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FESTIVALS FESTIVALS

I am not prepared to distinguish a festival from an unfestival program. Is a festival a concert series out of season? Or a concert in festival season? Does it imply summer or specialty? Is a festival a synonym for "out of the way" (geographically more, musically less often)? Is a festival series intended to be festive?

Festivals are subject to the current fashions, the newly accepted new music, the recently rediscovered or re-edited old music (presently Monteverdi or Vivaldi), and such touted merangues as the pseudo-medieval Carmin by Carl Off. You may judge a festival's good intentions by the disposal of these elements.

Good intentions are the general cause of festivals. Good intentions, like the music of Carl Nielsen, are not necessarily hellish. They may result in nothing worse than delinquent concentration. A large body of listeners prefers music able to be heard pleasantly without concentration, a cool sonorous vibrancy the mind treats on the soft carpeting of a plush hotel. Form is the pattern in the pile, not to be observed too intricately. Good intentions soon divert managerial attention from the music to be programmed, the excuse of festivals and their esthetic potentiality, to the potential audience, the economic stimulus or justification. Under the headlined sauce will be found the chopped beef of all festivals, a classical goulash.

For your sakes I have been sampling festivals and here offer a report of them, beginning with awards. For the pleasantest and friendliest of springtime festivals, where the critics, those lonely bears, are made welcome and amply fed: a Yates to the annual Ojai Festival. For the most interesting program: a Yates to Ingolf Dahl, Director of the University of Southern California Festival of Contemporary Music, who wound up the seven programs by conducting the University Orchestra through these works:

- Rounds, for string orchestra (1944) David Diamond
- Sinfonica Sacra (1954) Ramiro Cortés
- Tezignes (1924) Maurice Ravel
- Men and Mountains (1924) Carl Ruggles
- Nobilissima Visione (1938) Paul Hindemith

For the best program notes: a Yates to Lawrence Morton, Artistic Director of the Ojai Festival, who wins this award every year as surely as Disney wins another Oscar. For the most promising program that I planned to attend and didn't: a Yates in absentia to Lukas Foss, Music Director and Conductor of the Spring Festival at the University of California, Los Angeles, who brought together the chorus, band, and symphony orchestra of the university in a performance of Ernest Bloch's Sacred Service. For me this is a jinxed masterpiece; I have failed to be present every time it has been performed here since Bloch himself first played and sang it to an invited audience soon after it was written.

For the best show: Igor Stravinsky at the Ojai Festival conducting while Eudice Shapiro played his gay tricky Violin Concerto—a Yates apiece. For the best and biggest performance: a double Yates with a cherry to Robert Craft for conducting, with notable authority and fervor, the Hungarian Serenade, the Vespers Magnificat, assisted by the Pomona College Glee Clubs and eight inspired soloists.

To the best single performer, who sat me up straight and stood my goose pimples on end: a gold-plated Yates to the 22 year old composer and pianist Ramiro Cortés, for his playing of his masterly Piano Quintet at USC.

You want to hear about these events. I shall try to oblige, in this article and the next. First, the Ninth Annual Ojai Festival.

In the programs Lawrence Morton balanced opposing tastes to accomplish what seemed to many a successful compromise. The Friday afternoon program included a Mozart Divertimento (K 247), the Walton-Sinwell Facade, spoken poetry in a musical setting, and Stravinsky's Renard, a Burlesque in song and dance, all witty displays on a small stage, the first and last with choreography by Lew Christensen and the San Francisco Ballet Company. That evening Joseph Schuster, accompanied by Helen Taverniti, offered a violoncello recital, convincing a broad section of the audience, as a good cella recital should, that this is the Senator among instruments.
I didn't come on the scene until the Saturday noon luncheon for music critics, followed by the first general meeting of the newly formed Southern California Music Critics Circle. The Circle genially voted its thanks to hosts and hostesses and in the same spirit invited itself to meet again as guests of another festival to be held in September at Santa Barbara. The short time remaining was allotted to business: a proposal that the Los Angeles Bureau of Music maintain a record of all advance program schedules, in the hope that by such means duplication of similar programs on the same date may be avoided. It was agreed that a light opera opening need not conflict with a program of contemporary chamber music, a thesis I don't go along with, since in newspaper practice it does so more often than not. Yet if such a record can be set up and kept informed of program schedules as these are made and consulted, while other schedules are being put together, many needless and self-defeating conflicts can be avoided. Every large musical centre needs such a clearing-house. For more than ten years I have been urging that such a plan should be initiated in Los Angeles.

The Q&A concerts resumed Saturday afternoon with the duo-pianists Vera Appleton and Michael Field playing Brahms, Mozart, Schumann, and the Sonata for Two Pianos and Percussion by Bartok. Properly an indoor program, needing the resonance of an auditorium, this was played outdoors. The thin, punched clangor of a piano sounded outdoors without hall resonance is not improved when there are two pianos. The conditions were more suitable for the Bartok with its glistening percussion accompaniment than for Mozart or Brahms; yet the Schumann Andante and Variations, the lightest and most lyrical of the pieces, came off best—I suppose because the tone, being softer, did not so sharply fall away immediately after being struck. Thin in the cold air the Brahms-Haydn Variations seemed more than usually unable to compete with the familiar orchestral version: both Brahms originals. I believe and sad experience has confirmed my opinion that no two-piano team can play the Mozart Sonata season after season and continue making music of it. The musical intercouse of the two instruments becomes a precision act, acrobatic without risks. An unbridgeable gap separates the two light, wiry instruments for which Mozart wrote this music from the percussive behemoths on which it is nowadays expected to be beaten out.

That evening Bob Craft conducted the Monteverdi Vespers, the audience following the intricate music with the help of thirteen pages of closely detailed program notes. Monteverdi was one of the supreme creative innovators of musical history. There is a long-playing record of Paul Hindemith conducting the Collegium Musicum of Yale University in a series of choral compositions that begins with Perotin and ends with Monteverdi. Through an hour of listening one follows the development of choral counterpoint to its summation in Palestina and the lusty dissonances of Jacob Handl. Then begins the Monteverdi and one hears with a shock the discovery of modern harmony, no normal progression but a unique mutation in the entire worldwide history of music, vertical masses of chorded tone replacing horizontally interwoven counterpart. With this new means Monteverdi created the art of Italian opera at a level of dramatic excellence to be reached again only by Mozart and Verdi. Like the best Italian music of every period since that time it is an art of voices instrumentally supported, not an instrumental texture including voices in the German tradition.

Unfortunately, for it is sacred music, the style of nineteenth-century Italian opera is precisely the style that has been singled out as offering "the greatest opposition to Gregorian chant and classical polyphony" and is forbidden to be used in the Roman Catholic liturgy.

The Vespers consists of twelve numbers followed by a Magnificat in twelve sections. The form is additive, without development; the classical developmental forms had not been invented. Solo voices and chorus interchange and elaborate ideas; solo entrances are taken up and worked into multiple counterpoints, duets, trios, and accompanied solos alternate with massive choruses; all supported, enlarged and made glorious by strings and brasses, an impasto of Venetian color like the canvases of Titian.

Until lately we have not known how to take this music. We have treated it too solemnly, sung it too slowly and cautiously, in presumed "olden style," as if genius at this period had not yet learned to be joyous. We have forgotten or failed to consider how the

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voices and brasses of these antiphonal choirs resounded under the dome of St. Marks to delight a populace that fed its senses on color. A scholarly disputation has raged around the text of the Vespers, disagreeing over each detail of editing and performance.

For this occasion Robert Craft and Lawrence Morton cut through the tissue of arguments, the veils of historical distance, and brought the music back to its original vitality and, so far as the acoustics and the place permitted, its intended tonal liveliness. Then the heavy varnish of musicology was cleared off by speeding up the pace beyond the point of easy following with the score. This is an exception. The choir and instrumentalists of St. Marks were virtuoso performers of the first order; the taste of Venice was sumptuous, expensive, oligarchic, and worldly. We may presume that these merchants and their wives admired the texture of the music as it reached them brilliantly blared by the echoing dome, brasses, voices, strings, organs, and theorboes, in that order of intensity, intermingled like a banquet, furred and salted. These listeners did not share music democratically like the Germans singing in their parish churches. Germany was then chastened. Venice was not yet chastened. Music like that of Gabrieli, or these Vespers, was performed in Venice by the best obtainable musicians. We may presume that virtuosity governed, and the speed of performance was, for that time, what the speed of this performance was for us.

Such an explanation clarifies the mingling of contrapuntal forms, in short extensions, with solos more than fit for a contemporary opera, the choral importance of the orchestra, matched by the orchestral use of chorus. The Vespers were intended to delight the human ear at a time of scepticism that had substituted for the difficulties of theology the warm cult of Mary. The first part of the Vespers is directed to the honor of God: Domine ad adjutandum (Psalm 110) and Dixit Dominus (Psalm 110). Then the subject changes to imagery lacking liturgical justification: "And the two seraphim cried unto one another..." The program note is evocative: "With its runs, echo effects, repeated notes on a single vowel sound, imitations of one voice by the other, and passages in sonorous thirds, it calls for truly seraphic virtuosity. It...achieves a kind of mystical ecstasy, as though the composer himself had shared the rapture of the prophet." The fact seems to me more simple: two tenors, a baritone, and continuo ravishing the ears of the congregation, the tenor voices like seraphim echoing one another across the vast interior space. It is painting in sound, presence instead of representation.

Then Nisi Dominus: "Except the Lord build the house" for tenpart double chorus, broken by antiphonal verses. You have to imagine the setting, in this house of the Lord, the Temple as Titoreto saw it when Mary at the foot of the tiered steps looks up to the High Priest.

Confronting the forked beard and the twi-horned headdress, Mary, child and Mother of God, bearer of the sacrifice. And then the Pulchra es: "Thou art beautiful, 
O my love, beautiful and comely, O daughter of Jerusalem," sung by two sopranos with continuo, the words bearing multiple secular, historical, and religious meanings. So follows the Laetus sum: "I was glad when they said unto me: Let us go into the house of the Lord," for six-part chorus, solo voices, and instruments. Venetian religion like our own partook of worldly wealth and complacency. Venice in a sense rejoices in itself, in St. Marks, a psychological rapture of the rejoicing senses. The music violates the sombre calm, planting the rapture firmly in the heart of man, in the surrender to possessions. We expect such music of our own orchestras; we pay for it; we go abroad to seek it; we translate into such festival terms the spare religious music of the past.

Now the emotion rises and returns to Mary: Are maris stella, a traditional Gregorian hymn, set here for eight-part double chorus, solo voices, and instruments:

"Hail, O star that pointest Towards the port of heaven, Thou to whom as maiden God for Son was given."

Which is followed by the first emotional climax: Sonata sopra Sancta Maria, a symphony for instruments and unison voices around eleven repetitions of a single vocal phrase, "Holy Mary, pray for us!" The total effect is one of growing intensity—the ninth statement of the chant, for instance, having its rhythm broken so as to suggest that
the supplicant can scarcely muster strength to utter the prayer once more: baroque, dramatic, secular music, modern and built on a harmonic bass, music designed to stir up the emotions.

"We in the twentieth century have so deeply imbued the Romantic tradition that we take certain standards as generally valid. Does the composition sound well? Does it affect our emotions of the moment? These questions that assume such great importance today were barely raised at other times. The wallowing in sound for expressive reasons is another characteristic. Composers for centuries before and after Machaut hardly cared whether a work was sung or played, fiddled or blown, or performed by individuals or larger ensembles. Similarly, the question whether a composition was 'moving' did not occupy the forefront of attention... People of all times and places have experienced emotional responses to music. But the emphasis on the one or the other quality of a composition has shifted."

Or again, quoting Huizinga: "Whoever today were to draw the dividing line between higher and lower pleasures of life according to the dictates of our ethical conscience, would no longer separate art from sensuality, nature from sport, or aspiration from naturalness, but only egotism, falseness, and vanity from purity."

The modern revival of sacred music in secular performance enables us to enjoy the composer's art, to respond to his spiritual honesty, to place and appreciate his conception in its cultural setting, while standing aside from the liturgical argument.

The Vespers are modern music even by comparison with Bach. Though the origins lie deep in Renaissance and Medieval style, the Vespers belong with the Requiems of Berlioz, Brahms, and Verdi rather than with the Masses of Beethoven and Bach. (Stravinsky's Mass, by contrast, is designed for liturgical acceptance and was therefore coldly received at first hearing, because it does not outwardly appeal to our desire for immediate exaltation at any cost). Emotional instead of intellectual! the common listener immediately responds, as if that made a difference; but the Requiems by Berlioz, Brahms, and Verdi are determinedly non-conformist and intellectual.

Mind calls to mind by way of the senses: we hear, therefore we think. In Bach or Beethoven composition is explanation; the design of the sound amplifies every detail of the text. The earlier and proper music of the Catholic liturgy neither explains nor expounds; its purpose is to reinforce the liturgical utterance. These are difficult distinctions. Understanding them we free ourselves from the dominion of our own limited culture, our contemporary religious sophistica-
tion, and become aware of exaltations unlike ours. Free ourselves for what? the mystic may ask, secure and enshrined in strict dogmatic reservations.

By our standards the Vespers belong among the supreme masterpieces of music in any form but not among the supreme masterpieces of religious music. The style is of its culture and worldly, like the religious paintings by Titian and Tintoretto; it expresses to the full the power of religious sentiment. The Vespers could have been written, as Verdi wrote his Requiem, by an agnostic. Are the sacred paintings of Titian and Tintoretto banned by the church?

So the Psalms continue: Laudate Pueri (Psalm 113) followed by a hymn (Heaven hear my words), another display piece for the solo tenors, dramatically interrupted by the chorus; Laudare Jerusalem (Psalm 47: 12-20) for seven solo voices, syncopated and hot, followed by a gorgeous soprano aria, Nigra sum, from The Song of Solomon: "I am black but comely... Therefore the king hath loved me and hath brought me into his chambers. My beloved spake and said unto me, Rise up, my love, my fair one, and come away. For lo, the winter is past, the rain is over and gone; the flowers appear on the earth, the time of singing is come." The ambiguous attitude of the Jewish and Christian churches toward this text, deeply rooted in the pagan seasonal and sexual origins of religion, the fertility rituals, justifies this music.

And the aria continues with the first word, Magnificat, of the twelve-phrase final section. "My soul doth magnify the Lord," the song of Mary when the babe leaped in her womb. If the body, if the senses also call to God, if through them also is a way, then...
The music mounts through the successive phrases of the Magnificat, bringing out again the solo voices, the choruses, the instrumental interludes, a recapitulation of the entire preceding drama, to the final climax of the doxology, the verbal refrain of praise that has been heard in many settings at the end of each psalm section. This is religious music, as the Requiems of Berlioz, Brahms, and Verdi are religious music; though the composer may be a non-believer, or limited within the conceptions of his culture, his intention has been to express the spirit of man praising God. Of other composers we may ask more, explicitly, but not of these. They have given their utmost.

Credit and honor for the musical revelation go to Robert Craft, who conducted, to Lawrence Morton, who assisted him for many months in preparing the score and wrote the invaluable program notes, to William F. Russell who prepared the Pomona College Glee Clubs, to the soloists, Phyllis Althof and Marilyn Horne, sopranos, Margery Mackaye, mezzo-soprano, Richard Robinson and Paul Salamunovich, tenors, Howard Chitjian, baritone, and Charles Scharbach, bass, to Dorothy Wade, concertmistress, and the orchestra. It was one of those performances where you feel like congratulating everybody. You find yourself in the aisle exclaiming exchanging compliments with strangers. The hall was packed and people sitting outside the doors. It was a sacred smash.

The last program, Sunday afternoon, was in no way an anti-climax. A large audience spread out beyond the seats on the grass slopes of the bowl. The immense sycamore suppliedprosenium arch and a sense of enclosing auditorium. At the precise hour the orchestra broke into the Greeting Prelude by Stravinsky, a one-minute setting of Happy Birthday written for the eightieth birthday of Pierre Monteux.

First novelty of the program was the Accompaniment to a Cinematographic Scene, opus 34, by Arnold Schoenberg, in three sections (threatening danger, fear, catastrophe), the expressionistic side of Schoenberg's art I care for least. It was last heard in these parts when Nicholas Slonimsky outraged the mandarins by conducting a series of contemporary music programs at Hollywood Bowl—and destroyed himself as a conductor doing so. A similar series today would be called a Modern Music Festival. It could scarcely include a better set of programs. Slonimsky's judgement has turned out to be as accurate as it was premature. Let us therefore praise the mandarins.

The second novelty was the Stravinsky Violin Concerto in D, conducted by the composer, with Eudice Shapiro as the magnificent soloist. Eudice Shapiro, as concertmistress, chamber musician, soloist, is one of the world's great violinists. She is regarded in Los Angeles as Niagara Falls is looked at by those who live there and pass it every day in the week. Perhaps fortunately, because we have her with us fresh and wonderful each season.

Anyway, she looked and played as well as ever, not covering up the difficulties but making them exciting, as they should be; and Stravinsky was obviously as happy as a meadow lark. It was a great performance, making one question again why this most witty of violin concertos—a type of music seldom dignified by wit—has been disdained by orchestras and soloists, why Stravinsky himself has so seldom programmed it. Orchestral players should delight in it; every instrument has its solo, culminating in a joyous duet between the violin and the bassoon and an exchange of melodic pleasures with the concertmistress. The composer has amused himself by exploring every variant of the oompah bass. The Toccata opening touches each sound in the orchestra; the first Aria is learned, the second Aria is written by exploring every variant of the oompah bass. The Toccata opening touches each sound in the orchestra; the first Aria is learned, the second Aria is written by exploring every variant of the oompah bass. The Toccata opening touches each sound in the orchestra; the first Aria is learned, the second

I have heard Robert Craft distinguish himself by conducting many sorts of ancient, modern, and chamber music that do not enter the ordinary successful conductor's experience. Until this afternoon I had never heard him compete with Steinberg, Ormandy, or Muench in any item of the established symphonic repertoire. I am not impressed by Steinberg, Ormandy, or Muench. There were two items, the Egmont Overture by Beethoven, to which he gave a well-shaped reading, and the trodden park of the Second Symphony by Brahms. What did he do with it?

What happened reminded me of the first time I heard Toscanini

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conduct Brahms. I heard it fresh. I was not the Brahms we had expected. It was not a mellow, profound interpretation in the authoritative manner of Bruno Walter. It was not a Steinbergian display-piece, hoaxed up band concert fashion to astound those who, as I remarked earlier, prefer good intentions. Craft gave us a simple classical reading, in strict tempi, the parts carefully distinguished, the syncopations relished, the melodies rounded and counterpointed—that is to say, the counterpoints not harmonically subordinated to an all-inclusive unctuousness—the trombones urged to dance—they need not be always funereal or profound, as Stravinsky in the Violin Concerto demonstrates—in short, a clearly planned, tasteful cooking of a symphony that is usually roasted in emotion and basted with sentiment.

During the scherzo, I am sure they had not wired that bird to the tree or recorded it like Respighi's nightingale, a mocker at the top of the sycamore, and another slightly more distant, obliged with a sort of ostinato solo that would I am sure have brought a smile of appreciation, if not gratitude, beneath the beard of Brahms. With the start of the finale the bird tastefully recognized that these German excesses no longer suited his vocabulary and ceased singing.

J. O. B.

JOB OPPORTUNITY BULLETIN
FOR ARTISTS, ARCHITECTS, DESIGNERS AND MANUFACTURERS

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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 not be given.

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

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ARCHITECTURALLY SPEAKING, by Eugene Raskin, with illustrations by Robert Osborn. (Reinhold Publishing Corporation, $3.50)

THE HOUSE: And the Art of Its Design, by Robert Woods Kennedy. (Reinhold Publishing Corporation, $9.00)

As architecture is abstract and because of diversified interpretations of its intangible components—style, unity, rhythm, scale, proportion, etc.—there is much disagreement. To untangle the snarled skein of abstract thought Mr. Raskin has chosen an abbreviated semantic method, limiting the rungs on the abstraction ladder, yet giving adequate referents while climbing to the intangible at the top.

This approach as a measuring device is valid, and after careful and pointed consideration the author concludes that architecture is "emotion." "The abstraction 'architecture' tracked down to its referents, becomes a trio of emotions—emotion intended, emotion inherent, and emotion evoked. The common element is emotion, and if one must use a single term to define architecture, that is it. Architecture is emotion. If the emotion is mild, so is the architecture. If the emotion is great, the architecture is great. If there is no emotion, there is no architecture."

A complication here, not so much in the method, but in the individual's choice of the elements of the whole. Dr. Suzanne Langer, for example, in FEELING AND FORM, states that: "Nothing is more haphazard than the employment of words, illusion, reality, creation, construction, arrangement, form, and space, in the writings of modern architecture." Concluding after a reasoned, although non-general semantic manner, that architecture is an illusion. Frank Lloyd Wright might conclude that architecture is spirit: "... spirit in objectified forms." One could with some manipulation, substitute various other referents and determine that architecture is not only emotion but any of the mentioned abstractions, or even a combination of several. Mr. Robert Woods Kennedy finds it to be intellectual as well as emotional. Mr. Raskin's choice seems limited, although his meaning is clear, amusing, and made even more enjoyable by Robert Osborn's very funny drawings.

In a comprehensive and pragmatic volume (of more than 500 pages) devoted largely to the upper-middle class groups, Mr. Kennedy dissects and examines the space requirements, the interrelationships of zones and areas, shows the relationship of the human body to its housing: "Houses are only extensions of people—they are nothing in themselves—and as such are most satisfactory when they reflect the whole man." In reflecting the whole man, one must use the findings of the experts in biology, sociology, psychology and other fields. The author employs a proliferation of excellent source materials in the findings of such men as Lewis Mumford, Veblen, Thoreau, Gesell and Ilg, Warner and Lunt, Dr. Benjamin Spock and many another, and further enhances and amplifies his efforts with drawings, graphs, charts, photographs and plans. For the particulars of living in a house involve a host of minutiae: the roles and quotidian needs of housewives, husbands, babies, children, teen-agers, grandparents and even guests; the mixed daily traffic, streams crossing streams, conflicts, the changes from youth to old age ... "The skeleton of the house must always be proportioned to man's. Its entrails and nervous system must be partially hidden as are man's. Its exterior envelope must be related to man's, and most of all, its moods must be variegated."

Quite possibly, our house is now inadequate both physically and aesthetically. Maybe we are as mice in a maze in a house of many cubicles and doors; or as moths with claustrophobia between glass walls in a picture window affair; or as troglodytes peering securely from cove-like structures better designed for moles; perhaps in an exhibition-like package with little but space-dividers to limit the noise; very likely in an assemblage of accretions from other places and times. What we do in a house should determine its plan. From the plan, form will follow for better or worse, depending upon the client, the architect, and the harmonious relationship of the two.

As the doctor has a bedside manner, so the architect a site-side one. On the caprices of clients and the vagaries of architects there is an important chapter. The proper distance between client and architect; the client as a creative agent or catalyst in the process; and a view of the professional hierarchy with trenchant remarks on that subject. This portion of the book is a must for any prospective
If science is the most powerful force acting on society, then Einstein’s idea that energy can be created out of matter is now the primary force for change in man’s way of life and in his attitude toward the universe. This will become evident during the next fifty years, perhaps by the end of the century—and that means within the period when our present youth and children will inherit the earth.

Science enforces social change. Yet to the human mind change is seldom welcome. It is opposed because it is feared and feared because it is not understood. The fear of the atomic bomb is universal and hysterical. The fear of the beneficial atom will develop later when its consequent social changes become evident. Governments may decree that such changes are desirable and will result in improved living for more people. So they will, probably. But if means are not taken in advance to safeguard the individual persons who will be displaced or whose lives will be changed, evil results will accompany the good.

It cannot be forgotten that the industrial revolution that followed the invention of the steam engine created appalling social conditions in England a century and a half ago, chiefly because no one foresaw the inevitable developments. This time consequences must be foreseen. Above all, the element of fear must be reduced or eliminated.

Since fear is usually fear of the unknown, the preventative of fear is education. The United Nations project for the wide use of atomic energy and materials must consider well the experience in the work of Technical Assistance to underdeveloped countries, namely that new powers, new methods and new wealth cannot be imposed by the donation of machines and facilities, however precious, unless they are understood and are welcomed by a people that understands them and wants both them and their consequences.

The atomic power project is therefore not merely a matter of placing great nuclear reactors in countries that need more energy and more wealth. It requires not merely the education of scientists and engineers. Even more it needs a preliminary programme that may require years but must prepare the minds and the hearts of the peoples who are to receive its benefits for the changes that are to come.

Such education of the public, and particularly of the adult public, in turn means much more than explaining atomic energy. In a sense it will, in many lands, require what amounts to a cultural revolution.

It will involve first the adoption of the scientific attitude of mind which is in its essence one of welcoming a problem to be solved—whether it be a problem in mathematics, mechanics or science, whether it be a problem in economics, world trade or in relations between social classes or between nations. In an unscientific culture a problem of whatever sort is often the occasion for despair, for violence or for prayer. Then a problem is a thing to be avoided because the answer seldom comes with it.

But the scientific mind thrives on problems, analyses them, attempts one solution after another until the answer is found, usually on the basis of past experience or general principles. In science most problems eventually—though sometimes only after extended and patient effort—find a satisfactory answer. Thus scientists typically welcome a problem as a challenge to their intelligence, as an inspiration to their best thought. Such an attitude will certainly be needed in the face of the enormous possibilities that are inherent in the atomic project.

Secondly, an economy based on atomic energy must certainly adopt what is often called the scientific method but which is in fact the simple method of experiment. Its first impulse is to “try it and see,” if possible on a small scale, in order to test whether the idea, explanation or project is correct or feasible. In the dawn of the atomic age there will be numberless concepts and plans in engineering, public works, legal measures and social readjustments, whose consequences cannot be foreseen for lack of experience. It will be the part of wisdom to test such ideas experimentally and to adopt a conclusion or a plan after such tests and not hastily under pressure of emotion or prejudice.

Such considerations are cultural. They imply not the substitution of science for an unscientific culture but the integration of scientific attitudes with cultural ideas that have come down through the centuries, largely untouched by science. In many industrial countries scientific ideas have perhaps been all too dominant so that ethical principles and spiritual ideas have faded. A synthesis would therefore be desirable on both sides. If this is so, a profound revival of values is everywhere desirable.

If the atomic age is to be one of plenty, of good living and of benefits both broad and deep (Continued on Page 31)
PROJECTS FROM A MASTERPLAN FOR A SHORELINE DEVELOPMENT

Antonin Raymond and L. L. Rado, architects
David Leavitt, Associate
F. Ellwood Allen Organization,
Park and Recreation Planners

This project for the City of Long Beach, in California, is a carefully studied plan for the proper use, and in some cases rehabilitation, of a six-mile, crescent shape shoreline development. The proposal is a complete study of the planned facilities for approximately 14 million beach visitors a year and proposes a complete system of public recreation. The project divides itself in nine major sections which will include restaurants, concert pavilions, change bathhouses, swimming pools, a marine restaurant, plazas, game areas, fishing piers, drives and parking areas.

Above: Bixby Park
An integrated park development combining Bixby and Bluff Parks with the shoreline. A series of four parallel terraces, 1,200 feet long and 60 to 80 feet wide, step down from Ocean Boulevard to the beach. Steps and ramps provide access to each level and to the beach below. There is an underpass beneath the boulevard, splayed at each end, which connects the park with the shoreline. The change bathhouse is at the west end of the park. A parking area at each end is easily accessible.

Right: Plaza Alamitos
A large paved area slightly above the beach strand. The pavement is broken by structures and great masses of planting, and various concessions. It is the focal point of activity in this portion of the shoreline with direct access to the auditorium, exhibition hall and parking areas; ramps at both ends of the Plaza lead to an upper level. The ballroom is poised on graceful concrete arches at the north end of the Plaza. Its entire structure is cantilevered out over the Esplanade and the beach. It is on two levels with a bridge connecting the structure with the promenade on the upper level. Concentric circles of tables step down away from the ballroom floor providing an excellent view of the ocean and the beach. The shell dome is sound-absorbent, insulated concrete. The lower level provides space for rental concessions and various services.

Restaurant and supper club: A great concrete canopy which springs from three steel pivots resting almost on the terrace itself, composed of three diamond shaped arches, concave rather than the usual
convex in section; a hyperbolic-parabolid shell, it is a light and open structure of advanced engineering design. There is no need for heavy beams and columns to obstruct the view of the ocean. Low, rectangular wings on either side contain foyer, offices, bar, private dining rooms, services and kitchen. In the main dining room the tables step down towards the dance floor in concentric circles. A semi-circular mezzanine above is free of the main structure and connects with the roof terrace and kitchen service. A generous overhang protects the encircling glass from sun and sky glare. On the south a dining terrace overlooks the beach and the ocean. The ceiling is in three concave sections and lends itself to spectacular lighting effects.

**Right: Open air concert pavilion**

A large concrete canopy, circular in shape, arching over the band stand and amphitheatre for protection from sun and rain. It rests on the ground in two places with the ground plan, which resembles a saucer, tipped upward, away from the stand, and ramped to the natural grade on the higher side. The music is carried forward by the arch and outward by the concave roof canopy. The structure is protected from wind by adjustable louvered glass screen. The amphitheatre seats 1,000 with additional space provided around the perimeter. Dressing rooms, storage facilities are in a low building behind the band stand outside the main arch.
Restaurant and supper club: west elevation

Restaurant and supper club: south elevation

Open air concert pavilion
The recent work of Claire Falkenstein lies at the very heart of the adventure which is today's art, that art autre which, after the structural terminus of the classic spirit that Cubism was, and after the cognition of its total liquidation by Dada, came to life about fifteen years ago with, at the start, Mark Tobey in the United States and Fautrier in Europe. In a movement begun in an atmosphere of total anarchy—and it could not have been otherwise—among several isolated (and alas quickly imitated) individuals, the very slight distance we have come still puts at our disposal several hundred, soon perhaps several thousand autre works of indisputable value. Any confusion now can lead only to an academism of anarchy; we are almost there already. But this sterile trap, the greatest danger that attends the art of our time, can be avoided by throwing up as soon as possible—a posteriori in regard to existing works—the bases of an esthetics autre, without any retrospective tie to classic esthetics (and hence without systematic opposition), an esthetic at once on the scale of the authentic new works and on that of the new philosophico-scientific necessities which obtrude unavoidably upon our psycho-sensory reflexes.

At this historic point, we can see to what extent Claire Falkenstein's recent work is situated in the new zones of efficacy. I wish to cite her sheared and vigorously fired surfaces, and especially the series of "Suns" which, as an outgrowth of her techniques, suggests a possible future synthesis.

Claire Falkenstein joins to a vivid and rich intuition a sort of pantheistic governing wisdom which springs no less from a deep intellectual apprehension of the structural problems essential to our time. Departing from long research on forms structured not only from the pythagorean geometries and rhythms, but even more clearly from the organic, and the most freely dynamic rhythms, she has made the crucial element of her forms continuity, that concept which is one of the bases of present topology, by which our whole perception of formal and spatial relations has been challenged. But this is only of the so pertinent aspects of her work.

Her extraordinary "Sun" series deeply interests estheticians, philosophers, architects, at the same time that it attracts the subtle antennae of true collectors and art lovers, because these works, bearers of a mysterious magic issuing from forms and spaces conceived on the plane of our needs, reveal to us the current problems of tensorial calculus, of the dynamic logistics of contradiction, problems of abstract space, of complex relations decipherable only by the most contemporary notions of what 'number' can be (infinitesimal, real transfinite, hypercomplex...). All these things concur to endow the new forms with sensory efficacies so rich that, with them and by their means, it will one day be necessary to reconsider the Human Adventure, Eroticism, Drama, Love, and Life which, if these forms be not vitiated by useless academisms, must be the foundation of their content.

Claire Falkenstein is probably the artist who has led sculpture closest to the heart of that which must be the artistic epos of Now.

Translated from the French by Julia Randall
NO. 17 A CASE STUDY HOUSE

Designed by Craig Ellwood

Mackintosh and Mackintosh, Consulting Engineers
Wall panels between columns: steel reinforcing was minimized because the steel frame is designed to withstand all vertical and horizontal loads, including seismic forces.

The steel frame is integrated with the design, all steel columns throughout the building are exposed to become the basic element of the architecture. This exposed steel will be painted black to contrast crisply with the natural terra cotta color of the clay block. Room partitions occur on the module, or mid-module, so that the rhythm of the frame is reflected in the division of space and again in the vertical elements. Thus there is a complete harmony of structure, plan and form.

Steel insures permanence of form, minimum maintenance, and is not subject to moisture and termite damage. A steel fascia was also specified because wood fascias tend to warp, split and pull apart at joints.

The barbecue unit (see ARTS & ARCHITECTURE, May 1955) is constructed of black and stainless sheet steel. The use of steel here saved considerable space: structural masonry wall construction requires 8" thickness, whereas the steel barbecue is "sandwich" construction of 1" thick rigid Fiberglas insulation board wrapped in 1/8" sheet steel. Steel was also used to cantilever the children's beds from the wall (see ARTS & ARCHITECTURE, September, 1954). Bed framing is 2 1/2"-channel-3.87#.

Miscellaneous steel includes angles used for terrazzo screeds at masonry walls and terrace ends, flashing angles at top and bottom of fascia, cantilevered fireplace andirons of 1/2" bar, "jungle gym" of round tubing and 2 1/2" square tubing frame of the glass screened courts. Floor slab construction is Portland Cement concrete throughout. This type construction was selected because concrete slab floors are quiet to walk on, easy to clean, low in cost, vermin and termite proof. Also, the "on-grade" construction better integrates house and garden, eliminating steps between floor and terrace.

Concrete floors are ideally suited to the installation of radiant heat: the coils are simply embedded in the concrete during construction. Also, the heat loss factor is much less in concrete slabs than in standard floor joist construction. This provides fuel savings and greater comfort.

All under-slab water piping is copper tubing, and 1/2" copper tube hot water radiant heat coils are placed in the top of the base slab. Finish flooring throughout is terrazzo "floated" over the base slab with 1/4" sand bed to minimize cracking. Square footage of interior and exterior terrazzo totals over 7000.

Fiberglas insulations will be used throughout the structure. One of the photographs shows the installation of the perimeter insulation of 1" thick asphalt-faced rigid Fiberglas board. This perimeter insulation will greatly reduce heat loss through the exterior foundation walls and the asphalt vapor barrier will prevent moisture seepage into the slab. Other Fiberglas products include roof and wall batt insulation and the new Fiberglas Perma-Fly roofing.

(Continued on Page 32)
PINWHEEL HOUSE

Designed by Peter Blake

Paul Weidlinger, Structural Engineer
Idea: Most vacation houses are designed to work, roughly, like a camera: a box, glazed on one side, with the glass wall pointed at the view. The designer felt that he could make the project more interesting if he could find a way to open the house to a variety of views with a possibility of shutting out a view occasionally. It also seems that summer living poses certain distinct problems, i.e.; how to keep cool, how to keep away from bugs, how to cut out the sun if and when it becomes too insistent. Finally, the concept of summer-living as different from all-year-around living suggests that in a summer house the sleeping quarters and utilities be reduced to a minimum, and the living quarters made as spacious as possible, all to be designed for a minimum of upkeep.

Solution: The pinwheel house seemed both an obvious and a disarmingly simple solution to these problems. It consists of two elements: a 24' by 24' living area upstairs, and a 19' by 19' sleeping-bathing-utility-storage area below. The upstairs area has four identical exterior walls. Looking at each wall from the inside, and reading from left to right, these walls consist (1) of a 6' wide fixed glass panel; (2) of a 12' wide opening that can be screened; and (3) of a 6' wide wall panel faced with plywood.

The key to the pinwheel plan is a very large — 18' long and 8' high — sliding wall hung from an overhead track. This wall can be moved along the outside face of the house, to cover up or open up the 12' wide opening at the center. There are four such sliding walls—one for (Continued on Page 31)
STEEL FRAME HOUSE

PHOTOGRAPHS BY JULIUS SHULMAN
As seen from the street, the covered stairs to the right of the concrete retaining wall lead to the patio on the upper house level. The patio, stairs, and walks are brick paved. This upper level patio which cannot be seen from the street is the focal point for family activity. The dining-living area, the kitchen and one bedroom, each have a sliding door that opens to this common court. A white plastic panel projecting from the reflecting pool serves as a screen between the stairs and the patio bedroom.

The exposed-stock fireplace is faced with slumpstone below; the flue is covered with concrete and a metal shell. It acts as a buffer between the living and dining areas. The second bedroom, shown in the plan, opens to the rear of the house and has its own brick terrace. The exposed steel deck and interior beams are painted blue-gray, and the exterior steel beams are white. Interior walls are mostly mahogany plywood and sheetrock which is fastened to a system of girts and ledgers. The concrete slab floor is covered with mastic tile with the exception of the dining room which is polished brick. An extra wide hall accommodates a washer and dryer built into a cabinet that is hidden from view when not in use. The house is heated by a forced-air perimeter type system.

Steel is used in the construction in such a way as to achieve maximum use and economy.

Designed by PIERRE KOENIG

Consulting Engineer: William Porush
ANIMAL HOSPITAL

Architects:
Rochlin & Baran

Building and Interior Design:
Saul Bass, Herb Rosenthal

Landscape Architects:
Eckbo, Royston & Williams
This animal hospital is designed with a view towards providing complete and competent medical services in a structure that will be institutional in character. The administrative functions are organized into one area on a mezzanine over the driveway which creates the roof of the tunnel connection between the two parking areas. It is accessible through a stairway in the reception room as well as an outside stairway connecting directly with the medical section behind the reception area. The mezzanine also contains a multi-purpose room for the staff.

The entire structure is essentially wood frame, plaster and glass, with a minimum of structural steel. The building, on one continuous flat concrete slab is so framed as to provide a minimum number of bearing walls in order to allow for maximum versatility in future expansions. All mullions are load bearing to permit the thin sections on the west and east elevations. The entire roof is one continuous diaphragm which transfers all seismic load to interior partitions. All portions of the structure were designed so as to exploit minimum section modules for the greatest economy.

1. TV—CONFERENCE ROOM
2. CREDIT ROOM
3. EXECUTIVE OFFICES
4. PHARMACY
5. GENERAL OFFICE
6. EXAMINATION ROOMS
7. SURGERIES
8. LABORATORY
9. INSTRUMENT STERILIZATION
10. X-RAY ROOMS
11. GROOMING AREA
12. AMBULANCE PARKING—EMERGENCY ENTRANCE
13. KITCHEN
14. TREATMENT ROOMS
15. GROOMING ENTRANCE

PHOTOGRAPHS BY TODD WALKER
Four units of an eventual total of eight are presently under construction. The project will include gardens and a swimming pool designed by Eckbo, Royston and Williams. These apartments have not been conceived as small units but rather to reflect the atmosphere of a complete house. On staggered levels, each apartment will have access to an outside area, either to a garden at ground level, or to a penthouse garden, all by means of sliding doors. Each will have a large living-dining room with an elevated Calstone fireplace, a master bedroom with dressing room and bath; the den, or guest room, is located adjacent to the living area and will open by means of translucent shoji screens.

One apartment will have the additional feature of a studio which can be entirely opened into the garden by a folding wall. The entire project will be completely soundproofed using a system of suspended ceilings with acoustical blanket between the floor and the ceilings and also a soundproof blanket between walls. Each unit will have its own circulating forced air heating system. Kitchens will be of natural wood and will include General Electric counter ranges, ovens, and dishwashers. The garden will have a 20x37 foot Paddock swimming pool surrounded with colored exposed aggregate concrete paving separated into individual areas by semi-circular Calstone walls.
THE KITE from a student project

Department of architectural engineering, California State Polytechnic College at San Luis Obispo

Instructor: WESLEY S. WARD

The kite has held fascination and mystery for young and old throughout time. Ancient military men and modern admen have been literally carried away by it. Other more efficient aircraft may have taken over the simple tasks it once performed, but it is doubtful if technology will ever replace it as a toy and object of beauty.

In design it imposes discipline without impeding tradition, stimulates creative imagination without supporting irresponsibility, affords an opportunity to experiment first hand with basic aerodynamics, structure, materials, form, color, transparency, and motion. It has the dramatic appeal of understandable parts combining toward a well-defined objective. The results affirm the criteria of design in unmistakable terms: it performs or it doesn't,—it is a thing of delight or it isn't.
The architect today is challenged with the responsibility of not only solving in a technical way all the material considerations which are necessary for the construction of the secondary school, but also, more important, the approach to the educational plant which takes into account psychological and philosophical considerations. This basically, then, obliges the architect to attack the school plant problem with the fundamental concern of creating an appropriate teaching environment. This environment must not only meet the demands which are manifest at the present, but must also anticipate the probable course of our future cultural development; the school plant must be utilized as the motivating force which will not only offer educational opportunity for the student, but also orient the community in its broadest concept.

For several years, the trend in secondary educational construction has followed a pattern beginning with wing type and finger type plans. These concepts in planning have resulted in problems which the architect and client can now analyze and evaluate. It has been observed that finger type plans require greater area, create maintenance problems with their many courts, increase the heat losses through the glass, create expensive natural light control conditions, and add to the general cost of utilities. Lighting studies have been made where expensive natural lighting systems have been installed. And yet, artificial illumination is needed most of the time.

The teaching methods as outlined by the California State Department of Schoolhouse Planning and the Stanford Research Laboratory indicate the following trends:
A. All facilities should be made as flexible as possible; furniture should be made movable where possible. Multi-use of room areas is vital, especially with changing teachers and teaching techniques.
B. Visual Aid teaching methods are rapidly gaining in popularity, and rooms should be so constructed as to carry on these activities with a minimum of effort.
C. Television education is now in its infancy, and yet those who are familiar with this medium report extremely gratifying results; broadcasting from a local central station, state, national, or international station, creates a teaching medium with unlimited possibilities.

The secondary school plant should be carefully analyzed. The environment of each teaching area should be unique unto itself. The architect should very carefully study each of the areas, so that this personality and character of space should immediately become apparent and influence the student accordingly.

The architect is charged with conceiving the best possible solution to these problems, taking into account costs of construction, construction systems, building materials, equipment, speed of construction, and maintenance.

The site for the Westmoor High School is situated atop a high plateau overlooking the Pacific Ocean, Daly City, and the Santa Clara Valley. The site is generally exposed to wind and fog. It is situated in a rapidly growing residential area. The school district, anticipating not only the present plant requirements, but also possible other future projects, has purchased a 65 acre site, of which 42 acres will be devoted to this high school project.

In view of all the considerations which have been presented, it was decided to construct a tight, compact structure. This would afford its occupants a maximum of comfort under all weather conditions, and at the same time permit interior classrooms to be used as viewing rooms or controlled work areas. The placing of all the classrooms in a concentrated area made it possible to introduce mechanical cores between classrooms, which house all heating and ventilating equipment, plumbing, electrical and utility lines. The

(Continued on Page 31)
It's better to plan than patch (telephone facilities, that is)

People who are shopping for a new home like to feel that every modern convenience has been built into the house they select. Exposed wires, for example, are a dead giveaway that telephone outlets were put into the house rather than planned into it. Yet it costs so little to put built-in telephone facilities in your plans. Why not take advantage of Pacific Telephone's free Architects and Builders Service. Let us help you plan the kind of telephone facilities every buyer expects to find in his home.

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PRODUCTS

for the new Case Study House No. 17

DESIGNED BY CRAIG ELLWOOD
FOR THE MAGAZINE ARTS AND ARCHITECTURE

WASCO-ITIE SKYDOMES—Fifteen Skydomes have been specified for Case Study House No. 17. These prefabricated top lighting units admit overhead daylight through acrylic plastic domes set in airtight extruded aluminum frames. Balanced daylight is distributed to all parts of the house, no matter how distant from exterior walls; making possible compact, economical layouts that utilize interior areas to best advantage. The Wascoite Skydomes, strong, shatter-resistant and lightweight are virtually maintenance free. They are manufactured by the Wocco Flashing Company, 87 Fawcett Street, Cambridge, Massachusetts.

TENNIS COURT SURFACING—The tennis court will be surfaced with American Bitumuls' Loykold emulsified asphalt. Chosen for its precise ease of construction, rugged durability, perfect drainage, and minimum maintenance requirements, Loykold provides a comfortably resilient, grip-free, smoother surface. Loykold is one of the asphaltic products of the American Bitumuls & Asphalt Company, 200 Bush Street, San Francisco 4, California.

The following are previously mentioned specifications developed by the designer for the new Case Study House No. 17 and represent a selection of products on the basis of quality and general usefulness and have been selected as being best suited to the purpose of this project and are within the meaning of the Case Study House Program, "Merit Specified."

Blod-Fan Electric Exhaust Ventilators
Manufactured by Pryne & Company, Inc., Pomona, California

Conrac Television set
Manufactured by Conrac, Inc., Glendora, California

Fiberglas Building Insulation Products, Built-up Roof
Manufactured by Owens-Corning Fiberglas Corporation, Toledo 1, Ohio

Landscaping
All material from the Van Herrick's nurseries, 10150 National Boulevard, Los Angeles, California

Locksets
Kwikset Sales and Service Company, Anaheim, California

Modular Hollow Clay Block
Manufactured by Davidson Brick Company, 4701 Floral Drive, Los Angeles 22, California

Panaview Sliding Doors
Manufactured by Panaview Door & Window Company, 13434 Raymer Street, North Hollywood, California

Pry-Lite Recessed Lighting Fixtures
Manufactured by Pryne & Company, Inc, Pomona, California

Rotir Electric Barbecue Spit
Manufactured by the Rotir Company, 8470 Garfield Avenue, Bell Gardens, California

Structural Steel
Steel from Drake Steel Supply. Steel produced in mills of Columbia-Geneva Steel Division, U.S. Steel Corporation. Drake Steel Supply Company, 6105 Bandini Boulevard Los Angeles, Calif.

Succem and Water-Bar Waterproofing agents
Products of Super Concrete Emulsion Ltd., 1372 East Fifteenth Street, Los Angeles, California

Swimming Pool
Designed and Built by Anthony Bros., 5871 Firestone Boulevard, South Gate, California

Swimming Pool Cover
Manufactured by the Safe-O-Matic Manufacturing Company, 33 St. Joseph Street, Arcadia, California

Thermador built-in ovens and cooking top
Manufactured by Thermador Electric Manufacturing Company, 5119 District Boulevard, Los Angeles 22

Westinghouse built-in refrigerator-freezer, laundromat-dryer

Westinghouse Electric Corporation and distributed by Westinghouse Electric Supply Company, 4601 South Boyle Avenue, Los Angeles 58, California
in all nations, it must be accompanied by a revision of education in all countries, both advanced and underdeveloped, which must start in the primary schools — indeed in the home and hence must start even further back with the re-education of parents and teachers.

If this seems visionary it is because the time is still far off. Yet it must come if the human race is democratically to solve such problems as the atomic age will certainly bring — problems such as how to grow enough food to support the workers that the atomic industries will require; how to provide water to the arid zones so that the population can thrive and use the electric power that can easily be brought there; how to provide medical care to large populations that atomic energy will make possible; how to distribute the wealth that great atomic industries will create and that automatic factories, perhaps, will convert into tangible goods; how and by what steps it will be possible to increase the standard of living.

After such a brief review of the prospect it is no longer startling to speak of a revolution in the world's work and in its way of life. Perhaps the term should be "rapid evolution," not quite so fast as a revolution. In any case, one's vision must go far beyond mere nuclear physics and the technology of reactors. It is obvious that the coming atomic age requires foresight not merely from physicists and engineers but also from educators, social scientists and exponents of culture. It requires not only foresight but planning and action, lest the revolution overwhelm us. This great development must be guided for the benefit of mankind. — Unesco Courier

PINWHEEL HOUSE—BLAKE
(Continued from Page 21)

each side of the house.

If the day is sunny and warm, the 18' wall slides over to the right, or on two, three, or all four sides, which creates a shady pavilion, with views all around, and a steady breeze. To close the house up for the evening, the 18' wall slides back again, leaving only the 6' wide glass panel in each corner exposed, giving plenty of light, almost 200 sq. ft. of glass area for a 560 sq. ft. room.

The two-story plan was dictated by the obvious economies inherent in a smaller roof area and the space gained between foundation walls. On the lower floor, the house has two very compact bedrooms, utilities, storage room, four closets, a full bath.

It was found that the house was very simple to build and very simple to prefabricate in part. The sliding walls were assembled in a local mill and trucked to the site and hung. Screens were replaced by curtains of nylon mosquito netting, although the house is detailed to receive sliding screens as well. Light steel I-beams for the 12 columns that hold up the house were used in order to brace the sliding walls against the wind when they are in their extended position. Although the walls will not generally be open, or fully open, in any severe storm, it was decided to design the structure to resist wind velocities of considerable strength. The steel columns are 15' long. The section is a 4' 1" weighing only 10 lbs. per foot. Some shop fabrication was necessary to prepare the columns to receive wood beams at floor and roof. Each column is set into a 24" diam. steel drum filled with concrete. This footing is 4' deep, so that only 11' of each column appear above grade. The steel was given a rust preventative shop-coat and then painted black with a metal paint. The solid, plywood-faced panels that are fixed in each wall were designed for lateral bracing of the structure. Plywood was also used in the sub floor and the roof deck. The rigidity of the house under extremely high wind pressures is due to a large extent to the structural qualities of the plywood.

Because the house can be adjusted to any orientation and any view or combination of views, it is a universal vacation house for almost any site.

MODERN HIGH SCHOOL—CIAMPI
(Continued from Page 29)

non-structural partitions may be moved if necessary. The omission of natural light removes solar heat problems, light brightness contrasts, and reduces maintenance costs. The building will be artificially lighted with a maximum of openness created between rooms. Corridors will be constructed of steel and glass with colored panels inserted at eye level to isolate the teaching spaces.

Special areas such as the Library, Science, Homemaking, Mechanical Drawing, and Teachers' Room, have small garden courts in order that a change of environment may be created; these are used for teaching purposes. It is estimated that the saving in fuel in this compact plan will more than offset any additional costs incurred by the artificial lighting. Other areas, such as the Fine Arts Court, the Little Theatre, and Arts and Crafts Room, as well as the private teachers' lunch court and the student dining court, will relieve the tightness of the plan and introduce features of interest highly decorative and useful as sheltered areas against wind and fog.

The principal shop and gymnasium face north and here glass is introduced to add further contrast and transparency to the plan concept.

The Great Court offers an outdoor area for large student gatherings. It assumes a civic character and is introduced to separate the public areas from the academic and vocational areas.

The circular music room area, with its depressed floor and domed roof, again will create a change in environment and simultaneously create teaching spaces which are acoustically correct.

The entire exterior of the main building is designed with a tile roof and a glass skin which form the principal freeway of circulation and feed into the secondary aisles and adjoining areas.

Since the swimming pool building and community auditorium are to be built at a later date, they are planned as separate structures. The building will have a concrete roof. The low flat areas will be "lift slab" and the long span high rooms will be roofed with thin shell concrete pre-cost barrel vaults. Exterior walls will be colored masonry and glass areas will be framed in aluminum; corridor partitions, steel sash and plate glass. Acoustical plaster ceilings will be applied direct to concrete. Lighting will be fluorescent. Heating and ventilation will be taken care of by specially designed unit ventilators concealed in the mechanical core. Floors will be asphalt tile.
CASE STUDY HOUSE (Continued from Page 19)
The masonry panels between the steel columns are Davidson 6" clay block. Davidson 8" clay block is used in the walls flanking the terrace. In order to improve plasticity and curing, reduce shrinkage and efflorescence, provide greater density and water repellence, and increase strength and bond, Red Label Suconem has been specified as an admixture to masonry mortar and grout. This low cost product is an emulsion of specially prepared oils and chemicals, and the mix ratio is only 4/5 quart per sack of cement. The completed masonry walls will be protected with Water Bar, a one coat silicone resin water-proofing sealer. Water Bar seals the masonry from rain and weather, prevents water as a liquid from passing into the wall, but allows water to escape as a vapor. This "breathing" action retards efflorescence, because the escaping water vapor cannot carry dissolved salts to the wall surface. This product is completely invisible, and does not change the natural color and texture of the masonry.

Note: An early issue will show additional construction details.

BOOKS (Continued from Page 10)
home-builder, remodeler, student or practicing architect.

For the average reader interested in values, there are portions of this book devoted to the battles among the schools: Eclectic, Revivalist, Traditionalist, versus the Internationalist, Empiricist and Modernist, with a weighing of the good and the bad in all camps. Mr. Kennedy never underestimates the importance of the environment by which a house is surrounded, nor does he believe in limiting the use of form: "...new uses must be firmly tied to the reality of our demands on form, the first of these is to symbolize some generally desirable social goal. The second is to stimulate us at our most primitive and archaic level. Frank Lloyd Wright's success is due to his ability to manipulate form in these two levels."

In conclusion, the author wants a path towards architecture, rather than any final goal.

BRIEFLY NOTED

FINNISH DESIGNERS TODAY, by Oli Maki. (Werner Soderstrom, Helsinki, about $12.00)
A representative selection of the works of more than twenty-four outstanding Finnish designers of textiles, ceramics and glass. Some 150 plates in color and black-and-white along with photographs of the artists. Notable are the rugs and tapestries and fabrics of Margarita Ahlstedt, Dora Jung, Ultra Simberg and Martta Taipale; the late creative piece of Raita Tuuri, the ceramic sculpture of Sakari Vapaavouri, the glass of Göran Hogell and Tapio Wirkkala. A handsome book.

JAPAN, by Werner Bischoff. (Simon & Schuster, $10.00)
Not only a magnificent picture book, but a non-static recording of the culture and tradition in "Ancient," "Modern," and "Traditional" Japan. Sensuwa, photographic reporting at its best and the plates both in color and black-and-white are brilliantly reproduced in Switzerland by Gonzett and Huber, publishers of DU magazine.

JOB (Continued from Page 9)
sign experience helpful. Salary commensurate with experience and ability.

F. DESIGNERS: Two experienced industrial designers wanted by large Mid-western manufacturer of watches, jewelry and related items for permanent, full-time staff senior-designer positions. Male candidates, 30-40 years old, Mid-western residents preferred. Watch or jewelry design experience not essential.

G. DISPLAY AND EXHIBITION DESIGNER: Well-established growing New England manufacturer of display and exhibitions of unusually high quality seeks young staff designer to handle working drawings, color schemes, art direction. Advertising and merchandising also involved. Starting salary 4,200-$4,600 per year.

H. FLOOR COVERING DESIGNER: For full-time staff position with large Pennsylvania company. Prefer designer adept at drawing floral patterns; must be good draftsman. Experience in soft-surface floor coverings desirable.

I. FLOOR COVERING DESIGNER: New England manufacturer of soft-surface floor coverings wishes to develop free-lance design sources.

Two-dimensional designers of New England, experienced in fabrics, wall coverings, or floor coverings and willing to visit factory periodically with design manager are wanted.

J. FURNITURE DESIGNER: Large New England manufacturer of decorated vinyl sheeting wants young furniture designer for full-time staff employment at plant. To assist in developing new furniture uniquely suited to plastic upholstery.

K. GRAPHIC AND PACKAGING DESIGNER-EXPEDITOR: New Massachusetts company in plastic tube container field selling to large national accounts wishes to hire full-time for experienced expeditor with packaging, graphic arts and printing inks experience. Position involves design, color, printing on plastic, scheduling, costing and expediting. Excellent growth prospects. Salary area $6,000.

L. GREETING CARD ARTIST: New England manufacturer of greeting cards wishes to develop free-lance design sources. Two-dimensional designers wishing to qualify should apply to Editor, J. O. B.

M. INTERIOR DESIGNER: Interior designer preferably with architectural background and ability to design. Varies. Variant with emphasis on commercial interior. Experience required. Write enclosing resume: George Nelson & Assoc., 30 West 57th St., N. Y. C.

N. LAYOUT ARTIST: Large Pennsylvania company wants young man for permanent assignment. Will consider either a recent graduate or person with advertising layout experience. Needs creative and good idea man able to make fast pencil visuals, good comprehensive, color, and sketches in all mediums. Knowledge of typography and engraving processes also helpful.

O. MECHANICAL DESIGNER: For Research Division of large manufacturer of electronic equipment. Boston area. Job requires original and imaginative design for new products. Applicant should have mechanical engineering training or equivalent.

P. PACKAGING DESIGNER-ENGINEER: Large Eastern chemical firm has staff openings at experienced for experienced packaging designer with strong mechanical engineering background in plastics and metals, to develop practical, attractive containers for consumer products.

Q. PRODUCT DESIGNER: Leading mass-producing glass manufacturer, with design offices in New York City, wants product designer for immediate full-time staff position.

R. RADIO-TV: Openings are anticipated with a large, well-established manufacturer, for designers with experience in graphic, packaging, furniture, radio and TV design.

S. SCULPTORS: Leading manufacturer of cemetery memorials and tombstones seeks for full-time staff employment, in northeastern area, several young male sculptors of unusual talent and proven ability, age 25-35, for plaster model-making and stone sculpture. Salary commensurate with background and experience.

T. TEACHERS—DESIGN: Midwestern museum with school conferring degree and diplomas in several areas of Art and Design, wants to fill the following positions:

1. Chairman, Industrial Design Dept.: Young man with broad educational background to teach courses leading to B.F.A. degree in Product Design.
2. Instructor, Commercial Art and Advertising Dept.: Young man to teach Printing and Typography, Creative Layout, and to supervise platesetters. Should deal with typographic problems creatively, rather than purely technically.
3. Instructor, Department of Interior Design: Young man or woman qualified to teach courses in interior Design. Candidate should have broad educational background with working knowledge of historical developments of architectural and interior forms.

U. WALLPAPER DESIGNERS: 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—DESIGNER: 10 years experience as an architect. 1 year's experience with plastics and other new materials for use in prefabrication of buildings. Interested in prefabrication, mass-production, lightweight space frames and in developing prefabricated plastic house. Registered in Pennsylvania, living on West Coast. Male, age 32, married. Willing to relocate.
B. ARTIST—DESIGNER: 11 years varied experience in display, poster, mural design, advertising layout, book illustration. Knowledge of typography and printing reproduction methods. Desires mural or illustration assignments in California area. Female, single.

C. ARTIST—TEACHER: 10 years teaching Institute of Design, Chicago; 5 years, Midwest art school. 20 years advertising experience as art director, production manager, advertising manager, photographer, product and package designer. Can teach advertising design, photography, package design and product design. Desires position in art school, college or university. Male, age 45, married. Willing to relocate.


F. ART TEACHER: B.F.A., M.F.A., honor student. Qualified to teach drawing, painting, design and commercial art; 5 years experience preparatory schools. Desires position at college or university level. Male, age 33, married. Willing to relocate.

G. DESIGNER—ARTISAN: 4 years experience teaching and working in high school wood and ceramics departments, free-lance work in furniture and accessories design and construction. 2 years as artisan in store planning. Male, age 28, single. Willing to relocate.

H. DESIGNER—TWO-DIMENSIONAL: B.F.A., 1955, Massachusetts School of Art, 2 years specialized training in advertising and product design including reproduction techniques, direct mail, color, and display. Experienced also as jewelry designer. Desires position in two-dimensional design field, either free-lance or staff. Female, age 21, single.

I. DESIGNER—TWO-DIMENSIONAL: Desires free-lance work in the two-dimensional field. Adept at air brush, stencil techniques and opaquing.


K. FABRIC DESIGNER—STYLEST: Graduate Columbia U., Cooper Union. 4 years experience designing modern printed drapery and upholstery fabrics and wallpaper. A.I.D. and Good Design awards, 1955. Seeks position on free-lance or retainer basis. Female, married.

L. HOME FURNISHINGS STYLIST—PUBLIC RELATIONS: 18 years experience in styling and color work, promotion, publicity, merchandising, organizational and administrative work. Desires permanent position with manufacturer or public relations firm. Female, single. Willing to relocate.


N. INDUSTRIAL DESIGNER: Graduate Pratt Inst., Ind. Design. 3 years experience in interior, furniture design, including full-scale working drawings. Desires permanent position with product or interior design firm. Male, age 29, married. Willing to relocate.

O. INDUSTRIAL DESIGNER: 5 years experience in design of products, packages, exhibits, etc., for midwestern manufacturer. Familiar with manufacturer processes and art production. Prefer position in studio handling all types of product design. Will consider staff work. Male, age 28, married. Willing to relocate.

P. INDUSTRIAL DESIGNER: Graduate University of Illinois in Industrial Design. 2 years with major appliance manufacturer on training program and in design section. 2 years handling all design assignments of small manufacturing company. Desires position with free-lance design office or design section of manufacturing company in West, Midwest or South. Male, age 32, married.

Q. INDUSTRIAL DESIGNER—DESIGN DIRECTOR: 8 years experience in industrial design. Presently styling director for major appliance manufacturer. Expert and lecturer on all phases of technical illustration...
for product catalogues, etc., and can train personnel and assume supervision of styling department. Knowledge of management procedures, materials and manufacturing methods. Desires position with reputable manufacturer. Male, age 39, married. Willing to relocate.

R. JEWELRY DESIGNER—ILLUSTRATOR: Attended Vesper George Art School; School of Practical Art, Boston, and Rhode Island School of Design. Seeks free-lance work in jewelry illustration and/or design. Female, single. Willing to relocate.

CURRENTLY AVAILABLE PRODUCT LITERATURE AND INFORMATION

Editor's Note: This is a classified review of currently available manufacturers' literature and product information. To obtain a copy of any piece of literature or information regarding any product, list the number which precedes it on the coupon which appears below, giving your name, address, and occupation. Return the coupon to Arts & Architecture and your requests will be filled as rapidly as possible. Items preceded by a check (✓) indicate products which have been merit specified for the new Case Study House 17.

NEW THIS MONTH

(253a) Television Lighting Catalogue No. 4 is a result of research and development to meet Television's lighting needs. Contents include base lights, spotlights, striplights, beamlights, control equipment, accessories and special effects. Request your copy from Century Lighting, Dept. AA, 521 W. 33rd St., New York, New York 36, New York.

APPLIANCES

(426) Contemporary Clocks and Accessories: Attractive folder Chrompak contemporary clocks, crisp, simple, unusual models; modern fireplace accessories; lastex wire lamps, and bubble lamps. George Nelson, designer. One of the finest sources of information, worth study and file space.—Howard Miller Clock Company, Zeeland, Michigan.

(977) Electric Barbecue Spit; Folder Rotis electric barbecue spit with seven 28" stainless steel Kabob skewers which revolves simultaneously over charcoal fire; has drawer action so unit slides in and out for easy handling; heavy anodized aluminum head motor, gears run in oil; other models available; full information barbecue equipment including prints on how to build in kitchen or den. Merit specified CSHouse No. 17.—The Rotiri Company, 8470 Garfield Ave., Bell Gardens, Calif.

(250a) Built-in appliances: Oven unit, surface-cooking unit, dishwasher, food waste disposer, water heater, 257" washer, refrigerator and freezer are featured built-in appliances merit specified for Case Study House No. 17. Recent introductions are three budget priced appliances, an economy dryer, a 125" cubic ft. freeze chest and a 36" range. For complete details write: Westinghouse Electric Co., Dept. AA, 4601 So. Boyle Ave., Los Angeles 36, Calif.

DECORATIVE ACCESSORIES

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

(200a) KITES, by John Freeman. Bosuyant structures solve the problem of adding warmth and color to contemporary interiors. Custom design considers the architectural elements of the house. Hand crafted, durable construction Complete information: Kites, 819 N. Beverly Glen Blvd., Los Angeles 24, California.

(137a) Contemporary Architectural Pottery: Information, illustrative matter excellent line of contemporary architectural pottery designed by John Follis and Rex Goode; large man height pots; broad and flat garden pots; mounted in variety of black iron tripod stands; clean, strong designs; data belongs in all files.—Architectural Pottery, 1541 West Lincoln, Anaheim, California.


(206a) Mogensen/Combs of Brentwood Village, 11708 Barrington Court, West Los Angeles, at Sunset Boulevard, is the place in Southern California for Scandinaviana Modern. This handsome shop represents and has stock of Scandinaviana furnishing, decorative fabrics, floor coverings, lamps and shades, graphic art books, ceramics, greeting cards, wall papers, silver, jewelry, stainless steel, fine china, crystal and pewter. If impossible to reach this shop write for the complete brochure giving details and photographs of the stock. Mogensen/Combs of Brentwood Village, Arizona 7-7202.

(230a) Contemporary Office Furniture: Newly published illustrated brochure describing contemporary high-style office furniture in CMF quality line. Many examples shown, including such features as solid brass hardware, full-size file drawers fitted for Pendaflex File Folders; wide range of beautiful cabinet woods combined with cigarette-proof micarta tops. Perfect workmanship, finish of this handsome line combined with moderate price, make it ideal for retail stores, offices, reception room. CMF has recently affiliated with Vista Furniture Company of Anaheim. For full information and complete price list, write to Costa Mesa Furniture Mfg. Co., Dept. AA, 2257 Placentia St., Costa Mesa, California.

(168a) Furniture, Accessories, Retail: A remarkably comprehensive selection of contemporary furniture, fabrics and accessories. Illustrated catalogue. Equipped for execution of interior, commercial and residential.—Dan Aberle, 14620 Vista Avenue, Sherman Oaks, Calif.

(221a) Italian Marble Table Tops: Rene Brancusi's extraordinary collection of regal marble table tops, imported directly from Italy, is presented in newly published brochure now available. The table tops come in every size.
TONY HILL CERAMICS
(Wholesale & Retail)
3121 West Jefferson Blvd.
Los Angeles, California

LAMP & MASK AS ABOVE

VASES, ASHTRAYS, ETC.

PIERRE KOENIG HOUSE
shown on pages 22 & 23
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$16,950.
1884 Los Encinos, Glendale
Citrus 4-2539

surface-mounted units utilizing reflector lamps; modern chandeliers for wide-diffused, even illumination; select units merit specified for CSHouse 1950

(119a) Mosaic Western Color Catalog—In colors created especially for Western building needs, all of the clay tile manufactured by The Mosaic Tile Company is conveniently presented in this new 8-page catalog. Included in their various colors are glazed wall tile, ceramic, Velvetcx and Granitex mosaic, Everglaze tile and Carlyle quarry tile. Completing the catalog is data on shapes, sizes and trim, and illustrations of a popular group of Mosaic All-Tile Accessories for kitchens and baths. For your copy of this helpful catalog, write The Mosaic Tile Company, Dept. AA, 829 North Highland Avenue, Hollywood 38, California.

(197a) "This is Mosaic Tile": 16-page catalog describing many types clay tile. Outstanding because of completeness of product information, organization of material, convenience of reference, quality of art and design. Copies of award-winning Tile Catalog presented by The Mosaic Tile Company, Zanesville, Ohio.

(160a) Mosaic Clay Tile for walls and floors—indoors and out. The Mosaic Line includes new "Formfree" Patterns and Decorated Wall Tile for unique rain

(219a) Permatalexite Concrete Aggregate: Information on extremely light-weight insulating concrete for floor slab and floor fills. For your copy, write to Permatalexite Perlite Div., Dept. AA Great Lakes Carbon Corporation, 612 So. Flower Street, Los Angeles 17, Calif.

(938) Paint Information Service—authoritative, complete—especially for Architects. Questions to all your finish problems answered promptly and frankly, with the latest information available. No obligations. Also color samples and specifications for L & S Portland Cement Paint, the unique oil-base finish for floors, facings, masonry, galvanized steel. Used on the West's most important jobs. General Paint Corp., Architectural Information Department, 627 Army St., San Francisco 19, Calif.

(218a) Permatalexite Plaster Aggregate: Latest information on this highly efficient fireproofing plaster presented in detail in completely illustrated brochure. Brochure contains enough data and authority on fire resistance to warrant complete, immediate acceptance of Permatalexite for perlite plaster fireproofing. Many charts and detailed drawings give fire ratings, descriptions and authorities and describe plaster as lightweight, economical and crack-resistant, withstand ing up to 42% greater strain than comparable sanded plasters. Write to Permatalexite Perlite Div., Dept. AA, Great Lakes Carbon Corp., 612 So. Flower St., Los Angeles 17, California.


(251a) Concrete emulsions: Red Label Sucocom minimizes efflorescence, has proved an effective water-barrier. Merous popular colors are built in, cannot fade, chip, peel off or discolor. Washable, scratch and mar proof, withstands heat, will not rust, rot, warp or swell. Well suited for residence, business, industrial and institutional installations. Can be installed over any floor, smooth, sealed walls, as plywood, sheetrock, plaster board or plastered walls. Further information will be supplied by New Plastic Corp., 1025 N. Yucumac, Los Angeles 38, Calif.

(213a) Gelvatex Coatings: "First of the vinyl emulsion paints"—These paints have proved their outstanding durability in England, Africa, Canada, France, Australia, New Zealand. Available for all surfaces in wide range of colors. Advantages: lasts up to 7 years or longer; may be applied on either damp or dry surfaces; dries in 30 minutes; flows on in 25% less time; not affected by gasoline, kerosene, lubricating oils or greases, highly resistant to acids, alkalis, salts, fuel, salt air, smog. Gelvatex film lets surface breathe, will not trap moisture vapor, rain cannot penetrate. For informative literature write to Peter R. Jessens, Dept. AA, Gelvatex Coatings Corp., 1250 Wilshire Blvd., Los Angeles 17, California.

(193a) Simpson fissured Tile: New incombus tible addition to complete line of architectural products. From special type

A PERFECT SETTING
FOR CREATIVENESS.

ARCHITECTURE

ARTS & ARCHITECTURE
(222a) Architectural Window DeVor—LowerDrape Vertical Blind's colorful new catalog describes Lowervanes as the most flexible, up-to-date architectural window covering on today's market. Designed to fit any window or skyline—any size, any shape—and large enough to handle flame-resistant fabric by DuPont. Specification details are clearly presented and organized and the new catalog is profusely illustrated. Write to Vertical Blinds Corp. of America, Dept. AA, 1936 Pontius Avenue, Los Angeles 28, California.

(202a) "Arisilde Steel Sliding Doors": Innovation in sliding glass door industry is development of limitless number of floor widths and types from only nine Basic Units. 3-color folder now available illustrates with cutouts nearly every width and type that can be had without necessity of custom sizes. Maximum flexibility in planning is allowed by simple on-the-job joining of stock units forming watertight joint with snap-on cover-plate. Folder lists standard height of stock doors combined with several examples of width. Combination of Basic Units makes possible home and commercial installations in nearly all size categories. For more information, write to Arcadia Metal Products, Dept. AA, 324 North Second Avenue, Arcadia, California.

(229a) Multilith Stock Doors: Innovation in sliding glass door industry is development of limitless number of floor widths and types from only nine Basic Units. 3-color folder now available illustrates with cutouts nearly every width and type that can be had without necessity of custom sizes. Maximum flexibility in planning is allowed by simple on-the-job joining of stock units forming watertight joint with snap-on cover-plate. Folder lists standard height of stock doors combined with several examples of width. Combination of Basic Units makes possible home and commercial installations in nearly all size categories. For more information, write to Arcadia Metal Products, Dept. AA, 324 North Second Avenue, Arcadia, California.

(244a) Graphically illustrating the uses, sizes and prices of our framed sliding glass doors is a new 12-page brochure issued by Steel-Itt, Inc., pioneer producer of steel framed glass walls and sliding windows, is now available. The brochure includes isometric renderings of construction details on both Top Roller-Hung and Bottom Roller types; 3" scale installation details; details of various exclusive Steel-Itt engineered features; basic models; stock models and sizes for both sliding glass doors and horizontal sliding windows. This brochure, handsomely designed, is available by writing to Steel-Itt, Inc., Gardena, Cal.

(356) Doors, Combination Screen-Sash: Brochure Hollywood Junior combination screen metal sash doors; provides ventilating with weather protection and permanent outside door all in one.—West Coast Screen Company, 1237 East Sixty-third Street, Los Angeles, California (in 11 western states only).

(21a) Soule Aluminum Windows; Series 900; From West's most modern aluminum window plant, Soule's new aluminum window line offers all aluminum finish for longer wear, low maintenance; tubular ventilator section for additional comfort, strength, larger glass area; snap-on glazing for fast, permanent glazing; Soule's patent lock for neat, weather-tight seal; blind-free vents, 90° openings; 1/4" masonry anchorage; installed by Soule-trained crews. For information write to George Cobb, Dept. BB, Soule Steel Company, 1750 Army Street, San Francisco, California.

(117a) Stock Sash: Information on new Kawneer stock sash; designed for mod- ular building need; new glazing assembly; attractive appearance; resilient-grip principle ensures maximum safety, reliability; strong steel clip minimizes breakage due to sudden shocks, high winds, building settling: data belongs in all files.—Revere Copper, Inc., 1105 North Front Street, Niles, Mich.

(236a) Arisilde Aluminum Sliding Windows: Reduce installation costs, elimi- nate frames with new nail-in anchor bars. The windows may be nailed direct- ly into studs. All sides are weather- stripped. Nylon bottom rollers insure smooth operation. Unique sliding unit is removable. Write for brochure c/o Michel & Pfizer Iron Works, Inc., Dept. AA, 212 Shaw Rd., So. San Francisco, Calif.

SPECIALTIES

(152) Door Chimes: Color folder Nu- face door chimes; wide range styles, including clock chimes; merits specified CSHouse 1952.—Nu-Tone, Inc., Madison and Red Bank Roads, Cincinnati 27, Ohio.

(183a) New Recessed Chime, the K-15, completely protected against dirt and grease by simply designed grille, ideal for multiple applications; grille is a uniformly mild tone throughout house, eliminating a single chime too loud in one room. The unusual double resonator system results in a great improve- ment in tone. The seven-inch square grille is adaptable to installations in ceiling, wall and baseboards of any room.—Nu-Tone, Inc., Madison and Red Bank Roads, Cincinnati 27, Ohio.

(225a) Stained Glass Windows: 1" to 2" thick clipped colored glass em- bedded in cement reinforced with steel bars. A new conception of glass colored in the mass displays decomposing and refracting lights. Design from the pure abstract to figurative modern in the tradition of 12th century stained glass. For brochure write to Roger Dar- ricarrere, Dept. AA, 8030 W. 3rd St., Los Angeles, Cal.

(35a) Flashing Service: Brochures Revere-Keystone Interlocking Thru- Wall Flashing, Revere-Simplex Reglet System for Flashing Spandrel Beams, and other Specifications for Copper Roofing and Sheet Metal Work; these brochures, comprising one of best Park Avenue, New York 17, N. Y. sources, belong in all files.—Revere Copper and Brass Incorporated, 230
NOW...get Arcadia quality features in aluminum, too!

Here is a partial list of quality features that make Arcadia's new custom aluminum door the strongest, most weathertight sliding aluminum door ever made...

GENERAL—All members are Type 5063-T5 aluminum alloy extrusions, average wall thickness 0.24"—Lustrous, clear finish—Designed for either single or double glazing with standard 3/4" plate or 1 insulating glass—Glass Mold snaps on and off for fast and easy glazing—Beveled Mould for 3/4" plate prevents collection of dust and dirt—Hollow, box-type Sections provide extra stiffness and rigidity—Weathersealed on all four sides with Double-Seal Wool Pile finish—Designed for either single or double decorator-type Door Pulls—Available in a variety of widths. For free catalog write to Wm. T. Thomas, Dept. AA, Kwkitel Sales and Service Company, Anaheim, California.

STRUCTURAL BUILDING MATERIALS 207A—Unusual Masonry Products: complete brochure with illustrations and specifications on distinctive concrete masonry products. These include: Flagstone—a solid concrete veneer, cast in an irreglar size and shape, with bevelled edges on one face—face smooth; Romanstone—solid concrete veneer, cast in an irreglar size and shape, with bevelled edges on all four sides—suitable for interior or exterior architectural finish on buildings, houses, fire places, effectively used in contemporary design. New products not previously offered. These may be ordered in many interesting new colors. Brochure available by writing to Department AA, General Concrete Products, 13025 Oxnard Street, Van Nuys, California.

(21a) New Soul Steel Stud: Major advancement in metal lath and stud work. Soul Steel new studs were developed to give architects, builders stronger, lighter, and more attractive panels. Studs contain open web design, notched for fast field connection. New studs are easy to install, lightweight, less expensive than regular studs. Special work instructions will be furnished with every shipment. For catalog write by writing to Wm. T. Thomas, Dept. AA, Arcadia Metal Products, 1750 Army Street, San Francisco, California.

(18a) Plymoltite translucent-fiberglas reinforced-building panels. A new lightweight, shatterproof material with a thousand uses: for home, office, farm or factory. Lets light in but keeps out drafts. Plymoltite is pure, beautiful, weatherproof, shatterproof, and easy to use. Plymoltite may be used in metal lath, plaster, sand, or any other common hand or power tools and may be fastened with ordinary nailing or screws. Available in a wide variety of flat and corrugated shapes, and a selection of colors. Both structural and technical information available. Write Plymoltite Company, 2707 Third Ave., Burbank, Calif.

HELP BUILD A BETTER AMERICA—SEE AN ARCHITECT (107b) Tropic-balloon. Unusual acoustical tile designed to be used as a complete interior ceiling and wall treatment. Fiberglass balloon for noise abscorption dramatically camouflaged by the strength and beauty of the woven wood surfacing. Can be made to harmonize with any type decor specified and can be used in any manner desired. For information contact: Douglas Fir Plywood Association, Tacoma 2, Washington.

(20a) Modular Brick and Block: The Modular and Rug Face Modular Brick, the Modular Angle Brick for corners, the Nominal 6" Modular Block and the Nominal 8" Modular Block, have all been produced by the Davidoff type machine with the result of requests from the building trade and realization that all building materials can be worked together with simplicity and economy only with Modular Design. The materials now in stock are available from stock with delivery within 16 working days. Here are some of the advantages:

OVERALL WIDTH: 24" 1/8"
OVERALL LENGTH: 8" 1/8"
OVERALL HEIGHT: 4" 1/8"

Width: 24" 1/8" 
Length: 8" 1/8" 
Height: 4" 1/8"

This new grooved panel material of industry quality, is in perfect harmony with trend toward using natural wood textures. Packaged in two lengths and widths; has bevelled edges; applied quickly, easily; immune to water, weather, heat, cold. Uses include: vertical siding for homes; screening walls for garden areas; spandrel on small apartment, commercial buildings; instruction in front remodeling: exterior walls, ceilings, counters. For detailed information write Dept. AA, Douglas Fir Plywood Association, Tacoma 2, Washington.

(26a) Texture One-Eleven Exterior Fir Plywood: This new grooved panel material of industry quality, is in perfect harmony with trend toward using natural wood textures. Packaged in two lengths and widths; has bevelled edges; applied quickly, easily; immune to water, weather, heat, cold. Uses include: vertical siding for homes; screening walls for garden areas; spandrel on small apartment, commercial buildings; instruction in front remodeling: exterior walls, ceilings, counters. For detailed information write Dept. AA, Douglas Fir Plywood Association, Tacoma 2, Washington.

(24a) Contemporary Locksets: Illustrated catalog on Kwkitel "600" Locksets for sliding doors throughout the home: suitable for contemporary offices, commercial buildings. Features: 5-precision-matched parts for easy installation; dual locking exterior locksets—simplified cylinder reversing—may be reversed for left or right-handed doors. Stamped from heavy gauge steel, brass. Available in a variety of finishes. For free catalog write to Wm. T. Thomas, Dept. AA, Kwkitel Sales and Service Company, Anaheim, California.
NOW... get arcadia quality in aluminum too!

Today, after nearly six years of patient planning and exhaustive research, Arcadia proudly announces a magnificent new line of custom sliding doors of aluminum... designed and engineered to meet or surpass all commercial and residential needs! Here, at last, is an aluminum door worthy of the name Arcadia... long the leader in steel sliding glass doors. Before you specify any door, see the all-new Arcadia aluminum door. Compare it with all others... you'll see the difference. Then decide for yourself.

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first choice in steel... NOW first in aluminum, too!

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The new Soule Series 900 Aluminum Window includes every quality feature architects ask for. Tubular ventilator sections give greater rigidity and strength, permit larger areas of glass. Snap on glazing beads achieve a modern, all-aluminum window. And exclusive putty lock gives neater, weathertight putty glaze. All Series 900 windows are Alumilite finished in our new Alumilite plant. This finish imports a satiny smooth surface that is attractive to the eye and pleasing to the touch. Alumilite protects the surface of the window from corrosion, makes maintenance a simple matter of washing with mild soap and water. With Soule Alumilite finish windows stay new-looking longer!

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SAN FRANCISCO, 1750 Army Street • LOS ANGELES, 6200 Wilmington Avenue
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PHOENIX, 511 E. Roosevelt Street • SAN JOSE, 460 Park Avenue
SALT LAKE CITY, 220 Greyhound Building