

Journal of The American Institute of
ARCHITECTS



GIACOMO BAROZZIO (VIGNOLA)

January, 1952

Collaboration: Architect and Sculptor

People, C Factor and Architecture

German Architecture Looks Up

Try This for Sighs

Only Half an Architecture—I

Old Cities and New Frontiers

An American Architect in the Philippines

35c

PUBLISHED MONTHLY AT THE OCTAGON, WASHINGTON, D. C.

JOURNAL OF THE AMERICAN INSTITUTE OF ARCHITECTS

WITH THE AIM OF AMPLIFYING
AS THROUGH A MICROPHONE
THE VOICE OF THE PROFESSION

JANUARY, 1952

VOL. XVII, No. 1



CONTENTS

People, C Factor and Architecture <i>By Samuel G. Wiener, F.A.I.A.</i>	3	An American Architect in the Philippines	36
They Say: <i>Osbert Lancaster, Svend Riemer, Lewis Mumford, George Nelson</i>	9	Architects Read and Write: Commemorate Architects	40
German Architecture Looks Up	10	<i>By Elliott L. Chisling</i>	
<i>By Bernard Wagner</i>		Stock Plans	41
Try This for Sighs	17	<i>By C. Godfrey Poggi</i>	
<i>By Edwin Bateman Morris</i>		Extruded Housing	42
Collaboration: Architect and Sculptor	19	<i>By C. E. Silling</i>	
<i>By J. Byers Hays, F.A.I.A.</i>		The Architect's Reward	43
Only Half an Architecture—I	27	<i>By John J. Klaber</i>	
<i>By Hart Massey</i>		Calendar	43
Scholarships and Fellowships	32	<i>Chicago Tribune</i> Competition for Better Rooms	44
Old Cities and New Frontiers	33	<i>By George Howe, F.A.I.A.</i>	
<i>By George Howe, F.A.I.A.</i>		The Editor's Asides	45

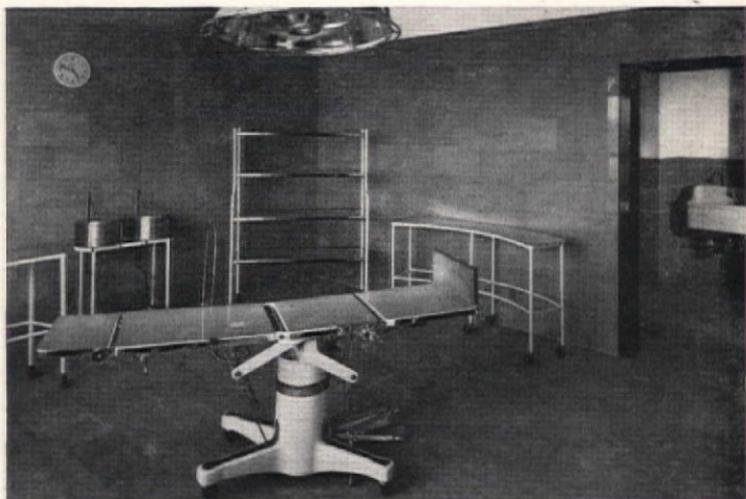
ILLUSTRATIONS

Cover Portrait: Giacomo Barozzio (called Vignola), 1507-1573	
Bird Building, Cleveland Zoological Park, Cleveland, O. <i>Architects: Conrad, Hays, Simpson & Ruth</i> <i>Sculptor: Viktor Schreckengost</i>	
Perspective of entrance front	22
Chimney tower	23
Rear view and ground-floor plan	24
Viktor Schreckengost at work on Archaeopteryx	25
Jury of the Hanover Competition	26

The *Journal of The American Institute of Architects*, official organ of The Institute, is published monthly at The Octagon, 1741 New York Avenue, N. W., Washington 6, D. C. Editor: Henry H. Saylor, F.A.I.A. Subscriptions in the Americas, U. S. possessions and Philippines, \$3 a year in advance; elsewhere, \$4 a year. Single copies 35c. Copyright, 1952, by The American Institute of Architects. Entered as second-class matter February 9, 1929, at the Post Office at Washington, D. C., under the Act of March 3, 1879.

marble

the Doctor's first assistant!



In every part of the Hospital, Cleanliness must be above suspicion—a Cleanliness in operating rooms, laboratories, wards, corridors, toilets, kitchens and reception lobbies, that extends beyond mere appearance and approaches the standards of sterilization established for bandages and surgical instruments.

Marble meets fully all such demands. It is the easiest and cheapest of building materials to maintain or keep clean.

*Write Managing Director
for latest literature
on foreign and domestic
marbles. Dept. 49-H*



**Marble Institute
of America, inc.**

108 FORSTER AVENUE, MOUNT VERNON, N. Y.

YOU and YOUR CLIENTS
of these two outstanding

ROBBINS

LIFETIME

Vinyl

FLOOR TILE

ROBBINS

Rubber

TERRA-TILE

LIFETIME Vinyl FLOOR TILE offers you, on many counts, the last word in resilient flooring. Colors (choose from 14) are of unrivaled, lasting brilliance. Grease and oil, strong cleansers, acids and alkalis, cause no damage. It needs no waxing.

TERRA-TILE—first rubber flooring to reproduce terrazzo's unique appearance—beckons you to a whole new field of floor design. You can work in 14 rich color combinations.

BOTH bring you famous Robbins quality—including precision-squaring, by an exclusive process, to .003". You get better-looking installations with watertight, practically invisible joints.

WANT the

**EXCLUSIVE
FEATURES**

resilient floorings!



YOU MUST SEE and FEEL these two superb tiles to appreciate fully how they can answer *your* search for the utmost in floor beauty and performance. *Tell us to send you samples and complete data today!*

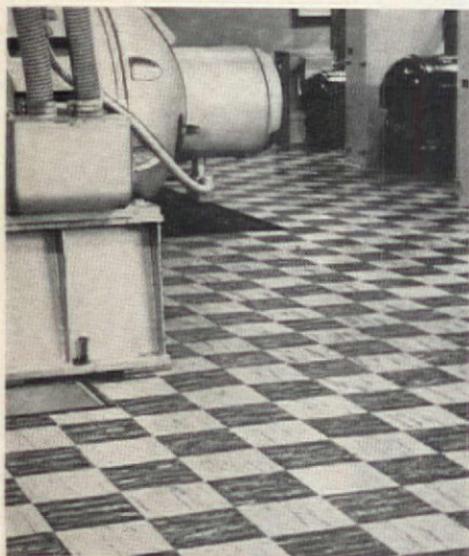


ROBBINS FLOOR PRODUCTS, INC.

TUSCUMBIA, ALA. • See Our Catalog in Sweet's



The practical and time-saving solution to any flooring problem is a call to the local Kentile Flooring Contractor



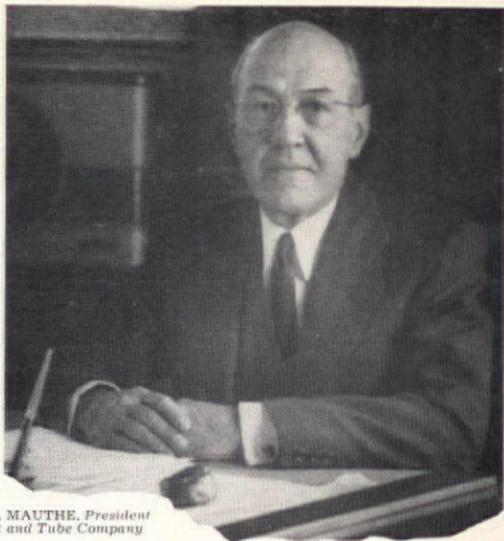
THE OBVIOUS advantages of a certain kind of flooring in a certain installation are often outweighed by disadvantages that can be foreseen only by the expert. To keep posted on the great number of products and materials available today would be so time-consuming that busy specifiers everywhere are learning to count on specialists for accurate and up-to-date information. Such a man is the Kentile Flooring Contractor. Call on him as often as you wish... you'll find his extensive background makes him a valuable addition to your "staff."

KENTILE • SPECIAL (Greaseproof) KENTILE • KENCORK • KENTILE RUBBER TILE



KENTILE INC.
BROOKLYN 15 NEW YORK

Why is the scrap situation so critical?



An interview with J. L. MAUTHE, President
The Youngstown Sheet and Tube Company

Why are you concerned about iron and steel scrap, Mr. Mauthe?

Our inventories are critically low and the present scrap flow is not sufficient to maintain capacity steel plant operations. Furthermore, if the flow of scrap is not increased, a curtailment of steel production is inevitable.

The industry is using all the pig iron and all the home scrap that is available. The balance of our metallic requirements must be made up through procurement of purchased scrap. Every ton of scrap that we do not get represents a ton of steel that we cannot make.

How much scrap does the industry need?

In 1950, 96,700,000 tons of steel ingots and castings were produced, requiring over 61,000,000 tons of iron and steel scrap.

In 1951, over 65,000,000 tons of scrap will be required, and even more will be needed in 1952.

Where does scrap come from?

About 58% of the total scrap required is produced by the ingot and casting makers, and is known as "home" scrap; the balance of 42% is "purchased" scrap and is procured from outside sources.

Purchased scrap generally falls into two categories: Scrap from current fabrication and that which is the result of obsolescence.

There are three important sources from which we get obsolete scrap, much of which is dormant:-

- 1 - Obsolete machinery and equipment in every industrial plant, at the oil fields and on the farms.
- 2 - Battlefield scrap, obsolete ships and war material, surplus machinery and equipment; which government can make available.
- 3 - Countless old automobiles and trucks, which are rusting away in automobile wrecking yards in every section of the country.

What can be done to increase tonnage of purchased scrap?

This scrap must be made available immediately! All industry and government must awaken to the critical nature of the situation. They must realize that if we do not get the scrap, they will not get the steel!

**YOU CAN HELP - YOU MUST HELP!
NO SCRAP - NO STEEL**



The Youngstown Sheet and Tube Company - Youngstown, Ohio

STANDARDIZED SERVICE IN STEEL CONSTRUCTION

T
E
E
L

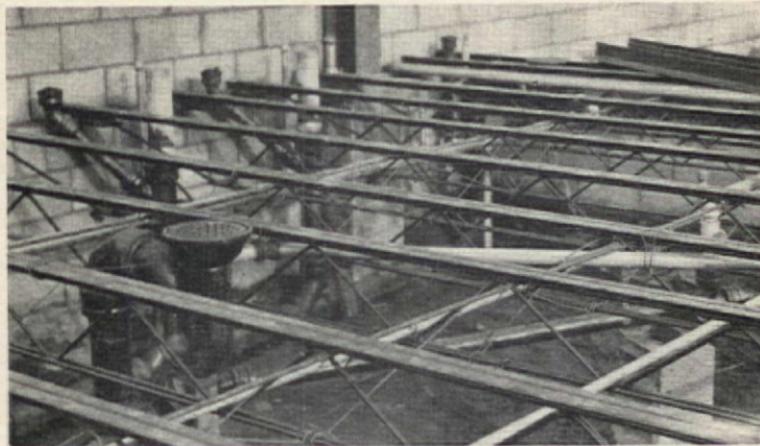
J
O
I
S
T
S

L
O
N
G
S
P
A
N
S

D
E
C
K
I
N
G

A
N
D

T
R
U
S
S
E



A
I
L
A
B
L
E

S
T
E
E
L

F
R
A
M
I
N
G

F
O
R

M
U
L
T
I
P
L
E

H
O
U
S
I
N
G

YOU CAN DESIGN AND SPECIFY ECONOMY INTO A BUILDING

An industrial washroom floor — a network of pipes when completed..

Imagine the hours and hours of labor.

No, don't. Just specify Macomber Nailable Steel Joists — a freeway for pipe installation — in any direction.

Then secure nailing for top lath. Some products seem to have everything. Call your Macomber Representative.

MACOMBER *Incorporated.* CANTON, OHIO
A NAME RESPECTED IN ENGINEERED CONSTRUCTION

STANDARDIZED LOAD BEARING UNITS SPEED BUILDING

"College-Requisite" Elevating



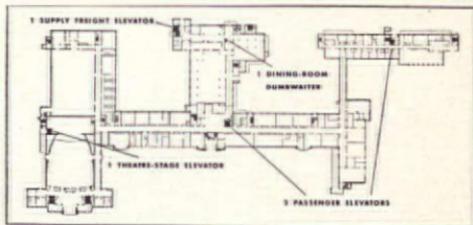
2 PASSENGER ELEVATORS



1 THEATRE-STAGE ELEVATOR

ALVERNO COLLEGE
Milwaukee, Wisconsin

Maguolo and Quick
St. Louis
Architect-Engineer



1 DINING-ROOM DUMBWAITER

James McHugh Construction Co.
Chicago, Ill.
General Contractor



1 SUPPLY FREIGHT ELEVATOR

Better elevating is the business of



The Name

HOPE'S

Guarantees

Lok'd Bar

FACTORY SASH

WITH SOLID WELDED CASEMENTS AND FRAMES



Armbrust Chain Co., Providence, R. I.

Frank B. Perry, Architect

The stout construction of Hope's Lok'd Bar Sash installed in this building reimburses the owner many times their cost in long-run saving of heat losses and upkeep, and in trouble-free operation and provides the most trustworthy resistance to wear and tear and corrosion for the life of the building.

ASK FOR CATALOG NO. 129A

World's Finest Factory Sash

HOPE'S WINDOWS, INC., JAMESTOWN, N. Y.



Through widely different approaches Messrs. Wiener and Massey (p 27) reach the conclusion that commodity includes more than stark functionalism.

People, C Factor and Architecture

By *Samuel G. Wiener, F.A.I.A.*

A talk given before the Gulf States Regional Meeting, A.I.A. in Memphis, Tenn., October 26, 1951.

I WAS TOLD that I was to talk on the "Effect of Modern Architecture on the Community." I objected to the title and was informed that it was not necessary to hold to the title, but that I should recount experiences of my associates and myself in "pioneering modern architecture in the South." I did give some consideration to the subject, that is, I tried to imagine what *could* be the effect of architecture on the people of a community. I dismissed the inquiry because I could not come to any conclusions, and decided it was a better subject for a public-opinion survey. We architects do have some general impression, or just a hope, that living in a well designed building, or being exposed to good architecture has a beneficial effect, but I don't know how to obtain any supporting evidence. I have long been convinced that public opinion

is an unreliable standard in judging the merits of a building, and that public acceptance should never be the consideration of the designer. That is why progress and vitality in architecture have been produced by architects of strong convictions who are able to convince their clients of the rightness of their own views, and not by those who feel that their community is not ready for their advanced ideas.

Rather than talking of the effect of modern architecture on people, I believe it would be more fitting to discuss the effect of *people* on architecture. I will try to do that only with the purpose of presenting what appears to me as the dominating influence, an influence that should be evident although it is so generally disregarded.

We have often heard that the form of our buildings should result from the forces or reasons that

cause them to be built. I believe that this is the most elementary statement regarding architecture, and possibly the most important.

If it is the first law of architecture it is also the most violated. It follows then that in his work the architect should constantly keep in mind these forces, and every decision should be subjected to the test of compliance.

The basic or primary force is man's continuous desire to improve his environment. It is the human desire for more convenience, comfort and pleasant surroundings. It may be described in a general way by the word "commodity," which is a somewhat archaic word combining what is known today as utility, function and livability. I can think of no kind of building today where it is not of primary importance. In fact, the desire for it is the *reason* for building. We may ignore it or disguise it but we cannot give our fullest service unless we subject our reasoning and our planning to its demands. This should be done without compromise to obtain appearance or effect.

Architecture is customarily included as one of the fine arts. Unfortunately this has led to thinking of it as merely a graphic or visual art in the sense of sculpture,

painting and engraving. To judge a painting or a piece of sculpture, we need only to look at it. Its entire value is visual. This is not a sufficient process in appraising the success of anything so complex and involved as a building.

Before considering the visual qualities of a building, we should first analyze and appraise it in terms of commodity. It is the obligation of the architect to obtain the utmost in commodity within the range of the economy afforded, or, in more direct language, the most for the least. It embodies more than is usually understood by function or utility, for it places *first* consideration on the *well-being* of the occupants. This qualification, being of primary importance, should have a name, or better still in textbook fashion, or in the manner of the engineers, should be reduced to a system of evaluation or measurement. I propose a first step in this direction.

Let us call this quality the C factor. The C factor can be described as the total amount of comfort, convenience and pleasant surroundings that can be obtained for a unit of cost; or mathematically, C factor equals commodity divided by dollars.

Let us see what is involved in the

term commodity as a quality applied to buildings today. It grows out of human needs and desires, and at no previous time has man demanded so much comfort and so many conveniences. Even during the years of our practice we have seen these demands increasing at a tremendous rate. Compare those of the 1930's with those of the '40's and the '50's, and try to envision what will be demanded in the '60's and '70's. These constitute a large part of what is called the high standard of living today.

If demands are greater, so are the technical developments that are available, and so are the possibilities for more freedom and originality in planning. The advances in construction, heating, air conditioning, acoustics, lighting, communication and transportation offer ever increasing possibilities for supplying these wants, and at the same time demand more of the creative ability of the designer.

It may seem that the elements that contribute convenience and comfort are so well understood that it is a simple matter to supply them in the desired abundance, and that very little skill and no imagination are needed for the fullest accomplishment. Of course, this is not so. Those architects who

are dedicating their work toward obtaining this high C factor are producing new and unfamiliar forms from plans to details. It is out of the efforts of such men that we first saw obsolete and sentimental elements abandoned and a direction given to architecture that made it independent of the past.

I do not believe that I am overstating the case, when I say that the progress of architecture has been proportional to the extent of producing a high C factor, and conversely when this factor becomes secondary to style or exterior effect, architecture loses its vitality and stagnates. We have seen many examples of this.

A case study for a single example is the so-called Colonial or Georgian house that we all know so well. At the time my practice started it was generally accepted as the best the architect had to offer. The house-charming magazines and the architectural publications were filled with the best examples, executed with scholarly refinement down to the smallest detail.

My memory goes back to early efforts trying to design a house that would conform to the Colonial or classical formulas and that would also give the owner the living qualities that he needed. Orienta-

tion was complicated by the necessity of having windows on all sides, and of having a main entrance on the front center with no relation to the driveway or recognition of the use of automobiles. Single windows had to be separated to allow space for the imitation blinds attached in an open and fixed position on the exterior walls, and these windows had to be tall rectangles of two sash divided into small panes. Many other features were largely predetermined by the style. The result was either a house that did not conform with the accepted impression of Colonial architecture or that did not have a satisfactory C factor. A compromise failed on both counts.

It was soon apparent that it was necessary to decide whether to continue to plan and design in the accepted styles or to strive for results that we considered essential. That was more than twenty years ago and people wanted then, and still want, what is acceptable and familiar. It was seldom easy and usually hopeless to try to convince the client that the customary was not the best. We found it necessary to make two plans: one traditional and one that had the qualities that we thought were needed.

Even in the case of a building as unromantic as a municipal incinerator, we had to make two sets of working drawings and take alternate bids to prove our point. I am glad that this is no longer necessary, but I don't believe there has been any universal acceptance or understanding of what may be called a new or creative architecture.

A drive through a new suburban section of any city is enlightening. There is sufficient evidence to see that the design of most houses is dictated by the desire for an attractive or picturesque street view. Of course, this applies to many houses designed in the modern vernacular, or the so-called ranch type, as well as those that suggest historic styles.

I believe that the successful house can only be developed from an appreciation of the qualities that contribute toward better and more pleasant living, rather than by a desire to produce an attractive or dramatic exterior. Unfortunately our architectural books, magazines, and exhibitions give the opposite impression in featuring photographs of exteriors and treating plans, sections, and interiors as of secondary importance. It is as though a book on anatomy were concerned chiefly

with dermatology and showed little interest in what went on inside the skin.

We should start with a thorough study of the climatic conditions of the region and the particular site, and here in the South that is principally for the purpose of obtaining maximum comfort during our long summers. In this region our buildings should express a desire for shade rather than for sun. This should begin with the selection of the site. The summer heat load should be reduced by designed orientation, by the correct location of trees, the use of sun-shades and extended roofs, and even by lattices and vines that serve to shield the walls from the direct sun. Windows should be located and shaded to avoid the sun's rays. This will usually result in a west wall with no windows.

This primary consideration of climate should produce new devices and forms which will become the elements of our southern architecture. We need never return to cornices, pediments, dormers, or to blinds that do not close, columns that do not support, or chimneys that have no flues.

It is now accepted that mechanical means are necessary to obtain a reliable degree of comfort dur-

ing our warm weather. Many years ago we saw the universal use of the electric breeze fan and later the attic or exhaust fan, and these mechanical aids are now to be found in the most modest homes. The speculative builder in the South would not attempt to sell a house without an attic fan. He would rather economize on the foundations.

But in warm weather there is a limit to the cooling effect of breeze alone, and today we are seeing the increased demand for air conditioning in the home as well as other buildings. It is an expensive luxury, coming at a time of high costs, but architects are already hearing their clients say they would rather give up something else. In some localities most of the architect-designed homes are partially or totally conditioned for summer comfort.

The effect of air conditioning on the appearance of theaters, stores, restaurants and factories has already been observed, but we have only begun to see what it will do to and for our houses.

The inclusion of air conditioning should have a dominant effect on the planning, and consequently should materially change the form and appearance of the house. The

architect can take full advantage of its possibilities. As the air-conditioned house is not dependent on prevailing winds, orientation takes on a different meaning. Windows can be reduced or located only for light, view, and furniture arrangement. They can even be omitted entirely on the street side, giving a degree of privacy not previously obtained, or they can be replaced with walls of fixed glass at desired locations. High ceilings, large rooms and screened porches may be desirable but they are no longer necessary as an aid to summer comfort, and herein are possibilities for economy.

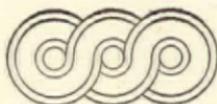
Thus from a demand for pleasant interior weather will come new forms and new views. The air-conditioned southern home should become more distinctive than any of the existing regional types. I have dwelt on this point because it is a convincing example of form generated from human desires.

I hope that I have not given the impression that the architect's responsibility ends with obtaining the

maximum C factor. Commodity is derived not from comfort and convenience alone but from the use of space in the most pleasing way. In other words, delight should be an ingredient of commodity rather than a separate quality or a contradiction.

It is the desire to produce delight even at the expense of commodity that has hindered the progress of our architecture. This applies to picturesque or dramatic houses in the modern idiom, as well as to those in the archaic styles.

Other qualities can be reduced to measurement, or at least to analysis. There has never been a dependable scale or guide to apply to the art of building. It is this that makes architecture something far more than a physical science. It leads us beyond functionalism into the vast uncharted area involving psychology, emotion and personal preference. It is there that we become conscious of optics, spatial relations, dynamics, proportion, color and texture; or, in short, with the things we feel through what we see.



They Say:

Osbert Lancaster

(In a BBC broadcast, as quoted by Anthony M. Chitty, President of the Architectural Association, London)

One of the treasured illusions of the modern movement that must go overboard is the frenzied rejection of the past, that ridiculous attitude of having absolutely no connection with the period next door, which has had such disastrous effects on architectural education.

Svend Riemer

(In "Architecture for Family Living," *Social Policy & Social Research in Housing*)

In spite of technical research difficulties inherent in livability studies, both the private and the public builder are sorely in need of them. Subsidized housing consumers must take what they get, and what they get is so much better than what they could otherwise afford that they do not establish a very sensitive market. Later complaints to management are not a reliable guide for improved design and construction, even if these complaints were systematically recorded, summarized, and made available for new building activities, which they are not. It is impossible to improve residential hous-

ing without either a really free market or research in problems of livability.

Lewis Mumford

(In "Function and Expression in Architecture," *Architectural Record*, November 1951)

To apply to all the diverse activities and needs of a community the standards that are appropriate to a factory is clearly a case of irrelevant symbolism. Those qualities that differentiate architecture from building cannot be derived from the mechanical requirements of the structure: they spring from the character and purpose of the user, as these are interpreted and remolded by the architect.

George Nelson

(In "The Enlargement of Vision," *Interiors*, November, 1951)

Modern relationships are an expanding network that links even enemies like Siamese twins. Beating the other man to the draw was once a workable technique for survival, but for Siamese twins it is not. We defeated Japan and Germany and since have been unable to leave them to their defeat or to detach ourselves from them. Nobody can get detached any more.

German Architecture Looks Up

E.C.A. HOUSING DEVELOPMENT PROGRAM HELPS GERMAN ARCHITECTS AND CONTRACTORS TO INTRODUCE MODERN METHODS IN HOUSING

By Bernard Wagner

IN 1929, when I. P. Oud, the famous Dutch architect, designed his dwellings for the Weissenhof housing project in Stuttgart, little did he know what would happen to them about two decades later. The Weissenhof housing project was at one time the shining example of the work of the *avant garde* of European architects, including Le Corbusier and Mies van der Rohe. Today, Oud's buildings, partially damaged during the war, are rebuilt tile-roof-and-dormer-window fashion to the point that it is impossible to recognize the original design with any amount of imagination or good will.

The extremely fruitful period of the 1920's in German architecture has not left any mark on the work done since then. Fourteen years of Nazi regime have systematically strangled any new ideas in architecture, have thoroughly eradicated the spirit of the 1920's and have seen to it that German architectural schools produced nothing but obedient servants of the national-

socialist conception of art and architecture.

Today, a small number of German architects are trying to pick up where Poelzig, Mies van der Rohe, Gropius and Martin Wagner left off. They are doing some excellent work but the odds are against them. Of all the obstacles restricting the free development of architecture, housing and city planning in Germany the following four may be the most significant:

1. There is *no city planning legislation* enabling the German people to rebuild their cities according to present and future needs. Every city has vast areas that are either completely leveled or consist of ruins beyond repair. City officials, architects, engineers and even bankers look at these ruins helplessly. Bombing has destroyed buildings but could not destroy property lines and inflated land values.

2. There are *no new building techniques* which promise a drastic reduction of building cost, and there are no building codes which

would permit the introduction of such techniques. German architects and engineers are still inventive and productive—let there be no doubt about that—but their talent cannot be exploited if not given a chance through proper legislation by the city and state governments. The federal government and the housing ministry recognize this to some extent, but are in a difficult position because their powers to speed up pedestrian thinking on the part of local officials are limited.

3. There is *no central organization* or group of people either capable or in a position to promote city planning and housing in Germany. Professional organizations quarrel among each other; labor and consumer groups are rather indifferent, and contractors and builders are too busy with small jobs and red tape to bother about the real big jobs, especially if the latter have not even reached the stage of discussion.

4. There is *little building money* in Germany. The currency reform has wiped out a substantial part of the people's savings. Money has become a scarcity and banks are reluctant to make long-term loans. Building money can be obtained only at extremely high interest rates and is therefore going mostly

into industrial and commercial construction.

The E.C.A. Housing Development Projects Program gave free-German ingenuity a unique chance to clear some of these obstacles and to set an example for any future housing program in Germany. This is the way it came about:

So far, E.C.A. has spent a total of about 400-million German marks (or about \$100 million) for housing in Germany. James W. Butler, chief of the housing section of E.C.A.—HICOG in Frankfurt—was deeply concerned about the fact that some of this money, made available from counterpart funds, was not spent as effectively as it could be spent.

The best way to correct this was to make sure that simple but adequate construction, paired with good design and efficient organization, would take the place of antiquated, costly building methods, wasteful design and haphazard organization. To this end he initiated a nationwide competition among architect-builder teams to submit the best proposals in the form of firm bids for modern low-cost housing in various German cities. The winning team for each city got the contract to build their project; runners-up received cash

prizes. The program for the competition was issued jointly by E.C.A. and the German housing ministry, and \$10-million worth of Marshall Plan counterpart funds was made available for the whole operation. Housing is still desperately needed in Germany, and architects and contractors were given only 10 weeks to submit their entries.

The cities and the sites within these cities were not selected on the basis of housing need, which is about equally tremendous everywhere, but on the basis of suitability for demonstration purposes. A total of 40 cities in all geographical locations in West Germany were invited to submit proposals for suitable building sites for projects of about 200 to 300 dwelling units each. Those cities which offered superior sites in respect to cost, location, nearness of community facilities, relationship to working places, etc., were given preference over others. E.C.A., in conjunction with the German housing ministry, selected 15 cities for the program: Frankfurt, Hanover, München, Nürnberg, Braunschweig, Mannheim, Stuttgart, Bremen, Krefeld, Aachen, Lübeck, Freiburg, Reutlingen, Mainz, Kaufbeuren.

Whenever possible, conditions

were promoted where the building of 200 or 300 dwelling units would be only the beginning of a larger housing development or neighborhood, so that progressive design of the initial project will set the pattern for any future development. Most sites are not in the city centers but still within city limits. They are well located in relation to working places, shopping centers and recreation areas.

It is not surprising that only one city, namely the city of Bremen, submitted a construction site in the bombed-out city center. Bremen used to be the town of the two-story row house, and land values were relatively low. Furthermore, real estate owners were willing to pool their properties for common development. A good solution in this case will not only determine the residential rehabilitation picture for the rest of Bremen, but it may also serve as an example for other cities to follow. Of course, each city had its particular problems, and what may be good for Bremen may not be good for another city. However, Bremen is in a position to show that action by progressive citizens can make it possible to turn a seemingly Utopian plan on some architect's drafting-board into reality.

Since construction of all projects was to be financed 100% out of Marshall Plan funds, the cities selected in fact received a present of 200 to 300 dwelling units. In turn, they had to agree to the following conditions:

1. Donate the site and carry the cost of site improvements up to the boundaries of the site.

2. Permit architects to deviate from local building codes and zoning ordinances.

3. Accept the decisions of the jury.

4. Restrict the list of tenants to refugees, bombed-out families and a small percentage of displaced persons.

Each project will be run by a non-profit development organization acting as a temporary owner, since E.C.A. as well as the German housing ministry look at the goal of eventual home ownership on the part of the occupants.

The jury for the competition was composed of 9 German members, predominantly private architects and engineers, with Prof. Bartning—head of the German Institute of Architects—as chairman, and 5 American members. The U. S. team was organized under the technical assistance program of

E.C.A. in Washington and included the following members: Walter F. Bogner as chairman; Mack Arnold, construction expert; Donald Monson, city planner; William Wittausch, economist of F.H.A.; and the author. (See p. 26)

For six weeks this jury had a rather difficult time, traveling from city to city, enduring fifteen receptions, judging close to a thousand entries, working with sweaters and overcoats in unheated rooms, and fighting colds. In spite of this, or maybe because of it, spirits were high and all fourteen members worked together as one team in perfect harmony. Chairmanships were rotated from city to city and there was never a split between the German and the American groups. The whole trip with all meetings and discussions was a splendid example of German-American cooperation. Germans and Americans who met for the first time as complete strangers, parted eight weeks later as close friends. To our mutual satisfaction, there were a number of architects among the winners who had been to the United States under the exchange program of the Department of State.

The jury completed its task in Bonn on October 20. At a final

meeting it expressed thanks and congratulations to the winning architect-contractor teams, received thanks and congratulations from representatives of E.C.A. and the German housing ministry, was photographed, interviewed and news-reeled, and then scattered in the four directions of the compass for a well-deserved rest.

PRELIMINARY IMPRESSIONS

While a definite evaluation of all the material submitted would be entirely premature, preliminary impressions may be in order:

There were a great number of outstanding projects at reasonable cost. In every city we awarded submissions which were not only of better design but also lower in cost by about 15% than the traditional housing project in the same locality. The prime aim of the housing development projects program—to achieve better housing at lower cost—has therefore been achieved thus far. The complexity of the over-all problem to be solved by each team of competitors made it necessary to introduce a breakdown into a number of categories or sub-problems for evaluation. Preliminary impressions as to approaches and solutions to these problems may run as follows:

A. *Site Planning*

The sites in the cities of Nürnberg, Bremen and Lübeck lent themselves to the creation of whole townships. While the dwelling units to be designed for the competition had to fit into a limited area, the architects were at liberty to make proposals for a much larger area. The sites of Hanover, Munich, Braunschweig, Aachen and Reutlingen offered similar opportunities on a smaller scale. Few architects took advantage of these opportunities, and a number of solutions demonstrated the severe dearth of city-planning talent in Germany. However, there were a number of outstanding designs for the project-sites proper. Here the architects succeeded in creating an interesting pattern of open and enclosed spaces and in relating proposed building groups to existing conditions of the surrounding area.

B. *Architectural Planning*

A great variety of building types were represented, many with excellent unit plans. Multi-story walk-up apartments and two-story row houses were the dwelling types used most often. Even the one-story row house received some attention. A Munich architect developed an extremely interesting idea from the

old atrium-type house, which consists of a series of one-story dwellings with courts in between. Dwellings and courts are offset in such a manner as to give the tenant or owner complete privacy. The elevations in general were simple and straightforward, expressing the various functions of the floor plans.

C. Construction

New construction methods or systems did not appear as often as expected. The average proposal showed a logical and somewhat improved use of existing, traditional construction methods. Hollow concrete blocks with pumice aggregate was the building material used most often. Walls were usually 10" thick, with plaster inside and stucco outside. Light-weight concrete slabs such as "Ytong" and "Porenbeton" were also used successfully. Floor constructions were predominantly reinforced concrete slabs or hollow tile and rib systems. A number of contractors used precast concrete beams. Since there is a shortage of wood and steel in Germany, wood or steel joists were used in very few cases.

The question of pitched roof *versus* flat roof usually hinged around the material used for roof

covering. The Germans do not seem to be in a position to construct a good built-up roof with a 20-year guarantee by the manufacturer. The selection committee did not make an arbitrary decision on this but recommended that research experiences made in the United States and in pre-war Germany be utilized for the purpose of constructing a roof covering equal to our conception of a standard 3- to 5-ply built-up roof.

German technicians voiced considerable skepticism as to the use of corrugated Eternit or Fulgurit (asbestos-cement) for a roof covering. They questioned the treatment of joints as well as the quality and durability of the material as produced in Germany after the war. The selection committee answered this controversy with the request that any architect-contractor team receiving first award should get together with the materials manufacturer to work out a solution for roof covering which would be acceptable to the German housing ministry and E.C.A.

Proposals employing prefabrication or semi-prefabrication methods did not appear as numerous as expected. Most of them were technically immature. Only one proposal was free from major techni-

cal deficiencies but was much too expensive to compete with a number of good designs employing standard construction methods.

Somewhat more progress was achieved in the field of mechanical installations. While a completely prefabricated utility core, including kitchen and bathroom fixtures was not in evidence, a great many designers had worked out standard plumbing trees and plumbing walls. Kitchen and bathroom layouts were back to back in most cases.

The shortage of fuel in Germany makes central heating too expensive for low-cost housing. The individual stove is the predominant method of heating, and affords the utmost of control and flexibility to the tenant and his pocketbook. It seemed incredible to hear that in some localities people buy their own stove and take it along with the rest of their cumbersome furniture when they move to another dwelling unit. As a rule, central heating pays off only in elevator-apartment structures with efficiency-type dwelling units.

D. *Economy*

While definite savings have been achieved through more functional design, simplified construction and competitive bidding, there are pos-

sibilities to achieve further savings which have not been sufficiently exploited:

1. Intelligent site planning, taking advantage of the natural characteristics of the site, and aiming at a minimum of earth movement, roads and utility lines.

2. Integration of architectural, structural and mechanical design for the purpose of repeating a few standard components as often as possible.

3. Streamlined financing which would make construction funds available to the project development organization in a more direct manner.

CONCLUSIONS

The final phase of the E.C.A. housing development projects program has not been completed as yet. Until now, better housing at lower cost is still on paper only. Proof will have to await completion of construction. Nevertheless, there are a number of major achievements, plainly visible and demanding our attention at this time:

1. The idea of combining architect and contractor as a working team was not only unique in Germany—if not all of Europe—but also proved to be the best way to arrive at bids which promise better design at lower cost.

2. The competition uncovered and gave recognition to a great many young architects in Germany, who produced a wealth of new and valuable ideas. No architect could afford to be fancy or extravagant because his plans had to pass the cautious judgment of his partner, the contractor.

3. The operation as a whole has stimulated professional groups and city and land officials as well. A

wedge has been driven into wasteful traditionalism and bureaucratic thinking. It is up to the Germans to capitalize on this and to see to it that the lead achieved so far will not be lost but will grow until architecture in Germany reaches or surpasses the high standard and the high regard it used to enjoy in the 1920's—and until even I. P. Oud will forgive the people of Stuttgart.

Try This for Sighs

By Edwin Bateman Morris

HOUSES NOWADAYS cannot be large, because when one has money enough for a large house he gives the money to the Government. But the houses can be, and are, complete. In planning a present-day house, one first lays out a rectangle of proper budget size, and divides this roughly into three, setting aside one-third for garage, tool-shed, lawnmower and bicycle terminal. This division does to an extent cut down living space; but it does induce plan ingenuity.

The point is that in assigning so large a space to the comfort of automobile, one must not sigh nor in any sense regard it as a body blow. It has been shown that the

human being can live happily in any reduced or constricted space, if he has adjectives. When living-room must perform functions also of dining-room, play space, office and reception room, the adjective "complete" serves as a solace. Where kitchen boasts of an area neatly and accurately arranged just to hold the kitchen equipment, without special thought concerning the person who may enter to operate in it, the term "modern" brightens up the situation.

Closets are reduced in size. But scarcity is cured by dividing the space into numerous sub-closets, each awarded terminology. A closet into which can be placed a sweater

and a plaid skirt is called an Off-season Clothes Closet. The Closet for Dad holds easily broom, ironing-board and floor mop. The General Utility and Large Toy Closet will store gloves, belts, caps, flyswatter and the like. Reduced area becomes adaptable by proper frame of mind and modern, forward outlook. Some of these closets have fluted-glass doors, which have an important—though perhaps forgotten—design purpose. They do represent advanced thinking.

Another thoughtful and adroit piece of planning is the enlargement of inner constricted space by the philosophy of Bringing Outdoors Inside . . . A broad and effective theorem! Under this idea the living-room may have as one side a sliding glass panel. The cost of such a sliding panel, arrangements to provide unused adjoining wall space and so on, would pay for, it is said, a commodious area of additional living space. But that is somewhat beside the point.

The panel slides back and living-room moves out to have sunny clouds for ceiling, walls at distant (20') stake fence, at lattice concealing garbage and trash receptacles, and at the hedge through which at inappropriate time enter neighbor Angora or Pekinese.

When this panel is open the bond with out-of-doors is further strengthened by companionable house flies which float gently in, and by certain of the smaller rodents which enter shyly to find rest in Closet for Dad or in Built-in Buffet.

A skillfully thought-out arrangement may be effected in a sort of remnant of space that often occurs adjoining living-room but too small to be of use to it, adjoining kitchen but too remote to be of advantage to it. In this, with ingenuity, can be placed a couch. By closing an expensive accordion-type partition (which, as soon as closed, a child opens to look for its water pistol) and by shutting door to kitchen (which someone immediately opens to push in neighbor Pekinese at the moment interfering with model airplane building) a refreshing energy-building nap can be had, making life again beautiful.

Thus houses become smaller and smaller. But human ingenuity makes them better and better, progressing toward a millenium of Completeness, in which area will have been reduced to a relative zero and completeness gloriously increased to a state of Infinite Convenience.

Collaboration: Architect and Sculptor

THE BIRD BUILDING IN CLEVELAND ZOOLOGICAL PARK

By J. Byers Hays, F.A.I.A.

IT IS FEARED that the impetus of the sciences as applied to building has been stressed to the exclusion of other factors essential to producing acceptable architecture. And in the field of city planning, which provides the ultimate setting for our buildings, this is equally lacking.

Obviously, the ideal bathroom or the kitchen beautiful does not include all the amenities of living. And neither does a rigid mathematical formula—which devises complex thoroughfare solutions and regulates space to insure light and air—guarantee an environment for the future setting of living which possesses a full respect for the human being.

This is the problem that faces us; to produce buildings and cities over and above the utilitarian solutions wherein we have admittedly advanced far in the field of structural, air-conditioning, electrical,

acoustical and many other branches of engineering. The art of arranging space, enclosed or open, in an orderly and beautiful way must be woven appropriately into the fabric of our physical environment. It should be human in scale and reflective of its very reason for being; form and proportion, atmosphere, color and decoration. This demands that the architect is increasingly forced to consider and work in closer collaboration with many others who contribute toward creating the nearly perfect living environment.

In the main, our abstractly structural and mechanical solutions to buildings lack decoration through the use of color and texture which is an important factor in activating an emotional reaction in sympathy with the reason for which they are built. Although this is only one phase in design, it is our immediate concern and presentation.

Decoration can be accomplished in many ways. Basically, it depends on the form and shape of the building and its structural parts. Furthermore, by the careful selection of materials chosen for their inherent beauty and decorative qualities and the judicious application of meaningful ornament. Of the latter, no other lends itself to greater flexibility and imaginative use in both color and relief than ceramics. They have withstood centuries of use, due to durability and low-maintenance properties which, in the light of our increased construction costs, are considerations of utmost importance.



The use of ceramics must, of course, be under the guidance of sympathetic and skillful hands. This requires of the architect the selection of and collaboration with a team member who is a competent artist. His selection and participation in the project should be encouraged in the early stages of designing if his contribution is to be an integral part of the finished building. Not only must he be a competent sculptor but also he must have a complete technical knowledge of the art of ceramics.

For this particular project, Viktor Schreckengost, of the Cleveland Institute of Art, was invited into all the discussions regarding the selection of materials as an appropriate background and in determining the subject matter and scope of the ornamentation. It was concluded that the dominance of the necessary heating stack should be exploited in the form of a contemporary totem pole whereon the highly colored ceramics would designate the use of the building. The selection of a local material, Berea sandstone, and the soft-toned earthy brick provided a harmonious foil for the application of the polychrome terra cotta ornament. In addition, other small plaques were introduced into the design of the adjacent walls leading to the main entrance. These were gradually dissipated as one enters the building where ornamentation and decoration rightfully depended on the living exhibits, the prime purpose for which the building was built.

Inasmuch as this was to be a permanent, educational record many consultations were held with the following authorities: Dr. Alexander Wetmore, Secretary of the Smithsonian Institute; Dr. Robert Cushman Murphy of the American Museum of Natural His-

tory; Dr. Lee Crandall, Head Curator and nationally known authority on birds, New York Zoological Society; Harold T. Clark, President Emeritus and Chairman of the Board of Control for the Zoo, William E. Scheele, Director, and Dr. Arthur B. Williams, Curator of Education of the Cleveland Museum of Natural History; Fletcher A. Reynolds, Director of the Cleveland Zoological Park, and Don Eckelberry, Ornithologist and Audubon artist. Long hours of conscientious research and advice were given by all of these men.

The subject matter was checked meticulously to assure scientific accuracy in representing bird development from prehistoric times to the present. The five large panels from bottom to top represent the Archaeopteryx, the earliest form of bird life, which was probably clumsy in flight similar to the modern flying squirrel; the Hesperornis, a six-foot loon who lived ninety-million years ago, a master of water propulsion; the Diatryma, the first of the great earth-bound birds; the Dodo, an awkward, flightless pigeon of recent extinct classification; and the American eagle, symbolizing the now-living species. The smaller plaques rep-

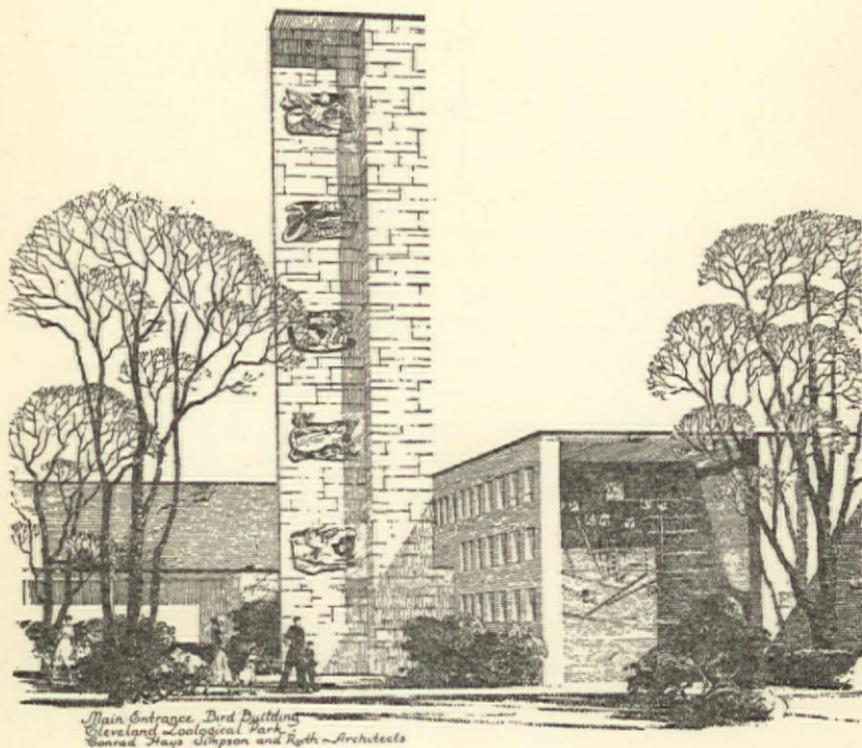
resent the extinct North American birds; the Labrador Duck, Heath Hen, Esquimaux Curlew, Carolina Parakeet, Passenger Pigeon and the Great Awk.

The modelling was executed in the local studios of James and Robert Fillious, where a forty-foot easel permitted accurate perspective corrections for the various heights from which the ceramics were to be viewed. Positive casts were used in studying the color, and full-sized negative casts were shipped to the manufacturer. Success in executing the final terra cotta, which was fired at Perth Amboy, is credited to the Federal Seaboard Terra Cotta Company. Their interest and enthusiasm contributed much toward producing these exquisite works of art. The entire team was so coordinated and the work was so ably executed that Viktor Schreckengost was awarded the First Citation for the use of ceramics in architecture by the Syracuse Museum of Fine Arts at the 16th Ceramic National.

The Bird Building is the first major structure erected for the complete rehabilitation of the Cleveland Zoological Park. Its location is a site semisurrounded by the Water Fowl Lake and the

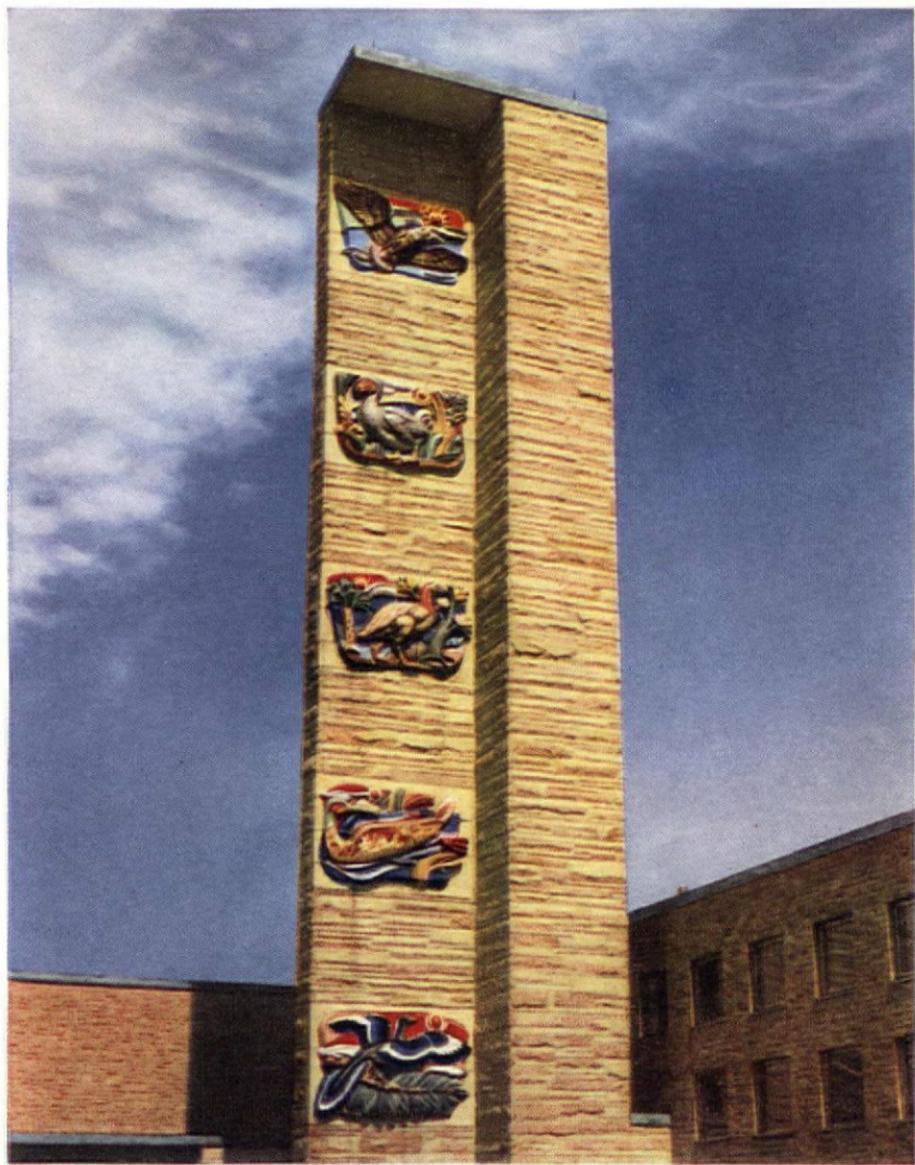
wooded hillside. The entire Zoo has been studied over a period of six years to provide a master guidance plan for the ultimate expansion of the project. Several minor exhibits are completed and the increased interest and attendance by the citizens of Cleveland to this revitalized recreational spot give promise of an early completion of the proposed work.

In conclusion, it might be stated that such a working collaboration between the architect and the sculptor can only be ideal under conditions where each is fully acquainted with the viewpoint of the other and both mutually directing their contributions toward a common goal. The resultant building and its presentation evidence the degree to which this was accomplished.

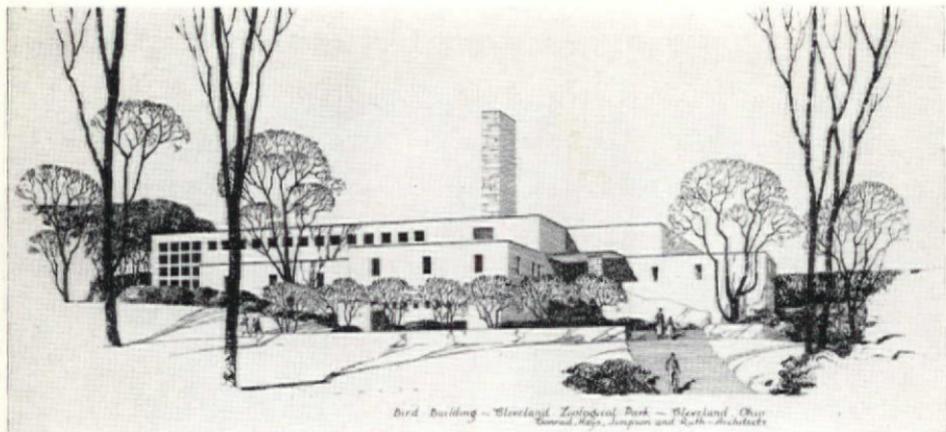


Main Entrance, Bird Building
Cleveland Zoological Park
Conrad Gray Simpson and Ruth - Architects

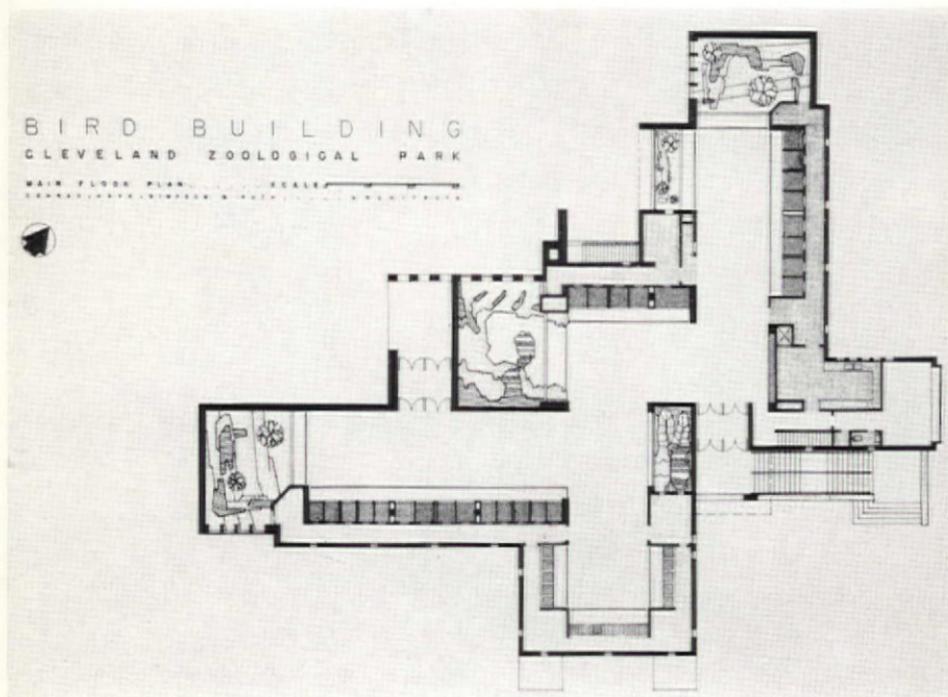
Perspective drawing of the Bird Building, showing the relation of the main entrance to the dominant motive, of which a detail is shown on the facing page



CHIMNEY TOWER OF THE BIRD BUILDING
CLEVELAND ZOOLOGICAL PARK, CLEVELAND, O.
ARCHITECTS: CONRAD, HAYS, SIMPSON & RUTH
SCULPTOR: VIKTOR SCHRECKENGOST



REAR OF THE BIRD BUILDING, AND (BELOW) THE GROUND-FLOOR PLAN





Viktor Schreckengost at work on Archaeopteryx.
This work on the Bird Building was awarded
First Architectural Ceramic Sculpture Citation
in the 16th Ceramic National

Through widely different approaches Messrs. Massey and Wiener (p 3) reach the conclusion that commodity includes more than stark functionalism.

Only Half an Architecture

IN TWO PARTS—PART I

By *Hart Massey*

Reprinted in abridged form from the *Journal* of the Royal Architectural Institute of Canada, September 1951, by permission of the Editor. The author wrote this thesis when a fifth-year student at the University of Toronto.

IT IS OBVIOUS enough that architecture reflects the attitude of society toward its present, its past and its future. This attitude is a complex of many elements, but within it can generally be found one dominating theme representing the collective purpose of a people. Such a theme has influenced the nature of every historic style. Although it will not necessarily predetermine the quality of architecture, it, at least, provides the boundaries of the art and the architect to be understood must remain within them. The architect may therefore in one society be free to expand his art on the widest plain of the human spirit and yet in another be limited to but one small corner of it. There are exceptional men, of course, at all times who will not be limited by prevailing attitudes but their own objectives are beyond the comprehension of society and will there-

fore have little effect upon it. The average, however, cannot see beyond their immediate surroundings and will always work inside the fence of understanding. It is the average architect moreover who makes architectural innovation into style and he will produce it—auftere or flamboyant, sober or gay, aspiring or complacent—in direct relation to prevailing demands.

Of all the desires that make up our contemporary civilization, by far the strongest is that for material well-being. It is expressed through politics in the new socialism, through economics in mass production and in the new religion—science. Our attitude towards them is directly related to the details of existence—such details being considered as sufficient or important in themselves rather than as means of achieving loftier ends. We have a fine collection of tools but as yet

no clear idea of what we should make with them.

This emphasis on means rather than ends could not be better exemplified than by the ever-growing influence of science and scientists on our thinking. Now science is a servant of man and must always be so. It can, however, only be kept in its proper place by a society whose values are of sufficient breadth and altitude to subdue its assertions of omniscience. But our material approach to life plays right into the hands of the scientist. We worship him because he has done so much for us. And because we are not equipped by training to talk the same language with him we cannot question or criticize him. In fact, his utterances are often accepted with somewhat the same confident misinterpretation as were those of the Delphic Oracle in the ancient world.

Our architecture, being an expression of our beliefs, and achievements, is also subject to the confusion of ends and means that arises from such materialism. For if it be considered as an art then surely it must have a wider theme than that of material well-being. But this is unfortunately not the case with us. Our battle cries and slogans all emphasize this material

attitude. The new architecture "arises from an accurate analysis of the needs of modern society." It "expresses the spirit of the machine age." It "makes full use of new materials and techniques." There is no indication here of ends but only of means. The achievements of great architecture in the past have taken place because of a strong desire for certain specific expression, and the tools of building were developed to that end. But we have our eyes fixed on the tools without knowing what the finished product should express beyond efficiency and some rather ill-defined feelings about the age in which we live.

It may be unfair to judge an architecture at this moment in its growth, or even our attitude toward life, but this is the soil in which our architecture has been planted and the roots will always influence the tree no matter what suns will shine or winds blow later on. If the intellectual, emotional and spiritual qualities that architecture has in its power to give were ever needed, they are now.

We are now devoid of loftier values because of political, social and economic unrest. But there may come a time when the material details of existence will recede into

the background and higher values will achieve dominance. Society will then demand and get from architecture what is not demanded or provided now—architecture as an art.

In the great architectural periods of the past the designer of buildings generally had the advantage of working within certain well established boundaries. These at least provided a framework for the limited vision of the average practitioner regardless of their nature or extent. Nowadays, there are unfortunately no such convenient paddocks of taste, and we either have to grope around ourselves or stay within earshot of the revolution's echoing battle cries. For the majority the latter is the safer course, and our collective architectural "philosophy" still springs very largely from that revolt. Of these echoes by far the most insistent is the somewhat limited but nevertheless dominant idea of function. J. M. Richards in the *Architectural Review* has already pointed to the need of some known track for the "rank and file architect" to travel on and the necessity of it is very clear. But the more important consideration is whether this particular track goes in the

right direction or indeed if it can go very far in any direction.

The effect of this upon the architect is that, besides being subject to the material demands of the society to which he belongs, his own approach to the profession is not on a very much higher level. The client will not often ask of his architect more than an efficient and economical solution to his problem. And the architect, having a somewhat similar attitude to building, will probably consider such a solution adequate. Not only does this dual approach to architecture tend to reduce the status of the profession in the eyes of the public, but it also induces a kind of spiritual atrophy in the mind of the architect. The results of this condition can be seen in the growth of architecture as a business and in the popular misconception of the relation between client and architect—that of master and servant. The extension of this idea is the assumption that the architect, being subject to a profit motive similar to that of his client, will therefore not have any architectural convictions to prevent him from doing exactly what he is asked to do.

Although the fault lies primarily within the standards of our society, the architect too is culpable. By

training and purpose he is presumably equipped to see his function and that of his art in the broadest perspective. But this he does not seem to do. The demands of materialism and the growing complexity of his craft lead him into ever-narrowing channels of thought which are not broad enough to allow the development of those aspects of architecture which, in the past, have ensured its position as an art.

The result of such preoccupation can best be seen in the uncertainty with which the modern architect approaches any problem not strictly contained within the limits of his creed. He has no rules to guide him other than the concept of function. There is no grammar of ornament or standard of taste. Nor can he find guidance in established architectural character for that, too, is in the process of taking new shape.

Within the safe logic of function there is room for only a very limited esthetic—the expression of material facts purely and simply. But this after all is little more than an extension of technique into craft which cannot be considered as the basis for an art. The architect may indeed be half-conscious of the inadequacy of func-

tion as a philosophy of design but, by external influence, training and position in society, he is restrained from escape.

So long as the architect considers himself compelled to follow in the wake of society, his architecture can only reflect in a negative way the requirements of that society. But architecture is more than this. It is also a concrete manifestation of aims. We do, it is true, have certain general ideas regarding an ideal environment, but owing to our immediate material objectives rarely see their fulfillment. Such realization of these rather vague aims can only take place if the architectural profession fully comprehends their nature and adopts an attitude consistent with their attainment. This attitude will not always be in accord with that more generally held, for the architect must be capable of leadership. In the same way, his architecture, in the absence of demand, may have to create demand. For only by infusing art into architecture once more may it provide those benefits of art so badly needed for the human spirit. To this end our esthetic should be directed frankly to the layman and not to a professional audience as there is a tend-

ency to do now. We must reassess the *philosophy* of the new architecture, see it for what it is,—a chest full of tools; decide what we are going to make with them and do so.

If architecture be primarily an art rather than a science—and I believe it to be so—then the position of the spectator is vitally important. No art can thrive without him. Without active, critical participation and general support it soon becomes isolated from life. Art exists for man in that it provides a path to emotional and intellectual experience beyond his own, but if man neglects the art, the art will also ignore man. The artist, therefore, needs at least the interest of society, for it is inertia and indifference that are the major enemies of art. Without such a feeling of mutual respect art flees to her ivory tower and society is poorer for her going. In architecture the effect of this separation is an esthetic expressing the personal *philosophy* of the designer and directed over the heads of his proper public to a professional audience.

With music, painting and sculpture I am not immediately concerned, and these may possibly now claim a certain degree of public support. So should architecture,

for by its very nature it has an advantage over these other arts which, paradoxically, has decreased rather than increased public interest in it as an art. While it is more than easy to evade the art gallery and the concert hall, to escape from architecture would require considerable and rather drastic effort. We live in it, we learn in it, we work in it, and we often play in it. The paradox lies in our attitude to those containers of our daily existence. For while, unlike the other arts, architecture is on exhibition everywhere at all times we are hardly aware of it. We know the purposes of different buildings and think of them only as fulfilling those purposes, quite forgetting that they are in themselves worthy of praise or condemnation on entirely other grounds. This has not always been so. Even in the scattered ugliness of the nineteenth century there was, to judge from some buildings, a demand for, and a somewhat distorted appreciation of, qualities in architecture above and beyond the requirements of utility.

Now, however, both client and spectator seem to be totally indifferent to the less practical aspects of building and modern architecture has not, apparently, encour-

aged them to be otherwise—concentrating as it does on material considerations. The appeal of function is obvious as everyone sees the need of efficiency. (It is easier to convince the voter of a new traffic plan than the importance of having a civic square.) But the appeal of the new esthetic is more restricted in spite of the fact that it has grown out of utility and should therefore be relatively easy to understand. It is not widely understood yet. In spite of the simple logic of its *philosophy* it still prompts mistrust. It is an architect's esthetic primarily

because its growth has never been subject to the constant awareness of a public, and as such, shows the signs of professional introduction.

The cure for this ill is twofold. One—the education of the public to an awareness of architecture as an art and, two—a change of heart in the profession. This is not a matter of reviving a lost art for its own sake, but rather of reviving it for the sake of the fuller life it will give to man. This can only be done if we open his eyes to the potentialities of architecture as an art for his own enjoyment.

(To be concluded next month)

Scholarships and Fellowships

THE LOWELL M. PALMER FELLOWSHIP IN ARCHITECTURE is designed to assist a student of unusual promise to undertake advanced study of architecture at Princeton. The stipend is \$1,200 for a year of residence at Princeton, where he will be entitled to all the privileges of a Fellow of the University, including residence in the Graduate College buildings if he is unmarried. All applicants must be citizens of the U. S. A., holders of a Bachelor's degree, less than 27 years of age on October 1, 1952, and in good physical condition. Applications for appointment for 1952-53 must be received not later

than March 1, 1952. Application blanks are obtainable from the Secretary, School of Architecture, Princeton University, Princeton, N. J.

THE BEMIS FELLOWSHIP IN HOUSING is offered for the second year by M. I. T., for the aid of a student engaging in a program of graduate research in housing during 1952-53. Candidates will be selected on the basis of their qualifications and of the contribution which they may be expected to make in the field. An applicant should have a Bachelor's degree, or anticipate

JANUARY, 1952

the award of such a degree not later than July 1, 1952. Fellowships are awarded for one year with the possibility of renewal. Applications should be filed by March

1, 1952. Further information and application blanks may be had from Burnham Kelly, Director, Albert Farwell Bemis Foundation, M. I. T., Cambridge 39, Mass.

Old Cities and New Frontiers

By George Howe, F.A.I.A.

An address in Philadelphia on the occasion of celebrating the sixtieth anniversary of Drexel Institute of Technology.

MR. CHAIRMAN, LADIES AND GENTLEMEN: You have just heard much of interest and hope concerning the material rebuilding of our eastern cities. It falls to my lot to speak of this esthetic rebuilding.

"And what part has the architect," asks the statement of the subject under discussion at this meeting, "guiding, inspiring and educating the public in rethinking its traditional loves and attitudes for the benefit of more honest and practical solutions to modern problems?"

In answering it will be worth while to consider the architect's contribution over the past sixty years. Sixty years ago, when the Drexel Institute of Technology was founded, an era came to an end and a new era had already begun. Exactly sixty years ago Her-

man Melville, the epic poet of the two oceans, died, and a year later Walt Whitman, the lyric poet of the great continent, also died. Mark Twain, the mystical poet of the great river, was to survive them by nearly twenty years, but the death knell of Twain's great river had been rung some twenty years earlier by the sledge hammer that drove the last spike in the transcontinental railroad.

But in 1869, the same year in which the transcontinental railroad was completed, Frank Lloyd Wright, probably the greatest and certainly the most prolific of modern architects, was born. So by 1891 he was twenty-five years old and working in the office of Louis Sullivan, twenty years his senior. These two men stand above all others as the originators of the idea that America deserved and must

have its own architecture, native to its soil and growing out of the needs and feelings of its sons.

And what was their contribution to architecture by way of "more honest and practical solutions to modern problems"? Sixty years ago Sullivan gave form to the contemporary steel office tower, gave it a form that in some ways has never been surpassed. Sixty years ago Wright was immature and still dallying with Queen Anne, but in his plans for houses the openness of the prairie could already be felt. Not many years later he was producing his so-called prairie house, in which form and function became one. Sullivan, in his later years, published his "Autobiography of an Idea," and that idea was "Form follows Function," an idea which influenced many younger architects, including myself.

So it is fair to say that, during the first twenty years of the period that has passed since the Drexel Institute was founded, contemporary architecture, or "modern" architecture as it is generally misleadingly called, came into its own. And it is interesting to note that it was a byproduct of the railroads that superseded the Mississippi steamboat. Chicago was becoming

one of the great railroad centers of the world, and it was Chicago that first afforded architects of imagination an opportunity to give expression to the poetry of space and mechanical power. So we may perhaps call Sullivan and Wright the romantic poets of the railroad era, for they were poets in words as well as in building.

But new ideas are slow to take hold. In 1893 the Chicago World's Fair had filled the mind of America, particularly the East, with the borrowed glory of classic colonnades. The new architecture remained essentially unrecognized nationally. I did not hear about Wright until 1912, when, just after completion of my formal training, a book of his work was published in Germany. I was still designing colonnades at the time.

Meanwhile, however, a revolt similar to Sullivan's and Wright's had been going on in Europe at the end of the nineteenth and the beginning of the present century. Naturally it took less romantic form than the American revolt, still imbued with the frontier, but it was likewise a byproduct of the railroad and of industry. The publication of Wright's book and a growing consciousness of great

American industrial and commercial building operations affected it both esthetically and technically.

Thus it came about that the two streams of architectural thought, American and European, flowed together about thirty years ago and became our common stream of architectural consciousness.

But again the spread of an idea into practice was slow. In 1925, when I finally began to advocate the use of contemporary forms of architecture, particularly conceived to express American industrial and commercial energy as well as the American way of living, I was laughed at for my pains. Five years later again, when my partner William Lescaze and I actually produced a design for the Philadelphia Saving Fund Society Building in which we expressed, to the best of our ability, the contemporary idea, we were met with howls of execration. Yet we had one convinced supporter.

Mr. James M. Willcox, president of the Savings Fund Society, asked me simply and directly whether I would guarantee that the idea we presented was to be the idea of the future. I was young enough and brazen enough to answer unequivocally, yes. So he

built the building according to our designs in spite of all opposition.

Now that contemporary architectural forms are generally accepted these incidents are ancient history. I cite them only to clarify the initial question, "What part has the architect in . . . educating the public for the benefit of more honest and practical solutions to modern problems?" For the task of the architect, and of the client who has faith in him, is far from done. While contemporary architectural forms were being laboriously evolved and accepted, groups of architects all over the globe were well aware that buildings alone do not make cities. Structures of all kinds must be designed, erected and serviced according to a well-conceived city plan if they are to produce more than formless piles of unrelated units. So, for many years these groups of architects, supported by far-seeing citizens, have talked planning, planning and more planning.

So now at last we have in Philadelphia, but only of recent origin, a planning commission, a redevelopment authority, a parking authority, backed by Federal, State and City legislation, largely permissive. And this is no "authori-

tarian" or "socialistic" set-up but one conceived along the clearest lines of democracy in action.

But commissions and authorities are not yet enough. They cannot act effectively except with support and on the initiative of private citizens. The architect has provided a contemporary "style" of architecture in the true sense. He must now provide contemporary plans in which the principles of contemporary architecture can be effectively applied. In this undertaking he will require political, financial and technical collaboration of every kind, but the task of

giving esthetic form to the energies of America will be his.

And so, as an architect and as a citizen, I look forward to the next sixty years of the Drexel Institute's life with pleasurable anticipation. By the end of that period I shall be a mature—I hope young man—of one hundred and twenty-five years. When I left Frank Lloyd Wright's desert house, a year ago come the New Year, he gave me one of his books. On the title page he had written: "To George, have patience." He's only eighty-two and can afford to wait.

An American Architect in the Philippines

*By Harold H. Keys**

THE WESTERN WORLD first came to know of the Philippine Islands as a result of Magellan's voyage in 1521. China and other oriental countries, however, had contact with them for many centuries before that time. In 1565, under the leadership of

Miguel Lopes de Legaspi, and with Father Andrease de Urdaneta representing the Church, the Spanish occupation was started.

Title to the Philippines passed to the U. S. A. in 1898, as a result of the Spanish-American War.

In 1936 the Commonwealth of the Philippines was established. This was a transition period leading up to their complete independence in July of 1946.

The Spaniards found a primitive country; one without permanent

* Mr. Keys was admitted to practice in California in 1915; went to the Philippines in 1920; was interned by the Japs; rescued by the U. S. Armed Forces; resumed practice in Manila; and in 1950 returned to the U. S. A. to practice in California.

buildings and where knowledge of construction was limited to what was required for their simple homes of native material. With the Spanish priests came a few lay brothers with sufficient knowledge of construction to construct the churches, mostly of adobe stone, now to be found almost everywhere the Christian religion exists in the Philippines. Spanish architects and engineers were responsible for the homes, business buildings, city walls and bridges found throughout the Christian part of the Philippines.

The Spanish people developed the *Maestro de Obra* (Master of the Work), who became what we know as the contractor. In time, these men furnished drawings for buildings which naturally showed lack of knowledge of design and which were comparable to the drawings so commonly found here as prepared by contractors. The *Maestro de Obra* is almost a thing of the past.

Such were the conditions that faced the Americans in the early days of our occupation.

Early in this century, our Government sent a few architects to the Philippines to handle Government buildings. Over a period of

time, these men did a certain amount of private work.

About 1918, steps were taken to regulate the practice of architecture and various types of engineering. Examination Boards were established. Broadly speaking, any one who had been following any of these professions for a period of years (including *Maestro de Obras*) qualified by the simple process of registering.

I was Number Sixteen when admitted to practice early in 1921. While some of those who registered before I did had attended architectural schools, others were Civil Service people or *Maestro de Obras* who had been styling themselves architects.

There are now several architectural schools in the Philippines, but previous to their establishment architectural studies were followed in Europe or the United States. Architectural precedent was, therefore, all foreign. Design, as we had been taught, did not meet the requirements of the tropics.

The Spaniards made quite a study of climatic conditions; much thought was given to cross ventilation, and from their studies they developed two types of construction.

One was the thick masonry

(adobe) walls with conventional-size openings. These thick walls did much to keep out the tropical heat.

The other type was of wood, with sliding windows which permitted opening about three-quarters of the walls. The openings extended from floor to ceiling.

Both types had broad, overhanging roofs, partly as a protection against the sun and partly as a protection against the torrential tropical rains. Small pieces of thin shell (about 2½" square) were used for glazing in lieu of glass. These shell windows, while admitting a certain amount of light, kept out much of the sun's heat. Roofs were nearly always of tile. We had much to learn from our Spanish predecessors.

After World War I, several architectural schools were established. These have permitted many young men to obtain an architectural training without being put to the great, and in many cases prohibitive, expense of going to Europe or the United States. Due largely to these schools, there are now several hundred registered architects in the Philippines.

About 1928 a group of Filipino and American architects organized

The Philippine Society of Architects, which later became The Philippine Institute of Architects. A Code of Ethics and Rules Governing Competition was adopted. These are much the same as those of The A.I.A. A schedule of minimum charges has been adopted.

The P.I.A. has done much to secure legislation that will advance the standing of the profession.

Philippine architects have an uphill fight to make their functions clear to the public; to make clear to the public the desirability of having men handle their projects who have been trained in that type of work. Their Institute is doing what it can to carry on an educational campaign along these lines.

For many years all government buildings were designed by the Bureau of Public Works. In the early American days, this was the proper method. Then, practically all competent architects and draftsmen were employed by the government. Today there are many men in private practice competent to erect government buildings. Steps have been taken to make this possible. Much of the opposition to this move comes from the Bureau, which wishes to retain this work for itself.

Filipino architects do not have

the services of different types of engineers as we do here. A few men practice as structural engineers, but electrical, mechanical, sanitary, air-conditioning engineers, etc., are employed by various contracting or supply firms. Their services may be secured, but there is an implication if one does.

Except for sand, gravel, cement and lumber, almost all building materials must be imported from abroad. In most cases this is done through local supply houses or agents. Most of the supply houses or agents have no technical knowledge of what they are offering. They sell by the catalogue. The buyer does not necessarily know just what he is getting until it arrives. Remember that they are seven to ten thousand miles and three to eight months from the source of supply. Only in late years have some of the importers brought in men trained in the line they are selling.

Prior to World War II, most of the old, established contractors were Chinese, Japanese or Americans. Needless to say, there are no more Japanese contractors. Filipinos are doing much of the present-day construction and have developed some very successful builders. Practice in the Philip-

pine calls for many things not called for here. Insured fire, earthquake or typhoon damages must be appraised by a licensed architect or engineer before a claim is paid. An architect must see that orders for imported materials are placed promptly to secure the uninterrupted construction of a building. Architects are expected to serve on civic and other committees.

Except for Warsaw, Manila is supposed to have been the worst war-devastated city. Much of our work directly after the war was examining what was left of various buildings, seeing if they could be repaired or not; in my case, sending reports to the European or American owners, and, last but not least, telling them how much it was going to cost to rehabilitate. There were no building materials, no idea of what changes would be made in labor costs, no idea of prices in the United States or availability; so estimates, to say the least, were not altogether accurate. I adopted a factor as compared to prewar prices, and things came out reasonably close.

Filipino architects have accepted the Modern type of design very enthusiastically.

There is a pronounced na-

tionalization move in the Philippines, so far as professions are concerned. Economic restrictions placed on non-Filipinos have made it difficult for many Americans to carry on various types of business. They have also slowed down considerably the investment of Euro-

pean and American money in new enterprises.

Considering their lack of precedent, as well as older architects to guide them, I believe one may safely say that the Filipino architects have gone far. There is yet a distance for them to go.



Architects Read and Write

Letters from readers—discussion, argumentative, corrective, even vituperative



COMMEMORATE ARCHITECTS

BY ELLIOTT L. CHISLING, New York, N. Y.

IN 1940 the Post Office Department issued a set of commemorative stamps under the headings of famous Americans. These were issued in sets of five, honoring artists, musicians, inventors, educators, scientists, etc. This list has been augmented from time to time by issuing stamps honoring other famous men and women who have departed this life for their eternal reward.

No more beautiful stamps have ever been issued by our Post Office Department, and these stamps have become collectors' items. It is even more important to realize that the names of these famous Americans were brought to the attention of everyone receiving a letter or package through the mails when these stamps were sold for postage.

One group of famous Americans whose contributions to the Ameri-

can scene have been no less than those mentioned above is the famous architects of the past. Apparently they have been forgotten by our Post Office Department while it has continued to issue commemorative stamps for other professional and business groups and individuals. It does seem fitting that the Post Office Department be requested to give consideration to honoring five of our famous architects (deceased) whose achievements in building will remain living records of American history.

Dozens of our most famous buildings have been depicted on our postage stamps, but only as a background for a chosen subject. In all cases, the architect of that famous building was kept even further in the background. If the Postmaster General can be persuaded to consider the issuing of

five stamps commemorating the names of five of our most famous architects, these names might be furnished by The A.I.A., after member architects have sent in their selections. Each stamp design would contain, in addition to a portrait, the outstanding example of that architect's work, such as the Lincoln Memorial for Henry Bacon.

It would be interesting to the profession to know also that the designing of commemorative stamps is open to the public, and the winning design is selected by the Post Office Department.

A word from you to the Postmaster General, Washington, D. C., would help.

STOCK PLANS

BY C. GODFREY POGGI, Elizabeth, N. J.

PROBABLY the surest means of soiling one's hands is to monkey with tar. For the purposes of this letter, tar can be likened to plans sold as merchandise.

Every so often some architects' society conceives the idea of establishing a clinic for the benefit of people who can't afford to engage the services of an architect, and just as often the scheme proves a failure. In the first place, the idea is based upon a wrong premise. There are no persons anywhere who can't afford to engage the services of an architect. It stands to reason that any one who can afford to pay the highly inflated rates and charges of the builder, the manufacturers, and labor in these times, can readily stretch his wallet a little more and pay the measly stipend charged by the architect, and thus get something for his money.

In the second place, the merchandised plan, when in the form of the stock plan, is potentially a

fraud, in that it is in reality nothing but a preliminary sketch dressed up to resemble an honest-to-goodness set of plans. It illustrates the arrangement of rooms and the design of the exterior, but there are, as we all know, many other things needful to make the house fit the property, its grades, and to harmonize with its surroundings, etc. It is an incomplete plan at best and often gives the owner a lot of trouble during the construction period. No reputable architect should tar his fingers with this mess.

In the third place, when these plans are purchased by the speculative builder, he knows full well that they are not complete, as above mentioned, but it is within his power to depart from them sufficiently to meet local conditions; and having no one over him, he is also in a position to mutilate both the plan and design to satisfy his whims.

Last but not least, there was a

time when plans were declared by the profession as "instruments of service and not merchandise." This was, within that period of time, upheld by the courts, and was the architect's anchor to the windward, when involved in court proceedings.

Just how far the subsequent advent of the stock plan has discounted the value of that particular anchor is problematical, but this writer has heard of no such court ruling within a long period of

years. What with the advent of stock plans, job chasing, and fee cutting, it is quite evident that if the profession becomes thoroughly demoralized, it will be the fault of those within the profession itself, and all will suffer the evil consequences.

Each and every individual architect has a birthright and a heritage to uphold and maintain. Let's keep the home fires burning and stick to our guns.

EXTRUDED HOUSING

By C. E. SILLING, Charleston, W. Va.

MOST of my education on "housing," if any, comes from listening to others wrangle about it. Occasionally I see some of it, generally risking only one jaundiced eye. In New York they rear vast, vertical cliffs like filing-cabinets, stuff the people into them whether or not they fit. Near the Labrea tar pits in Los Angeles they're doing the same thing on a vast scale. In the several open fields between these two localities I hope the people get a chance to express a preference before the "planners" overtake them.

The other day I was much encouraged to hear an important public official say that if the banker (PHA) dictating to the architect (AIA) was going to tell the owner (NAHO) "how much of what" he could build, it was high time the owner got a new banker and a new architect. He was being

facetious in order to emphasize a serious thing. Why should we architects permit PHA regulations to cramp our imaginative understanding of our individual community housing needs and local way of life, through PHA's stereotyped standards to produce the monotonous extrusions PHA calls "housing"?

I'm strictly for local option. Let's decentralize: get "housing" down to the local level, individually tailored to fit individual community needs and characteristics. Maybe we can invite PHA to have a look in that direction and entertain fees commensurate with the contribution. I think that background noise I hear is NAHO applauding such ideas.

As a "non-houser" I can speak freely. Maybe "non-housers" ought to be doing the housing, come to think of it!

THE ARCHITECT'S REWARD

BY JOHN J. KLABER, Huntington, N. Y.

MR. C. GODFREY POGGI, reviewing the earnings of architects, as summarized in the 1950 Survey of the Architectural Profession, suggests that many of us would do well to get out of architecture and go into something more profitable.

But who ever went into architecture with the idea that he would make a lot of money? Most of us, I think, only took up architecture because no other occupation seemed to give us the same satisfaction of the creative urge. My own earnings have never been large, but I have no regret that I am working

in this field, and I do not believe that I could be happy in any other, even if I earned twice as much. And I feel sure that this is typical of the profession.

As to Mr. Poggi's contention that one year's earnings are not sufficiently typical, this may be true for the individual, but less so when the earnings of a large group are averaged. And of course the work of summarizing a series of years, for the whole of the profession, would be very great. Anyway, somebody did read the Survey and tried to draw some conclusions from it.



Calendar

January 16-17: 7th Annual Short Course in Residential Construction, University of Illinois Small Homes Council, Urbana, Ill.

January 20-24: 8th Annual Convention and Exposition of the National Association of Home Builders, Stevens and Congress Hotels, Chicago, Ill.

January 21-25: First Session, Fourth Williamsburg Antiques Forum, Williamsburg, Va. Registration should be made in advance through Mrs. Alma Lee Rowe,

Registrar, The Goodwin Building, Williamsburg, Va.

January 25-27: Annual meeting of the Society of Architectural Historians, New York, N. Y. For details address James G. Van Derpool, Avery Library, Columbia University, New York 27, N. Y.

January 25-27: Annual meeting of the Church Architectural Guild of America and the North American Conference on Church Architecture, Chicago Theological Seminary, Univ. of Chicago Campus.

January 28-February 1: Second

JOURNAL OF THE A. I. A.

Session, Fourth Williamsburg Antiques Forum. See *January 21*.

February 7-9: Inter-Society Color Council's 21st Annual Meeting, Hotel Statler, New York, N. Y. The program includes a talk by Kenneth C. Welch on "Color in Merchandising," on the morning of February 8.

February 23-27: Regional Convention and Exhibition of the American Association of School Administrators, St. Louis, Mo. Entry blanks and details for the architectural exhibition available from A.A.S.A., 1201 16th Street, N. W., Washington, D. C.

February 27-April 13: Annual Festival of Contemporary Arts, University of Illinois, Urbana-Champaign, Ill., including concerts, lectures, exhibitions, in the areas of art, music, literature, dance, drama, motion pictures, architecture, printing, and other phases.

March 3-5: Meeting of the Board of Directors, A.I.A., The Octagon, Washington, D. C.

March 8-12: Regional Convention and Exhibition of the A.A.-S.A., Los Angeles, Calif. See *February 23*.

April 5-9: Regional Convention and Exhibition of the A.A.S.A., Boston, Mass. See *February 23*.

April 24-25: Annual Convention of Virginias-Carolinas Hospital Association, Hotel Roanoke, Roanoke, Va. In cooperation with A.I.A. chapters in the Carolinas, Virginias and Washington, D. C., the Association is planning sessions of special interest to architects.

April 26-May 3: Historic Garden Week in Virginia. Details from Mrs. Irving L. Matthews, Executive Secretary, Jefferson Hotel, Richmond, Va.

May 6-9: 4th International Lighting Exposition and Conference, Auditorium, Cleveland, Ohio.

May 19-24: International Churchman's Exposition, Chicago International Amphitheatre, Chicago, Ill. Further details may be had by addressing the Exposition headquarters, 19 S. La Salle St., Chicago 3, Ill.

June 24-27: 84th Convention, A.I.A., The Waldorf-Astoria, New York, N. Y.

June 25-28: British Architects Conference of 1952, Edinburgh, at the invitation of the Royal Incorporation of Architects in Scotland. A.I.A. visitors are welcome and, if planning to attend, should ask C. D. Spragg, Secretary, R.I.B.A., for a program.

Chicago Tribune Competition for Better Rooms

CALLING FOR DESIGNS for a living-room, living-dining room, dining-room, child's bedroom, adults' bedroom, "extra room" and kitchen, this year's *Chicago Tribune* competition will distribute 52 cash prizes ranging from \$100 to \$1,000 each. A copy of the complete rules and other details may be obtained by addressing the Better Rooms Competition, *Chicago Tribune*, Chicago 11, Ill.

The Editor's Asides

SCULPTURE of our generation may have put considerable stress upon abstraction, but a look around Washington, at least, leads one to believe that for a symbol of leadership, power, and even of civic virtue, the sculptors of today, like those of the Renaissance, turn most frequently to the man on a horse. The Army may mechanize its cavalry, give up breeding the Army mule, relegate saddlery to the lost arts, but the day seems far distant when a sculptor will risk memorializing a hero general seated in his jeep.

SPEAKING OF SCULPTURE, at the recent unveiling of his monumental "Construction" in the stair well of the Young People's Art Center in Baltimore, Naum Gabo said:

"My work is done; now your work begins.

"A work of art, restricted to what the artist has put into it, is only a part of itself; it only attains full stature with what people and time make of it."

U. S. HIGH COMMISSIONER FOR GERMANY, John J. McCloy, has named Francis Keally, F.A.I.A., to act in a dual role in the design

of Berlin's American Memorial Library commemorating the sacrifices of the men who died in establishing the airlift. Appointed consulting architect, Mr. Keally's other role will be acting as judge in a competition, open to all architects in West Berlin, to determine the basic design.

IN THE ACCOUNT of Hanover's Constructa, December JOURNAL, there was mentioned the American model kitchen, equipped for demonstration purposes, which stole the show. Our information for this story came by way of the State Department, which usually is meticulous in its fact-gathering function. The design of the kitchen, however, was credited to Mrs. Chloethiel Woodard Smith, whereas, the credit should go to her firm of Keyes, Smith, Satterlee & Lethbridge, architects of Washington, D. C.

ONE OF THOSE extra-curricular activities that subtly and effectively enhance public relations has just been uncovered by the Toledo Chapter. Joining with the city's Museum of Art to celebrate the latter's fiftieth anniversary, the Chapter gathered, photographed,

and installed in the Museum a show entitled "Fifty Years of Toledo Architecture." It was a chronological exhibit, comprising the city's buildings from the Victorian period of 1850-90 through the eclectic period—given the heading of "Derivative"—down into the Modern. A printed "chronological guide to Toledo's principal buildings," listing 56 structures, with locations, dates, architect's names and style comment, was given the visitors. In addition to its popularity as a three-week exhibition, the material gathered forms the nucleus of a permanent historical record to be kept in the Museum's archives and occasionally put on display.

NOT ONLY NEW YORKERS and not only architects are concerned over the financial problems facing The Architectural League of New York. This large and vigorous body has had its difficult times before and has emerged bigger, more vigorous and better welded after each storm. There is every reason to believe it will do so again.

With an expensive plant offering office space, bedroom space and exhibition space, besides the club facilities for its members, the League is asking itself whether it

is wasting its energies and funds as a landlord in activities that may not be within its true sphere. An alternative that may repay exploration is the banding together with certain New York organizations—New York Chapter, A.I.A., the B.A.I.D., Sculptors' Guild, and the like—to share a new building which would serve both their varied and their common needs. Meanwhile, the League is assured of a vast throng of well-wishers in the design professions cheering their old friend on to victory.

IN SPITE OF government controls, material shortages, clients' buck fever, high building costs, and all the other impedimenta of these days, three recent news items tell of architects' dreams come true: Fairchild Camera and Instrument Company will build the first section of a \$25-million community at Jericho, Long Island, with Kahn & Jacobs as architects; Ford Motor Company will develop a residential and commercial community of 4,500 acres near Dearborn, Mich., with Skidmore, Owings & Merrill as architects; and India is starting the building of Chandigarh, a city of 500,000 at the foot of the Himalayas, with Maxwell Fry, F.R.I.B.A., as architect.



Beautiful . . .

INDIANA LIMESTONE

► Wherever beautiful buildings stand throughout the land, there you will find Indiana Limestone in generous proportion. Today, as always, the warm beauty of Indiana Limestone, occurring in soft, natural colors, uniquely uniform in texture and remarkably free of impurities, presents a rich opportunity for distinguished design in buildings of every type and style. It's available now . . . it is reasonable in cost . . . it is still



The Nation's Building Stone

INDIANA LIMESTONE INSTITUTE • P. O. BOX 471, BEDFORD, INDIANA

*You are invited to make full and frequent use of our
technical counsel without expense or obligation*



Georgetown University Hospital, Washington 7, D. C. Heated by 4-zone Webster Electronic Moderator System of Steam Heating. Architects: Kaiser, Neal & Reid, Pittsburgh, Pa. Consulting Engineer: F. J. Firsching, Pittsburgh. General Contractors: John McShain Co., Washington, D. C. Heating Contractors: Standard Engineering Co., Washington, D. C.

3-Year Heating Record

Report of Chief Engineer Sam S. Shepherd Georgetown University Hospital

"In my opinion, the Webster Moderator System embodies the best features to be found in controls for heating systems.

"As we have it here, the Webster Moderator System coupled with a properly installed zone system makes it possible for us to prevent underheating in severe weather and—even more important—we do not overheat in mild weather or during days with a normal variation in the outside temperature.

"My records show clearly that with the Moderator in use, the consumption of fuel for heating purposes follows very closely the degree day demand.

"This is encouraging to the operating engineer because he knows that here is a means to prevent waste of fuel from the very sources which are most prevalent in uncontrolled heating systems.

"Our installation is reasonably new. We are now in the third year of operation. Very few parts have been replaced and the control system is operating at peak efficiency."

at Georgetown University Hospital

How the Webster Moderator System meets comfort requirements without wasteful overheating has been demonstrated in the new Georgetown University Hospital.

With the Webster Electronic Moderator System, this well-managed institution enjoys "Control-by-the-Weather" comfort. Each of the 779 radiators gets heat in the amount needed.

The report on the effectiveness of the Webster Moderator System was made by Sam S. Shepherd, Chief Engineer of the Hospital since its completion in 1947 and prior to that Chief Engineer of Georgetown University. Careful operation and a vigilant maintenance program have been important factors in the success of the heating installation.

In choosing the Webster Moderator System, designers of Georgetown University Hospital did not experiment. Similar Webster Moderator Systems serve in such outstanding institutions as the U.S. Naval Hospital, Bethesda, Md., Delaware Hospital, Wilmington, Del., Our Lady of Lourdes Hospital, Camden, N. J., and many others.

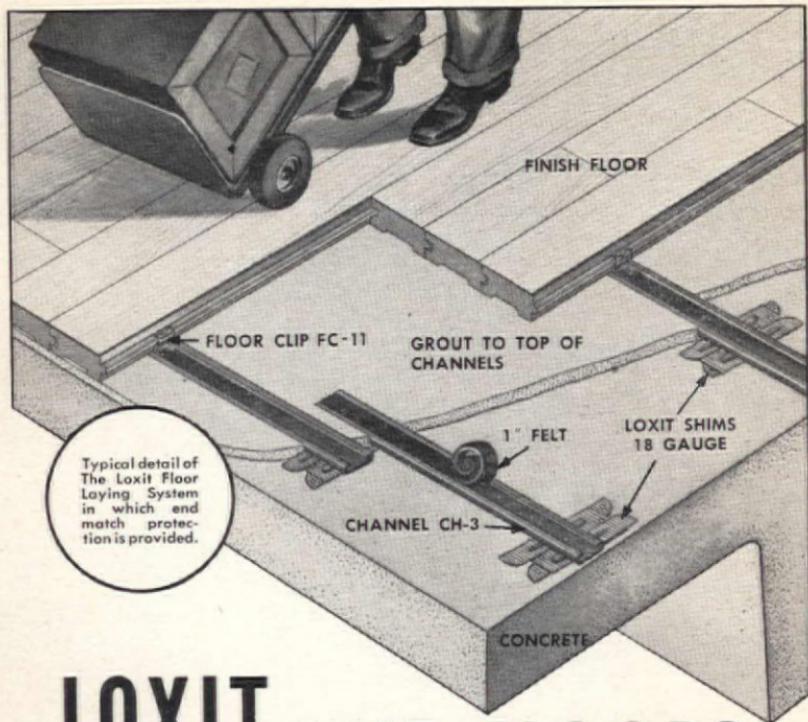
For further information, address Dept. AIA-1.

WARREN WEBSTER & COMPANY

Camden 5, New Jersey :: Representatives in Principal Cities

In Canada, Darling Brothers, Limited, Montreal

WEBSTER
MODERATOR
SYSTEM
OF STEAM HEATING
"Controlled-by-the-weather"



Typical detail of
The Loxit Floor
Laying System
in which end
match protec-
tion is provided.

LOXIT-LAID FLOORS *"can take it"*

Write today
for free
descriptive
literature.

For beauty, economy and easy installation, the Loxit Floor Laying System is the permanent solution to your floor laying problems. Simple to install! No special tools required. Loxit laid floors are especially adapted to factories, stores, skating rinks, field houses, etc., where end match protection is required; and gymnasiums, auditoriums, classrooms, etc., where drumming may be objectionable.

LOXIT FLOOR-LAYING SYSTEM

LOXIT SYSTEMS, INC. • 1217 W. WASHINGTON BLVD. • CHICAGO 7, ILL.

the LEADER VARSITY



Chosen by
E. RIVERS SCHOOL
ATLANTA, GA.

to Create **IDEAL SEEING CONDITIONS FOR YOUNG AMERICA**

It is only logical that when really important lighting jobs are up for bids . . . architects and contractors look to Leader. That's what happened in the case of the E. Rivers School at Atlanta. Architects Stevens & Wilkinson, and contractors Brittain & Pattillo, agreed that a dual component luminaire was required. The Leader VARSITY was the obvious choice because 60% of its output is directed downward and 40% upward, creating ideal seeing conditions. And VARSITY's economical price runs well within the school budget . . . Whatever your next lighting problem may be—classroom, office, library, store, bank, institution or industrial plant—look to Leader and see the logical and profitable answer.

Leader

*Sold and installed by the better
electrical dealers and contractors*

ELECTRIC COMPANY

3500 North Kedzie Ave. • Chicago 18, Illinois

Leader Electric—Western: 800 One Hundredth Avenue, Oakland 3, California
Campbell-Leader, Ltd.: Brantford, Ontario • Canada

Specify
HILLYARD
Floor Care
and be sure of

*"First Day Newness
for Years Ahead"*



South Side Junior
High School, Kalamazoo, Michigan



Architects—Louis C. Kengscott
and Associates

Planners for this beautiful new school made a wise decision—called a Hillyard floor expert (Hillyard Maintainer) for advice on floors while building was in the blue print stage. The Maintainer, schooled to work hand in hand with architects, made his survey, prepared a plan to assure protection to all floors throughout the building, (even to specifications for the marking of the new gym floor). Now in daily use, the new school follows labor-saving Hillyard recommendations for a lifetime of beauty.

Tough, glossy, non-skid Hillyard floor finishes specialized for wood, asphalt, rubber, cement, terrazzo, will give YOU planned protection for your new floor installations. Save you labor costs during construction. Save your clients future maintenance. You'll welcome Hillyard's easier methods. The services of a Hillyard Maintainer are offered Architects without obligation on any job, large or small.

ONLY *Hillyard* MAKES
HIL-TEX® SEAL

new undercoat treatment that gives asphalt tile and resilient floors longer life and beauty.

MAKE THE
HILLYARD MAINTAINER YOUR JOB CAPTAIN

You can depend on his help to get the job done "on schedule."
On Your Staff—Not Your Payroll



HANDLE WITH

HILLYARD

CARE!

St. Joseph, Mo.

Branches in
Principal Cities



How's your set of bound JOURNALS?

Send us your loose copies, any time, to be bound as illustrated above.

A volume consists of six issues—January through June, or July through December. Each volume has its own index, and we supply a title page.

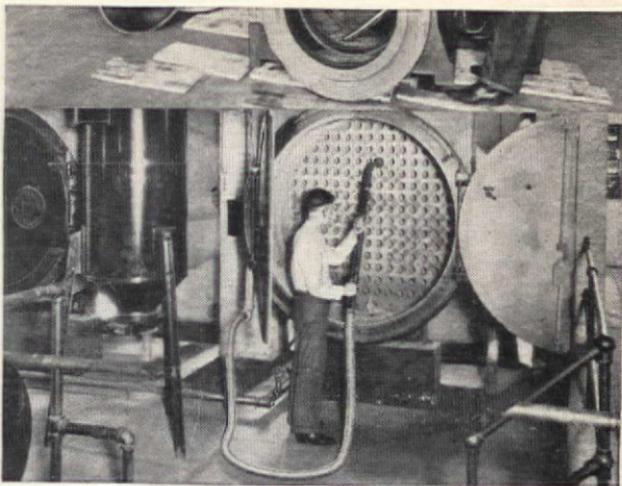
Issues missing from your file can be supplied, while they last, at 35c each.

Unless you instruct otherwise, we bind in the original covers of each issue but not the advertising pages.

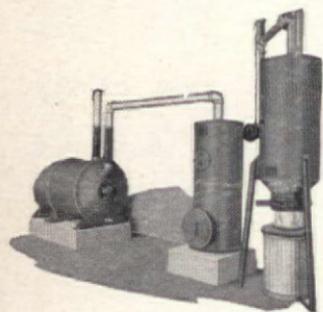
Binding, when you supply the loose copies, \$2.25.

Bound volume, we supplying all new copies, \$3.50.

JOURNAL OF THE AMERICAN INSTITUTE OF ARCHITECTS
1741 New York Avenue, N. W., Washington 6, D. C.



Cleans THE MOST DELICATE DECORATIONS AND THE DIRTIEST BOILERS



The vacuum producer and dirt container are located in the basement. Piping connects to convenient inlets all over the building.

For a quarter of a century, Spencer Central Vacuum Systems were installed primarily to clean floors.

Special tools, easily manipulated on all kinds of floor surfaces, backed up by powerful vacuum, resulted in faster, better cleaning at lower ultimate costs.

In the meantime, other uses have become dominant in the minds of architects and building superintendents. Spencer cleans radiators, filters, and boiler tubes, and often saves its cost on these items alone in a few years.

In every kind of building it does something special—an extra dividend at no extra cost. In schools, it's chalk trays; in theatres, projection machinery; in hotels, rugs; in stores, it's displays, and in hospitals, dry mops.

Let us give you reasons why Spencer Vacuum Cleaning will result in a better cleaned building at less cost in the long run.

THE SPENCER TURBINE COMPANY • HARTFORD 6, CONNECTICUT

SPENCER
HARTFORD

Now MATICO offers a SUPERIOR, NEW PLASTIC FLOORING for on, above or below grade

- ▶ Impervious to petroleum solvents, oils, greases, turpentine, alkalis and household acids.
- ▶ Extremely resilient. Good sound absorption.
- ▶ Smooth, non-porous surface sheds dirt — wipes clean with damp mop.
- ▶ Excellent indentation recovery.
- ▶ Fire-resistant — will not support flame.
- ▶ Wide variety of bright, clear, non-fading colors.
- ▶ Easy to install — no special adhesives needed.
- ▶ Available in 9" x 9" standard gauge and 1/8" tiles.



ARISTOFLEX

THE ARISTOCRAT OF RESILIENT FLOORING

PLASTIC — ASBESTOS . . . NO FELT BACKING

New MATICO Aristoflex Tile Flooring is plastic-asbestos through and through. It's extremely tough, very flexible. Vivid, sparkling colors and marbleization go clear through each tile. Long wearability and enduring beauty is assured.

Aristoflex may be laid direct on concrete . . . over terrazzo or ceramic . . . on wood over 15-pound saturated felt . . . and over magnesite (above grade).

Installation is unusually easy, and less costly. No special cements are required, ordinary asphalt tile adhesive does the job. It lays in tightly, immediately, due to square corners and clean edges.

Write for free Aristoflex samples and specification data.



MASTIC TILE CORPORATION OF AMERICA

Member Asphalt Tile Institute
Long Beach, Calif.

Newburgh, N. Y.

World's largest producer of asphalt tile

THE AMERICAN INSTITUTE OF ARCHITECTS

BOARD OF DIRECTORS

OFFICERS

(Terms expire 1952)

GLENN STANTON, President
208 S. W. Stark St., Portland 4, Ore.

KENNETH E. WISCHMEYER, First Vice President
911 Locust St., St. Louis 1, Mo.

NORMAN J. SCHLOSSMAN, Second Vice President
430 North Michigan Ave., Chicago 11, Ill.

CLAIR W. DITCHY, Secretary, 5 W. Larned St., Detroit 26, Mich.

MAURICE J. SULLIVAN, Treasurer, 3901 Travis, Houston 6, Tex.

REGIONAL DIRECTORS

(Terms expire 1952)

ARTHUR C. HOLDEN, Room 2305, 570 Lexington Ave.,
New York 22, N. Y. New York District
M. H. STARKWEATHER, 40 W. Congress St., Tucson, Ariz. Western Mountain District
WILBUR HENRY TUSLER, 202 Foshay Tower,
Minneapolis 2, Minn. North Central States District
HAROLD BUCKLEY WILLIS, 20 Newbury St., Boston 16, Mass. New England District

(Terms expire 1953)

HOWARD EICHENBAUM, 304 Wallace Bldg., Little Rock, Ark. Gulf States District
JOHN N. RICHARDS, 518 Jefferson Ave., Toledo, Ohio Great Lakes District
C. E. SILLING, 314 Masonic Temple, Charleston, W. Va. Middle Atlantic District
IRVING G. SMITH, 2040 S. W. Jefferson St., Portland 1, Ore. Northwest District

(Terms expire 1954)

LEONARD H. BAILEY, 1215 Colcord Bldg.,
Oklahoma City 2, Okla. Central States District
G. THOMAS HARMON, III, 3350 Millwood Ave.,
Columbia, S. C. South Atlantic District
CHARLES O. MATCHAM, 612 South Flower St.,
Los Angeles 17, Calif. Sierra Nevada District
EDWARD L. WILSON, 209 Majestic Bldg., Ft. Worth, Tex. Texas District

THE EXECUTIVE COMMITTEE OF THE BOARD

(Terms expire 1952)

GLENN STANTON, Chairman
CLAIR W. DITCHY, Secretary
MAURICE J. SULLIVAN
HAROLD BUCKLEY WILLIS
WILBUR H. TUSLER
HOWARD EICHENBAUM, Alternate

HEADQUARTERS

1741 New York Avenue, N. W., Washington 6, D. C.

EDMUND R. PURVES, Executive Director

J. Winfield Rankin, Administrative Secretary; Frederick Gutheim, Assistant to the Executive Director; Louise S. Miller, Treasurer's Office; Florence H. Gervais, Membership and Records; Henry H. Saylor, Editor of the JOURNAL and BULLETIN; Walter A. Taylor, Director of Education and Research; Theodore Irving Coe, Technical Secretary; Frederic Arden Pawley, Research Secretary; George E. Pettingill, Librarian-Researcher; William Demarest, Jr., Secretary for Modular Coordination

Official address of The Institute as a N.Y. Corporation, 115 E. 40th St., New York, N.Y.
The Producers' Council, affiliated with The A.I.A., 1001 15th St., N.W., Washington 5, D.C.

