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The Convention at New Orleans

Samuel Ratensky on European Housing Robert Moses Discusses Planning





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COVER: Before a flood of good natured mail begins to pour into the Journal office, we want to state that we are fully aware the photograph on the cover is not of a New Orleans building. It is, of course, Stanton Hall in Natchez, Mississippi, and the photograph is reproduced with the permission of The Press of H. N. Cornay, Inc., of Reserve, La. So unless you want to be picayune about the whole thing, you will have to admit that it is a typically Southern scene and it is an attractive illustration—not to mention the obvious architectural merits of the building itself.

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Letters to the Editor ...

EDITOR, Journal of the AIA:

How do you select an architect?

In spite of the progress made in our public relations, people who would engage architects are becoming more confused about how to make a selection. Why are they becoming confused, we may ask? Are not the recommendations of the AIA adequate?

Let me list for you some of the reasons why would-be clients are confused and often disgusted.

1. The client, instead of having to select one from a group of three of four qualified architects, is frequently required to interview twenty or thirty, many of whom are not capable, in order to select three or four for final interview. Does this not result in confusion?

2. Some architects appear at an interview with sketches, models, cartoons, etc., of the proposed building, while others say that such sketches are contrary to the "code of ethics." Regardless of who is right, the client is confused.

3. Some architects spend a great deal of time "wining and dining" a client obviously trying to gain an advantage. Some clients accept this, some don't, but they all know why the architect is doing it.

4. Some architects offer to make surveys and studies—no obligation. The architect who makes such an offer is lying, because it is his sole intention to get the client obligated to him.

5. Some architects offer their services for a fee so low that they must reduce their services to a minimum. Is this treating the client fairly?

6. Some architects organize joint ventures with well-known architects, feeling that the association with such architects will sufficiently enhance their prestige that they will get the job. Does the architect really think that this association will result in a *better* building for the client? I dare say he doesn't even *think* or he would not propose such an association. For one thing, such an association is a frank statement by the architect that his firm is not capable of rendering adequate service. 7. Some architects boast of their con nections with the legislative and administrative branches of government implying that they can be of special assistance through their connections. The thinking client will realize that something is wrong if an architect can exert influence on our public servants. Any public servant who recommends an architect or permits himself to become obligated to an architect is placing himself in a very precarious position.

8. Some architects will endeavor to bring outside pressure to bear on the client, thus forcing him to act in the architect's favor. This borders on "blackmail" and is intolerable among honest men.

9. Then there is the older architectural firm who offers its services for the same fee as the new firm. This poses some interesting but confusing questions in the client's mind: "Shouldn't the older, more experienced firm receive more for its services because it should be able to render a better service?— or maybe it doesn't render a better service." "Why should I pay a new firm the same fee I would pay an older firm? Surely they don't have the same experience." "Isn't the young firm experimenting with me?"

10. Then there is the architect who hires a "peddler" to ferret out work, entertain prospective clients and represent him at interviews. Is it surprising that clients do not attach much importance to architectural service when the architect employs a salesman to represent him?

Any architect who engages in these tactics brands himself as a "huckster," interested only in securing the job. He operates on the premise that brains are cheap, that the most important thing is to get the job. This philosophy cannot result in satisfactory service.

How can a client respect our profession when some of our members, by their "job selling techniques," destroy this respect?

How can a client have confidence in an architect who, in order to secure a job, has compromised himself?

How can a client expect good service from (Continued on page 8)





(Continued from page 6)

an architect who has secured the work, not on his ability as an architect, but rather upon his sales ability?

Can we architects expect our would-be clients to respect us when so many of us look upon the practice of architecture as a business venture and not as a personal service profession?

Why should not clients expect to bargain with architects, when some of us by our tactics encourage this very thing?

How can we expect our clients to know that architects render a personal service? That he should be selected on the basis of ability? And that his relationship with the client is one of trust and confidence? We don't seem to know it ourselves.

Perhaps our stature in the eyes of the public could be improved if we would do the following:

1. Recognize the practice of architecture as a profession.

2. Realize that the code of ethics is for the benefit of the client, and not to protect the architectural profession.

3. Establish our own individual standards of service and charges.

4. Become cognizant of the fact that the actions of one individual architect affects the reputation of every other architect and of the profession as a whole.

5. Realize that ability to render architectural service must be proven. It seems that a prospective client would be impressed by receiving a simple statement expressing an interest in his project and setting forth truthfully the architect's experience and ability.

> UEL C. RAMEY, AIA Wichita, Kansas

EDITOR, Journal of the AIA

For the last nine years, as a result of polio, I have been confined to a wheel chair and am unable to walk. I am, however, fairly active in that I am employed full time, and in addition, I drive my own car and make a fair number of trips to conferences and various other meetings both within Vermont and outside of Vermont. The philosophy and attitude toward handicapped people toward life and of society toward handicapped people has undergone a change. These people, whether they be handicapped by reason of the loss of the use of one or more limbs, or by heart difficulties of one sort or another, no longer tend to remain confined to their homes. In so far as possible more and more of them take their place in society. With this

in mind and based on my experience, it is my feeling that all public buildings, of whatever nature, should have, at least, one entrance at ground level without any steps. If a rise of any sort is necessary, a ramp of the proper angle should be installed. If the building has more than one floor, an elevator should be installed and should be of sufficient size to accommodate a wheel chair and should be accessible without steps from the floor served by the grade level entrance.

When I say that this treatment should be present in all public buildings, I mean by public buildings, state and federal buildings, university buildings, hotels, department stores, etc. I realize that this is a big order, and that of course, it cannot be compulsory and can only be accomplished through an educational process with the architects, some of whom evidently place great value on steps, whether they are needed or not. One glaring example of this type of architecture is the Barbizon Plaza Hotel in New York City, where it was practically impossible for a guest to get to eating facilities from the lobby even by using the elevators, it is impossible for a guest in a wheel chair to get to the registration desk because of steps, it is equally impossible for him to get to several of the meeting rooms, including the library off the lobby, because of one or two steps. Esthetically this may be desirable, but from a safety and convenience standpoint it is my opinion that it is undesirable.

One important point to consider is that the barrier that steps and lack of elevators presents to many people does not ordinarily come to one's mind even though one is an architect until they themselves have, either personally or through close relationship, encountered the situation.

I am writing to you in an effort to bring the major points of my letter to the attention of architects and others interested in public buildings in the hope that this problem might be given as wide a public dissemination in the trade as possible, either by rewrite or by publishing my letter in entirety or in part. Any questions or comments you have will be appreciated.

Another problem in connection with wheel chairs which might be of interest to architects is that of clearances both in width and at turns for wheel chairs. It would appear to me that dimensions of this sort could well be a part of any and all architect's standards.

> E. C. SCHNEIDER, Chairman, Agricultural Engineering Department, University of Vermont, Burlington, Vt.

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FORMING THE VANGUARD as architects converge on New Orleans in June will be members of Architectural Registration and Licensing Boards from all over the United States. Members are also expected from Puerto Rico and the Canal Zone as the Thirty Eighth Annual Convention of the National Council of Architectural Registration Boards (NCARB) convenes there on June 20 and 21. As in past years, the annual luncheon and banquet of the Society of Architectural Examiners will also be a combined part of the meeting this year that is expected to draw the biggest attendance in the history of the NCARB.

NCARB president, Walter F. Martens has announced the theme for this year's convention to be: "The Council Advances," recognizing recent progress which has better prepared the NCARB to serve member Boards and the now almost seven thousand "Record" holders whose files are handled by the new Council offices in Oklahoma City.

NCARB Convention headquarters will be at the Hotel Monteleone on Royal Street in the splendor and atmosphere of the world famous French Quarter and the program has been planned so as to allow ample time for enjoyment of the varied historic attractions and fine contemporary buildings that make up the New Orleans of today.

The main sessions of the Convention deal this year with examinations and, as such, the discussions may have long-reaching effects on future architects and those whose practice takes them beyond their own state borders. Through such discussions does NCARB continue its striving to facilitate reciprocal registration and to secure greater uniformity in the requirements for registration in all states and territories.

Particularly active in the preparations for this Convention have been Doyle Harvey, of Georgia, who has worked with President Martens in making preparations for the Convention. Examination Committee Chairman Fred L. Markham, of Utah, and his committee have spent many hours preparing for these important sessions. Ralph C. Kempton, of Ohio, will again make arrangements for the exhibits that add so much to each NCARB Convention.

Solis Sieferth and Earl Mathes of New Orleans will see their southern hospitality enjoyed by members, wives, and guests as "The Council Advances" to New Orleans. EDWARD LARRABEE BARNES has been chosen to receive the 1959 Brunner Memorial Prize in Architecture of the National Institute of Arts and Letters. The \$1,000 Award was presented to Mr. Barnes by Henry R. Shepley at the Joint Annual Ceremonial of the National Institute and the American Academy of Arts and Letters on May 20.

The Brunner Prize was set up in honor of Arnold W. Brunner, a former Treasurer of the National Institute of Arts and Letters, himself a distinguished architect and city planner, and is awarded annually to an architect who shows promise of contributing to architecture as an art. Former recipients of the award are: Gordon Bunshaft, Minoru Yamasaki (Honorable Mention), John Yeon, John Carl Warnecke and Paul Rudolph.

Mr. Barnes has undertaken a great variety of work, from individual homes to large housing projects. He attended Harvard College and the Harvard School of Design, winning the Sheldon Traveling Fellowship in 1941. From 1942 to 1946 he served as a naval architect on submarines at Hunter Point Navy Yard in San Francisco; his first large project on returning to civilian life was the designing of aluminum prefabricated houses for Consolidated Vultee Aircraft, in association with Henry Dreyfuss.

Among his most important works are the Donald Miller house in Chappaqua, New York, and the Wiener house in Fort Worth, Texas; a radio station for Radio Mount Kisco; two housing projects in San Juan, Puerto Rico, and an urban renewal project in Sacramento, California, in association with the firm of Wurster, Bernardi and Emmons. The Sacramento project has recently won the Top Design Award for 1959 of the magazine *Progressive Architecture*. He is currently working on a design program for Pan American World Airways and a United States Consulate Compound for Tabriz, Iran.

FRANCIS KEALLY, architect, has been elected an associate of the National Academy of Design, in the architectural class.

A past president of the New York Chapter and the Municipal Art Society of New York, Mr. Keally is president of the Fine Arts Federation of New York and chairman of the Committe to Preserve American Art. Outstanding value has made OTIS the accepted word for elevator quality in the U.S. and throughout the world.





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2

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STATE OFFICE BUILDING, PHILADELPHIA, PENNSYLVANIA

Collaborating Architects: Carroll, Grisdale & Van Alen Harbeson, Hough, Livingston and Larson Nolen and Swinburne

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Some Observations on European Housing Design

BY SAMUEL RATENSKY

Director of the Urban Renewal Board of the City of New York Based on an address delivered at the Silver Anniversary Conference of the National Association of Housing and Redevelopment Officials at San Francisco, October 1958. Reprinted by permission of the Bulletin of the NIAE.

My European study trip was made possible by a Brunner Award given by the New York Chapter of The American Institute of Architects. Perhaps an explanation of the reason why I applied for the grant-and why the Brunner Committee gave itwould be meaningful and relevant. For many years I have worked in the planning and technical aspects of housing at Federal and local levels. During the early USHA days, I participated in the formulation of design standards, plan types, and administrative regulations, which, with the wisdom of hind-sight, appear to have been conceived within the narrowest interpretation of the law's directive that housing be "decent, safe and sanitary," and with more concern for the attitude of private real estate investment than for the quality of living that such housing contained or the quality of neighborhood and community that such housing created. This was not the result of any lack of idealism or devotion in the early advocates of public housing; but the concept of public responsibility in this field was new, the motivation humanitarian, the politics expedient, and the planning concepts rudimentary or non-existent. Then, for many years, at the city level, I participated in a large planning and building program with an increasing awareness that these same standards and

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regulations, which had changed little over the years, had by now become ossified into a procedure which produced stereotypes with little distinction as architecture or as community.

Emerson said, "Those who would carry on great public schemes must be proof against the worst fatiguing delays, the most mortifying disappointments, the most shocking insults, and, worst of all, the presumptuous judgment of the ignorant upon their designs." But after watching a score or two of talented architects and designers try and fail, I came to the view that perhaps these did not qualify as "great" public schemes, and that the "insults," "delays" and "disappointments" were perhaps implicit in the programming, in the procedures and in our own understanding or lack of understanding of the goal.

I had not been in Europe since the war years, but in magazines and technical publications I saw photographs of contemporary housing and town planning that caused me to remember hearing Mrs. Roosevelt say, in 1942, that after World War II most of the European countries, because of the impact of the war on their social, political and physical structures, would spontaneously accept change and the aspect of the future, whereas we would only be able to do so by an act of will.

Accordingly, in association with an experienced architectural designer, I applied for the Brunner grant to look for and at those examples of housing in Europe which (1) have architectural quality and vitality and (2) are part of an acceptable and desirable urban pattern in the neighborhood and in the larger community and city. My search was not an investigation into legislation, financing techniques, or administrative procedures except to the extent that these inevitably control the form and quality of the product.

My itinerary included London and Harlow New Town; Copenhagen; Göteborg and Stockholm; Zurich; West Berlin and Frankfurt; Italy from Milan to Rome; and Amsterdam and Rotterdam. Although I will generalize about European practice and experiences that does not mean that there are not important and vivid differences from country to country and frequently within countries from city to city. In capsule form, my impression of the work I saw was that realization of planning concept and integration of housing into a planning goal were most advanced in Stockholm and Rotterdam; that quality and refinement of architectural design were most advanced in Zurich and Copenhagen; and that freedom and experiment in architectural design were most advanced in the London County Council work.

However, an evaluation of European experience for its meaning to us must, at the outset, admit that there is great reward and pleasure in seeing different vocabularies, landscapes, and colors, and that one's reaction therefore sometimes goes overboard in uncritical acceptance; that a true evaluation must

be one in depth, worked out in time and experience, and in specific terms of what is relevant and suitable in each country and community; that there are fundamental differences in politics, economics, tradition, and social attitude which make it difficult, if not impossible, to apply directly any European experience to our own situation. It is obvious that the Socialist or Labor governments in Stockholm and London create a different social climate and are, in fact, responsible for the approach to the total housing supply as a public utility, which in itself implies a better relationship between housing program and planning objective; also that the relatively stable and homogenous populations in European cities give an essential basis for better community organization and better maintenance, which permit freer, more varied and more experimental architectural design. Perhaps from this latter fact we may parenthetically conclude that we must conceive programs which will encourage stable communities and give people a greater sense of belonging and caring. Further, in evaluating European experience, we must remember that there are differences in relative costs of labor and materials which would make prohibitively costly here some of the most charming features of design and uses of materials-colored and patterned pavements for example; and that, finally, codes are more lenient and living patterns and status symbols different. The less restrictive attitude toward fire exits almost universally makes possible the use of the stair as a major architectural design element. And although Americans would find some of the arrangements for space heating primitive and would miss the individual electric washing machine, almost everywhere they would find more effective and integral provision for clothes

Elmington Estate, London. Row houses arranged vertically 4 stories.



Alton Estate East, London. A London County Council "estate" showing careful site planning and a skillful admixture of building types.





Alton Estate East, London. Another view of the "estate" shown on the opposite page. Included in this project are four story masionettes, two story row houses, and eleven story "point-blocks."

LONDON PHOTOS COURTESY LONDON COUNTY COUNCIL

Amsterdam-West, Slotermeer. Low rent housing in a garden city development. Traditional motifs and materials used freshly with a contemporary feeling. Amsterdam-West, Watergraafsmeer. Housing for middle income families.



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Alton Estate East, London. An eleven-story "point block," a structure combined with other building types on a carefully planned site by London County Council.

drying than we customarily make. The Dutch, incidentally, from long exposure to visiting Americans, apologize in advance for the lines of drying clothes which festoon their balconies, although the clothes are very clean and the patterns charming.

What, then, are the aspects of current European housing design which, though existing in varying degree in different countries, seemed to me most significant in relation to our own work? I have assembled my observations into six main groups:

First, the planning function has greater status, and is more controlling. Housing is part of an overall planning concept and goal. Examples of this abound, and are almost too well known to require mention here. In Stockholm the planning of the subway and of residential communities, with their schools and corollary facilities, proceed in a logical sequence, with the requirements of community living establishing the planning modules. In connection with the last link of the subway system, through downtown Stockholm, enough land has been acquired to make possible a great commercial and business center, with articulation of pedestrian and vehicular traffic. Vällingby Centrum, the main center serving the communities to the northwest, with its related industrial area, has been conceived on a large enough scale and with enough diversity and interest to serve as a compelling alternative to downtown Stockholm, and in practice its "pull" is turning out to be greater than anticipated.

Thus housing is being provided, on open land long since acquired by the municipality, and phased in carefully studied relationship to transportation, shopping, schools, industry, and recreation areas and this entire undertaking is correlated with a program to increase commercial space in downtown Stockholm.

In Rotterdam the planned reconstruction of the destroyed center of the city is based on a decision to put back fewer residential accommodations than had existed there prior to the War. Out of this decision flowed naturally a decision to develop garden communities along the perimeter, and, most interestingly, a decision to include, within the core, a variety of housing types and building heights. In Rotterdam, which was for me the high point of my trip, I learned that one of the most acutely felt lacks, after the total destruction of the central city, was pavements: what the planners learned to call "Asphalt Recreation"areas for promenading, for window shopping, for congregating, and for that vital urban pastime of seeing and beeing seen by others. Perhaps we can learn from this a lesson well known to earlier planners-that verdure is fine, but that open spaces are for people in pursuit of urban pleasures.

Second, a greater understanding of and concern with density concepts as instruments of local and national policy. Perhaps the most interesting evening of my trip was one I spent in London in a discussion of densities with a group of people all of whom were interested in politics and social philosophy, but not one of whom was a planner. Several of them felt that densities had been set too low in the new towns to achieve a "town" quality. In the Netherlands, where land for building has to be made and jealously guarded, and where the population is increasing at the fastest rate in Europe, density of development is obviously a vital factor in national planning. In the face of this, how good of the Dutch to include in their designs the planting of a forest and the making of a hill. Everywhere I went in Europe I found a concern with the meaning and effect of density in the lives of people and the patterns of cities. To a New Yorker, who deals in astronomical densities as the inevitable end-product of administrative ceilings on costs or cost pressures, this experience was uniquely meaningful.

Third, a greater interest in and appreciation of the esthetics of structures and of neighborhoods. People care more about their cities and the architecture of their cities, and are willing to give architects and planners the freedom and the money to do things just because they are more beautiful. Certainly the longer historical tradition of most European cities is a factor in this, and where the city frequently is older than the nation its power is respected and its individuality cherished. All the more surprising, therefore, is the fact that almost everywhere one finds greater architectural freedom, variety of materials and forms, and more adventurous use of color. There are differences everywhere between planners and architects—good, healthy differences —but nowhere the attitude that they are people to be humored but watched, and not really as sound and practical as the engineer and the cost estimator.

Fourth, the concept of the total housing supply as a public utility and as a major tool in the planning and replanning of cities results in a greater articulation of housing programs-in types of housing for the aging, for single persons, for large families, for children without families, even for artists; and in greater variety of building types-gallery buildings, point blocks, maisonettes, flats, and row houses, used in more varied combinations (sometimes with beautifully studied and sensitive site-planning) both in inlying and outlying sites. Of notable interest, but perhaps selected at random, I found the "Willem Dreeshuis" in Amsterdam, which offers an institutional or communal type of living for older people with both dignity and charm; the group of row houses in Harlow New Town by Powell and Moya which capture, in contemporary terms, the scale and color and quality of an older London street; and the magnificent Torre Velasca in Milan which expresses a multi-purpose structure in terms which are strong and fresh and uniquely Italian. This last, which combines in one building both commercial and residential uses, lesser examples of which can be found throughout Europe, might have useful application in our downtown areas because of its value in diluting high land costs, spreading investment risk, diffusing commercial traffic, and minimizing dead spots in the City pattern.

Fifth, the essential living quality offered by tall buildings, which are now used widely in combination with other types, generally is higher than we offer in ours. I am not referring to color-codedkitchen-cabinets or to a common standard of central heating, because allowances must be made for differences in values, habits and standards. But in basic amenity, in intensity of occupancy within the structure, in quality of ventilation, in daylighting in public halls, in the universal provision of the balcony, the European buildings are superior to ours. I do not know how this difference is justified cost-wise, and I do know that recent British students of American housing design have concluded that our buildings are more "efficient." But the effect is to make life in a European tall building very different, and very much sweeter, than life in one of ours.

And sixth, because housing design generally is better intgrated, through planning control, with other types of building and city development, because most European programs are less unilateral than ours, and because in most of the countries many more instrumentalities for initiating, building, owning and operating housing have been developed, new neighborhoods are more diversified, more interesting, more complete and more normal a part of the city pattern than in much of our work. One simple administrative ruling which says that no public housing funds may be used to build retail shopping facilities and that no land "in excess of project needs" may knowingly be acquired in advance not only results in the total dislocation of the local small merchant but robs our developments of the charm, the texture, and the value of the local neighborhood shopping center and makes more difficult the provision, or planning for the provision, of all the other facilities and structures which make a neighborhood rather than a project.

To sum up, the European cities, most of which are feeling acutely the impact of the enormous increase in incidence of car ownership since the end of World War II, and which have had to deal with even more acute housing shortages than ours, have, in my opinion, developed broader and more effective planning and housing programs, and designs which are at once more sophisticated, more appropriate, more various and more exploratory.

If these observations, made over ten hurried and reaction-packed weeks, appear too generalized, or too categorical, may I lean on the words of Hippocrates who, after saying that "Life is short, and Art is long," added, "the occasion fleeting, experience deceitful and judgment difficult."



Amsterdam-West. Middle income housing, with access galleries on one side and private balconies on the other.

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Physical planning in the broad, accepted dictionary sense is simply anticipating future needs, desires and growths, in a changing world. It has existed since there has been animal life. It is influenced by the Biblical Four Horsemen, Malthus, Gibbon with his decline and fall of civilizations, the hydrogen missile and threats of atomic destruction, the conquering worm, birth control, smog, the economical extraction of salt from sea water, the addition of plankton to sawdust breakfast foods and the clash of freedom with communism

Defense made city planning what it was for many centuries and the motor car largely makes it what it is today. We are not wholly free agents in any case.

If some of my observations appear contradictory or inconsistent, reflect that every wise saw, proverb, precept and motto has an antonym, or whatever you call it, which apparently says just the opposite, yet they are not irreconcilable and both may be true.

We say *festina lente*, make haste slowly, and the Supreme Court uses the curious phrase, "with all deliberate speed." Obviously you can't be deliberate and speedy at the same time, but it's an admirable objective. Phi Beta Kappa means that philosophy is the guide of life, but Huxley says the great end of life is not knowledge but action. The trouble is that those who are busy have no time to be profound and those who are profound are too thoughtful to act.

Why go on? Truth has many facets and must be viewed from many angles. Knowledge comes and wisdom lingers. The trick is to find wise men of mature judgment. In this so-called planning profession the people have too often been at the mercy of miserable little squirts trying to play God. A while ago there was a song popular with disk jockeys and jukebox aficionados soulfully entitled "Be Careful, It's My Heart." Cities, too, have a heart, and it is well to be careful about it. A lot of irreparable damage can be done by ambitious amateurs. There is a certain natural logic in uncontrolled growth; it is hard to imagine an educated Topsy.

There was no word in the Greek language for "art." Art was an accepted and unaccented incident in functional representation and build-

Mr. Moses Discusses Planning, Et Cetera

New York City's ebullient Construction Coordinator, etc., discourses on the myths and meaning of urban development and redevelopment and ticks off sundry other matters along the way.

ing. It had no isolated existence.

Similarly, nobody among the ancients talked about planning as a separate subject or profession. When the mists of antiquity were lifting, Odysseus or Ulysses saw the cities and learned the minds of many men, ran afoul of an extraordinary series of monsters and sirens, and following this survey founded Rome. On finally reaching Ithaca in the rosyfingered dawn the hero discovered the Sweetheart of Sigma Chi and promptly set forth on another trip.

Others say it was the legendary Romulus who, drawing more than condensed milk from a she-wolf, scorned amber goblets, downy couches, Arabian hair oil and Tyrian purple to lay out the Seven Hills before the American Academy enrolled its first fellow. Incidentally, Romulus slew his twin brother over the original plans for Rome, thus setting a fine precedent for all the ideological family bloodshed which followed.

Ancient planning was beset with tragedies. Look at the Tower of Babel, a multifamily, multilingual, perhaps middle - income dwelling which never functioned properly, no doubt due to poor design, bad management and human cussedness. In any event, the noblest civic and religious centers of antiquity, buried under tons of dust, rubble, ashes, lava and jungle and only recently excavated by archaeologists, builders and ghouls, give mute testimony to th. fact there were great planners under other names long before Burnham, Niemeyer, Gropius, the Saarinens, Corbusier, Markelius and Frank Lloyd Wright.

o tell the truth, I lack the assurance, or shall I say effrontery, of our more prominent planners. If, in the words of the Halls of Montezuma, I ever gaze upon Heaven's scenes, I do not expect to find that the mansions there were designed by Frank Lloyd Wright any more than I anticipate that the celestial streets will be patrolled by the United States Marines. Cousin Frank is going to kill me for this, if he sees it, in spite of my repeated tributes to his constructive iconoclasm, native originality, courage and admirable refusal to accept meekly the role of a senior citizen.



Drawing by Carl Rose

Cousin Frank is strong for decentralization. He asserts that New York and other great cities are just overgrown, crazed villages, inhabited by cockroaches who will soon be squashed in their own filthy juices. The growth of the city, he fulminates, is really the death of the city. The decentralized town will be a native and natural performance, planned from within on organic principles.

Having got this off his chest, Frank goes on his merry way to Taliesin East or Taliesin West where worshipful apprentices rapturously echo his strictures. He can't add anything to what he has said because it's the ultimate in contempt, and the funny part of it is that thousands will turn out to greet this Jeremiah of 90 when he comes East this spring to open the Guggenheim Museum.

I am no foe of romanticism, and in fact am an incurable romantic in my spare time, which is almost nonexistent. But I like my romanticism to be adult and discriminating and not childish and silly. As yet no Agamemnons, no major prophets, no Gamaliels, no really great men have appeared in this field.

No doubt in time-whether it be a science or an art or a mixture of them-someone of great stature will turn up, someone with the approach of Malraux in "The Voices of Silence," someone with the vast, purposeful, peopled canvas of Michelangelo, with the all-round genius of da Vinci, the vision of the unknown builders of the Hanging Gardens of Babylon, Mont St. Michel, Carcassonne; a Christopher Wren with a warrant to rebuild London, a Baron Haussmann with orthodox financial principles, a Titus not addicted to monument and megalomania, someone with the humility of the potter with his clay. When that giant appears we shall be ready to listen and perhaps follow. Meanwhile the watchword is caution.

Some will say that I am a stickin-the-mud, mired in the past; the kind of reactionary who would deny the possibility of any new science psychiatry, for instance. The study of the mind and its aberrations is not new, by no means yet a science and still too much in the hands of medicine men, couch sitters, head shrinkers, and quacks. There is little or nothing new under the sun. Catharsis and the confessional contributed to sanity long before Jung and Freud. I will admit that when I look at Cousin Frank's Guggenheim Museum I know somebody has been afflicted with a complex, Oedipus or otherwise, and has been chasing the Id down the spiral ramps in a facile descent to Avernus.

A nother spiritual cousin of mine, the late humorous Senator George Higgins Moses of New Hampshire, referred to Robert La Follette and his assorted crew of insurgents as the Sons of the Wild Jackass, taking his text from Jeremiah. In the wilderness of municipal planning, too, the wild asses are standing today in the high places snuffing up the wind like dragons.

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Having offered these general observations, I propose now to discuss, with necessarily peremptory characterization, several planning clichés, indicating as I go along, in a more or less categorical fashion, the myth or fable cultivated by the ambitious planning profession, and what I conceive to be the real problem and the long, thorny way to its solution. If this treatment appears at first blush to be arbitrary and dogmatic, remember that I am not a spokesman for planners—merely a practitioner in a broken field.

Here is my first point: dispersion and decentralization do not spell the death of cities and civilizations, nor is there any immediate prospect of Megalopolis and regional government.

Purveyors of pseudoscience and Madison Avenue ballyhoo, editorial pundits, footloose columnists, assorted map makers, market analysts, statisticians gone loco, architects graduated by their own letterheads into planners and poll-parrot imitators have been handing the public manifestly conflicting stories through every medium of publicity.

F or example, Dr. Philip Hauser of Chicago cheerfully predicted that there would be a billion people in this country before long and added: "You can look forward for New York and Philadelphia to fuse and then grow north to Boston, and south to Baltimore and Washington. This might be called Atlanticopolis."

Not to be outdone, Southern experts recently predicted that Florida will soon be one gargantuan city stretching from Miami to Jacksonville, to be known as "Mi-Jax," the longest city in the world.

Hauser's billion population theory will no doubt become known as Hauser's Law, will add many cubits to the professor's academic stature, and will open up new vistas to the manufacturers of baby carriages, hearing aids, frankfurters, lots in the Bahamas and standard works on the fear of crowds. According to the learned Doctor, man is thumbing his nose at the rabbit, the hamster and the guppie. Cheer up, chums. Lift up your hearts. If we don't die of fright we shall surely perish of boredom. In Dr. Hauser's statistical feast of reason we are reaching the ennui.

Did this learned statistician ever look out of a plane flying over largely unsettled exurbia? If so, did he note the absence of lights at night? Does he really know anything about rough topography, absence of utilities and poor transportation, the three devils which confound the realtors, or about human loneliness in out-ofthe-way places inhabited by gnarled Yankees, Jackson-Whites and clam diggers who haven't been to the nearby big city in years and have no desire to go?

I wouldn't give you a nickel for such confident, smarty-pants conclusions. You can speed up a reel of film to the point where a tortoise looks as if he were outrunning Dr. Bannister. Population will grow, but not that fast.

"Leave us not be too highbrow," as Archie would say in Duffy's Tavern. When it comes to explaining the population trend toward the cities, a Tin Pan Alley songwriter can say more in his chorus than the egghead statisticians in all their labored interpretations of the census, to wit: "How'ya gonna keep 'em down on the farm, after they've seen Paree?"*

Now let us go on to other pundits. We are told that decentralization and dispersion of population alone can reduce the big cities to workable and what is called "viable" size; that suburban sprawl and rot will make the suburbs worse than the cities; that exurbia will soon be suburbia and just as bad or worse, because split-level boredom is harder to bear than ulcers and St. Vitus' dance: that traffic will strangle the big town and commuter congestion kill the suburb; that out-of-town real estate is selling like hot cakes; that people are steadily gravitating from the farm to the city; that the farm is reviving; that, as the population ages, most everybody above 55 will be in Florida, the Southwest desert or Southern California, and that older people are moving in hordes back to town.

We are also told that there is too much uncontrolled public housing, too little middle-income housing; intolerable high-rental housing; that only shops and millionaires, banks and Bourbons, will be left in Manhattan; that integration will kill Harlem; that folks are returning to Harlem; that Macy's and Gimbels are going, basements and all, to the suburbs; that the customers are mobbing the old stores; that nobody wants to go to New York any more; that it's impossible in New York to get hotel accommodations, theater tickets, food and the time of day; that industry is hotfooting it south; that the New York State Power Authority is fresh out of kilowatts to meet insistent industrial demands. How can you reconcile such dogmatic, clashing assertions?

Where there is so much yelling, ink spattering and desk thumping, no wonder that the Common Man (not to speak of superior minds in the halls of ivy) who has only just got the geography of the Middle and Far East, and the pronunciation of strange, foreign names and places, is bemused, bewitched and bewildered. In the ceaseless din of many voices to whom we listen with respect and confiidence? I can only urge that we sharpen our wits with tolerant skepticism, keep our shirts and foundation garments on and have an occasional belly laugh at our gargantuan democracy.

At this point I am reminded of the fellow who said he was free from all the entanglements and puzzles of the world and no longer had opinions on anything. "How come?" he was asked. "Well," he replied, "I don't ride in taxis any more and I shave myself."

The road to salvation from urban growth and blight is not by superduper charters, regional governments and larger taxing areas, requiring very superior administrators. There is something very wrong with the bland assumption that if you can't find enough promotable sergeants and warrant officers there will be plenty of material for commissioned personnel. Any commissioner can testify how hard it is to fill vacancies near the top in the public service from among eligibles obsessed with security, short hours, early retirement and a determination not to stick their necks out and look for responsibility and trouble.

My second point is that the civic millennium is not to be achieved overnight. The time required to carry through any large program of reconstruction is appalling. Why? Simply because the indifference, mistakes and outrages of generations of go-getters and their victims, largely foreign, penniless and ambitious folk superimposed on complacent natives,

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cannot be repaired on new principles in a few years.

It would cost some \$750,000,000, necessitate rehousing about 250,000 people and require at least twentyfive years to clear all the existing bad slums in New York City, and even this would be futile without an unremitting drive to prevent further deterioration of buildings which still have the possibility of life and usefulness, and without a drastic curtailment of immigrants from Puerto Rico and the South. The truth is that complete urban renewal is not in the cards. Similarly, what the planning pundits call "suburban sprawl" is just an epithet. There is a great difference between cure and semantics.

The solemn truth is that as long as the planners stick to pretty pictures, it's easy going, but when it comes to action, reaching even limited objectives in the rough and tumble of American politics calls for more fighting equipment, nerve, guts and endurance than the average bureaucrat, persuaded or precipitated into Government service, can mus-The line between a believable ter. program and one which is too comprehensive and imaginative to survive the initial press announcement is a very thin one.

Similarly, standards must not be pitched too high at the start, for if you develop early the reputation of being a fanatic, you are lost. It is, for example, hard for the average citizen, bedeviled by condicting advice, to realize that, in the case of parks, today's bosky dell is tomorrow's hemmed-in Japanese garden.

These things are relative. One man's vision is another's mirage. A blind man hired guides to carry him up the Matterhorn for the sensation of sight, and a great Biblical leader, worn out with keeping complaining exiles together, toiled up a mountain to look toward the Promised Land, died there, and nobody knows where he is buried.

It took almost thirty-five years of unremitting toil to build Jones Beach and it isn't finished yet. Those of us who have nursed it along through hell and high water can hardly be charged with astigmatism. Our land reclamation program in New York City is on a twenty-five-year basis, of which about fifteen years have elapsed. This is hardly shortrange stuff.

Why do so many well-laid plans go agley? A midtown Baltimore expressway, properly planned, has been held up for years because it involved clearing a slum which local political leaders liked the way it was. A civic center in Portland, Ore., and other improvements were caught in a hassle between the old and new towns divided by a river. A dramatic plan for controlled use and building along the entire Pinheiros Canal in Sao Paulo ran afoul of local opposition and most of the land reverted to countless original owners.

Part of a New Orleans program was delayed because it included doing something for Negroes on the wrong side of the tracks. Suggestions for the development of the island of St. Croix never even stimulated debate because the then-Governor had no real power and the local Virgin Islands Planning Board had all the jargon and lingo and little else. And so it goes. It's easy to be the monarch of all you survey if you are on a remote, uninhabited island.

In all the denunciation of us middle-roaders who try to progress with the means at hand and the support we can muster, you find little disposition to figure costs and availability. The public builder is classified by the Chamber of Commerce as a spender where retrenchment is in order. Borrowing to expand a private corporation is progress, by a public one, waste, and I am not even stopping to characterize adequately the stuffed shirts floating on foam rubber who are for good causes every other day.

Governor Smith in such context had a couple of characteristic Bowery sailor stories for the critics.

One was about the tar who had picked up a girl at the docks and invited her to Dorlan's hash house. She reflected and then ordered vichyssoise, Chateaubriand steak smothered in onions, asparagus vinaigrette, baked Alaska and a demitasse. The sailor said, "Make it two." The waitress regarded the couple with distaste and said, "If there was anything like that around here, Dorlan would be eatin' it himself."

The other tale was of the sailor, maybe the same one the next morning, who ordered up a 5-cent beer at Tom Foley's saloon and tore into the free lunch. Mr. Foley remarked, "You want too much corned beef

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and cabbage for a nickel." That's the trouble with most of our citizens —they want too much for a nickel.

My third point is that completely integrated metropolitan transportation is a dream. I do not assert for a moment that all forms of metropolitan transportation should not be *considered* together. I do say that any attempt to merge and consolidate them under one management and one financial plan is, in areas like New York, quite impractical.

The reputation, solvency and credit of highway, bridge and tunnel authorities and other limited, *ad hoc* agencies which depend on prudent private investment and do not have public credit to support them—that is, business agencies under public auspices created for a specific purpose not otherwise attainable—can be ruined by a political drive to force upon them politically motivated enterprises, which cannot possibly be self-supporting.

I know that public authorities are unpopular in some quarters, and particularly with those who think they are too independent of elected officials. It may well be that elective officials have a tougher life, and are more deserving of sympathy, than those appointed by them. But it may nevertheless be a good thing that there are some comparatively obscure second-string administrators who are indifferent to the fickleness of voters, and perhaps a little more concerned with the next generation than with the next election. To stav long in any public work you have to be indefatigable and just a little crazy. It is significant that Senator Taft in a talk at Ohio State University told the students to avoid government as a career.

The manufacture of automobiles is pretty nearly our biggest industry. Its ramifications are endless. Cars are no good without roads, and roads are largely paid for and maintained out of charges and tolls paid by the users. What has brought about car pools, express bus service and longhaul trucking is door-to-door, uninterrupted, comfortable travel at reasonable cost, and no one will charm this type of commuter, rider and purveyor of goods back to the railroads. You can argue until you are black in the face that a railroad coach can carry twenty times as many passengers as an automobile, and talk about gliders, monorails and

Talgo trains, but the car and road will still have the edge.

C ar owners and riders are not going to be soaked to revive moribund commuter railroads. Rails cannot be rescued by rubber. Moreover, in the New York metropolitan area each commuter railroad is a separate entity, usually owned by an absentee landlord, and each is a separate financial entity. There is no relation except in theory between the Long Island Rail Road, owned by the Pennsylvania, or the Staten Island Railroad, owned by the Baltimore and Ohio, and any other line. Other ways must be found to restore adequate local rail service-the application of brains, liberal corporate and real-estate tax exemption, merger of spurs with rapid transit, etc.

The first thing for the railroads to do is stop whining, junk their organs, monkeys, tin cups and "I Am Blind" signs and rescue what they used to call free enterprise. For example, we have a Hell Gate railroad bridge over the East River in New York from the Bronx to Long Island, with miles of elaborate approaches. It belongs to two big railroads and only a fraction of its capacity is used. Why don't the rail experts who built it figure out some commuter usage?

Here is an industry whose cardinal principle has been never to retire a debt, whose slogan is the barber shop quartet chorus of "Casey Jones"—"We're going to Frisco but we'll all be dead"*—whose coat of arms boasts a grasshopper couchant on a railroad track gules singing, "Polly Wolly Doodle all the day."

My fourth point is that the drive to make government the sole employer is neither inevitable nor desirable. Its success would spell bureaucracy triumphant and the beginning of the end of private initiative.

There is much propaganda to compel government agencies at all levels to use only permanent civilservice technicians in the preparation of engineering and architectural specifications for public works and for supervision of construction. It would be a costly victory of bureaucracy to rely on the rank and file of public employes to furnish all professional advice.

The vast new Federal Aid Highway Program involves some fifty billion dollars, and includes some 41,000 miles of interstate network. There has been serious discussion of eliminating private engineering firms from this expressway work. Adoption of such a policy would, in my opinion, ruin the program, and inevitably spread into the design and inspection of other public works, including slum clearance, housing, power, bridges, parks and every other kind of public building.

My fifth point is that government as the forerunner in art spells mortmain. It is a tragic thing that in modern building and planning the artist is more and more neglected. Avant-garde indeed! The artists are no longer an inspired advance guard carrying proud banners. They are reduced to a Falstaffian rabble running along beside the goosesteppers and the crushing apparatus of conformity.

Engineering triumphs over sculpture and painting. Soon, architects will be known as structural engineers. Twisted stabiles and trembling mobiles take the place of classical ornament. It is not merely a matter of new materials, mass effects and so-called clean lines as against beauty of detail. It is not due solely to the arrogance of a new generation of technicians without liberal education. The failure here is that of the artist himself to assert not only his credo but his ability to meet the challenges and opportunities of a new age.

Why, indeed, should a park commissioner, not particularly gifted by nature and clothed in a little brief authority, flout tradition and help to retire the fine arts? There is a common assumption that if you have an official art commission with teeth you have art. I do not believe in the infallibility of municipal art commissions. They reflect the culture of their time. They play a negative, not an affirmative, role, for at best they only keep bad stuff out-which is not a small virtue. A look around the statuary of any big city will show that even this has not always been SO.

I suppose, more and more, in this way or that, the performing and other arts will receive support from the public treasury, and that the price will be relatively harmless, minority, ex-officio membership. That's as far as we should go with European analogies. Beyond that is xenomania—a word I am very proud of at the moment, having just learned it from the crossword puzzles.

As for schools of architecture, I believe that public officials charged with buliding should be conservative, that their oaths of office do not pledge bold experimentation, that they should respect but not be slaves to tradition and that they should keep in mind that the extreme stlyes, modes and fashions of today may be the bywords of tomorrow.

I have been in charge of Central Park in New York for almost twentyfive years. It is a century old, with structures in the colonial, Georgian or, if you please, classical tradition established by Olmsted and Vaux. It is a tradition which, considering fantastic surrounding changes, has worn well. I have felt it to be my duty to maintain that spirit, adapting it to present-day materials, demands and conditions. Of course, the avant-garde regards such reasoning as absurd.

Does the thinking citizen really want the municipal arbiter elegantiarum to imitate the global planners who decorated the walls of the Assembly Chamber of the United Nations with meaningless paintings resembling scrambled eggs, country style, abstract chicken guts and stylized floating kidneys? Are Michelangelo's inspired frescoes in the Sistine Chapel too explicit for a sophisticated age? Or was there just no one around the United Nations capable of grasping this opportunity to portray the long, weary march of humanity toward the brotherhood of man?

Finally, let us consider briefly the cliché that by establishing a planning commission, a board of standards and appeals, or other variation or escape valve gadget to make it Constitutional, by hiring experts and adopting their terminology, holding hearings, keeping the official city map up-to-date and issuing reports, the Mayor and elected officials will be educated and the future of the city made secure.

Most vaunted artificial barriers in the way of excessive suburban population are ineffective. Numbers up to a point can be kept down by highly restrictive zoning, but I doubt whether the Supreme Court will uphold four-acre zoning in subdivisions unless there develops an entirely

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new and revolutionary concept of the police power.

Planning machinery is surely indispensable in any progressive community, but we mustn't delude ourselves! Planning is no fourth power in American politics, standing beside and even overshadowing the Executive, Legislative and Judicial branches. It is a subordinate agency of the Executive, effective only as long as elected officials will let it function freely.

To make it work you must have salient, honest, realistic, courageous and highly respected personalities. Otherwise, your shiny, expensive equipment is about as useful as a dirt mover, concrete mixer or reaper in a primative Asiatic village.

What, then, is my conclusion about planning? Perhaps I can state it best in the words of Sisley Huddleston in his "Normandy Pastoral": "And, for my part, in this practical business of living from which I would not voluntarily drop out, I am assisted enormously by the thought that the community to which I belong existed long before me and will exist long after. It is hard for me to imagine a rational man pursuing his selfish interests, which are in themselves so paltry, without some regard to what has gone before and what will come after."

Is This Death?

For Frank Lloyd Wright

If death were just the stopping of the breath Death would not matter; Man through God's design

Breathes in and out substance that is divine. Live beings breathe surrounding atmosphere, Drinking of day; or it be dark or clear.

Those who greatly live Absorb from fellow beings A sense of understanding And, by outbreathing, give Vitality to love; Then self turns love received Into eternal life, And so is death deceived.

As inbreathed love will shape a radiant face, Do architect's awareness and out-giving

Shapes form to be the frame of vital space, And thus, through art, gives meaning to man's living.

When genius shapes surrounding atmosphere, Beauty bestows new harmony on men;

Then artifice and sham both disappear, Substance unites with spirit once again.

Genius creates; and his exhaling breath Immortalizes mortals. Is this death?

ARTHUR C. HOLDEN, FAIA

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A. Sessor had newly qualified as an architect,

a lot of

old hat .



and he and his friends got

criticising

One day he said if you want to get ahead get a hat . . .



which he thought was original

But he still didn't

get any jobs, so

he got another hat, and got

plenty of jobs

But it

and started to give destructive criticism. Everyone thought his judgement



had matured, and he got



even bigger jobs

which he handed over to his staff because he hadn't time to do



them himself because

but he did not know this and gave it his most



devastating criticism





applause-which didn't come.

And people said

The young

old hat ...

· is he really so good



and were very worried
pleasure somehow he of the profession and shouting . fusspot gimmicky if you want to get a hat never got any jobs the senior members get a head . . . haven't you got any And people thought he had He went away and thought One day ideas of your ouns judgement and made him a professor. judgement, only diplomacy. about it, and came back said a student wasn't One day at an important exhibition he saw a design that his and flew around the world he had become assessing things. own office had produced a professional assessor But they had a picture of people called him him hung in the and as for being a professor He stopped getting Tutors Common Room, fusspot ... beaver ... so it was jobs he was due to retire anyway all right really . . .

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A Lay Report on Harrison's Stamford Church

The Final Question

WOLF VON ECKARDT



There was a brief flurry of publicity when Harrison and Abramovitz's daring, fished-shaped First Presbyterian Church at Stamford, Connecticut, was dedicated just about a year ago. "A whale of a church!" exclaimed *Time*. A "holy mackerel," said *Life*. The architectural magazines ran brief, non-committal accounts.

The rest was silence.

Yet, this provocative monument waits, in Bruno Zevi's words, "like characters in search of an author, for a modern criticism that will release and reveal" it. Here a new structural approach has created new shapes and a wholly novel architectural experience every bit as exciting as the peekaboo architecture everybody is writing about. But, unfortunately, this country lacks the lively and alert criticism which is as vital to architecture as to any other art and which can do much to arouse public interest in architecture. Lewis Mumford, obviously, hasn't got around to Stamford yet. And it seems that this illustrious name just about exhausts our national roster of qualified architectural critics.

Driving into Stamford from the Westchester Parkway, you can't possibly miss this architectural sensation, as a gas station attendant quite correctly pointed out to us when my wife and I made the trip last spring, shortly after the church was completed. We found ourselves among hundreds of sightseers, who, much to the pride-tempered annoyance of the parishioners, still keep coming.

Harrison told me later how hard he tried to avoid having his first church look like a bank or just another auditorium. He certainly succeeded.



But neither does one immediately associate it with a church. The lengthy grey, slate-covered structure rises like an angular mound atop a soft, green slope. It startles, with its faceted, diamond-shaped shields thrusting out from its middle. From them fllashes a pattern of glass which appears dark in its light cement criss-cross. Toward one end, the odd shape dips down, rises up again, and then slopes sharply to the ground. There is no perpendicular in any direction.

The magazine pictures had prepared us for the strange exterior, but we were utterly unprepared for the effect of the nave. We entered through a small, somewhat incongruously framed door into a low, dark narthex. From there we were drawn into an immense Gothic-like vault of multicolored glass, set into a web of gray concrete ribs which carry the sparkling chipped glass chunks six stories high, right up to the ridge of the pointed roof. This tent of flashing ruby, amber, emerald, and sapphire-arranged in Harrison's abstract design of the Crucifixion on the north side and the Resurrection on the south-encloses the entire nave and its plain, unfinished mahogany pews. We were immersed in soaring space and jeweled light. In the rear, in the chancel, which is mysteriously dark again, rises a thin, stark cross of wood. The only other focal point is the high marble pulpit to the left with its angled marble sounding board tilting above it.

We were so impressed that, much against our habit, we decided to take the trip again the next day to attend service in this inspiring edifice. And I could well understand the emotions of the worker, who, when the scaffolding was first removed from the complex interior construction, was heard to cry out: "Magnifico!"

Only much later, after the impact of this highly dramatic architecture had somewhat faded, did some second thoughts occur. Why, for instance, did the cross in the chancel have to be artificially spotlighted? It spoils the wonderful honesty of the structure and, once you've caught on to this trick, seems to border on "Kitsch" (which, in the event you are not acquainted with this eminently useful but untranslatable German word, means something like sentimental tawdriness, such as rainbow-colored whipped cream served to the strains of a Wurlitzer organ or most objects in curio shops). The cross should stand out against the dark chancel, of course. But daylight, I feel, would make it stand out far more convincingly.

Another complaint I have is the odd, "modernistic" shape of the pulpit—with its tilted sounding board which the church's publicity release rationalized as symbolizing an "open Bible." It makes the minister look like a jack-in-the-pulpit and, like the rather small entrance to the church, is somehow irritatingly reminiscent of Detroit-type "styling" rather than design.

I wondered, too, about the glass corridor which runs parallel along the back of the church. Its purpose is, of course, to keep the minister and choir both dry and out of the sanctuary as they walk from the parish house to the choir room which adjoins the chancel. The walk is much like the "follow-thegreen-lights" one to the Grand Central shuttle train in the Times Square subway. But worse, hidden away behind the building this surface tunnel is and looks swept under the rug.

But none of these things can even remotely detract from this marvelous achievement which is the result of years of groping and searching on the part of its architect and—perhaps even more importantly —his amazing ability to carry the congregation along in this creative process. For what astounded me more than the structure is the fact that it stands in all its heretic originality and brazen stylelessness (it's certainly not "modern" in the S.O. & M. sense) in the midst of an essentially conservative medley of exurbanites and old New England families. It seems to prove that public taste need not be an obstacle to architectural genius if the architect is as sincere and persuasive as Harrison.

K ussell E. Davis, one of the trustees of the church, whom I asked about this, smiled: "We certainly never dreamed of anything like this. When our congregation first started talking about a new church back in 1952, most of us had visions of English Gothic. That, we found, would have cost us at least three or four million dollars. So our thoughts shifted to the traditional church architecture you find around here. You know, Colonial. We talked to about fifteen architects, but we weren't satisfied.

"Then someone suggested we try a modern architect and we decided to approach a really good one. Someone else knew Mr. Harrison, so we asked him. We had no idea what would come of it."

In most cases, unfortunately, the result of cooperation between a vaguely conservative congregation and a modern architect is vagueness. What emerges is a "contemporary" church designed to "integrate" with a suburban environment for which some builder's modification of modified Colonial, on the order of Stouffer's or Howard Johnson's restaurants, has set the architectural style. The architect's ingenuity expresses itself mainly in such things as the loudspeaker system (which permits the ladies in the parish kitchen to follow the service while preparing refreshments) or the theatrical lighting effect in the sanctuary (which may or may not be push-button controlled to fit the desired mood in the order of service). To this Stamford offers a refreshing contrast.

"Harrison is an Episcopalian, you know," Davis told me. "But he studied all about our Presbyterian history and tradition. He asked many questions about our service and what was essential to us and what was mere convention. He worked intensively with our senior minister, Donald F. Campbell, who had often preached 'of a time to let go of old ideas while holding on to eternal truth'."

I mentioned this to Harrison when I talked to him later in his office, saying that he had certainly succeeded in letting go of the forms of the past while recapturing some of the spirit. "What's wrong with past forms?" he countered a bit belligerently. "What's modern, anyway?" He wasn't consciously trying to do anything but build a church for the people of Stamford.

"Your starting point is always the human being." He said, doodling a figure on a sketch pad. "The amount of space his rear end requires when he sits, the things he intends to do in the building, his relation to others, his *mores et lares*, his customs.

"First we worked for months on the floor plan. The chancel, the choir stalls, the organ, space for 800 seats, the balcony for an antiphonal choir and overflow crowds—the arrangement for all the things Don Campbell and the congregation wanted. I groped for a religious atmosphere. I considered stone columns and beams and even flying buttresses, but soon threw them out. Too expensive. Also we wanted the acoustics as near perfect as possible. The acoustical people I brought in, Bolt, Beranek and Newman of M.I.T., didn't want any obstructions to the smooth flow of sound. A square arrangement wouldn't do. We had to modify and remodify.

"Finally we arrived at the shape of an elongated megaphone to spread the sound toward the rear. That determined the shape. The fish symbolism was discovered much later. When you are finally done, people will always rationalize."

But the result is phenomenal. There is no loudspeaker system and the minister, speaking in a normal voice, can be heard clearly anywhere in the church. Musical director W. Raymond Randall, who plays the giant 100-stop electronic organ, is delighted. "Best accoustics I've ever heard in thirtyseven years of church music," he said. I found his fortissimo almost overwhelming.

"When we finally had the floor plan, came the question: what cover?" Harrison continued.

"I wanted to follow Fernand Léger's concept

of contrast: round against flats, contrast in colors. I wanted the narthex dark, the nave light, and the chancel dim again because I wanted to make light and color an integral part of the structure. We have lost the fundamental effect of architecture on the pupil of the eye which the Egyptians mastered. And I wanted a structure as clear and honest as Gothic. I groped and fussed a year or two. But I don't think, right off, you should ever know too clearly where you are going.

"Finally I went to Europe to get away from this thing and perhaps find an inspiration. In Paris I saw two things: Léger's stained glass windows and the Sainte Chapelle."

Léger had told Harrison about Gabriel Loire, who, as a result, got the job of producing the 20,-000 glass chunks for Stamford from forms or templates of Harrison's design.

"In the Sainte Chapelle I thought: We could carry the stained glass even higher," Harrison went on. "I was intrigued with folded concrete. It would span the space without supports. At that time nothing of the kind had been done in this country. We didn't have the engineers and I had to get Felix Samuely, a British engineer, who had done two or three of these things in England. He took two trips here and I went over twice on this job."

Samuely and Harrison evolved a structure of folded planes, tilted to meet at the top and consisting of 152 panels of concrete, some of them weighing eleven tons, which were precast in a Long Island plant and swung into place like a giant threedimensional puzzle.

To demonstrate the strength of the crimped concrete shell construction, Harrison once brought a sort of model he had made of pleated wrapping paper to Stamford. He asked each member of the building committee to press down on it with his hands to see for himself that it wouldn't budge. To test the construction method, Harrison himself built a fair-sized cement mock-up in the back yard of his home at Huntington, Long Island.

"We had to solve the problem in the cheapest way," Harrison explained. "There's no sense kidding yourself. No one in recent times has ever said: 'Let's build a monument to God, we don't care what it costs'."

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Together with the parish unit, which was designed in cooperation with Harrison by Willis Mills of the Stamford firm Sherwood, Mills and Smith, the church came to \$1,500,000. The rest of what has become known as the "church plant" is a long, low fieldstone and glass building which frames the sanctuary to the east and looks as different from it as a gold frame from a modern painting. With fifteen Sunday School rooms, babyfold, nursery, offices for the two ministers, a library-lounge, a hall with a stage, a large kitchen, and an exceptionally beautiful chapel, it serves about 2,000 members and their 1,000 children.

And most of them like their new church. Only a very few members have left since the Harrison-Mills building was completed, presumably in silent protest of the daring sanctuary, though "without bitterness," as Davis put it. The vast majority reacted as all congregations seem to have reacted to the all too few original churches that have gone up in the past few years: They are enthusiastic.

"When Mr. Harrison first presented his ideas to the congregation," Davis said, "only one person spoke against them. We voted unanimously to go ahead. Yet I suppose many felt as I did. I thought it was right that our church should be expressive of modern times and all through the discussion and planning sessions I was careful not to carry any prejudices, to keep an open mind. When the building was completed I was surprised and delighted."

"Like Harrison and Don Campbell we all groped and searched," Mrs. Kind Hoyt, who with her husband helped raise the funds for the church, added. "And He answered. God had a hand in this building."

The most significant architectural aspect of his church, Harrison believes, is not just the new construction method. "The structure is wonderful," he said. "We are only beginning to open up an exciting new world of space construction . . . of domes and rounded, hyperparaboloid frames to span space.

"But when you've plodded through it all methodically from the beginning—the human needs, the floor plan, the economics, the structure—you still must get an emotional reaction. The answer is to merge art and architecture. At Stamford we did it by bringing in color and the stained glass design. I would have liked to get sculpture, too. I don't mean going out to buy it, but sculpture which grows out of the architecture. The future belongs to the integration of architecture, painting, sculpture and landscaping—to what has been called 'total architecture'."

By the time our interview ended, Harrison had waxed quite animated talking about his first church.

"Oh, there are many mistakes at Stamford," he said as I left. "But the final question always is: Is the thing beautiful?"

I think it is, Mr. Harrison. And I wish people would start arguing about it.

Admonitions to a Young Architect

An Architect should always be A model of sobriety; Yes, you should never, never sink To sottishness brought on by drink. That is, unless a client should Break out some scotch aged in wood, And while you both get tight as swine, He signs upon the dotted line.

An Architect should ever be wary Of any slick contemporary, Who with a glib and oily tongue, Takes foul advantage of the young And offers you a partnership. Be careful, it may be a gyp; His charming ways may be a cloak To swipe the cash and leave you broke. An Architect should so resolve That he will never once involve That he will never once involve Himself with any female who, Though she may be très bon to woo. Will lead him into actions rash, Costing a lot of hard-earned cash, And when too long with her he's tarried, Disclose that she's already married.

So take your alcohol with care; Of potulence you must beware. Think twice about association If you'd avoid extermination. Whenever you should crave affection, Indulge with only circumspection. These admonitions don't neglect If you would be an Architect.

RALPH MITCHELL CROSBY, AIA

The ever vivacious French Quarter, a supreme cuisine, authentic jazz and "99% air-conditioning" await architects and their wives at

The 1959 Convention City

by ALBERT J. WOLF, JR.

Chairman of the Host Chapter Activities Committee, 1959 AIA Convention

N ew Orleans, the scene of the 1959 AIA Convention, is a favorite among convention-goers. The city is booked solid for many years in advance for conventions which, along with the annual events customarily held in New Orleans, overtax the hotel facilities. Since New Orleans holds an annual Mardi Gras, a mid-winter sports festival (known to most as the Sugar Bowl), a Spring Fiesta, is the center of yachting regattas, tennis and golf tournaments, as well as being the port of entry for the Caribbean and South American cruises, you can well see that the city has had to atune itself to accommodate the visitor.

There are three native features which most Americans associate with this city: the French Quarter and its architecture, Creole cooking, and jazz. The ladies of New Orleans have arranged opportunities for the convention visitors to partake of all of these attractions. A guide book has been prepared giving in detail the history of the French Quarter as well as the Bayou St. John area and the Garden District. These two latter historically important areas of the city are often overlooked by the casual visitor.

As you know, the convention is in June, and the weather in New Orleans at that time is rather warm. Because of this, airconditioned buses will stand by to ride you through these areas in comfort (and, unfortunately, speed). The true lover of history will walk through the French Quarter in order to visit the little patios hidden from the street, to browse in the many fine antique stores, and to wait for the proper lighting for photographs. The walking tour is the only satisfactory way to get the full flavor of old New Orleans. The streets are narrow, having been laid out for carriages. The buildings are immediately adjacent to the sidewalks, known in New Orleans as "banquettes." Since the old homes were entered from a carriage-way which led to the patio surrounded by its high walls, the patio can only be found by investigation.

Historically, this part of town is Spanish, although there are some examples left of the earlier French era. One of these, the Ursuline Convent, has a delightfully aromatic herb garden, thus appealing to several senses at once. Jackson Square, the old Place d'Armes, is the heart of the French Quarter. It is bordered on one side by the Cathedral and the old Spanish state buildings and on two sides are the oldest apartment houses in America, known as the Pontalbu Buildings; on the fourth side is the Mississippi. The statue of General Jackson, the hero of the Battle of New Orleans, rears on his horse as if he had just seen the late Cecil B. deMille's production of "Lafitte the Pirate." 41



A typical residential street in the Garden District of New Orleans.

The Bayou St. John Area is exemplary, on a smaller scale of the River Plantations. This area, now a part of the city and easily accessible, faces a bayou which was one of the water entrances to the City. A fine example of architecture located on the bank of this bayou is the old Spanish customhouse.

The Garden District area developed when the Americans moved into Louisiana and were not accepted by the Creole society. These homes are not only typical of the early nineteenth century feeling for space, but are set on lovely grounds amid oaks, magnolias and well-tended gardens, Arrangements are being made to be received in several of these homes which have been maintained as private residences.

To sustain the inner man—and woman, New Orleans offers a unique cuisine. Again, the cooking, like the architecture, is a mixture of the French and Spanish ancestry, well laced with Caribbean and a touch of Indian. In general, Creole cooking is not so subtle and delicate as the French, or so broad as the Spanish; it is rather an adaptation of the native products tempered to the taste. Rice, not the potato, is the staple food and is used in num-

berless combinations. You may try it in a gumbo, which is really the product of everything left over in the refrigerator, plus shrimp or chicken and okra filé. Jambalaya is gumbo's first cousin. Again the basis is rice with shrimp, ham, chicken and "what they didn't eat last night," all piled into a steaming mountain sprinkled with paprika. Crawfish bisque (and please don't call them KRAfish) is also closely related. This delightful concoction takes several days to make, including picking of the crawfish and then boiling them down with several secret ingredients to end in a mouthwatering, stomachsatisfying bowl. Rice again tempers the fire. No one who claims any identification with the French would fail to experiment with eggs. The local restaurants and the more adept housewives are expert in preparing eggs St. Denis, eggs Sardu, and the most delicate of omelettes. Of the latter, a Spanish omelette is perhaps the most typical of the natives.

Surrounded on three sides by the Mississippi and on the fourth by Lake Pontchartrain, it is only natural that seafood should be an important part of the local menu. The area abounds with both fresh and saltwater fish as well as shrimp, crabs and

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oysters. A few of the choice dishes are oysters Bienville, shrimp Cardinal, trout Almondine, and crabmeat Maison. No receipe could replace the necessity for enjoying these delicacies in the reality.

Adjacent to the French Quarter is the time-honored French Market. Here may be purchased the farmers' produce and here each morning may be seen the restaurant owners, as well as the more enterprising ladies, doing their daily marketing. When next seen, the farmers' lowly lettuce, endive, or beets appear dressed for the best and easy to swallow. It is perhaps interesting to note that the favorite salad in the fine restaurants is a mixed green without vegetables but with highly delectable dressing. In order that you may be directed to at least one of these fine restaurants, a breakfast has been arranged at one of the world famous places with the hopes that once having found your way there, you will return. But don't overlook places like Antoine's, Galatoire's, Arnaud's, the Four Seasons or Gourmet. In the latter you may have your choice of fifty kinds of coffee. Since the local coffee is mixed with chicory, and dripped slowly, you will probably want to sample it also at the French Market.

The Mardi Gras season in New Orleans starts on Twelfth Night, which is the twelfth night after Christmas, and culminates on Shrove Tuesday, or the beginning of Lent. During the entire season various organizations hold elaborate evening balls.



One of the famous Pontalba Apartments facing Jackson Square.



The Port of New Orleans at night. Last year the port handled more than fifty million tons of cargo.

The members of the organization mask and a tableau is presented. Attendance at these balls is by invitation only and constitutes the center of the debutantes' season. In the last week of the pre-lenten period, street parades are held. The production of papier mâché floats takes a full year. Riding on the floats are members of the sponsoring organization who throw trinkets to the crowd. Many native New Orleanians have never seen the floats, so busy are they grabbing for these baubles. Mardi Gras Day is the climax and the entire day is dedicated to masking, parades, and sometimes, like this year, rain. Rex, who is King of Carnival, reigns supreme and the activities of the populace vary from complete abandonment to the idea of Mardi Gras, to "let's go look at the parade and then go home." A luncheon has been planned during Convention Week at which some local authorities on the Carnival Season will explain the background and details. Royal robes and costumes will be modeled.

The history of jazz is an integral part of the history of New Orleans. A derivative of the African slave rhythms, overlaid with the emotional outpouring

of a naturally expressive group, it has resulted in America's contribution to the world of music. At one period in the history of New Orleans, the houses of ill repute were restricted to an area known as Storeyville. Basin Street was the center of this area, which is adjacent to the French Quarter but not a part of it. The Professors generally associated with these houses were, in many cases, the best-known names in the annals of jazz. Small groups would play after working hours developing the subtle rhythms and individual expressions which we associate with this music. The center of jazz moved up the river to Memphis and Chicago and thence to the world. There remain in New Orleans though, many small bars and evening entertainment spots where good contemporary jazz can be heard, although it has a professional veneer. You can walk into these small spots and for the price of a drink you may spend an evening. Many of them provide, in addition to jazz, a form of entertainment that has a reasonably limited appeal. This is known as the "strip tease." Some of the better known exponents of this highly esoteric art are liberal in their demon-

New Orleans is famed for its beautiful homes. Shown below are houses along the Bayou St. John.



stration, generous in their time, and surely can wiggle.

To provide the convention visitor with a sample of New Orleans attractions of the evening, the ladies have planned a night of jazz on the Mississippi. The steamer President will make a two-hour voyage up and down the river. This trip is a favorite, not only with visitors, but with the natives of the city. A fine New Orleans jazz band will entertain both for visual and auditory purposes as well as for dancing. In addition, the services have been secured of a group of young boys who make their own music on homemade instruments and dance. In New Orleans, these are known as "Spasm Bands." The traditional drink of the river is mint julep. We hope you will partake with us in this aromatic concoction.

The season, as we have said, is warm, but New Orleans is approximately 99% airconditioned. This includes not only the hotels, the restaurants, the night clubs, the stores and the homes, but many of the automobiles. Bring your summer clothes, your wives and your best humor, for your spare time enjoyment of "The City That Care Forgot"!



St. Louis Cathedral built in 1794 is one of the most famous religious structures in this country.

The Cabildo, now a part of the Louisiana State Museum, was built in 1795 as the seat of the Spanish governing body. In this building took place the final signing of the Louisiana Purchase.





THE PROGRAM OF THE NEW ORLEANS AIA CHAPTER WOMEN'S AUXILIARY

The Women's Auxiliary of the New Orleans AIA Chapter is looking forward to your visit. Traditionally, the ladies of the South are the hostesses for any entertainment. The wives, mothers and daughters of the New Orleans architects have arranged a series of functions for your entertainment so that you may enjoy your stay to the fullest. Among these functions are:

Monday, June 22, Morning

A View of Our City

A "rubberneck" trip of the Old and New City. You will certainly find one or more areas you wish to revisit. Each bus will be furnished with the usual guide and supplemented by a host who will give the tour an architectural slant. Not only will you have an opportunity to see new civic and residential construction, but also to visit prize winning schools.

Tuesday, June 23, Morning

Breakfast at Brennan's

This is one of the treats of New Orleans. A worldfamous restaurant, newly reconstructed, but with traditional Creole cuisine. Delightful food in delightful surroundings.

Wednesday, June 24, 10 to 12

A View of the Garden District

Most visitors overlook this important part of New Orleans. The large, well-preserved, gracious homes set among magnificent trees. You will be welcomed on the buses by hostesses informed on the background of the area and the individual homes.

Wednesday, June 24, 12:30 pm

The Mardi Gras Luncheon

Every stranger in New Orleans wants to know about our annual Carnival. We have arranged a luncheon with audio-visual aids—in true-life color and dimension to give you this picture.

Wednesday, June 24, 8:30 pm

Jazz on the Mississippi

Join us on our main artery for several hours of boating. "New Orleans Jazz," as expounded by our local bands and entertainers, will be featured—with the customary refreshments. You may dance, view the harbor, or simply sit noisily in a dark corner. The Mississippi will dominate the party, as it does the city.

Plantation Tours

Tours have been organized on both sides of the river, providing visits to the neighboring Plantations. Again guides will tell you of the traditions and customs of this phase of Louisiana life. East tour: Tuesday, June 23, 1 to 5 pm; West tour: Thursday, June 25, 10:30 to 5 pm.

Although New Orleans has a reputation for being a "City of Sin," all the events are planned by the ladies to be both legal and moral. And don't worry about the heat—everything is air conditioned.

The 1959 Building Products Exhibition

International Room Roosevelt Hotel New Orleans, Ia. June 22-26



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Prizes — An Innovation for 1959

By J. Winfield Rankin, CONVENTION MANAGER

Following a pattern established successfully in many state and regional conventions, The Institute will this year make available prizes to be awarded only to corporate members registering at the various Product Exhibit booths. To ensure early and frequent visits to the displays, there will be two daily prizes of gifts worth about \$100 each, on Tuesday, Wednesday and Thursday. The grand prize to be awarded on Friday will be worth approximately \$500. Awards will be made by a Committee of Exhibitors by means of the following procedure:

Each booth has a number. The first drawing will be to select a booth. The registration book from that booth will then be obtained and subsequent drawings will select the page and line number on which the winner's name will appear. Every corporate member registering at the booths will have a chance to win *one* of the daily prizes, and the Grand Prize. All prizes must be picked up before noon, Friday, June 26. The Grand Prize will be given only to a corporate member present at the time of the drawing, which will be held just prior to the adjournment of the Convention on Friday.

Sketches of the booths planned for this year indicate that the exhibitors are emphasizing the Convention theme, "Design," and the ways their products can contribute to this phase of the architectural solution.

Time is being set aside in the mornings and afternoons for visiting the product exhibits while refreshing oneself with a cup of coffee.



WHAT AND WHOM YOU WILL SEE AT SOME OF THE EXHIBITORS' BOOTHS

ALLIED CHEMICAL CORPORATION BARRETT DIVISION

Booth No. 10

Built-Up Roofing, Pitch, Saturated Felt Insulation Board, Flashing Systems, Drain Connections. R. S. Dugger will be on hand to answer questions.

ALUMINUM COMPANY OF AMERICA

Booth No. 15 Alcoa's exhibit will be built around vari-

ous new ideas on solar shades and decorative screens. Included will be their newlyannounced Sol-Dec system, a unique solar and decorative shade offering complete design versatility for the architect within the economies afforded by mass production techniques. Another new product will be a circular, die-cast aluminum grille. The company will be represented by J. M. Arnold.

AMERICAN AIR FILTER CO. INC. Booth No. 47

"Year Round" airconditioning for school classrooms is possible with use of the HerNel-Cool II unit ventilator, to be displayed and demonstrated. The manufacturer says it is the only system which automatically provides hot weather airconditioning, controlled winter heating, all-year ventilating and classroom ventilation cooling. The heater-ventilator units may be installed when the building is built, and the chiller unit added to the boiler room later if desired. No ducts are needed. The many other features of the HerNel-Cool II unit will be pointed out by Charles S. Stock, who will be in charge of the booth.

AMERICAN BRASS COMPANY

50

Booth No. 29 Anaconda Extruded Shapes, Sheets, Rods and Tubes of various alloys. The company will be represented by W. M. Dowd.

AMERICAN GAS ASSOCIATION ARKLA AIR CONDITIONING CORP.

Booth No. 39

The sudden popularity of outdoor gas lights will receive a new impetus by this display of Arkla's five gas lamp designs, "Sentry," "Cabildo," "Flair," "Heritage" and "Doorman." Besides their smart designs, with a nostalgic touch of yesterday, these outdoor lights are essentially practical in that they are "insect repellent" since they create light on the yellow band of the color spectrum.

Also displayed will be the Arkla-Servel

"Sun Valley" all-year gas-burning airconditioners—heat in the winter, cooling in the summer, air circulation all year round. J. Alan Davis will be in charge of the booth.

AMMERMAN COMPANY, INC.

Booth No. 67

The Ammerman Company will display its new AirXpeler PB-BCD Power Roof Exhausters and RC AirXpeler and Air-Mpeler Gravity Exhausters molded out of reinforced Fiberglas.

The advantages of molded reinforced Fiberglas are its strength and extreme lightness. It is an inert substance, making it highly corrosion resistant. These units can be in many colors and since the coloring is impregnated throughout the plastic resin they are colorfast. Fiberglas also acts as a sound deadening material. The exhibit will be in charge of C. L. Ammerman.

ARMSTRONG CORK COMPANY

Booth No. 16 Featured here will be two of the company's newest and most luxurious plastic flooring products: the heavy-duty Tessera series in Armstrong Vinyl Corlon, and the lustrous new Opalesq Vinyl Tile. The back wall of the exhibit will contain samples of all seven Tessera colorings and will include illuminated full-color Ektachromes showing Tessera installations at various grade levels. A small plexiglass case mounted on the back wall will contain samples of the tiny, square-faced vinyl cubes which make up the unusual wearing surface of Tessera.

18"x18" Opalesq Vinyl Tiles will also be displayed, beneath another plexiglass case containing samples of the four vinyl components used in creating the airy dimensional effect of the material. Complete technical information on both products will be available at the booth, which will be in charge of C. M. Barnes and J. J. Van Eman.

THE BILCO COMPANY

Booth No. 11 The Bilco Type L Roof Scuttle will be featured in this booth, showing how to carry a stair tower to the roof without the need for a pent house. There will also be information on other Bilco products—"spring-balanced" doors for access through any horizontal surface, such as roofs, ceilings, floors or sidewalks. The exhibit will be in charge of B. E. Farrell.

AMERICAN-SAINT GOBAIN CORP.

Booth No. 43

The American-Saint Gobain Corporation will feature glass spandrels, glare-reducing glass and heat absorbing glass. In addition, their complete line of patterned glass and colored plate glass will be on display. The exhibit will be staffed by Richard K. Laurin.

BRIDGEPORT BRASS COMPANY HUNTER DOUGLAS DIVISION

Booth No. 28

This exhibit will display the latest additions to the FLEXALUM line of qualitydesigned window accessories, including the following:

- FLEXALUM TWI-NIGHTER Venetiansthe full closure blind
- FLEXALUM VERTICALS—the new height of interior window decorating
- FLEXALUM WOVEN ALUMINUM for draperies and shades
- FLEXALUM—new wide slat louver for vertical blinds

W. O. Spiess, Advertising Manager, will be in charge of the display.

BRIGGS MANUFACTURING CO.

Booth No. 12

The Briggs plumbing fixture display will be in charge of H. L. Tullos.

CARADCO, INC.

Booth No. 49

New Bilt-Well Unitized Casements and New Simple System of Angle and Bow Bay Construction; Cabinets. H. A. Muir will be in charge of the exhibit.

CONGOLEUM-NAIRN, INC.

Booth No. 51 Congoleum-Nairn will display their latest novelties, such as Nairon Custom "Dynasty" Vinyl Tile and Inserts, with which any mechanic—or a do-it-yourselfer—can create custom designs. There will also be their all-purpose vinyl asbestos tile "Brushwood," which is tough and durable and can be used below grade or with radiant heating. Flor-Ever "Cosmopolitan" Vinyl is a new addition to their line of vinyl sheet-goods, being a combination of highly polished "marble chips" surrounded by richly colored granules of "marble dust," highlighted by iridescent metallics embedded in the clear vinyl. "Tiffany" is 100% vinyl with no filler added, in a wonderful blend of shimmering metallics in six pearlescent colors. This colorful exhibit will be in charge of Robert C. Kopyta.

CRANE CO.

Booth No. 66

A boon for tidy housewives who are sick of mopping around conventional watercloset bowls will be exhibited in the Crane booth — the Walsan Modern Off-The-Floor Closet for homes, with electric pushbutton flushing. Even the tank is hidden in the wall, with a flush access panel. Also to be displayed are the New Crown circular countertop type lavatory with New Singl-ese Faucet; the New Crescent Lavatory with custom cabinet, and the New Singl-ese controls for bath tubs and kitchen sinks. There will also be a display of the New Superior Water Heater, gas-burning, with glass-lined tank. In charge of the booth will be F. P. Uphues, of the Crane Co.

GENERAL ELECTRIC CO.

Booth No. 22

GE's Room Airconditioner Department will display its new Built-In Thinline Airconditioner, a unit no thicker than most masonry walls, which presents only a flat surface on the interior, projecting $3\frac{1}{2}$ " into the room, and louvers on the exterior. Economy through flexibility is the manufacturer's claim, plus no interference with interior wall decoration.

GE will also introduce at their exhibit their "Thermaline," not to be available until 1960. Like the Thinline, Thermaline is a room-sized unit installed within the thickness of the walls, but it offers *year-round heating and cooling*. Basically, it is a heat pump, with controls set to keep all spaces at the desired temperature the year round. The exhibit will be in charge of C. E. Ring.

HAWS DRINKING FAUCET CO.

Booth No. 61

In addition to their well-known line of drinking fountains for school and industrial use, Haws will display the Haws-Kramer H-K "Silent Service," a concealed flush valve that minimizes bathroom flushing noises. It is particularly designed for wall-mounted toilet bowls; operation can be either manual or by electric pushbutton.

Two new fiberglas units will also be displayed: the one-piece deck-top receptor and fountain unit made to meet special building code requirements which call for a drinking fountain separate from the sink; and a multiple, wall-mounted drinking fountain (three bubblers) in a handsome streamlined design, coming in five colors. Another display feature will be the Haws Model FL-1 Fluoride Unit, a drinking fountain attachment which provides correctly fluorinated water where required. Terry R. Haws will be on hand to answer questions.

HILLYARD CHEMICAL CO.

Booth No. 3 Hillyard will feature their well-known products for the initial treatment and subsequent maintenance of all types of floors. AIA-numbered files will be available, showing both architects' (short form) and contractors' (long form) specifications for proper treatment of floors—including wood, concrete, terrazzo, clay tile and resilient flooring materials. Properly treated and untreated samples of the various flooring materials will be displayed. In charge of the exhibit will be the ever-popular Elliott C. "Jack" Spratt.

INDEPENDENT NAIL AND PACKING CO.

Booth No. 75

This display of threaded nails will be in charge of Arthur S. Tisch. (See Page 12)

MASTIC TILE CORP. OF AMERICA

Booth No. 69

Matico's new "Lode O'Gold" tile will be featured, along with an exhibit of their complete line of asphalt, vinyl-asbestos and rubber tiles. "Lode O'Gold" is an Aristo-flex vinyl-asbestos tile with metallic markings in each of four colors—ebony, golden birch, cedar and ash. The softly gleaming pattern is suitable for either floor or wall use.

Matico will also display the several new colors which they have added to their standard lines of asphalt, rubber and vinyl-asbestos tiles—some of which are quite novel, such as #3009 marbelized in gray with bright pink, yellow, blue, charcoal and white. Garland Kellog will be on hand at the booth to greet visitors.

MO-SAI ASSOCIATES, INC.

Booth No. 72 The many colors and textures of Mo-Sai precast panels will be featured in this booth. Mo-Sai panels can be used as surfacing, concrete forms (one or two sides), insulated curtain walls, or as complete wall units. Widely used on new construction, Mo-Sai is also easily adapted to the renovation of old buildings and the re-surfacing of existing walls. John H. Bell will be in charge of the booth.

PITTSBURGH PLATE GLASS CO.

Booth No. 25

Pittsburgh will feature "Design With Glass," showing many new decorative glasses, as well as their standard products used in different ways—plate glass, partition glass, mirrors, spandrel glass, decorative glass and colored glass—also variable transmittance glass and the new curtain wall metal construction. The exhibit will be in charge of William R. Evans.

RED CEDAR SHINGLE BUREAU

Booth No. 7

The esthetic and practical advantages of cedar roofs and walls will be the theme of this exhibit — shingles, machine-grooved shakes and luxurious handsplit shakes. In addition to their inherent texture and charm, these three exterior building materials provide the finest natural insulation and durability. Machine-grooved shakes are a relatively new variation of the basic shingle. Their sides have been trimmed to exact right angles to the butts and tips, and they have been run through a machine which literally grooves out their faces.

Handsplit shakes are rapidly gaining in popularity in the Middle West and East. Always prized on the West Coast for their rustic charm and rugged texture, these shakes are manufactured by splitting cedar blocks either by hand or by machine. Demonstrating the varieties of shingles will be Virgil G. Peterson.

ST. REGIS PAPER COMPANY PANELYTE DIVISION

Booth No. 57

"GALAXY," the brightest star in plastic laminates, will be featured in this exhibit. Golden flecks, with a touch of silver, give it a sparkle and richness that have made it a favorite for walls and work surfaces. S. D. Boudreau, Jr., Assistant Advertising Manager, will be on hand to demonstrate the merits of the material.

TIMBER STRUCTURES, INC.

Booth No. 32

This booth will show the use of glued laminated timber products in such widely divergent types of buildings as a field house, schools, churches and banks. Scale models of actual jobs will show the structural framework of glued laminated beams, arches and domes. The jobs will be further identified by large color photographs of the completed installations.

Their heavy roof decking products will also be exhibited, showing their Western Red Cedar Tim-Deck, Blonde Tim-Deck, and the new Oak Panel Tim-Deck. Through the use of a miniature electric train layout, the exhibit will convey the fact that all of these laminated products made with Northwestern woods are readily available for shipment to any point in the United States. The company will be represented by Lawrence H. Price.

UNITED STATES PLYWOOD CORP.

Booth No. 52

US Plywood will feature an important new product, WELDWOODGLAS-WELD, an asbestos reinforced structural building panel with a permanent fused enamel surface. Available in more than thirty colors and patterns, Glasweld is guaranteed for exterior use.

Other products exhibited will include Weldwood Architectural Panelling in a variety of exotic woods, Weldwood Acoustical Sound Control Door, Prefinished Plywood Wall Panelling, Novoply Paniflex Bi-Fold Doors, Formtex concrete form plywood, Micarta, Flexwood and Kalistron. The exhibit will be in charge of F. B. Peckham.

WARE LABORATORIES, INC.

Booth No. 56 Curtain Wall Sections and Windows. The manufacturer will be represented by W. L. Hunter. 51

At <u>this</u> price, can you afford <u>not</u> to provide for air conditioning?

Michigan school provides for future air conditioning at <u>no extra cost</u>, with *hernel-GOO* Π unit ventilators

School officials in Portage, Michigan weren't interested in expensive frills for their new Ramona Lane Elementary School. But they did *demand* an efficient, modern design. The provision for future air conditioning—with HerNel-Cool II unit ventilators—is one of the many built-in economies at Ramona Lane. HerNel-Cool II unit ventilators provide balanced classroom thermal environment now . . . and the change to year-round air conditioning can be made at anytime by installing a packaged liquid chiller in the boiler room.

HEATING AND VENTILATING COSTS "IN LINE." The cost for this versatile equipment was in the same range as equipment not adaptable to air conditioning! Heating and ventilating costs per square foot were slightly higher than those of some other schools in this area, but they were also lower than others!

HEATING AND VENTILATING COSTS AT RAMONA LANE ELEMENTARY SCHOOL COMPARED WITH SCHOOLS NOT PROVIDING FOR FUTURE AIR CONDITIONING

		-		
SCHOOL A	SCHOOL B	RAMONA	SCHOOL C	SCHOOL D
\$1.25 Per Sq. Ft.	\$1.34 Per Sq. Ft.	\$1.30 Per Sg. Ft.	\$1.65 Per Se, Ft.	\$1.23

Data based on actual school construction cost figures in Herman Nelson files.

RAMONA LANE ELEMENTARY SCHOOL Portage, Michigan

> SUPERINTENDENT Varl O. Wilkinson

ARCHITECTS & ENGINEERS Trend Associates, Kalamazoo

VITAL STATISTICS—Cost per sq. ft.: \$10.68; square footage: 58,000. Steel framing with brick; concrete slab on ground, classroom floors asphalt tile; corridors and multi-purpose room floors asbestos vinyl tile; kitchen, toilet, entrance floors ceramic tile. 1½" steel deck, 1" rigid insulation and built-up roof. Metal exterior doors and frames; aluminum sash and curtain wall throughout. 18 classrooms, 2 kindergartens, art room, music room, library, conference room, multi-purpose room, cafeteria and kitchen, administrative area, 2 student activity areas. Exterior and interior classroom walls constructed of panel wall material manufactured in standard sizes to save labor. Small piecework items avoided to keep maintenance and operating costs down. Compact plan also reduces amount of exterior wall.





ADD YEAR-ROUND AIR CONDITIONING AT A SAVINGS OF 60% TO 72%! The original decision to provide for air conditioning at Ramona Lane—or the school you're planning—pays big dividends when classrooms are actually air conditioned. Largeenough piping, pipe insulation, condensate drainage system and proper control system are installed originally.

A packaged liquid chiller, to provide complete year-round air conditioning, can be installed in the boiler room without disrupting classroom activities or without expensive building alteration costs. And you can do it for an estimated 55c per square foot—a savings of about 86c per square foot under individual packaged commercial cooling units and about \$1.41 per square foot under a duct-type air conditioning system.

COMPARE ESTIMATED COSTS OF ADDING PACKAGED LIQUID CHILLER WITH THOSE OF COMPLETE AIR CONDITIONING SYSTEMS



MORE THAN 250 SCHOOLS NOW EQUIPPED WITH hernel-GOO II UNITS

Install now at little or no extra cost, air condition later at a great saving. This approach to classroom thermal comfort has made such good sense to architects and educators that more than 250 schools have already installed HerNel-COOL II equipment.

HerNel-COOL II is the first unit ventilator to offer optional air conditioning as well as heating, ventilating and natural cooling (with outside air). Units can be installed so the school enjoys the usual benefits of Herman Nelson unit ventilation, including the famous DRAFT|STOP draft control system—the only system compatible with air conditioning. Then, at any time—immediately, or whenever the school budget will allow it—the addition of a packaged liquid chiller in the boiler room is all that's needed for complete hot weather air conditioning.



53

See Exhibit Booth 69



This is new Matico Lode-O-Gold

Matico Lode-O-Gold, a brilliant new style in Aristoflex Vinyl-Asbestos Tile, is a modern expression of the golden age of elegance. The rich, golden marble adds the smart, distinctive touch to residences, office buildings, institutions or almost every project. It is long-wearing, easy and economical to maintain. The golden marble won't wear off because it goes clear through the tile. Available in 4 colors in $9" \times 9"$ tiles, in $\frac{1}{6}"$ and standard gauge thicknesses. For specifications and samples write Dept. 12-6, P. O. Box 128, Vail Gate, N. Y.

MASTIC TILE CORPORATION OF AMERICA Houston, Tex. • Joliet, III. • Long Beach, Calif. • Newburgh, N. Y. Visit Our Exhibit Booth 69





WITH THIS SEAL...

the Barrett SPECIFICATION[®] Roof becomes the first roof ever bonded for 25 years!

Now the pioneer in the bonding of built-up roofs presents another first—the Quarter Century Bonded Roof.

This is the longest roofing guarantee in the history of the industry—a guarantee made possible by the proud record of the "SPECIFICATION" Roof itself. Since the turn of the century, Barrett "SPECIFICATION" Pitch and Felt have piled up phenomenal longevity records on the leading buildings of America.

The best test—actual performance—conclusively proves that pitch provides the best weather protection for flat roofs. Asphalt absorbs anywhere from two to seventeen times more water than does pitch. Where prolonged exposure to water may be expected, as on flat roofs, pitch is always the expert's choice.

A system of improved quality controls is now used in the manufacture of Barrett "SPECIFICATION" Pitch and Felt, virtually eliminating the possibility of materials failure. Specify the built-up roof that is now guaranteed for five years longer than any other . . . the roof that has always been famous for outliving its bond—the Barrett Quarter-Century "SPECIFICATION" Roof.

Visit Barrett Booth #10 at Building Products Exhibition, Roosevelt Hotel, New Orleans, La.





cedar fans freshness into home design

Favorable first impressions are assured when you combine fresh design with quality merchandise. Certigroove cedar shakes give you the best of both. The deep-etched striations add interest to a wall and mask joints between shakes. Double-coursing with shakes creates bold shadow accents for home exteriors as well as superior insulation in all kinds of weather.

Available in a wide array of colors, applied under controlled factory conditions . . . Certigroove cedar shakes answer your need for an exterior wall material with design versatility, low applied cost and enduring good taste.

RED CEDAR SHINGLE BUREAU

5510 White Building, Seattle 1, Wash. • 550 Burrard Street, Vancouver 1, B.C.

For complete application details on Certigroove cedar shakes, see the current Sweet's Catalog . . . or send coupon . . .

		Name	_	
		Firm		
		Address		
TIGRODVE AN FHARES	CERTI-SPLIT	City	Zone	State

Now we're cooling with GAS

A 22-foot wall of sheer glass... yet it's always cool inside! – thanks to **GAS**-operated Arkla-Servel air conditioning

The strikingly modern Hillside Church is one of four completely air-conditioned buildings located within Rose Hills, Southern California's beautiful memorial park. Because of the liberal use of glass walls, and the desire for one central system, the air conditioning installation presented unique problems.

After a careful study, the Arkla-Servel gas absorptive cooling system was chosen. "And we're completely satisfied," says John D. Gregg, President. "Our 25-ton gas unit produces 10,000 cubic feet of cool air per minute. And you can't beat it for economy. It requires practically no maintenance. Since it uses the same boiler, it makes use of our heating facilities on a year-'round savings basis."

Gas absorptive cooling can put your heating plant on a year-'round economical basis too. For specific information, call your local gas company, or write to the Arkla Air Conditioning Corporation, General Sales Office, 812 Main Street, Little Rock, Arkansas. *American Gas Association*.

GAS OPERATED ARKLA-SERVEL ABSORPTION-TYPE WATER CHILLER packaged construction lowest operating costs fully automatic operation • compact size easy installation · long dependable service



color fall-out

In the hand or on the floor, the color never changes. These superb vinyl tiles are translucent, not transparent!

Now, Congoleum-Nairn presents a supremely luxurious, pure-vinyl tile that <u>always</u> keeps its most beautiful promises.

In your hand, it offers the loveliest translucent and pearlescent colors, glorified by a brilliant shower of diamond flecks. On the floor, it gives you exactly the same colors and beauty—with no special adhesive needed (and no trowel marks can show, either).

Nairon Custom Tiffany Vinyl Tiles are 1/2" thick, available in six colors and three sizes: 9" x 9", 12" x 12", 18" x 18" (larger slabs on special order).

A companion design, with the same specifications and glamour, is Nairon Custom Tiffany Metallic Vinyl, simulating the costliest of metals.

For samples and further data write Congoleum-Nairn Inc. Kearny, New Jersey.





GALAXY—BRIGHTEST STAR IN PLASTIC LAMINATES

This is the beauty that created such a stir, and almost overnight became the most wanted pattern in plastic laminates. A Panelyte original, *Galaxy* captured the imagination of architects and designers, who are using it not only for counter tops, but walls, elevator cabs, countless interior surfaces. Golden flecks, with a touch of silver, make Galaxy Panelyte unique in its effect. For the smartest colors

and patterns...for new ideas in durable decor ... look to St. Regis Panelyte, style leader in plastic laminates.



May we send you free samples of color-coordinated Panelyte? Write Panelyte Division, St. Regis Paper Company, 150 East 42nd Street, New York 17, New York. the style leader in plumbing fixtures

BEAUTYWARE



KROGER BUILDING, Cincinnati, Ohio. Owner: R. E. Dumas Milner. Architects and Engineers: Hedrick and Stanley, Fort Worth, Texas. Plumbing Contractor: Sam P. Wallace & Company, Cincinnati, Ohio.

New Kroger Building to feature over 400 Briggs Beautyware fixtures

Water closets, lavatories, drinking fountains, urinals, sinks—415 fixtures in all will equip the new 25 story Kroger Building in Cincinnati. And all will be Briggs Beautyware, for good reason. The architects selected Briggs Beautyware with an eye to the lustrous durability of Briggs vitreous china, its immaculately sculptured styling, its carefully worked out functional features.

These same advantages can apply to your commercial and institutional work. Specify from the complete, easy-to-work-with line designed for Briggs by Harley Earl, Inc. It is handcrafted in high density vitreous china for years of maintenance-free operation. It is rigidly controlled in quality to assure you that it will meet every requirement. Specify Briggs Beautyware —the brand that makes the difference!

"See our display at the Building Products Exhibition Convention o the American Institute of Architects, Roosevelt Hotel, New Orleans June 22-26. Booth No. 12."



Briggs Lawton Urinal provides wash-out operation, integral extended shields, vitreous china strainer and flushing rim.



Briggs Mercury Drinking Fountain is semi-recessed, features angle-stream, anti-squirt, chrome-plated bubbler head.



Briggs Sultan Water Closet gives the advantage of wall-hung installation plus syphon jet and elongated bowl.





Alcoa Aluminum beauty that pays dividends

Economically speaking, this ingenious curtain wall sunscreen facade on the new Public Library in New Orleans is an admirable example of what inspired architects and versatile Alcoa[®] Aluminum can do to stretch a client's dollars. At a total cost of \$160,000, it reduced solar radiation enough to permit a \$120,000 reduction in air conditioning equipment . . . plus subsequent yearly savings in operation.



BUILDING: Main Public Library, New Orleans, La.

ASSOCIATED ARCHITECTS: Curtis & Davis and Associated Architects & Engineers; Goldstein, Parham & Labouisse, Architects; Favrot, Reed, Mathes & Bergman, Architects; (Sidney J. Folse, Jr., and Walter J. Rooney, Jr., Associates in Charge of Project), New Orleans, La.

GENERAL CONTRACTOR: R. P. Farnsworth & Co., Inc., New Orleans, La. ALUMINUM SUBCONTRACTOR: Metal Trims, Inc., Jackson, Miss. Ornamentally, it would be difficult to find a more apt illustration of artistic fitness. The metalwork is an echo of historic New Orleans—a city traditionally rich in metallic, architectural adornment.

Functionally, nothing could be more modern. In the over-all arrangement of Alcoa Aluminum against walls of glass, the ingenious sunscreen admits soft, glareless daylight to all three elevations through all four seasons . . . daily, from dawn to dusk. Alcoa Architectural Gray 2010 reflects light and heat away from the building; Architectural Gray 2030 prevents glaring reflections from bouncing inside.

This new and superb modern structure is well worth further study—it's a source of inspiration and practical ideas that may well be applicable to *your* present or future problems. Write for your free copy of the Alcoa Architectural Achievement File on the New Orleans Public Library. Aluminum Company of America, 1827-F Alcoa Bldg., Pittsburgh 19, Pa.

Your Guide to the Best in Aluminum Value



... the architect's metal!

For other dramatic new uses of Alcoa Aluminum for solar shading, visit Booth 15 at the AIA Convention.



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By its very nature, regular plate glass resists wind, moisture, fumes, gases and other damaging influences. But glass manufacturers have also produced specialized glass building products . . . tinted glass that absorbs solar heat with minimum interference with visible light transmission ... insulating glass that maintains desired temperature and hu-

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midity levels . . . extra-thick, heat-strengthened glass that resists the fiercest weather conditions.

A trained staff of Architectural Representatives is at your service to acquaint you with Pittsburgh Plate Glass Company's quality specialized glass products. Please feel free to confer with them at any time about your problems in the selection and application of glass.

See Sweet's Architectural File-Sections 3e, 7a, 13e, 16a, 16d, 21.

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ATE

GLASS



Lighting conditions and resilient floors

—with special reference to schoolsAIA FILE NO. 23-G

The theory and practice of lighting engineering have advanced rapidly in the past few years, providing architects with a variety of valuable new techniques for improving interior environments. While floors are certainly not the most important consideration in lighting problems, they are among the variables architects should keep in mind. How much light is reflected (or absorbed) by floors bears heavily on the over-all lighting of any interior.

This report summarizes general considerations, with special attention to schools. Further data is readily available: A chart giving the light reflectivity values of all colors of all Armstrong floors will be found in the Armstrong Technical Data Book (A.I.A. File No. 23-G). Reprints of this chart are also available. It's advisable to consult this before selecting floors to meet previously defined lighting requirements. Your Armstrong Architectural-Builder Consultant can provide additional help. And, if especially complex problems arise, he can get you the assistance of the Armstrong Research and Development Center.

Flooring color and gloss basic factors

Flooring colors play a basic role in determining how much light floors reflect. Naturally, light colors usually reflect more light than dark colors. However, people with normal color vision are most sensitive to colors toward the middle of the visible spectrum, and sensitivity decreases toward both the violet and red ends. This factor should be kept in mind in selecting flooring colors. In the aforementioned chart of light-reflectivity values for Armstrong floors, values have been weighted to take this eye-sensitivity into account.

A second basic factor is gloss, which is determined largely by the composition of the flooring material. A high-gloss flooring surface has lower light reflectivity than a matte (low-gloss) one. This is because a matte surface reflects light about evenly in all directions, while a high-gloss surface behaves more like a mirror and tends to reflect light directly instead of diffusing it. Gloss also affects color values, making the color in a high-gloss floor look slightly darker than the same color in a low-gloss floor.

All types of Armstrong floors come in many different colors. And, conversely, many colors are common to different types of floors with different degrees of glossiness. So in areas where special lighting standards must be met, practically any value can be obtained and any decorative needs met simply by choosing from various colors in one type of floor — or from similar colors in different types.

A word of caution about maintenance

Improper or inadequate flooring maintenance can affect the reflectivity of floors. Scratches, for instance, will tend to absorb light and will in time catch and hold dirt which cuts reflectivity. And with very high-gloss flooring materials, subfloor irregularities tend to be magnified by reflections from the floor. Only careful inspection and, if necessary, special preparation beforehand can prevent these irregularities from becoming apparent in the finished installation.

Choosing floors for schools

A number of different systems have been devised for assuring the best possible lighting conditions in schoolrooms. And floors often have to be chosen in accordance with these requirements. The working surface (book, desk, etc.) is usually the reference point. In one system, for instance, this point has been assigned a reflectance value of 70%. For ideal seeing conditions, floors should have reflectivity values not greater than that of the reference point and not less than one-third of this value. With the exception of Cork Tile and Custom Vinyl Cork Tile all Armstrong floors are available in a wide range of colors that meet these requirements.

Assistance for architects

Your Armstrong Architectural-Builder Consultant will be glad to help you choose the floors best for any project. Since Armstrong makes all types of resilient floors, he is not biased towards any one type and can make unprejudiced recommendations. Call him at your Armstrong District Office. Or write to Armstrong Cork Company, Floor Division, 1606 Sage St., Lancaster, Pa.



FLOOR DIVISION . LANCASTER, PENNSYLVANIA

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Write for details about HAWS-KRAMER "Silent-Service" and see the unit in actual operation at our display booth at the convention.



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CURTAIN WALL panels faced with Weldwood Glasweld and used as opaque glazing-a new concept in permanent exterior color. Weldwood Glasweld panels answer the need for a flat, economical, and highly durable facing.

GLASWELD – a colorfast inorganic panel to inspire fresh ideas in building design

Here is an attractive solution to the problems of beauty, durability, and economy in building design. Weldwood Glasweld is a completely inorganic exterior-grade steamcured reinforced asbestos panel with a permanent allmineral enameled surface. It is *guaranteed* colorfast, fully weatherproof, and incombustible. An effective moisture barrier, it will not rot or warp, is easy to keep clean, has a high strength/weight ratio, and has high resistance to chemicals and abrasion.

Suitable for exterior use such as fascia panel components, soffits, and canopy ceilings, Glasweld has countless interior possibilities, as well. Bathroom walls, fixed and movable partitions, wainscoting, kitchen counter tops and sliding cabinet doors, and dinette tops



of Glasweld suggest just a few of its uses. Select from its variety of patterns and more than 30 standard colors.

Weldwood Glasweld in 48" x 96" panels comes in stock thicknesses: $\frac{1}{8}$ ", $\frac{3}{16}$ ", $\frac{1}{4}$ ", and $\frac{5}{16}$ ". Prices and delivery on special sizes and thicknesses on request. For specifications and installation data, mail the coupon.

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INSIDE, the new Thinline air conditioner panel can be painted or papered to blend in with room décor. Easy-to-reach controls are hidden from view.



OUTSIDE, the Built-in Thinline has a "no-see-through" aluminum grille. It can be painted to match exterior. From street, it has a neat, built-in look.



New General Electric Built-in Thinline Solves more builder problems than any other air conditioning system

Designed specifically for home builders. The new Built-in Thinline's aluminum case is exactly as high as two building blocks with mortar, six courses of standard brick, or five courses of jumbo brick. Case fits between a standard two-stud width. Unit actually becomes part of the wall.

Problem SOLVED!

Cuts on-site costs-Your workmen build case into the wall

during construction-slide the unit into place when the building is finished. No ductwork or plumbing needed.

Problem SOLVED!

Preserves beauty of home-Inside panel can be painted or papered to match interior. It blends with room décor! Outside grille can be painted to match exterior.

Problem SOLVED!

Flexible-You can now air condition as little or as much as you need to assure a quick, profitable sale.

Problem SOLVED!

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Powerful, but quiet !- One model, packing up to 10,000 BTU's*

is enough to cool the large rooms in an average-sized house. A second complementary model, with extremely low noise level, is ideal for bedroom use.

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SPECIFICATIONS

	MODEL	NUMBER	
	R4355	R4755	
BTU/hr. — ASRE Cooling Ca	pacity 5300	9500	
Voltage	230	230	
Amperage (namep	late) 5.0	6.9	
Watts (ASRE)	1000	1575	
Height of cabinet.	155/8″	15%	
Depth	12''	167/16''	
Width	26″	26″	
Depth of Louvers	17/8''	1 7⁄8′′	

*Cooling capacities are tested and rated in compliance with NEMA Publication No. CN1-1958, and are stated in British Thermal Units.

Stop in at Booth 22 Visit General Electric's exhibit-Booth 22 at the AIA convention. See the new Built-In Thinline Air Conditioner and the new General Electric Thermaline unit that both heats and cools for perfect year-round comfort. General Electric Co., Room Air Conditioner, Department, Appliance Park, Louisville 1, Kentucky.

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Bilco Special Service Doors are the architect's logical answer to access problems. He can choose from a wide range of standard units, or call for doors custom-engineered to his specifications.

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See our catalog in Sweet's or write for complete information



The Bilco Company, Dept. A26, New Haven, Conn., U.S.A.

Wherever vertical access is required, a Bilco door will do the job better.

For the tough tests of school service the choice is CRANE

Few installations test the quality of plumbing equipment so mercilessly as do schools. It is in such service that Crane plumbing proves its superior worth. Here Crane quality means economy—the economy that results from rugged construction, a design which permits easy cleaning and maintenance. Here, too, the advanced styling of Crane plumbing equipment helps keep schools modern for years to come.

The broad Crane line offers plumbing equipment for every unit of the school, as well as valves and fittings which assure enduring dependability of the hidden parts. That is why so many architects specify Crane plumbing for new or remodeled school buildings.

> This smartly designed yet rugged Crane Waterfall drinking fountain has elevated bubbler for maximum sanitation . . . automatic stream regulator and vandalproof base.

See Exhibit Booth 66



A cleansing spray—not a stream emerges from the *Dial-ese Neu-Spray* supply fitting of this vitreous china Crane *Norwich* lavatory.



With its bevel-paneled shelf back and modern trim, this Crane Oxford vitreous china lavatory combines beauty and durability.



An excellent choice for faculty rest rooms and dormitories is this Crane *Westland* vitreous china counter-top lavatory.



Tamperproof and exceptionally sturdy, the Crane *Wall*-type shower head gives a heavy shower, covering entire body.



Whirlpool flushing action assures thorough cleanliness with the Crane *Whirlton* siphon jet closet. Modern, elongated rim.



Crane *Placidus* closet has whirlpool, quiet-action bowl and flush valve that minimize noise. Has elongated rim, open front seat.



Classroom convenience: Crane Classroom combination drinking fountain-sink of acid-resisting porcelain enamel cast iron.



Hygienic principles govern the design of this Crane *Correcto* wall-hung urinal with its vigorous flushing and clean-out trap.



Dial-ese controls are a feature of all Crane plumbing. These exclusive controls close with water pressure, not against it. All working parts contained in one replaceable unit.

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69

A fresh new design concept for windows-the "vertical look"!



Flexalum Verticals with aluminum louvers that rotate add a new dimension to window design—height! Windows look taller, more dramatic in perfect step with today's clean linear look in building design. They have important functional advantages, too. You can have diffused sunlight, complete privacy or anything in between. A single control cord rotates the louvers smoothly, quietly to any angle... draws the Verticals openor closed. There's no cleaning or maintenance problem, either. Dust can't cling to the smooth vertical surfaces. And Flexalum's special baked enamel finish can't chip, rust, peel or fade. Include Flexalum Verticals in your plans for the future.

Hexalum verticals

with aluminum louvers that rotate.

For name of your nearest Flexalum manufacturer, write: Bridgeport Brass Company, Hunter Douglas Division, 405 Lexington Avenue, New York 17, New York See new Flexalum Verticals, new Flexalum Woven Aluminum at Booth No. 28.
ALL-COPPER

plumbing chosen for new Butte hospital because it cost no more — saved space — offered economies in maintenance



WATER SUPPLY AND SANITARY DRAINAGE. Roughed-in piping system for rest rooms and therapy service shows how compact assemblies of copper tube and solder-joint fittings save valuable floor and overhead space. General Contractor was Dan J. Mooney, Butte, Mont.

The \$2,100,000 Silver Bow County Hospital, Butte, Montana, is the first major public building in the state to have all-copper plumbing—for sanitary drainage lines, water supply, and heating.

What the architect says: "In specifying materials to be used in a building, we feel it incumbent on the architect to select those materials that have longer life and contribute to low maintenance costs. For this reason, we selected copper tube for all plumbing lines in Silver Bow County Hospital. In a hospital there are many plumbing lines; they are all concealed; and the use of less durable materials would not give true economy in the operation of the building." Norman J. Hamill, Norman J. Hamill & Associates, A.I.A., Butte, Montane, and Idaho Falls, Idaho.

What the plumbing contractor says: "In a hospital, intricate systems are the rule rather than the exception and the use of copper in Silver Bow County Hospital made it possible to complete all lines with greater ease and speed than would have been possible with other materials.... Copper tube requires less space in par-



HEATING SYSTEM: Copper tube piping for hot-water heating system, awaiting installation of boilers. Over 6 miles of Anaconda copper tube in sizes up to 6" and about 10,000 Anaconda wrought-copper and castbrass solder-joint fittings for plumbing and heating system supplied through M & L Supply Co., Inc., plumbing wholesaler, Butte, Mont.

titions and other areas of concentrated services. Its use also made it possible to fabricate bends, connections, etc., at a workbench with the result that final installations were made in one operation with a minimum of effort. . . . Particularly in hard-to-get-at places overhead, copper's lighter weight than other materials was a factor that appealed to us." Floyd J. Stewart, Reardon Plumbing & Heating Co., Butte, Montana.

For more information on ALL-COPPER plumbing, write: The American Brass Company, Waterbury 20, Conn. In Canada: Anaconda American Brass Ltd., New Toronto, Ont.



Available through Plumbing Wholesalers

See Exhibit Booth 49





Sigma Alpha Epsilon House, West Lafayette, Ind. Architect: Warren D. Marshall, W. Lafaye

Waxman Clinic, Kansas City, Mo. ts: Curti nd Cow

Dubuque, Iowa

Check WINDOW UNITS, Double-hung, Awning, Casements, Basement, Storm and Screen. CABINETS, Kitchen, Multiple use, Wardrobes, Storage and Vanity-Lavatory. DOORS, Exterior, Interior, Screens and Combination. For complete information on BILT-WELL Products see Sweet's Architectural 17c/Car and 24b/Car, or Sweet's Light Construction 6c/Car and 12a/Car Build Well 17c/

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WOOD V WORK

Job Mercer County High School, Harrodsburg, Ky. Architects: Meriwether, Marye and Associates



St. John Lutheran Grade School, Libby, Montana Architects: Eddy, Carlson & James, Spokane, Wash.





Alpha Chi Omega Sorority, West Lafayette, Ind. Architects: Walter Scholer and Associates, Lafayette

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The Cadet Field House, at an advanced stage of construction. Hillyard Gym Seal and Finish were chosen for all 8 Academy Gymnasiums, 12 Handball Courts, 12 Squash Courts.

General Contractors for Phys. Ed. buildings: T. C. Bateson, Dallas. Flooring Contractor: Superior Floor Company, Colorado Springs.



THE REAL PROPERTY.

Hillyard Seal and Finish were chosen for more than 1,000,000 square feet of oak flooring in 1200 units of Capehart Housing on Academy grounds.

General Contractors: Del E. Webb Constr. Co., Phoenix, and Rubinstein Constr. Co. Flooring Contractor: Superior Floor Company, Colorado Springs.







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FRESH AIR SUPPLY or RELIEF ROOF EXHAUSTERS



FRESH AIR SUPPLY or RELIEF VENT INLETS

Base constructed in any size to accommodate roof opening. Furnished in MOLDED REINFORCED FIBERGLASS. Aluminum, mild steel or copper also available. Specify type construction "R C " units may be used as GRAVITY VENTS.



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FRESH AIR SUPPLY or RELIEF VENT INLETS

Similar in appearance to AIRMPELER "BCB" ROOF EXHAUST-ERS. Designed with square or rectangular inlets. Supplied in MOLDED REINFORCED FIBERGLASS. Copper, aluminum and mild steel also available. Specify type construction.

AIRXPELER and AIRMPELER units illustrated have identical—140 square inch—inlet areas in varied heights and designs. AIRMPELER Gooseneck design available only in aluminum, mild steel and copper.

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For more detailed and complete information on units illustrated and other AIRXPELER and AIRMPELER ventilating equipment see Sweets 20 c Amm, or write for Bulletin 100.

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for modern hospitals

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See Our Display—Booth 43—in June 1959 AIA Building Product Exhibition, New Orleans, La.





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See Exhibit Booth 5

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Ridgewood Elementary School, Beaverton, Oregon. Architect: James C. Gardiner, Portland, Oregon. Contractor: Sterner Construction Company, Portland.



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FOR GIMBEL'S new Wisconsin store

Patterned Panels Mo-Sai

The design effect varies with the time of day, as light and shadow play on the patterned panels of Gimbel's new suburban store at Mayfair Shopping Center, Wauwatosa, Wisconsin. These panels are made of Mo-Sai-the truly versatile architectural facing that can be cast in an infinite variety of sizes and shapes, colors and textures.

The Mo-Sai panels on the Gimbel's store are made with a beautiful white quartz aggregate that is exposed to its full beauty and texture by the special Mo-Sai process. These Mo-Sai curtain wall panels, erected by the manufacturer, were quickly and easily anchored to the masonry back-up wall.

For more information about the economy and versatility of Mo-Sai exposed aggregate panels, call or write any of the Mo-Sai associates.

See Versatility of Design, Color and Texture in the Mo-Sai Associates booth (No. 72) at the A.I.A. convention at the Roosevelt Hotel, New Orleans, June 22-26.

> Architects: Grasshold-Johnson & Associates, Milwaukee, Wis. Welton Becket & Associates, Los Angeles, Calif.

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THE 1959 NATIONAL HONOR AWARDS

REPORT OF THE JURY

The undersigned jury met in Washington from April 1 to 3 inclusive to judge 332 entries submitted by architects from across the United States; they represented buildings of all types and of great range of size.

After a preliminary screening of all submittals by each member of the Jury, followed by careful deliberation over a number of designs chosen for final consideration, the Jury selected five buildings for First Honor Awards and ten for Awards of Merit. In this selection, the Jury was guided by the following criteria:

Architectural distinction was of primary importance. The design had to be an outstanding example of good architecture and had to represent a quality of work that stood out above the great volume of competent performances by architects exhibited in the competition.

The totality of the solution was another guiding factor. The design of the building submitted had to express a comprehensive solution to all problems confronting the architect. The planning had to offer a good answer to the functional needs; the structural design had to be well integrated and the visual treatment had to produce an impressive and beautiful building.

The character of the design further influenced the choice. A building had to express a certain spirit and convey an atmosphere in keeping with its use; its appearance had to be a truthful representation of the structural method and the materials used; the architectural treatment had to show the skill and care of the architect in handling the composition and its elements.

The Jury searched for examples that indicated a trend of development in architectural style and the utilization of new structural techniques or materials. The Jury observed a general aim of architects to make buildings richer in their appearance and to give them a certain human quality as a reaction against the more austere functional expression associated with earlier modern styles.

The competition for Honor Awards suggested the submission of individual buildings by their architects. In several cases, the structures appearing in the submittals were related to a treatment of the grounds that enriched the architectural composition. Occasionally, a large building group was presented that served one purpose, like research, industrial production, or education. Unfortunately, no examples were provided to show the architect's concern for the diverse social and economic problems occurring in the redevelopment of urban centers or in the design of residential neighborhoods. Future competitions should invite submittals from the teams of architects and developers engaged in these tasks.

> Dean Walter Gordon Albert S. Golemon Vincent G. Kling Harry Weese Walter F. Bogner, Chairman

Concordia Senior College, Fort Wayne, Ind. BUILDING: ARCHITECTS: Eero Saarinen & Associates OWNERS: Lutheran Church, Missouri Synod Severud-Elstad-Krueger STRUCTURAL ENGINEERS: Associates Samuel R. Lewis & Associates MECHANICAL ENGINEER: LANDSCAPE ARCHITECT: Dan Kiley GENERAL CONTRACTOR FOR CENTRAL GROUP: Wermuth, Inc. GENERAL CONTRACTOR FOR CHAPEL, GYM, DORMS: Hagerman Construction Corporation





ARCHITECT'S COMMENT:

The site plan for this small college for divinity students recalls a North European village, in which the chapel, the central and all-important symbol, is placed on the highest spot with the other buildings grouped around it. The black pitched roof, used on all the buildings for unity of expression, reaches its most dramatized and emphatic expression in the chapel.

COMMENT BY THE JURY:

Great architectural quality was obtained through simple means. The building expressed the religious spirit through the great calm, dignity, and power of its architecture.



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BUILDING:	McGregor	Memorial Community Conference Center, Detroit, Mich.
ARCHITECTS:		Minoru Yamasaki & Associates
OWNERS:		Wayne State University
ENGINEERS:		Ammann & Whitney
CONTRACTOR:		Darin & Armstrong, Inc.
Photo by Baltaza	r Korab	

ARCHITECT'S COMMENT:

The Building contains several meeting rooms of varied sizes with enough flexibility to accommodate different groups. All meeting rooms open to a skylit 2-story lobby. Kitchen facilities are provided in each floor and when in full use can serve up to 500 persons.

We chose the concrete folded slab for interest of form and of silhouette against the sky. We set the glass walls behind the columns to achieve a pattern of sun and shadow. We filled the spaces between the columns with ornamental sunshades of aluminum.

The building is placed on a platform to gain importance. The space between this and the surrounding buildings is filled with a sunken garden in which there are pools planted with water lilies and lotus, and granite edged, white graveled islands to serve as outdoor exhibit areas for sculpture.

This Building serves as a symbolic gateway to the University. It is also a meeting ground between the Community and the University where ideas can be provoked and exchanged.





COMMENT BY THE JURY:

An ornamental structure enriched by beautiful gardens and pools. The design showed great discipline in its adherence to symmetry; a new type of ornament was derived from the skillful handling of new structural media. 81

Central Service Facility, Spokane, Wash. BUILDING: ARCHITECTS: Kenneth W. Brooks, Bruce M. Walker Washington Water Power Company OWNERS: STRUCTURAL William W. Wilson, Jack M. Lyerla ENGINEER: MECHANICAL ENGINEER: Kendall M. Wood Associates LANDSCAPE ARCHITECT: Lawrence Halprin Johnson-Busboom-Rauh GENERAL CONTRACTOR: Photo by Morley Baer



ARCHITECT'S COMMENT:

The Owner-with shops, warehouses, storage yards and offices in thirteen different locations throughout the city-asked the architects and their consultants to consolidate all of these facilities at a new site. Every square foot of the 28 acre project was developed through consultation with the architects to reflect a continuity of design and a unity of materials in an Owner-Architect teamwork effort to produce a com*plete* project—from the 40-ton crane to electric releases for executive doors; from landscape sprinkling with heat-pump discharge water to setting up planting schedules for annuals in flower beds and pots; from custom designed transformer storage pads to custom designed dining tables.

COMMENT BY THE JURY:

A utilitarian building group dominated by an effective office structure of refreshingly simple form and faced by a well-proportioned and neatly-detailed curtain wall. The beautiful effect of the structures was aided by a well-handled landscape treatment.







BUILDING:

ARCHITECTS: ASSOCIATE ARCHITECT: OWNERS: STRUCTURAL ENGINEER: MECHANICAL ENGINEER: GENERAL

Zeckendorf Plaza Development, Denver, Colo. I. M. Pei & Associates Ketchum & Sharp

Webb & Knapp, Inc. Weiskopf & Pickworth Jaros, Baum & Bolles

CONTRACTOR: Webb & Knapp Construction Corporation Photo by Warren Reynolds





ARCHITECT'S COMMENT:

The Department Store and Garage are a part of a two-block complex which will soon include a 900 room hotel. Parking area with a capacity of 1800 to 2000 cars will serve the entire development with a direct connection to the hotel at a lower level which has a motor entrance for hotel guests. Department Store customers have elevator service from parking area to any floor of the store. A bridge across Court Place Street will connect the Second Floor of the Department Store to the Main Registration and Convention Floor of the hotel. The thin shell concrete structure serves as the Main Entrance and Boutique Shop for the Department Store. Since heavy structures in Denver must be supported on a shale formation some 40 to 50 feet below street level, it was considered economically feasible to excavate to that level. The five floors and basement of the Department Store and three garage levels rest directly on the rock.

Since the site of the development is remembered as Court House Square, which for many years was a public park, one corner of the site has been reserved for planting and public use. In the winter, a near regulation size ice skating rink is in operation. In the summer, this same area is converted into a sidewalk cafe.

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COMMENT BY THE JURY:

A simple and large building mass accompanied by the rich sculptural form of an appendage surrounded by outdoor features for the enjoyment of the public in a crowded downtown area.

 BUILDING:
 Diaz-Simon Pediatric Clinic, New Orleans, La.

 ARCHITECTS:
 Colbert & Lowrey & Associates

 OWNERS:
 Drs. Joseph A. Diaz & Henry G. Simon

 STRUCTURAL ENGINEER:
 Ogle & Rosenbaum

 CONTRACTOR:
 John W. Waters

 Photo by Frank Lotz Miller





COMMENT BY THE JURY:

A simple and architecturally effective building on which a direct and well-composed facade created a fine street appearance.

ARCHITECT'S COMMENT:

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Site with thirty-five foot frontage and one hundred twenty-five foot depth was to house four pediatricians and include maximum car parking required by off-street parking ordinance. Entire structure including architectural fees cost \$44,000 plus \$15,000 site cost. Cost per square foot of enclosed area was \$18.00.

Alley along site was used for driveway. Minimum required front-yard setback was utilized as sculptural court.





BUILDING:	Tourist Center, Silver Springs, Fla.
ARCHITECT:	Victor A. Lundy
OWNERS:	Ray, Davidson & Ray
CONTRACTOR:	John Rasmussen
Photo by Alexandre Geo	orges

ARCHITECT'S COMMENT:

This group of structures—a curved structure (echoing the curve of the water basin) with shops on the ground floor and offices in a partial second floor; a restaurant and banquet hall building; a boat dock; and a series of interconnecting, covered walkways;—serves this popular tourist resort in Florida, one of whose main attractions consists of rides in glass-bottomed boats to view the wonders of subterranean life through the crystal clear waters. This group was designed to replace wood buildings that had been destroyed by fire.

One of the problems was moving great crowds of people past the shops, to the boat docks, out of the hot sun and rain. There is a cool shelter of a wide new promenade, where gift and service stores are skylighted by a long curving strip of blue, heatabsorbent glass. To avoid pedestrian traffic jams, the popular soda and photosupply shops are completely opened to the walk through slide-up partitions. The shopping arcade and the nearby restaurant building both echo the curve of the covered boat dock.

The restaurant building, located near the main highway to attract transients as well as sightseers, has a dining room and coffee shop for from 250 to 300 on the ground floor and a banquet hall above that accommodates 500.



COMMENTS BY THE JURY ON THE AWARDS OF MERIT

The Jury selected two outstanding schools for their differing approaches to the solution of the problem. In one, located in Texas, the Jury found a beautiful campus development with buildings and grounds that must bring joy to the pupils and teachers. In contrast to the spreading layout, a school in Michigan offered attractive qualities in a highly compact plan with classrooms to both sides of corridors. Here, the architect succeeded in making an efficient structure pleasant in appearance by attractive entrance porches and glazed corridor roofs. A shopping center in the State of Washington showed a beautiful handling of barrelled vaults that gave the exterior of the building effectiveness and provided the interior with a pleasing ceiling form.

The Awards of Merit also included two religious buildings—a Methodist church in Louisiana and a synagogue in Texas. The architects of both building complexes succeeded in creating religious quality through the honest and simple treatment of the architectural elements. In the residential field, a few houses were given awards for the individuality and unusual character of their design. The Mile High Center of Denver received its award as one of the first commercial structures in the heart of a city to provide an open ground area with fountains and trees for the benefit of the building and its neighbors. An Award of Merit was given to a tourist center of Florida, where the architect created great beauty in a type of structure in which it is frequently lacking.



BUILDING: Temple Emanu-El, Dallas, Texas ARCHITECTS: Howard R. Meyer & Max M. Sandfield, Associated OWNER: Temple Emanu-El CONSULTING ARCHITECT: William W. Wurster, FAIA GENERAL CONTRACTOR: J. E. Morgan & Sons Photo by Ulric Meisel





ARCHITECT'S COMMENT:

Built on an 18-acre tract at a busy street intersection, the plan was conceived as one "turned within" to obscure the neighboring local retail area and heavy traffic. The building stands in a grove of trees planted in a forty-foot square grid. Within this pattern of trees are roads, walks and parking areas.

(Architect's Comment Continued)

The requirements of the 1500 family congregation for a flexible seating arrangement were met by planning 750 seats within the 83 ft. diameter circle of the Sanctuary that could be expanded to 1000 seats within the 110 ft. square encompassing the circle for special services. Further expansion for the high holy day services to seat 2000 was obtained by opening the folding wall between the Sanctuary and the 1000seat Auditorium.



BUILDING: Benjar ARCHITECTS: M OWNERS: CONTRACTOR: Photo by Baltazar Korab

Benjamin Franklin Jr. High School, Wayne, Mich. Minoru Yamasaki & Associates Wayne Community Schools Darin & Armstrong, Inc.



(Architect's Comment Continued) ing by a vaulted plastic canopy. The common rooms, such as gym, auditorium-cafeteria, homemaking, shop, art, library and administrative offices, open into a wide central corridor which is skylit and called "Main Street."

"Main Street" is lined with windows looking into each of the activities rooms and faces courts filled with blossoming trees and flowering plants. Down the center there are display cases and benches. "Main Street" is painted with lively colors and bold, gay signs, like those in a shopping street, mark the rooms. The same stimulating environment provides the community with a facility to develop its recreation and adult education programs.

ARCHITECT'S COMMENT:

Our attempt in this solution was to give the students in junior high school the type of space in which they could develop the pupil-pupil relationship in contrast to the pupilteacher relation so important in elementary grades. We built it like a public square—a community center —with a central space which the children will use as a meeting place. The classrooms are organized in blocks of six each in four smaller buildings, linked to the main build-



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 BUILDING:
 San Angelo Central High School, San Angelo, Texas

 ARCHITECTS:
 Caudill, Rowlett & Scott

 ASSOCIATE ARCHITECT:
 Max D. Lovett

 OWNERS:
 Board of Trustees, San Angelo Independent School District

 MECHANICAL AND ELECTRICAL
 J. W. Hall, Jr.

 GENERAL CONTRACTOR:
 Rose Construction Company

 Photo by Ulric Meisel
 Image: Contractor



ARCHITECT'S COMMENT:

Design a central high school to accommodate 2,000 students, on a beautiful, 30 acre site in a growing community.

Exploit the potential of the rolling site. Although near the business center of town, the school site enjoys quiet isolation, located on the wooded banks of a river and bounded by residential sections and a park.

Decentralize the school by having separate buildings for sophomore, junior and senior academic studies thereby grouping students of a similar age. These students may mingle with other age groups in buildings scheduled for electives and other activities.





(Architect's Comment Continued)

Consider flexibility of interior spaces so that they may be altered to fit future programs.

Plan for year round and extended time use for future educational programs.

A campus plan was developed which:

Zones academic areas from the noisy activity areas.

Disperses student traffic, with a minimum of congestion.

Locates individual buildings at different levels, making the most of the rolling site.

Creates outdoor spaces between buildings—the mall, courts, and terraces—for social, aesthetic and academic values.



BUILDING: ARCHITECT: OWNERS: LANDSCAPE ARCHITECT: ENGINEER: CONTRACTOR: Photo by Ernest Braun Residence, Medford, Ore. George T. Rockrise Mr. & Mrs. Dunbar Carpenter Lawrence Halprin William B. Gilbert Dunbar Carpenter





ARCHITECT'S COMMENT:

Clients: Husband, wife and three children.

Occupation: raising chickens, growing pears.

Site: Rogue River Valley, Oregon. A general flat-topped hill rising 300 ft. above owner's orchards, views in all directions (except northeast blocked by grove of trees).

Climate: Many hot, dry summer days, many below-freezing days; in winter, heavy rains.

Program: Living and Dining Rooms suitable for intimate gatherings or large parties. Centrally located kitchen. Bedroom wing to have maximum privacy. Large family room for family dining, children's play and work. Guest room to serve as office and den—generous porches and covered access from outside.

Solution: Plan arranged in hollow "U" with major rooms towards best view and orientation. Bedrooms in east wing for morning sun and view privacy. Kitchen between two dining areas and serves north and south terraces. All service and storage facilities grouped around carport entrance. Loggias and covered walkway provide covered access and semienclosed atrium as contrast to circumferential view. Porch and trellis areas provide varied outdoor dining and lounging areas.

 BUILDING:
 Tradewell Market, Burien, Wash.

 ARCHITECT:
 Welton Becket

 OWNER:
 and Associates

 Tradewell Stores, Inc. of Pacific Gamble Robinson Company

 ASSOCIATE ARCHITECT:
 Rushmore & Woodman

 STRUCTURAL ENGINEER:
 Richard R. Bradshaw

 CONTRACTOR:
 Jentoft & Forbes

 Photo by Charles R. Pearson







ARCHITECT'S COMMENT:

Client called for a design scheme that would be a prototype for some 25 proposed markets. Scheme was also to be a trademark so that their markets would be quickly and favorably identified, at the same time variable in size. These markets are now doing much more business than originally forecast, trademark has been established, and markets are flexibly sized by adding or removing one or more thin-shell concrete vaults. With all interior areas easily accessible, maintenance problems are minimal.



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generation approved

Mr. & Mrs. Richard Beattie August Nelson

Photo by Ezra Stoller

OWNERS:

BUILDER:





ARCHITECT'S COMMENT:

Owner has two teen-age children whose rooms have been placed into a separate wing with its own entrance.

BUILDING:	Mile High Center, Denver, Col.
ARCHITECT:	I. M. Pei & Associates
ASSOCIATE ARCHITECT:	Kahn & Jacobs
OWNERS: Webb & K	napp, George A. Fuller Company
STRUCTURAL	
ENGINEERS:	Severud-Elstad-Krueger Associates
MECHANICAL ENGINEER	: Jaros, Baum & Bolles
GENERAL CONTRACTOR:	George A. Fuller Company
Photo by Ezra Stoller	





(Architect's Comment Continued) piping for all circulation lines with a separate heating and refrigeration plant to maintain proper water temperatures. The site has a twelve foot difference in elevation from Broadway to Lincoln Street.

ARCHITECT'S COMMENT:

O w n e r required approximately 400,000 square feet of office building to rent at rates higher than competitive space in Denver. An existing three-story concrete structure on the north edge of the site was completely remodeled for a bank tenant. The reinforced concrete structure on the upper terrace was designed to house transportation ticket offices. At the lower level shops and a restaurant overlook the pools. The pools are stocked with Rocky Mountain trout, making it necessary to install plastic



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BUILDING:	Residence, New Canaan, Conn.
ARCHITECT:	John Black Lee
OWNERS:	Mr. & Mrs. John Black Lee
LANDSCAPE ARCHITECT:	Paschall Campbell
BUILDER:	Ernest R. Rau
Photo by Molitor and Lisanti	, Inc.



ARCHITECT'S COMMENT:

This house is a study in symmetric proportion. Two children's balance with another bedroom and study at either side of a $31' \times 31'$ (10'6''high) central area. The large central room, lit by two glass walls and a full perimeter clerestory, integrates the family and provides areas for all group activities—living, dining, kitchen, and entry. The kitchen itself, designed as an island space dividing element, serves also to define and organize the room.



(Architect's Comment Continued)

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A classically conceived veranda, to which all rooms have direct access by means of sliding glass walls, runs around the house without interruption. Its perpendicular columns, in conjunction with the surrounding pines, give a unique serenity and repose to the balanced, horizontal lines of the house.

BUILDING: ARCHITECTS: OWNERS: ENGINEERS: CONTRACTOR:

Gretna Methodist Church, Gretna, La. Lawrence and Saunders Gretna Methodist Church Ellzey & Estopinal Richard Goodyear





ARCHITECT'S COMMENT:

Previous building burned down and owners had no opportunity to buy additional property inasmuch as there are houses to the rear and right. Existing lot is 80' x 120' and it was necessary to get the entire church on this area and still fulfill the program in a one story building.



THE VALUE OF THE GENERAL CONDITIONS

LAST YEAR the Executive Director of the Institute received a letter from a member who stated that it had been his practice to reference the AIA General Conditions in his specifications, instead of actually binding copies in, and including a "Supplementary General Conditions" setting forth modifications of the Standard General Conditions. He asked permission to write the various clauses of the Standard General Conditions into his own specifications, making any modifications he felt advisable for that particular job.

The Executive Director sent the letter to William Stanley Parker, FAIA, Consultant to the Institute on Contract Procedure. As a matter of interest to all members, Mr. Parker's reply is quoted below:

"The Institute asks me to answer your letter in which you request permission for certain privileges in the use of portions of the AIA Standard General Conditions. Any such permission would have to come from the Executive Director of the Institute, so all I can do is to express my personal opinion as to whether what you wish to do is desirable from the point of view of the Institute and its Standard Documents.

"In my opinion any such permission given to one member of the Institute would have to be equally available to all members. If this were done and came to be the general practice, it seems to me the value of the General Conditions would be almost entirely destroyed. They would become merely a suggested group of provisions that Architects could quote so far as they desired. This would make the copyright practically valueless to the Institute, which has spent much time and money, and freely-given service of many of its members for vears, in an effort to create a document of service to its members. It would also tend to defeat the standard character of the General Conditions as a whole which are a carefully inter-related group of provisions.

"It seems to me, therefore, that what you suggest is not in the interest of the Institute or the profession or the construction industry; and I must so report to Mr. Purves who will receive a copy of this letter.

"It seems to me the proper way to use the General Conditions is to bind them in to each set of the Contract documents, a system used by many architects. A Boston Architect who does a great deal of school work, where open public bidding is required, which means a large number of bidders, told me he always bound in the General Conditions in all sets of specifications.

"Members buying the General Conditions from the AIA in lots of 100 or more get a 25% discount from the unit price of 35c, making the cost per set 24¼c. Sixty copies for a million dollar school job would cost \$15.15. That hardly indicates a burdensome addition to the Architect's costs on such a job. The net profit over and above printing and mailing and other overhead costs involved in handling the documents is not great but in the aggregate it is an important return to the Institute for this service that it renders its members.

"This factor of cost is only a part of the reason why the documents should be bound in to all copies of the documents submitted to contractors and subcontractors engaged in submitting bids. New bidders are constantly coming into the construction market. It is not reasonable to expect all of them and their employees to know by heart all the standard General Conditions by which their bids are to be bound. Also each job is likely to have some Supplementary General Conditions that will amend one or more of the standard articles in order to conform to some necesary local job condition. In order to see clearly what this change involves it should be possible to check the amendment against the standard article. In my opinion it is unreasonable merely to tell the bidder where he can see a copy of the standard article. It should be immediately available to him in the copy of the specifications with which he is working.

"The General Conditions constitute one of the important services that a member receives as a result of his membership in the Institute. They are recognized by all elements in the construction industry as the proper standard basis for construction contracts. They should be studied with much more care and understanding than they often appear to be by many architects, in order to prevent undesirable amendments in Supplementary General Conditions.

"It is my conviction, therefore, that for their own protection and that of their Clients, Architects should adopt the use of the AIA General Conditions as a regular part of their contract documents, bind them in to all sets, and amend them only after very careful study."



J. Roy Carroll, Jr.

Here is a neighbor's eye view of the Director of the Middle Atlantic District—The story of his professional career from student days to the head of one of Philadelphia's most successful firms.

BY JOHN KELLEY MURPHY Community Relations Manager, Public Relations Department, Pennsylvania Railroad.

Philadelphia International Airport Terminal.



Sometimes I'm not sure I like being a neighbor of J. Roy Carroll's. Just when I have decided that the lawn can go hang and nothing is as important as a nap—there is Carroll, getting things done with a *joie de vivre* that is positively contagious.

Roy will tell you he has been just plain lucky in his career. If luck is compounded of enthusiasm, friendliness, talent and the intellectual capacity to make the most of these assets, then let's not quibble—he *has* been lucky.

He is the Carroll of Carroll, Grisdale & Van Alen, with offices at Six Penn Center Plaza in Philadelphia. Founded in 1946 with John Thomas Grisdale and William L. Van Alen as partners, the firm's first large commission was the Philadelphia International Airport Terminal which, with a Freight Annex and other additions, cost more than eight million dollars.

Other jobs in the Philadelphia area have included the Youth Study Center Building on the Parkway, Virus Research Laboratories for Children's Hospital, a multi-story building for the Child Guidance Clinic, various warehouses, shops, manufacturing plants, a field house for Haverford College, dormitory buildings for La Salle College and for the Law School of the University of Pennsylvania, an elementary school for the City of Philadelphia, and the Philadelphia State Office Building executed in association with two other architectural firms.

Among work presently under construction is a Student Union Building for La Salle, a 600-unit low-rent multi-story housing project in Philadelphia, the Bucks County Courthouse, a Community Center in Salisbury, Maryland, and a manufacturing plant outside Philadelphia.

With Holabird & Root & Burgee, of Chicago, CG&VA are architects for the Federal Office Building No. 10 on the Mall in Washington, D. C. Its floor area of 1.5 million square feet makes it the Philadelphia firm's largest building commission.

The "C" of CG&VA was lucky in one respect. A father who had received no formal education beyond grade school, but who studied New Testament Greek and Latin while learning to be an engineer, saw that young Roy was entered as a 16-year old freshman at the University of Pennsylvania. The course: chemical engineering.

Here, something other than luck took over. At any rate, Roy's frequent absences from laboratory classes, his drawings for the undergraduate humorous magazine, plus reports of chemistry experiments which were consistently well illustrated but too often faulty in their conclusions—all led a perceptive faculty advisor (who was also a chemistry instructor and frequent tennis opponent) to suggest transfer to the course in architecture. On a June day when the academic line filed by and it was announced that Roy had been awarded a graduate fellowship in Architecture, his old advisor winked knowingly at him.

While at the University, Roy was a second medalist in the Second Paris Prize Preliminary Competition and one of five finalists for the John Stewardson Memorial Scholarship and the American Academy at Rome Fellowship. (Three of the Rome Prize finalists were from U. of P.)

In 1932, Roy and Don Barthelme anticipated the jet aircraft of today. Their designs in the Lehigh Airports Competition were published, but the jury decided that they required too great an area—the runways were 3,200 feet long! Significantly, their drawings appeared the same year in the Berlin publication *Neuzeitlicher Verkehrsbau*.

On his graduation in 1928, Roy accepted a job with Harry Sternfeld who had been his senior design critic and who planned to enter a series of national competitions. Sternfeld had been a Paris Prize winner of 1911, and a student of Paul Philippe Cret's.

Even after 1929, the Sternfeld firm kept busy, and it did enter a number of national competitions. It was one of five firms selected in open competition to enter the final phase in the design of the Tomb of the Unknown Soldier. Its preliminary drawings showed the arches and retaining wall fronting the Memorial Amphitheatre replaced by a broad, monumental flight of steps. The jury thought so well of this feature that it was made mandatory in the final competition. "Our big planning idea was no longer unique in the finals," Roy recalls. "Our office placed second."

The firm also placed second in two more competitions: the Girard College Chapel in Philadelphia and the Harrodsburg Monument Competition conducted by the War Department. By this time Roy was an associate, and the firm hopefully entered the Appomattox Monument Competition, winning first place on a unanimous first ballot by the jury. Congress had appropriated money to hold the competition, but not to build the monument. It is still unbuilt. But the firm's competition record led to a large federal job.

One day in 1935, Roy decided to open his own office. Next day he met an architect for whom he had worked two summers in his undergraduate days, and described his plans. The erstwhile employer handed him a key to his office, said he was leaving next day for Iraq and they could talk about rent on his return. "All I had to do," say Carroll, "was to have the phone reconnected and I was in business." Roy has returned on occasion to the halls of academe. A year after completing graduate work, he was an instructor in design at Pennsylvania. He became assistant professor and executive chairman of the design staff when Otto Faelten came to Penn. Roy speaks of working with the great Yale critic as an exhilarating experience. "Some day," he says, "this legendary character should be set to paper by his friends at M.I.T., Yale, Penn, the Beaux Arts Society and the profession of architecture."

In 1940, Roy was awarded the Henry Gillette Woodman Scholarship and visited architects throughout the United States to obtain advice on setting up a course in Industrial Architecture at Pennsylvania.

Meantime, his own design practice included buildings for the Naval Aircraft Factory, aluminum forge shops, a radar laboratory, an overhaul and repair shop for lighter-than-air craft, and studies of expansion of navy airfields.

All three partners in CG&VA are active in and out of the Institute. Grisdale is currently president of the Child Study Center of the Pennsylvania Hospital, and Van Alen is president of Children's Hospital of Philadelphia. Carroll has been president of various organizations, the General Alumni Board of the University of Pennsylvania, his own class of 1926, the Housing and Planning Council of Delaware County, and the Trustees of the Swarthmore Presbyterian Church.

As Board member of the Pennsylvania Association of Architects, Roy was chairman of the Reorganization Committee during the unification year, and became first president of the Pennsylvania Society of Architects. He has also been president of the Philadelphia AIA Chapter, and has served on many committees at local, state and national levels.

Roy lives in a wonderful home of his own design in Swarthmore, with a lovely wife, three charming children, a collie and a cocker spaniel. He thinks he's lucky. In some ways, I guess maybe he is. So are his neighbors.

Residence of J. Roy Carroll, Jr., FAIA.



JOURNAL OF THE AIA



From the Executive Director's Desk:

Complying with the exacting schedule laid down by our Editor, this article is written six weeks ahead of publication. So I commence my labors as the cherry blossoms make themselves apparent. Those of you who know Washington recall the bitter week when the cherry blossoms actually do appear and defy the lingering March winds—the early sleets of April, to grasp at the occasional bursts of bright cold sunshine of the still elusive spring.

In more than one year the beautiful cup magnolias in the park between the North and South Interior buildings, which appear slightly ahead of the cherry blossoms and can be seen from the Octagon windows, push through heavy mantles of white damp snow, giving the square the appearance of a store "boughten" birthday cake. The fascinating effect is likely to enjoy short glory for the arrangement, though daring, is not acceptable to nature. She quickly turns the pink petals a dirty tobacco brown.

For one Cherry Blossom Festival I was enticed into acting as a judge of floats, an occupation more alluring in prospect than in performance. One sits in the wide open reviewing stand watching the drum majorettes prance up the street to wheel and face the judges. They stand there in their finery, blue with cold, covered with goose-pimples, for which occupational disease the drum majorettes' costume affords ample opportunity of infection.

The formalized strutting of our majorettes has given this country what it has been seeking for years, the only genuine American Ballet, developed naturally by the people for the people. Ballroom dancing is European, the Cake Walk and its derivatives are African, the non frenetic (old fashioned) stage dancing is cosmopolitan, the current frenetic which came apparently from the St. Vitus building on the State grounds is, I trust, just on its way through town. The stage ballet is Russian via the Place de l'Opera (or is it the other way around), so it remains for the drum majorette to bring to us the American Dance in an unadulterated 100% form.

This year the Festival and the City were blessed momentarily with two or three days to delight the tourists, to favor the season and to bring a rare touch of accuracy to travel agency advertising. The temperature was warm, the sun was out, the air languid, but not too much so, and then came the inevitable sleet storm and with a vengeance. So spring started in normal Washington style. This year spring brought with it an additional invasion and one of pomp and circumstance. The entire NATO galaxy convened in Washington to be, it seemed from the papers, wined, dined and otherwise feted. Its deliberations and progress for the most part went unheeded, so firmly has the Cherry Blossom Festival fixed itself upon us.

I am mildly curious about, though not hostile to, the plethora of devotional days and weeks which our Capital enjoys, a number which probably exceeds the officially designated distractions of the average American city. We have cherry blossom week, candy makers week, flag week, weeks to honor everybody and everything. I think at one time we even had an architects week, though we have no statistics to indicate to what extent that devotional period replenished the coffers of the profession. Now the interesting aspect of Washington as a forum of festivities lies in the fact that it has no voice in the matter. Its jolifications are ordained for it by the representatives of good people from all over.

Washington is governed not only by the laws enacted by the Congress, but also by protocol, criteria and fast forming tradition. It is well to learn the rules and taboos when one works here, especially when engaged in construction industry association work. There are two cardinal rules, the observance of which can assist any newcomer to this City in his dealings with his fellowman whatever his organization may be. The first, never double cross. You can oppose, you can battle, you can argue, you can even get angry (risking usually only your own blood pressure) but the double cross, once committed, is never forgiven.

The second rule, never to get personal. When one lives continually with those with whom one contends the avoidance of being personal is essential. This life of constant avoidance of personalities while engaged in the business of people leads one to look with compassion on those who purvey vituperation gentle or otherwise, usually for the gratification of their egos. Doubtless the foregoing will raise the eyebrows of a reader or two of my article in the February issue, but the promoters of an outfit whose purpose is so patent does not merit the regard which one holds for the sincere people who represent the established organizations of the construction industry.

There was an occasion some years ago in the height of the many housing battles, when representatives of the interested organizations in the construction industry mutually agreed to stay away from a certain public official until the issue had been decided. You can imagine our indignation when we read in the paper one morning that the representative of one of the leading organizations had made a deal with that official of seemingly immediate benefit to his constituency and to the detriment of all others in the industry. The victory was momentary but the effect of the wound took a long time to heal. The perpetrator found himself ostracized and unwelcome at industry gatherings, thus handicapping his own people.

These thoughts were written in part in a stalled plane on the New Orleans airstrip from which city I was returning after having spoken on retained percentages to the National Association of Architectural Metal Manufacturers convention. I had approached the Convention with some trepidation for I knew I was representing the point of view of the profession and the position of the Institute in a matter of considerable concern to others in the construction industry and I realized that I would be a minority of one. However, I found myself thoroughly enjoying the occasion.

It is a challenge to match your wits with others, especially when outnumbered. Once the introductory statements have been made and the debate is on with questions flying thick and fast, there comes the awareness that this is a game to be played by a practiced hand and the encounter can be just as thrilling as any athletic contest.

The issue is interesting. By their estimate the producers have retained against them some \$5

billion which they allow is a vast sum of money and one, which, if freed, would give impetus to the construction industry and thereby relief to the architects.

Nor for the moment leaving aside the rights and wrongs, I could not help but reflect even during the debate that in terms of the current economy \$5 billion is not such a vast sum, and I venture to say that its liberalization when spread evenly over the country would have little or no impact. There is also a feeling substantiated by the reports which we gain from our Board of Directors and from other sources, that the construction industry is not in desperate straits, that the architectural profession is doing all right.

The question of retained percentages is one uppermost in the minds of subcontractors and certain of the producers. It is apparently not one that greatly disturbs the general contractors. It is a question which disturbs the architectural profession scarcely at all. In fact, architects are so busy, so engrossed with their own practices, that their surplus attention is for the most part devoted where it should be—to their professional organization, the welfare of the profession, and the advancement of their communities. So naturally, the architect takes the point of view that the question of retained percentages is chiefly the concern of those whose percentages have been retained.

We agreed that the Institute should hold a meeting at its headquarters on the subject and even chair the meeting. I was glad to offer them the facilities of the Octagon for the purpose of further discussion and debate. In view of our position in the construction industry, this is entirely appropriate. It would be well too for a larger audience than myself to hear the arguments of other elements in the industry.

I was very much impressed by the esteem and respect with which The American Institute of Architects is now regarded. There is no hesitancy in disclosing the fact that the Institute is looked upon as the key organization and the architect the key man in the problem. The industry looks our way for the nod. In rising up to its role of leadership, the Institute will give heed to all complaints, all statements, and evaluate with the utmost justice and fairness the pleas and requests of our fellow toilers in the greatest industry in this country.

Filmund R. Turns

Gifts to Library-July through December, 1958

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HAROLD D. HAUF

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- GORHAM PHILLIPS STEVENS, HOn. FAIA His "Restorations of Classical Buildings".
- SVAZ CESKOSLOVENSKYCH ARCHITEKTO Its "Town Planning in Czechoslovakia 1958".
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- GEORGE L. WALLING Eleven foreign architectural magazines.

BOOK REVIEWS

Our Architectural Confusion. Essays on Architecture. By Louis LaBeaume. 128 pp. 5¹/₄" x 8". New York: 1959: Vantage Press, Inc. \$3.00

This is the third book by a Fellow of the Institute to cross this reviewer's desk this season. The attainment of Fellowship must do several things to the erstwhile "too-busy-to-read" architect—limber him up, relax his thinking muscles and induce a pontifical condescension.

Not that Mr. LaBeaume's book is either pontifical or condescendinghe couldn't be. It's very charming, in fact, and often amusing. As might be expected, he "views with alarm" the trend of today's architecture, but with a pleasant mellowness. We would hazard a guess that some of the essays were written some years ago, for some of them, such as " 'The New Architecture'-A Moral Tale,' seems not quite fair today. Many an ardent young contemporary designer would give his eye-teeth to get hold of a genuine 1740 New Hampshire house! It is the genuineness that matters.

In "The Decay of Architectural Morale" he is at times writing as though it were twenty years ago, and at other times making statements with which today's sensitive architect must agree. For instance, balance "To refer to architecture as an art is no longer comme il faut. In fact, it is precisely verboten, and any chance reference to beauty makes the average architect hang his head in shame." against "There was gusto, virility and vigor in much of the work of the generation just past. The exuberant practice of architecture went on all over America. . .

One of the better essays is "Our Expanding Vocabulary: What Shall We Do With It?" Speaking of a poet's vocabulary of words, and the architect's of building materials, he says "No salesman knocks at the poet's door to sell him a new word a word spelled in the phonetic manner. Progress passes him by and concentrates all its fury on the architect. . . Of course, masquerade parties are a lot of fun, but really, producers keep architects running around with their tongues hanging out. Truly, as producers, their ingenuity is beyond praise. They have made it possible for architects to achieve the most absurd and fantastic results."

The author is always warm and good-humored—these two qualities being the essence of his own personality. It is a pleasant little book to slip into one's pocket when going on a journey. J.w.

Gaudi. By Henry-Russell Hitchcock. 48 pp. 7¹/₂" x 10". photos. New York: 1957: Museum of Modern Art. \$1.95

Issued in connection with an exhibition of Gaudi work at the Museum of Modern Art, this is the first monograph in English devoted to his work. Prof. Hitchcock, wellknown architectural historian, selected the material included in the exhibit and prepared the text for this volume.

Antoni Gaudi (1852-1926) was a Catalan architect whose conspicuous works are a characteristic of Barcelona. With a renewal of interest in an architecture of expressive, plastic form has come a revival of interest in Gaudi's work. He employed strong sculptural modelling in facades and interiors, his wrought iron grills and gates are highly imaginative and bits of broken colored glass and tile are combined into colorful mosaics.

With a unique style that may well be considered bizarre, Gaudi produced an art "too personal to be 'revived' or imitated." Eighty-five illustrations with perceptive text offer a good introduction to his work.

G.E.P.

Modern Gardens. By Peter Shepheard. 144 pp. illus. 9" x 11¹/4". New York: Praeger: 1958: \$9.50

While this is the third impression of a book, first published in 1953 by The Architectural Press (London), it remains a useful and stimulating collection of photographs and drawings of modern gardens from all over the western world.

The author is an architect and planner as well as a topflight British landscape architect. His twelve-page introductory essay, decorated marginally by some of his own quite fine pen-and-inks of plants, says a few things very well: emphasis on "... understanding of what can and cannot be done with the space between buildings ..." and his warning to the uninstructed and overconfident concerning "... cultivated plants, all of which can, more or less easily, be made to look ugly in certain situations ..."

Many of the more than forty gardens illustrated (nearly 300 photos and drawings) are undated. Some drawings lack graphic scales but general dimensions usually can be estimated.

A most important point is Mr. Shepheard's recognition of the need for study of the third dimension in gardens—relative height of vegetation, grades and points-of-view—and its effect on the perspectives of walls, walks and curvilinear elements. E.P.

Die Architektonische Gross-

form. By Otto Ernst Schweizer. 200 pp. illus. 8¹/₂" x 10³/₄". Karlsruhe: 1957: Verlag G. Braun. New York: Wittenborn: \$7.50

This monograph on the work of O. E. Schweizer, the influential German architect and teacher, covers his pioneering prewar classics, the Nuremberg and Vienna stadiums (1927-1929), etc., then after some fifteen years of eloquent silence begins again about 1950 and carries into 1957, with theaters, Freiburg University and various housing and city planning studies.

The title implies a theory of largescale architectural form which is illustrated in 120 pages of good photographs, plans and project models all of the author's work—sandwiched between two sets of brief essays in German, with handsome marginal sketches and diagrams.

The first group of essays includes that for which the book is titled accompanied by articles on the modern great city, open spaces, green areas, proportion and form. The three concluding essays all date from 1935 and concern an organic, architectonic approach to architecture and city planning.

A noteworthy clarity and excellence of formal proportion characterizes Schweizer's work although some may find the larger-scale projects inhumanly regimented. Another reviewer of this book has used the word "serene" and that is the visual impression of some of these enormous arrangements. The sociological implications might suggest "tranquilized" as more accurate—should we say Miltown-planning? E.P.

THE EDITOR'S ASIDES

All of a sudden, it's "status." Fortune for May, Look for April 28th and Horizon for May-and there may well be others-have feature articles on the new consciousness of status which has risen in our "classless" society. We are accustomed to the automobile as an expression of status, but now Vance Packard in Look points out how widely the advertising techniques of the automobile industry have been taken over by the speculative builders and developers, selling their "hand-crafted manorial estates" on the basis of prestige-snob appeal-rather than on their merits as honest houses.

The dwellers in these spawling acres of "homes," in price ranges from \$9,990 to \$29,990, according to Mr. Packard, have an established pecking order, as firmly entrenched as in any chicken yard. This status is based upon occupation rather than upon income or either social or racial background. The same caste system exists, based upon rank, in most large corporations, and woe betide the innocent junior executive who proudly displays the thermos carafe and the desk set with a twopen pen holder given him by his loving mother!

Since members of the architectural profession are invariably such modest men, I am sure thousands must be blushing with secret pride at their rating as given by the research division of the Chicago Tribune. In a sort of status totem pole, sixty or seventy occupations are divided into seven "status groups," graded from highest to lowest. Being one of the more immodest followers of Vitruvius, Vanbrughius and Gropius, I note with glee that the first occupation mentioned in the "Highest Status Group" is "Licensed architect"!

But before we get too puffed up, I must point out that the survey was made in Chicago, based upon occupations in that area. So perhaps it is just the Chicago Chapter who will need the new hats. Come to think of it, certainly such surveys would produce differing results in different types of communities there are still plenty of areas which have no architect, but none without their "doctor, lawyer, merchant, chief," the later probably meaning nowadays "banker" rather than mayor.

Well, it was nice while it lasted, and I hope it does us some good.

Daniel Seligman, in Fortune, sees the traditional pyramid which has historically represented the class structure of society, as now being more properly a diamond-shaped form, standing on its point, with the most highly skilled occupation (the architect?) at the top and the lowest skill (the street cleaner, according to the Chicago Trib) at the bottom. The great bulging middle represents the vast group of white collar and blue collar workers, the semi-skilled and the semi-professionals, who are now in the after-tax cash income groups between \$5,000 and \$10,000. These are the people who can and do spend their money on status symbols-chromium-plated monsters, Cape Cod split-Ranch-level houses with "antique" brick-, "crafted" stone-, "hand-rived" shake-, "textured" stucco-veneered fronts (all on one house) and plain asbestos shingle backs, full of all the electrical conveniences and nuisances GE and Westinghouse have been able to contrive

But it's wonderful. These people (and how many of us must not honestly count ourselves members of this group, regardless of our *Tribune* rating) are buying boats, going camping, taking Florida vacations, even going to Europe, on a scale never before dreamed of. Furthermore, they're buying books and prints and hi-fis too, and not entirely as intellectual status-symbols.

Mr. Seligman sees us being homogenized, rather than separated by a snobbery of occupational skills. Yet instead of deploring this as creeping conformity, he feels that the individual's own opportunities to live in diverse fashions are being immeasurably expanded, which, it seems to me, should lead to the ultimate goal of happiness, a richer and fuller life.

The article in Horizon, I must admit. I haven't read yet for my copy hasn't come. But I have received a press release with some interesting quotes in it. The author, Stimson Bullitt, is of the same opinion as the Look author. He says that people of talent, now scattered throughout our social system, will rise to the upper class. However, only by continued effort will they be able to retain their privileged status, and their possibily undeserving children won't inherit it. Meanwhile, the untalented will drop to the bottom of the social scalewhich is tough.

And what has all this got to do with architecture? A heck of a lot, I think. First, it affects us as individuals because we are members of a profession in which the majority of members are exceedingly talented and highly skilled-and must become increasingly more so in the future if we are to cope with the planning and technical complexities ahead of us. It's nice to be top man on the Chicago Tribune's totem pole, but that precarious position can be maintained only by increasing our abilities and skills. Secondly, it will affect the types of buildings we are called upon to design and the thinking we must put into them. Our client, the public, is not only better fed, better clothed and better housed than ever before. but he is better informed and will increasingly make higher demands upon our skills and be more intelligently critical of what we produce for him. We have got to review-and we are doing so-our educational and apprenticeship methods; we have got to retread some old tires; and we have got to assume and hold the position of leadership in the re-planning of the entire physical background of a new society.

BTRG

The Library Building PART 2

Clinton H. Cowgill, FAIA

and George E. Pettengill

Part II. The first part of this article appeared in the May issue. A complete bibliography is available on request.

University Libraries:

University libraries are distinguished from libraries for independent colleges by the greater number of specialized fields represented by book collections and the greater emphasis upon research and graduate study.

Two questions of policy are important: (1) Shall all books be kept in a central library or shall some be kept in a number of branch libraries; and (2) shall students be admitted to the stacks?

The advantages are:

For a centralized library:

ease of administration

more efficiency in services rendered

better access of students and teachers to a broader field of knowledge

For a branch-library system:

a closer acquaintance of students with books in fields of their special interest

greater convenience for teachers in making use of library materials

The arguments regarding open stacks are:

for:

greater use of books greater ease in selection reduced number of pages needed

against:

increased losses and damage

Answers to both of these questions may be influenced by the size of the book collection and the size and composition of the student body. Burchard¹⁸ says: 1,500,000 books is a maximum for one library. The number of books in the central library may be reduced by storing inactive books. In the average library 2/3 of the books receive only 10% of the calls. Required procedures must be simple in order to induce students to make use of material available.

AIA Building Type Reference Guide (BTRG 3-3)

To make the use of books inviting, most university libraries, now have open stacks. At the Lamont Library, Harvard's undergraduate library, reader circulation is through the stacks which are arranged to form alcoves. Like supermarkets, libraries accept unavoidable losses in order to promote access to their goods.

Six examples of university libraries are outstanding. The New Undergraduate Library at the University of Michigan, the John M. Olin Library at Washington University of St. Louis, the Lamont Library at Harvard University and the Wayne University Library are representative of the larger buildings; the libraries at DePauw University, and Georgia Institute of Technology are representative of the smaller.

In recent years, the library system of the University of Michigan has become overtaxed by the needs of a rapidly expanding undergraduate population. Consequently, in 1956, the university undertook to provide students in their first through fourth years with a separate building de-

signed to meet their special needs and to offer such students an oncampus cultural and intellectual center. This new undergraduate library was opened for service early in 1958.

Designed by Albert Kahn Associated Architects and Engineers, in close collaboration with the University Architect and the Director of Libraries of the University of Michigan, the new building is the second, and largest, separate undergraduate library in the country. Total construction cost was \$2,435,000. The building now houses approximately 60,000 volumes by the open stack method. Planned capacity, however, is for a book collection of 125,000 to 150,-000 volumes. At present, technical services are performed in the general library. Eventually, books for the professional schools will be placed in divisional libraries in each professional school's quarters.

The library's contemporary exterior design and pleasant interior decor characterize the structure's informality, crispness, and friendliness. Of reinforced concrete, flat slab construction, the building is a four-story and basement structure, completely arconditioned, and provides 145,036 square feet of floor space. The main lobby, located at the north end of the ground floor, is paved with bluestone and is separated from an adjoining reading area by a glass partition. The loan desk, catalog and office

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¹⁸ John E. Burchard, Library Consultant in Planning the University Library Building; Princeton University Press. 1949.



EDRICH-BLESSING

Entrance detail of Undergraduate Library, University of Michigan. Albert Kahn Associated Architects and Engineers, Inc.

are to the right of the lobby entrance, and a combination exhibit and lounge area (a portion of which projects from the front of the building) is to the left. Two elevators and a broad stairway give access to upper floors and basement. Planned for the utmost in flexibility, the module of the building permits easy rearrangement of free-standing bookcases in any direction and will accommodate different and varied seating arrangements without major change. One third of the 2,250 seats provided are in comfortable upholstered chairs.

Special features of the building include:

An exhibit area in the main entrance lobby where the Museum of Art can display various items of interest;

A print study gallery on the west side of the fourth floor where students can view and study photographs and color prints;

Individual group study rooms, designed to accommodate six students, on each floor;

Since smoking is permitted in most areas in the building, non-smoking rooms are provided on every floor except the fourth;

Typing rooms where students may rent typewriters or bring their own;

Reading rooms in the basement for blind students;

A film preview room to which students and faculty may take films, mainly educational, and have them shown; An audio room equipped with 72 turntables, each for use by two persons with earphones, a control booth with AM and FM radio receivers, 2 tape playback machines and 10 turntables. Anything played in the control booth can be tuned in at the 72 turntables or piped into a multi-purpose room above.

A unique element in the undergraduate library is the multi-purpose room which is located on the third floor and seats 200. This room can be split into two smaller rooms by means of a folding partition and is equipped with a film screen projector, a public address system, and a pegboard on one wall for exhibitions.

Although large in size, the spacious reading areas provided throughout are designed to create an atmosphere of friendliness. The informal and varied seating arrangements, the screening, and the free-standing bookcases are planned to afford ease of use and create a sense of privacy, quiet and freedom from distraction.

A colorful room in the basement houses a lounge area which offers welcome diversion from studying in a coffee club atmosphere.

Lighting was a major element in the design of the undergraduate library and dictated exhaustive predesign studies to determine exact library activities and lighting requirements. The installation achieved as a result of these studies permits maximum flexibility of furniture and bookstack arrangements by providing lighting intensities above recom-

mended practice, coupled with low brightness, throughout. In the main entrance lobby, continuous rows of cool white fluorescent tubes, mounted above a plastic louver grid, produce 50 footcandles of uniform illmination which enhances the attractiveness of the lobby and creates an appearance of spaciousness. At night, this luminous ceiling serves as an attractive design feature identifying the entrance to the building. General reading rooms, 160 feet long by 90 feet wide, are located on all floors from the basement through the fourth. Special merit pertains to the lighting of these areas where wellproportioned spacing is achieved and the "bowling alley" effect, normally prevalent in long rooms, is eliminated by the installation of rows of 4-foot fixtures, on 6-foot centers, running the short dimension of the rooms, with a 3-foot gap between each 12foot length. The fixtures are of the recessed fluorescent troffer type with diffuse alzac reflectors and grooved aluminum baffles which blend to become an inconspicuous part of the ceiling. The intensity of the installation, presently averaging 65 to 70 footcandles, together with the low brightness of the fixtures, provides good visual comfort to minimize eye strain and fatigue. The design of the lighting for the multi-purpose room, located on the third floor, is similarly multi-purpose in character. Composed of both incandescent and fluorescent units, each separately dimmer-controlled to permit all combinations of the two types of lighting, the installation provides 50 footcandles of illumination when both systems are in service. According to university personnel, students now spend four to five hours reading and studying in this library without experiencing physical fatigue or eye strain.

Heating is accomplished by a zoned forced hot water system which serves convector radiation used for perimeter heating. The supply main is run at the first floor ceiling with up-feed risers and the return main at the

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fourth floor ceiling. Low-pressure steam is supplied to heat exchangers from an underground central distribution main located in a tunnel near the building. This steam is used for the hot water heating system, the airconditioning and ventilating system and the absorption refrigeration machine as well as a few cabinet heaters at critical locations such as entrances. The airconditioning is basically a conventional low-velocity system using a modular arrangement of perforated ceiling panels for supply. The space above the suspended ceiling is used as an exhaust plenum. Cooling and dehumidification are accomplished by means of chilled water coils. The chilled water is produced by an absorption refrigeration machine from which the heat is removed by condenser water circulated through a cooling tower. The cooling tower is located in a court between the fan rooms on the fourth floor level. This location minimizes the objectionable appearance of a roof installation.

The plumbing system is comprised generally of gravity soil, waste and storm water piping with the basement areas being pumped. A recirculating hot-water system originates with a central underground hot-water main near the building and serves all required fixtures. Two circulating mechanically-cooled concentric-tube drinking water systems supply the majority of the drinking fountains in the building with several scattered "in-the-wall" type package coolers.

The fourth floor fan room includes all heaters for the hot-water heating system and airconditioning and ventilation fans. A basement machine room houses the absorption refrigeration machine, condenser water and chilled water pumps, condensate pumps and sump pumps. An important feature of the mechanical trades design is the provision for sound control. This involved vibration-isolation mounting for equipment and piping and particular attention to the design of the basic components and systems.

The library at Washington Univer-

sity and the Lamont Library differ greatly in exterior appearance, but are similar in conception and general scheme. The design of the former was chosen by means of an approved AIA Competition, with six invited competitors. The winning design was praised for its "greatest accessibility of readers to books" and the "superior arrangement of the main floor." In addition to a basement and subbasement, the building has three stories above ground and a penthouse for mechanical equipment. The building, with its garden court, is surrounded by a covered way and terrace. Story heights are approximately ten feet.

The acknowledged watchword in the design of the Lamont¹⁹ building was accessibility. The entrance lobby is midway and centrally located horizontally. Two stories below the entrance level each have two tiers of stacks; two tiers are in the entrance story; and two tiers are in the upper floors. Reading spaces are near the stacks on every floor except the subbasement. Supervision of this all male clientele is reported to be easier than supervision when sexes are mixed. Smoking rooms in which conversation may be less restrained are strategically located. All furniture is specially designed and is light in colorsome designed by Alvar Aalto was manufactured in Sweden and assembled here. Book cases are in colored enamel-old gold, dull red and gray blue. The wide entrance is inviting and the illumination of the lobby simulates daylight.

Both of these buildings had to harmonize with nearby buildings; the Lamont with that of Harvard Yard, the Olin with the fine Gothic of Cope and Stewardson. The bulk of both buildings was too great for their sites, so both were pushed down into the ground. The Lamont Library is for undergraduate students and supplements the service of the main library.

In the design of the Wayne University Library,²⁰ "wisdom was the end, knowledge the means." For students and teachers to gain knowledge, they must read books—so the guiding principle was *optimum access*. An unusual feature is the division of the library into sub-libraries for six subjects: General—Law—Humanities—Social Science—Education— Science and Technology. Each of these has its own core, circulation desk, reference desk, catalog, book conveyor, and pneumatic tube connection; but each uses other services in common. This building, which accommodates 2,200 readers and 800,-000 volumes, is airconditioned.

The stated objectives of the De Pauw University Library are to:

- complement and round out the teaching program.
- encourage independent use of books.
- increase knowledge of

reference tools.

cultivate appreciation of books as a part of the students' life.

Square in plan, two stories and basement, of reinforced concrete (22'-8"X27' column spacing), it has space for 700 readers and 390,-000 volumes. The present ventilation system may be converted to yearround airconditioning. The reading rooms have luminous ceilings with acoustical baffles. The cost was \$1,-090,000, \$13.90/sf (\$15.90/sf including equipment).

The advantages of limited size are exemplified by the library for Georgia Institute of Technology. This compact building (185' x 100') has seats for 800 readers and shelves for 450,-000 volumes. Reading spaces, next to the high glass walls to the north, merge with stacks to the south. There are five stack floors and three stories of reading spaces. The lobby, exhibition space, music room and faculty lounge are on the ground floor; books on the humanities are next; and books on science and technology are on the upper levels. Columns are spaced 27'-0" each way. The building is completely airconditioned. The cost was \$16.57/sf and with equipment totaled \$2 million.

Arch. Rec. 105:86-95 June '49.
 Prog. Arch. 36:96-99, June '55.

University branch libraries may serve a professional school or other unit of a university.

A recent example is the Law Library for the University of Chicago,²¹ Eero Saarinen FAIA, Architect. The main reading rooms, in a high story with mezzanine, occupy the space above an ample lobby. The main stacks are in the upper floor. Classrooms (courtrooms) are included in the facilities. A pool is a feature of the entrance court. A major architectural problem was to create a contemporary character which would be at peace with the Gothic revival of adjacent buildings.

The current trend toward making books available for maximum use and the stimulation of student self-education may lead to the establishment in universities of an increasing number of branch libraries near the various specialized classrooms and laboratories.

Walter H. Kilham, Jr., FAIA, of O'Connor and Kilham, architects of the Harvey Firestone Memorial Library at Princeton University, among others, emphasizes the importance of programming and the value of the cooperation of those who expect to use the building. Guided by the broad aim "to induce the student to work for himself," it was decided to "bring together, harmoniously and in one place, the faculty, the students and the books, particularly in the fields of the humanities and social studies." Realizing that the same book may be a reference in several fields, the earlier plans, in which definite spaces were assigned to major teaching departments with their own departmental libraries, were abandoned in favor of one general collection of books equally available to all. In the end, however, the modular system facilitated locating the various departments in relatively close promixity to the groups of books in which they were most interested and, at the same time, giving them space which could be adjusted to meet future changes, as in office building planning.

Major decisions concerning the planning were for (1) "open" lofttype floors and interchangeable partitions, providing flexibility; (2) functional planning with the exterior in harmony with the building's Gothic surroundings; (3) the use of "open" stacks (which could be "closed" in the future if policy changed) so that users would be free to select books from the shelves (they would, however, be responsible for having them checked if they wished to take them out); (4) use of a design module 18 x 20 feet, 8'-4" in height, recognizing 3' stack units 41/2' on centers and ceiling heights to allow reasonable lighting and ventilation; and (5) that space for $1\frac{1}{2}$ to 2 million volumes and 1891 seats would be provided.

The Cincinnati Library²² has a browsing room with a teen-age corner facing the street near the entrance, thus popularizing use of the library by the casual reader. Offices, staff facilities, and children's room are on the third floor. Columns are spaced 21 feet by 27 feet. The building cost \$2,850,000 (\$14.90/sf).

Woodie Garber & Associates, Architects; Prog. Arch. 36:77-83; Dec. '55.

²¹ Arch. Forum 105:112-15, Aug. '56.



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Site:

An interesting recent example of the main library of a large city is the New Orleans Public Library. The designers of the building, Curtis and Davis; Goldstein, Parham and Labouisse; Favrot, Reed, Mathes and Bergman; Associated Architects, prepared the following statement:

GENERAL DESCRIPTION

The site is in the newly created Civic Center, one block south of Canal Street, at the intersection of two major thoroughfares—Loyola

THE NEW ORLEANS PUBLIC LIBRARY:

Avenue (a new north-south boulevard created as an artery into the new Civic Center) and Tulane Avenue (the principal east-west thoroughfare into the heart of the business district). The library fronts on Loyola Avenue, facing a complex of newly constructed, multi-storied office buildings, but adequately separated by the generous dimensions of Loyola Avenue, which is an eightlane street divided by a fifty-foot wide landscaped "neutral ground." The one-block vista toward Canal Street includes the fifty-foot landscaped "neutral ground" and terminates on a large fountain and sculpture, while the south vista is across a one block long landscaped mall to the new fifteen-story City Hall. The

site abuts a bus terminal and parking concourse to the west.

These features of the site—adjacent office buildings, nearby department stores and landscaped vistas in three directions—had important influences on the architectural design.

Philosophy and Design:

In addition to the standard program of requirements, the architects were given the task of designing a building which would be convenient and inviting for patrons to use, economical for the Library Board to operate from the functional standpoint, with a minimum number of operating staff for supervision; and which would allow forever-changing re-
quirements in service to the public without basic structural alteration. It was also desired to have the building sufficiently unique so that, in itself, it would stimulate and encourage cultural development through the use of library services. To accomplish the latter, it was decided that the building design should take a direction similar to that used for department stores-that the building should literally be a "department store for books," whose showcases would be the walls of the building, with the interior of the library as the constantly changing display. The interior, while retaining dignity, should reflect an informal atmosphere, with a visual flow which would encourage "shopping" through the various departments. To achieve this informality and yet retain the dignity which should characterize this type of public building was the challenge.

This challenge was met by reflecting informality in departmental arrangements of furniture, stacks display, color, etc., while the architecture, in contrast, is formal, symmetrical and above all restrained.

While the glass walls solved the problem of "showcases," they posed problems in daylighting, glare and distraction control from the patron's viewpoint, as well as tremendous solar load from the airconditioning standpoint.

These important criteria led to the postulate that the sun must be screened so that it would neither touch nor penetrate the walls of the building after 9:30 AM during any season of the year. This was quickly modified to exclude the west elevation during the winter months only, because of the low altitude of the sun in this latitude (31° 30' at noon, December 22nd). Research into available systems of solar control such as motorized louvers soon revealed that the desired function, plus proper esthetic effect, could only be achieved in a custom designed product. Drawing on a local heritage of ornamental and cast iron lace work, it was conceived that a similar treatment in depth could be designed in the modern idiom, and not only control the sun, but achieve the desired esthetic effect. The resulting design provided an imposing, yet light facade treatment which envelopes the glass and lends a striking appearance to the building. On the west wall, a 12% to 15% light transmission glass was used for the winter condition mentioned above to reduce sun intensity to a tolerable level. Glarereducing glass was used behind the remainder of the sun screen to control sunlight reflected from the surfaces of the screen itself and from adjacent buildings.

To provide economy of operation and flexibility of service, all public areas are planned as zones within the total space, defined only by furniture and movable stacks. This allows for increase or decrease, addition or subtraction of departments without alteration. Also, the large interrupted spaces can be supervised by a smaller staff. With all departments exposed to view, the public is encouraged to wander and "shop" for the various services offered. This is implemented by a modular ceiling system of integrated lighting with acoustic materials and airconditioning supply. This system allows enclosures where necessary, on a 4'-0" module, without adjustment to the lighting or airconditioning. This same openness of plan is achieved vertically by an opening in the second floor at the center of the building which extends the first floor space through to the ceiling of the second floor. At the second floor level, the walls of this opening are glazed and flanked on two sides by landscaped patios open to the sky, and on one end by the Arts and Music Department. This spatial penetration is a central feature which is further punctuated by a bridge leading from the front elevators to the mezzanine which extends across the rear of the building. The bridge and the mezzanine glass are enclosed for sound and airconditioning control. The bridge also serves as a central display and browsing area, with the ceiling at second floor level and the floor of the bridge having mirror image patterns of hook-eyes to which cables can be attached for display hangings.

Plan:

The plan of the library consists basically of five distinct types of elements:

PUBLIC DEPARTMENTS: business & science Louisiana general services arts & music children & young adults extension department MEETING ROOM SUITE: multipurpose room (150 sets) 2 soundproof rooms (30 each) from which radio programs can originate 2 small meeting rooms separated by a movable wall (60 sets total) CLOSED STACKS: 850,000 volumes (2 levels) ADMINISTRATION: office suite & staff lounge order,

catalog department & bindery PUBLIC LOBBY:

circulation & registration desks staff offices checkrooms with coin lockers

elevator

Within a 150' x 216' rectangle, the basic concept is zone planning for flexibility, ease of supervision and visual flow of space. This is accomplished by locating the three service cores (which contain a stair, elevator and booklift in each) along the periphery of the building. Two are located on opposite corners along the rear wall and one centrally on the front wall. The core at the front contains two elevators, one serving the Public Lobby and the other opening from the Main Reading Room for use as staff circulation only.

The three larger Public Departments—Louisiana, Business and Science and General Services—are located on the first floor, each with a centrally located main desk. At the center point, where the three departments coincide, is the Main Public Catalog and Bibliographer Center. The periodicals are located centrally against the rear wall, with indices and shelves for recent perodicals adjacent to the central booklift for delivery from the stacks below. Smoking is permitted in this area which has a separate smoke exhaust system.

The first floor is separated from the Main Lobby (and mezzanine as well) by glazed walls principally for sound control, but also to zone the airconditioning system.

The two levels of stacks are located below the first floor for immediate access by the staff and quick delivery of books by booklift. A large staff work room for the Louisiana Department is provided on the first stack level where extensive indexing of local newspapers and city documents is handled. Adjacent to this work room is the current newspaper room which is reached by patrons directly from the Main Lobby by elevator, and which is supervised from the Louisiana Work Room through glass view panels. The first stack level also contains a main service point for stack books. Books returned at the Main Lobby Desk are transported by chute and lateral belt conveyor to this service point where they are redistributed either to the stacks, or vertically to the proper department by booklift. Pneumatic tubes are also contained in this central booklift shaft which dispatches call slips to the central service point.

The mezzanine extends across the entire rear of the building and is reached by a glass-enclosed bridge at mezzanine level, served by both the Main Lobby elevators and a sculptural open stairway. The mezzanine contains Popular Reading and Young Adults and Children's Departments which, by virtue of the glazed walls, are sound isolated from the main floor departments. The bridge, in addition to its circulation function, serves as a display and browsing area. The space is enhanced by a Japanese garden, donated by the Japanese Government, located on the roof of the one-story Main Lobby which coincides with the mezzanine level. The garden is viewed through the exterior glass wall. The bridge area penetrates vertically through an opening in the second floor, extending this space upwards to the ceiling of the second floor a height of 26'-0" above the floor of the bridge. This opening is glazed on three sides at the second floor level, being flanked on the two long sides by luxuriously landscaped patios which open to the sky. This penetration affords exciting vistas from the first floor and mezzanine interior spaces and, in reverse, floods the central interior with natural lights.

The second floor is divided principally into three areas. The front of the building is divided into two by the service core, to the left being the Administration and to the right Arts and Music, while to the rear behind the two patios is the Meeting Room Suite. Again, the focal point is the penetration of the second floor which affords attractive views down 14 feet to the bridge, and 26 feet to the main floor departments on each side of the bridge.

The tropical planting and fountains in the second floor patios lend an air of leisure and relaxation to the Arts and Music Department, which is conducive to the use of these facilities.

The staff elevator of the front service core opens into the General Office Area, while the public elevator opens to a Reception Area serving both Arts and Music and the Administrative Receptionist.

At the left and right rear, the service core serves respectively the Catalog and Order Department and the Meeting Room Suite. The core at the right side serves a secondary public entrance on Tulane Avenue which allows groups of children to reach their mezzanine space without passing through the Main Lobby and, at the second floor, allows for large groups attending meetings to enter in the same way. It also allows public use of meeting rooms separately when other sections of the library are closed. This entrance is normally locked from the exterior except for scheduled use, providing one central control through the Main Lobby. Electronic signal devices advise the staff if anyone attempts to leave the library through this exit in an unauthorized manner.

Staff offices and work rooms are provided for all departments and are glass-enclosed on at least one wall for good supervision.

SPECIAL ARCHITECTURAL FEATURES

Aluminum Sun Screen:

In designing the aluminum sun screen for the New Orleans Public Library, the architects were faced with the problem of providing a sun control device which would:— 1. Be an effective barrier against penetration of the sun, providing natural diffused light without glare and reducing airconditioning load

2. Allow sufficient visibility to retain the openness characterized by the design

3. Function on three different elevations (orientations) at all seasons of the year. Only the west elevation (in the mid-winter season) could not be controlled by the sun screen. Sun is controlled here by use of a glass with a 12% to 15% light transmission

4. Be an esthetic solution.

It was evident that these varied factors would require many changes and adjustments during the design stage, and that the use of the graphical method of projecting the sun's rays would be laborious and arduous.

We therefore devised an instrument which would permit the testing of models at one-half full size. It employed a fixed light source and a rotating and tilting table upon which the model could be mounted. The use of the instrument was simple and rapid, and its results were accurate to a surprising degree.

In the case of the Library, it was necessary to keep out all sunlight on all elevations from 9:30 in the morning (the Library opens at 9:00 a.m.) through sunset. Since the sun screen is the facade of the building, scale was the first consideration in fixing the aperture size and depth of the screen. In this case, after several preliminary tests with the instrument a regular "egg-crate" of 8" squares by 6" depth was selected. The "egg-crate" offered simplicity of construction and strength, since it could be fabricated with horizontals and verticals half-notched into each other and welded. This unit was tested to determine the amount of sun penetration and its was learned that the verticals were effective on this spacing, but the horizontals were too far apart. To correct this an overlay was designed to be mounted on the outside face of the "egg-crate" which, from the sun control standpoint, was simply two small horizontal louver blades crossing the 8" x 8" aperture near the top of the

opening, resulting in a reduced spacing of horizontals. Since these two blades are closely spaced, their depth could be small and this was determined by experiment to be 31/2". For esthetic effect, it was desired not to have this smaller overlay pattern continuous; at its discontinuous points, the penetrations of sun are trapped by small horizontal fins notched into the rear of the "eggcrate." Since all of these members had to function for three different orientations and for all seasons, it was necessary to check the model for all conditions to arrive at final sizes.

Experiments in the sunlight on the final model revealed that in order to reduce glare from reflections off of the members, it was necessary to make them a deep charcoal gray in a dull finish without lacquer. To relieve the dark color, the overlay pattern will be natural aluminum. Since its reflections will be on the outer surface of the screen, there will be no reflections projected into the building.

In order that completed panels could be anodized in one operation, different alloys were used for the "egg-crate" and the "overlay." The basic screen is made of a high silicon alloy which anodizes dark gray, and the overlay is made of a standard alloy which remains "aluminum." The final product, with the playful design of the overlay reflecting from the dull background of the geometric "egg-crate" creates a very handsome illustion of lightness and dimension which greatly enhances the sun screen and the building in general.

The cost of the sun screen installed was \$160,000, of which \$125,000 was immediately offset by initial savings in airconditioning equipment. Additional savings are realized by omission of drapes and venetian blinds unnecessary.

Integrated Ceiling

Since the key word in the program for design of the library was "flexibility," it was necessary to develop a modular ceiling which would integrate lighting, acoustic and airconditioning supply. While standard systems are available which meet these requirements, the comparatively low budget of the building prevented their use, and its was decided to develop a system using available components. The basis of the system is an exposed grid of parallel aluminum bulb tees 21/2" deep and 2" wide running the 216'-0" length of the building, suspended from the structure by steel flat bars on 4'-0" centers. Ribbed perforated aluminum sheets set between tees run continuously for the length of the building, with sheets lapped one rib. On top of this sheet is one inch of fiber acoustic blanket. Although this system of perforated metal ceiling had not been used before for distribution of air conditioning, it appeared that it could be utilized. The manufacturer was contacted and he agreed to conduct tests and furnish performance data for design use. The test results were satisfactory, so this function was combined simply by creating plenums above the ceiling corresponding to zone requirements at floor level and then distributing air evenly into the plenums thru a central trunk duct.

While standard troffered fluorescent fixtures could have been utilized in this ceiling, a lower cost was achieved by framing 2'-0 x 8'-0 areas with aluminum cross tees and inserting aluminum honeycomb diffusers in lieu of the perforated aluminum sheet. A simple industrial fluorescent was then suspended in the plenum at the proper height above the diffuser. To avoid a concentration of conditioned air flowing out of the lighting fixture diffuser, a sandwich was constructed of the honeycomb and a plastic sheet held together by an edge banding frame. The final ceiling provides acoustic treatment with lighting varying from 60 FC to 100 FC depending on ceiling height. The cost of the ceiling was approximately \$2.50 per square foot installed.

Airconditioning

The airconditioning system for the New Orleans Public Library was designed to maintain temperature of 75° dry bulb summer and winter and a relative humidity between 40% and 60% throughout the year.

The library building consists of a two-story building and mezzanine above ground and two basement levels below ground. The equipment for the airconditioning of the building is all located in a machine room in the second or lowest basement level. The refrigerating equipment, boilers, control panels, pumps and switchboard are located in a machine room on the south side of the building. The air distributing equipment is located at the same level in a fan room on the west side of the building. Both the machine room and the fan room are full height rooms, extending from the first floor slab to the lowest basement level.

In the machine room are installed two automatically controlled 250-ton centrifugal refrigerating machines. Each of these is a hermetic machine consisting of compressor, water cooled condenser, water chiller and auxiliaries. The machine room also contains chilled water circulating pumps and hot water circulating pumps for circulating hot and cold water through the coils in the fan room. Condensing water pumps in the machine room circulate water through the refrigerating condensers to a cooling tower located above ground on the outside of the building. This cooling tower is of the induced draft type with wood framing and transite sides.

Heating for the entire building is



provided by two gas-fired boilers, which generate hot water for circulation through the heating coils in the air distributing units. In addition, there is a smaller heating boiler for off-hour heating of the Multi-Purpose Room and the meeting rooms. This boiler is also used during regular operating hours in the summer to supply hot water to the neating coil in the dual duct unit serving certain areas of the building.

All air distributing equipment is located in the main air equipment room along the rear wall of the building. A mixture of return air from the conditioned spaces and treated outside air from outside units is delivered to this equipment room, where the mixture is filtered, drawn through the heating or cooling coils and discharged by fans through ducts to the conditioned areas. The outside air unit draws fresh air from near the top of the building and, after this air is filtered, it is delivered through heating or cooling coils into the fan room as previously described. The air distributing equipment for the main library section is of the multi-zone, blow-through type, with a separate set of controls for each A thermostat in each zone zone. controls the temperature of air delivered to that zone by regulating the operation of dampers or water mixing valves in the heating and cooling coils.

A second air distributing equipment room is located in the front section of the building at the same level. This room contains a dual duct unit which supplies conditioned air to the Executive Offices on the second main level. Each of these offices has its own thermostat which proportions the warm air and cool air delivered to the room. Other units in the same equipment room supply conditioned air to the perimeter of the building and to the Entrance Lobby. Air is distributed around the perimeter of the building through grilles which discharge parallel to the glass. These grilles discharge either warm air or cool air, depending on the outside conditions. Outside air which is introduced to these units is pre-filtered and then heated or cooled in the same way as the outside air introduced to the main fan room.

In all outside air units, the fresh air, in addition to being filtered and cooled or heated, is dehumidified in summer and humidified in winter in order to provide the proper humidity conditions within the building. Air for the interior zones of the building is distributed through a perforated metal ventilating ceiling. The entire ceiling area is divided into separate plenums and each is equipped with a separate branch duct from the main duct supplying the zone. An exhaust system is provided for toilet areas and for areas which are subjected to excessive smoke. Booster heating coils are provided for the entrance vestibules in order to prevent the infiltration of cold air into the building in winter.

A central control system is provided in the main machine room to control the action of all automatic dampers, valves, etc., in order to provide proper conditions in the build-This control system operates ing. through a central master graphic panel, which allows the operator to observe and control conditions in any part of the building. This graphic panel permits the reading of temperatures in each area of the building and provides for remote adjustment of the temperatures if it is desired to raise or lower these temperatures. Special provision is made on the panel for indication of fire in any area of the building and for cutting off the fans in case the temperatures exceed a pre-ordained figure. On the graphic panel, the operator has a visual portraval or picture of the entire building so that he can determine what equipment is operating and what the conditions

are in any section of the building.

Electric power for the operation of the compressors, fans and pumps is obtained from New Orleans Public Service, Inc., and gas for the operation of the boilers is obtained from the same company. The system is a mixture of standard-pressure conventional duct distribution for part of the building and highpressure dual duct air distribution for other sections of the building. The duct work is provided with acoustical lining to minimize noise in the building. The main air distributing ceiling is a perforated aluminum acoustical ceiling furnished by the Reynolds Metals Company, with Fiberglas blanket above the metal panels. The air distribution has proved fully up to expectations and proper temperature conditions are being maintained without drafts in any section of the building.

Electrical

The utilization voltage for the new Main New Orleans Library is 277/480 volt, 3 phase, 4 wire wye delivered from a transformer substation adjoining the building. All power in the building for airconditioning equipment, elevators, sump pumps, etc., is 480 volts, 3 phase. The majority of lighting fixtures are fluorescent and are served at 277 volts. All receptacles and miscellaneous small power loads are fur-



nished at 120 volts through dry type step-down transformers.

The basic lighting system used throughout most of the Library consists of two 2' x 4' sections of aluminum hexcel "Honeylite" which lie in a T-rail suspension system of a metal acoustical ceiling to form a $2' \times 8'$ diffuser. Above the Honeylite is an 8 ft., 4 lamp fluorescent strip lighting source. A top reflec-

Branch Libraries:

Whenever demands upon a central public library become so great that to accommodate them adequately would require an over-large building, or where communities are developed within a city (or its metropolitan area) then the advisability of establishing branch libraries deserves consideration. The first situation may occur when a city has reached a population of 500,000 or be deferred until it has grown much larger. Wheeler and Githens 23 suggest that any reduction in space demands for a central library resulting from diversion of patrons due to the establishment of branches is offset by increased space for administration and the stimulated use of library facilities. It would appear, then that to lessen demands upon a central library, a segregated administration building would be the answer; but such a separation generally would be undesirable.

If branch libraries are established to serve the public better, rather than to reduce the load on central libraries, they may serve best in locations within divisions of the city which have demonstrated community spirit. Establishment of a branch library may also result in stimulation of that spirit. In a community having a school with facilities for adults as well as students, a school library may serve also as a branch library.

Conceivably, the entire area of a city may eventually be divided into sections, each with its branch library, but unfortunately in many cities there are sections which are isolated by traffic-ways, industrial plants or other tor plate and 45° metal sides direct virtually all the light downward through the Honeylite. The fluorescent strips are mounted approximately 8" above the diffuser and were designed to produce a maintained level of 50 to 75 footcandles, depending upon the ceiling heights.

Actual readings have indicated a level of 60 to 100 footcandles. The system produces a diffused light

barriers and which have populations too small to justify establishment of branch libraries. Such areas may be best served by bookmobiles. For economical operation, a branch library should serve a population of 30,00 or more persons.

Some of the decisions might be appropriate for other university libraries and the procedure may serve as a pattern.

City Libraries:

Public libraries may include the central library and branches. Central libraries in large cities have two principal functions: (1) direct library service by means of reading rooms, listening rooms, etc., and book circulation through its own facilities and possibly through bookmobiles; and (2) the general management of and assistance to branch libraries.

As in any large library, the functions of various parts should be obvious to the visitor, parts should be small enough (or broken into alcoves) to give a quiet, restful atmosphere. The entrance floor should contain as many of the units with noisy activities as possible. Some observers stress the desirability of privacy for users of the library, while others (Curtis and Davis for example) emphasize the promotional effect of allowing the public to see the actual users of the library so that they may emulate them.

Generally branch libraries are so small that supervision is no great problem. With the desk commanding the entrance and divisions of spaces accessible to the public marked off only by low cases or glass partitions, one person can maintain effective which is shadowless and exceedingly low in brightness and offers an excellent source of light for library use.

A typical column bay of 22' x 28' has eight 2' x 8' lighting units. Use of the relatively new 277 volt system substantially reduced copper and circuit breaker cost and held the total cost of these units installed, completely wired, to approximately \$1.20 per square foot.

control, at least during quiet periods. The smallness of branches also makes it easy to keep the scale down and to secure a homelike intimate character for the design.

J. Russell Bailey, AIA, comments as follows:

"Your statement that branch public libraries should be located near Senior High Schools may be misleading. To be sure, they should be near shoping centers and adequate parking but not necessarily near the high school. There is a danger that the branch library might become another study hall for the school rather than functioning as a library for the public. We have an example of this in Elkhart, Indiana, where the library is right across from the High School. The boys and girls take over the library during certain hours and it is difficult to carry on the functions of the rest of the library while this is happening. Of course if the school facilities are not sufficient it is a great help to the school, but quite harmful to the general public library service."

Book Storage Libraries:

College and university libraries and some central public libraries are approaching the time (and some have reached it) at which it will be necessary to eliminate some of the littleused items from their collections. On the other hand, few libraries are able to own all of the books and pamphlets which may be desired for every research problem. By pooling resources, it is possible for a group of institutions to maintain a library for the

²³ The American Public Library Building, Scribners, '41.

storage of such items in such a manner as to preserve them and make them promptly available on call.

An example is the Midwest Inter-Library Center 24 in Chicago. The first unit has space for 2,225,000 volumes and service facilities for the eventual expansion to 10,000,000 volumes. These facilities include offices, staff lounge, lobby, microfilm laboratory, work room, teletype room, receiving room, storage, loading dock and parking space for personnel on the first floor; cubicles and lounge on the second floor, and mechanical equipment in the basement. The stacks have swinging double units on both sides of fixed double units making a total of six tiers of shelves between aisles. Aisles are wide for easy use of book trucks.

For report on a special study of compact book storage, see ACRL Monographs, No. 11, Spring 1954, Association of College and Reference Libraries, Chicago.

Archives Buildings:

A very special kind of storage library is that for archives. An example is the National Archives building in Washington, D.C. Some historic documents are on display for the public, but most of them are available only to scholars in connection with historical research.

Archive libraries may be units of general or specialized libraries. Wherever archives are stored, temperature and humidity should be controlled and the space should be fireresistant.

Special Libraries:

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Special libraries are becoming increasingly important. They may be maintained for the use of specific groups, or they may be special collections within public, college, or university libraries. Some industrial corporations and government agencies maintain libraries primarily for their investigation and research divisions, and trade associations may have libraries to provide source material for promotion and for other purposes. Professional societies, such as the AIA, commonly have libraries which are primarily for the use of their members. The same may be said of learned societies and social clubs. A few private libraries are of sufficient importance to use the services of a librarian, and such facilities may be used by others than the owner.

Special collections within libraries may be specified by donors to be kept intact, or they may be established for special purposes, such as to promote interest in certain subjects. Exhibition facilities for artistic or other collections (either temporary or permanent) might be included, but some librarians consider this to be outside the normal function of libraries.

Special libraries, usually limited in size and in clientele, may have fewer problems of control. The kind of equipment needed varies widely with the character of the sponsors. Some may require shelving for large portfolios and drawings and maps; some may make use of microflm; some may have large book collections with small numbers of users; and some may need few shelves and many tables and chairs. Also the character of special libraries may be utilitarian or esthetically rich and attractive.

Small Town, County and Rural Libraries:

A community library, not a branch of a public library system of a city, may be either a small town library or a rural library. While a branch library is serviced and controlled by the central library, a small town or rural library is under the control of the local government and purchases and processing are done by its own staff. When the area to be served is large and sparsely settled, it may be best served by means of a bookmobile. Towns under 8000 in population may find it difficult to support minimal library facilities unless rural areas are included, or the public library is combined with the library of a consolidated school. Such combinations may also be desirable for towns and cities with populations of 25,000

or more. Populous counties may support public libraries in addition to libraries for schools.

Memorial Libraries:

Memorial libraries may be for colleges or universities or for municipalities. They may honor a group, the name of the donor, or the name of another. It is not necessary that the character of the building be "monumental", but generally for a memorial the esthetic is stressed and the building should be as timeless as possible both in design, and in construction and finish.

A notable example is the Grace A. Dow Memorial Library of Midland, Michigan, Alden B. Dow, FAIA, Architect. 25 Auxiliary facilities include an auditorium with large stage, and meeting rooms, exhibition rooms and lounge in the basement. Parking space is bordered by two long covered walkways. A small stack room is adjacent to the offices and work space on the main floor; the children's room is next to the control desk; and the young people's and general reading rooms are mostly visible from the desk (although the distance to the furthest corner exceeds 100 feet). There is a separate entrance to the auditorium, and the basement may be reached either from this or the main entrance. The children's room



North elevation, Undergraduate Library, Univ. of Michigan.

may be reached from the main entrance without going through other parts of the building. Adjacent to the children's reading room is a dramatically treated story-telling room

 ²⁴ Arch. Rec. 111:157-9 April '52, Shaw, Metz & Dollo, Architects.
 ²⁵ Arch. Forum 106:122-5, April '57.

with banked seats. The building is in a residential district, replacing a downtown building, and book circulation has been much larger than formerly. The interior presents a spacious, light and airy, but homelike effect.

Conclusion:

It should be reiterated that a library project deserves the collaboration of the official board (or governing body) in control, the librarian and his staff, and the architect. The site may be selected by the board, with or without the advice of the librarian and the architect. The program is normally furnished by the librarian, but the guidance of the architect and/or consulting specialists may be needed. The architect's first presentation normally consists of one or more sketches (schematics) which illustrate one or more solutions of the problem in general terms. This should be studied by the librarian and the board, or perhaps by a building committee. For comparison, other libraries (or illustrations and descriptions of them) should be examined. When the schematic sketches have been approved, the architect proceeds with more complete and detailed design studies (including structure and equipment), and when these have been approved, he prepares the construction documents. During all of



these stages, and while the building is under construction, the librarian (or whoever is designated to act for the owner) should be available to settle questions as they arise, to check the adequacy of spaces and a myriad of details, and to sign approvals when required. If a library building is well designed, with adequate provision for expansion (within 20 to 25 years), with a minimum of permanent partitions, and with accessible spaces for piping, etc., future developments and habits (of which we can only guess) should not cause early obsolescence.



Typical Reading Room, Undergraduate Library, University of Michigan.

Prepared by AIA and the American Society of Heating & Air Conditioning Engineers Subcommittee of the AIA-Engineers Joint Council

N EITHER THE "70° inside" of the theaters in the '30s nor the "10° or 12° below outside temperature" average building owner is the correct inside design condition. According to the ASHAE Comfort Chart and corroborated by practical experience, the optimum inside design temperature should be 76° F dry bulb and 50% relative humidity in summer and 75° F dry bulb and 30% relative humidity in winter. In some areas these temperatures are adjusted up or down, but in general they will hold for most any comfort conditioning system. Caution should be used in the setting of the humidity control in winter so as to prevent condensation on outside walls and windows. Some engineers design for higher inside temperatures when all of the load-producing factors are at maximum with the resultant reduction in inside temperature when the total load is not present. While this is good economy, the average occupant wants uniform temperature regardless of varying load conditions. This is particularly true of the 8-hour occupant who quickly acclimates to his office temperature and is unconcerned with outside temperature.

The basis for design is most generally the ASHAE Summer and Winter Climatic Charts which give the design temperature in common use in the area. These charts give a guide for a safe design. It is a calculated risk if outside temperatures are modified to effect economy. It is very important that all people concerned know just what variations from maximums are taken.

Local codes and ordinances frequently specify ventilation requirements for various types of occupancies. In some cases, these are given as cubic feet of outside air/minute/ occupant, or/square foot of space. In the case of people not smoking, the recommended ventilation is $7\frac{1}{2}$ and the minimum is 5 cfm. For people smoking, the recommended outside air is 40 cfm and the mini-

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mum is 25. By using chemical adsorption filters such as activated carbon, the amount of outside air may be reduced and not result in a concentration of odors and a feeling of staleness in the occupied area.

In the field of filtration there is a wide variance in cost and efficiencies. Since different areas of the country, and even different areas of a single city, have different types of dust, it is very difficult to approach the problem specifically. To evaluate filters and air cleaners properly for a particular application, two factors should be carefully weighed: (1) the degree of air cleanliness required, and (2) the disposal of the dirt after it is removed from the air. These factors affect initial costs, operating costs, and the extent of maintenance that will be required. In some cases, the first cost may be held down, but the maintenance required will increase the operating expense beyond a reasonable amount. It is fairly obvious that the better the filtration, the more the first cost, but greater is the saving in decorating, etc. Even with a good filtering system, it is possible to get bad smudges caused by induction of room air which has become soiled by traffic of many people. The manufacturers have studied the problem and have designed anti-smudge rings, but most of these merely increase the length of time before the ceiling is smudged and has to cleaned. This condition may be improved by mounting the ceiling diffuser six to eight inches below the surface.

For an airconditioning system to be satisfactory, air must be distributed without undue noise or draft, and yet there must be a noticeable circulation of air. With an air velocity within the space of less than 15'/minute, there is likely to be a feeling of closeness and people may complain of the space being stagnant. A velocity of 25-35'/minute is the most satisfactory, but velocities ranging from 20-50' are generally acceptable. Over 65'/minute is usually drafty and people complain of being too cold even though the temperature may be quite satisfactory.

Noise is a very complex problem dealing with three items: Source, path of noise, the receiver.

It is desirable to select equipment and locate it so that noise is kept to a minimum. There are very fine isolating bases composed of springs, cork, rubber, etc., which effectively isolate vibration. Air borne noises may be isolated by lining duct work or by using specially constructed sound traps for the air before it is directed to occupied areas. These methods should utilize non-combustible materials. The location of equipment away from private office, living quarters, etc., is highly desirable. In some cases, it is necessary to provide sound absorbing material on the inside of such equipment rooms to deaden these noises. With agreement between engineer, architect and client, it is good practice to wait until the equipment is operating before installing such acoustical material. While this usually requires an "extra", total cost is much less than trying to provide for it before operation begins.

Finally, in order to provide complete airconditioning at the lowest cost, attention must be paid to various items of construction such as insulation, double glazing, heat absorbing glass, reduction in glass area, proper evaluation of lighting and electrical machinery, and type of occupancy. Basically, incomplete airconditioning or that which only reduces the ambient temperature a few degrees should not be considered, since this has never been satisfactory to the occupant even though he decides in advance that this is what he wishes. You get what you pay for, there is no such thing as an acceptable second-class airconditioning job.

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* Sound Insulation of Wall, Floor, and Door Constructions. 2nd Supplement to Building Materials and Structures Rpt. 144. December 1, 1958.

Richard V. Waterhouse, Raymond D. Berendt, & Richard K. Cook. 8" x 10¹/₄", 13 pp, 10¢

Building Materials and Structures Report 144, issued in February 1955, and its first supplement, issued in February 1956, included the results of sound insulation measurements made at the National Bureau of Standards through June 1955. This second supplement gives results

for 28 building constructions obtained in the period July 1955 through December 1957.

* Selected Bibliography on Building Construction and Maintenance. Third Edition, Building Materials and Structures Rpt. 140. January 15, 1959.

U.S. Department of Commerce, National Bureau of Standards. 7³/₄" x 10¹/₄", 30 pp, 30¢

Selected references on building materials, equipment, good construction practices for new construction, and the modernization and maintenance of buildings.

*Available from Superintendent of Documents, U.S. Government Printing Office, Washington 25, D. C. (Stamps not accepted.) Code of Standard Practice for Steel Buildings and Bridges (Revised, March 10, 1959)

American Institute of Steel Construction, 101 Park Avenue, New York 17, N. Y. 6" x 9", 9 pp

Outlines in reasonable detail commonly accepted practices relating to the design, fabrication and erection of structural steel. Current issue refers to tolerances permitted in erection; clarifies responsibilities of the steel fabricator, erector and owner, with respect to the method of erection; setting of loose lintels; and adequate storage space during erection. Copies available upon request.

The New Simplified Built-Up Roofing Specifications

Chicago Roofing Contractors' Association, 20 North Wacker Drive, Chicago 6, Ill. 8" x 11", 61 pp, \$5.00

Prepared by a joint committee of the Chicago Roofing Contractors' Association and the Chicago Chapter of the Construction Specifications Institute, Inc., this publication is an attempt to provide a comprehensive roofing specification which eliminates ambiguities and inconsistencies found in many other manuals. Reference is facilitated by a series of identified tabs. Compilation of ASTM Standards on Cement (With related information.) 13th Edition

American Society for Testing Materials, 1916 Race St., Philadelphia 3, Pa. 6" x 9", paper covers, 278 pp, \$3.50

Of major assistance to users of cement in concrete structures and buildings. The general refinement of Standards by Committee C-1 on Cement is evidenced by the up-dating of 15 of the 34 Standards included. Of particular interest are revisions in the Specifications for Portland Blast-Furnace Slag Cement (C205) and the Methods of Sampling Hydraulic Cement (C183)

Installation and Maintenance of Resilient Smooth-Surface Flooring

Publications Office, National Academy of Sciences, 2101 Constitution Avenue, Washington 25, D. C., December 1958, 8¹/₂" x 11", 146 pp, \$5.00

Twelfth in a series of technical publications reporting the proceedings of research correlation conferences conducted by the Building Research Institute. Brings together in one volume the properties, methods of installation and problems of all the different types of resilient flooring on the market today. There are illustrations, diagrams and discussions of the bases on which these types of flooring are laid.

TECHNICAL NEWS

materials sciences

The American Society for Testing Materials is organizing a new Division on Materials Sciences to coordinate and intensify the development of knowledge of the fundamentals of materials. The new division, the first to be established by ASTM, will augment in depth and scope the Society's long-time objectives of promoting knowledge of engineering materials and tapping new sources of knowledge for the Society's extensive standardization activities. The division will concern itself with the collection, establishment, and publication of basic information essential in creating a better understanding of materials and their properties, and especially will help to answer "why" materials are what they are.

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CALENDAR

June 7-19: ACSA Seminar, Grindstone Lake, Wisconsin.

June 19: Salute to FHA Dinner, Sheraton-Park Hotel, Washington, D.C.

June 18-20: Library Buildings and Equipment Institute, College Park, Maryland.

June 10-13: British Architects' Conference, Cardiff, Wales.

June 22-26: AIA Annual Convention, Roosevelt Hotel, New Orleans, Louisiana.

June 30: Tile Contractors Association Convention, Chicago, Illinois.

July: Meeting of Housing Commission of the UIA, Moscow, U.S.S.R. Details of all UIA activities from M. Pierre Vago, 15 Quais Malaquais, Paris.

September 21-25: International CID Congress, Rotterdam, Holland.

September 22-23: North Central States Regional Conference, Milwaukee, Wisconsin.

September 30-October 2: Producers' Council Annual Convention, Chase-Park Plaza Hotel, St. Louis, Mo.

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October 7-9: Central States Regional Conference, Des Moines, Iowa.

October 7-14: California Council Convention, Hawaiian Village Hotel, Honolulu, T.H.

October 8-10: Northwest Regional Conference, Spokane, Washington.

October 9-11: Western Mountain Regional Conference, Western Skies Motel, Albuquerque, New Mexico.

October 13: Fourth Annual Architects' Tour of Japan. For information contact Kenneth M. Nishimoto, AIA, at 263 South Los Robles Avenue, Pasadena, Calif.

October 14-16: Texas Society of Architects Annual Convention, Austin, Texas.

October 20-30: Annual Convention, Architectural Institute of Japan, Kyoto and Osaka.

October 23-24: 14th Annual Meeting and Forum, Pennsylvania Society of Architects, Galen Hall Hotel, Wernersville, Pennsylvania.

November 16-19: BRI Fall Conferences, Shoreham Hotel, Washington, D.C.



According to notices received at The Octagon between March 27, 1959 and April 24, 1959

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COMEAU, CHESTER W., Redondo Beach, Calif.
CROWELL, C. PARKER, FAIA, Bangor, Maine
ESTEP, JOE M., Santa Monica, Calif.
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annual Building Products Register will tabulate the properties and test data of more than 1,300 product listings by over 600 manufacturers for direct pre-selection analysis. But the Register itself is only part of this unique, new AIA service. It also will include periodic reports on product behavior on completed installations, a field inspection service, and reports on new products and uses prior to the next publication in the Register. The 1959 Register, commencing the service, is scheduled for distribution June 15. Be sure to receive it by mailing your subscription check *now*. \$25.00 for AIA members.



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