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February 1960

Journal

OF THE AMERICAN INSTITUTE OF ARCHITECTS



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Some Keys to Pandora's Jar (Part I) • Save Urbia for New Urbanites • Truck Terminals

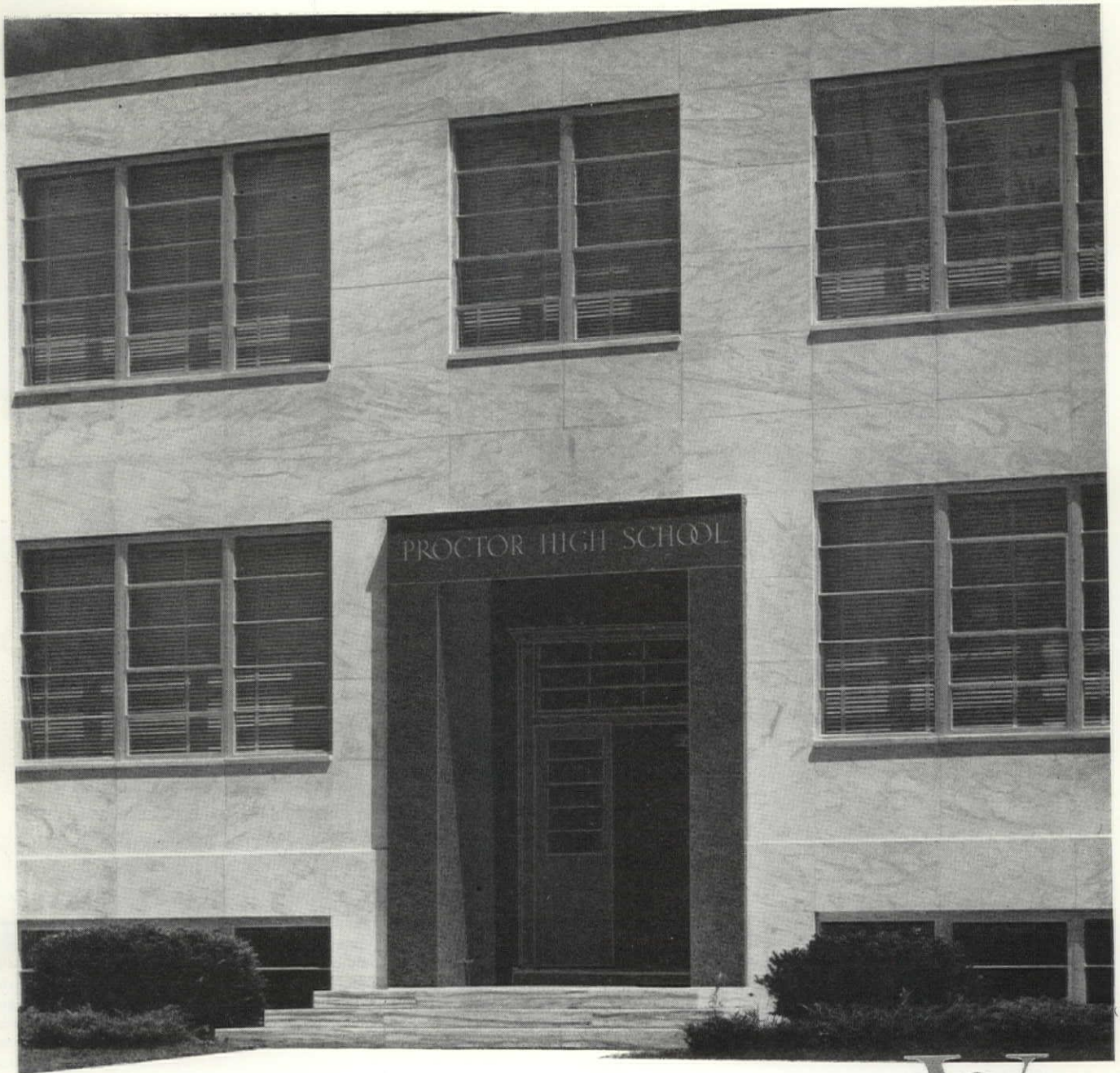
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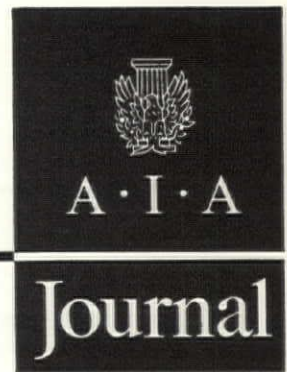
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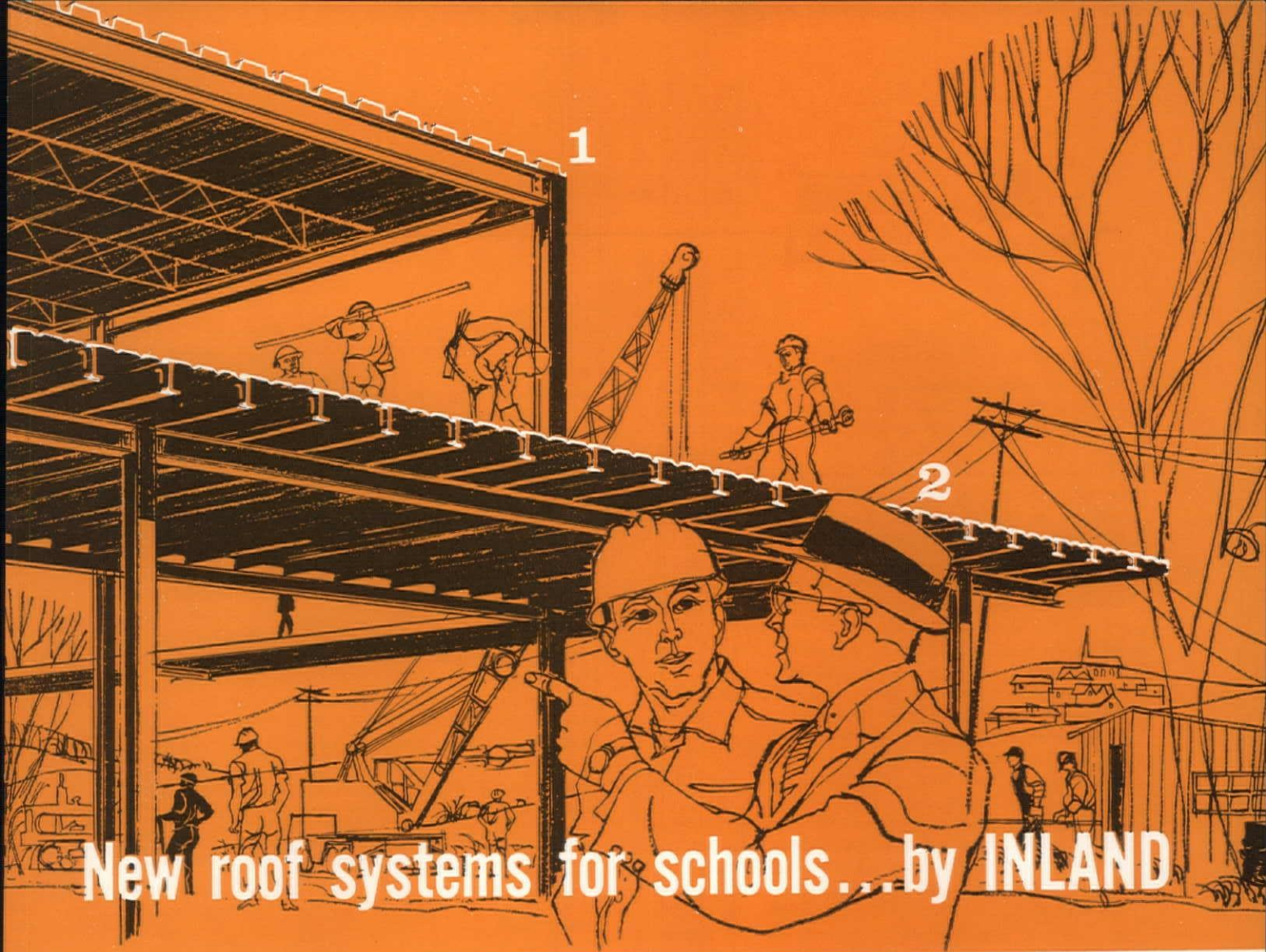
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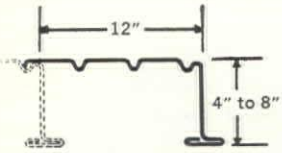
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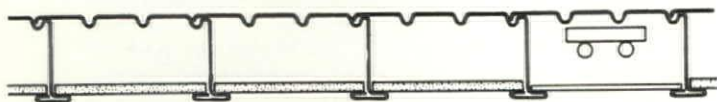


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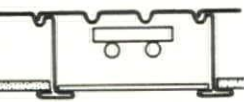


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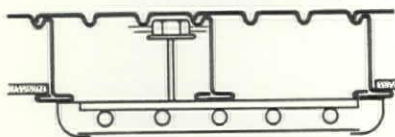
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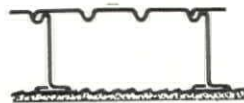
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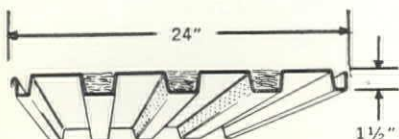
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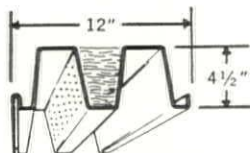


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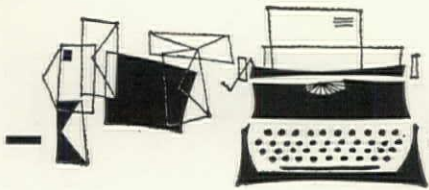


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L E T T E R S

More on FLW

EDITOR, *Journal of the AIA*:

Mr William Lescaze, AIA, in a letter published in the *New York Times* of November 2, comments on Mr Frank Lloyd Wright's Guggenheim Museum, and speaks of Wright's "tyrannical disregard of the objects of art to be shown, of the human beings who are to go to see them, of those who will eat in the cafeteria, and of those charged with the directing of the museum."

But why should anyone be surprised at this? When did Wright ever do anything else? This is not said in disparagement of his genius, for which I have the highest admiration, but to point out that his brain was so prolific of new ideas, his conviction of their value so strong, and his salesmanship so powerful, that he habitually persuaded his clients to let themselves be used as the subjects of experiments in new forms of design and new methods of construction.

Of course this was very costly, and how he found clients willing to permit it I have no idea. Most clients, in my experience, have very definite ideas of what they want, and are most reluctant to do anything that will increase the cost of building. This I can understand, for present building costs are very high, and there is no reason that they will go down in the foreseeable future. But all architects must admire and envy one who can, despite this, convince his clients that it is worth while to spend a little more and to produce something that will not only be adequate for their needs, but a contribution to the development of the art of building. True, some of Wright's experiments, including the Guggenheim Museum, were not entirely successful, but many of them were valuable milestones in architectural progress.

JOHN J. KLABER, AIA
Huntington, New York

No Steps, Please!

EDITOR, *Journal of the AIA*:

I want to add a hearty endorsement of the views of Mr E. C. Schneider concerning steps in your June, 1959 issue. I second the idea that "all public buildings . . . should have, at least, one entrance at ground level without any steps . . . (or) a ramp of the proper angle should be installed. . . . Another problem . . . is that of clearances both in width and at turns for wheel chairs."

The Paralyzed Veterans Association pointed out to the Long Beach City Council that steps present a problem to a large number of people (polios, arthritics, cardiacs, paraplegics, the aged, the heavy) who cannot climb steps. Also it was

suggested that many of these steps could be eliminated, and the City Council was urged to consider legislation requiring that all public buildings constructed in the future have at least one level or ramped entrance.

The City Council caused a study to be made by the Planning Commission. The Council then, after the report, adopted a policy of providing pedestrian ramps or grade-level entrances on future public buildings. Also existing structures, of which there were six needing ramps, were to be renovated at a cost of \$5,000.

Long Beach has grade-level curbs in its business district. Outlying shopping centers are usually flat and have graded accesses to the sidewalks.

We who cannot climb steps would like to see other cities follow Long Beach's example.

To you who are members of Planning Commissions I appeal for consideration of these things in your future constructions; to you who are drawing plans for public buildings I appeal that you remember some of us cannot climb steps nor get through narrow doorways.

JAMES J. SCULLY
Chairman, Steps Committee
Long Beach 4, California

People Read Us

EDITOR, *Journal of the AIA*:

I am enclosing a copy of our December issue of *Inside Daverman's*, a publication for our employees, and have marked a paragraph regarding an article in the December issue of the *AIA Journal*. I thought this might be of interest to you.

We have a great many trade journals checked each month for articles of interest, and try to limit our "You should read" suggestions to three or four articles.

I am sure it is not necessary to add that the *AIA JOURNAL* is read by all of our architectural employees and many of the engineers.

H. G. DAVERMAN
Grand Rapids, Mich.

More on Architectural Education

EDITOR, *Journal of the AIA*:

In the July number of the *Journal* Professor Muschenheim reported on the methods of teaching in a number of European architectural schools. He did not include among these, however, one which will be in the thoughts of a large number of your readers, and that is the Ecole des Beaux Arts in Paris. During the

(continued on page 8)



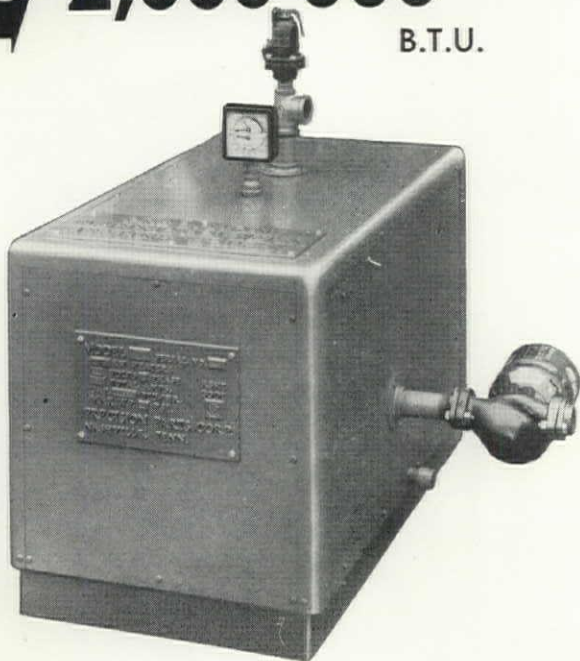
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LETTERS

first thirty years of this century that school influenced very greatly the course of architecture in this country and the teaching in American schools.

As I visited this school in the summer — particularly to inquire about the teaching in painting and sculpture, but also inquiring about that in architecture — it may serve a purpose to add this information to that of Mr. Muschenheim.

That school has changed also in post war years: there is, as in this country, a loss of interest in traditional forms. But there is a continuing effort to stimulate the creative abilities of students who are admitted.

Admission is still limited numerically, and the best applicants — as shown by their work which is judged anonymously — are the ones who are permitted to enter, no tuition fees being charged, even to foreigners.

The greatest difference between the Ecole and all other schools is that all work is done *in competition*, the work judged anonymously by practicing architects. While the Institute, by action at several Conventions, has urged the use of competition in the award of government and semi-governmental work, no students in American schools of architecture are now being taught how to compete on an architectural problem.

As in the schools Mr. Muschenheim visited there is an examination after the preliminary period, before admittance to the First Class. The subjects on the curriculum are substantially those listed by Mr. Muschenheim as generally forming the training at the schools he examined. The work in Drawing, Painting and Modelling is still of great proficiency. A preliminary sketch, done in a fixed period and "en loge" is still required, though it may be abandoned if the student does not wish to compete for the money prizes. And the date for the submission of problems is fixed in advance — as a method of training the student in the use of available time.

The student work is of high proficiency, compares favorably with the work that was illustrated in the Muschenheim report.

In the First Class buildings are considered not as isolated objects but as parts of urban planning, affected by sociological conditions and with sensitivity to technology.

But the use of competition as a factor in training is the great notable difference.

JOHN F. HARBESON, FAIA
Philadelphia, Pennsylvania

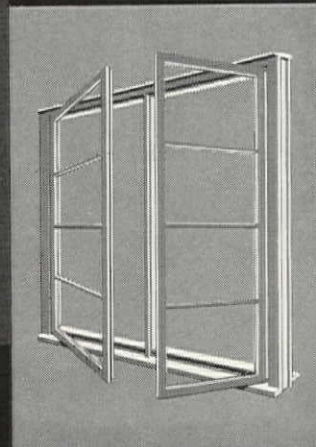
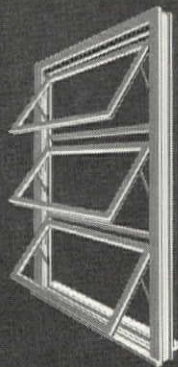
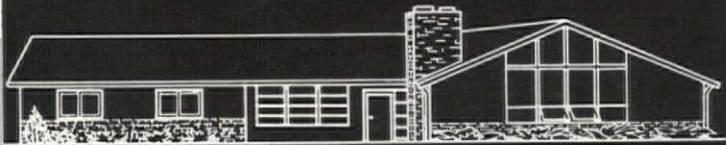
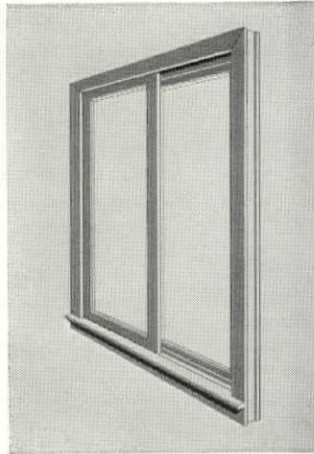
Low Man

EDITOR, *Journal of the AIA*:

When are we going to stop kidding ourselves by trying to compare our Profession with the Medical Profession as to status, prestige, and public respect. It is only the Architects themselves that feel that there is any similarity. Let's face it . . . we are the last man on the bottom of the totem pole as far as the public is concerned, and the sooner we realize it the better off the Profession will be. Maybe then we will take steps to remedy the situation.

WILLIAM E. EVANS, AIA

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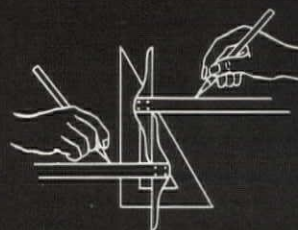
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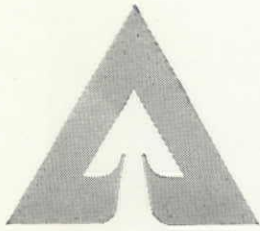
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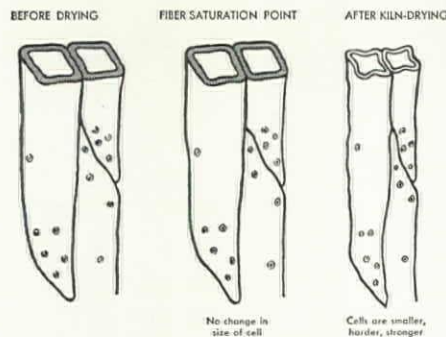


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**Note: Moisture content is the weight of water contained in wood expressed as a percentage of the weight of the oven-dry wood. Weyerhaeuser 4-Square kiln-dried framing lumber is dried to an average moisture content of 19%, well below the 25% fiber saturation point. Finish lumber is kiln-dried to an average of 12%.*

The illustration below shows how wood cells change as water is removed.



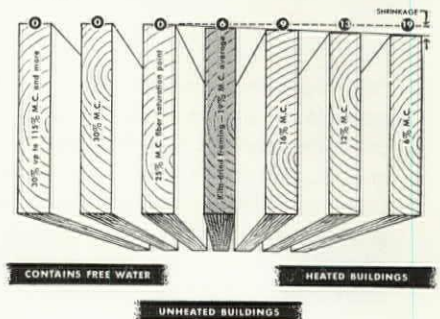
Kiln-drying not only reduces the natural moisture content of lumber: it also makes lumber less absorbent, less subject to changes in humidity. And as the "patterning" of the cells and fibers becomes more stable, lumber will grip and hold nails better. Pound for pound kiln-dried lumber is one of the strongest materials available to the builder!

Kiln-drying minimizes the effects of humidity

One of the characteristics of wood is that it shrinks or swells in proportion to the amount of moisture it contains. Scientifically controlled kiln-drying brings all framing, and all finish lumber to predetermined moisture levels. The result is that all framing members in a home

built of kiln-dried lumber will shrink or swell equally with changes in humidity. The same is true of all finish lumber in a house. The result is that each piece of lumber works like a component part with every other piece. The house built of kiln-dried lumber offers exceptional resistance to the changes due to humidity variance, and thus to such problems as windows or doors that stick . . . cracked ceilings (generally caused by uneven shrinkage of floor joists) . . . popped nails, and the like.

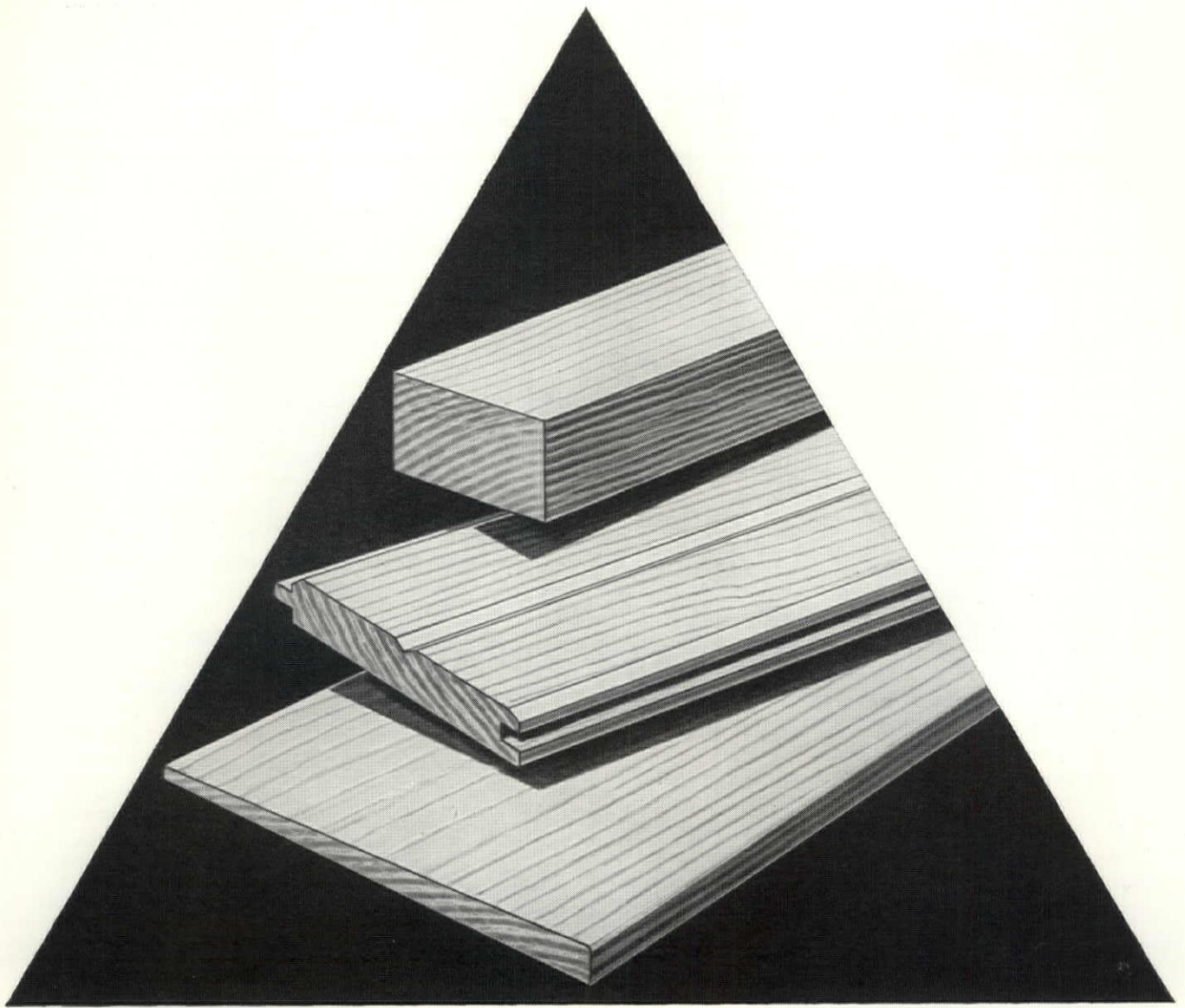
The following chart shows the relation of shrinkage to the moisture content of wood. Several facts should be noted. (1) Shrinkage starts only after free water is gone—at about 25% moisture content. (2) The Western softwoods shrink in width and depth, not in length. (3) Moisture content of lumber in use is governed by temperature and relative humidity. This varies according to locality, use within buildings, and so on.



Weyerhaeuser adds these extra advantages to scientific kiln-drying:

1. Manufactured to size and cut to accurate length *after* kiln-drying.
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3. Edges eased for safer, easier handling.
4. Surfacing after kiln-drying to assure full dimension.
5. Accurate grading and correct identification after kiln-drying. (Kiln-drying tends to bring out otherwise hidden defects, and this step culls out pieces containing such defects.)
6. Trademarked and grade stamped to assure your receiving exactly what you ordered.

Weyerhaeuser 4-Square kiln-dried lumber is available in 11 species in finish, board, and dimension lumber—and in a variety of manufactured lumber products. For additional information, write: Weyerhaeuser Company, Lumber and Plywood Division, First National Bank Building, St. Paul 1, Minnesota.



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up moulding, works like a component part with every other piece and is equally resistant to dimensional change.

Many of the other structural and in-use advantages of kiln-dried lumber are outlined on the facing page. It's worth remembering, too, that its quality is an added assurance of your client's satisfaction. For further information, write: Weyerhaeuser Company, Lumber and Plywood Division, First National Bank Bldg., St. Paul 1, Minnesota.



Weyerhaeuser Company

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NEWS

News from the UIA

► The biennial business meeting of the *Union Internationale des Architectes* was held in Lisbon, September 20th to 27th. Approximately one hundred official delegates were present, representing forty-two countries. The Executive Committee also met. This is the active governing body, with twenty members from twenty countries.

The American Institute of Architects was represented by Henry Churchill, member of the Executive Committee; Messrs. Ralph Walker, John Fugard, Sr, Samuel L. Cooper, as delegates, Messrs Ernest Grunsfeld, Eugene Fuhrer and John R. Badgley were present as observers.

Reports from the various committees showed definite progress in promoting the interests of the architectural profession in international affairs and organizations. The UIA was represented at meetings of appropriate sections of UN both in New York and Geneva; at the World Health Organization; the International Federation for Housing and Planning; the International Labor Office; UNESCO and others. M. Michel Dard of UNESCO presented the draft of an international document defining the mutual rights and obligations between architects and practitioners of the plastic arts, which was accepted with minor changes and will shortly become official.

At the instance of Mr Churchill an ad hoc committee was set up to establish the criteria for a working program with the Housing Bureau of UN, of which Ernest Weissmann is chief. This committee, which meets November first in Paris, consists of Robert Matthew of Great Britain, Rasmussen of Denmark, Abrossimov of USSR and Dubuisson of France, with J. P. Vouga of Switzerland as reporter.

Prof. Mountschen of Belgium gave an interesting report on the Practice of the Profession. (Alexander Cochran of Baltimore is a member of the Committee on Professional Practice.) Prof. Gardner-Medwin of London reported on the Education of the Architect; M. André Gutton of Paris summarized the work of the Committee on Urbanism, of which Churchill of Philadelphia is a member; Herr Wilhelm had a brief report on School Building; Prof. Daniel Goldfinch sent in a long and excellent account of relations with WHO (Zachary Rosenfeld of New York has just joined this committee) and M. Vouga of Switzerland reported on Housing and on Research. (Walter Campbell of Boston is a member of the Research Committee.)

On the question of revision of the code of International Competitions it was decided not to make

recommendations for changes at this time, even though certain administrative abuses continued to exist. It was felt that since the code has been only recently approved by UNESCO and has been in official use for so short a time, further experience was desirable. The matter might well come before the Congress in London in 1961.

In connection with the London Congress, Prof. Matthew is preparing a competition for the Schools of Architecture, the subject to be the design of a small "demountable" theatre. This competition will be suitable for use in the 1960-61 college year. As soon as details are available the information will be circulated through the Journal.

The International Exhibit of Architecture which was on display at the Congress in Moscow in 1958 has been shown in Bulgaria, East Germany, Poland, Hungary, Czechoslovakia and Yugoslavia, according to M. Jirr Novotny. It is scheduled for France, Turkey, China and North Korea, and will be available for showing in the United States late in 1960, if it is wanted.

An excellent documentary film of the Moscow Congress was shown, with comments in French. Everyone agreed it was well and fairly edited. It runs about fifteen minutes. French-language copies are available now through the UIA Paris office; but if there is a demand for it M. Abrossimov of USSR said an English version would be supplied. Chapters interested should inform the International Relations Committee at the Octagon.

The UIA will continue to sponsor a summer school for architectural students in Portugal, under the direction of Prof. Carlos Ramos, and a seminar for architects in Warsaw.

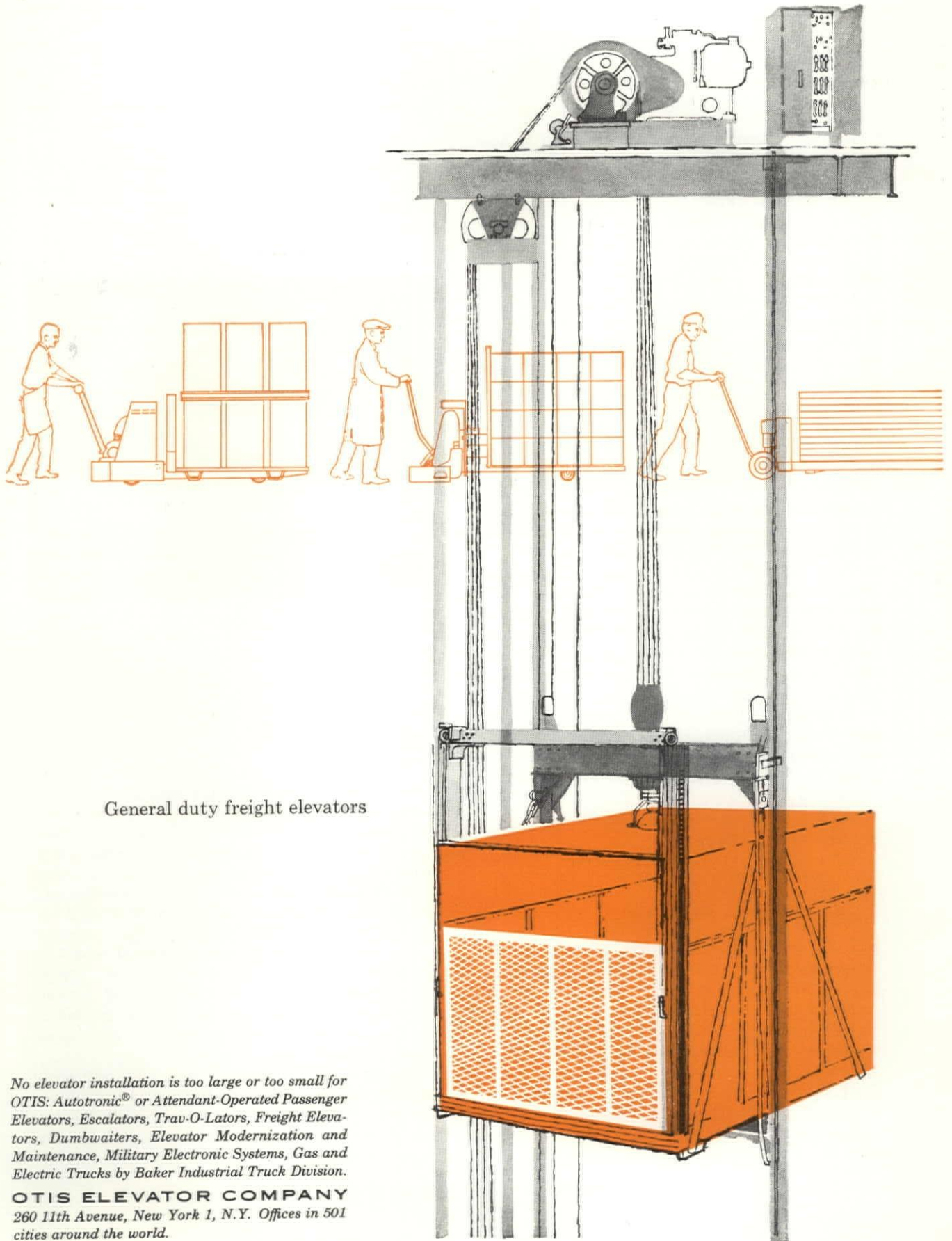
The meetings of the Working Committees are as follows (subject to change):

1960

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|----------------------|------------------------------------|
| 1st week in May: | Urbanism, in Majorca |
| 2nd week in May: | Professional Practice, in Madrid |
| June (date not set): | Sports Construction, in Rome |
| 4-9 July: | School Construction, in Bulgaria |
| 10-16 July: | Housing, in Hungary |
| 18-24 July: | Health, in USSR |
| 1-3 Sept.: | Research, in Rotterdam |
| 5-11 Sept.: | Executive Committee, in Copenhagen |
| 12-17 Sept.: | Urbanism, in Stockholm |

(continued on page 14)

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MORE NEWS

2nd 2 weeks of Sept. and beginning of Oct. | Professional Practice, Formation of the Profession, and a Regional Conference, in Chile
October (no date): A Colloquium on the Theatre, in Berlin
December (no date): International Competitions, in Yugoslavia

The VIth Congress and an Assembly will be held in London, June 22nd to July 7th, 1961. The theme will be "New Techniques and Materials, Their Impact on Architecture." Prof. Matthew, who is in charge of organizing the Congress, states that he hopes to have three very specific papers by specialists prepared in advance for discussion in three separate sessions. There will be a final plenary session in which the total "impact" will be talked about by some internationally known person. This promises to be an outstanding Congress, not only because of the program but because there is so much to see in England and the British architects will be so wonderful at showing it.

In 1963 the VIIth Congress will be held in Havana, and the Assembly in Mexico City.

The Executive Committee and Delegates and their wives were splendidly entertained in Lisbon, by the Portuguese architects and by government officials. There was a dinner in the ancient Castle of St. George which overlooks the city and the Tagus, at which the Mayor of Lisbon presided. The Minister of Public Works was present at another dinner at the Hotel Avis; and the Portuguese architects gave a lunch (department of understatement, it only lasted three hours and a half) at the Hotel Seters in Sintra, one of the show places of Europe. The Syndicat d'Initiative turned over its pleasant quarters in the old *Palacio do Foz* to the UIA for its headquarters. Everyone was taken to a "rodeo" and "dancing folklorique" at Ribatejo, and there was a final dinner for the new members of the Executive Committee at the Ritz. There was also an evening at the home of Prof. Carlos Ramos, with Portuguese music, that was a tribute to the culture and hospitality of his country.

HENRY S. CHURCHILL, FAIA

The Rotch Travelling Scholarship

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► Exercises preliminary to the selection of the seventy-first winner of the Rotch Travelling Scholarship will be held in April 1960. Applicants must be American citizens, under thirty-one years of age on March 15, whose architectural record includes study or experience in Massachusetts. A statement of requirements may be obtained by writing William G. Perry, Secretary, Rotch Travelling Scholarship Committee, 955 Park Square Building, Boston 16, Massachusetts, before March 1, 1960. All applications are due Monday, March 21, 1960. ◀

Mr. Nutter Goes on a Cruise

► Convention-goers will remember that the grand door prize was a Caribbean cruise. It was won by Arthur E. Nutter of Houston. Mr Nutter has been practicing architecture for sixty-five years, and has become a familiar figure at AIA conventions. He shipped aboard the *M. S. Bergensfjord* from Wilmington, N. C. Aboard was a convention party of the North Carolina AGC and several architects and their wives. The ship touched at San Juan, Puerto Rico and St. Thomas in the Virgin Islands. The photograph shows Mr Nutter happily standing between Captain Olaf Bjornstad and John E. Smith, Jr, President of the US Travel Agency. ◀



Professor Wanted!

► In line with the AIA Survey Recommendation R-22 and the activities of the Education Subcommittee on Expansion of Schools to Serve the Building Industry, the Master Builders of Iowa (a chapter of the Associated General Contractors) and Iowa State University have entered into an agreement which is intended to lead to expansion of the present programs of education for the construction industry.

This means that Iowa State is looking for a new type of professor. Minimum qualifications would be a Bachelor's degree in Architecture, Architectural Engineering, Building Construction or Civil Engineering plus several years' experience in construction and construction administration. Also it would be desirable that this man have a Master's degree, possibly in Business Administration and possibly some teaching experience. However it is realized that an interested person having all of these qualifications may be hard to find.

Applications or suggestions of persons who might possibly be interested should be directed to Professor Leonard Wolf, Head of Department of Architecture and Architectural Engineering, Iowa State University, Ames, Iowa. ◀



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Celadon, 117
Champagne, 225
Cocoa, 886
Umber, 134
Signal Red, 862
Antique White, 132

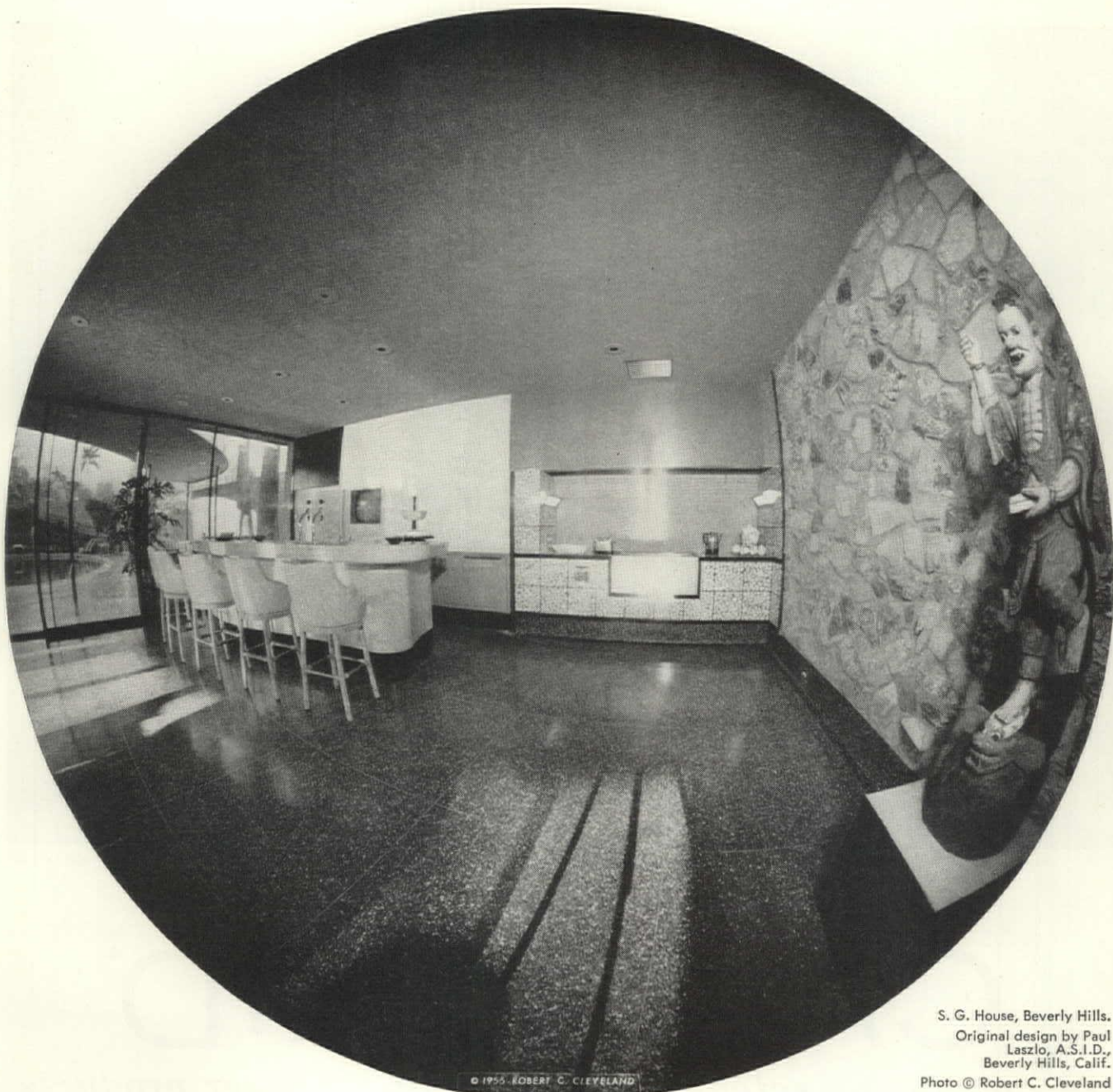
Lime Parfait, 58-MZ-1
Almond Parfait, 22-MZ-1
Mint Bonbon, 63-PD-47
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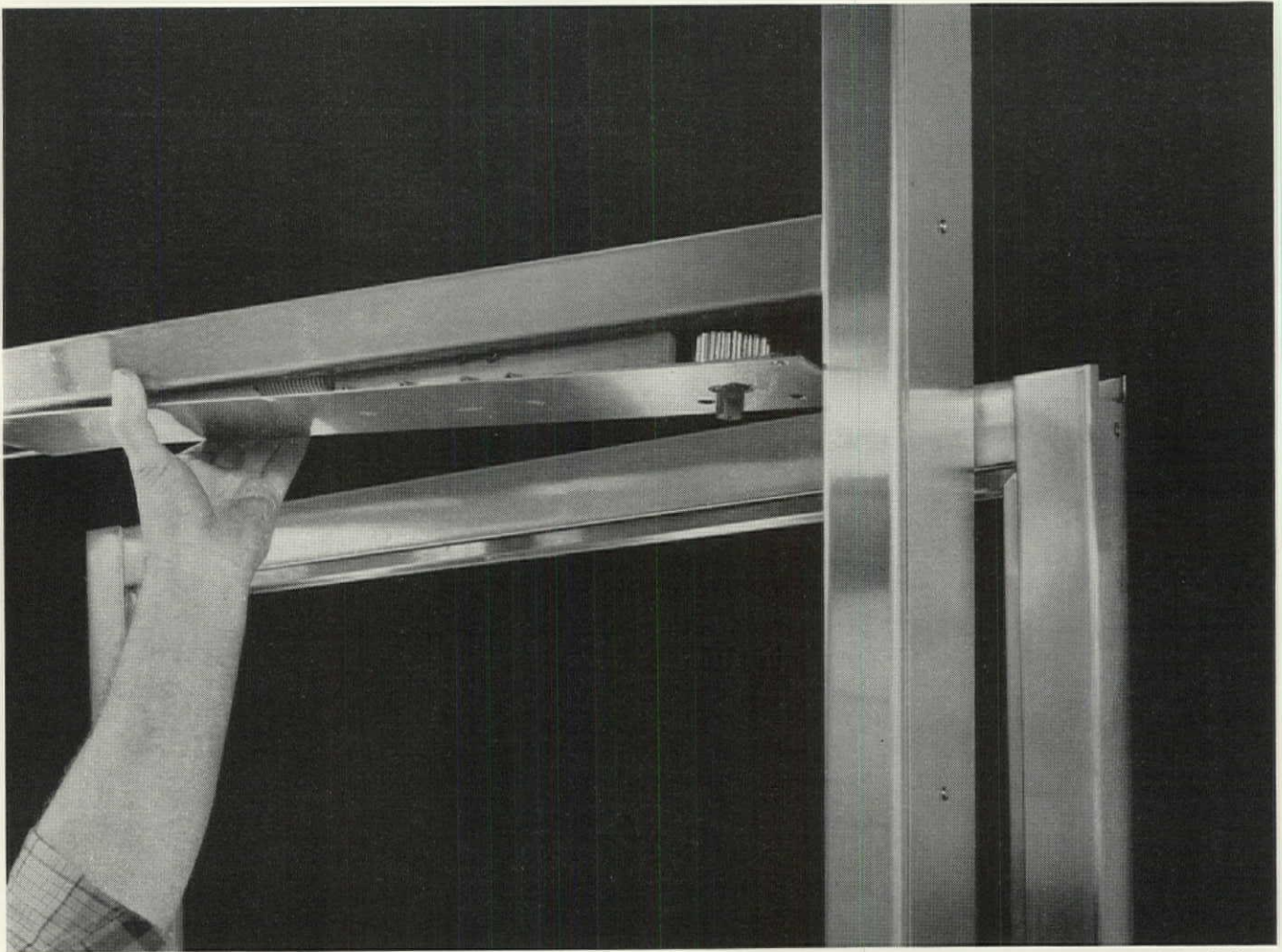
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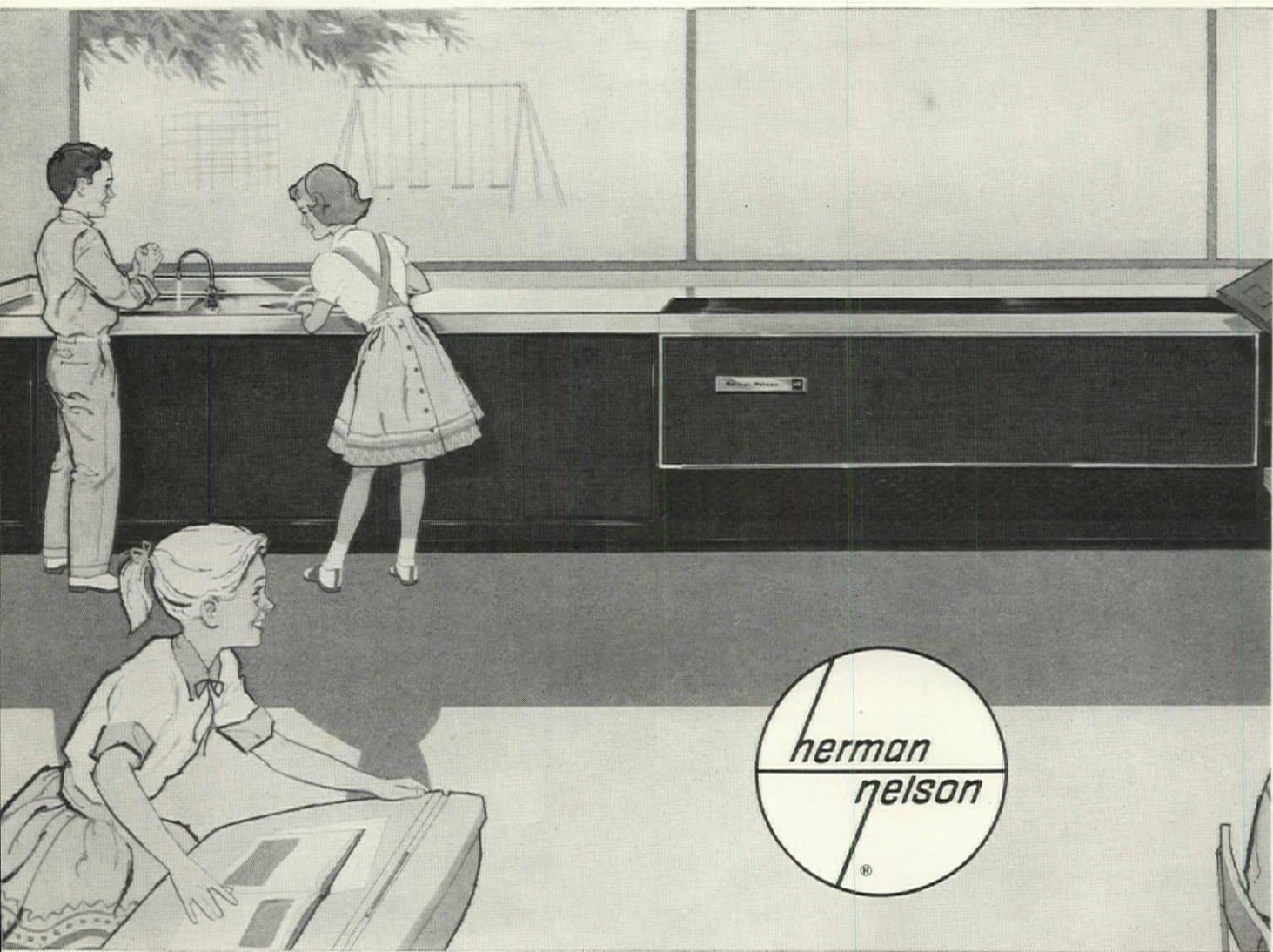


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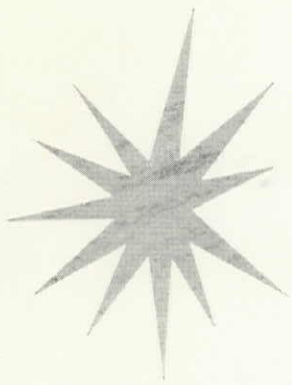
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A · I · A

Journal

Expanding Horizons

*The San Francisco
AIA Convention
April 18-22, 1960*



BY ELIZABETH K. THOMPSON, AIA

► For a convention at the western outpost of a continent, what more appropriate theme than "Expanding Horizons"? And what more fitting program at the beginning of a new decade, full of promise, opportunity and challenge but demanding an ever-increasing knowledge of fields beyond architecture, than to explore some of these fields through contact with experts in the humanities and in science?

These premises led the Northern California Chapter, hosts for the Institute's 1960 convention, April 18th to 22nd in San Francisco, to formulate the program now being announced. For if architecture, as the art of environmental design, is to continue to be the channel through which progress and human betterment are given valid physical form, architects must keep pace with major trends in fields other than those with which they are directly familiar; they must extend their horizons to include new knowledge, to recognize ideas and forces which influence individuals and social groups alike; they must become aware of technologies other than their own, since it is they who will in time be called upon to interpret these intangibles in functioning entity and in esthetic concept.

In thinking through the programming for the 1960 convention, the program committee headed by John Lyon Reid concluded that the protection of professional pigeonholes is no longer a guarantee that the prime factors in the building field—architects, engineers, builders, planners—will each retain his traditional domain. Each may retain this status but it will be because of real effort to keep up with, if not ahead of, the changes which increasing speed in transportation, increasing ease in communication, and continually advancing automation inevitably produce. What better opportunity than a national professional gathering to stimulate the self-education and re-evaluation required for progress toward such a goal?

25



PHOENIX SYMBOL

The design of the Phoenix is by ERNEST BORN, FAIA, of the Northern California Chapter. The Phoenix, the mythical bird who was consumed by fire and rose in youthful freshness from the ashes, has long been a symbol of San Francisco, which rose from the ashes of a series of disastrous fires in the mid 1800's, and again after the great earthquake and fire of 1906. The Phoenix Symbol appears on the flag of the City and County of San Francisco, and is a recurring decorative motif used by various civic agencies.

The convention's professional program focuses on four fields in which architects are not usually versed but which influence architecture, sometimes with rather more directness than architects are prepared for, and which affect—sometimes slowly and sometimes with lightning-like immediacy—the very practice of architecture. These fields are sociology, politico-economics, technology and science, and philosophy.

The speakers chosen to develop the theme of "Expanding Horizons" are all experts in their respective fields and have been invited to speak as such, leaving the exploration of the relation between these fields and the practice of architecture to the architect-discussants who, in panels of three, will follow each principal speaker. Already announced as speakers are Dr J. Robert Oppenheimer, Director of the Institute for Advanced Study, Princeton; Dr Wendell Bell, Associate Professor, University of California, Los Angeles; Dr C. Northcote Parkinson, author of "Parkinson's Law" and many other books and Raffles Professor of History, University of Malaya; and Dr Morton G. White, chairman of the Department of Philosophy, Harvard University.

Distinction and age once were hand-in-hand attributes of the expert. But with these speakers, this is not so. Their average age—well under

fifty—indicates the vitality of both their subject-matter and of the way in which they can be expected to treat it.

The social side of the program is being planned under the energetic chairmanship of Donn Emmons, to give visitors a chance to see and know San Francisco and some of the surrounding communities as we who live here know them. Highlights include hospitality night in the homes of local architects; an afternoon open house in Jackson Square, San Francisco's unique wholesale furnishings district, a miniature private redevelopment project which has revitalized a historic section of the city; the annual banquet at the Palace Hotel, in its Garden Court; the investiture of Fellows in the sumptuous City Hall, designed as a result of a competition, by Bakewell and Brown; and the chance to participate in the Black and White Ball, an unusual social event held annually in the city's finest hotels.

With headquarters at the Mark Hopkins Hotel on Nob Hill, the convention places itself in a historic and scenic location. For here were the mansions of the Bonanza kings—Flood, Hopkins, Huntington, Crocker—and here one of them still remains, the Flood residence, handsomely preserved as the Pacific Union Club. From Nob Hill, and especially from the top of the convention hotel, there is an unsurpassed view of the city and the Bay and the communities which, in almost unending succession, line its shores.

And this, too, is appropriate. For although San Francisco is the host city for this convention and most of the activity of the convention will center within its limits, San Franciscans are neither selfish with their city nor independent of the virtues of the surrounding cities and countryside. And for all the residents of the cities and towns around the Bay, San Francisco is, and has always been, "the city."

Although the Bay may look geographically like a separation between these areas, it is their great unifying factor. All the communities of the nine counties which touch its waters are drawn together by it; it is their mutual dowry, their common capital. Across its usually placid face they look at each other; toward it all who can, orient their houses, their offices, even their schools. San Francisco might have coined the device and the term "Bay window" for the use it makes of such means to get even a tiny glimpse of the water.

Around the Bay the hills tower—hills that to an Easterner often look like mountains. But no real San Franciscan refers to them as other than hills. These are our vantage points. Not only do

we see the Bay and the Golden Gate from the hills; we see each other in neighborly fashion, delighting in the special beauty each section gives to the others. San Franciscans see the setting sun set fire to the Berkeley hills; the East Bay wakes to the sparkle of a million windows in San Francisco as the rising sun touches them with its light. Marin looks at San Francisco's Marina, Twin Peaks, Telegraph Hill and Coit Tower, the ships that sail out through the Golden Gate; San Francisco in turn looks at Mount Tamalpais, Marin County's great and beautiful landmark, at Angel Island and wooded Belvedere.

Of the man-made landmarks, once San Francisco alone boasted buildings high enough to be seen across the Bay. Now Oakland, too, has its cluster of tall buildings, the tallest the very recent Kaiser Center. In contrast, San Francisco's newest buildings are not so very tall: Crown Zellerbach's twenty stories and John Hancock's fifteen take their place with modesty in the city skyline stating rather, that what really creates environment is not the distant view but what is near at hand.

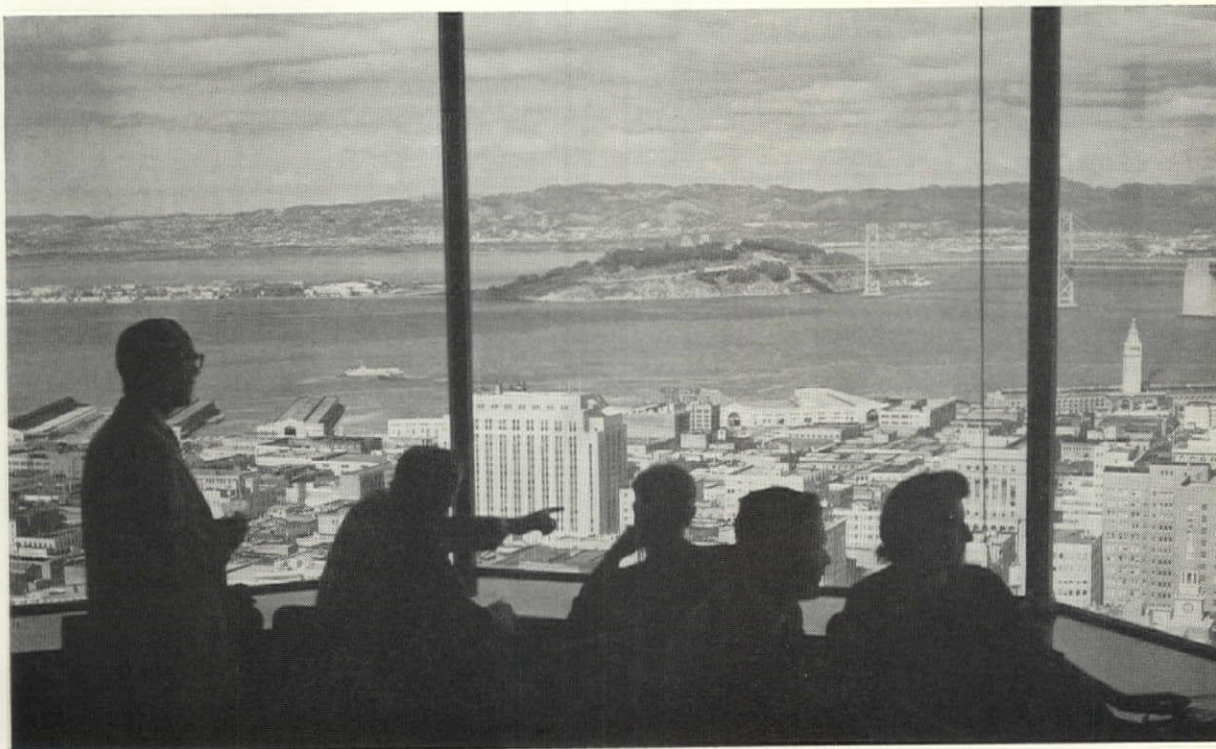
The bridges that cross the Bay are justly world-famous. Not only in themselves are they worthy of note—the San Francisco to Yerba Buena crossing of the Bay Bridge, and the Golden Gate bridge are not only engineering marvels of their

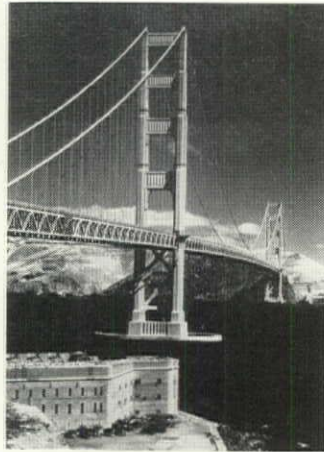
time, but continuing esthetic satisfactions—but the view from them is incomparable.

And for what do we cross the Bay so constantly? We live on one side, work on the other, play anywhere. The climate varies from area to area: San Francisco's fog comes over to Berkeley and the rest of the East Bay, slides down the Marin hills and over the Peninsula range, cooling and cleansing. But beyond the East Bay's hills, it is hot when the Western slope is cool; and down at the southern tip of the Bay, where the fog does not penetrate, and in the upper reaches where the Bay changes its name twice—once to San Pablo, then to Suisun (pronounced Soo-soon)—it is, more often than not, quite warm.

But, contrary to popular notion about California, we do have winter. And those areas which in spring, summer and fall may be very warm are in winter colder than the areas nearer the "fog belt." What is unique about our climate is not a lack of seasons, for we do have them, although they are not at all like seasons in other parts of the country. What is unique is that in one location we can run the gamut of all four seasons in a single day. The fog makes it cold, and we wear coats and turn on the heat; but the sun comes out and burns the fog away, and it is spring, then summer, and as the fog comes in again, fall and then winter again.

From the Top of the Mark Hopkins, the AIA Convention Headquarters Hotel





This changeable climate affects the way we live—the houses of the Bay Area are too well known to architects to need description here, but they reflect a response to climate as well as to terrain and to materials. And it keeps us open-minded—a quality which perhaps more than anything else gave impetus to the unconventional approach to residential design which has always been a hallmark of the region. If this open-mindedness is only now beginning to be apparent in our larger buildings, there are perhaps other reasons for a tolerant attitude toward this deficiency. Many earthquakes and fires in the city's earliest days may have engendered a cautious attitude toward what went into a big building; this is only a supposition, perhaps altogether too subjective. But it is a fact that in our large buildings we have until recently been more conventional, more hide-bound by tradition, than in our houses.

Here, as in every other city, interesting examples of architecture are far apart. The convention program offers two ways of seeing some of them: bus tours to San Francisco and East Bay buildings will take groups, or individuals, using the unusually handsome and inclusive "Guide to Bay Area Architecture" compiled by a young architect and his wife (which all convention registrants will receive), can route themselves to the buildings they want to see.

And in seeing the buildings which are so much our professional concern, the visitors will also see such essential accessories to our cities and our urban pattern as Golden Gate Park, reclaimed from the shifting sands to become one of the world's loveliest parks, Portsmouth Square, soon to have its "face lifted" to provide for parking below, and Union Square, first of the underground garages.

There is much to see and do, and the program allows ample free time for individual sightseeing and for eating out at some of San Francisco's renowned restaurants. But some things we can't show you. These are the projects of the future: Golden Gateway, a vast redevelopment project for the old produce district, a change in character of use and in appearance of that section; a completely new harbor development to be known as Embarcadero City; and, of all things, a concrete replica of Maybeck's Palace of Fine Arts, crumbling relic of the 1915 Panama-Pacific Exposition.

Come back again in ten years. The phoenix, our symbol, is still rising. San Francisco of the future, building on its indomitable past, will be even finer than the city of the present. ◀

Some Keys to Pandora's Jar

By John E. Burchard

*Dean of the School of Humanities and
Social Studies at Massachusetts Institute
of Technology*

► Certainly architectural schools have a difficult mission, made more difficult for themselves by vagueness of purpose. Law schools produce men who will end by being philosophers of the law and writers about it and secretaries of state; men who will plead only the most fundamental cases before the highest tribunals; men who will argue the lowest kind of personal causes in low courts; and men who will never argue causes at all but work in offices on such large and technical questions as new articles of incorporation for a vast company with a new kind of business, on technical questions of how to pay the least potential income tax, and down to the drawing of the simplest wills and contracts. All this is subsumed within the rubric of a legal education.

I assume that lawyers might agree in general as to the highest aspirations of a lawyer, which might, I suppose, seek to be a great philosopher, judge, or teacher and expositor of the law. But the ability to do that superbly is certainly not made into the be-all and end-all of a legal training. It is not all even in schools such as Harvard and Yale which have a reasonable expectation that some of their students will have high talents in these directions, and that a few may also have the moral and other qualities needed before you get a Cardozo or a Learned Hand or a Justice Holmes. To be sure, some law schools will place more emphasis on this aspect of the law than others; and some law schools will work primarily on training people to do the more pedestrian chores skillfully—and I hope ethically—for the pedestrian chores

THE FIRST PART OF AN ADDRESS

Dean Burchard's keynote address to the Fourth Annual AIA-ACSA Teachers' Seminar at Grindstone Lake, Wisconsin, last June raised many doubts about the efficacy of our present methods of teaching architecture. We present the first part of it here, to be concluded in the March issue.

must be done. But I cannot imagine that any law school would be effective in preparing a large group of men for practice if it placed all the major emphasis on talents of this sort and if only the few who were most promising in this direction turned out to be those who were generally admired and prized while in school or after graduation.

It is much the same in the practice of medicine. Doctors have to know a good deal of anatomy and chemistry and physiology and psychology and a number of other things, and it is practically impossible to say that one competence is so dominantly basic as compared with the others that eminence in it in school is the only way to guarantee eminence in practice later on. As in the law, eminence is to be achieved in many ways, through brilliant research, through brilliant surgery, through skillful administration of large medical enterprises. At the same time all kinds of doctors of less fame are needed to treat broken toes skillfully or to disinfect minor wounds either of the body or of the soul. In this medical hierarchy it may be less

clear what stands as the highest aspiration. I would put it at the level of brilliant research. Perhaps the medical profession would not put it there but at the level of advanced surgery, such as is involved in brain or heart operations or even at being a first-class general practitioner. But wherever they put it, we know that medical schools have a sufficiently clear understanding of their objectives so that they can design a curriculum from which the doctor can go in any one of the many ways he needs to go if we are to have an adequate supply of competent men at all levels needed; and we must emphasize at *all* the levels.

Surely as I have been talking of the law and medicine you have thought of its possible relevance to architecture. I could elaborate the point by talking of engineering education and its complicated problem of producing analysts and synthesists, of designers and managers, of theorists and researchers and systems contrivers and persuaders. Yet it is uncomplicated by the fact that any of these ways of being an engineer is given an awesome priority over the others so that young men who are slow in this area feel, in effect, that there is no hope for them to be good engineers at all.

Now what is the situation in architecture? Let me say one thing right away before I start walking on this treacherous bog. Though architecture is both more and less than an art, it is nothing if it is not an art. Design does stand as the foundation of architecture and without it there is no architecture. Nothing in any program of architectural education should be permitted to stand in the way of the maximum development of those with a real talent for design. But unfortunately architecture is also not only an art. If it were only an art such as painting or sculpture then we have vastly too many architectural schools now. We ought to be able to find out quite soon, certainly in a couple of years, whether an aspirant really has any chance of becoming a designer of quality. If he has not, we should send him on his way. Now you know very well that out of two hundred men in a school today there is nothing like fifty of the quality I am hinting at here; and most likely no geniuses at all. But if there are fifty who will turn out to be really fine designers when they are in the world, the school is batting way above the average for the country. Who would be prepared to say that one-fourth or even one-tenth of all the present graduates of architectural schools are any good at all as designers?

Anyway, for the sake of later argument I am going to say that not more than a quarter of the men have any chance whatever of doing significant

design later in life. What should we do if architecture were only an art? Well, we should obviously fire the other three-quarters. For the country as a whole this might mean we could reduce the number of schools by half and retain only the faculty that could be honestly useful to the talented designers. Then by cutting the student population by three-quarters and the faculty only by half, we might double the faculty-student ratio which would also be worthwhile.

I want you to understand the magnitude of the reduction we ought to make if we are actually to insist that the profession include only artists. The drop-out rate of college and university architectural students exceeds the fifty per cent common for college and university students by a wide margin. In fact, about three times as many matriculate as graduate. On graduation, only about a fourth of those graduating are able to pass the registration examination the first time and in the end only perhaps three-fifths of all the graduates succeed. Combining these figures, we can arrive at the conclusion that a freshman entering an architectural school has about one chance in five of attaining registered professional status. Now the ones I have been talking about leaving out are of course not the four out of five who fail but a good many are to be drawn from the one-out-of-five group who on the face of it succeed. Of this group I am saying that three-fourths have obviously no designing talent. Their work as published and seen all over the country must prove this to you as well as it does to me. This means that not more than one man in twenty of those who now come to our schools could reasonably be expected to live up to the highest standards of a course which makes a very heavy investment in design as the essence of professional competence.

THE FATE OF THE POOR DESIGNER

The resistances to such a proposition that are certainly rising in you should be the best demonstration that we do not really expect the whole of a flock to go out in the world and be designers. Indeed, if the evidence of the past means anything some of those who are going to pass and be graduated are going to be so bad that our best prayer should be that they never have a chance to design anything but go to work for a bank as soon as possible. We have to remember that it may not even be safe for them to go into a bank to help it buy architecture or to work for a magazine criticizing it if they lack taste. Design is partly a kind of intuitive skill that makes brilliant syntheses and partly a matter of good critical sense. The

critical sense needed is the self-examination that makes it possible for the designer to reject some of his own most spontaneous conceptions, conceptions that were often compelling to the conceiver at the moment but which his later critical faculty will discard as meretricious or inappropriate. A great deal of our worst design seems to me to come less from the inability of the designer to put together some kind of plausible synthesis than from his inability to bring self-criticism to bear. Perhaps I even dare say it comes through his utter lack of good taste. But those with good critical standards and good taste may be useful somewhere even if they are not good designers themselves.

But all these inept designers may not be foolish or incompetent men. If they have a kind of synthetic talent but no taste, it may be possible for them to be used in the follow-up procedures of design, that is, working out what somebody else has designed and will continue to watch over. This is a role that a good many graduates obviously play all their lives. It is a necessary role and the question about them is whether in the large emphasis on design in our present curricula we do not teach them to feel that they are second class and must play a second-class role in their profession all their lives solely because they are second-class designers and regardless of any other superiorities they may have. Goodness knows, this long-time sentence would be bad enough. But we may often even make frustrated designers out of them, men who thought they were good, found out they lacked something, never have a chance really to make their own designs. Then even if they are highly paid in an office which talks about teamwork while its decisions are made on an authoritarian basis, they may live a frustrated life.

In speaking about the sad future of three-quarters of the students, and I think it is a sad future, I have been gearing up to some remarks about what the practice of architecture is. Of course it has no more facets than the practice of medicine or the practice of law. But the difference is that we treat the school program as though design were not only the most important thing (which it is, I repeat for the last time) but also as though it were the only important thing, which it is not. If we are speaking of professional education, are there not more tasks to be achieved? Shall we leave all the other important activities to chance; to be performed mostly by people trained in other ways who happen into architecture; or by competent graduates with minor talents in design who get their first jobs as draftsmen and then as their lack

of maximum talent in design is discovered, concomitantly with their unusual capacity to do something else well, may move over into some other part of the organization almost by accident, quite innocent of any knowledge or skill which might have been given to them by an earlier professional training? Is not this a little casual?

So again let us ask first whether formal education in architecture is first and foremost and almost completely training in the *art* of architecture. If it is, I have given a useful prescription to destroy three-quarters of the schools or at least reduce the number of students by three-quarters. Or is it to be such a training for those gifted enough to pursue it to the utmost combined with a different training for good men who have high talents in other directions still relevant to architecture, and are sufficiently endowed with synthetic talent and taste to go part way but not to the top in design? Such men, not being frustrated, might understand and be sympathetic to what the good designers do, help them to achieve their ends, and do all this with no sense of personal inferiority and frustration while they are doing it. Is the task of a professional school to manage consciously what is now achieved accidentally in a few, and only a few, good architectural organizations?

This means that we ought first to decide whether an architectural school is a school for architectural *art* or a school for the architectural *profession*, including a wing for architectural art.

WHAT IS A PROFESSION?

We have to be very careful about this word *profession*. Again the situation of architecture seems to me unhappily unique. Let me offer you an example from medicine. Suppose you went to a doctor and told him you had a pain in your left kidney and that you had decided you wanted it out, and not only that but that you had read about and admired a new way of performing this operation which had been perfected in Barcelona. He immediately said he would take it out and he would try to do it in the Catalonian way although he had always been a Williamsburg man himself; still, he had seen papers by surgeon Gaudi and believed he could manage it. If you asked any such question of a doctor and he replied in these terms you would be well advised to run for the nearest exit. You know very well he would first want to examine the kidney and judge for himself whether or not it should come out at all; and if perchance it should come out he would want to decide for himself how; and if you declined his position on either of these matters he would

gladly have you go elsewhere. But even Dr. Gaudi in Barcelona would probably not take the thing out unless it ought to come out.

Now has the architectural practice any relation to this? Among the very greatest and most obstinate men of whom happily there are and have been a few, geniuses like the late Frank Lloyd Wright or Mies or Corbusier would throw you out of the office if you came with a comparable suggestion. But how about the general situation?

There are two levels of professional standards involved here. One is how the operation shall be done if it is to be done at all. Here as I have said we know that some men and some firms would be adamant while more would be tractable. But the other level asks whether the operation should be performed at all. Here I suppose we would have to admit that the professional *ethos* of architecture is less clear than that of the law or medicine. The good lawyer, too, will often advise his client against litigation, advise him on the conditions as well as the legal language of his will, interrogate his purposes and not be content merely to find a way to achieve unquestioned purposes. The analogous professional situation would arise in architecture if for example some one came to you and asked you to design a sixty-story building and you asked him no questions as to what this might do to the surrounding metropolis, whether to build it was in accord with urban trends or struggling vainly against them, whether the investment in the building was wise, and a whole range of comparable social and economic and political and even moral questions. What is the architect's responsibility here? If it is only that of taking the job because he knows that if he does not some one less responsible than he will, I have to say that this may be proper artistic ethics but it is not professional ethics as they would be understood by a doctor or a lawyer. The question this poses in the philosophical sense is, of course, what are proper professional ethics in architecture (I should think fee-splitting and failure to use professional documents or even investing in a building enterprise were the least important, not the most important questions) and how, if they can be determined, is the education of the architect to contribute to the probability that the graduate will understand them, believe in them, and adhere to them? (Education, we could suppose, would contribute more than Hippocratic oaths or codes of conduct imposed by the AIA.)

There are a lot of other and perhaps less drastic ethical decisions. A client comes to you with a hundred thousand dollars and a desire to build a

complex that cannot cost less than a quarter million. What is your first move? Of course you have to know that his desire is unrealistic, that no miracle will happen this time as it never has before, but that is a professional competence which we must assume you have. Do you use the competence professionally? Do you tell him he just can't do it and tell him what he can get, right off the bat; or do you study it, hoping against hope that the market will fall or that anyway he will go out and find some more money? Do you then end with a project that the client likes so much, even if he can't afford it, that he goes broke building it or sacrifices other things he should not sacrifice, or, if an institution, bleeds his donors again to make good on the aspiration he should not have entertained in the first place? Few examples are so spectacular as this but the whole question of professional competence as to costs and of professional ethics in bringing to the client something his budget can afford or declining the work is one on which I am convinced the public view of the architect as extravagant, incompetent and obstinate is generally justified. All this is a very difficult subject to get at effectively in school, I am sure, but when does it all begin?

These few examples ought to satisfy us that architecture is not really a profession in the sense of most professions, and not quite an art either in the sense of most arts. It is more responsible than art and less responsible than the professions, if I may use the word responsibility here only in a narrow sense of practical matters. And when we come to costs and the extent to which the architect should participate in or even help to form business decisions, we are beginning to ask the third and last question as to whether architecture is not also a business. Surely firms have to get work to do. Around their ability to seek work we have put a number of fences of so-called "ethics." It was all right, and still is, I suppose, to circulate in the right clubs and among the right families and to use one's friends as clients or to act as procurers by suggesting one's talents to other clients. But we are in a world in which many fewer important commissions are given over a bar or in a club. It is all right to enter a competition but this is no longer regarded as a profitable way even for the client and certainly not often the way, in the United States at least, by which a talented young man can suddenly spring from obscurity.

It is all right to send along a very fancy submission couched in terribly businesslike terms and costing a good deal of money to prepare *if one is*

invited to send it. Some of these presentations, as you well know, are really expensive now and part of the justified overhead of an architect's office if architecture is a business; but one cannot advertise that one is good save indirectly, by getting published in the right magazines, by giving interviews to *Newsweek* or *Life*, by making a speech in the right situation, by arranging to be asked to make a submission. One cannot *buy* the advertisements directly. One cannot go on the air with a TV show of one's work, week after week, although this could be very effective on a local channel when an important local public project is under consideration. One certainly cannot contract the building itself or invest in it. And why, pray, not? Are not the rules of practice something like the codes of amateurism for American football teams? Would the architect be a stronger man if he did put his own fiscal neck into the noose of a building project? All these questions and others like them have been asked many times before and a good deal of hypocrisy surrounds the whole affair. The hypocrisy is, to be sure, a tradition rooted in history and in earlier business and building conditions. But if architecture is a business, if firsthand presentations of one's capacities, firsthand estimates of cost, firsthand managerial skills and ability to assist in financing a project are indeed part of the proper practice of architecture, then how is it again that architects who are to deal in such matters must enter upon it as green as grass, innocent of anything they might have gained from formal instruction?

THE EMPHASIS ON DESIGN

Out of all this I raise the following fundamental question. Does the large emphasis on design as so central to the entire curriculum for everybody, seem justified? Does it tend to insure that a man who is only a fair designer will automatically be adjudged as a man with a second-class or third-class future in architecture? Is it possible to conceive of a more versatile program? Such a program might push the designers to their limit in the upper years, unencumbered by the lower-level skills of those who are dragging along. It could also select from those with marginal designing skills those who have high aptitudes in some other matters and encourage them to pursue a greater concentration in relevant subjects outside of design. Thus a wider range of professional skills might be available to employers of the graduating class; a larger number of the graduates might have a real chance of useful and profitable careers. I do not suppose for a minute that such a program

could or should try to make it appear that those who do reach the top in design are not the most important men in architecture. To this extent status will always exist. But I suppose if it were carefully tended it might reduce the frustrations of second-rate designers, improve the quality of the other tasks done in architectural offices, provide a more substantial sympathy and cooperation between the business and design staffs. It might provide all these necessary cooperating nondesigners with a sense of their own dignity and usefulness which would not force them to bow their heads to any one called designer but only to first-class designers. This of course is what most of the first-class designers have to do too when they come into the presence of real masters such as Corbusier, or Wright, or Mies van der Rohe, or Aalto.

Of course I know that there have been tries at architectural options before, especially in architectural engineering, and that not very many have been happy with the results. But I am not sure that they have been sophisticated tries. Moreover I do not argue at all that this proposal should be tried. I would only argue that it should be thought about as part of a serious reconsideration of what the architectural profession is today and how closely the education has anything to do with the realities of it. I mean an unsentimental try too because all intelligence can be thrown out of the discussion by an emotional appeal to the *art* of architecture which ignores the fact that very few architects are in fact very good artists and that we are lucky there are as many as there are.

Because I am not at all sure that the options are even a good idea I do not propose to try to inhibit your imagination by saying what they might be. Let me point out, though, that the use of the intellect is not to be scorned in architecture. It will not replace the use of intuition. The very greatest men arrive by intuition at answers which are intellectually sound and the fact that their intuition is reliable is what sets them aside as very great men. But heaven help us from the uncontrolled intuitions of lesser men! It is here that reason takes the floor. I think it is demonstrable that there are men who can make the most refined analysis of the real needs of a program and establish the general space relationships needed to carry out such a program and yet be quite unable to create physical spaces following the program which will really be pleasant at all. Certainly we have countless examples also of good designers (but not geniuses) who can put together the spaces but whose thinking about the program is so woolly that the results are impossible.

Now the problems of programming are getting ever more complex. A good programmer really has to do a lot more research than he once did; he may have to travel and look and listen and examine figures and do a lot of drudgery to arrive at his really useful conclusions. All of our design courses today, I suppose, involve some student programming and do not present the students with *a priori* conditions. But are the exercises strong enough to do anything more than suggest that a program should be prepared? May their necessary superficiality not even encourage the idea that some diagrams that look well are the thing, as sales documents really, rather than a sound understanding of what facts and figures are relevant, and what facts and figures are reliable and to be believed? Is it not possible in curricula that bifurcate in the upper years that some men whose talents for programming are manifestly superior should be encouraged into more of this

work and less in design, *provided always* that they are not also the superior designers whom we need continuously to cherish and not permit to be diverted since there are so few of them.

I might add that other bifurcations are also possible; one surely in the direction of management itself; one probably in the direction of a good social understanding which would make the man a useful operator (let me say salesman if you realize I mean the purveyor of good wares who must convince people) in public situations especially; this will be a very important area in the future especially in large urban redevelopment projects.

Let me rest the case on three possible ultimate forks, one to design, one to management, one to programming. And there are others, both alternative and additional, but it would not profit to try to spell them all out.

(To be concluded next month.)

**TAKE IT AWAY,
LE CORBUSIER!**

by Elise Jerard

A client views with dark misgiving
A home that's a "Machine for Living."
What normal family you've seen
Would choose to live in a machine?
A home where there is too much Built-In
Is one to feel too darn much guilt in.
A place for this, that, those and these
Just makes you fling things where you please.
If you're a man and not a mouse
You don't take orders from your house!
Design that's so austere neat
Either makes generations Beat
Or architectural overwork
Drives inmates mess-and-muss berserk.
A cellar bar that's too precise
Makes drinking somewhere else seem nice.
Too many Areas defined
Runs counter to the human mind
Which is by nature brash and sloppy.
(Le Corbusier addicts please copy.)
A home is just a place to live in,
A place that something's got to give in,
And what has got to give must be
The house — because it won't be we.
Clients will take just so much steering.
They don't want houses domineering.

by Elise Jerard

WHITCH

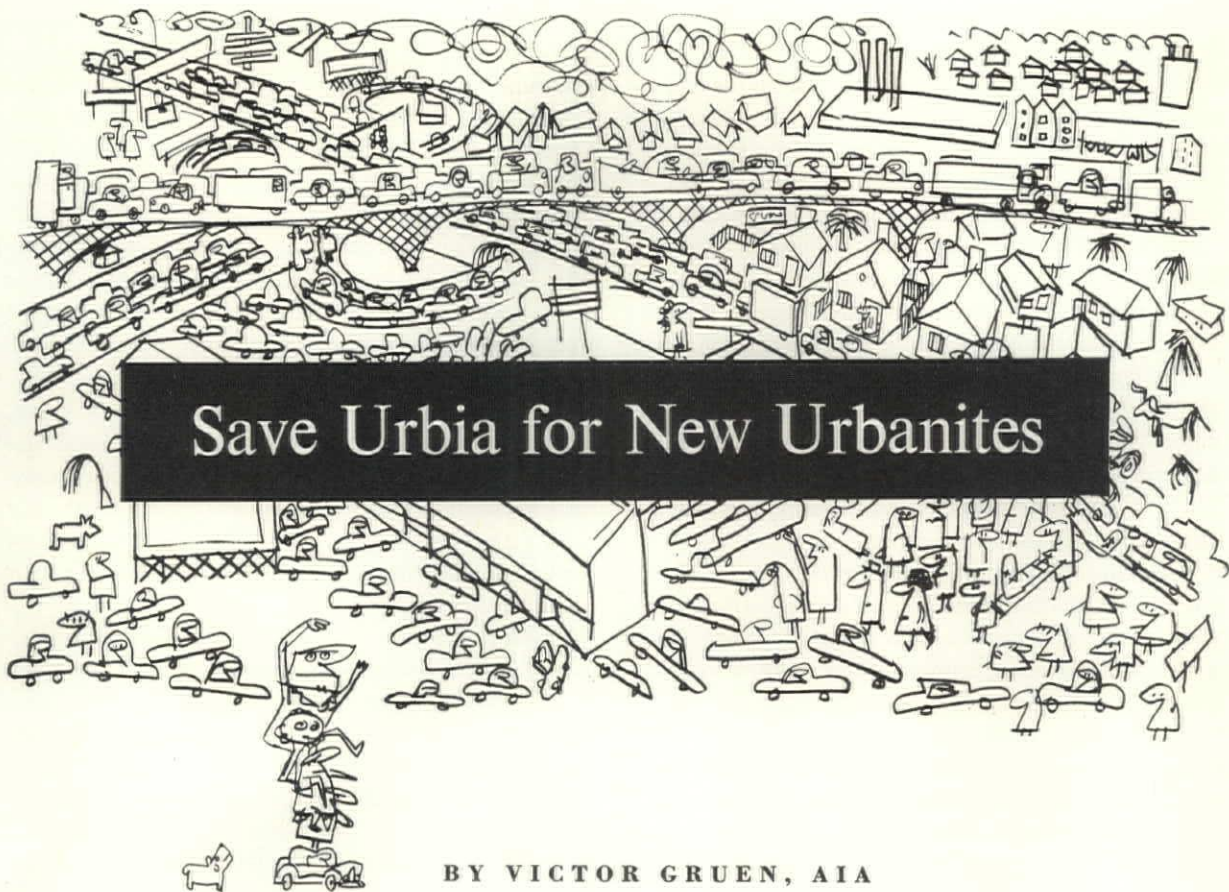
by Ralph Mitchell Crosby, AIA

Oh, who would be an Architect
When a Poet he could be,
With verses dancing from his pen,
A rhymed Terpsichore;
His head 'way up among the clouds,
His eyes upon a star;
Or deep in fields of asphodel
Could roam somnambular?

Oh, who would be an Architect
And waste the precious hours,
Instead of penning lilting rhymes
Of birds and bees and flowers?
Why be a weary galley-slave,
At a driving client's bid
When one could spin an epic to
The joyous katydid?

Oh, who would be an Architect,
Jaded with tedious toil,
When one could dream away the days,
Free from insane turmoil?
Shall a Poet's prating pen my role
As Architect usurp?
To hell, I say with such a thought!
Excuse me while I erp!

by Ralph Mitchell Crosby, AIA



Save Urbia for New Urbanites

BY VICTOR GRUEN, AIA

Adapted from an address delivered to the Sixty-fifth Annual National Conference on Government of the National Municipal League, in Springfield, Massachusetts, in November.

► Statisticians forecast with great certainty that the present population growth will continue, that the rural population will further decrease, and that therefore the urban population will increase faster than ever. The challenge of the sixties is: Will we be able to provide functioning, livable and workable cities to take care of the growing urban population—or will the overwhelming majority of Americans in the sixties have to live and work in human conglomerations which no longer have characteristics to which the terms “urban” or “city” apply?

Most symptoms discernible today indicate that we will fail in facing the challenge. We are busily engaged in passively destroying whatever we had of urban organisms, and we are resigned to the fact that we live in a time of urban crisis.

Living within any organized form of society necessitates the acceptance of certain public re-

sponsibilities and the subordination of certain individualistic desires. We accept this truth by having regulated our general behavior pattern, by accepting a certain political order anchored in the Constitution and the Bill of Rights, and by living within a certain legal framework. We reject the acceptance of these truths completely in our relation to urban organization. In this respect we can be best described as “anarchists”. Compared with other civilized countries, our public urban institutions are on a shockingly low level. This applies to public transportation, to school systems, hospitals, city parks, city streets, and to every other aspect of an urban environmental nature.

Every attempt of those who believe in and fight for urban and public improvement is brought to a standstill by the followers of a new cult which, instead of the golden calf, has chosen as its goddess the private automobile. The believers, whom for the sake of brevity I will call “autocrats,” have raised their goddess on a high pedestal and they preach complete subjugation to this “higher mechanical being.” They accept automobile traffic in the same manner that former heathen religions accepted elementary phenomena like the sun and

the rain, thunder and earthquakes—as superior elementary forces with which man cannot assume to tangle. They pay tribute to the new goddess not only through monthly installment payments but also by prostrating themselves or, as the foreword of the proposed New York Zoning Resolution states, “by paying deference to the automobile.”

How deeply autocrats believe in their dogma may be best illustrated by a statement in a report concerning the rebuilding of Los Angeles downtown, which reads, “. . . the pedestrian remains as the largest single obstacle to free traffic movement.” The cult of the autocrats, which I will name “autocrazity,” is perfectly willing to sacrifice our cities on the altar of the new goddess. Their evangelists preach ceaselessly that everything must be done to facilitate and increase the flow of automobile traffic. Autocratic fanatics have already succeeded in leveling large parts of downtown cores of our cities, which now resemble the worst bombed-out European cities as they looked after the war. Some of our city cores, in fact, represent only tremendous parking lots and road accumulations, rendered inefficient by the few buildings which have resisted, for some inexplicable reason, the holocaust.

Everybody, it seems, has fallen under the spell of the autocratic fanatics. Downtown merchants, rapidly losing their shoppers, are yelling for more and more parking space. City administrations prescribe that every newly erected building must provide altars to the autocrazity in the form of car storage space. Traffic planners favor the slicing up of the urban fabric, the sacrificing of parks and historic buildings, the widening of streets, the narrowing of sidewalks. Impressed by the evangelistic fervor of the autocrats, the urban citizen is willing to give up privacy, quietude, restfulness, beauty and, when called upon, his very life, for the representatives of the deity from Detroit.

A few years ago, Wilfred Owen, one of the most knowledgeable men in the field of transportation, stated with conviction, “We cannot be both motorized and urbanized.” What was then a prophetic remark based on sound thinking is today proven by hard figures and facts. Statistics show that the economic well-being of any city center decreases in exact proportion to the increase of private automobile traffic within the built-up area. In Chicago, for example, the loop area was entered in 1958 by 55 per cent more people by automobile than in 1954. Business of State Street department stores dropped during that time by 16.3 per cent, and the number of people entering by public transportation by 13.2 per cent.

Manhattan was entered on a typical business day in 1956 by 171,000 more people coming by automobile than in 1948, yet 350,000 fewer people *altogether* entered Manhattan daily in 1956 than in 1948! A half-million people a day have been lost in those eight years as passengers of public transportation. Thus, an increase of 36 per cent daily in the volume of motor vehicles entering the business and shopping district of Manhattan has been accompanied by a decline of about 12 per cent of the total of people who come into the hub area of New York.

If we continue to follow, like a flock of sheep, the preachings of the autocrats, we will bankrupt public transportation and any other form of mass transportation. We will lay waste the centers of our cities and, by doing so, destroy any form of urban organization. We will wipe out what is being referred to as “urban culture.”

Before we continue on this path of de-urbanizing urban areas, we should seriously ask ourselves whether the shiny, fin-tailed, many horse-powered images of the new autocratic cult are really worth the sacrifice. In the past, human achievements and human progress had their mainsprings in the city. Athens and Rome, Paris, Vienna, London, Peiping, Tokyo, New York and Chicago, and an endless array of other cities, past and present, were the cradles of human thought and human progress. Only *urbia* was able to provide the climate, the physical possibility of human communications, the concentration of brainpower and talent essential to intellectual and spiritual development. Our democratic system depends on the possibilities which only direct human communications afford. Should we be willing to swap urban organizations which have been accepted as the symbols of the status of a civilization for a formless, sprawling, diffused and confused conglomeration in which all direct human communication would have to be replaced by vicarious experiences through electronic devices like television, videophone or other gadgets?

The challenge of the sixties, as I stated in the beginning, is to see to it that we will still have “urbia” for the millions of new arriving *urbanites*. The ways and means to create better, more livable, more workable and more beautiful cities are in our hands, but we can apply them only if we can defeat the cult of “autocrazity.”

Some readers might have gained the impression that I want them to go out with hatchets and destroy every car they see. Don't be concerned. I am not asking for violence. I have nothing against automobiles. In fact, I own one myself—even if it

is only a small one. I think they are extremely useful appliances—like electric toasters, dishwashers, and vacuum cleaners. We know we will have more and more of them—and that is fine with me, as long as we can arrange things so that they can *actually move*. What I am asking is that the automobile be de-throned from its high pedestal as a symbol of divinity and that, like all the other appliances, it be put in its proper place and utilized where and when it is needed, without interfering with the more important rights of human beings who, at least for the time being, are still in the majority.

To some degree even the most fanatic autocrat recognizes that there are certain places in which the automobile does not belong. Even the most emotional sports car fan does not take the object of his adoration into bed. It is still unusual to find even the most elegant highway cruiser in the living room. And with the exception of a few slowly rotating but otherwise harmless symbols of the cult, automobiles are kept out of hotel lobbies, air terminals, and railroad stations.

All I am asking for is that we expand logically our pattern of etiquette with regard to living with our mechanized servants. We need a kind of Emily Post on the theme of how to live with our mechanical gadgets. I am by no means advocating a turning back of the wheels of history. On the contrary, it is a logical continuation of our behavior pattern with regard to other transportation novelties. After the first excitement died down, we took railroads off our main streets and separated them neatly from our urban environment. Nobody has ever proposed building garden apartments on both sides of an airport runway. We have even gotten rid of elevated trains in New York, and we now have our rapid transit within cities underground.

What I am asking for is a return to sanity and an application of the same principles which we follow with regard to railroads, airplanes, rapid transit, sewers and water lines, electric power lines, which at least in our more civilized urban centers are all removed from visibility. Concentrated human activities—whether they are concerned with working or selling or learning or dwelling—are just not compatible with the noises, smells and dangers of mechanized traffic; and mechanized traffic is steadily and extremely disturbed by human activities. Traffic cannot flow between structures which steadily receive and emit people and all types of vehicles. And people are steadily and extremely disturbed in all of their pursuits, in their privacy, and in their peace of



mind by steady streams of mechanized traffic. The old system of separation, consisting of sidewalks and driving lanes, was compatible with the horse and buggy age. It has become impractical and insufficient with our economic growth, with the increased number of mechanized vehicles and the greater speed which we are able to attain. Logically we have to devise a new method of separation for our times.

Recognizing the need for greater separation, the new pattern will have to provide separated areas for transportation and separated areas for all types of human activities. A cellular form of urban organization will result. Human activity cells will be pedestrian islands separated from each other by landscaped areas in which various means of transportation will have their specific rights-of-way. A number of such activity cells will be grouped in cluster-like fashion around core cells containing, depending upon the size of the urban organism, the necessary common facilities for work, trade, administration, cultural, recreational and educational pursuits. In the case of a large metropolitan area, a great number of such cell clusters will surround a metropolitan core area, which again is organized into a number of activity cells of the highest order. In the case of large urban organisms, public transportation will make interior points of activity cells accessible through underground facilities. All other transportation, however, will be brought only as close as possible to each cell by means of surrounding-loop roads with directly adjoining car storage

areas and terminal facilities for public transportation carriers.

This newly emerging urban pattern has not found expression by implementation in large urban areas up to now. But there are hundreds of new urban elements on a smaller scale which represent the new pattern. The large suburban shopping centers, college campuses, industrial parks, office building clusters, amusement parks like Disneyland, are excellent examples. The plans which my firm has developed for cities like Fort Worth, Texas; Kalamazoo, Michigan; St. Paul, Minnesota; Newark, New Jersey; Green Bay, Wisconsin; Fresno, California, and others, illustrate how the new planning pattern can be superimposed without the necessity for large-scale physical destruction of existing cities.

The planning principles of separation of traffic which we have expounded over the last ten years, together with the impact of the formidable success of pedestrian malls in large shopping centers, have not failed to get recognition. In the last few months there has been a rash of downtown mall projects. Over fifty such mall experiments were recently listed. Most of them are of experimental and temporary nature, but at least one, the mall in Kalamazoo, was installed on a permanent basis.

Because we have included the pedestrian island concept in all of our downtown planning projects, we find ourselves now in the embarrassing position of being credited, either directly or indirectly, with being the cause of these mall experiments. Frankly speaking, we are quite upset about them. We believe that not only will they be ineffective after the first excitement over the unusual sight of grass and bushes in a downtown street has died down, but that they may prove downright dangerous with respect to long-range over-all planning efforts. If the expected long-range success does not occur (which in our opinion is most likely) then the citizenry at large and the business men specifically will claim that this is just proof that the ideas of long-haired and egg-headed planners do not work.

The trouble with these mall experiments is that they are not based at all on *planning* considerations. They are rather the result of promotional and advertising mentality, with the aim of creating sensations, and are quite similar to other downtown promotional activities like Dollar Days, parades, etc. The creation of pedestrian areas downtown can be successful only if it is accomplished as an integral part of an over-all plan. In fact it is probably one of the *last* measures for implementation within a carefully scheduled re-

vitalization plan, and it just cannot be the beginning. Only after proper access from suburban areas toward the central business district has been achieved for private as well as public transportation; only after a belt road system around the downtown core, together with directly adjoining terminal facilities for public transportation and storage facilities for private cars, has been constructed; only after a system for servicing downtown buildings has been implemented, can the creation of pedestrian districts be accomplished. The replacement of the choking ring of slums, which we find around most of our downtown cores, by new high-density residential areas is another prerequisite to the improvement of the environmental qualities of the downtown core, of which the pedestrian island concept is a part.

The trouble with the mall experiments (including the permanent one in Kalamazoo which, in fact, was part of the over-all plan which our office developed for that city) is that they are spatially limited, poorly executed, promotional measures based on a complete misunderstanding of the whole problem. They are the direct outcome of the desire which most downtown interests share to do quickly and cheaply something spectacular and to rely on patent medicines rather than a thorough treatment.

The downtown mall experiments are only another measure in the endless series of single, unrelated measures like one-way streets, municipal garages and parking lots, scramble crossings, spot redevelopment, new street lighting and all the other gimmicks which are so popular because they create for a certain time a certain amount of excitement and can be implemented without the investment of too much brainpower or too much money.

Only if we recognize that the urban crisis, which is the outcome of a deep-seated disease which has progressed for fifty years, cannot be cured by administering aspirin in the form of unrelated small measures but that an over-all treatment based on a clear understanding of the problems is needed, will we be successful in revitalizing our cities.

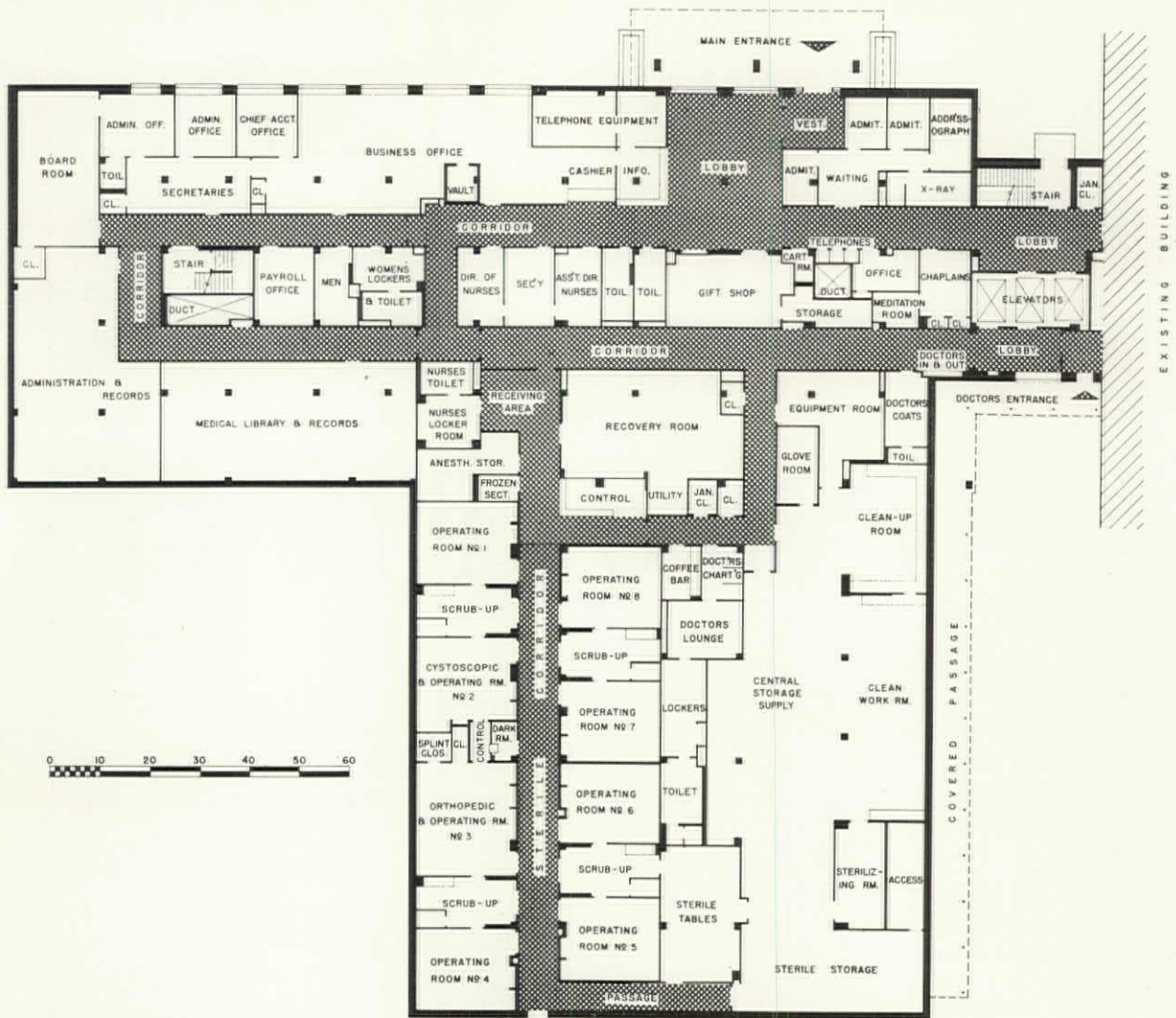
Only if we are willing to accept the automobile for what it is—a servant to mankind and not a deity; only if we are willing to progress in a civilized manner, enlarging our concepts concerning the separation of incompatible uses; only then will we be able to live up to the challenge of the sixties and create superior cities of truly human environmental qualities for the dramatically increasing urban population. ◀

An exhibition of new hospitals is on view at the Octagon Gallery until the end of February. The designs were selected by a screening jury consisting of members of both The American Institute of Architects and the American Hospital Association from projects shown at the AHA meeting in New York's Coliseum in August 1959. All these

NEW HOSPITALS

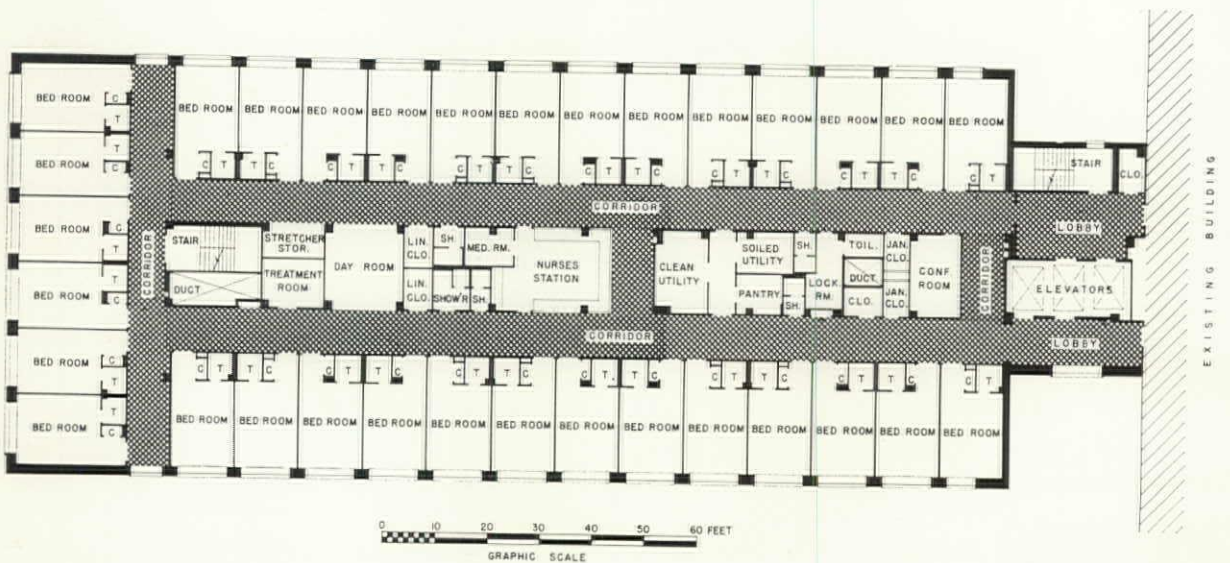
designs represent actual projects which have been completed or were under contract for construction in the course of the last five years. The current exhibition is the fifth in a series of similar showings at the Octagon. The large photographs and detailed plans of hospitals of diversified types provide an opportunity for both architect and layman to see a broad sampling of outstanding new work. Through the publicity and visitors to these exhibitions the selected projects have received considerable attention. Once the entire exhibition was taken by the United States Information Agency for circulation in Europe. Last year, through the interest of the Public Health Service, a group of the designs was sent for further display to Atlanta, Georgia. There is proven value in such an established series of exhibitions which consistently brings forward a high standard of design in a specialized field. It serves as an inspiration to architects and clients alike.

**An Exhibit
at the Octagon Gallery,
February, 1960**

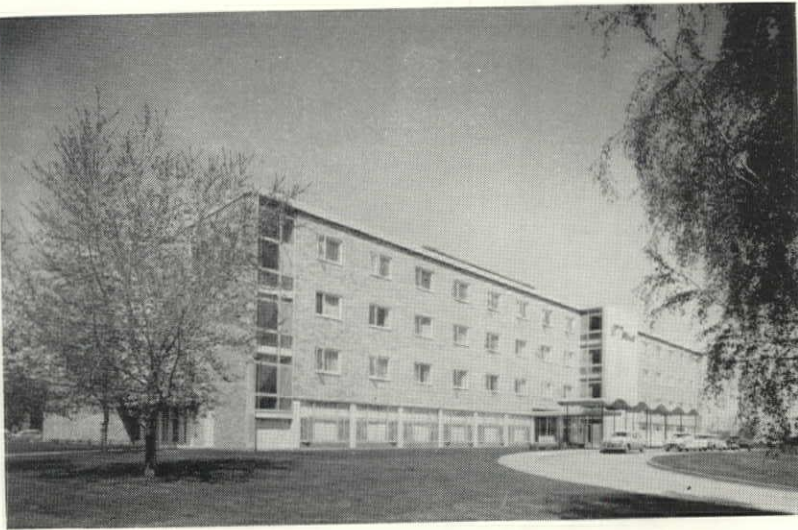


Addition to Prince George's Hospital, first floor plan above, second, third and fourth floor plan below

40



Davis Studio



Addition to

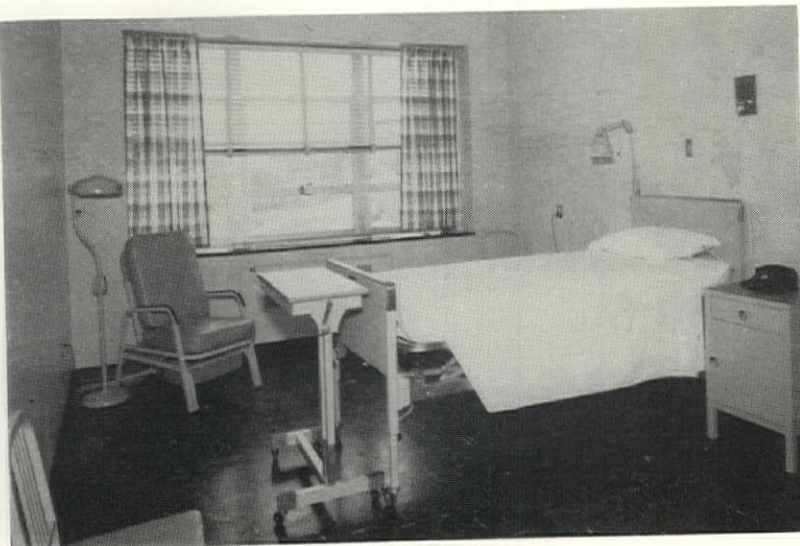
Prince George's Hospital, Cheverly, Maryland

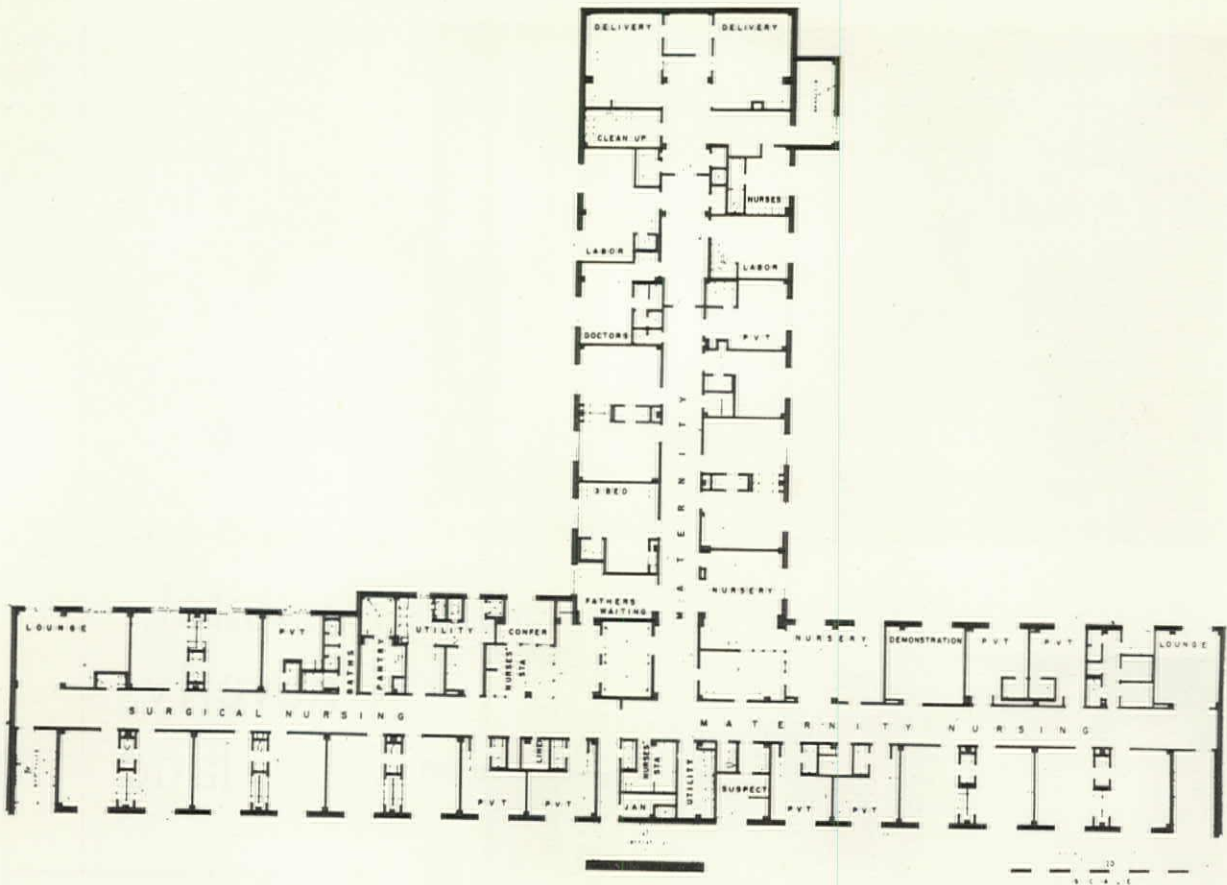
Davis Studio



Faulkner,
Kingsbury and
Stenhouse,
Architects,
Washington, D. C.

Davis Studio

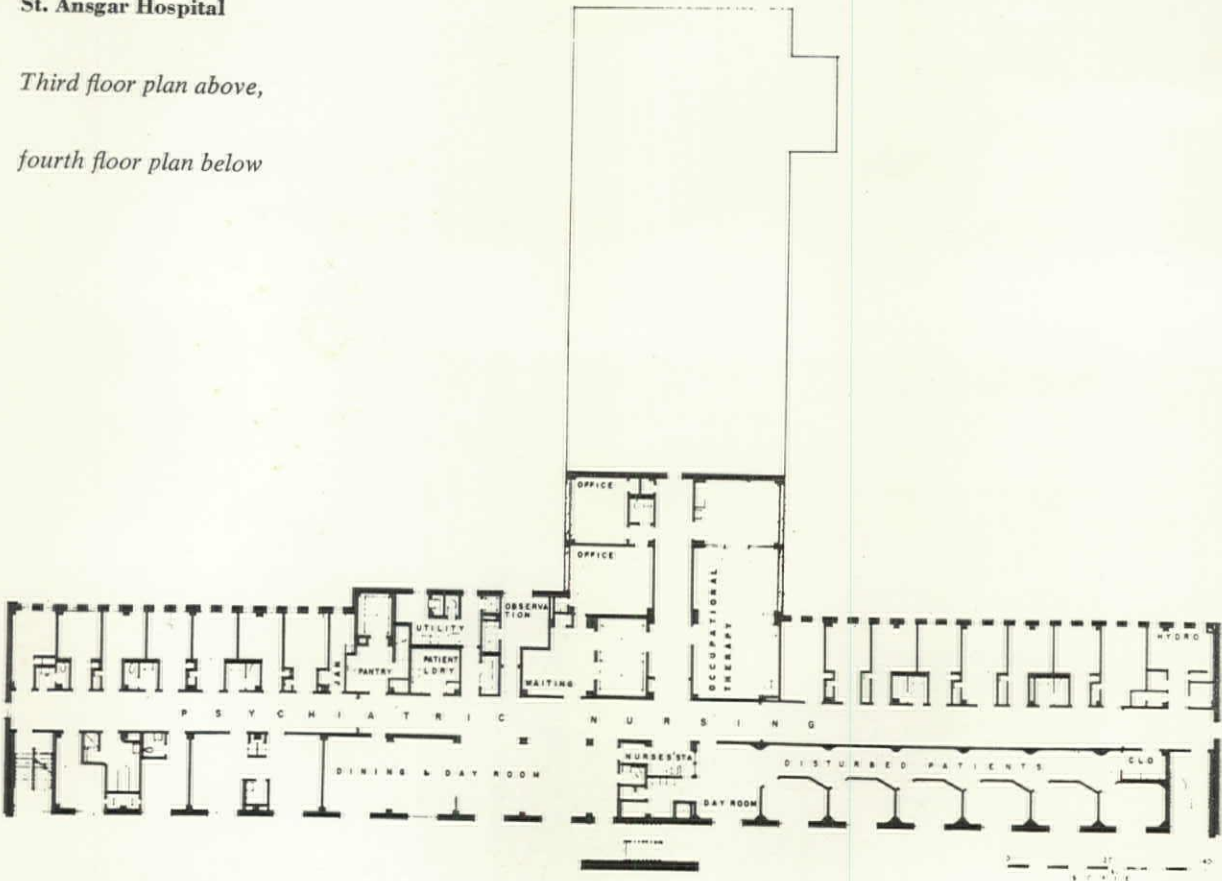


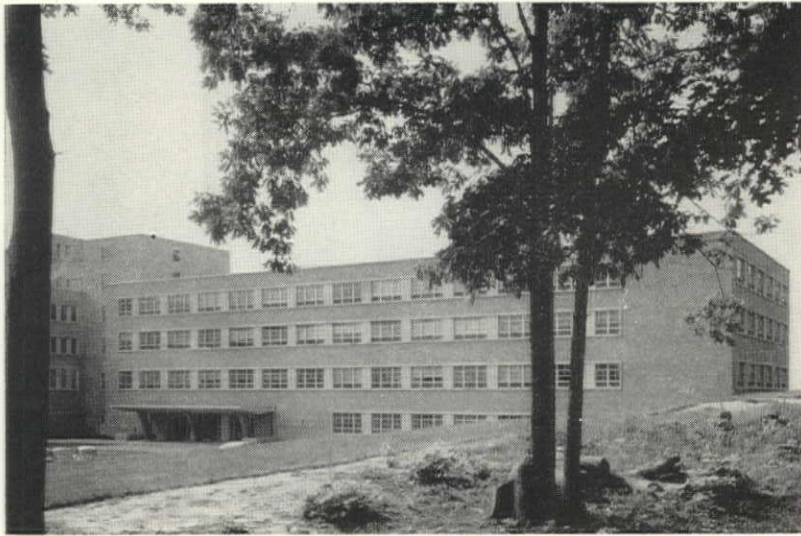


St. Ansgar Hospital

*Third floor plan above,
fourth floor plan below*

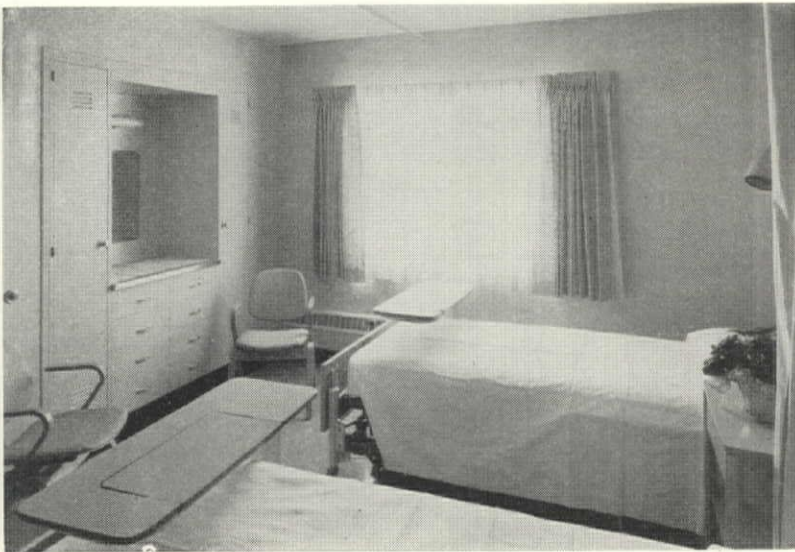
42





St. Ansgar Hospital, Moorhead, Minnesota

Gillespie Studio

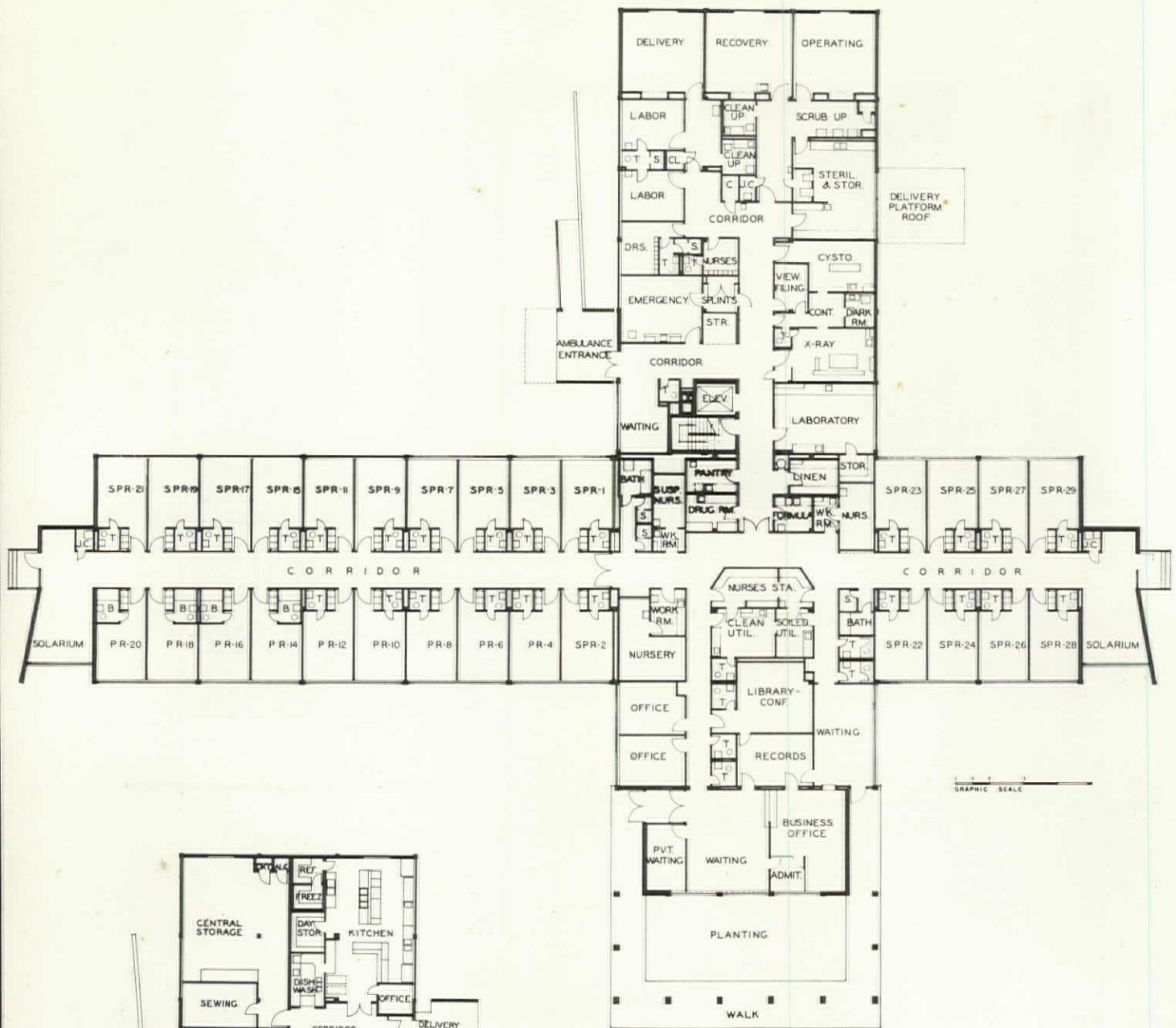


Bettenburg,
Townsend,
Stolte and
Comb,
Architects,
St. Paul,
Minnesota

Gillespie Studio



H O S P I T A L S



Walton County Hospital

First floor plan above,

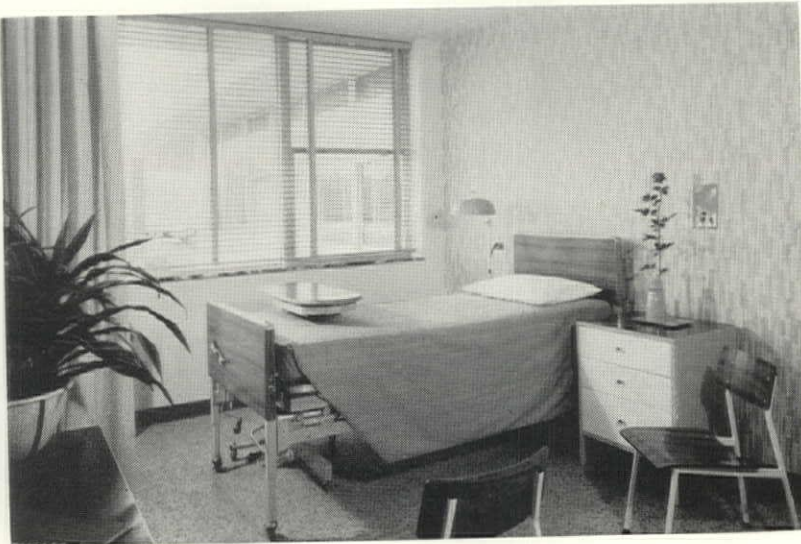
ground floor plan at left

Robert McGinnis



Walton County Hospital, Monroe, Georgia

Robert McGinnis

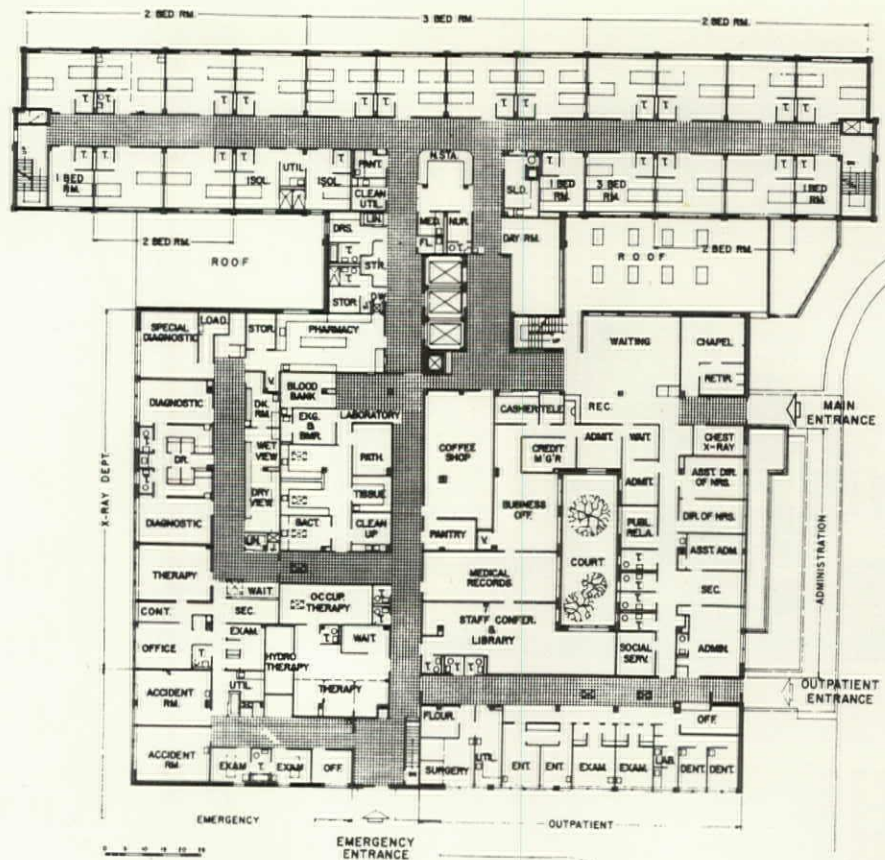


Abreu and
Robeson, Inc.,
Architects,
Atlanta,
Georgia

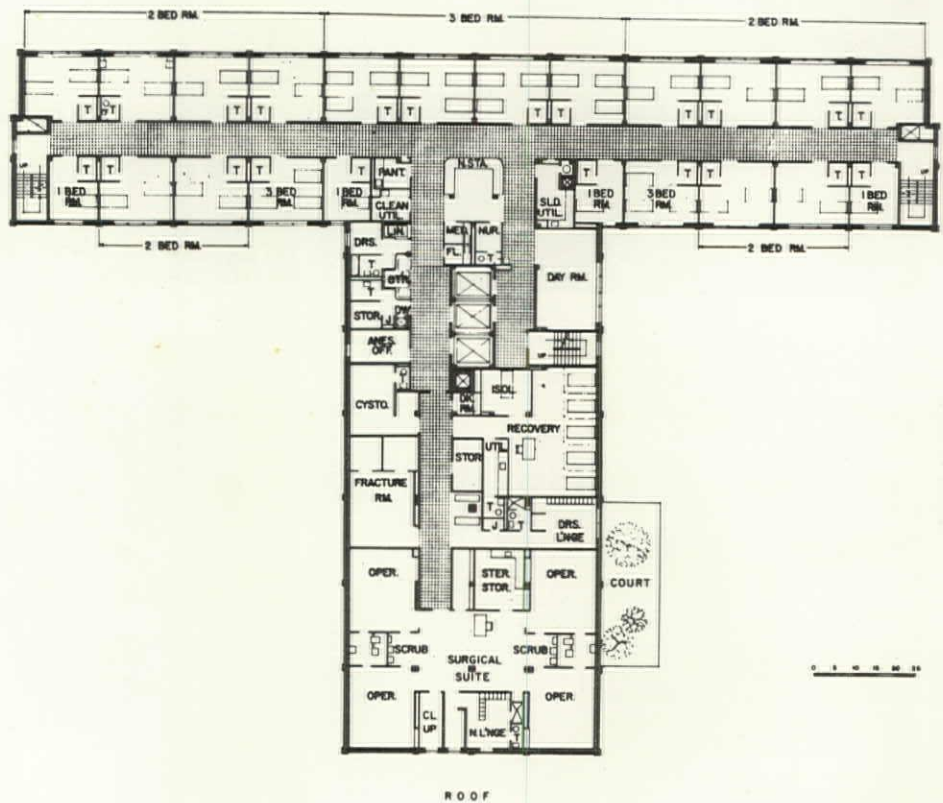
Robert McGinnis



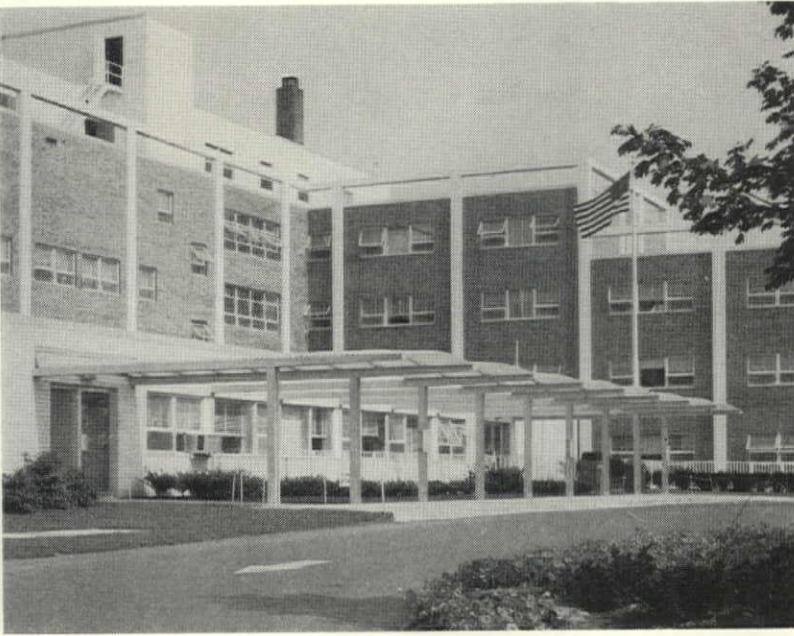
Warren Hospital,



First floor plan above, second floor plan below

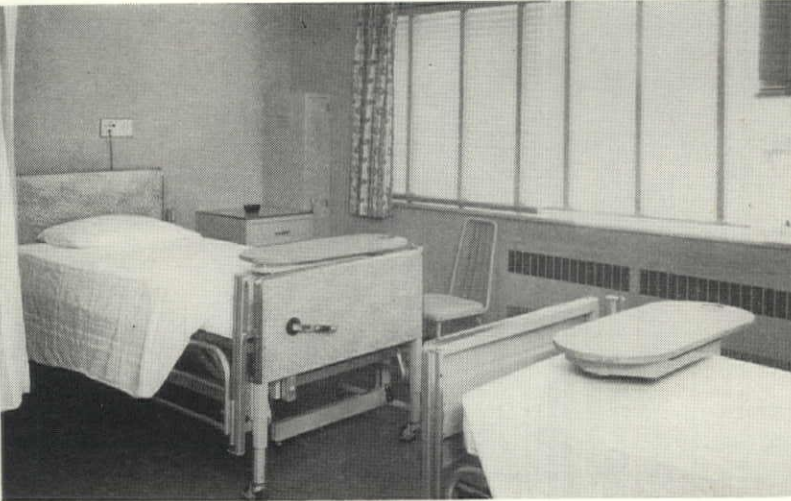


Robert S. Knerr



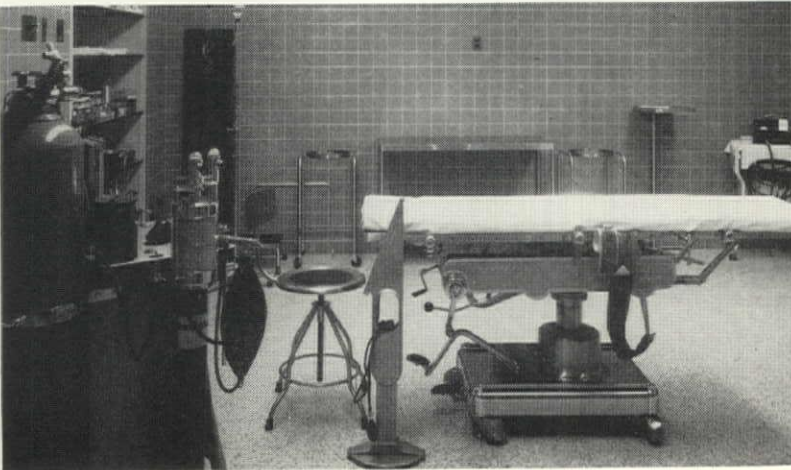
Warren Hospital, Phillipsburg, New Jersey

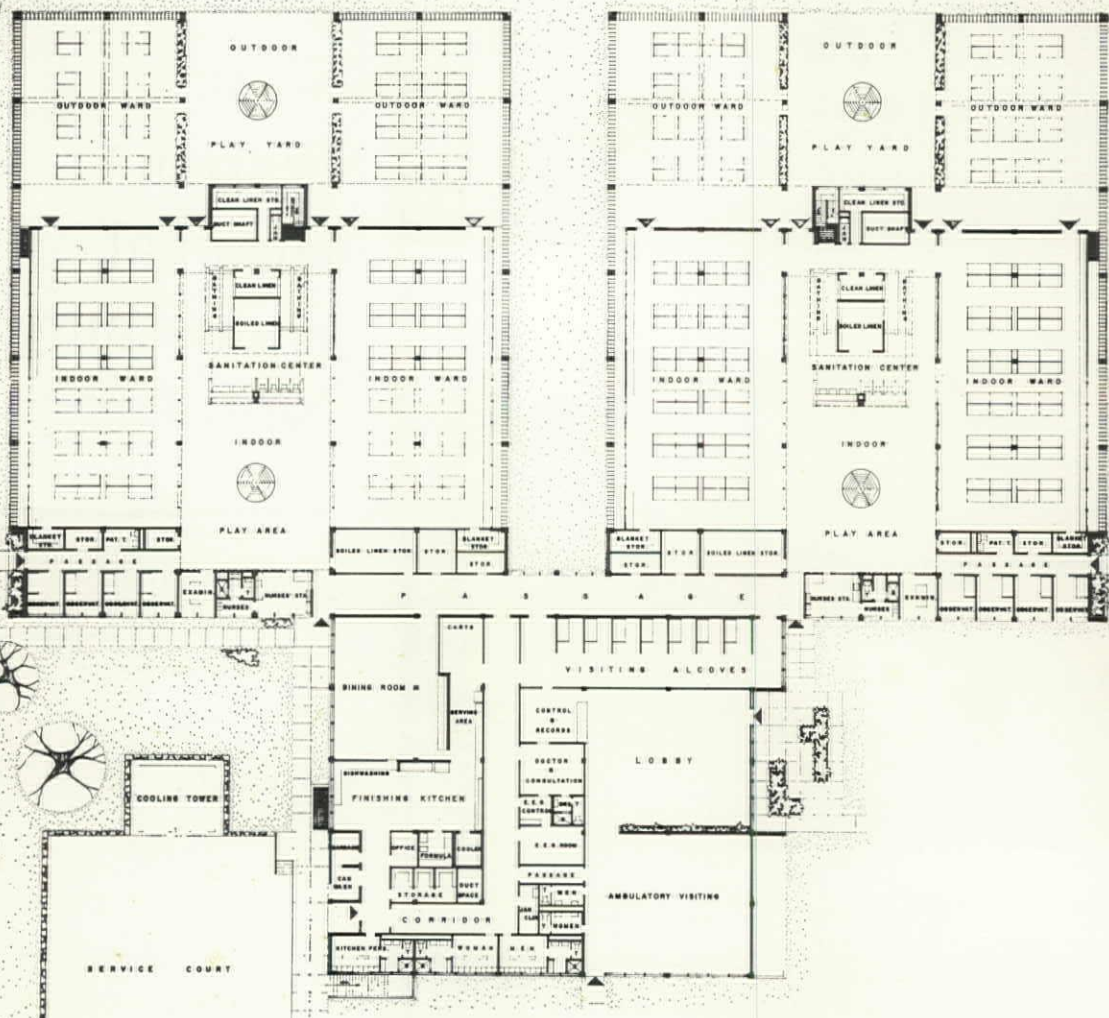
Robert S. Knerr



Frederick G.
Frost
Associates,
Architects,
New York City

Robert S. Knerr





Clement Research Unit

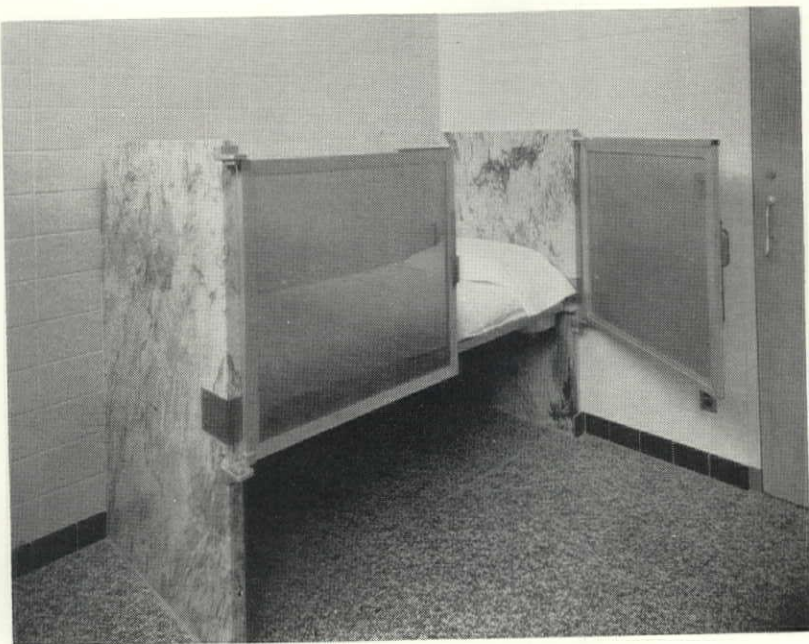
Henry Schofield



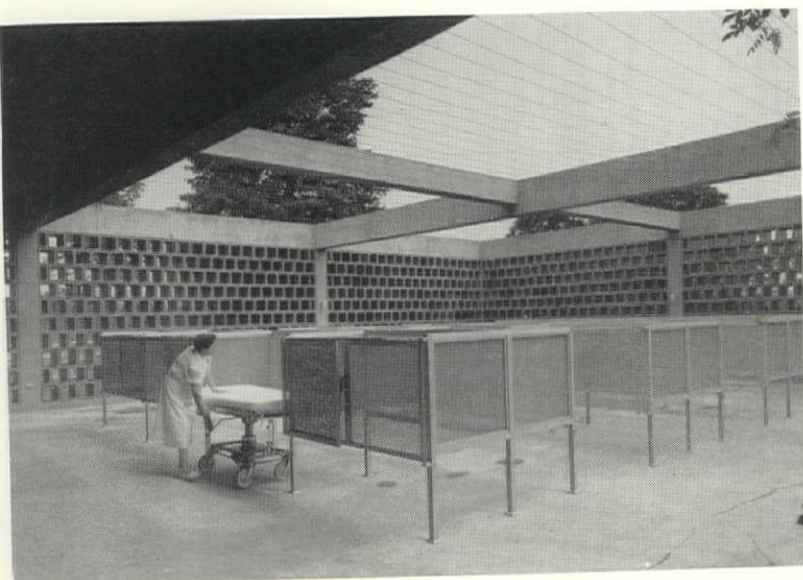
Clement Research Unit, Clover Bottom Homes, Donelson, Tennessee

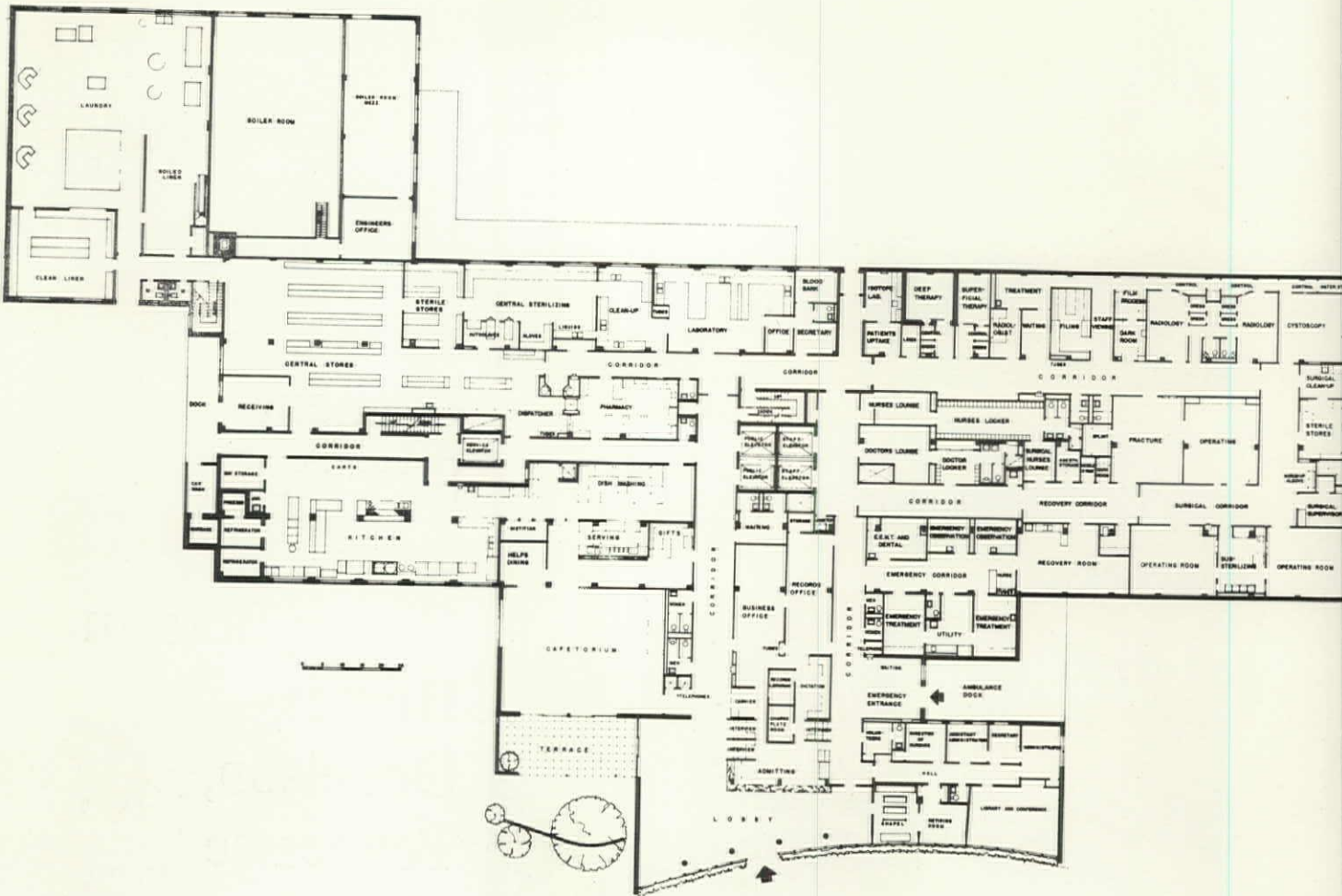
Taylor and
Crabtree,
Architects,
Nashville,
Tennessee

Henry Schofield



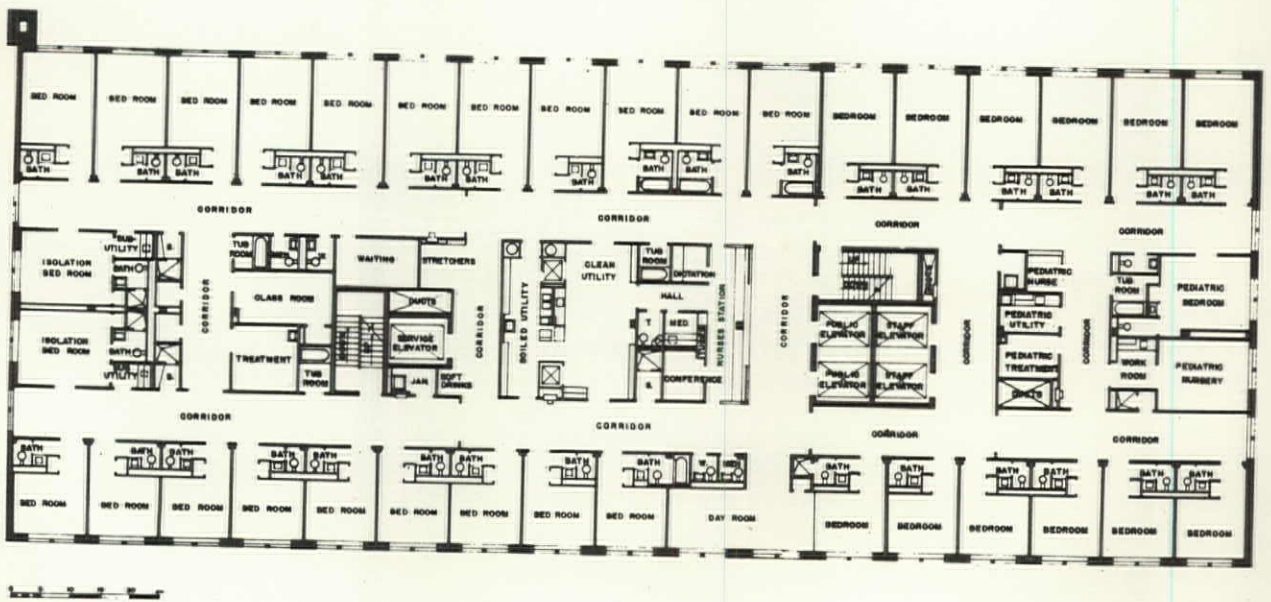
Henry Schofield





Wadley Hospital, first floor plan above, third floor plan below

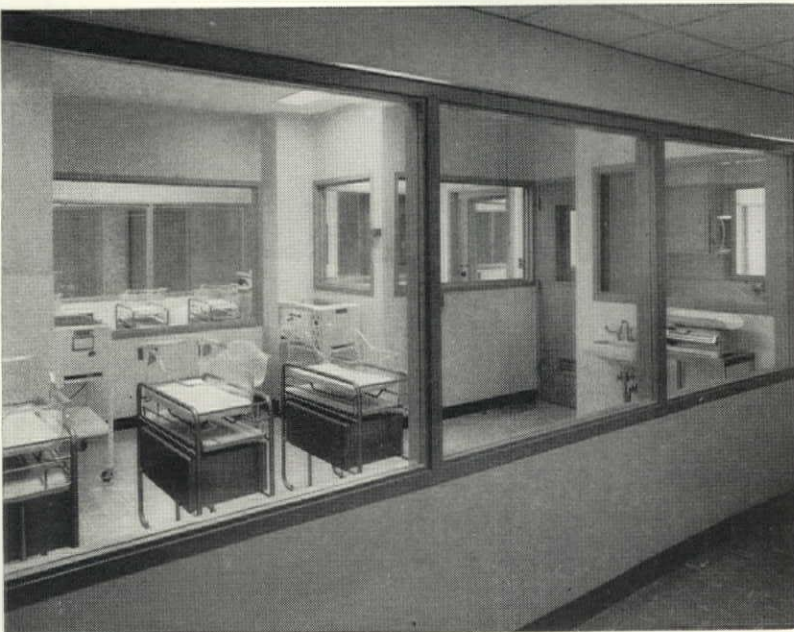
50



Mears



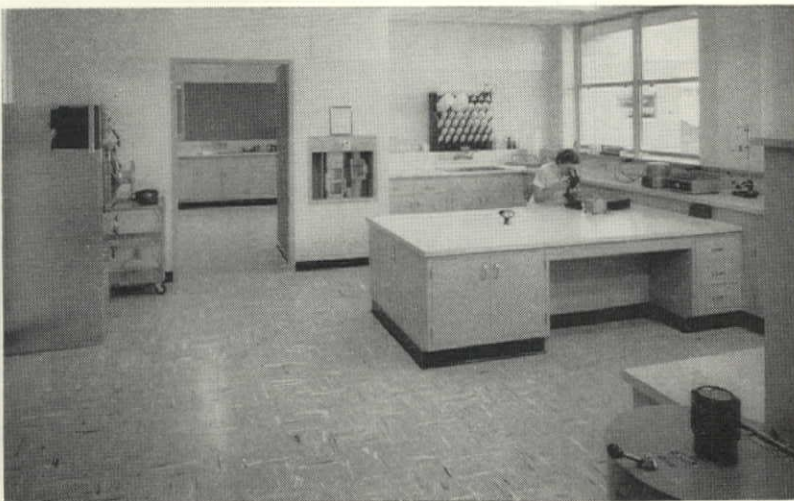
Mears

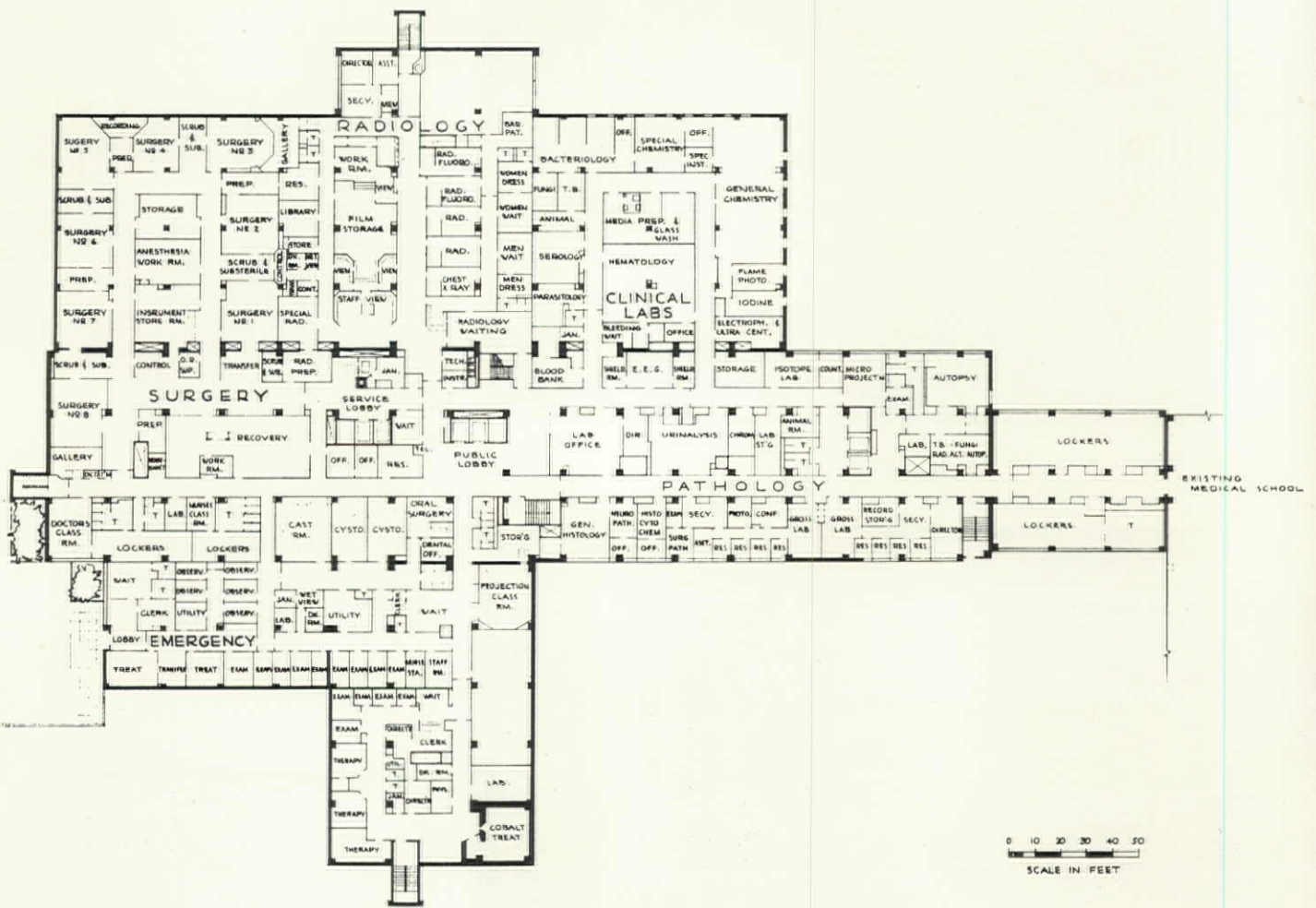


Wadley Hospital, Texarkana, Texas

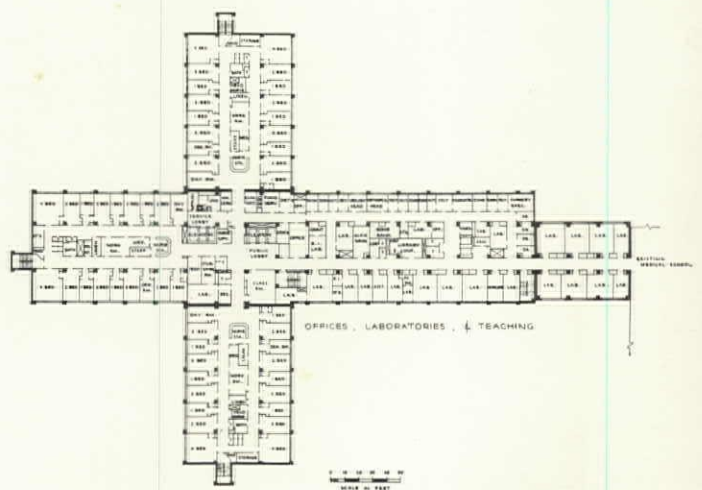
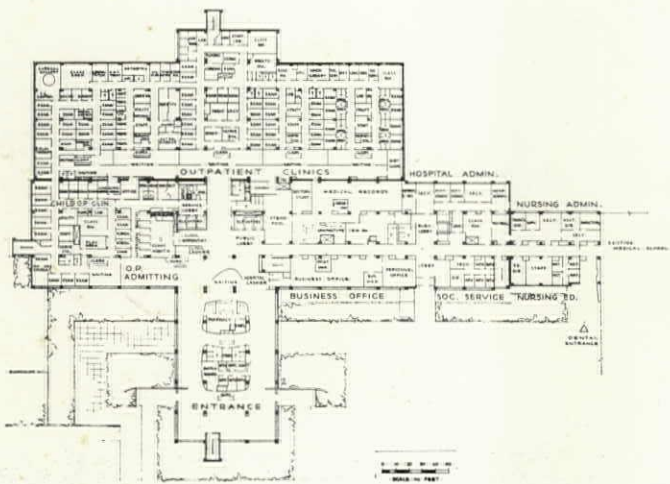
Page,
Southerland and
Page,
Architects,
Austin,
Texas

Mears





University of Washington Teaching Hospital, second floor plan above, third and fourth floor plans below



Roger Dudley

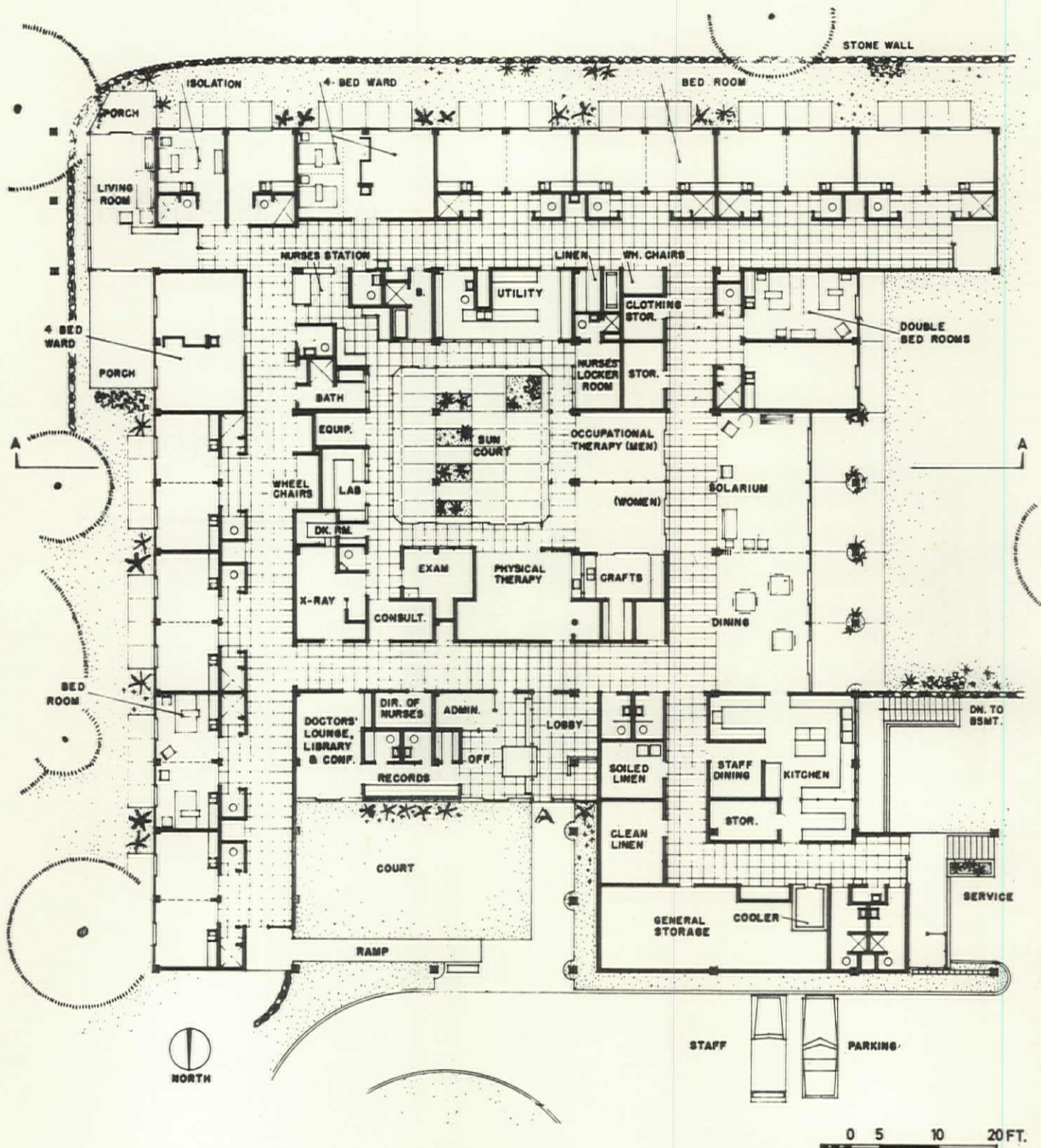


Chas. R. Pearson



University of Washington Teaching Hospital, Seattle, Washington

Naramore,
Bain,
Brady and
Johanson—
McClelland and
Jones,
Associated
Architects,
Seattle,
Washington



Susie Parker Stringfellow Memorial Hospital, (30 Bed Geriatric Hospital) floor plan

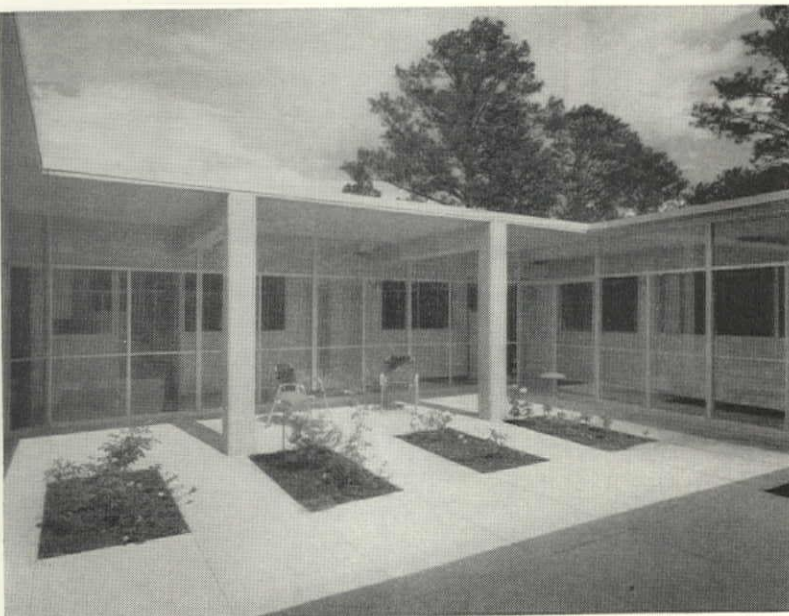
A. C. Kelly



A. C. Kelly

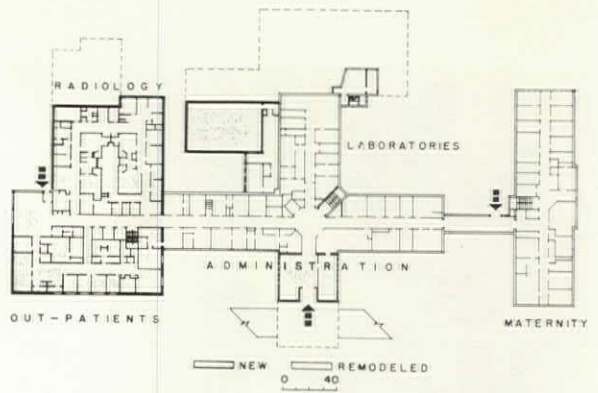


A. C. Kelly

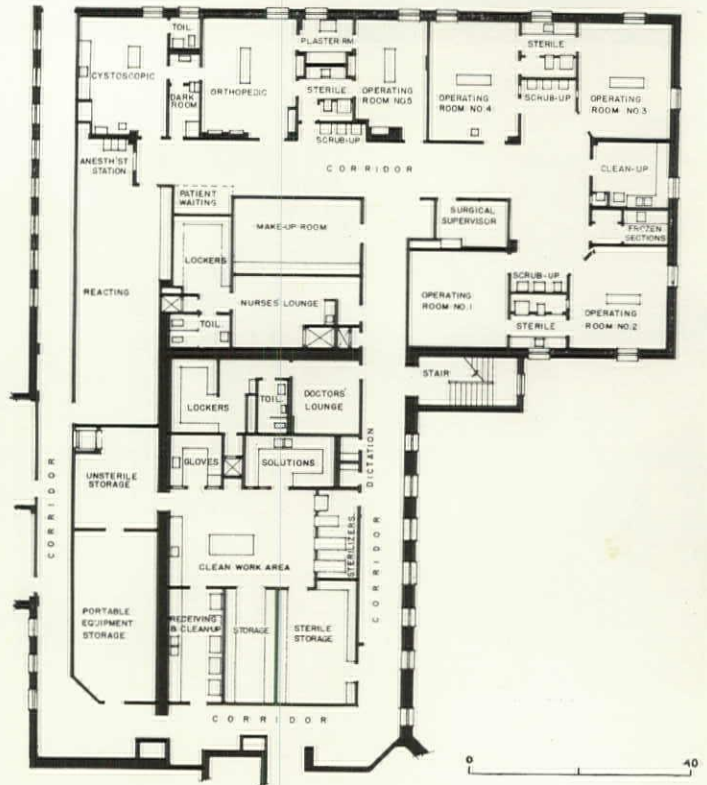


Susie Parker Stringfellow Memorial Hospital, Anniston, Alabama

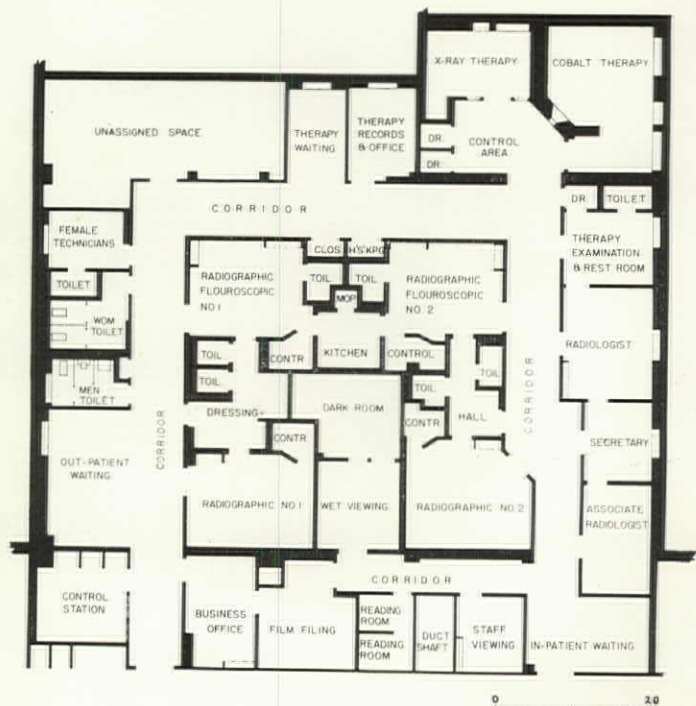
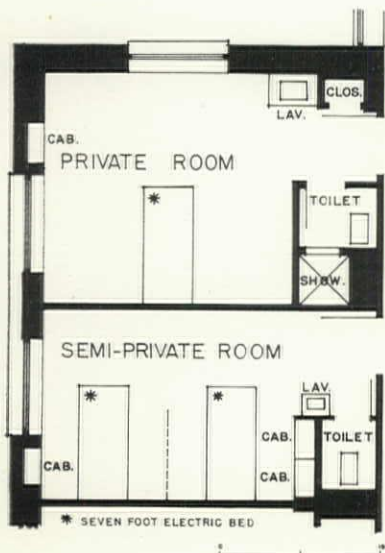
Van Keuren,
Davis and
Company,
Architects,
Birmingham,
Alabama



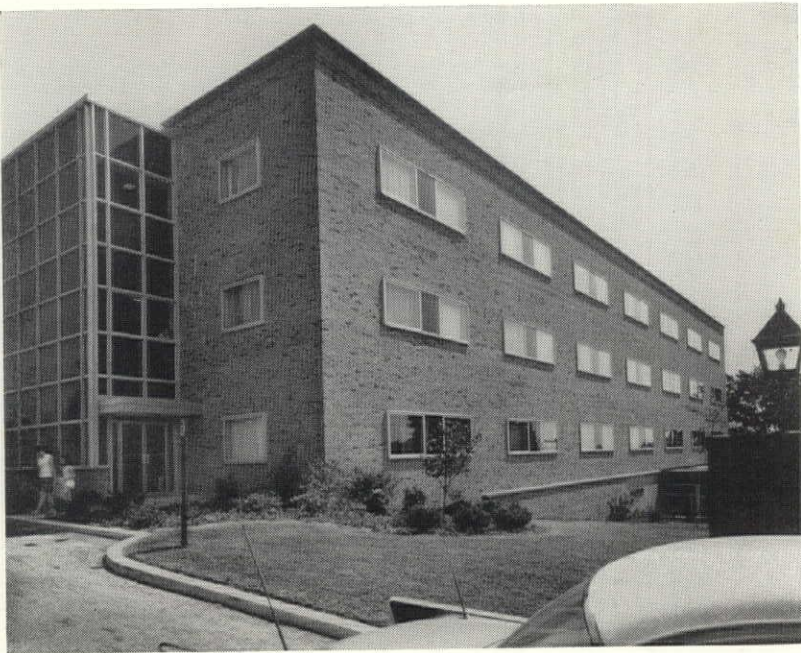
Addition to
Wilmington General
Hospital
First floor plan above,
surgical suite at right,
Patient's Room and
Radiology below



56



Willard Stewart

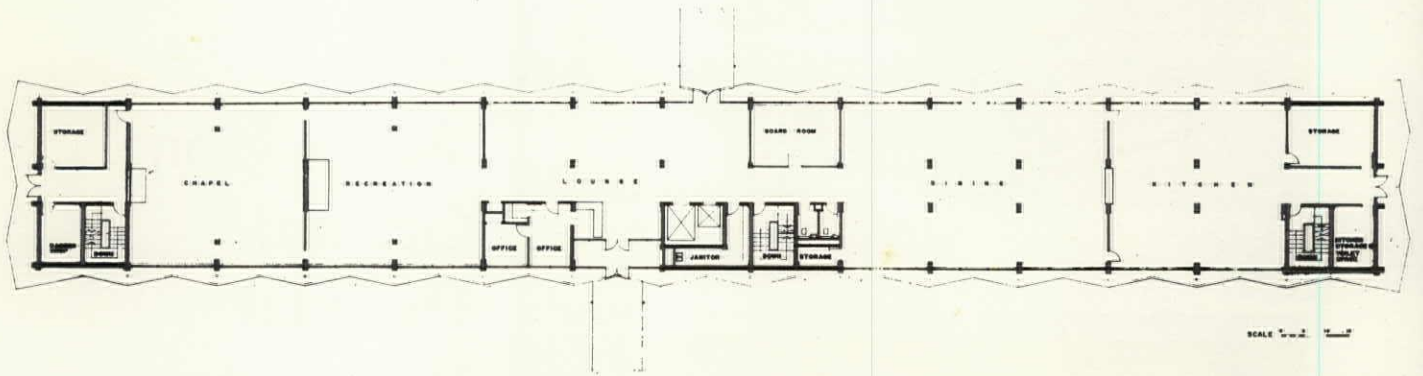
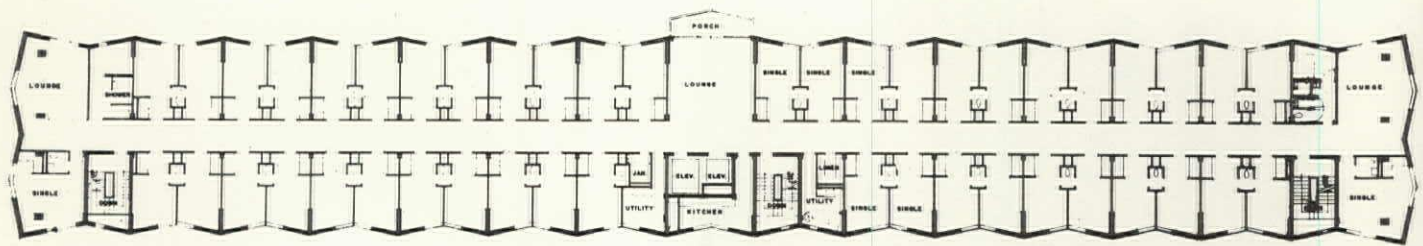


Addition to
**Wilmington
General
Hospital,
Wilmington,
Delaware**

Whiteside,
Moeckel and
Carbonell,
Architects,
Wilmington,
Delaware

Willard Stewart





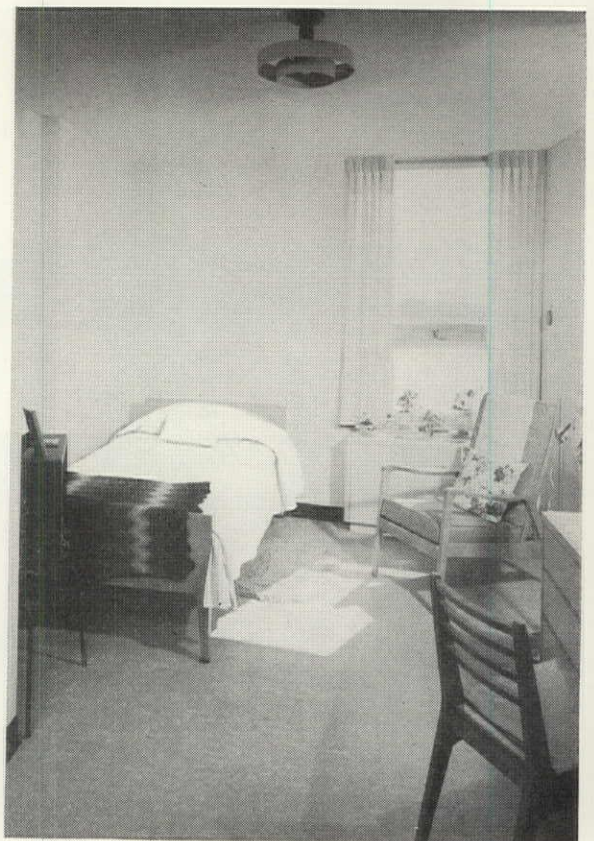
Good Samaritan Home for the Aged

Entrance level plan above,

bedroom level plan below



Ezra Stoller



Ezra Stoller

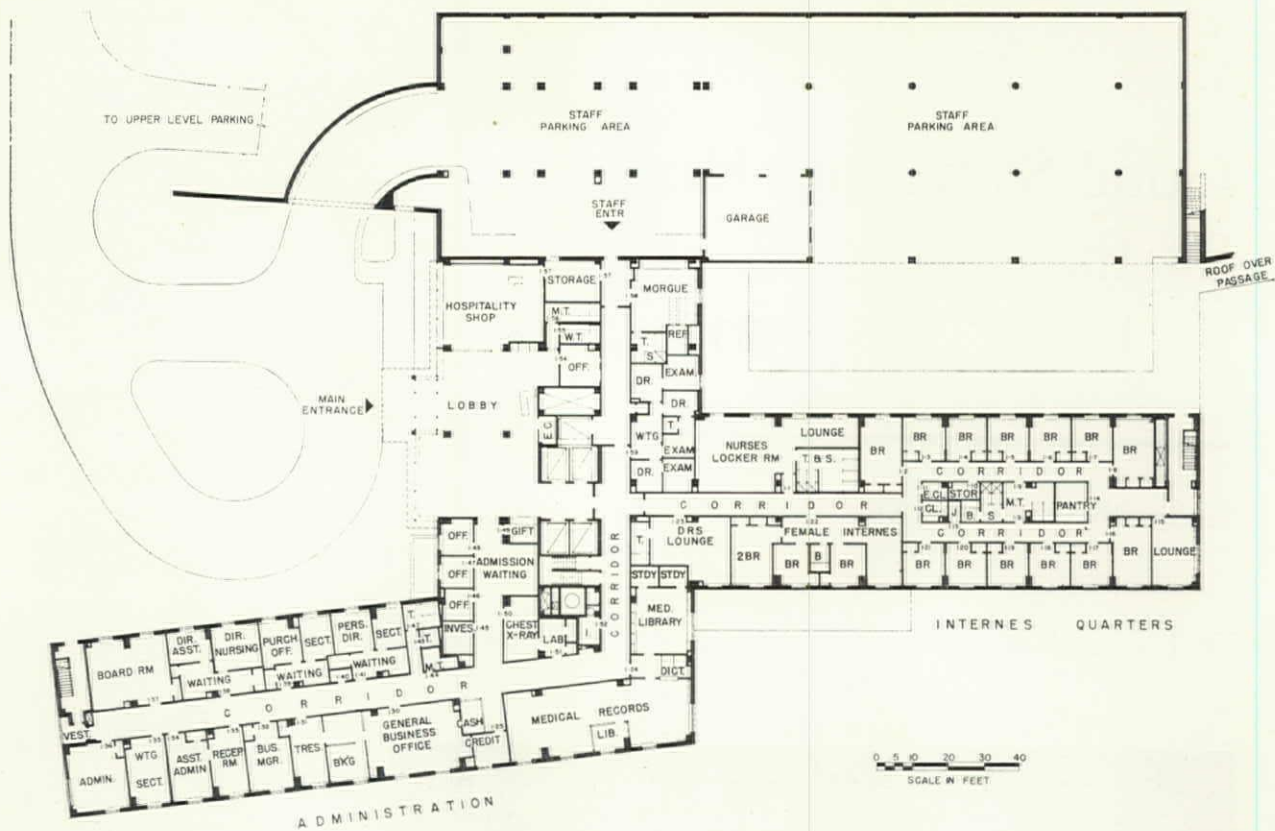
Good Samaritan Home for the Aged, St. Louis, Missouri

Hellmuth, Obata and Kassabaum, Inc.,
Architects,
St. Louis, Missouri

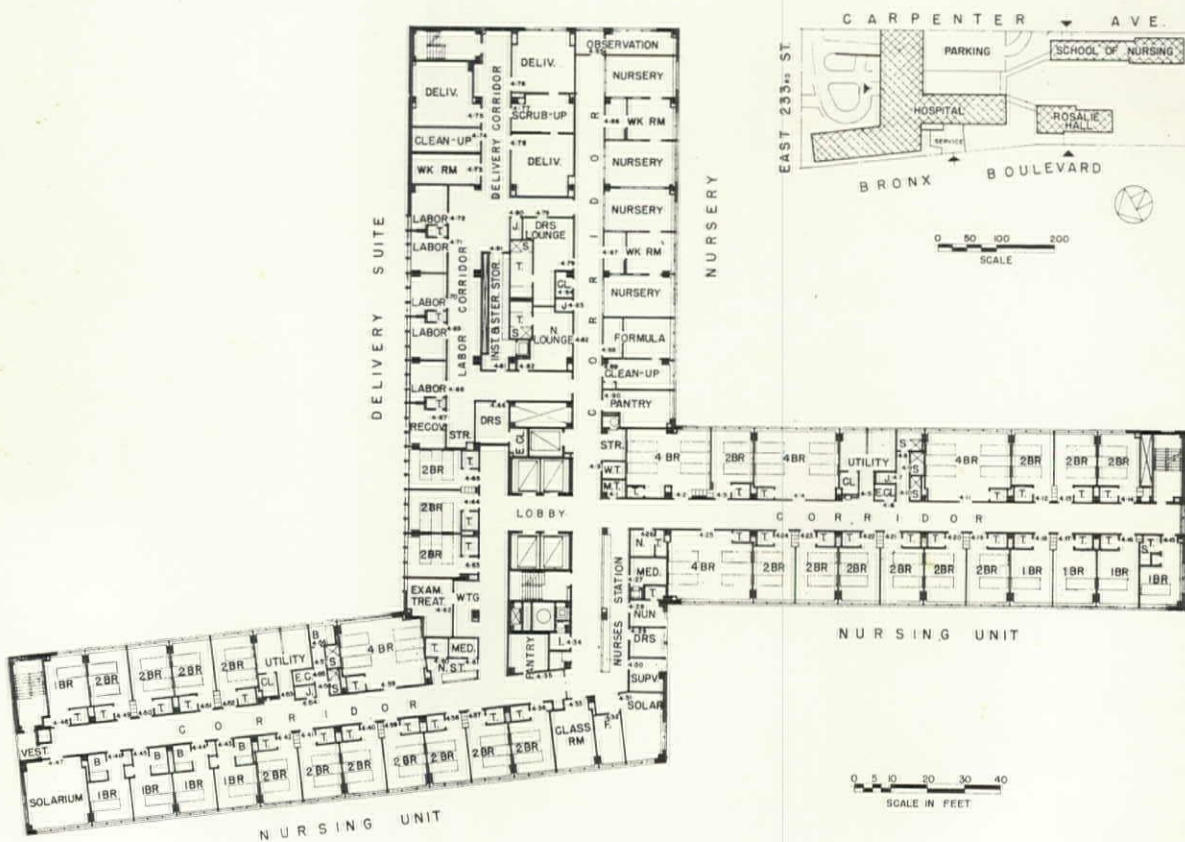


Ezra Stoller

H O S P I T A L S



Misericordia Hospital, first floor plan above, fourth floor plan below

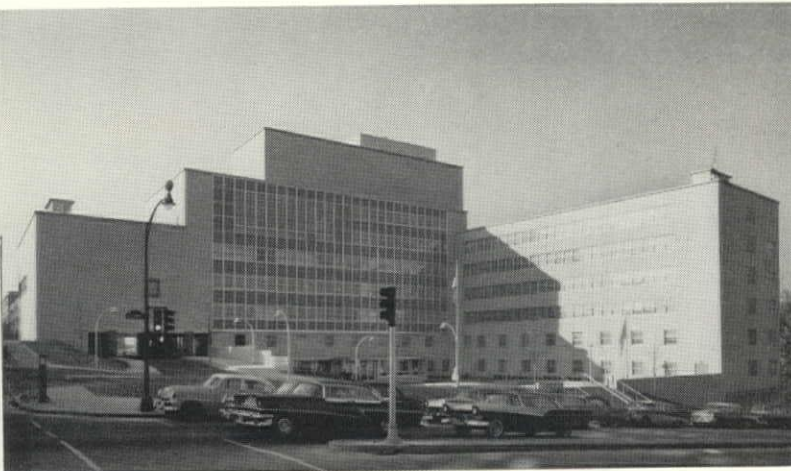


Sigurd Fischer



Misericordia Hospital, New York City

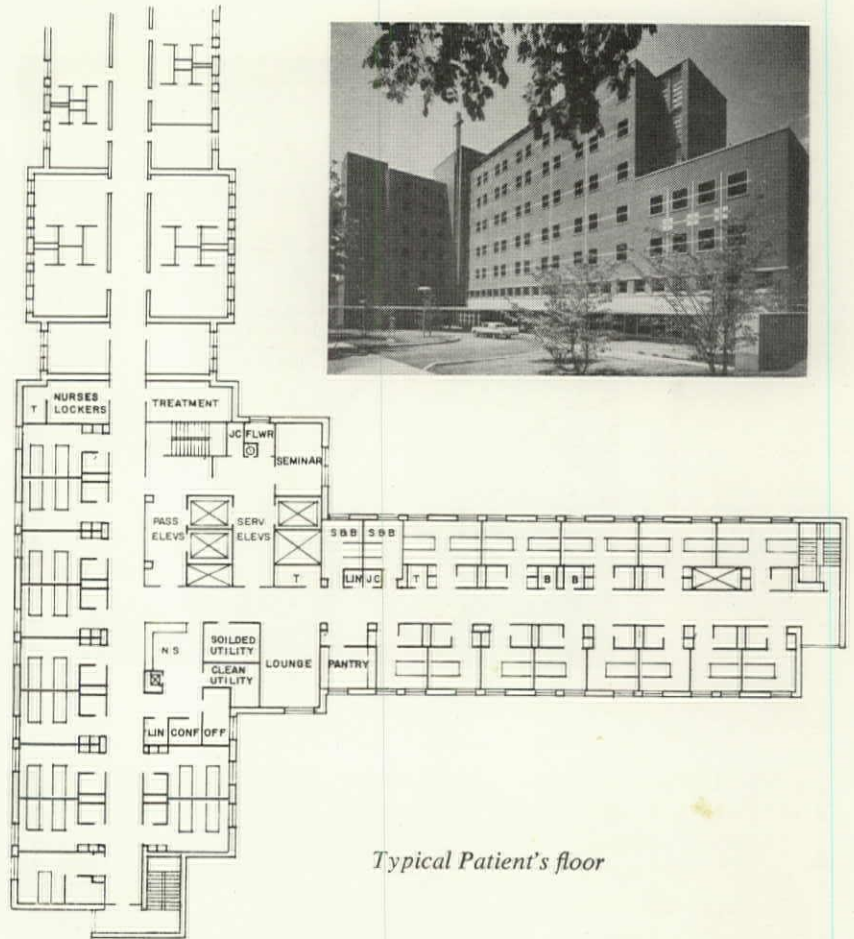
Sigurd Fischer



Kiff,
Colean,
Voss and
Souder,
The Office of
York and Sawyer,
Architects,
New York City

Sigurd Fischer



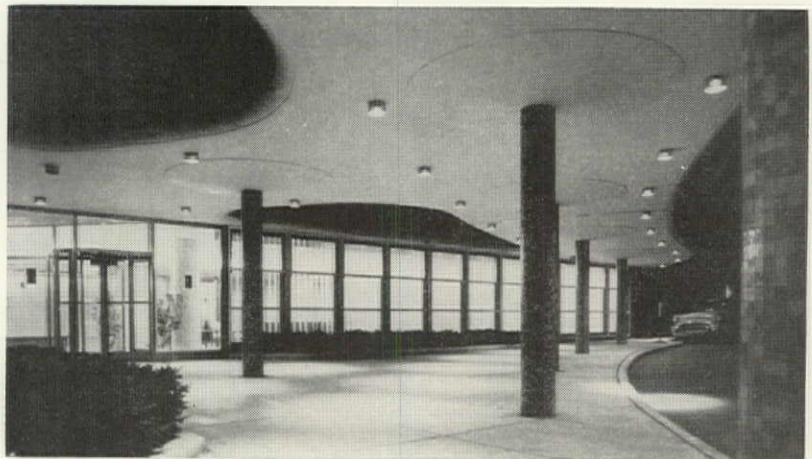


Typical Patient's floor

St. Joseph's
Hospital,
South Bend,
Indiana



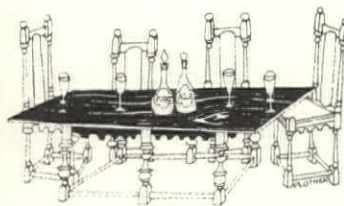
Schmidt,
Garden and
Erikson,
Architects,
Chicago,
Illinois



We present the first of a series, which will appear more or less monthly, by our new columnist, Neoscopos. We hope he will rapidly acquire the regular readers we feel he deserves. Comments from such readers will be welcomed by both the anonymous author and the Editor.

AMONG THE VARIED CONSOLATIONS OF AN architectural practice in a median town — one long since too large for a village, but still happily too small by some margin to qualify for an individualized representation of yellow field with black streets on a service station map—is that there are enough of one's colleagues around to occasion a fairly regular shop-talk lunch. And so it seems to have evolved, because one had to give precedence to the formal noonday good works of Rotary on Monday and Lions on Tuesday and Kiwanis on Wednesday and almost everyone had at some time seen fit to cast in his lot with one or another of those eleemosynary sodalities, that Thursday became the day of the architects' tacitly agreed, quite unofficial but surprisingly consistent luncheon club. Actually the physical circumstances were never, even from the first, overly propitious—one of the sad liabilities of our scale of betwixt-and-between size of town can only too easily be complete and utter failure in the gustatory field—but a large table, relatively sequestered in a subdued corner of the stained oak Men's Bar of one of the local restaurant-grilles, apparently exercised no significant magnetism upon the higher-pressured grey flannel types frequenting the town streets in ever increasing numbers during the midday hour, and so came by default to be regarded as our preserve: We were left to argue our beloved architecture to our hearts' content.

It must be nearly six years now, since the ingress of separate and distinguishable architectural offices into our town reached a number sufficient to engender this sort of good fellowship. In those years, naturally, faces have changed; offices have opened and prospered, offices have dwindled and closed. Offices have grown too big for the town and moved to the city, architects have retired, called it quits for some other line, or just up and died. The membership of the luncheon group has shifted accordingly, improved and deteriorated. As a consequence there would seem a reasonable doubt whether its colloquies have been worth preserving from the first, and in any case it occurred to no one six



TRACINGS

from an

Oaken Table

NO. 1

by Neoscopos

or seven years ago to bring a tape recorder to the first casual lunch—if we were beginning today, I am not so sure, all the offices seem so superbly mechanized now. But we have numbered among us some prodigious talkers, old-style string-tie orators and new-day psychometrist con men, compulsive fountains and repressed volcanos, legendary pants-charmers from the Helen Hokinson circuit and raffish street-corner haranguers more to the taste of a George Price cartoon. And it may safely be posited, whenever anything of interest has transpired in the architects' world, some one of our confraternity will know about it or have been somehow involved with it, and will have an opinion to express on it; and two or three others will have voluble opinions to express as well, whether they know anything about it or not it sometimes seems.

Now through most of this oral luxuriance my friends find I have little to say, and indeed less and less as the years go by; though compared to my habitual reserve in public places, my luncheons are little short of loquacious. But more and more I find myself content to let the world wag; indeed, it is not my own motivation that

has been primary in persuading me to set our verbal pearls down in writing either, but just these voluble colleagues of mine: as though they felt their judgments and speculations deserved not a mere mechanical recording, but preservation by a more rare and humanistic hand. My diffidence lingered, dissolving only slowly; until one day, I seemed to see myself in capsule in prose a quarter-millennium old:

"Thus I live in the world, rather a Spectator of Mankind than as one of the species. . . . I am very well versed in the theory . . . and can discern the errors in the economy, business and diversion of others, better than those who are engaged in them; as standers-by discover blots which are apt to escape those who are in the game. . . .

"I [shall] give the reader just so much of my history and character as to let him see I am not altogether unqualified for the business I have undertaken. As for other particulars in my life and adventures, I shall insert them in following papers, as I shall see occasion. In the meantime, when I consider how much I have seen, read and heard, I begin to blame my own taciturnity; and since I have neither time nor inclination to communicate the fulness of my heart in speech, I am resolved to do it in writing. . . . I have been often told by my friends that it is pity so many useful discoveries which I have made, should be in the possession of a silent man. For this reason, therefore, I shall publish a sheet-full of thoughts . . . for the benefit of my contemporaries; and if I can any way contribute to the diversion or improvement of the country in which I live, I shall leave it, when I am summoned out of it, with the secret satisfaction of thinking that I have not lived in vain."

And so here am I embarked, at my co-professionals' request; though at what interval, I prefer not to guarantee. And now singly it is time to present our members, their names and natures; or perhaps I should start with myself. But once again my modesty looks to its classic model for an excuse:

64 "There are three very material points which I have not spoken to in this paper, and which, for several important reasons, I must keep to myself, at least for some time: I mean, an account of my name, my age and my lodgings. I must confess I would gratify my reader in anything that is reasonable; but as for these three particulars, though I am sensible they might tend very much to the embellishment of my paper, I cannot yet come to a resolution of communicating them to the public. They would indeed draw me

out of that obscurity which I have enjoyed for many years, and expose me in public places to several [attentions if not attacks] which [could only] always be very disagreeable to me."

For the rest, it might be felt prejudicial to name anyone first, even *primus inter pares*, so highly do we all value each and every other one's activity; but in one sense at least, habitually earliest to arrive and thus at the head of the table is Fred. In early middle life as are most of us, he has in recent years blossomed professionally, his basic soundness and personal warmth and interest fusing happily to recommend him for a variety of relatively large and interesting commissions, educational, religious and public. But all was not always so roseate: years of marginal practice after licensing, and yet sterner trials of spirit in the formative period, mingled long and often drowned in deep hazy doubts of any artistic destiny at all. Those days now firmly, securely past; and yet, of us all probably truest still to the functional faith of our school days, he reserves an honored niche both on his bookshelves and in his thinking for "Space, Time and Architecture." (There are others among us who wonder if this may possibly be because he has never actually talked to Giedion.)

A second, neither so punctual nor so successful, but one of intensest concern is Burton. For him it was not fifteen years with the wrong woman, but with the wrong vocation: and a profitable, and not undistinguished, career in advertising has been equably resigned in favor of architectural school and apprenticeship for licensing. Now a minimum practice, a few residential commissions plus an occasional exhibitionist collaboration where the years misspent on the well-known Avenue may prove particularly helpful in opening doors and accounts: slim pickings, but the fire of resolve burns higher than ever five years and more after the break. Here is devotion, in detail and in deliberation, to the ideals of the architect as artist and as prophet, to which too many of us others feel we can afford to subscribe only in our subconscious norms and reflexes. For Burt, the morality of architecture is primary; the whole world has been relinquished, and the stakes were high. There will be no time-serving, no compromise, now. True that the "Seven Lamps of Architecture" have gleamed for more than a hundred years, for him they shine not less urgently today.

Born into the same World War I world, trained and tempted through the same ferment of the thirties, schoolfellow of several others often

around the oaken table, Tom seems the darling of architectural destiny. Brilliant, facile, perceptive, imaginative, he is also dynamic, ambitious, and thoroughly bright. All prospers for him, as in fact it should: his office is not by other standards large, but ever busy; each commission he undertakes still bears the impress of his personal concern and his personal solution. Already he is not only the critics' cynosure, but the rallying point of a movement. Rational and articulate, serenely confident of his course and direction, he draws for speech and writing from a copious shelf on which stands prominent "The Architecture of Humanism".

One younger by a decade has joined us in recent years: Frank, whom we welcome and watch with a fascination as though he were our own son. For his story is such that he has been instructed as a schoolboy in the faiths and the values we were helping as Young Turks to hammer out in practice ten and fifteen years ago: Where he stumbles or strays, we cannot blame it on outmoded or transitional training. Only a few years out of school, he is not as of this writing licensed; we sometimes wonder, between his obvious talents and his undeniable armor-chinks, whether he may not be heading for a silly tumble.

But Frank is unquestionably charming, and gifted, and capable, not only in others' offices but already in small works on his own: He will go far. We could not be less than pleased at his company, as he seems also at all of ours; though he would not deny his preference for the sparkling controlled balance of Tom's architectural expressions. In his reading too, Frank has drunk deep of Geoffrey Scott; but he has further updated him with liberal drafts of Philip Johnson's "Seven Crutches of Modern Architecture". Ah, the cynicism of the young! One wonders how they have had time to become so promptly over-wise in so many directions.

There will be others, from time to time, who come and go; our median town plays host to visitors from many climes, and there are other men, even other offices whose principals may pause to join us on occasion. But we are the habitués; and so what I may in coming months impart can but reflect the atmosphere, the ambience of one or more of our small world. As for myself, one last note: If I should be asked to cite a text at lunch as I have just asked the others, I think that it would be that transcendent autobiography that demands of us again and again, "Our demonstrations shall be so broad as to admit of no exceptions." ◀

STUDENT

Subscription

RATE

Effective immediately, Student Subscriptions to the *Journal* will be \$2.00, instead of \$1.50. Existing subscriptions at the old rate will of course be continued until their expiration.



Journal Index

The index for Volume XXXII of the *Journal* will be ready soon, and will be mailed to all libraries, universities, colleges and schools of architecture which receive the magazine. It will also be bound into all volumes bound by the *Journal's* binding service. Copies will be sent to all others upon request.





S T U D E N T S

AIA at KU

by John N. Pap, Kansas University

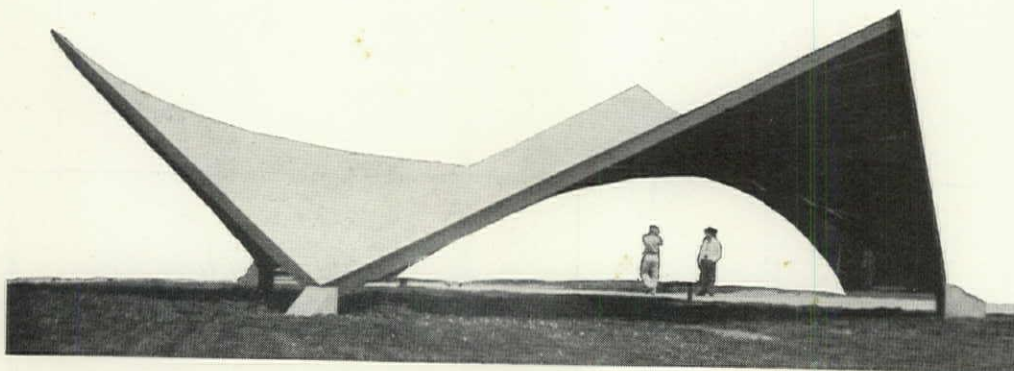
► The Student Chapter, AIA, at the University of Kansas has been in existence since 1947 and has since that time played, in varying degrees, an active part in the architectural program at K.U. The Chapter is a part of the campus whose rapidly increasing enrollment is now near 9,000. More specifically, its 63 members are from an architectural department of 276 students. As current president of this Student Chapter I appreciate the opportunity to present some to the work not only of our Chapter but of our department in general.

In design, as well as in other courses, competition within each class is strong. However, it is felt that the

greatest progress is made when an individual treats each new problem as a competition against his last best effort.

Each Spring these "best efforts" are displayed in the Student Union as an Arts of Architecture show. It is sponsored and assembled by our Student AIA Chapter. The entries are judged and prizes from the Kansas City and Kansas Chapters, AIA, are awarded. The awards, along with others, are presented at an Awards Banquet later in the spring. The banquet is followed by a dance also sponsored by our Student Chapter.

These events, plus occasional movies and guest speakers, comprise a large portion of our Student Chapter activities. They have been interesting and worthwhile additions to our curriculum in the past. We hope to be able to expand these services in the future.



AFFENSATTEL

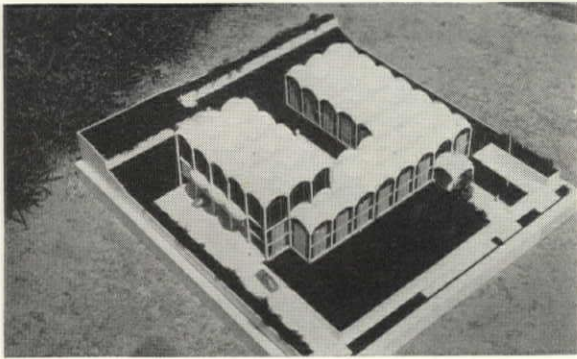
The photos show a project of departmental scale which was completed last spring. Through a grant from the Douglas Fir Plywood Association to Prof. W. Strode (arch. eng.) and Prof. D. Dean (civ. eng.), and with the students of our department furnishing the labor force, an *Affensattel* or monkey saddle was erected on the campus near the engineering building.

The structure is supported by three concrete piers which receive forces from the six tapered 3"x12" edge members. The $\frac{1}{2}$ " warped surface membrane is made of single layer plywood held together with a 4-inch wide sheet metal strip glued to both top and bottom of all the butted joints.

The area under the structure is a very pleasing hexagon of 50' diameter. This space was used, immediately after completion, to shelter the architectural display in the Engineering Exposition and we have hopes of utilizing it as such again this year.

Optimists have ventured many other uses for the shell, such as an Engineering and Architecture Lounge, as meeting and club rooms, or as a browsing library. However, in late spring or sometime during the summer session, the structure will be extensively tested until failure.





U. S. EMBASSY

A proposed American Embassy in Kabul, the capital of Afghanistan, represents a problem of a more complex nature. The objective was stated as follows: Within the limits of the problem the student is expected to provide solutions for the problems of furnishings and mechanical equipment as well as the

problems of space-form, orientation, structure and materials in the design of a government building.

The solution presented is the work of Eugene Davis in Design VI. An extensive explanation is not within the scope of this article but research revealed that the only building material which would not have to be flown in was readily available—concrete, hence the pre-cast forms.



PRIMITIVE HOUSING

The problem was to pick a tribe or group of primitive people from anywhere, preferably in their earliest recorded existence. Their exact location, environment, means of existence, type of shelter construction, and any other data influencing their shelter was to be summarized in a brief essay. This essay became part of the presentation along with a section, plan, and eventually a model.

One photo shows a model by Max Schardein illustrating the Ifugaw tribe from the extreme northern Phillipine Islands. An interesting aspect is that the accurately fitted members could be dismantled, moved, and re-erected in one day. (Would this be a fore-runner or the ultimate end of our present-day prefabrication?) The other photo is of an Indian culture from Northern Arizona and New Mexico and has no particular significance except that it is the writer's.

The problem has proven to be very useful in forming habits for preliminary research and problem analysis in relation to structure. ◀



FOR INSTANCE —

Ownership of Documents

BY WILLIAM STANLEY PARKER, FAIA, *Consultant to the Institute on Contract Procedures*

► At intervals, over the years, the question of unauthorized use of an architect's design is raised. We discussed it at some length in the *AIA Journal* for December 1954. The question of copyright was considered, based upon an authoritative article by Arthur S. Katz in an issue of "Law and Contemporary Problems" issued by the School of Law of Duke University. A reading of this article is recommended to any architect interested in considering the use of copyright as protection.

This problem seems to be naturally limited to designs of small or moderate sized single houses. A recent case is considered in the July-August 1959 issue of *Oculus* issued by the New York Chapter of the AIA. The architect sued to recover fees for repeated use of designs of a private house without the consent of the architect.

The architect is reported to have been unable to show how the plans were obtained by the persons who used them. It also appeared that his agreement with his client did not state that the documents were "instruments of service" and the property of the architect. It appears that the AIA Standard Form of Agreement between Architect and Owner had not been used, for these facts are clearly stated in all AIA Agreement Forms. The client, in such cases, is clearly restrained from any further use of the architect's plans without his consent. The terms of Article 7, Ownership of Drawings, of the Standard General Conditions if used in the client's contract with his contractor will similarly control unauthorized action by the contractor. In both cases, however, as in the case referred to in the *Oculus* (Tumey v Little, N. Y. Law Journal April 10, 1959), how the documents were obtained by the unauthorized user may be difficult to show.

A third party, neither the original owner nor

the contractor, would not be bound as they would be if AIA Standard Forms had been used. Legal "publication" of the design may be held to have been effected by filing of the plans with the Building Department, as well as by the actual construction of the house. Use of the plans by a third party might well be affected by a local registration law requiring that the designs be signed by the architect which is unfortunately by no means a general requirement.

Even if the plans had been formally copyrighted, conditions might exist to vitiate the protection sought, as indicated in Mr Katz' article referred to above. It is stated that it is the copying of the plans that would constitute infringement of the copyright. If the house could be built without the use of any plans that would not be held to be infringement of the copyright and to secure the somewhat limited protection from copyright, the architect must carefully follow the technical requirements involved in the copyright procedure. However, the copyright procedure has been successful in an actual case (Cliff May et al. v Wm. M. Bray et al. Jan. 12, 1955 Dist. Court So. Dist. Calif.) in which the architect's copyright of his design was held to be infringed by the defendant who had constructed a number of houses from plans shown to be substantial copies of the copyrighted design.

The Court enjoined the defendant from further use of the plans and from constructing houses according to such designs, and ordered all copies of such plans to be delivered to the Clerk of the Court for cancellation and destruction.

The case cited in *Oculus* once more brings this problem up for consideration. Architects working in the small house field may well find it worth while to give it careful consideration. ◀

SOME THOUGHTS ON "ARCHITECTS-IN-TRAINING"

GEORGE F. PIERCE, JR., AIA

► During the past four years it has been my privilege to have served as a regional representative of the AIA Chapter Affairs Committee. One of my pleasures, and also my concerns, during this time has been to observe from close hand the inception and development of the AIA Architect-In-Training Program, both as a national picture and also in an AIA chapter in my own Texas Region. I would like to share some of my thoughts with you because I believe it is one of the most important basic and long-range activities which we can encourage in the interest of the Institute and the architectural profession.

Actually not a specific intent, but what has developed as a very important result of the Architect-In-Training program is the help and orientation of unlicensed degree-holders toward state registration, and also of great importance, the development of a more positive affiliation between this group of young men and the AIA. The idea of the Architect-In-Training program was conceived and developed by the AIA Education Committee and the Department of Education and Research at the Octagon, and was based on Board-Approved Recommendations R-30 and R-31 of the Commission for the Survey of Education and Registration. After an early trial run in a couple of states, the program was revised and perfected and two years ago made available to the entire country. The Chapter Affairs Committee was requested to push the program at the regional and chapter levels and to make the Institute membership aware of its importance to the health of the profession.

The Architect-In-Training Program is well planned, easy to understand and simple to put into operation. In essence, the candidate for registration is given a pattern for completing the required experience in practicing architects' offices, and a comprehensive and simple method of recording it. He "enrolls" in the Program either by writing directly to the Octagon or to the local AIA chapter nearest him. Accredited schools of architecture are aware of the program and are cooperating by informing their students of its existence and advantages. In some cases the schools are arranging for the class to enroll at graduation. However, if the program is to be successful, the individual AIA

chapters must carry the responsibility of reaching and enrolling the eligible candidates. The chapters are best able to direct the individual candidate in his in-service-education since all states are not yet alike in their licensing requirements.

After registration in the Architect-In-Training program, the trainee receives a handsomely bound "Log Book" in which his types of office experience are recorded and then verified by his employer. A "Log Book Supplement" is also presented to the applicant. It contains many items of information valuable to a would-be architect. Both are in loose-leaf form and the material will be supplemented from the Octagon as occasions arise.

Individual AIA chapters can accomplish much for themselves, their membership and the profession by actively encouraging and pushing the Architect-In-Training Program. A chapter can be of very great assistance to the enrollees in the Program by assisting them in the satisfactory fulfillment of their prime ambitions. It can take great steps toward strengthening the Institute by attracting serious, well-trained new members. It can, by developing this important activity, materially raise the standards of the profession. Through committee assignments, it can give chapter members a worthy goal of improving their own background while assisting younger people to reach higher levels of professional development.

Experience has proven that the candidates really need only to be shown how to help themselves. This can be done by compiling bibliographies of pertinent material for study, by advising on state and NCARB registration requirements, and by conducting seminars in fields of interest directly related to their current needs. The chapter committee can acquaint the candidates with established practicing architects who will advise them and serve as proper examples. The program can show the academically-trained enrollee the other skills and techniques valuable to the practicing architect, while affording the office-trained applicant (who may be without formal education in architecture), the opportunities to widen his horizons through history, engineering and other fascinating subjects. As singularly important as any other feature, the chapter, through such a program, can keep in touch with the candidates and draw them logically into the profession and the Institute.

It has been my pleasure to observe how one chapter in particular has handled the Architect-In-

Training Program during 1958 and 1959 in a very successful and gratifying way. With the real hope that other chapters and Institute members will be interested and will benefit in developing their own programs, I would like to relate the experiences of the Fort Worth Chapter initiated, I am proud to say, by their Chapter Affairs Committee Chairman, the late Hubert Crane, and also their Education Committee Chairman, George W. Shupee.

Under the direction of these two capable and dedicated gentlemen, the following objectives were adopted:

- 1 To assist capable men to prepare for the examination for architectural registration in Texas.

- 2 To make youngsters feel a part of the profession (an answer to the recurring question, "What can the AIA do for me?").

- 3 To bring the students and sponsors together and accomplish the stimulation of both.

- 4 To afford the Fort Worth Chapter a worthy project of which it could be proud.

A start toward accomplishing these objectives was made by placing an announcement in the drafting rooms of all chapter members. This method reached and sought out the type of men for which the program was designed. The chapter did *not* wait for these individuals to seek it. The response was most encouraging.

Next, a canvass of chapter members was made and a list of men, agreeable to serve as sponsors, was compiled. Monthly meetings were scheduled, programs of lectures, round table discussions, and "dry run examinations" were conducted. Special classes in techniques of presentation were organized on a weekly basis and were enthusiastically attended. The chapter committee obtained a list of books for special study from the office of the state registration board and made volumes available to the candidates by soliciting gifts to the public library. The Fort Worth Art Association's help was enlisted through the use of its auditorium for meetings. An anthology of typical questions on registration examinations was obtained from the NCARB. The Fort Worth Chapter paid the five dollar registration fee in the Architect-In-Training Program for every one of the candidates.

After one year of operation of the program, the Architect-In-Training Committee of the Fort Worth Chapter recently took stock of the results.

First of all, the attendance and interest was continuing in an unrelenting and gratifying manner. New subjects for lectures were constantly being suggested by both chapter members and trainees. Classes and "dry run" examinations on

registration subjects were very popular. The round table discussions with practicing architects or engineers seemed to be most appealing to the candidate. More help in structural design, history and site planning was specifically requested.

In his report of the year's activities and recommendations to other chapters interested in instituting their own program, Hubert Crane carefully pointed out that each chapter must endeavor to suit the needs of its particular group of candidates. To be successful, he believed the chapter must have at least one dedicated member "with a low regard for his own time." My question is, "How could time be invested more wisely in one's profession?"

Certainly another important feature which must not be overlooked is that chapter cooperation and participation is mandatory. However, this can be accomplished with thorough and thoughtful planning, as was done so well at Fort Worth. Philip Creer, Director of the Department of Architecture at the University of Texas, has called Hubert Crane "the Babe Ruth of post graduate architectural education" in Texas, and rightly so!

Other areas of the country have also been showing a growing interest in the Architect-In-Training idea, and it is clear that the potential benefit is almost unlimited. Over eighty chapters are presently listed on the Octagon's records as having a chapter program under way, or at least having trainees enrolled from their area. Members of the Columbus Chapter have assumed individual responsibility for graduates of Ohio State University, paying their enrollment fee. Similarly, the Utah Chapter has sponsored graduates of the University of Utah. The Houston Chapter formed a special "Architect-In-Training Committee" and has a well-organized program under way under the leadership of Stayton Nunn, Sr. All these are really fine examples for other chapters to follow.

The president of the AIA Student Chapter at the University of Illinois wrote the Institute expressing the need for a practicing architect to come and help them sell the program to the students. This young man wanted to have the 1959 class automatically enrolled on graduation. He wrote that the student chapter is willing to work to pay part of the cost. Apparently they were not receiving proper encouragement and help from the nearby AIA Chapter. What a fine opportunity we are missing!

AIA President, John Richards, calls the Architect-In-Training Program "Our version of medical internship." We have the way set up for us, let's enlist the unlimited means of every chapter! ◀



From the Executive Director's Desk

► Beckoning me the other day, I found on my desk the recent book of reproductions of Frank Lloyd Wright's original drawings and sketches—"Drawings for a Living Architecture." This had been sent up by our omniscient and considerate Librarian, George Pettengill, who looks after my improvement whenever the occasion arises, which is frequent.

To those of you who may not have seen the book, I strongly recommend that you buy, beg or borrow a copy—even steal it—for in these days when we are surfeited with architectural renderings all of a kind, (in fact, American architecture seems to have become all of a kind) the extraordinary beauty that Wright gave the presentation of his concepts is not only inspiring but a welcome relief from the endless procession of opaque nineteenth century panorama-like perspectives put out by offices all over the land. It is also a relief from the so clever, rough, scratchy, indications of first thoughts that look as if they had been done on a stucco wall with the fireplace poker when the cocktail party had reached its intellectual zenith. A lot of us, especially those with natural or developed talent, admire and respect good drawing for its own sake. I could not help but think just how much more successfully these beautiful drawings of Wright's convey the real man, the real genius, and the great artist than do his writings, his spoken words or do even sometimes his buildings. The world is much the poorer because his buildings could not always have been carried out in the material promised by the presentation.

Though not illustrated in the book, we are told that the Guggenheim Museum had to be built of stuff which is a sad substitute for the noble materials Frank Lloyd Wright had in mind and which would have saved it from the rather dreary controversy to which it is subjected. Appropriate materials might well have lifted it to an eminence where no one with appreciation of beauty would dispute success of the accomplishment.

Wright's joyful presentations are definitely dated which, to one of nostalgic temperament, is a happy fault. Few, if any, artists today can achieve the mastery of the line and light wash that flourished in the period of Aubrey Beardsley and began even earlier. Frank Lloyd Wright's perspective for the Larkin Building for instance has a noticeable Beardsley quality. It is that ethereal yet solidly founded sort of rendering to which many engaged in architectural pursuit have striven to accomplish only to find that the attainment of so seemingly simple an art is not easy. So the inclination to adopt the more mechanical means becomes too persuasive. I could never achieve the quality of drawing and water coloring and crayon work that was my ambition—an ambition which has been fully realized by Mr. Wright in his deceptively delicate colored drawings.

Here we can see what he was really striving for. One wonders why he bothered to talk or write for in both of these fields of self-presentation he was confusing, irritating and sometimes purposefully insulting. To me his lectures always seemed ill-organized and inconclusive with his incessant harping on "organic architecture," a phrase the meaning of which when described by him could be both vague and elastic. But then he thought not as a writer or lecturer, but as an artist. So although his oratory and writing are strangely unconvincing, his drawings are not for they have a great and spiritual conviction which sometimes seems to have gotten lost in the process of being transferred to actual structure.

It is fun to make beautiful architectural drawings or even to try to do so. It is an art that should be encouraged as fascinating and disciplinary. Architectural drawing as an art is callously overlooked. Whether or not Piranesi ever built anything is of scant consequence. The fact that he inspired generations of architects is important.

To return to Mr. Wright for the moment, of course there is an unreality about his architectural drawings. No trees or flowers in nature ever looked

like those which set off his perspectives, and which contribute clues to his aspirations. But who cares when his message has been so beautifully and successfully conveyed?

Now the attainment of the perfect and beautiful building is something else again. We wonder whether architectural renderings and the making of beautiful perspectives should not be acknowledged as a separate art in itself, somewhat apart from architecture. The beautiful perspective can be made for the architect's own pleasure and for the inspiration that it might give others. But perhaps we should be factual, almost cruel, when we set out to tell the laity what the building is really to look like.

There was a maker of architectural perspectives who flourished—a word used advisedly—in the early part of this century. His renderings were painfully accurate, superrealistic one might almost say. They were harsh, brutal, unlovely, tasteless and sometimes downright hideous as pictures. They told the truth and if the beauty of the architect's conception showed through the treatment it received at the hands of that brutal renderer, the client could be reasonably certain that he was going to have a very beautiful building.

It is suggested that in competitions it should be required that all the perspectives be made by the same artist and that the artist be one of the persuasion just referred to. The presentation certainly would not beguile the jury or fool a layman. However, it would make it very easy to determine which one of the submissions really had the greatest architectural merit. Those renderings of our candid friend were painfully accurate. The bricks were red—Pennsylvania Dutch red—the limestone base was just that, the windows reflected the dreariness of the probable entourage. The sky was brutally blue with just enough indication of cloud to convince the client that weather was still with us—and the automobiles and trolley cars were unmistakable as to vintage and destination.

We have all fallen victim to the lovely rendering. I had a lesson when I was a young practitioner. I had designed a country house for the son of a wealthy man—the father was paying all the bills. In order to impress the old gentleman, I engaged a local renderer of considerable talent. The drawings I took to my client's father were really works of art; they were black and white, but so fetching through the skillful use of a pencil that the father, who was experienced as a client having built some half-dozen buildings of various sizes in his life and having known architects well

(I am glad to report he never built a building without an architect) held my drawings up to show his son and said "See all these lovely soft lines on the roof, see the delicate shading, the wonderful technique; well, son, your roof is not going to look like that at all, it is just going to look like a collection of slate; however, we will overlook this charming attempt to bewitch us and go ahead with the job." That house was built in the days when craftsmen were to be found on the site as well as in the drafting room. The job did end up well and the slate roof was not as harsh as the old gentleman had predicted it would be. But the house and the rendering were not one.

At a recent exhibition of governmental buildings held in the Octagon Gallery the similarity of the renderings was quite marked. Although I imagine the drawings were made in the architects' home offices it seemed as if one artist had flown furiously about the country with his kit of tempera to dash off the whole series. However it was done, one has to admit that this genius or his school can make a glass and skin job look almost fetching on paper.

Though it ill behooves me to venture a critical comment on contemporary mass commercial building production, one gets the impression that all a designer needs nowadays to fill in the borders of Main Street with passable buildings is a drawing board, T-square, triangle and Sweet's catalogue—architecture by the numbers.

It is of a piece with guided painting for the Sunday artist—you know the stretched canvas, the laid-out picture, each bit to take on color is numbered carefully so that the painter need only exercise his ingenuity to the extent of finding the corresponding number on the palette. He can scarcely miss. Today the architect can avail himself of somewhat similar surefire assistance. He can, however, I suppose, get his numbers confused and play havoc with the financial picture.

So it is with relief and encouragement that we turn to Frank Lloyd Wright's book and also to the many architects both here and abroad who search for and who have already developed new and thrilling forms and who, like their illustrious antecedents, will recapture for architecture that priceless quality — beauty.

Edmund D. Purvis



TWO REFERENCE BOOKS

Just as every good architectural office will have a few books which are constantly referred to—such as a “Sweet’s Catalog,” an “Architectural Graphic Standards,” a local building code, so also a library must have a collection of reference books constantly at hand to enable the staff to answer a large proportion of questions rapidly. The AIA Library has such a section—actually in large part non-architectural—to answer the numerous questions that come in from the staff and others during the course of a day’s work.

Two recent additions received within the last week seem important enough to warrant a special notice. One is the first volume of fifteen of the “Encyclopedia of World Art” published in this country by the McGraw-Hill Book Company, Inc. This is issued in Italy by the Istituto per la Collaborazione Culturale, under the title “Enciclopedia Universale dell’Arte.” The work has an International Council of Scholars, numbering among its architect members Alvar Aalto, Walter Gropius, and Pier Luigi Nervi. The contributors in the first volume alone represent some nineteen different countries.

Although in general the English language edition corresponds to the Italian, which is the original, certain changes have been made: A considerable number of cross references have been added; some 300 separate short biographies and an extensive article on Art in the Americas with new text by American authorities have been included.

This first volume covers fifty-eight subjects from Aalto to Asia Minor in 450 double-column pages. Many of the topics are treated at great length and are really a collection of shorter articles. For example under “Americas: Art since Columbus,” there are a half-dozen major topics, with a total of twelve contributors. The author of the section on American architecture is Henry-Russell Hitchcock.

The author of the major article on Architecture is the Italian critic Bruno Zevi. Appended to the article is a bibliography of nearly eighteen columns. In its closely spaced small type it is rather formidable but it is indicative of the importance that has been attached to bibliographies and the

resulting value of the set as a starting point for research.

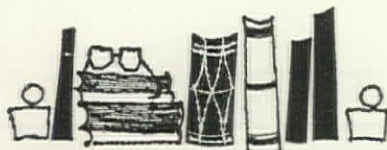
Perhaps the most outstanding feature of the set is the wealth of illustration. This volume contains 542 plates of which 98 are in full color. The plates are arranged by topic following the same order as the text. Indicative of the wide variety of approach is a plate showing six views of the Kaufmann house by Neutra in the Arizona desert, under various light and weather conditions. The result is startling indeed.

Although a final critical opinion must await use and the verdict of qualified critics, first impressions of this volume are most decidedly favorable and the succeeding volumes are anticipated with keen interest. It should be noted that volume fifteen scheduled for 1963, is promised to contain a detailed index, which will make available the wealth of material contained in the longer articles.

The other volume of more limited general appeal but of great potential value to librarians and scholars is “Guide to Art Reference Books” by Mary W. Chamberlain, librarian, of the Fine Arts Library at Columbia University. This is published by the American Library Association. Its purpose is stated as follows: “It is the intention of this book to do what has not yet been done in the English-speaking world: to organize systematically and to evaluate the vast and ever-growing literature of art history — the basic reference tools as well as the resources for the most advanced research.” There are some 2500 entries ranging from the earliest books on art printed to the Encyclopedia above (an announcement of its intended publication). All types of literature are included—handbooks, ready-reference works, encyclopedias, and the rarer sources of highly specialized information. Subjects covered are architecture, painting, sculpture, prints and engravings, drawings, and the applied arts. Among the peripheral fields omitted are city planning, interior decoration, landscape gardening and photography.

An appendix contains descriptions of some 75 special collections and art research libraries in the United States and Western Europe. The author has had the advice of several scholars who have read sections of the manuscript.

G.E.P.



BOOK REVIEWS

Manual of Hospital Planning Procedures. 72 pp. 6" x 9". Chicago: 1959: American Hospital Association*

This booklet should be in the hands of every architect before he undertakes a hospital project, and it should be read and re-read by every hospital administrator, trustee and building committee member before and during the establishment or expansion of their hospital facilities. It is concise and complete. The format is attractive, but readability would have been improved by use of a larger type or a two-column page. Since the subject-matter may change while this edition is still available, it would have been wise to give greater prominence to the date of publication.

As stated in the foreword, "The intent of the authors is to present a comprehensive guide for planning, organization and financing involved in almost any type of developmental program." The manual itself is an excellent example of the results of the kind of cooperative endeavor recommended for hospital planning procedures. The AIA committee which wrote it assigned several important chapters to AIA members Kiff, Wheeler & Cutler, Clifford Wolfe, AIA, then associated with AHA, also prepared a section. The complete job took about five years.

Some valuable information, especially to those who must accept the responsibilities of owner, is given in Appendix B. This was prepared by the Subcommittee on Architectural Contracts of the Council on Hospital Planning and Plant Operation of the Massachusetts Hospital Association. The discussion of the architectural contract apparently was not based upon the newer forms published by the AIA, but most of the advice given is sound.

In the chapter dealing with the responsibilities of members of the

team, it is stated that "The architect is responsible for the structural, mechanical, electrical and other engineering." This is sound, but later it is stated that "The owner may wish to retain the right to approve or reject those selected." We might also quarrel with the statement: "When an interior decorator or an equipment specialist is desired, he is usually retained by the owner to whom he is responsible."

In connection with the chapter on modernization, mention of the suitability of cost-plus-fee contracts might have been mentioned, and the method of selecting the contractor for such a contract explained.

These criticisms are all minor. Such a guide as this manual probably was needed more acutely in the hospital field than any other. When the usefulness of this manual has been demonstrated, however, a similar publication might well be developed for school buildings. In the meantime, much of value in the "Manual of Hospital Planning Procedures" may be applied to school building projects. Wherever the owner's responsibilities are divided between a number of individuals, a clear statement of how they are divided is essential. C.H.C.

Planning New Institutional Facilities for Long Term Care. By Edna Nicholson. 358 pp. 5½" x 8". New York: 1956: G. P. Putnam's Sons. \$4.50

In her book, Edna Nicholson makes a good case for coordinating the services of homes for handicapped and homes for the aged with the general hospital serving the area. This may be accomplished by:

- 1 physical amalgamation
- 2 combined administration
- 3 working agreements

By the first means, the homes become essentially departments of the hospital—perhaps using specified areas, certain floors, one or more wings, or separate or attached buildings in the general hospital group.

By the second means, the management of the homes may be directed by the top management of the hospital or the managements may be combined. By the third means, the homes may be independent, but have arrangements for the hospital to furnish diagnoses and treatments to patients in the homes.

Having the homes under the same roof as the hospital is most efficient, but some patients in the homes prefer not to be in a hospital. Furthermore, it is difficult to develop a homelike atmosphere in a large institution. On the other hand, since many a patient should be examined by the hospital staff before admission to a home, since the examining doctor should follow the case, and since the patient should be moved from one building to another as little as possible, both physical amalgamation and combined administration are highly desirable.

In opposition to Miss Nicholson's view, it should be pointed out that hospital service is generally much more expensive than that furnished by homes for the aged and homes for the handicapped.

Miss Nicholson points out that homes for the handicapped and homes for the aged have much in common. While there are some homes for healthy old people, most of the old people in homes are handicapped—mostly by chronic disease—and as they grow older, most of the healthy aged become chronically ill. Miss Nicholson does not deal with housing for old people who need no special care.

The book contains much useful data. It is difficult reading, partly because of repetition.

In Part II, Miss Nicholson advises concerning preliminary planning, and in Part III and Part IV, she discusses how to work with an architect, criteria, details and costs. An interesting table indicates that only 13% of patients (or their families) are able to pay nothing for their long-term care, and that nearly half are able to pay the cost of reasonable care. C.H.C.

* 840 North Lake Shore Drive, Chicago 11, Illinois.

The Stones of Florence. By Mary McCarthy. 130 pp. 140 plates. 8½"x11". New York: 1959: Harcourt, Brace & Co. \$15.00

"The Florentines, in fact, invented the Renaissance, which is the same as saying that they invented the modern world—not, of course, an unmixed good." Miss McCarthy, Vassar graduate, novelist, essayist, and now, art historian, has produced an absorbing and beautiful book which is not only art history but criticism, social and political history and witty and scholarly evaluation, all rolled into one.

Don't be misled by its Ruskinian title, this book is no blind paean of praise, but a tough sizing-up of the good and bad of Florence and the Florentines, ancient and modern, illustrated with very beautiful photographs made specially for the book by Evelyn Hofer.

The story opens with the Florence of today, an excessively hot and dull city which tourists would rather shun—all you can see there is the originals of paintings and architecture too familiar since childhood from schoolroom photographs. The streets are crowded and insufferably noisy, there are no smart sidewalk cafes and there is

no night life. Furthermore, the natives are indifferent and uncommunicative to tourists, they offer no assistance—"the monuments are there, let the foreigners find them." So much the better for the lover of what the City of the Lily has to offer, those who love to linger in the cool shadows of Santa Croce or the Bargello, without being pestered by sacristan, guide or beggar.

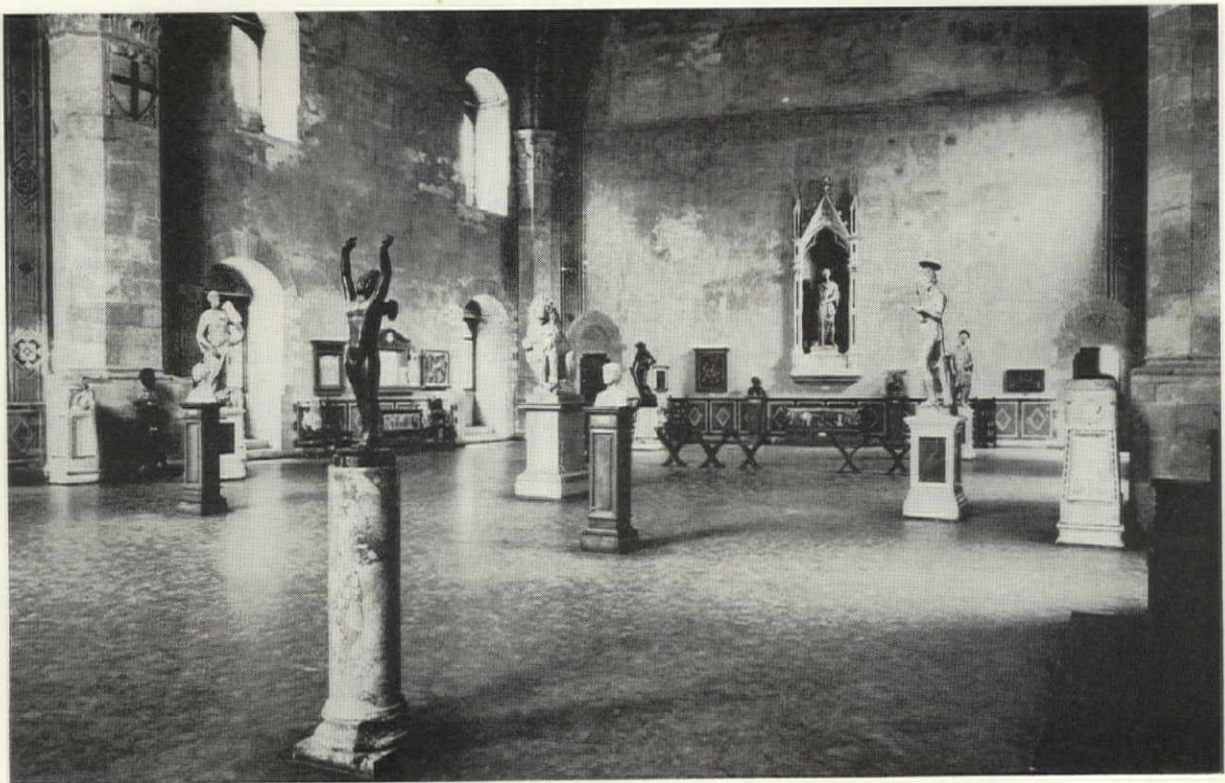
Miss McCarthy tells of Michelangelo and Donatello, their backgrounds, their lives and their works. Her occasional caustic comments on their art will give readers who know it either delight or dismay—such as her reference to the four "famous, somewhat rubbery" figures that adorn the Medici tombs. She tells of the Ponte Santa Trinita, its wartime destruction and later rebuilding; she tells of Nazi mines left in the villas of Fiesole, hidden in a garden lemon tree or a book in the library; she tells of the vivid political life of the city in medieval and early Renaissance times. She tells of the discovery of the laws of perspective by Brunelleschi and their development by Uccello and later painters; she credits Florence with a long list of "firsts": they built the first

great dome since antiquity, they produced the first nude of the Renaissance, they composed the first opera. Petrarch was the first humanist, Boccaccio the first literary critic, Machiavelli the father of political science and Alberti wrote the first modern art criticism. Furthermore, the first chair of Greek was set up there and the first public library was established in the convent of San Marco. To top it all, "The Italian literary language is exclusively the creation of the Tuscans, who formed it on their dialect as spoken in the city of Florence. . . ." Thus the author's statement that Florence "invented" the modern world.

Miss McCarthy has many heroes, but if one stands out beyond all others it is the bald-headed little man, Brunelleschi, with his dome, his many churches and his sculpture. She speaks of Michelangelo's veneration for him and says ". . . his architecture is always conscious of Brunelleschi, long dead before he was born, whom he could not surpass but only exceed."

This is no mere travel book, but a rich and lively appreciation of one of the prime fountainheads of our culture, and a very handsome job of book-making too. J.W.

Great Hall of the General Council, Bargello 1254-1260. Restored. (From "Stones of Florence")



To the Gentlemen of Detroit:

► For some fifty years now the automobile industry has been growing and thriving until it long ago became one of the great basic industries of the country. It has provided vast fortunes for a large number of people, highly profitable investments for thousands of people, and good employment for hundreds of thousands and indirectly for millions. Its product has brought pleasures to three generations which their preceding generations could only dream of. It has created many new businesses and industries which no previous generation could possibly have dreamed of. It has revolutionized surface transportation in a manner unforeseeable even three generations ago. It has changed completely the mode of life of hundreds of millions of people, and it has changed completely the cities and the highways of the nation.

The product of the automobile industry has grown from a snorting, bucking little monster of the dusty roads at which horses reared and dogs barked, to a purring, gliding, glittering and stinking big monster of the highways from which dogs flee and before which even angels fear to tread. We have deified this demon and we prostrate ourselves and our cities before it. It is a household god, and every family has at least one image of it, usually enshrined in a special room of the house or in its own separate building. Yet we worship it en masse, by hurtling it and ourselves within it along vast highways at great speeds, in company with thousands of complete strangers. Some forty thousand of us give our lives to the demon-monster every year, wildly and eagerly if not willingly, while a million and a half more of us sacrifice our limbs and the blood of our veins, to say nothing of the lingering sorrow and bereavements we suffer.

We destroy hundreds of homes, bulldoze mountains, level forests, cut wide swaths through crowded cities, in order to create thousands of miles of smooth ribbons of con-

crete for our deity to travel on, or vast acres of cement for its repose. We do this because the god is more important than the man. All hail, Automobile!

Through all this, for nearly three generations, the few major companies that make up the greater part of what is known as the automobile industry, have sat very tight—although not very quiet—and grown fatter and more powerful each year as they planned new models of the god, glassier and gassier than before, much as the priests of the oracles and man-made gods of ancient times grew fat and powerful as they manipulated their creatures and breathed vaporous and vacuous ambiguities through their senseless lips.

It is time the major automobile companies awakened to their public responsibilities. It is not enough to spend millions in "research" so that automobiles may go faster and smoother, so that they may be bigger and shinier or smaller and more conservative, whatever the trend of the moment may be. That is no public service; it is just another form of "sales & service." True, General Motors has established a very handsome scholarship fund, which is a public service. But one somehow suspects it is just using money which Uncle Sam would get otherwise. The service which the automobile manufacturers owe the public has nothing to do with sales and it is much closer to them than improving the educational opportunities of the young.

With all the benefits the automobile has brought to mankind, it has also brought to this nation—and to other nations which are as automoted as we—the blight that has now overtaken our cities and is creeping over our countryside. There is no need to detail here the symptoms and malignancies of that blight. They have been well described many times by better writers than the present one. But the point must be hammered home to the gentlemen of Detroit that it is *their* automobile which has done it. True, we love our shining mons-

ters, we buy'em and we strut'em, but we are also defeated by them.

It is not enough to increase production so as to turn out millions more cars. Where are we going to *put* six or seven million more cars each year? What are we going to *do* with them? The manufacturers of this essential luxury must stop thinking in terms of production units and sales, and think in terms of *people*.

The automobile industry must underwrite a vast program of broad studies of population trends, housing needs, civic requirements and conservation demands. Through this perhaps a program can be prepared and a pattern established for our cities, towns and villages to follow in their groping efforts to plan for the new age—which has already overtaken us; perhaps a line of guidance can be established for the highway engineers, who are now the much too efficient enemies of conservation, both natural and historical; perhaps we can be shown a way toward re-establishing that simpler and more neighborly mode of life for which we envy our forebears, which in their day was accomplished even in cities more overcrowded than today's.

Is this just a display of another one of our modern weaknesses—the feeling that a survey can cure anything? I don't think so. True, a survey is no better than its surveyors, so the surveyors must be the very best. But a survey must precede a study, and only a long hard study can precede a program which will save us from streets stalled with crosstown traffic, fine civic buildings desolate in seas of parked cars, two-hour-long rides from home to work, thousands of ugly car-carcass lots, millions of acres of concrete, cities, homes and countryside wrecked by the bulldozer to make way for the onrushing god, and ultimate asphyxiation by carbon monoxide gases.

Gentlemen of Detroit, only your concerted efforts can save the people of this nation from the evils that you have been principally responsible for bringing upon them.

BTRG

AIA Building Type Reference Guide (BTRG 11)

Truck Terminals

By Clinton H. Cowgill, FAIA, and James W. Boyer,
Executive Secretary, The Operations Council
of the American Trucking Association, Inc.

The purposes of this guide are to assist the truck terminal owner or operator in organizing his data for a design program, and to provide the architect with recognized design standards for convenient reference.

On matters upon which the opinions of operators with long experience vary, two or more opinions are given. Details are avoided, since recognized problems may be solved in different ways in different places and by different architects.

Site

If the site has not been selected, the following items may be considered in connection with its location:

- proximity to deliveries, pickups and connecting carriers
- accessibility to traffic ways
- obstructions such as bridges, underpasses and railway crossings
- relation to future redevelopment plans, especially areas which may be zoned for truck terminals
- zoning restrictions
- distance from labor supply
- transportation facilities for employees
- utilities: water, sewer (sanitary and storm), electricity
- character of surroundings

Relation to urban planning

Probably no other business is more concerned with the direction the growth of a city will take than that which furnishes truck transport

service. In addition to current conditions, the truck operator locating a terminal should give careful consideration to all factors which will influence the direction of growth as it may affect the proximity of a site to deliveries, pickups and connecting carriers; accessibility to traffic-ways; distance from labor supply; and transportation facilities for employees. An important factor influencing the direction of growth is the action of urban planning officials. The net long-term result of urban planning and zoning is an increase of stability and the provision of adequate roadways. The efforts of those concerned with urban planning and zoning deserve the critical support of all forward-looking businessmen.

Do not overlook growth in real estate values—that become a “wind-fall”—when terminal is outgrown or must be relocated.

Check insurance cost of each type of construction:

- frame
- incombustible
- fireproof

The first item listed above is of sufficient importance to justify calculations of total ton-miles for deliveries to consignees, pickups from shippers, and deliveries to and pickups from connecting carriers for each of the sites being considered. The suggested steps are as follows:

- divide city into zones by pickup and delivery routes

- calculate tonnage into and from each zone for two or three typical months
- multiply tonnage by distance from center of each zone to each proposed terminal site

Except for differences in the square foot cost of the land, it makes little difference whether a long or short side of the site faces a street. In cold windy climates it is best to have the long dimension of the dock in a direction parallel to the prevailing winds so that a blank wall of the dock wing faces the wind, and for natural illumination the long dimension running north to south is preferred.

In selecting the site, size required will be affected by the following decisions:

- ultimate number of truck stations (at 12 per station) will determine length of dock for both local and long distance trucks
- width of dock
 - 1 type of operation on dock:
 - a) cross load
 - b) temporary storage for sorting and reloading
 - 2 16' aisle each side of dock total 32'
 - 3 additional width for flooring or temporary storage of freight
- exterior distance from each side of dock to nearest obstruction: 100' for 50' road units, 60' for 30' city trailer, and 50' for 25' city truck

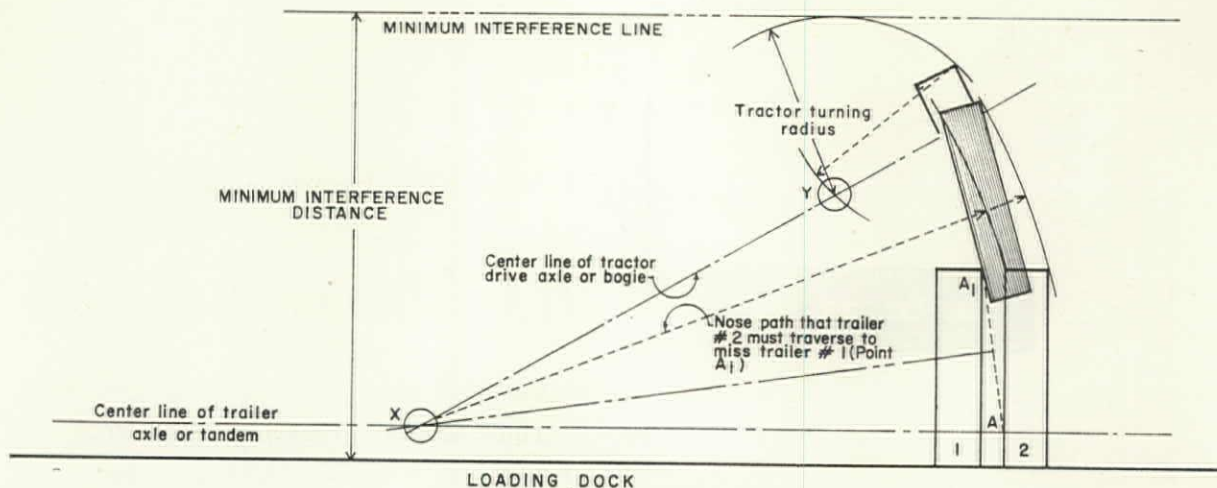


FIG. 1 Graphical method of determining tractor trailer maneuvering dimensional requirement by C. P. Hoffmann, Jr, Automotive Engineer, American Trucking Associations

Procedure

- 1 Pick scale to be used in problem.
- 2 Draw to scale trailers up against the loading dock at expected spacings. (Use longest and widest trailer measurements expected at dock.)
- 3 Extend trailer # 2 axle or tandem center line in direction of turn.
- 4 Draw chord AA_1 from that point on the side of trailer # 2 where the axle or tandem center line intersects the side of the body, to the nose corner of the adjacent trailer (# 1). This is a chord of the curve through which point A (# 2) must traverse to miss trailer # 1.
- 5 Bisect chord AA_1 and extend a perpendicular line until it intersects the extension of trailer # 2 axle or

- tandem center line at point X. This is the point about which all points on trailer # 2 must rotate to miss striking trailer # 1.
- 6 With the compass point on point X, swing trailer # 2's nose around until point A reaches point A_1 . Sketch trailer # 2 into its position as shown.
- 7 Through the location of the kingpin, extend a line back through point X. This line then represents the center line of the tractor drive axle or bogie. From this drive axle center line, draw the tractor with the greatest turning radius in its proper position with respect to trailer # 2 in its second position.
- 8 With the compass point on the tractor front bumper (opposite side from the direction of the turn) scribe

an arc equal to the turning radius of the tractor so that it intersects the center line of the tractor drive axle at point Y.

- 9 With the compass set at the turning radius of the tractor, place the point at Y and scribe an arc that represents the curve about which the bumper will travel.

Result

Measure that distance from the dock to that point on the curve just drawn which represents the greatest distance from the dock. THIS REPRESENTS THE ABSOLUTE MINIMUM DISTANCE AWAY FROM THE DOCK NEEDED FOR MANEUVERING AREA (based on a single continuous forward movement).

- ultimate size of shop—number of vehicles in shop and kind of repairs and servicing
- location of shop
- size and location of fueling area
- size and location of weighing area
- size and location of truck parking area
- size and location of employees' and visitors' parking area

If maneuvering areas 50' and 100' wide and a dock-width of 60' are assumed, the minimum width of the site would be 210'. If 50' is allowed for parking, this width becomes 260'. If parallel docks are arranged in series, the same maneuvering areas may serve two adjacent docks. The minimum width for two 60' docks with two 50' and one 100' maneuvering areas is 370'.

The actual choice of site will be influenced by cost. For high-cost land, buildings of more than one

story might be considered. With a sloping topography, it may be possible to design a two-level dock. Some offices and auxiliary units may be placed upon a second floor.

If a site of adequate size for all facilities is not available, such units as the shop and parking spaces might be located on another site nearby.

Before purchasing a site, it is wise to engage an architect to make schematic sketches indicating the best utilization of each of the sites being considered, making suitable allowance for expansion. Data concerning available sites may be obtained from the Chamber of Commerce and other sources. The site selected should be ample, but the building should initially be no larger than needed with allowance for ten years' expansion.

All traffic adjacent to the dock is one-way and moves counterclockwise to permit left-hand backing.

For each space at the dock, at least two other parking spaces should be provided.

For fast clearance of unloaded trailers away from the dock and the temporary parking of loaded trailers, awaiting spaces must be provided.

The width of the parking spaces against the dock particularly together with the length of the trailer and the tractor employed for maneuvering determine the minimum maneuver space.

If the site has been selected, a topographical map giving grades, boundaries, positions of adjacent buildings, location of utilities, etc., should be furnished to the architect. If the character of the soil is unknown, soundings or test pits and soil analyses may be justified.

Building

The first logical step in the planning is the location on the site of

the dock wing with its two aprons, together with the offices. The owner should state the sizes of auxiliary units chosen from the following check list:

- general office
- message center
- billing office
- cashier
- telephone room
- foreman's office
- office manager
- terminal manager
- operations manager
- salesmens' room
- record room
- heater room
- central checking
- drivers' locker room
- transportation dept
- dormitory
- cafeteria
- drivers' ready room

There are sharp differences in opinions regarding preferred locations of the shop or maintenance facility. Locating it in a building separate from the dock and offices is the only one considered by some operators, but some favor locations near the office and under the same roof as the dock.

The fueling area may be near the entrance or exit if the terminal is large enough to justify keeping an attendant on duty — otherwise it should be near the shop, or in the shop where regulations permit.

The owner should report separately the number of road vehicles, and the number of local trucks and tractor-trailer units. These data determine the length of the dock. The number of trailers, tractors, trailers hooked to tractors, shop and road service vehicles, and employee and visitor cars to be parked at one time should also be given.

Figure 2 illustrates a common T-shaped terminal building with dock space for 84 trucks and expansion at one end. The shop may be in a separate building. The scheme indicated by Figure 3 is currently popular. The offices are near the center and expansion is possible at both ends of the dock.

Split-dock plan

The "split-dock" operation is receiving more and more attention as a means of expanding existing terminal facilities where this type of operation is found practical. With this plan, outbound and incoming



Interior of dock building showing drag line

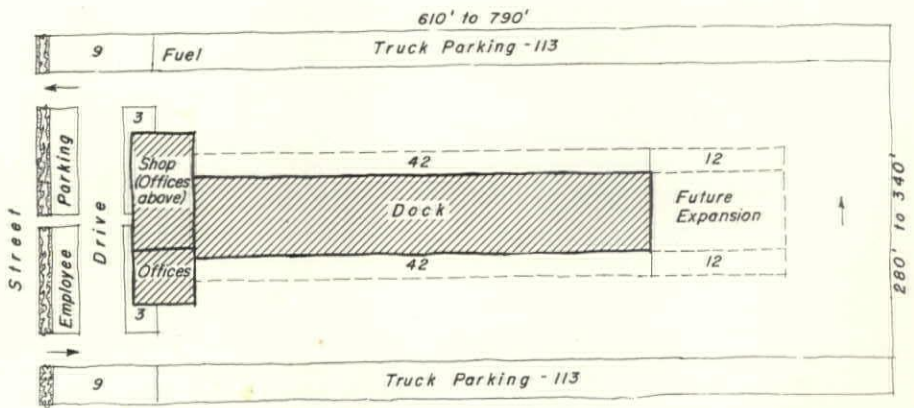


FIG. 2 T-shaped truck terminal with short side to street

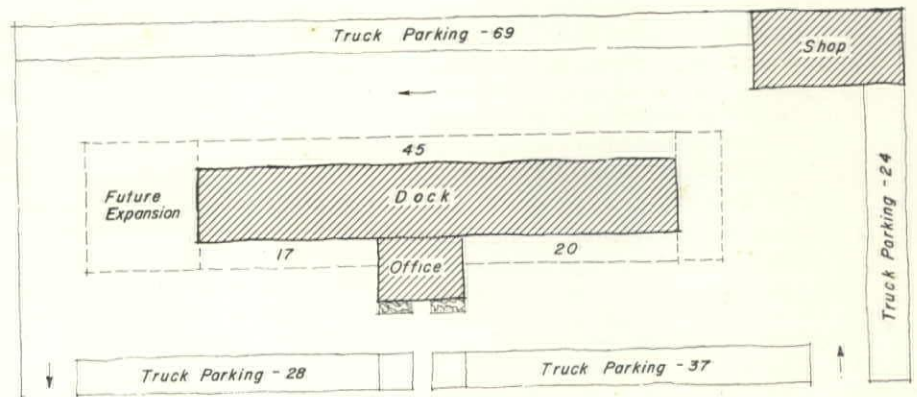


FIG. 3 Terminal with expansion provided both ends



View of a maintenance shop

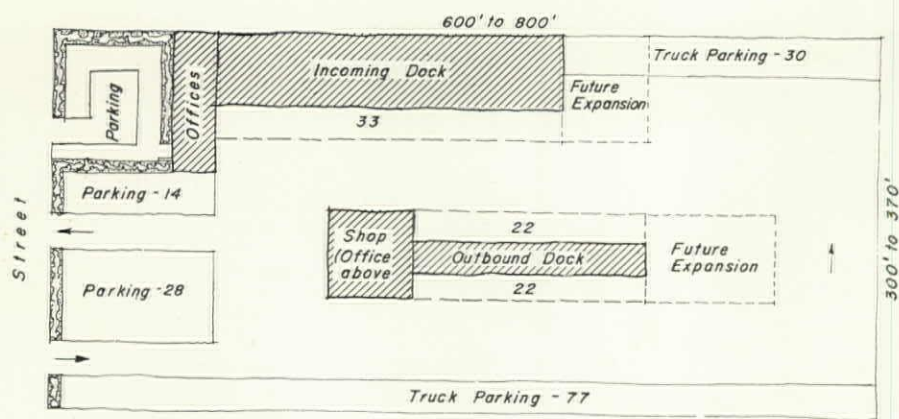


FIG. 4 Split-dock truck terminal

freight shipments are handled in separate docks. (See Figure 4) The outbound dock is narrow and has the maximum number of truck unloading and loading stations, because most of the freight brought in by local trucks is loaded immediately to outgoing trucks using 4-wheel cargo carts. A width of 30' is suitable.

The incoming dock, on the other hand, is more compact and provides space for temporary storage so that local deliveries may be according to a regular schedule. A dock 70' deep with doors on one side only, has been found to be workable and a round plan may be considered. Where the two docks are completely separated, the offices may also be split. To avoid this necessity, consideration might be given to joining the two docks with a unit containing service garage on the ground floor and offices above.

Advantages claimed for the split-dock plan are:

- avoidance of confusion attending the change from outbound to incoming operations and vice versa
- continual unloading, and quick service on late arrivals and rush loads
- use of the most suitable material handling technique and equipment for each operation
- increased skill due to specialization of labor
- increased flexibility of operations and possibility of conducting both operations simultaneously

Disadvantages have been noted:

- difficult supervision of parking and maneuvering
- higher operation costs
- use limited to end-of-line facilities where there is no intra-line transfer

A prominent motor carrier says, "Each carrier must develop his terminal to fit his particular needs. . . . For a carrier to use efficiently a portion of his dock continuously for inbound freight requires a substantial amount . . . arriving continuously over a 24-hour period so that he can set up the necessary dock crews to work around the clock unloading inbound trailers, sorting freight and temporarily storing it on the dock for reloading on delivery trucks. For a carrier to utilize efficiently a portion of his dock (exclusively) for outbound freight would also require pick-up trucks, connecting lines, cartage companies, and customers' trucks to be bringing freight to the dock regularly for acceptance over a major part of the 24-hour period to unload, sort, temporarily store on the dock and load outbound road trailers.

"Where same dock can be used for inbound and outbound, greater utilization and flexibility is possible during a 24-hour period such as — outbound—10 AM to 10 PM—inbound—10 PM to 10 AM."

Design standards

Parking spaces for trucks should be 12' wide and about 20% longer than the trailer, with a maximum of 60'. Parking spaces for employees' and visitors' cars should be 10' wide and 20' long. For perpendicular parking, 20' to 22' should be allowed for maneuvering.

It is recommended that the entire site be fenced with 2" mesh, number 9 gauge wire with twisted and barbed selvage top and bottom. Total height should be 7', including several strands of barbed wire at the top in one foot of height. Rigid metal posts should be set in

concrete, and corners and gate posts should be braced. Fences should be protected with curbs—5' to 15' from fence. The curbs may be heavy timber or utility pole bumpers supported by heavy pipe or rail sections, driven into the ground or set in concrete, or by a 2' high sloping earth bank with slope paved with asphaltic concrete and the top covered with gravel. In automobile parking areas, bumpers should be not less than 3' from the fence.

The design module is based upon the dock length per truck of 12' and the following dimensions are recommended:

- doors, single, 8' to 10' wide by 8' to 9' 4" high
- doors, double, 16' to 22' by 8' to 9' 4" high
- piers, 2' to 4' in width
- roof overhang, 6' to 35' (12' average)
- vertical clearance, 14' to 15'
- it is suggested that to assure sufficient clearance between canopy and top of trailer unit that a recommended vertical distance of 11' from the dock floor to the lowest underside element of the canopy be used to fix the clearance from the yard surface to the lowest underside element. (See figure 5)
- hi-lift overhead type doors are preferred—opening in or out. Use of the sliding type (either horizontal or vertical) is seldom possible and the hinged type is cumbersome.

Jambs should be protected with steel angles. Truck height limitations in different states vary from 12'-6" to 14'-0". Structural columns should be avoided outside the dock area and limited to a single row inside. Column guards, if of flexible materials, protect both columns and merchandise. Interior clearance from 10' to 12' is recommended. Other standard dimensions are:

- metal ladder rungs embedded in the concrete side—every 4 doors. Generally, it has been found the metal ladders can be installed every 4 doors around an average dock of 100-200' in length at approximately the same cost as one concrete stair case
- truck-bed heights (loaded and with tires inflated) 51" to 52"
- platform height for "over the road" vehicles, 48" to 52"

For leveling, self-adjusting dock boards or ramps under truck wheels may be used.

By installing some type of self-adjusting dockboard having a spread of 6" on a dock with a height of 48", it would be possible to cover a range of dock heights from 45" to 51".

Docks should be protected with bumpers of one of the following types, placed on the edge of the dock:

- replaceable timber
- permanent timber
- replaceable steel
- permanent steel
- rubber
- tire stops
- tire stops with cock trough

In mild climates, docks may be open on one or both sides. For protection from cold winds, the end wall may be extended. In cold climates and where closing is necessary for security, doors should be provided.

The dock floor should be laid on a thoroughly compacted earth fill, or it may be a structural slab designed for a uniform live load of 150 psf to 250 psf or more. Wood is not recommended for either the structure or finish. The finished surface of concrete may be made slip-proof by mixing carborundum or metal filings with the topping or top portion of monolithic slab.

The minimum heating required for the dock area is in a room for freight which would be damaged by freezing. When doors are open much of the time, it is difficult to heat the space adequately, but in cold climates it may be expedient to provide workmen with some heat—possibly radiant coils in the floor.

Narrow docks with doors on both sides may have adequate natural daytime illumination. For wider docks either skylights or electrical illumination may be needed. In localities with low electric rates, the annual cost of electrical illumination may be less than the fixed charges on an adequate area of skylights. A minimum of 10 foot-candles of general illumination is recommended for the dock area. For night work, floodlights are desirable at:

- corners of dock
- sides of dock

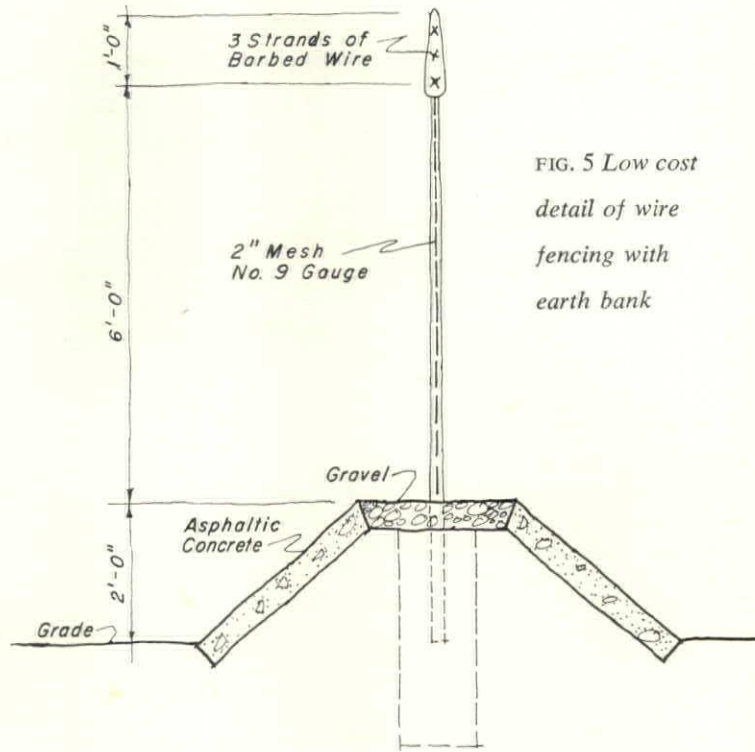


FIG. 5 Low cost detail of wire fencing with earth bank

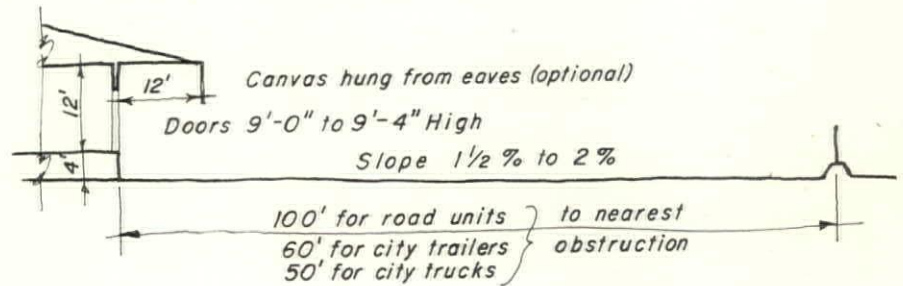


FIG. 6 Suggested dock dimensions. The tendency is toward higher trucks. Lower docks may be obtained, if needed in the future, by raising grade or installing some type of self-adjusting dockboard

- corners of office
- corners of shop
- utility poles
- fueling area

To get light inside the truck:

- an overhead spotlight may be used on a flexible or non-flexible conduit
- spotlights may be attached to dock columns
- spotlights may be directed through translucent plastic inserts (skylights) in vehicle roofs
- dome-lights in vehicles may be run from terminal current

Open doorways may not provide adequate summer ventilation (especially if gasoline fork-lift trucks are used) in which case intake fans and/or exhaust fans are recommended.

Consideration should be given to the installation of a sprinkler system and fire hydrants. The owner should indicate the need for communications, such as:

- loud speakers
- pneumatic tubes
- tel-autograph
- micro-speakers
- teletype

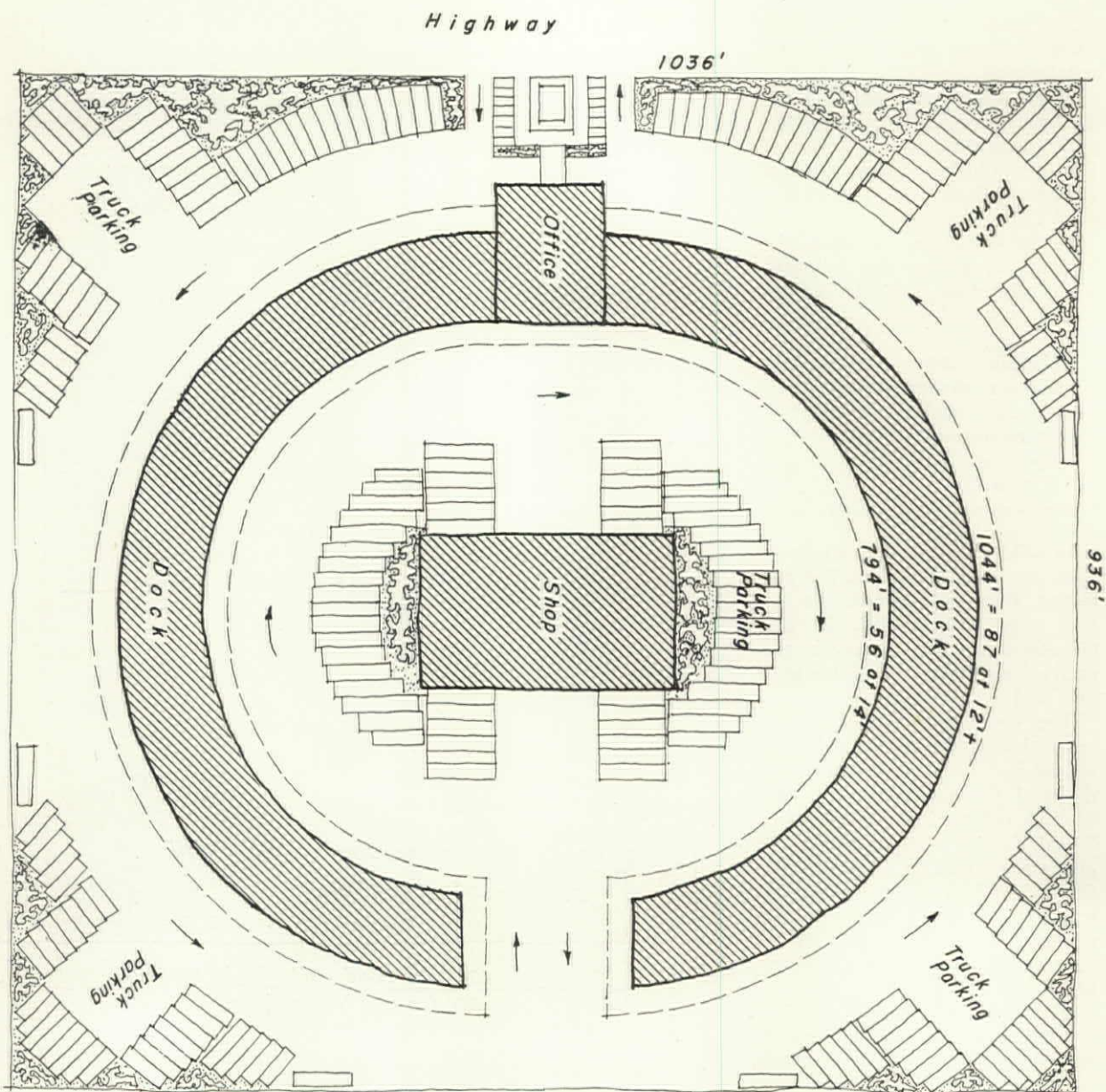


FIG. 7 Large truck terminal with curved dock accommodating 286 trucks at maximum expansion

- signal systems
- inside telephone
- radio system

82

Parking and maneuvering areas should be properly graded (sloping down away from the building) and paved. Minimum grades from 1/10"/ft to 1/4"/ft are recommended and grades should never exceed 6' in 100'.

Storm sewers are desirable—storm water should not be carried on surface of paving more than 100'—preferably 60' to 75'.

It should be emphasized that allowances should be made, not only

for expansion, but also for possible changes in truck design, such as increased lengths and heights. Increased demands for agreeable working conditions should also be anticipated.

Maximum size of terminals

The maximum size of a single truck terminal has not yet been determined. A maximum dock length of 500' applies to the T-shaped terminal with offices at one end; and a capacity of 200 trucks (length of dock approximately

1100') applies to a terminal with the office at the center of one side.

Some more complicated shapes, such as the I, U, and E have been considered, but at the intersections of wings with the main dock unit, dockside truck spaces are useless along either the main dock or the wings. A possibility worth exploring is the use of curved docks with road vehicles generally using the outside of the curve and local trucks the inside. With the offices on a second floor, the space beneath them could be given to

incoming freight requiring temporary storage, thus leaving the front wall at the office entrance clear. By proper grading, a truck underpass could be provided and the approach from the highway to the offices thus kept free of trucks. With a radius of 344', the curved portion of an 80' dock would have 174 truck spaces at approximately 12' per truck along the outside wall; and with a radius of 264', there would be 112 truck spaces at approximately 14' per truck along the inside wall. The maximum distance from the offices to the extreme end of the dock (inside) would be 900', and 286 trucks may be accommodated at the dock at one time. (See Figure 7)

Figure 8 indicates a more compact arrangement on a site approximately the same size as that shown in Figure 7. Spaces are provided for 356 trucks at the docks with a maximum distance of trucks from offices of 900'. If such large truck terminals were built, electronic equipment for yard and dock supervision would be required.

One motor carrier executive reports a layout for a dock having 200 vehicle spaces, 120' wide and 1100' long with offices at center of one side. He believes that "there is no practical limit to the size of a terminal facility."

The limiting factors determining the size of a truck terminal, as pointed out by another motor carrier executive are "the size of the pick-up and delivery area, volume of freight, and the number of trucks needed to serve this area." Travel time, more than distance, affects pick-up and delivery costs; hence, terminals will be located for the most efficient pick-up and delivery of freight handled. As volume of freight increases, the pick-up and delivery area will be reduced, resulting in adding terminals, other factors being equal. . . . Freight can be efficiently moved on a large dock with mechanical equipment . . . hence the trend today is for longer and wider docks. . . ."

Consolidated terminals and transport centers

Where terminal trucks of non-competing lines are located near each other, shipments can be transferred from one to the other expeditiously. In some cities large

areas have been developed as truck terminal centers. Where it is possible for truck lines to use terminal facilities under the same roof, the transfer of shipments is even more convenient. The consolidated terminal makes this possible. The largest size which is feasible for a single terminal building is unknown, but beyond a certain point, obviously, the convenience of transferring shipments from one line to another would be more than offset by increased average distance which shipments of a single line would be forced to travel within the dock.

A notable transport center is Chicago's Lake Calumet Harbor, which will cover 100 acres initially and 200 acres eventually. Truck terminal buildings will be constructed to fit individual requirements and leased on a long-term basis. In addition to truck terminals (which will include a consolidated terminal), there will be facilities for rail and water transport, restaurants, motels, service stations, repair shops, weighing station, truck parking compound, and a retail shopping center. Facilities will be provided for piggy-back and fishy-back service, making it possible for a cargo loaded into a truck trailer at the shipper's place of business to be delivered to the consignee without rehandling in transit, even though the movement includes rail and water transport in addition to trucking.

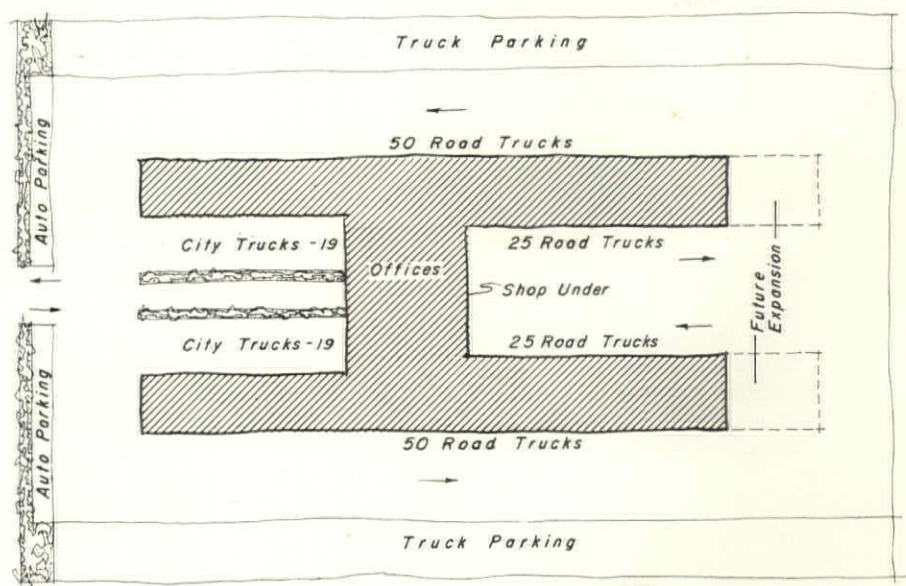
Feasibility

Before developing the final design and construction documents for a truck terminal, both the truck line owner or operator and his architect should assure themselves that the design as conceived is economically feasible. This may be accomplished without involvement in calculations of the results of the various ways of financing. If an investment in a building is expected to pay 8% on the total capital (without any borrowing or sale and lease back) the return on the investment in the equity would be even higher if part of the capital is borrowed at a rate lower than 8%. If 60% of the capital is borrowed at 6% interest, the rate of return on the equity becomes 11%. With lower interest rates and the borrowing of larger proportions of the invested capital, the return on the equity is still larger. For tests of feasibility at early stages, therefore, it is suggested that an overall return of 8% be the criterion.

The architect may make or secure an estimate of the construction cost of the building and site improvements to which is added:

- cost of land free of obstructions and including utilities
- compensation of architect, engineers and surveyor
- carrying charges, including taxes,

FIG. 8 Terminal with wings for 188 trucks. Expansion to 208 trucks at dock



interest and insurance during the period of construction

- financing and legal costs, etc.

The sum of these items is the total capital cost upon which a reasonable return must be earned.

The net income to be expected over the period of the useful life of the building may be based upon that earned from past operations with suitable allowance for expansion and expected inflation as well as possible slack periods, but not including rent or its equivalent. These data, of course, should be furnished by the owner.

In addition to the expenses incidental to the operation of the business which are taken into account in determining the net income above, such annual expenses as real estate taxes, insurance, depreciation and repairs should be deducted from the net income. If the balance is divided by the capital cost, the result will be the rate of return expressed as a decimal.

A hypothetical example follows:

Capital:

Land	\$ 50,000
Building, etc.	225,000
Architect, etc.	15,000
Carrying charges	10,000
	<u>\$300,000</u>

Operation:

Net income	\$30,000
Building expense	6,000
Balance	<u>\$24,000</u>
Rate of return equals:	
$\frac{24,000}{300,000}$	$= .08 = 8\%$

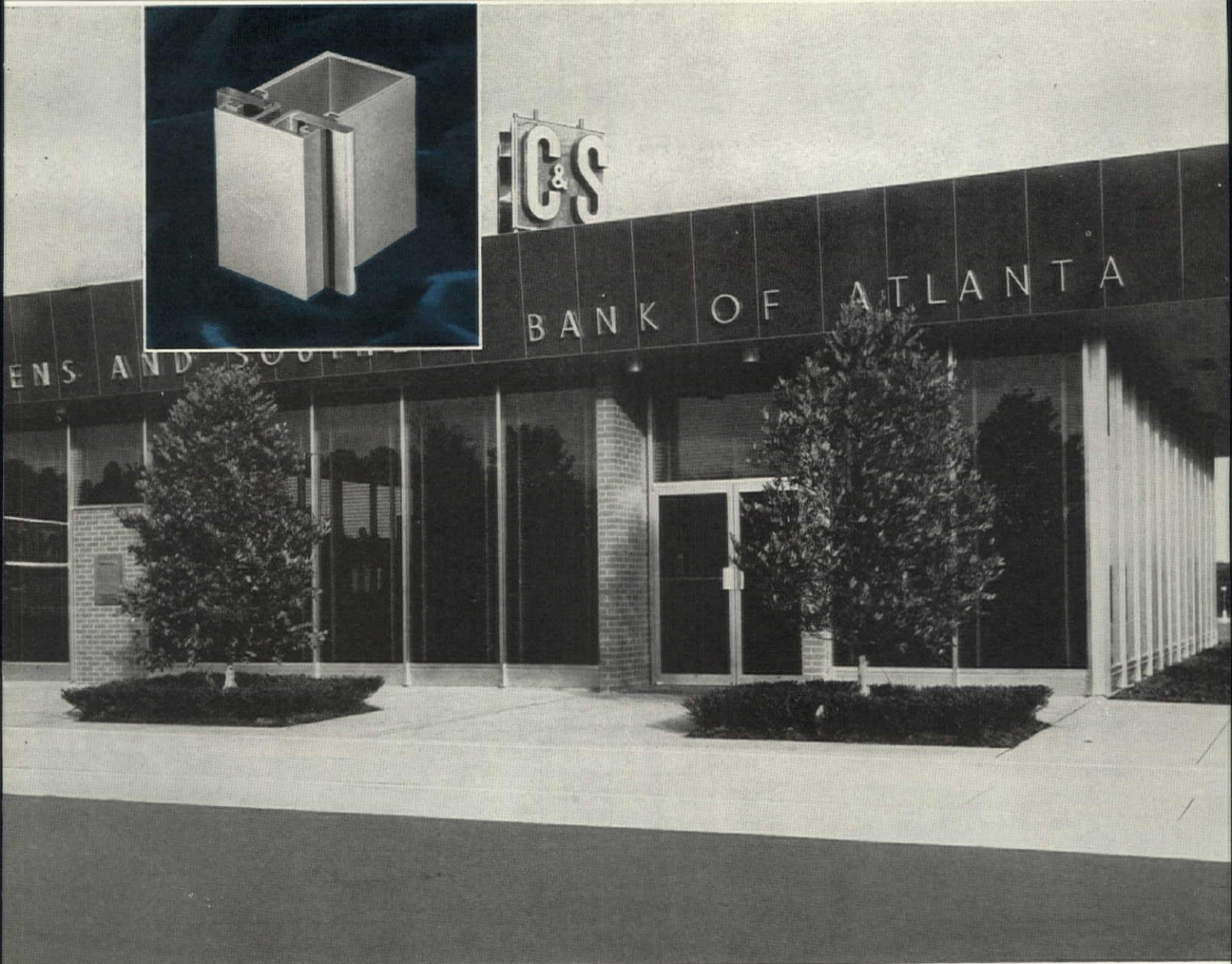
If the rate of return is less than 8%, the project may be abandoned, a less expensive site be sought, or the design of the building be reconsidered. In cutting the capital cost of the building, changes which result in increases in annual building expense, such as insurance, depreciation and repairs should be avoided.

If the project appears to be feasible, the most suitable method of financing may be explored. See *Financing Terminal Construction** for advice upon this.

* By Philip H. Small; available through The Operations Council Office, American Trucking Association, 1424 Sixteenth St., N.W., Washington, D. C., 10 pp.

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- Denver Chicago Trucking Co. Terminal at Denver, *Purchasing*, v 43, No. 5, N. '57, p. 332. Site 15 acres, cost \$1.5 mil, floor area 125,000 sf capacity 71 trucks, under floor conveyor.
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- Olympic redevelopment with truck terminal under freeway, *Am. Inst. of Planners J.*, v 19, Fall '53, p. 227; *Civil Engineering* v 25, No. 1, Ja. '55, p. 84.
- P.I.E.'s Kansas City Truck Terminal, *Power Wagon*, v 90, No. 575, Mr. '53, p. 16. 48 trailer capacity, floor area 42,000 sf.
- Precast Concrete Trucking Terminal in Albany, Ga., *Dixie Contractor*, v 31, No. 19, Oct. 26 '56, p. 8. 24,000 sf, warehouse and dock 100' x 212'.
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- Truck Terminal at Kalamazoo, Mich., *Traffic World*, v 95, No. 2, Ja. 8 '55, p. 65. 5 acres, capacity 35 trailers, fire resisting 14,000 sf floor, dock and warehouse 60' x 180', yard floodlighted. Teletype dispatch, pneumatic tubes, electronic intercommunication system for checking inbound and outbound freight shipments. Hinge action magnesium dock plates adjust to truck bed heights.
- Truckaway Terminal at Wayne, Mich., *Transport Topics*, No. 953, N. 16 '53, p. 40. Serves Lincoln-Mercury plant.
- Lake Calumet Harbor, *Terminal Operator*, No. 2, Vol. VI, p. 14.



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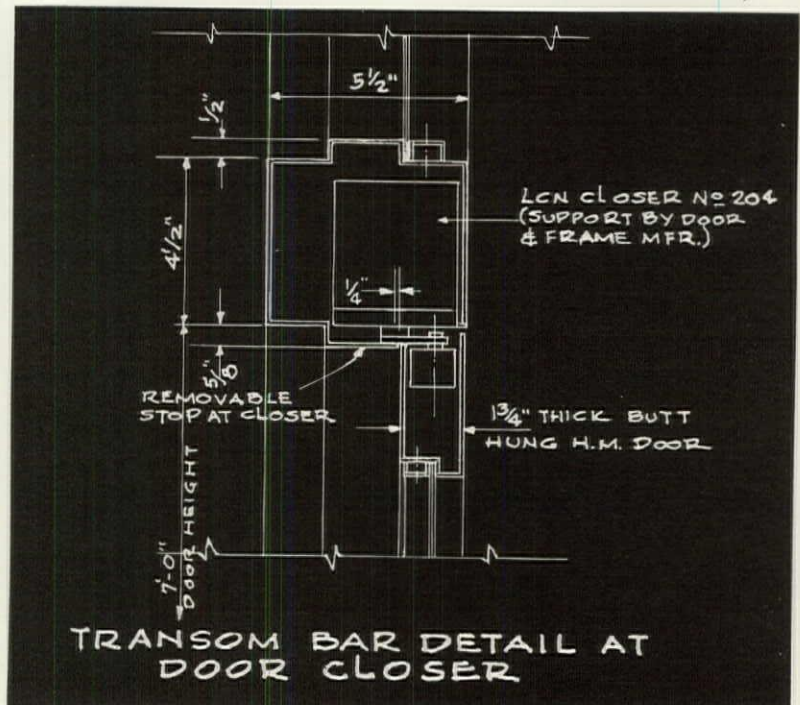
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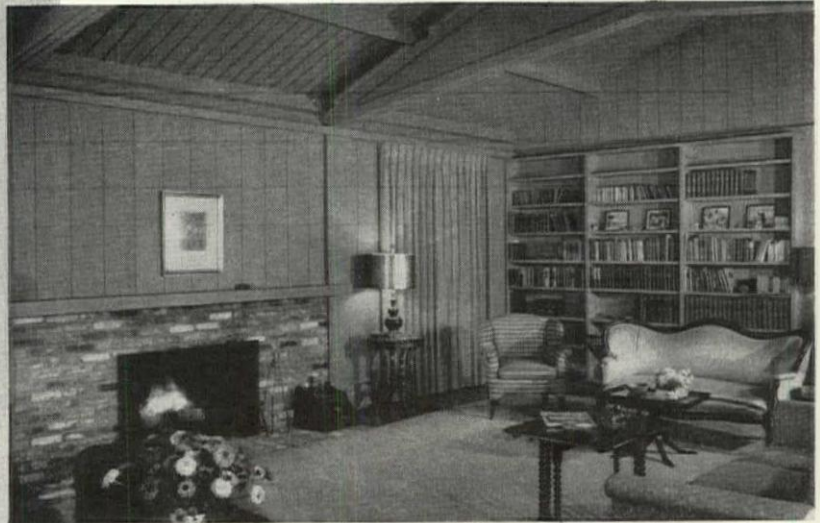
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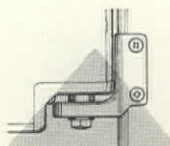
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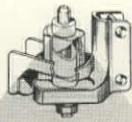
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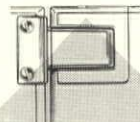
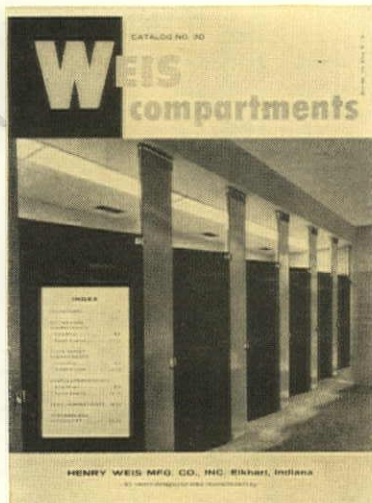
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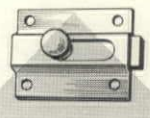
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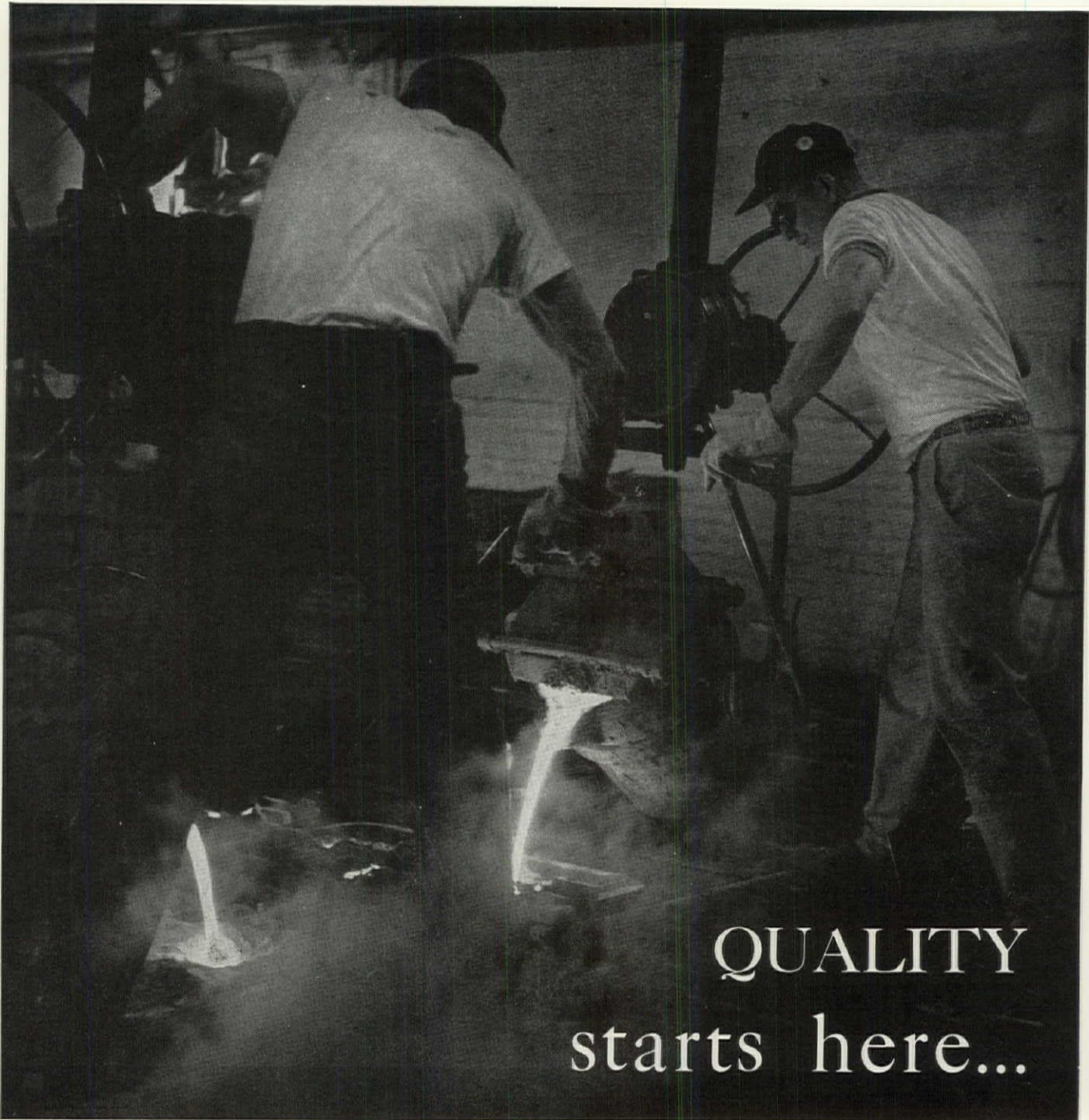
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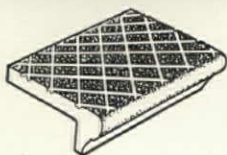
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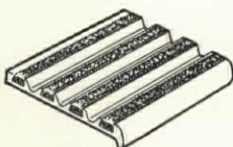
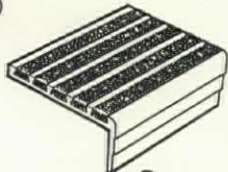


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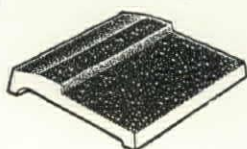
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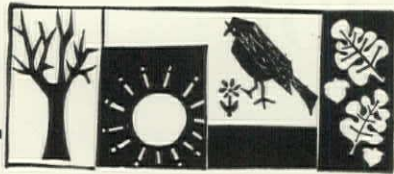
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April 18-22: AIA Annual Convention, San Francisco, California.

April 23-30: Twenty-seventh Annual Historic Garden Week, Garden Club of Virginia. (For information write The Garden Club of Virginia, Room 3, Mezzanine, Jefferson Hotel, Richmond 19, Virginia.)

May 11-16: World Design Conference, Sankei Kaikan, International Hall, Tokyo, Japan. For full information write Wo-De-Co—Tokyo, Room 301, International House of Japan, 2 Tariizaka-Machi, Tokyo, Japan.

May 12-14: South Atlantic Regional Conference, Winston-Salem, North Carolina.

May 28-June 3: Twenty-fifth World Planning and Housing Conference, San Juan, Puerto Rico.

June: AIA-ACSA Teaching Seminar, Sagamore, N. Y. (exact date not known).

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NOTICES

OF ACTIONS TAKEN IN CASES OF UNPROFESSIONAL CONDUCT

Disciplinary actions as shown in the following tabulation have been taken by the Board of Directors of the Institute at its November 9-13, 1959, meeting:

Member	Violation	Penalty
Herbert P. Beyel, Hawaii Chapter	Mandatory Rules Nos. 14 and 15 and Obligations of Good Practice B and K	Termination
Rolland Denny Lamping, Washington State Chapter	Obligation of Good Practice C	Censure

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14 An Architect shall conform to the registration laws governing the practice of architecture in any state in which he practices and he shall observe the standards of practice established by the local Architects' professional body.

15 An Architect shall at no time act in a manner detrimental to the best interests of the profession.

Obligations of Good Practice

B An Architect should consider the needs and stipulations of his client and the effect of his work upon the life and well being of the public.

C An Architect may offer his services for anyone on the generally accepted basis of commission, fee, salary or royalty, as Architect, consultant, adviser, or assistant, provided that he rigidly maintains his professional integrity.

K An Architect should seek opportunities to be of constructive service in civic affairs, and to the best of his ability advance the safety, health and well-being of the community in which he resides.

Finally, every Architect should do his part to forward justice, courtesy and sincerity in his profession. It is incumbent on him in the conduct of his practice to maintain a wholly professional attitude toward those he serves, toward those who assist him in his practice, toward his fellow Architects, and toward the members of other professions, and the practitioners of other arts. He should respect the distinction between professional practice and non-professional enterprise.

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According to notices received at the Octagon between November 25, 1959 and December 17, 1959

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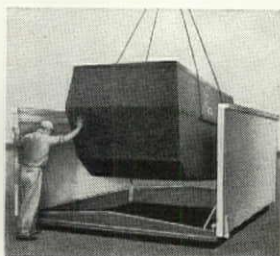
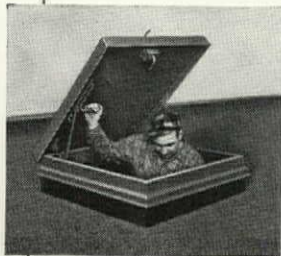


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Choosing floors for atomic architecture

The newest phase of architecture—and a most important one—is the creation of laboratories and power plants to house atomic reactors. In all atomic architecture, prime consideration must be given to the protection of the building's occupants from radiation and to provision for fast and effective decontamination procedures. Flooring needs for atomic architecture are ideally met with resilient floors. These materials are non-porous in nature and extremely easy to clean. But not all resilient floors are equally suitable. Some types have certain properties that make them better than others. Armstrong has been working with architects, contractors, and scientists involved in the designing of atomic labs and plants to help make sure that the most appropriate floors are chosen. Problems involved are also being studied at the Armstrong Research and Development Center. The following is a synopsis of the information and suggestions now available.

I How much radiation can resilient floors take?

In considering the amounts of radiation involved, the limiting factor, really, is how much radiation humans can withstand. Naturally, their radiation tolerance should never be intentionally exceeded. But in the case of an accident, it may be. Would such excessive radiation damage a resilient floor? From all available evidence, it appears that resilient floors can withstand repeated exposures of extremely great amounts of radiation without any bad effects.

II Which is better: sheet or tile?

Means must be provided for the fastest possible removal of radioactive material accidentally spilled on the floor. And every precaution must be taken to make sure that it does not seep down to the subfloor. For, if the "hot" material were to reach the subfloor, it could penetrate into the porous concrete and make decontamination extremely difficult and expensive. Sheet floors come in large units,—6 ft. wide and usually up to 70 ft. long. And they can be installed, even in big areas, with a minimum of seams. Experienced flooring mechanics can make seams so tight that they are figuratively non-existent, at least to the eye. Actually seam-free, monolithic floors can be achieved with Armstrong Sheet Vinyl Corlon because it is thermoplastic and can be heat-sealed.

Because of their seamlessness, then, sheet floors drastically reduce the chance of radioactive materials' penetrating to the subfloor. And the lack of seams also makes sheet

floors the easiest of all to wash down completely. Another advantage is that they can be curved up walls and counter faces to facilitate cleaning and eliminate baseboard crevices.

III How do floors stand up to decontamination?

The most common method of decontamination is by the use of great amounts of water and cleansers. Vinyl floors are extremely resistant to soaps, alkalis, and cleansers and will not be damaged by such rigorous cleaning. A heavy-duty, sheet vinyl floor, such as Armstrong Tessera Corlon, will keep its good looks and extraordinary practicality for years, despite repeated decontamination processes.

IV Are special flooring adhesives required?

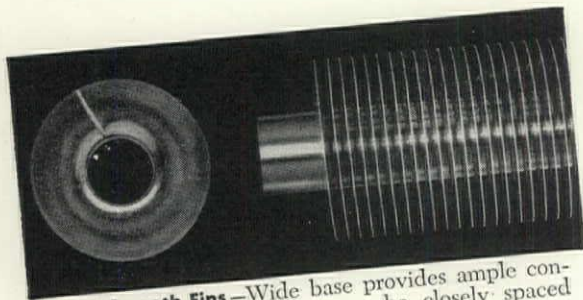
The adhesives recommended by Armstrong for regular buildings can also be used in atomic architecture. Radioactive materials have no effect on the bonding power of these adhesives. It is good practice, however, to use waterproof adhesives whenever possible, since they provide an added measure of protection against any ill effects from the water used in decontamination.

V Some other considerations

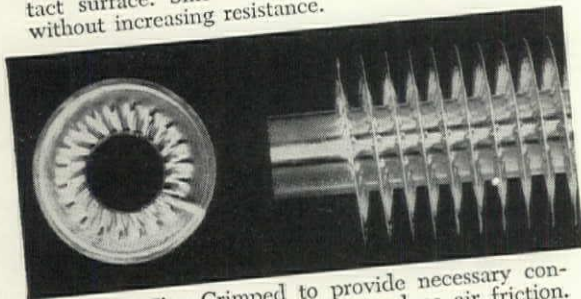
In many atomic structures, resilient floors must be installed on grade or below grade. Armstrong Tessera Corlon and certain other types of sheet vinyl Corlon are available with the exclusive, alkali-resistant Hydrocord Back, and are the only sheet floors that are suitable for on- and below-grade areas. It's also a good idea to select a material with high resistance to indentation, since the floors in labs or power plants are likely to be subjected to heavy moving and static loads. Tessera Corlon is one of a number of Armstrong floors that meets this requirement. And Tessera Corlon also has the additional advantage of possessing a slightly nubby surface that helps conceal marks made by loads exceeding the material's indentation resistance.

VI Valuable services for architects

If you have any questions on the subject of resilient floors in radioactive interiors—or on anything to do with resilient floors—call the Architectural Builder-Consultant at your Armstrong District Office. A flooring expert, he can give you invaluable information. He can also get the assistance of research and installation specialists at Armstrong for you. Or if you wish, write direct to Armstrong Cork Company, 302 Sage Street, Lancaster, Pennsylvania.



New Smooth Fins—Wide base provides ample contact surface. Smooth fins can be closely spaced without increasing resistance.



Old Type Fins—Crimped to provide necessary contact surface, widely spaced to reduce air friction.

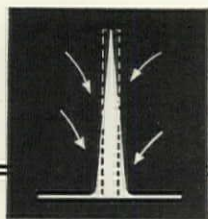
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A BLOCK OF BLUE GLASS, unearthed at the site of Abri Shahreim in Iraq, leads us to believe that the world's first glass house may have existed there 4500 years ago. What its particular design features were, we can only guess. But at least its discovery has confirmed our belief in the great antiquity of glass.

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See *Sweet's Architectural File*—Sections 3e, 7a, 13e, 16a, 16d, 18e, 21.



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ALLIED ARTS

EDITED BY WOLF VON ECKARDT

Arts and Crafts

► Don't miss the perfectly enchanting Museum of Contemporary Crafts if you should find yourself in New York with time for enjoyment. It is a few houses west of the Museum of Modern Art on 53rd Street and after my last visit there its honest contemporary crafts gave me a most welcome relief from the pretentious pasticcio of the particular brand of modern art I had just seen.

"Pasticcio" is a fancy word for plagiarism which seems to me to apply particularly well to most of the modern American painters and sculptors the Museum of Modern Art had included in a show called "New Images of Man". I don't mean that these earnest, domestic moderns—there's no point naming them, I'm generalizing—literally steal their motifs, approach or style from others. On the contrary, it is precisely their obsession with originality which is so deadly monotonous and depressing.

True originality and — what seems far more important — talent and quality is often lost in this desperate search for the novel. It's like the beastly conformity of the endless railing against conformity one suffers at most cocktail parties these days. People, it seems to me, don't have to be different in their habits and aspirations to be happy or worthwhile human beings. And art doesn't have to be "different" to be good — or even different, for that matter. Real artistic distinction, I dare say, can only be found in quality, whether it's quality in a bold experiment on canvas, an accusation against contemporary humanity, or just a still life.

And that's the trouble with these neo-moderns I'm talking about. They forget that modern art with its abstractions and exploration of the non-objective is more than a half-century old by now ("Dada" was the rave in 1916) and has long ago won its battle. But so many of our American moderns just can't take "yes" for an answer. They rebel rather than create, defy rather than produce and still feel called upon to tear down a bourgeois and class conscious world which in these days of prosperity seems as remote as Atlantis. I don't mind deliberate avantgardism at all, but I'm afraid most of these fellows are quite *après-garde* and without humility or any sense of humor, at that.

The severe designs of Mondrian, the witty fantasies of Klee and some of the dynamic "drippings" of Pollock are delightful and important art.

But a mere adaptation of the style and approach of such works, without their meaning and genius, is just pasticcio, no matter how sincerely re-experienced or skillfully executed. And such pasticcio is no more justified to be taken as museum-worthy art than some eager beginner's studious copy of a Rembrandt. As skillfully crafted decoration, however, the idiom of the great pioneers of modern art can have much delightful appeal.

This is proven on many buildings whose architects dare to use such means of decoration. It was also proven in a marvellous exhibit of enamels at the New York Museum of Contemporary Crafts. The show included a brief and fascinating survey of the history of this wonderful craft which led me to wonder if that much tender loving care for detail and refinement is still left in the world. It is! I learned that we have some really dedicated craftsmen and great enamelists in this country — despite all the sighing into martini glasses. Many of these craftsmen work with the full knowledge and appreciation of techniques handed down through the centuries. Others seek out new and adventuresome methods — experimentation which seems a lot more interesting and rewarding in enamels, mosaics or other handicraft materials than in oil paints on canvas. All the work shown strives for design and esthetic effect which reflect our own time, and the results are almost uniformly beautiful. Here are precious and often jewel-like trays, boxes and church utensils which decidedly add to the living culture of our time. Architects will be particularly interested in the large pieces of architectural decoration in mural size, some of which also have functional use as room-dividers or interior screens. The work of Jean Ames of Claremont, California; Earl B. Pardon of Saratoga Springs, New York; and Peter Ostuni of New York City caught my particular fancy.

I've seen other equally inspiring shows at the Museum of Contemporary Crafts, and believe that this relatively young institution, along with the American Craftsman's Council which founded it in 1956, deserves the kudos and support of all architects.

In contrast, New York's new Design Center for Interiors, way east on 53rd Street, which claims to prove that America's interior designs "can take their place proudly among leading creative efforts," manages the very opposite. It's an indiscriminate, badly displayed agglomeration mostly of horrors which seems intent on catering to the worst popular taste.

W.V.E.