invites inquiries from free-lance furniture designers of proven talent and success; please submit experience descriptions and photographs of work.

W. INDUSTRIAL DESIGN INSTRUCTOR: Leading design school in East seeks full-time industrial instructor who wishes to make industrial design teaching a career. Outside activities in industrial design field encouraged in order to benefit teacher's experience and income. First assignment teaching sophomore class in design. Good future prospects.

X. INDUSTRIAL DESIGNER: Chicago office of industrial design firm has immediate opening for qualified industrial designer with minimum of 2 years' experience. Must be good renderer.

Y. INTERIOR DECORATOR: Well established small decorating firm in Redlands, Calif., needs fully qualified interior decorator. Job offers minimum salary, plus commission of sales in rapidly growing small community. Salary range depending on ability, from $6,000.00 to $10,000.00.

Z. LETTERING SPECIALISTS: Artists to make master drawings of Printing Type faces for use in Photon photographic type composition equipment. Up to $100 per week, depending upon experience.

Aa. PACKAGING DESIGNER-ENGINEER: Large national distillers want top-quality man for new full-time position as manager, packaging and design; desired qualifications: mechanical engineering degree, plus degree in industrial design or advanced engineering; age 30-40; preferably has 4-5 years' experience with production phases of packaging and bottling operations; proven ability to create designs with customer and sales appeal, preferably in fancy food, beverage or other luxury fields.

Ab. PRODUCT DESIGNER: Well established, nationally known industrial design consulting firm seeks product designer with 2-3 years' experience in designing appliances, etc., for full-time position in Pittsburgh area. Salary based on experience and qualifications.

Ac. PLASTICS COMPANY DESIGNERS: A leading Eastern manufacturer of plastics coverings (furniture, automobile, wall, etc.) has positions open in company design department for a male stylist with art or design training, to be given training in company's operations; and for a two-dimensional designer experienced in textile design.

Ad. POTTER: Wanted to establish own studio in pre-Revolutionary building located in historic Massachusetts town; thousands of visitors yearly. Rent free in exchange for maintenance duties. Young man preferred.

 Ae. PRODUCT DESIGNER: Well established nationally known and respected company in midwest invites inquiries and applications from individuals 25 to 45 years of age of unusual design talent. If background information shows great promise company will fly candidate to factory for interview.

Af. WALLPAPER DESIGNER: New England manufacturer of wallpaper wishes to develop free-lance design sources. Two-dimensional designers in New England or New York area wishing to qualify should apply to Editor, J. O. B.

II. ARTISTS AND DESIGNERS SEEKING EMPLOYMENT

The Institute does not necessarily endorse the following individuals who are listed because they have asked the Institute to help them find employment.

A. ARCHITECT-INTERIOR DESIGNER: B.F.A., Rhode Island School of Design, 1934. 2 years' active military duty in Japan. 5 years' experience architectural drafting, working drawings, field supervision. 4 years' experience in all phases upholstered furniture manufacture. Basic knowledge ceramicories production, glazing and decoration. Avoidation in photography. Willing to relocate. Desires more than employment; willing to forego privilege of responsible position. Male, age 27, single.

B. ART DIRECTOR-ADMINISTRATIVE DESIGNER: B.A., Boston Univ. (C.L.A.); 2 years' Boston Museum of Fine Arts School. 1 year own design consultants group; interior installation published nationally. Art Director, industrial corporation; executive assistant, same. Experience in advertising layout, architectural design, interior planning, plant layout, ceramics, public relations, drafting. Seeks staff position in any field of design or planning. Position sought probably has not yet been named; it is some long-range project requiring executive and administrative ability, creativity, versatility, and ability to persuade VIP's. Male, age 30.

C. ARTIST: Extensive experience designing advertising, sales promotion and public relations material with 4-A agencies and large companies. Presently employed in New York City as Sales Promotion Art Director for company known as largest in its field. Desires to relocate in less congested area, preferably as sales promotion and/or public relations art director with progressive company. Male, age 41, married.

D. ARTIST-DESIGNER: Studied John Herron Art Inst. 8 years' experience in furniture and automotive field; various aspects including color, color development, design and fabrication. Seeks position with firm in East. Male, age 28, married.

E. ARTIST-TEACHER: B.F.A., Yale Univ., 1953; 4-year certificate Hartford Art School; Trinity College; Kansas City Art Institute; 10 years' teaching on college and university level; exhibited nationally; book illustrations in national competitions sponsored by Limited Editions and Domesday Press. Prefers teaching drawing, painting, serigraphy, color, basic design. Male, age 41, married.

F. ARTIST-TEACHER: B.A.E., M.F.A., B.A.E., Art Inst. of Chicago, 1953. M.F.A., Univ. of Chicago, 1957. 3 years experience teaching high school, elementary school and University; qualified to teach both art history and practice of art. Desires position teaching college or high school. Willing to locate anywhere in U. S. Male, age 27, married.

G. CONSULTANT DESIGNER-EDUCATOR: B.F.A., Rhode Island School of Design. Complete presentations available on past experience in market analysis, product development, styling, sales promotion. Engineering detailing and visualization, merchandising display and public relations. 15 years in varied New England industries: jewelry, home furnishings, steel, ceramics, packaging; display Director, Vesper George School of Art, 3 years; Department Head and Asso. Prof., 4 years. Prefers Boston-Providence area. Male, age 45, married.

H. CRAFTSMAN-TEACHER: B.S. art education, Skidmore College. 2 years' experience teaching; operation of own studio shop for metal jewelry. Desires position with firm giving technical styling or marketing assistance in handcrafts to foreign concern; or as apprentice to craftsman. Female, age 24, single.

I. DESIGNER: Experienced greeting card, package, and gift wrap designer with contemporary style, seeks free-lance or retainer account. Male, age 35, married.

J. DESIGNER: B.F.A., Ohio State Univ., 1951. 5 years' experience in design, estimation, production and installation of furniture; also, experience in design, estimation, production and installation of furniture; also, experience with commercial interiors and architectural projects. Seeks design position with large furniture manufacturing company. Male, age 29, married.

K. DESIGNER-CONSULTANT: Art school training in Ireland and Canada; degrees in drawing, design. Experience in typography, printing, caligraphy, advertising layout, architecture, etc. Instructor in advertising design, Academy of Arts, Newark, N. J. Desires consultant connections with industry within 100 miles of New York City. Male, age 45, married.


M. DESIGNER-ILLUSTRATOR: 2 years' study Wilcox Technical School, Meriden, Conn.; Vesper George School of Art, Boston; Navy veteran, grad. of Naval Photographic School; 2 years as graphic illustrator at Naval Air Station, Va. Desires position in New England area; excellent references. Male, age 27, married.

N. DISPLAY AND ADVERTISING: Grad. Vesper George School of Art; European study; grad. U. S. Army school of engineering; 3 years graphic illustration and production control; 8 years retail display and advertising; experienced interior display and fashion coordination. References and color slides on request. Desires northeastern location but will consider far west. Male, age 27, single.

O. GRAPHIC DESIGNER: Grad., Cooper Union, 1949. Experienced in retail, direct mail, editorial and pharmaceutical advertising; now art director of large pharmaceutical agency in Chicago. Seeks position as art director or graphic designer in Boston area. Male, age 30, married.

P. INDUSTRIAL DESIGNER: 7 years' experience in automotive styling and industrial design in Detroit, seeks permanent position with appliance manufacturer or industrial design office in Northeastern Ohio. Male, age 30, married.

Q. INDUSTRIAL DESIGNER: Over 20 years experience designing all phases of product design; furniture and interiors, expert renderer and f.s. detailer. Seeks connection with firm in New York City on a part-time basis, as consulting, designing and detailing supervisor. Female.
INTERIOR DECORATION—HOME STUDY

(828a) 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. 8282, 835 Diversey Parkway, Chicago, Ill.

NEW THIS MONTH

(265a) Contemporary Danish Furniture: New line featuring the "Bramin" convertible sofa designed by Hans Olsen, awarded the "Furniture of the Year Award" by Interiors, Feb., 1955. Showrooms: Paul Rich, Angels 48; K.I.P. 720 Montgomery Street, San Francisco 2, California. Phone: Oleander 5-8553.

(122a) Contemporary Ceramics: Information, prices, catalog contemporary ceramics by Tony Hill, includes full range table pieces, vases, ash trays, lamp bases, colorful, full fired, original; among best glazes in industry; merit specified several times. (S/HS Program magazine Arts & Architecture); data belong in all contemporary files. Tony Hill, 3121 West Jefferson Boulevard, Los Angeles, California.

(137a) Contemporary Architectural Pottery—A new line featuring imaginative, modern lamp designs by such artists as Finn Juhl, Karl Ekselius, Jacob Kajaer, lb Goldtree Liebeskind, Copenhagen; describes upholstered pieces. Large and small scaled patterns plus a large variety of desirable textiles. Large and small patterns, plus a large variety of desirable textiles offer a complete range of work from small specialty shops to complete departments in large stores. Experienced staff to discuss technical or structural problems, and to render information. Laurel Lise Products, 1604 W. Washington Boulevard, Los Angeles 7, California.

(250a) Built-in appliances; Oven unit, surface-cooking unit, dishwasher, French freezer and refrigerator are featured built-in appliances merit specified for Case Study House No. 17. Recent introductions are three budge priced appliances, an economy dryer, a 1/2 cubic ft. freezer chest and a 30" range. For complete details write Westinghouse Electric Supply Co., Dept AA, 4601 So. Boyle Ave., Los Angeles 5, California.

(294a) Architectural Interior Metal Work and Custom Lighting Fixtures: Specializing in the design and fabrication of decorative metal work, contemporary lighting fixtures and planning, room dividers, and decorative fixtures of all types for offices, buildings, restaurants, cocktail lounges, churches and homes. Sculptured metals, tropical hardwoods, mosaics, glass and plastics are used in the fabrication of these designs. Send for information and sample decorative plastic kit, Stickley & Co., 711 South Grandview Street, Los Angeles 5, California.

ARTIFICIAL WOODWORK

(265a) Manufacturers of architectural woodwork, specializing in all types of fixtures for stores, offices, churches and homes. Large and complete shop facilities offer a complete range of work from small specialty shops to complete departments in large stores. Experienced staff to discuss technical or structural problems, and to render information. Laurel Lise Products, 1604 W. Washington Boulevard, Los Angeles 7, California.

DECORATIVE ACCESSORIES


(281a) Monsoon: Studio workshop offers complete line of contemporary customs made to order. Tropic hardwoods, mosaic materials, architectural sculpture, contemporary architecture, special leather and brass. Original designs. Maurice Bailey Designs, 989 North La Cienega Blvd., Los Angeles 46, California. Phone: Olean der 5-8553.

(117a) Contemporary Fabrics: Information on the best lines of contemporary fabrics, experience in choosing the right fabrics; data belong in all files. Write: Larsen, 36 E. 22nd St., New York, N. Y.

(264a) Fabric for a handsome $3.00. Selection of 100 different swatches of Granite, a heavy-duty upholstery, adapted from a hand woven original. An accordion folder of fifty different swatches with complete information may be ordered for $3.00.

The finest contemporary fabrics from Jack Lenor Larsen, Inc., are available in San Francisco and Los Angeles. These fabrics are weaver-designed, with the emphasis, the designing, the weaving, and the sales supervised by the Larsen brothers. The designers have experience in both design and architecture and know the place of fabric in the total design. Write: Larsen, 36 E. 22nd St., New York, N. Y.

(171a) Contemporary Fabrics: Information on one of the best lines of contemporary fabrics by pioneer designer Angelo Testa. Includes hand prints on cottons and chintzes, woven design and colored woven solids. Custom printing offers special colors and individual fabrics. Large and small scaled patterns, plus a large variety of desirable textiles. Furnish the answer to all your furnishing needs; cabinet units have wood or glass doors; shelves and trays can be ordered in any combination; free standing units afford maximum storage capacity; English hardwood, American walnut, and oak wood, providing a total of infinite combinations;—almost true white and deep brown; most pieces also available in all walnut; wood and provide a wide range of finishes; only piece: natural finish or exposed wood and exposure to all contemporary files; illustrated catalog available.—Baker Furniture, Inc., Grand Rapids, Michigan.

(314) Furniture, Retail: Information top retail source best lines contemporary lamps, accessories, fabrics; designs by Eames, Farn, Rhode, Neagu, Nelson: complete decorative service.—Baker Furniture Design by Edward Wormley; describes upholstered pieces. Furniture for living room, bedroom, case goods; woods include walnut, hickory, cherry, cherry; good design or quality hardware in careful workmanship; data belongs in all files; send for information regarding any product, list the number which precedes it on your letterhead to: Selected Designs, 968 North La Cienega Blvd., Los Angeles 46, California.

(169a) Contemporary Furniture: New 28-page illustrated color brochure gives detailed information Dunbar, Architects, Dornbracht, Karo, Thonet, Handicrafts and John Stuart. Representatives for Howard Miller, Glenn of California, Kasparian, Pacific Furniture, String Design Shelves and Tables, Swedish Modern, Woolf, Lam Workshops and Vista. Also, complete line of excellent contemporary fabrics, including Anglo Testa, Schiffer, Print, Elenhank Designs, California Weave Fabrics, Robert Schiffer, Holmberg, Vasa, Hitt, Florida Workshops and other lines of decorative and upholstered fabrics.

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(270a) Furniture (wholesale only): Send for new brochure on furniture and lamp designs by such artists as Finn Juhl, Karl Ekselius, Jacob Kajaer, Ib Kofod Larsen, Eko Kristensen, Panton, Camplin. Five dining tables are shown as well as many Finn Juhl designs, all made in Scandinavian workshops, Write Frederick Lunning, Distributor for Georg Jensen, Inc., 653 N. La Cienega Boulevard, Los Angeles 46, California.

(265a) Catalogue sheets and brochures available on a leading line of fine furnishing featuring designs by MacDougall and Stewart, Paul Tuttle, Henry Webb, George Simon, George Kasparian. Also available: 7772 Santa Monica Blvd., Los Angeles 46, California. For further information write on your letterhead to above address. Showrooms: Carroll Sugar & Associates, 8833 Beverly Boulevard, Los Angeles 48; Bantry and Perry, 170 Decorative Center, Dallas, Texas; San, Inc., 326 South Michigan Avenue, Chicago; Goldtree Liebes & Co., San Salvador, El Salvador, C. A.
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(291a) Permalite-Alexite Concrete Aggregate: Information on extremely light-weight floor and ceiling fills. For your copy, write to Permative Perlite Div., Dept. AA Great Lakes Gypsum Co., 1321 North Decatur Street, Los Angeles 17, Calif.

(228a) Mosaic Western Color Catalog on colors because of complete freedom in design of tile building needs, all of the clay tile manufactured by The Mosaic Tile Company contains 128 pages, over 650 illustrations of most advanced merchantable finishes. For your copy, write to Mosaic Tile Company, Dept. AA, 829 North Highland Avenue, Los Angeles, California.

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