NOVEMBER 1957



ART AND MUSIC

A New Architecture for Man

By Ernest J. Kump, FAIA

THE ARCHITECT TODAY

By August Heckscher

The American Institute of Architects

BOARD OF DIRECTORS OFFICERS (Terms expire 1958) LEON CHATELAIN, JR., President 1632 K Street, Washington 6, D. C.

JOHN N. RICHARDS, First Vice President 1600 Madison Avenue, Toledo 2, Ohio

PHILIP WILL, JR., Second Vice President 309 West Jackson Blvd., Chicago 6, Ill.

EDWARD L. WILSON, Secretary, P.O. Box 9035, Fort Worth 7, Texas RAYMOND S. KASTENDIECK, Treasurer, 128 Glen Park Ave., Gary, Indiana EDMUND R. PURVES, Executive Director

REGIONAL DIRECTORS (Terms expire 1958)

MATTHEW W. DEL GAUDIO, 545 5th Ave., New York 17, N. Y. New York District BRADLEY P. KIDDER, 717 Canyon Rd., Santa Fe, N. M. Western Mountain District BRYANT E. HADLEY, Myers Bldg., Springfield, Ill. North Central States District AUSTIN W. MATHER, 211 State St., Bridgeport 3, Conn. New England District

(Terms expire 1959)

J. ROY CARROLL, JR., 6 Penn Center Plaza,	
Philadelphia 3, Penn.	Middle Atlantic District
BERGMAN S. LETZLER, 543 S. Fifth St., Louisville 2, Ky.	Great Lakes District
JOHN H. PRITCHARD, Tunica, Miss.	Gulf States District
DONALD J. STEWART, 219 S. W. Stark St., Portland 4, Ore	Northwest District

(Terms Expire 1960)

I. LLOYD ROARK, 7133 W. 80th Street, Overland Park, Kans Central States	
SANFORD W. GOIN, 518 N.E. 4th Avenue, Gainesville, Fla South Atlantic	
U. FLOYD RIBLE, 3670 Wilshire Blvd., Los Angeles 5, Calif CalifNevada-Hawaii	
R. MAX BROOKS, 203 Perry-Brooks Bldg., Austin, Tex	

THE EXECUTIVE COMMITTEE OF THE BOARD (Terms expire 1958)

LEON CHATELAIN, JR., Chairman

EDWARD L. WILSON, Secretary

RAYMOND S. KASTENDIECK

The Journal of The American Institute of Architects, official organ of the Institute, is published monthly at The Octagon, 1735 New York Avenue, N. W., Washington 6, D. C. Editor: Joseph Watterson. Subscription in the United States, its possessions, and Canada, \$4 a year in advance; elsewhere, \$5.50 a year. Single copies 50c. AUSTIN W. MATHER

J. ROY CARROLL, JR.

R. MAX BROOKS, Alternate

Copyright, 1957 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. Change of Address: Notify The Octagon, giving both old and new addresses. Allow four weeks for change to go into effect.



Seton High School, Cincinnati, Ohio . Architects: Maguolo & Quick, A.I.A.

marble COMES BACK TO THE SCHOOL . . . and with good

reason, for no other material is so appropriate for school construction as Marble. Marble satisfies these important and basic needs: first, it is *economical*, reasonable in first cost and a source of regular annual savings because of its negligible cost of maintenance; second, it is *beautiful*, providing students, young or old, with the best of environments, an incentive to refinement in thought and action.

Write now for the profusely illustrated and highly informative booklet: "Modern School Construction, a Study in True Values," to



MOUNT VERNON, NEW YORK

OF AMERICA. INC.



Successful installation of resilient floors in hydraulic lift-slab construction

Hydraulic lift-slab construction techniques have created new problems in resilient floor installations. The problems are caused mainly by the oil or resinous "breaker" compound, applied to the top surface of each slab to prevent the slabs from sticking together while at ground level. These compounds leave a waxy film that often prevents the flooring adhesive from making a firm bond to the slab.

In most cases, little trouble has been encountered by Armstrong Asphalt and Excelon[®] Tile on lift slabs. However, the only assurance of a permanent bond for all types of resilient floors is to remove the waxy film.

Methods of removal

Three removal methods can be used. One method is sanding. This is seldom completely successful because it will not get at the breaker compound that has penetrated the concrete.

Another method is sandblasting. This will remove the film, but it may also make the concrete extremely rough —or even cause the surface to become pitted.

The best method of removal is to grind the slab with a concrete or terrazzo grinder. Grinding will remove film both on the surface and in the surface pores, and it will cut a new surface on the concrete. In addition, grinding insures a smooth, level floor. A simple "mat test" should be employed after grind ing to check its effectiveness. Lay several pieces of the resilient flooring to be installed on the concrete bonding them to the slab with the recommended adhesive. If the bond is still strong after 10 to 14 days, the slab is react for resilient flooring installations.

Floors to be specified

In general, the same Armstrong Floors used on convetionally constructed suspended slabs should be specified for lift slabs. The methods of installation—and the Arr strong adhesives used—are likewise the same. If, as sometimes the case, the slabs are of lightweight aggr gate concrete, they may absorb atmospheric moistur In such cases, only those floors that can be specified f on-grade concrete should be used, with the appropria Armstrong adhesive for on-grade use.

If the lift-slab construction entails special consider tions, it is advisable to consult the Armstrong Archite tural-Builder Consultant in the nearest Armstrong Flo Division District Office. Or write direct to the Arn strong Cork Company, Lancaster, Pennsylvania.



FLOOR DIVISION . LANCASTER, PENNSYLVANI



In hydraulic lift-slab construction, concrete slabs are poured directly on top of each other at ground level. The slabs are coated with a "breaker" compound that prevents their sticking

together. When resilient floors are installed on this type of c crete subfloor, the breaker compound should be removed grinding to assure proper bonding of the flooring adhesi



and in Eight Attractive School Colors

LOXIT MIRAWAL PORCELOX Porcelain Steel Chalkboards are produced in single, straight-line continuous electric furnaces to make the long lengths possible. The vitreous porcelain surface is fused to the nickeled steel sheet at a temperature of 1600°F, making it unexcelled as a porcelainized metal coating for all chalkboard uses.

heck these advantages!

TWO TYPES AVAILABLE

LOX-85 NU-VICTORY LOXIT MIRAWAL PORCELOX - a light gauge porcelain steel chalkboard face sheet laminated to 3/8" 'structo-core" with a porcelainized steel backing. Available up to 4' x 16'-in one piece. LOX-86 NU-IMPERIAL LOXIT MIRAWAL PORCELOX - a light gauge porcelain steel chalkboard face sheet laminated to $\frac{1}{4}$ " exterior grade plywood with a rust resistant metal backing. Available up to 4' x 12'-in one piece.

DURABLE AND PERMANENT

The vitreous inorganic porcelain surface will not craze or crack. Shrinkage and expansion is negligible. Will take magnets.

SCRATCH AND IMPACT RESISTANT

The flint-hard, glass-smooth porcelain surface provides high resistance against scratching and marring. Tests at least 6.5 on scale of Hardness of Minerals.

SANITARY AND EASY TO CLEAN

The glass-hard porcelain surface is impervious to acids, odors, grease and solvents. Easily cleaned with a damp cloth.

5. FIREPROOF CONSTRUCTION

LOXIT MIRAWAL PORCELOX chalkboards are fireproof. Will not support combustion.

6. LIGHT WEIGHT-SIMPLE TO INSTALL

The thinness of gauge which is adequate for all chalkboard requirements makes them light in weight, simple to install and easy to handle during erection.

7. EIGHT BEAUTIFUL FADEPROOF SCHOOL COLORS Rite Spring Green, Rite Dark Green, Rite Gray, Rite Tan, Rite Coral, Rite Blue, Rite White (Ivory), and Rite Black.

8. MAINTENANCE FREE—ECONOMICAL

They are maintenance free except for cleaning. Will meet any reasonable budget both in the construction of the building and in its maintenance.

9. TRIMMED

Available completely trimmed ready to set in place-with or without the use of the Loxit Miracle Adjustable Chalkboard Setting System.

Write today for literature and sample panel.



Copyright 1957, Loxit Systems, Inc.





First Baptist Church, Long Beach Cal. K.S. Wing, architect.



Bradford Church Monastery, Bradford, Vt. William Colleary, architect.



Bahai Temple, Wilmette, Ill. Louis Bourgois, architect.



Architectural Concrete is ideal for churches of any design

These photos illustrate the versatility of architectural concrete for churches. No other material offers architects more freedom to translate the wishes of building committees into structures that please congregations aesthetically and economically. It combines distinctive beauty, rugged strength and proved economy.

Beauty can be imparted by forming materials, by a finish treatment or by ornamentation. Ornamentation is economical because it can be cast integrally with structural elements.

Architectural concrete is exceptionally durable because it can be designed to resist weathering in any part of the country. And it can't burn or be damaged by rats, rot or termites.

With its moderate first cost, low maintenance cost and long life architectural concrete serves at *low annual cost*.

For more information about designing churches and other structures in architectural concrete, write for free, illustrated literature. It is distributed only in the United States and Canada.

PORTLAND CEMENT ASSOCIATION Dept. A11-68, 33 West Grand Avenue, Chicago 10, Illinois

A national organization to improve and extend the uses of portland cement and concrete... through scientific research and engineering field work.

Cathedral of the Holy Spirit, Bismark, N. D. W. F. Kurke, architect.

Church of Christ the King, Seattle, Wash. Paul Thiry, architect.



Holy Blossom Synagogue, Toronto, Canada. Chapman & Oxley, architects.







ake Elementary School, Glen Lake, Minn. cts: Bissell & Belair, Minneapolis, Minn. ntractor: Dale Tile Co., Minneapolis, Minn.



many.Spartan tile selected for Glen Lake school

dvanced thinking of our architectural des, their skillful blending of modern and onal material, and their utilization of new g techniques are providing America with orld's finest school buildings.

program, ceramic tile is playing an imt part. New setting methods offer new cunities to use tile where cost or weight is a factor. And Romany-Spartan offers a complete line to fill every functional and design need. Little wonder that more and more architects the country over are specifying Romany-Spartan.

If you'd like design help or more information, contact your nearby Romany-Spartan representative or write United States Ceramic Tile Company, Department J-13, Canton 2, Ohio.



Member: Tile Council of America The Producers' Council, Inc.

Today's smartest floors wear KENTILE

This is New KENTILE[®] Asphalt Tile

So decidedly improved it makes other asphalt tile seem old-fashioned! Gives you a finer, smoother surface--greater light reflectance --and brighter colors than ever before!



available in Asphalt tile, Vinyl Asbestos, Solid Vinyl, Cushion-back Vinyl, Rubber and Cork tile...over 175 decorator colors!

SPECIFICATIONS:

SIZE: 9" x 9"

THICKNESSES: 1/8"; 3/16" for extra-heavy commercial duty (marbleized only)

COLORS:

Marbleized -- 21 Carnival -- 13 Corktone -- 4 New Random Tones in green, gray, and rose

APPLICATION:

Can be installed on any smooth interior surface, even concrete in contact with the earth.

IMPERIAL OIL BUILDING

Toronto, Ontario

ARCHITECT:

Mathers & Haldenby



unn

IIIII IIIII mm mm mm mm mm mm 111111 mm **NEGEN** 111118 110383 INNER DE LE COLUMN

> 19 Balanced Doors in the entrances to Imperial Oil Building in Toronto.

The Door that lets TRAFFIC through QUICKLY

lison



ELLISON BRONZE CO., INC. Jamestown, N.Y. the BALANCED DOOR

representatives in 77 principal cities in the United States, Canada and Puerto Rico

still another steel-frame skyscraper for Pittsburgh's Growing Gateway Center



Structural steelwork for fifth and newest building also fabricated and erected by American Bridge

As recently as eight years ago, the parklike area in the foreground of the picture above and the large buildings bordering it just didn't exist. Today, Pittsburgh's Point Park and its growing Gateway Center have captivated even the most imaginative of our progressive city planners.

All five buildings built thus far in this newly developed area are steel-frame structures fabricated and erected by American Bridge. They are the three stainless steel skyscrapers known as Gateway Buildings 1, 2 and 3; the State Office Building; and the Western Pennsylvania Headquarters Building of the Bell Telephone Company, which is still under construction.

The new Bell Telephone Headquarters is a 12-story office building, $99' \ge 208'$, consisting of beam and column framing for 1st to 12th floors, mezzanine floor, attic floor, main roof and penthouse roof. A total of 2,350 tons of steel was involved. Field connections were made with high strength steel bolts except in the case of minor members, where ordinary machine bolts were used.

The use of steel-frame construction greatly speeds the transformation and development of business areas like Pittsburgh's Gateway Center. And American Bridge has the facilities, the know-how and the skilled personnel to handle any type of steel construction with maximum efficiency and economy.



Western Pennsylvania Headquarters Building, Bell Tele phone Company of Pennsylvania, Pittsburgh, Pa.

Designed by Press C. Dowler and William C. Dowle Architects, Pittsburgh, Pa. and Frank N. Kneas, Enginee Philadelphia, Pa.

AMERICAN BRIDGE DIVISION, UNITED STATES STEEL CORPORATION · GENERAL OFFICES: 525 WILLIAM PENN PLACE, PITTSBURGH, PA Contracting Offices in: AMBRIDGE · ATLANTA · BALTIMORE · BIRMINGHAM · BOSTON · CHICAGO · CINCINNATI · CLEVELAND · DALLAS · DENVER · DETROIT · ELMIRA · G HOUSTON · LOS ANGELES · MEMPHIS · MINNEAPOLIS · NEW YORK · ORANGE, TEXAS · PHILADELPHIA · PITTSBURGH · PORTLAND, ORE. · ROANOKE · ST. LOUIS · SAN FRANCISCO · TREN UNITED STATES STEEL EXPORT COMPANY, NEW YORK





Mrs. architect

When in doubt on what floor finishing material to specify for a client, rely on your Huntington Representative. He is the Man Behind the Drum, a skilled technician who has firsthand knowledge of many cleaning and refinishing problems that can be of value to you and your clients.

This Man Knows how to properly finish wood floors



The Man Behind the Drum

For complete information and sound recommendations on any floor finishing or maintenance problem, call your Huntington Representative. His skill and experience is yours, at no cost to you or your clients.

AND GIVE THEM ADDED YEARS OF HARD USE

When you specify Huntington Seal-O-San or any other Huntington floor finishing material, you can be assured that your client will have the finest floors possible. And here's why: Every Huntington Representative is a trained, skilled technician who knows exactly how and why to properly refinish wood floors to maintain the beauty you have designed in them.

Every Huntington Representative has this skill, because Huntington products service more than 25,000 floors daily. And from this accumulated knowledge of cleaning and refinishing problems comes the skill and experience that practically guarantees the finest results possible at all times.

So, when you specify "Huntington Seal-O-San," or any other Huntington floor finishing product, you can rest assured that your client will receive not only a high quality product, but the experience and skill to use it properly.





ACETYLENE HYDROGEN PLANTS - AIRCRAFT HANGARS - AIR REDUCTION PLANTS -AMMUNITION DEPOTS - ARTIFICIAL GAS PROPERTIES - ATOMIC ENERGY PLANTS -CARTRIDGE PLANTS - SOLVENT STORAGE ROOMS -CELLULOSE PROCESSING PLANTS - CHEMICAL PLANTS - COAL STORAGE - COMBUSTIBLE ANESTHETICS PLANTS - DIP TANKS - FLAMMABLE LIQUIDS - DRY CLEANING PLANTS - ENAMEL AND LACQUER PLANTS - GASOLINE PLANTS -GRANERIES - FLOUR MILLS - HOSPITAL OPERATING ROOMS - MAGNESIUM GRINDING DEPARTMENTS -NATURAL GAS PROPERTIES - PAINT SPRAYING DEPARTMENTS - PAINT AND VARNISH PLANTS -PLASTIC PROCESSING PLANTS - POWDER PLANTS -

HOW MANY ON YOUR BOARD? PRINTING PLANTS - REFINERIES - SHELL LOADING PLANTS

Even the best-laid Conductive Floors can go sour, almost overnight—if the wrong maintenance materials are used on it. For example, ordinary soap-type cleaners deposit an insulating film which quickly destroys the floor's conductivity, restores the explosion hazard. To preserve the original safety, take this extra step—

when you specify a

specify its MAINTENANCE with Hillyard Conductive Floor Cleaner

the ONLY Floor Cleaner to carry this U/L Listing, Hillyard CONDUCTIVE FLOOR CLEANER was specially developed to keep a Conductive Floor Clean and Conductive to meet requirements of National Fire Protection Association Code No. 56 relating to Conductive Floors. Independent laboratory tests show that CONDUCTIVE FLOOR CLEANER removes up to 99.2% of soil from flooring -yet its action is gentle-safe to use on any flooring that water won't damage!



THE NATIONAL SAFETY NEWS lists 28 locations where Conductive Flooring is needed.



"On Your Staff,

Not Your Payroll".

DEPT. A-3 ST. JOSEPH, MO. Passaic, N. J. • San Jose, Calif.

BRANCHES AND WAREHOUSE STOCKS IN PRINCIPAL CITIES

NOTE TO ARCHITECT

Depend on your local Hillyard Maintaineer® for expert consulting advice on floor treatment specifications—application procedures —"Job Captain" service. No charge, no obligation.



Hollywood Federal Savings & Loan Association, Hollywood, Florida Gamble, Pownall & Gilroy, Architects

HNICAL CO-OPERATION

m drawing board to on-the-spot supervision of installations, an hitect can always rely on Ludman Engineering Service for assistance any stage of planning or construction.

-TESTED PERFORMANCE

Ludman products are subjected to the most rigid laboratory and tests for the perfect performance of every integral part of every man product, before release.

ERIENCE

nan was one of the first to enter the field of curtain wall construction. result, hundreds upon hundreds of Ludman Curtain Wall installations by give tested proof of the superiority of Ludman engineering and man know-how. When you specify Ludman, you specify experience!

RTAIN WALL... by LUDMAN

n Curtain Walls match architectural vision with superb v engineering that reduces construction time and costs, ally eliminates maintenance, yet is always beautiful, t and flexible.

om basic wall treatment of integral wall units that combine v and wall in one easily handled, quickly fastened laborunit, Ludman Curtain Walls are easily adaptable to any eatment desired, offering a wide range of materials, colors tures for interior and exterior walls.

DS



PROVEN ADVANTAGES TO ARCHITECTS in LUDMAN Curtain Wall



City

Zone State

Name

Street.



PRODUCTS MADE BY THE MAKERS OF FAMOUS

AUTO-LOK ALUMINUM AWNING WINDOWS

WINDO-TITE ALUMINUM AWNING WINDOWS

ALL-WEATHER SLIDING GLASS DOORS

DM

INTERMEDIATE ALUMINUM PROJECTED WINDOWS

NEW Sunti INSTALLS CLEAN AND EAS Cuts Installatio

Suntile SETFAST wat

Suntile SETE

A tremendous forward step for ceramic tile—with t to architect, contractor, and buyer!

Suntile SETFAST Wall Tile is the most modern, st and fastest method of installing tile.

It's economical. SETFAST fits Suntile to modest b No need to use substitutes.

Suntile SETFAST Wal

... pre-bonded on durable that strengthens tile-t bond like the ribs in rein concrete . . . and provide additional safety fact vibration, structural shift temperature changes! In 16 most popular contents

TFAST* Wall Tile TH STRONGEST BOND me and Costs



LATION – Ideally suited for thin-set method using either an approved self-curing mortar. Where necessary by be installed over mortar beds of thickness. <u>No soaking required</u>!



MODERN ECONOMY – 12-tile, factory inspected units cover $1\frac{1}{2}$ sq. ft. Individual operations reduced.



PERFECT SPACING – beautifully precise, auto matic alignment and easy handling. SETFAS Wall Tile conforms perfectly to minor irregula ities in existing wall surface!

SETFAST Ceramics

two foot sheets offer you design versatility with economy!

ts 288 one-by-one inch ceramics at once, perfectly spaced. He can inspect his work, avoid error, installs ceramics *face up*.

soak off, no mess to clean. Tile can be grouted immediately! eramic patterns encourage originality in floor and wall design geometrics, abstracts, and randoms.

om stock, including the famous, exclusive Max Spivak motifs! alog.

CAN OUR SPECIAL DESIGN STAFF HELP YOU?

artists, headed by Harry J. Macke, will be glad to suggest tile to your plans or elevations; or put your own tile designs m.





P.O. Box 71, Cincinnati 15, Ohio



Drake University, Des Moines, Ia. Architects: Saarinen, Swanson and Saarinen, and Brooks-Borg. Contractors: Arthur H. Newmann & Bros., Inc.

HOPE'S WINDOW WALLS KEEP THEIR PROMISE...

More than ten years have passed since the architects designed this building . . . one of the earliest "Window Wall" installations in the United States. At the time, when Hope's Window Wall construction was adopted, we pointed out the labor-saving advantages of its installation and confidently predicted that upkeep expense would be low. That has proven to be the case. The total Window Wall area in the building group is more than four times that illustrated in the photograph; the location is in a severe climate; yet the maintenance is less troublesome and expensive than for comparable, conventional masonry and window construction.

The great increase in the use of Window Wall construction by architects is sufficient evidence that it offers economies in original building cost and that its esthetic effects and benefits to building interiors are pleasing to owners.

Hope's engineering and planning assistance can be of great help to you and is always available when you have in mind a building with an interesting window problem. Write for Catalog 152 AI for your files.

HOPE'S WINDOWS, INC., Jamestown, N.Y. THE FINEST BUILDINGS THROUGHOUT THE WORLD ARE FITTED WITH HOPE'S WINDOWS



OF THE AMERICAN INSTITUTE OF ARCHITECTS

EDITOR EMERITUS Henry H. Saylor, FAIA

> EDITOR Joseph Watterson

TECHNICAL EDITOR Frederic Arden Pawley

EDITORIAL ASSISTANT Walter Neil Letson

PRODUCTION ASSISTANT Gabrielle J. Cheston

> ART ASSISTANT Dorothy E. Harris

CONTRIBUTING EDITORS:

David C. Baer John Stewart Detlie Carroll L. V. Meeks Richard J. Neutra, FAIA Henry H. Saylor, FAIA Charles M. Stotz, FAIA Ralph Walker, FAIA Philip Will, Jr., FAIA Edgar I. Williams, FAIA William Wilson Wurster, FAIA

REGIONAL EDITORS:

CALIFORNIA-NEVADA-HAWAII DISTRICT Corwin Booth CENTRAL STATES DISTRICT John T. Murphy GREAT LAKES DISTRICT Talmage C. Hughes, FAIA GULF STATES DISTRICT John H. Pritchard MIDDLE ATLANTIC DISTRICT Paul Schell NEW ENGLAND DISTRICT Samuel S. Eisenberg NEW YORK DISTRICT Charles R. Ellis NORTH CENTRAL STATES DISTRICT Raymond C. Ovresat NORTHWEST DISTRICT Carl F. Gould SOUTH ATLANTIC DISTRICT William E. Willner TEXAS DISTRICT John Flowers WESTERN MOUNTAIN DISTRICT Bradley P. Kidder

VOL. XXVIII, No. 7

NOVEMBER 1957

CONTENTS

Opinions expressed by contributors to the A.I.A. JOURNAL are not necessarily those of the A.I.A.

EDITORIAL:	
by Charles M. Stotz, FAIA	385
PUBLIC RELATIONS-AND PROFESSIONAL ETHICS	
by Robert R. Denny	387
FROM THE EXECUTIVE DIRECTOR'S DESK	390
NECROLOGY	391
A NEW ARCHITECTURE FOR MAN	
by Ernest J. Kump, FAIA	392
MEETING OF THE ADVISORY COMMITTEE ON U.S. BUILDING IN BRUSSELS	398
EDUCATION	399
LIFE IN A MARTINI GLASS:	
by Alfred Bendiner, FAIA	400
Sharp Focus	402
CHARLES SUMNER GREENE	402
PROTECTING OUR RESIDENTIAL NEIGHBORHOODS	
by Austin W. Mather	403
THE ARCHITECT TODAY	
by August Heckscher	408
FAVORITE FEATURES	414
THE ARCHITECT-IN-TRAINING PROGRAM LAUNCHED	415
Regional News	416
Archcrostic	417
AIA LIBRARY NOTES	418
BOOK REVIEWS	419
Letters to the Editor	420
THE EDITOR'S ASIDES	422
SCHOOL PLANT STUDIES	
EDUCATIONAL THEATRE ARCHITECTURE	423
TECHNICAL NEWS	429
CALENDAR	430





EDITORIAL:

A T THE CENTENNIAL CONVENon we pondered many aspects of the century that chons but I do not recall any speculation about conventions of the future. Will they continue to ow in size and complexity? Will the changes be perficial? I for one am willing to let the sleeping ure lie. Others may grapple with this questione item of research. I am moved to make a few servations about the changes in conventions since middle twenties, to show how much we have ogressed since those days.

Large conventions are not peculiar to America. In Munich a few years ago we planned a visit Freiburg which had to be abandoned as there re no accommodations to be had for miles around town. There was an enormous agricultural fair t attracted delegates from every part of the conent. Europeans love large expositions and mass herings. However, we Americans do very well. It summer we inundated London with lawyers and cerne with Rotarians. And here in Washington re were 4300 registered at our own Centennial pvention, the largest we have ever held.

In our early conventions most of us lived, ked and played under one roof: now we require st of the facilities in town. Increased numbers e worked a change in the programming and racter of our annual meeting. The agenda is a uplex pattern with seminars and panel discussions, a three-ring circus, scheduled simultaneously several places at the same time. The delegate s a Smorgasbord frustration in choosing his pury. We no longer dine on the hard tack of itute affairs. These have largely been predigested in private wranglings of the Board. And surely no one misses the old interminable business sessions which either brought us to our feet in an uproar of controversy or submerged us in a tedium that eventually drove us in small groups from the hard convention seats to the quiet and comfort of the local bistro. Many of these latter impromptu intimate gatherings, I hesitate to say, are treasured memories; but they are almost a thing of the past.

The size and complexity of the annual meeting is reflected in the program of convention meetings as well as entertainment. Each delegate may get the particular thing he wants if he can find it or if there is no conflict in his scheduling. The last two conventions drove me to the expedient of ruling a sheet of paper into boxes, one for each hour of the day to remind me where I was to be morning, afternoon and evening as well as for breakfast, lunch and dinner. The chart was complicated by an overlay of my wife's activities which happily here and there coincided with my own. In spite of this precaution, I found we occasionally had tickets for two simultaneous events or could not get back from one in time before another had started. As the days went by and our fortitude waned, the chart was a handy means of determining what must go by the board. Conventions thus reflect that bane of modern life; we have everything-everything but enough time.

The Board's committee on arrangements must be commended for their ingenuity in making a schedule that will work for so many who want so much; the same goes for the Host Chapter, who are now in show business in a big way. It used to be that we had nothing but business at conventions and had to make our own play. For years the only really live subject was the controversy between the modernists and the traditionalists. They now lie down peaceably together. Integration is not yet complete, but the heat is off.

Large attendance has raised a serious problem with two of the main convention events, the President's reception and the annual dinner. The solution is not apparent to me. It is now difficult to find the President at his reception as we trample one another in the largest available hall or outdoor terrace, while the annual dinner is so large that latecomers, if they can get in the room at all, require field glasses to see the features of the speakers at the head table.

At my first conventions in the twenties it did not occur to me to take my wife. There were few events for the women and it seemed incumbent on me to tend my knitting as a conscientious delegate. I remember when C. Herrick Hammond with a tap of the gavel pronounced the 1929 meeting in session, formally greeted us and then, with a winning smile, included a welcome to the handful of women in the balcony. Now we have turned co-educational.

A convention means many things to many architects. But, above all, it means to most of us an opportunity to foregather with those who speak the same language as we do-other architects. Though we practice in many different parts of the country, we share the same problems, face the world with similar trepidation, and suffer like consequences. Although I like to hear my fellow architects speak from the platform I prefer to talk with them informally and leisurely in small groups. This is now very difficult to accomplish. I must be content to greet my friends hastily as I stumble over them while hurrying from one event to another. This year I waved to several long-lost companions of other years across the crowded rooms but either could not locate them later or did not have the time to try.

His first convention is an experience every architect remembers. It was a thrill to rub elbows with the great men of the profession who were otherwise only known by the buildings on which they had left the stamp of their personality. Klauder, for instance, I first saw standing in the lobby of the Mayflower with several other architects grouped about his ample curved facade. As I came up he was saying: "The client is the chief obstruction to good architecture. He should be seen only twice, when he gives you the job and when it is finished." Some one said, "If you could manage that Mr. Klauder you would be a remarkable man." Peering down the stem of his pipe, he replied "Well, I am a remarkable man."

386

I had the great pleasure at our Williamsbu convention of browsing around one afternoon wi Charles D. Maginnis and his wife. Among oth things, we visited an immaculately restored ear kitchen presided over by a colored mammy in pi turesque dress. He drew her out in a conversation which I remember more vividly than the details the architecture. Later, as president, the meetin at which he presided were always well attende Gifted in his profession, coherent and literat guardian of the amenities, his personality permeate and gave distinction to many conventions. I w astonished when he told me that he endlessly i viewed and revised the subject matter of his tal before they were given. They had the sparkle at charm of extemporaneous speech. Maginnis' br comments in acceptance of the Institute's Go Medal deserve preservation in any anthology American literature.

Who can forget Hubert Ripley, the noblest a most engaging Roman of them all. Quiet and se effacing, he was a much sought-after companion many convention gatherings. Writing in the da when the journals provided ample space for precious irrelevancies of the architect's life, he h left a literature that should be assembled. I h collected and bound all of them that I could fi and showed them to him once when he visited r Curiously enough he had kept few of them and w amazed to see them all together. Some of them had forgotten about. He borrowed the collection relive the many memories they aroused. They exu that special drafting room humor peculiar to profession, decorated with delightful thumb-r pencil sketches and quotations from the La classics. I finally got up the courage once to ask h whether they were genuine quotations, not that really mattered. In reply he sent me a volume of works of Publius Papinius Statius.

On one occasion at a convention a group us spent a memorable afternoon with Aalto, Finnish architect, who spoke of his country and office, from which he lost many members in Russian War. Ripley drew him out deftly, a c versation between two remarkable and quite similar architects that remains a classic memory my convention experiences. At this group Rip quizzed the waiter on the building of a julep, incident that defies reproduction.

The conventions of today, all things consider are much better than ever before. While increa numbers have made them more cumbersome to range, there is much more fun and profit for The pace has increased with the times, Clevel beckons. See you there next July.

CHARLES M. STOTZ, F

BY ROBERT R. DENNY



wann Studio

Robert R. Denny is public relations director of Henry J. Kaufman & Associates, of Washington, D. C., the public relations counsel to the AJ.A. This is the second of a series of articles which discusses the theory and practice of public relations for the architect and his professional association.

ublic Relations —

and professional ethics

WHEN WE FIRST BECAME ASSOCIATED with IA, we were warned by architects that they were bing to be very difficult to deal with. After nine onths' association, I can't say we've experienced uch personal distress or found architects very ugh or troublesome.

There *is*, however, one point of personal irritaon. It's an infrequent thing, but still we find it agging. The irritation is created by the architect -usually the very young architect—who carps about s professional status, apparently considering it hindrance in his work. This, of course, is a rare tuation. More frequently, the criticism of profesonal status is unintended, and those who try to reumvent professional ethics do so for the most art unwittingly and would be horrified if they ought they were chipping away at the stature of the profession.

It's irritating to hear, even infrequently, about hat's wrong with being a professional, when there's very much more to say about what's right with

Professional status, in itself, is a highly desir-

able public relations goal and many, many people in business and industry are doing their best to make the public regard them as professionals. You've undoubtedly heard from the office equipment salesman who now calls himself an "office equipment specialist." Or the supplier who identifies his top salesmen as "architectural relations specialists." This, perhaps, makes everybody feel better and that's fine, but claiming professionalism isn't the same thing as being a professional.

You can find as many definitions of "profession" and "professional" as there are dictionaries, but the common point of agreement seems to be that the professional has a "calling," which is compatible with commercial enterprise and personal profit but places him on a plateau above salesmen, businessmen, technicians, and various crafts. The public, by and large, respects the person with a "calling." It is a distinct advantage to him who possesses it.

Self-identification with professional status is certainly no problem to the doctor, lawyer, or minister. Why, then, to the architect? It is, perhaps, because he is responsible for such a multiplicity of tasks in society. He must be the artist, the professional consultant, the engineer, and the canny businessman. This would create an element of schizophrenia in any man's mind. Although he may remain somewhat aloof from competition as an artist, he certainly faces it from others when he plunges into the economic mart.

Formulation of a code of ethics is one ingredient of professional conduct, although it must be recognized that no such code can—or should—attempt to plug every loophole which leads to unprofessional behavior. Our interest in this rather abstract matter is simply that good public relations for the architectural profession demands protection of this professional status. We should also say that the interpretation of the code is the exclusive privilege of the Board of Directors and the Secretary, to whom this power has been delegated. The Board has granted permission for us to discuss the matter in this article and the manuscript has been approved by Secretary Edward L. Wilson.

The Board has recognized the impossibility and undesirability of erecting a chink-proof wall against possible abuses of the code by adopting the following resolution:

"Policy: The Mandatory Standards contained in AIA Document 330 are believed to be clear. concise, and understandable. It should therefore be possible for each member to read and interpret these standards for himself as they may apply to any proposed course of action or they may be used to measure the ethical standard of any action already taken. The Board of the Institute will not for itself or through the Secretary issue interpretations of these standards as they apply to hypothetical cases. The Board believes that very few situations are apt to arise where a member cannot read the Mandatory Standards for himself and arrive at a correct interpretation of them. It therefore urges the members to refrain from directing inquiries to the Secretary concerning interpretations of the Mandatory Standards. This position is taken in the belief that to do otherwise is unjudicial and possibly prejudicial to any case involving charges of professional conduct which may later arise."

Nevertheless, questions come up from time to time which suggest genuine doubts in the minds of members, and sometimes chapters, as to the real intent of the rules. Let's consider a few; again, keeping in mind that there are undoubtedly technicalities which someone could use to violate them, if he so chose. Neither professional performance nor ethical conduct can be legislated.

388

Standard 2 of Part II says:

"An Architect shall not render profession services without compensation. He shall neither offer nor provide preliminary services on conditional basis prior to definite agreement with the client that if the contemplated project succeeds, he will be employed as its Architect

The basic purpose of this standard is to elin inate the undesirable practice of performing pre liminary service or supplying free sketches to get commission. Standard 4 says that "An Archite shall not offer his services in a competition except a provided in the Institute's Competition Code Standard 2, however, recognizes that under son state laws and circumstances, it is *necessary* to pe form basic preliminary service on a contingent basi It sets up ground rules for this and takes the el ment of competition out of the situation.

Possible violations of the code through don tion of architectural service to churches, friends, o clubs also have been discussed. In this connection the Board ruled:

"Policy: The Board of Directors considers th the statement in Mandatory Rule No. 2 of th Standards of Professional Practice, AIA Doc ment No. 330, which reads, 'An Architect sha not render professional services without cor pensation,' refers particularly to cases in whice competition with other architects is present and that, where professional services a rendered without compensation or, where a architect reduces his usual fee by donation, the requirements of Rule No. 3 shall be observed Rule No. 3 reads, in part, 'An Architect sha not . . . use donation as a device for obtainin competitive advantage.'"

Standard 3, "An Architect shall not knowing compete with another Architect on a basis of pr fessional charges . . ." simply mean that the profesional should not auction himself and his talents the marketplace. Schedules of minimum fees habeen recommended by chapters and regions for t guidance of members and the public. They are n and cannot be mandatory. There is and alwa should be competition among architects on the bas of the quality of service rendered, the ability and c pacity to handle various projects, the talent existiin an architectural firm, and so forth. It is left the individual to know in his own mind whether not the fee he names is an element in competitic

The crux of Standard 7, that "An Archite shall not engage in building contracting" would see to be crystal-clear. It refers to a matter of divid loyalty; on the one hand, to the client; on the othe to interest in a profit on the sale of materials at labor. Standards 8, 9, and 10 refer to the injury one architect by another, the supplanting of one by mother, and the undertaking of a commission on a ob that already has an architect. These problems can be resolved by asking the client two questions— (1) Do you have an architect? and (2) Has there been one? If the second is answered affirmatively, hen it calls for another question—(3) Has his conract been terminated?

A sticky situation and a considerable amount of onfusion occur when it comes to the question of romotion and paid advertising. Despite periodic and in our opinion, rash) efforts to scuttle this proibition, it has remained. Standard 12 forbids the use of paid advertising in any form. On the other and, recognition by the press is extremely desirable. Auch has been made of imagined conflicts between he two, but the confusion is one of semantics, and onflicts are more imagined than real. Faced with his problem of definition, the Board has appointed special committee and subsequently adopted the ollowing resolution in 1957:

"Whereas the existing Mandatory Rule of the Institute prohibits the use by the Architect of paid advertising and

"Whereas, the indiscriminate distribution of brochures, reprints, etc., is considered to be paid direct advertising and as such is damaging to the status of the profession, and

"Whereas, there is need for more accurately defining such paid advertising, be it

"RESOLVED that paid advertising, as referred to in Rule 12 of Part II, Mandatory Standards, AIA Document 330, is defined as any form of *paid* announcement or printed material in the public press or circulated indiscriminately by an architect to the public or a segment thereof, intended to aid directly or indirectly in securing actual commissions for that architect, with the following exceptions:

"Brochures containing factual information concerning an architect's work; reprints made at the architect's expense, or in his behalf, of items in the public press; and announcements, reports, analyses, and descriptive data relating to an architect's work shall not be considered to be paid advertising, provided their direct distribution by the architect is limited to those persons with whom the architect has had previous professional or personal contacts."

Assailable? Certainly. Easy to violate, too, anyone wants to do it. But that's not the point. very architect of integrity wants to do the right ing; it's just a matter of knowing what it should be.

Paid advertising would destroy the profession, ven if the Institute and its members could match romotional funds with the giants of industrywhich they cannot. It would remove the mantle of professionalism from the architect. And it sheds no light on anything to carp about the word "paid" and use the kind of argument that goes "... well, isn't everything *paid* for; publicity isn't free, you pay somebody for it." Publicity is not advertising. The term "paid advertising" refers to space that is paid for directly or air time that is bought.

It is for the architect's conscience to determine whether the brochure he distributes is factual. In this, he is directly responsible for language employed by the person who writes it for him. However, it is not this that confuses-it is the matter of distribution itself. The key word here is indiscriminate. Admittedly, it is a word that involves personal assessment and definition. But look at it from a broad vantage point. Do you think a brochure describing the work and organization of an architectural firm should reach the desk of a stranger-albeit a prospective client-in the same stack of promotional mail from vendors of nuts and bolts, electrical appliances, and prefabricated "we'll solve your building problems" schools? I hope not. The architect who places himself in the position of a vendor is committing professional suicide.

There is a vast difference between handing a pamphlet to a man who wants to know something about your work—or mailing a magazine reprint to the chairman of a school board with whom you have been in consultation—and "shotgun mailing" large quantities to strangers in the fashion of the directmail advertising agency.

The same philosophy underlies the prohibition against using architect's pictures and testimonials to plug a building material or product. During the brief period when this was permitted on an experimental basis, things came to a silly state whose nadir was a "reader" ad in a newspaper proclaiming a young architect as a "master designer" of martinis. Advertisers do not like the prohibition against architectural testimonials, and magazines, whose revenues come from advertising, cannot be expected in all cases to see things clearly in this foggy area. Both situations are understandable and imply no criticism of anyone.

There is no short-cut to success, even professional success. Young architects, just out of school and eager to carve a niche for themselves, understandably want to use every means at hand to create a reputation. We offer no magic formula, except imaginative, competent work. They can also heed the well-known television advertisement, "Do what doctors do . . ." Better still, do what successful architects do. Plunge into your community life. Join —everything you can. Speak when you can. Serve. When a firm can afford it, it can seek competent 389

public relations advice or, at least, hire an experienced and intelligent newspaper reporter on a parttime basis to publicize the firm's work and achievements by honest and legitimate means. The young architect can benefit himself by offering his services to his chapter programs, including its public relations program. Support of his professional society is a means of accomplishing many things, directly and indirectly, which no individual can do for himself.

Meantime, don't envy the vendor and his advertising. He envies you.

(Next month: Newspaper Publicity— Tips and Techniques)

From the Executive Director's Desk

IT WAS MOST REFRESHING the other day in Denver to come again upon that charming bit of braggadocio "'Tis a Privilege to Live in Colorado." This happy plug, which appears every day in the Denver Post, set me to wondering whether we might not emulate and come up with our own cheerful boast, for I could not help but reflect that wonderful as it is to be in Colorado it is even more of a privilege to have lived in our time and in the United States. No other age in recorded history has seen the change, the development and the progress that our era has enjoyed (or, in the mind of the pessimist, has experienced) and surely no human beings ever have had that marvelous opportunity which is ours to live with history being swiftly made. Those of us who have reached that flexible age known as "middle" age cannot claim omniscience or longevity, but we can claim to crowded, rapid and exciting experience.

One can best illustrate through reminiscence, and assuming that others have the enjoyment that I have in reading personal accounts, I venture to become mildly autobiographical. I had the good fortune to have been ser abroad when quite young and to some of the less travelled parts of the old Austro-Hungarian Em pire, so as a boy I myself saw the Austrian Empere Franz Josef in his white coat, his scarlet trouses and his plummed hat, the symbol of an era whic lived in and cherished the past. The old gentlema typified a civilization which, but recently vanished is as remote today as is the empire of the Incas.

Once in a distant part of the Austrian Alp through which we were travelling by carriage, (auto mobiles were then owned only by the very rich an daring) I saw the mails carried in stage coache painted a bright yellow with the crest of the Empirio on the door and the postillion perched on the rewith his long silver horn.

Later in a small English port where I lived for a while, square-rigged ships sailed in and out, no training or show vessels, but working ships plyin their trades. They far outnumbered the coal-burn ing tramps, those evil-smelling intruders in pastor British harbors. Once as a boy, I was sent with n oldest brother to a camp in the Canadian woods an



we came upon an Indian birchbark village, the inhabitants of which, when alive, still travelled in birchbark canoes, and when dead were laid out in a birchbark canoe covered with a second one and the two were set high up in the trees to foil the wolves. We white boys were the object of curiosity, the Indians bringing out their children to see the pale aces. Now that country is a resort.

One summer morning during World War I as was coming back from the lines, I saw a regiment of French lancers riding toward the battle with pennons flying from the tips of their lances.

It was not so long ago that even radio was unmown, television unthought of. Now we have acepted them with varying degrees of equanimity ind can face the swiftly advancing atomic age with certain amount of complacency, assumed or natral, and we are learning that the association of eople of different races is not only possible but aceptable save for the violence manufactured by a ew connivers of evil will.

Our philosophies and our points of view are hanging continually. In architecture many of my eneration were trained in the manner, custom and adition of the Beaux Arts. We have been all brough the imitative, the eclectic, the academic, nd fortunately we have been engaged in the exloration of the new philosophies. We are done ith groping for a new medium of expression and or the new and revolutionary approach. Architecre itself is simply a manifestation of the underlying nilosophies and trends. In the development of ontemporary architecture we realize that the Ameran tradition and character has exerted itself and we we seen those foreigners who have come to our ores to point the way, find themselves absorbed y our civilization and our point of view, thus beming exponents of the American way of archictural life. Architecture has certainly flourished d has reached a point where it has and is producg great monuments-great in the architectural nse-such as the St. Louis Airport, the Connecticut General Life Insurance Company, the Air Force Academy, the buildings at Illinois Tech, at M.I.T., General Motors Laboratory and the hosts of beautiful and fresh buildings to be found anywhere in the United States.

But we wonder if we have not accelerated to the point where in the span of some thirty years we have seen an architectural era start from its first seeds, timid sprouts, full flowers, and that we have nothing to look forward to at the moment but the withering. Perhaps we have reached the end of an architectural era. We are fully aware that there is bound to be a change in our economy and although we may not have to endure again the horrid experiences that were touched off in 1929 and maintained for the next half a dozen years, nevertheless, the inflationary spiral will have to be stopped or diverted lest it destroy us, and this diversion or stoppage will of itself bring about a marked change in our economic thinking and in our philosophies which in turn can well have its impact on architectural thought.

We are also aware that the struggle between the ideologies and economies of the western and communist worlds is not going to taper off. There is no present indication that one will absorb the other, or that those of the communist philosophy will recognize the error of their ways and come to us for assistance and advice. What lies in store we do not know. Conceivably the world will agree that it will have to get along with itself, but there is no present indication that it will do so, except that now that we have found the key to total destruction, in the name of prudence and salvation we may never open the lock.

Indeed, 'tis exciting to live this century in the United States.

Formund R. Turns

ccording to notices received at The Octagon etween August 27, 1957 and September 26, 1957



EMERSON, FRANCIS H. Winter Park, Fla. HALLER, WILLIAM A. Dravosburg, Pa.

H. HETTEL, JOSEPH N.
a. Pennsauken, N.J.
A. SEYMOUR, ALEXANDER D., JR. Oxford, Md.
WILLIAMS, HARRY J. Palm Springs, Calif. 391

A New Architecture for Man

In past eras when there was broad agreement among men on a fundamental philosophy of architecture there resulted periods of environment-building which have later been recognized as consistently harmonious and honored as "great." Where the individual philosophies have been diverse, confusion and discord have resulted. We have recently been passing through such a time. Relatively few American architects seem to have developed a true and profound understanding of what they are doing. There are signs, however, that we are presently evolving toward a substantial agreement on the true principles underlying the design of manmade environment. Ernest J. Kump has set down here a mature statement of his analysis of the true nature of Architecture.

I The Architectural Elements

Wisdom is the principal thing: Therefore get wisdom

And with thy getting, get understanding. Proverbs IV. 7

I BELIEVE I HAVE DISCOVERED basic truths and principles underlying the nature of Architecture that will result in a new Architecture for Man. I do not say this in an attempt to give the impression that I have created anything, much less a new theory or philosophy of Architecture. I believe I have merely made a discovery of that which has always existed but has remained obscure. My feelings are of humbleness, awe, and deep appreciation for having been one, probably among many others, who had the good fortune to be permitted to see and understand that which is a part of the divine order of nature. I do not seek to persuade anybody. I claim nothing. The quest itself is my reward.

The object of my quest has been to discover the nature of Architecture and the principles underlying its creative expression. I believe that in the answers to my quest there lies the secret of how to understand, teach, and do good Architecture. In my quest I have sought:

To understand the nature of Man, To understand the true nature of Architectur and its relationship to the nature of Man, A clear definition of Architecture, and The universal principles underlying the expression of Architecture.

As a result of my quest, my first realization wa that Man by nature is an indivisible physical an spiritual entity endowed with the powers to "Fee think and act."

The second realization that came to my min was that Man by his nature is a creature of space that whatever he is, wherever he is, or whatever h does, he cannot escape from the space in which h finds himself—not for even as much as a fleetin instant. It is in space that Man lives, moves, an has his being. It is inconceivable that Man's earth emergence long preceded his feeling of an inner con cern with the myriad spaces of nature. It becam understandable to me, then, that Architectur evolved as a result of Man's concern with the space of nature in which he found himself, and of his d sire to order these spaces better to suit his physic wants and spiritual needs.

The understanding that Man was endowed wi the power to feel that which he desired, couple with the ability to think and act to attain the obje of his feelings (in this case his concern with t spaces which surrounded him) awoke within me t third realization—that of the true definition of A chitecture, which I believe to be: "Architecture the Expression of Feeling Through Ordered Spa Environment."

These first three realizations formed the ke stone upon which my burgeoning philosophy of A chitecture evolved. This was the first plateau in r



Skelton Studios

principles governing creative expression. These resultant elements are:

ORDER, or the law of discipline of the parts, (grammar in language)

DESIGN, or the ordered arrangement of the parts, (melody in music)

HARMONY, as a principle of balance or rest, and FORM, as the resultant expression of the objective materialized.

These four elements, in addition to being principles, also manifest quality as a resultant principle. Order manifests a quality as the result of the right relationship of the parts. Design manifests a quality as the expression resulting from the ordered arrangement of the parts. Harmony manifests a quality as the result of balance and quiet, and form manifests a quality inherent in the idea of organic unity or wholeness. These things are all fundamental.

In understanding these seven universal elements, I found it necessary not only to know them as principles but also to understand their nature. Again, I sought the answers in what was manifest in nature and the universal order of things.

I observed that everything in nature is endowed with dual properties which are exactly the same as those inherent in the nature of Man. I found that everything in nature outside of Man is also endowed with physical and spiritual properties, and that these properties are related to the consciousness of Man.

Understanding this, I could see that all things in nature, in addition to having physical qualities, are also carriers of emotion. For from observation it is evident that every entity in nature, whether it be a concrete block or a tree or a space, has both physical and emotional properties to which we are all sensitive. I believe this to be true, and since it is generally understood today that all of the universe was created from a simple basic principle,

Y ERNEST J. KUMP, FAIA

tempt to attain my ultimate goal—a clear underanding of the principles underlying the creative exression of Architecture. In seeking the answers to e remaining questions, it was only natural that I rned to the principles inherent in nature herself.

In seeking these answers, I discovered that in I of nature there are manifest certain principles werning all of the activities of Man and the unirse. I further discovered that three of these prinples are the generative elements of all creative acvity. These are:

Center of consciousness, or a judgment sense Organic unity, or an object in view Vocabulary, or the parts between

It is self evident that a subject or center of nsciousness (like Man himself as an entity capable projecting and visualizing an object in view) is cessary to creative activity; that an aim or goal is cessary as that which is to be achieved or matelized in any activity of man; and that a vocabuy of parts is necessary of manifesting, externalizg, or materializing the object in view held by the pject.

These three generative principles, governing the ivities of Man, are manifest in music by the key ne, tonality, and scale degrees; and in literature the subject, object, and a vocabulary of words. thout the principle of these three, neither music r literature could be.

In Architecture, these generative principles are nifest in function, form, and a vocabulary of lding parts. They are further manifest in the chitect as the judgment sense, in his objective as m, and in a vocabulary of emotive parts.

In my quest, I further began to observe that re were four additional elements inherent in the ure of things. These are the elements created the result of the activity of the three generative these properties must also be inherent in the principle of a microcosmic unit from which the universe was created. From my observation, I believe that all things in nature and the universe are created from a basic unit of energy, and that this basic unit of energy contains inherently an indivisible duality of both physical and spiritual (or emotional) properties.

This brief adumbration, then, outlines the basic principles on which my philosophy is based, a philosophy resulting from my quest for the past twentyfive years of seeking the truths and principles underlying Architecture.

II Freedom Within Order

From cradle to grave, this problem of running order through chaos, direction through space, discipline through freedom, unity through multiplicity, has always been, and must always be the task of education, as it is the moral of religious philosophy, science, art, politics, and economy. "The Education of Henry Adams"

TO UNDERSTAND PRINCIPLES but not to understand their application is obviously of little use. Therefore, my quest widened from one of understanding principles to one of understanding their practical application, and this I understood almost simultaneously. Believing it first necessary to understand the underlying principles of Architecture and their application before maturity in architectural design could be achieved, I have never been particularly concerned with attempting sensationalism or tricks in design to achieve publicity or attention in journals or magazines. If publicity has occurred, it has been a result, not a sought-after goal. The primary concern in my architectural activity, today, has been to develop a crystal clear understanding of the principles of Architecture and their application. I am patient. I know that maturity in architectural design and variety in expression beyond anything I can at present comprehend will come in due course of time.



394

ORDNANCE AND OPTICAL SHOP, SAN FRANCISCO NAVAL

In my first awkward attempts to apply the principles that I had learned, I discerned that there were two obvious blind spots in my ability to express myself creatively in Architecture. These were the lack of a clear understanding of the principles o vocabulary and order as related to Architecture. So a new quest started, aimed at understanding the nature of these two principles.

In my approach to my next problem, I chos a very simple method. I decided to divide and con quer, or to take one of the principles at a time and concentrate on it until I had a fairly good under standing of its nature. The principle that I chos to work on first, in its application to Architecture was the principle of *order*. I chose this principl first because I had always felt the importance of order and was mindful of Pope's great admonition "Order is heaven's first law."

When I contemplated nature, I observed that the whole universe and everything in it as created be God is based on order. To be in harmony with unversal nature, Man must follow nature's laws. When Man has done this as God's creative deputy, we hav Man-made order; where he has disregarded the law we have disorder. This applies to all fields of huma activity, including Architecture.

My first attempts to apply the principle order in my work were in the area of physical of dimensional order of the structure and parts of building. I experimented with various dimension of modules and applied the principle of modula dimensional design in all of the work that I unde took. This taught me many things. I discovered that working to a dimensional module gave direction and discipline to my work, and resulted in efficient and economy in the use of structural parts f building. I also found-and this was possibly the most important factor-that the principle of c mensional order applied to the design of a structu resulted in a quality in the work which could not | captured in any other way. This quality of orde I found, was in itself an expression of good desig It was a powerful principle simply manifested by t inter-relationships of materials in their use buildings.

I eventually achieved facility in incorporati the principle of order in the design of a buildin which resulted in a complete organic integration all of the physical elements that went into a stru ture, including the structural frame, enclosing wal finish materials, plumbing, heating, electrical wor and other parts. I attained the ability to bring of these elements into a single organized un through the principle of order.

This principle of order, practically applied



ORTH HILLSBOROUGH, CALIF. ELEMENTARY SCHOOL

Sturtevant

chitectural practice, I discovered, not only meant ore economy and efficiency in construction but also the organization of the working drawings which I ad to prepare. And so I applied the principle of der (with great success) in the method of organizg my working drawings and office procedure. It as a quest worthwhile, and I believe I am now miliar with the practical application of the prinple of order in organizing the physical parts of a uilding.

It is gratifying to me that in 1936, when moducoordination became recognized on a national sis as a principle worth being considered seriously, y work was a source of vast information concerning e practical application of the principle of modular sign, and served a great purpose in helping to proote a sound principle for the benefit of architects d society as a whole.

The Vocabulary of Environment

The chief function of architecture now is to bring a sense of dignity, refinement, subtlety, gaiety, to all the places where we live and work -- to bring out the values which are latent everywhere in the measured enclosure of space. "The Mischievous Analogy"

John Summerson

AFTER ACHIEVING A FAIR KNOWLEDGE of the plication of the principle of order in architecture, next sought understanding as to the principle of cabulary as applied to Architecture. And this was great deal more difficult than the first. For it was I difficult for me to think that vocabulary in Aritecture meant anything more than the materials or physical building parts that are used to design and construct a building. And, still thinking in these terms, I developed a method of standardizing the structural parts of buildings which gave order to these physical entities that I used in design. I even went so far as to design such items as bricks and concrete blocks and window sashes to be made up to my own dimensions and capable of being uniformly related in my system of modular principle. However, even at this stage of development I still felt that I did not completely understand the principle of vocabulary in Architecture, and decided to turn to my original method of analysis, that of observation of Man's other activities as well as nature in general. This led me to some very interesting discoveries.

I discovered that creative activity in any art was based on a vocabulary related to that art. I started to see that creative expression in all of the arts was based on the same basic principle: "That all art activity is an expression of feeling," and that the only difference between the arts was the difference in the particulars used as a vocabulary. For music is the expression of feeling through ordered tones in ordered time. In order to express one's self in music, one uses ordered scale degrees which have indivisible physical and emotional properties inherent in them. Likewise in literature, to express one's self one uses a vocabulary of words in which each word of the vocabulary contains both physical and emotional qualities; and so, on and on.

I then began to realize that the physical parts

that go to make up a building—bricks, stones, and wood—in fact all building materials—have both physical and emotional properties through which they speak to Man. But I also realized that Architecture concerned itself with spaces for Man and that Architecture is basically the expression of feeling through ordered space environment; that *space is the important thing*. I realized that space is meaningless unless it is defined and that building materials and parts were the means by which we define space and give it spirit and meaning.

I was still looking, however, at the defining mass rather than at the space. (I still believed that vocabulary in Architecture consisted of the physical, structural parts of a building, such as brick, concrete, wood, stone, etc., with which one defines the spaces.) I could not see the wall for the bricks. I knew that I did not have the answer to vocabulary in Architecture, but for many years I could not discover what it was that was lacking.

I knew, for instance, that it would be impossible to express myself in a language if I did not have a vocabulary of words which I knew and understood. Likewise, I observed the basic reasons why students in Architecture could not express themselves in design was their lack of knowledge and understanding of a proper vocabulary. Their attempts to design were merely two-dimensional graphic art. It even began to appear rather ridiculous how Architecture was being taught, since in most instances in which I watched the teaching process, the idea of developing a conscious vocabulary of architectural materials was practically disregarded. The nature of vocabulary in Architecture was constantly on my mind. realized only too clearly that a clear understanding of the nature of vocabulary was absolutely necessary to express myself properly in Architecture. However, the major question remained as to the tru nature of a vocabulary for Architecture. From m experience I was satisfied that it was not physics or structural parts; it must be something else.

IV The Basis of Organic Space

... we, in our art, are to follow Nature's processes, Nature's rhythms, because those processes, those rhythms, are vital, organic, coherent, logical above all book logic, and flow uninterruptedly from cause to effect.

"Kindergarten Chats" Louis Sullivan

IN FURTHERING MY QUEST, I observed that na ture contains an infinite variety of matters and forr and that underlying all these there are laws of natur organization and growth. I was able to see that a nature is built of repetitive units. Some are infin tesimally small—the atom, the molecule, the cel and the crystal. Some are larger—but all thing no matter how large or small consist of combination of these units. I was further able to see that the nature of each thing in the world depends on the nature of units composing it. God must have con ceived the units first that composed His vocabular for creation.

The question that was then uppermost in m mind was, what is the true nature of the unit or pa that makes up the vocabulary of Architecture? From my previous observations I realized that whatever this unit or cell was, it had to have characteristic parallel to those cells which nature has created. observed that the cells of nature are complete entities in themselves. They are capable of sel reproduction, they are self-energizing, and they a units that are capable of being put together im larger unities.

I then recalled what I had discovered as the true definition of Architecture-that Architectu



SARATOGA LABORATORY, SANTA CLARA COUNTY, CALIF.

396

Photo by S

concerned itself with the ordered space environment of Man. And I then naturally deduced that, if Architecture concerns itself with the spaces of Man, the natural unit or cell of Architecture is a unit of space. That space was the key to the whole thing.

With this understanding came the realization that the basic unit of Architectural vocabulary was not or could not be material units but must be ordered units of space environment. A UNIT OF SPACE IS THE ARCHITECTURAL UNIT. This struck me as an astonishingly new concept in Architecture. I had never heard this theory put forward before nor had I seen it used in practice. The more I thought of it the more I realized that the possibilities in Architecture within this concept were unlimited and startling.

I believe that this is the first fundamental breach in architectural thinking up to the present time, and that this is the most basic contribution to architectural thinking since emphasis changed from sculptural mass to space and functionalism. I further believe that this had to come, and that it will have the same impact on Architecture that science has had in other fields when the thinking changed from mass to energy as a basis of all physical creation.

Under my concept, I now realize that the organic cell of space environment is the basic unit of an architectural vocabulary and that Architecture is a cellular organization of organic units of space environment. At last I felt that my understanding of the principles of Architecture was complete. But there still remained the practical application of this new theory of a vocabulary of Architecture.

In pursuing this idea, I realized that here at last was the basis for establishing a true vocabulary for Architecture, but that in order to achieve its practical application, it would be necessary to understand more clearly the particulars concerning the nature of the space environment units. And among these I discovered that, if the vocabulary is to be sound, it must allow in design infinite variety and reedom within unity. To accomplish this, thereore it became apparent that the vocabulary would have to consist of at least several types of space units ncorporating different characteristics of physical and motional environment, creating a variety of space units which would be suitable for different types of space organization for Man's social purposes, and rom which would grow his Architecture.

I also realized that each space unit would have o have both physical and emotional properties, and hat these physical properties would include: The three dimensional size of the space unit as well as he physical environment which it would provide, .e., visual environment, climatic environment, etc.



FRESNO CITY HALL

In addition, it would be necessary that one of the physical characteristics of the space unit would be the quality of organic flexibility with respect to organization of sub spaces within it. In addition, each space unit would have to be capable of being given an emotional quality, which would be achieved through the proportion, profile, scale, color, texture, pattern, and finish of the space defining materials.

Another characteristic that I realized would be necessary to the development of a space unit is that its physical characteristics must be self-energizing. In other words, each space unit must contain its own integrated mechanical and electrical system capable of energizing the elements of physical environment provided therein, such as heating, lighting, acoustical control, etc. Last, but not least, each space unit must have inherent in it the property of its being able to be related structurally to all other space units, either horizontally or vertically. In other words, the principle is that it must be possible to join these space units in multilateral combinations physically to allow three dimensional freedom in space organization. This is the basis of cellular construction in nature and, of course, must apply to cellular space units as a vocabulary of Architecture.

Within this concept, therefore, it can be seen that there will be limitless mathematical possibilities in organization and form in Architecture. It will make possible for the first time true organic threedimensional planning. Simplicity will become a resultant quality and a better and higher quality of space environment for all of Man's social activities for less money will be possible of achievement. In other words, this concept will open the way to raising the standard of living of all peoples in society with respect to Architecture as the space environment of Man. It will truly initiate a new Architecture for Man.

397

Meeting of the Advisory Committee on U.S. Building in Brussels

On July 15, the AIA Advisory Committee on the U.S. Building in Brussels met at The Octagon. Members of the committee present at the meeting were Earl T. Heitschmidt, chairman; Edgar I. Williams, Richard Koch, Roy F. Larson and Clair W. Ditchy. In addition to the committee, James F. Plaut, William Alex, Peter Harnden who represented the State Department, Edward D. Stone, the project architect, and Edmund R. Purves, the Executive Director, were also present.

The following has been adapted from the minutes of this meeting submitted by Clair W. Ditchy, Secretary pro tem of the committee:

In opening the meeting, Mr. Heitschmidt said that it had been called at the request of the State Department and would ask Mr. Plaut to explain the purpose of the meeting.

Mr. Plaut stated that there were two purposes: First, to make a progress report and second, to obtain the assistance of the Committee in the selection of material for the Architectural Exhibit.

Mr. Plaut and Mr. Stone described the progress which had been made up-to-date on the site. Mr. Stone explained that the working drawings had been prepared in an office set up in Belgium assisted by six or more Belgian architects. The services of German engineers had been retained and most of the building materials, particularly the structural ones, were European. All of the details of the original concept had been reconciled practically and actual construction was proceeding satisfactorily. Mr. Stone described in detail the many features of the building which are illustrated and fully described in the current issue of the Architectural Record (July 1957 issue). Mr. Stone also stated that much of the landscape development was under way, that many of the large willow trees would remain, some of them even within the building, and that the apple trees which are to appear in the foreground had been contracted for.

Mr. Plaut explained that Peter Harnden had been retained to arrange the exhibits which would be placed within the building. Mr. Harnden gave a brief general description of the theme which had been arrived at, namely the portrayal of the United States of America as a society in ferment, presenting the idea that contemporary developments such as modern art, electronics, modern conveniences, modern leisure, the vastness of the country, the facility of communication and the many other facets of modern life provide the background for a continuous revolution in our economy and way of life. It would be the intent of the exhibition to transport the visitor to the United States to have a glimpse at the variety of influences and activities which shape our daily lives. One of the dominant features would be a map of the United States approximately 136 feet in length placed on the ceiling and directly below it on the floor under each State would appear an exhibit of some of the features or products of that State. Folklore and art, Indian artifacts, contemporary art, music, Americana of all sorts would be strikingly displayed. A communication center will show our use of television, newspapers, the telephone, radio, stock exchange tickers, etc. Religion, industry, labor, health and all similar facets of our daily life will be touched upon. A transportation center will show the covered wagon, the model "T" Ford, the latest automobiles, helicopters and the like. Somewhere the Bill of Rights would be shown.

The second floor would be divided into three areas: First, Islands for Living where full size rooms of a typical American home could be viewed from a catwalk above or by walking through them. Architectural photographs would show the history of the American home including the log cabin, the adobe house, and similar rudimentary structures. Second, a Children's Museum would depict the daily life of children and 20 actual children would be used in

implementing this exhibit. Third. a "Streetscape." This would consist of typical shop windows, a drugstore with a soda fountain, an animated electric billboard sign, a section of actual asphalt pavement with manhole covers, post box at the curb, also parking meters and all the other visual impedimenta of the American street. There would be photographs and models of cities showing current planning developments. In the pool there would be several small boats and there would be 20 models going from the beach house to the pool intermittently. Camping, hunting, bathing and other American sports would be depicted. One of the features of the pool, would be floating sculpture gardens above, on, and under water.

Sculptures by Calder, Bertoia and Jose de Ribera are being considered. It was emphasized that this is a humanitarian exhibit, rather than a trade fair and that it would be more of an experience in American life than the viewing of an exhibit.

In addition to the many exhibits already mentioned in these notes, there would be an exhibit of "unfinished business" which through specially prepared sculpture would tell the story of future trends and future problems and what we are doing to meet them, such as tornadoes, racial problems, economic problems, traffic problems, etc. Every feasible modern device will be used to display these various facets of American life. In addition to sculppainting, diagrams, phototure. graphs, music, etc., loop films will be placed at strategic places to give the casual passer-by a glimpse of some phase of American life.

A list of contemporary buildings was submitted by Mr. Alex for the consideration of the Committee. The list as amended was approved.

The Committee also requested Chairman Heitschmidt to write to the Commissioner General expressing the enthusiastic approval of the Committee, congratulating him and his co-workers.



MILTON S. OSBORNE, head of the Department of Architecture at Pennsylvania State University, s on a sabbatical leave for the school year. He will erve as acting director of the School of Architecture t the University of Toronto, Canada.

KENNETH ALEXANDER SMITH has been apointed assistant dean of the School of Architecture t Columbia University, according to an announcenent by Leopold Arnaud, dean of the Faculty of Architecture. Mr. Smith, who has been a member f the Faculty of Architecture at Columbia for more han twenty years, will assist Dean Arnaud in the dministration of the School. Since 1955, Mr. Smith as been associated with the firm of Sherwood, Mills nd Smith, Architects, Stamford, Connecticut. Dean arnaud has also announced the promotion of Proessors Albert O. Halse, Alexander Kouzmanoff, and harles J. Rieger to the rank of Associate Professor.

CONSTRUCTION OF THE KRESGE ART CENTER, b house Michigan State University's department of rt, has been started on the university campus. The uilding is financed by a gift of over a million dolrs from the Kresge Foundation of Detroit, acepted in May 1956, by the State Board of Agriculire, governing body of the university. Estimated ompletion date of the building is late 1958. On s site overlooking the Red Cedar River the Center ill house studios, classrooms and an art gallery. ominant construction materials will be brick, glass id enamel panels. Architect for the building is alph R. Calder, of Detroit, who has designed seval of the newer buildings on the M.S.U. campus.

RENSSELAER POLYTECHNIC INSTITUTE has anounced the reorganization of its architectural proam into the School of Architecture, and has esignated Harold D. Hauf as Dean of the School. his move is part of a general change in the Instite's academic organization under which the underaduate programs of instruction are set up into hools.

THREE APPOINTMENTS TO THE FACULTY of the niversity of Michigan College of Architecture and esign were approved recently at a meeting of the egents of the University. Guy Joseph Palazzola d William Arthur Lewis were appointed assistant ofessors of art and Robert Bruce Lytle, Jr., was pointed assistant professor of architecture. THE AMERICAN ACADEMY IN ROME is offering a limited number of fellowships to mature students and artists capable of doing independent work in architecture, landscape architecture, musical composition, painting, sculpture, history of art, and classical studies. The fellowships will be awarded on evidence of ability and achievement, and are open to citizens of the United States for one year beginning October 1, 1958, with a possibility of renewal. All applications and submission of work, in the form prescribed, must be received at the Academy's New York office by December 31, 1957. Requests for details should be addressed to the Executive Secretary, American Academy in Rome, 101 Park Avenue, New York 17, New York.

WELLS BENNETT, FAIA, professor of architecture and Dean of the College of Architecture and Design at the University of Michigan, went on retirement furlough on August first, after 45 years at the university. Dean Bennett, whose birthday coincides with the start of his retirement furlough, plans an active and creative life filled with travel and study abroad interspersed with gardening, furniture building, and private consulting work. Looking back over his long and successful administrative career, Dean Bennett says, "It has been very pleasant and satisfactory to work with the students. I shall regret the loss of personal contact with so many young and gifted people. But it's most satisfying at the end of one's career to see that things are in good shape and that the staff and students are doing such a fine job."

A SCHOLARSHIP FOR FIFTH-YEAR study will be awarded to a student at each of the five participating architectural schools in an Architectural Student Design Competition sponsored by Koppers Company, Inc., of Pittsburgh, Pa. Fourth-year architectural students enrolled at Cornell University, Carnegie Institute of Technology, Washington University, and the University of California will be eligible to participate this year. Each award will be made on the basis of interesting conception and excellence in design of flat roof structures for nonresidential buildings. The competition will run from September 15, 1957, to January 31, 1958. Entries will be judged through March 31, 1958, and the awards will be made before May 31, 1958.

LIFE IN A MARTINI GLASS:

THE OTHER WEEK-END we did something which I have deemed advisable for some years. We went on a sketching trip with a couple of other Architects, Victorine and Sam Homsey.

I have long been an advocate of the School of Thought which says that Architects nowadays don't know how to draw and when I went to school we were all taught to draw and how can you see anything in three dimensions unless you sit down and draw it?

Of course, Sam and I are old hands at drawing since we both have things hung in Exhibitions and Museums, along with just simple Artists who are not also Architects.

When we went down to Wilmington to see Sam's Persian Version of an Embassy, Vicky suggested that we four get away soon. The rendezvous was one of those swish Motels out in the Dutch country all full of Mennonites, Hicksites, Moabites, and Amish. You couldn't possibly have more sketching material, since every other gent wears a beard or at least a Sophomore goatee, the ladies dress in lovely alizarine crimson or is it rose madder pink, and it is hell to drive around carriages which are completely hooded or completely open with some unmarried kid at the reins. The houses, barns, stables and tap rooms are well protected with Hex signs and in general the area is set-up for Grandma Moses, Van Gogh, Grant Wood, Adolph Dehn, Corot, Bendiner or Homsey.

By the time I got my family Doctor to give me a week-end of penicillin for an infected tick bite, put the Dalmatian in a kennel for a Holiday, approved matching dresses and jewelry for a country week-end and tried on my Iraqui sun helmet to see if it went well with a Hathaway shirt bargain and khaki pants it was four o'clock. We had gotten lost a couple of times and arrived just too late to get much sunlight for painting, but in time for a quick wash and a Martini.

Sam and Vickey had arrived about ten minutes earlier because he had been to see his Doctor about an old lumbago or maybe it just indicated rain, which hasn't fallen here since May. They looked lovely and couth. The Motel had no license so we just had to drink in our air conditioned room and chew a zillion peanuts.



Well there is no use being in genuine Dutc country unless you eat Sauerbraten, sixteen sweet and sours, homemade pigsknucklesmitkalbfleist shoofly pie and wash it down with Reading bee and Lititz pretzels, so we went into Lancaster. Th only thing that doesn't look like a pizzeria is th very olde Hotel which doesn't serve after eight an never did go in for them Tourist Dutch foods so w had steak and Hamburger. Of course, we wer much too tired and so went right to bed to be u bright and early and a doin' sketching with all th wealth of material around.

At about ten A.M. we gathered for breakfar and discussed office problems and the failing of Architecture as a Fine Art. At about noon we started to decide which car we would take an shifted all the painting equipment to our car. The we started to look for a place to sketch. Right across from the Hotel was a lovely arrangement but we could come back to that anytime. So we rode us and down for about five miles of farmlands pickin out future sketches, passed up the Landis Museur because that would mean going indoors and went Ephrata, four miles the other way where the gir could see the Cloisters while we sketched. Th was IT.

Sam went back to the car and unfolded genuine Bean's carry-all and chair which holds hat shoes, peanut bars, an olde former Scotch bott now corked with water, and sixteen house painter brushes. He disdained that folding easel which I bought in Paris twelve years ago, but picked up tin chest of surf fisherman size and lugged that whi Vicky carried the Paris umbrella, the genuine A proved Water Color Paper and his Borsalino paintin hat. I, who have long since passed the washes which give great depth for the simpler hit and run method, simply carried my featherweight hip flask of nylon which sprung a leak and wet the whole seat before I could stand up. That reduced me to a fountain pen and my Bijou set of water colors which is only large enough to do those wonderful Dufy strokes which I have been glancing at for some years.

Sam walked around with his equipment but his back finally gave out right in front of a fine composition of a springhouse, olde pump with wooden bucket and whitewashed tree trunks. I settled in the sun where Old Mother Nature could dry me while I created a masterpiece. The girls went into the Museum and read the literature. Finally they returned. Sam needed another five minutes. I was dry. We had made a water color and it was time to just catch the Market in Lancaster where we could lunch on blooded wursts, real Dutch Rye bread, sauerkraut and spiced knockwurst, liver paté and finish off with apple strudel, shoofly pie and potato salad.

As we entered Lancaster a real policeman stopped the car and said I was riding without an inspection tag, gave me a summons and told me to get it fixed, right away. I deposited the rest at the market and took the car around. We feasted on ham sandwiches on white bread, peaches and brownies. I did get a touch of the potato salad and that dear little old Dutch number handed me a spoon which she wiped off on her antique thumb.

We went for the car but I happened to spot a real bargain pair of desert boots, cheap and that trying and fitting took so long that it was much too late and too hot for another sketch.

Anyhow, Sam's back was hurting, maybe just a little, and my tick bite wasn't quiet and we all wished we hadn't eaten so many peanuts. Besides I wanted a straw hat just like those Amish boys wear but their heads are small and we had to ride about four miles to the small places.

We saw a wonderful sketch or maybe six but what we really needed was a hat. I got a real bargain in a farm coat which I need for winter and it still had a N.R.A. label in it and Vicky just couldn't resist an Amish boy's black felt. No straws. Then Sam decided he could use a pair of desert shoes because he just had sneakers and maybe that was what was killing his back. We went back to Lancaster and bought a couple of more pairs and were just about to unbutton everything for another sketch when suddenly the Angelus sounded and we had to have a Martini before the night air chilled us.

The next morning about noon everybody had recovered enough to visit Lititz which is famous for

being five miles down that way and very good for pretzels and sketching. By the time we swung around the town and had that wonderful boiled ham for which Lititz is famous, tried sixteen straw hats on for size and bought a couple of blue handkerchiefs which are just too small for hair bandanas it was time for one more sketch. Sam unpacked his gear and I just stuck to ink. In about five minutes the rain spoiled everything so we just had to drive twenty miles to a farm where they make genuine Dutch Ice Cream. This charming parlor is located about two feet aft of the cow shed, and is served right from the cow to you, frozen into vanillachocolatepeachorstrawberry. The company and the flies were too quaint for a serious sketch so we went about twenty miles to a place where they made the wonderful carriages. It was a little late for a sketch since they were all washed up for the day and the owner had gone into town for a quick one, leaving his genuine Amish wife and sixteen daughters to explain everything. They said they had been putting nine coats of black paint and lacquer over carriages all day long and a lot of it had rubbed off on them. The whole seven kids weren't over nine to twelve and the bearded boy helper had evidently been around. Well, since they were getting cleaned up we couldn't ask them to pose over a hot anvil and paint jar so we drove about twelve miles to a lovely mill on a stream, but by that time all the light had gone and we were wishing we had taken strawberry instead of peach ice cream, so we just had to go home and there is no better antiseptic mouth wash than Gilbey or Gordon.

Of all things this Motel didn't serve breakfast on Sunday so we had to drive back into the Olde Glasses Kitchen in Lancaster for breakfast. Well by that time it was almost twelve when you must check out. All those quaint Amish were at Sunday services which were letting out and you can't make a sketch of Sunday worshippers, it wouldn't be polite or something. By the time we did stop everybody and his carriage was going the other way for home and so did we.

That night in the calm of my studio, I lined up my achievements. I guess Dufy is still better.

401

But those desert boots are wonderful, my tick bite has quieted, the Dalmatian has kennel fleas, Betty is getting the Ice and the Homseys seemed relaxed. Someday I'm going right out the door and make a real fine sketch of this old farmhouse, just to show I still have it in me, but not until I get back from making some drawings in Paris, London or Lisbon.



Sharp Focus

MODULAR MEASURE WILL NO doubt go down in history as a classic example of an idea which is perfectly logical, sensible and practical but which was unduly retarded on its way to general acceptance by plain ordinary conservatism, procrastination and buckpassing. The American Standards Association, the respected high-level organization, official sponsors, are accustomed to this in many fields and have been perhaps too patient about slow development of technical standards, but they have now given it special priority and emphasis in collaboration with the new Modular Building Standards Association.

Modular Measure is unique also in that you can have your cake and eat it too; an architect can benefit by using the Modular system of dimensioning even if no Modular materials existed, or the building can be Modular in general and non-Modular for special details and there are benefits if only a portion of the materials available are Modular. It is always a case of everything, or something, to gain and nothing to lose. The project was handicapped for years with an unwieldy and formidable name-Modular Coordination, now to be changed, and it was going along on a starvation financial diet, but the real drag has been the old "Let George do it" attitude. Like the old comic characters Alphonse and Gaston, Alphonse the Architect says "You first, my dear Gaston, you make it and I'll specify it."

Gaston the Producer says, "You first my dear Alphonse—you design and specify it Modular and I'll make it."

Modular Measure, for years sponsored by AIA and Producers' Council, now has also the official support of Associated General Contractors and the National Association of Home Builders, altogether the highest possible sponsorship in the building industry. The Modular Building Standards Association is incorporated and functioning and individual architects and others can become members. This is all fine and necessary but what is really needed is that every architect who has not done so should immediately convert his office to Modular methods (one project for transition period, after that, greatly improved efficiency). He should insist on Modular materials or let non-Modular be cut and fitted until Modular are available. Instead of beating our breasts about concern for the public welfare and proclaiming leadership of the building industry, a prompt and general adoption of Modular Measure would be deeds instead of words and everybody would benefit. There should be an M-Day two or three years hence, perhaps during the World Construction Year, after which date all architects would design Modular and only Modular materials would be manufactured and sold.

WALTER A. TAYLOR

Charles Sumner Greene

IN THE PROVERB "Exceptions prove the rule" the word "prove" originally meant "tests." Another aphorism: "A prophet is not without honor save in his own country" is tested and disproved by the brothers Greene, who have lived long enough to be recognized and appreciated by their countrymen and fellow-professionals, in contrast to Sullivan whose recognition during his lifetime was hardly more than the publication of some of his designs by the AIA.

402

Official recognition of the work of Greene and Greene, a Southern California AIA Chapter Special Certificate of Merit 1948 and a national AIA Citation 1952, were no doubt considered adequate by these modest pioneer architects, supplemented by an increasing flow of published photographs, brochures and articles on their work. They have both gone on to their eternal rewards; Henry Mather Greene in October 1954 and Charles Sumner Greene on June 11, 1957, having had in their mortal years the assurance of a kind of immortality which few achieve, a strong recognizable influence on the work of others and the esteem of their patrons and fellow professionals. But it would be an impossible feat of research and scholarship to appraise fully and ade quately their contribution to American architecture from the vulgarization of their bungalow houses by carpenter-builders across the continent to the more basic contributions in freedom of planning and de sign and the essence of Far Eastern architecture and decoration distilled through their sensitive souls and talented hands, long before the current more direc and obvious influence in contemporary work.

Charles Sumner Greene and his brother epito mize and aid in perpetuating the ideal which we are always in danger of losing—the architect as artist WALTER A. TAYLOI


PROTECTING OUR Residential Neighborhoods

AUSTIN W. MATHER

Mr. Mather is Regional Director from the New England District and has been an active member of the Fairfield County (Conn.) Planning Association since 1934.

IN A REPORT to the Architectural Record, Marcel Villanueva said, "Although we are living in a new country we have grown prematurely old. Obsolescence surrounds us right and left. It appears not only in our large cities but in sections of our town that were good only ten or twenty years ago."

The instability of real estate values will probably stand out as one of the tragedies of our genration. It is a tragic paradox that in this new country of ours we seem to be in the process of plowing out blighted areas while at the same time we are creating new ones.

Luther Gulick finds in our cities a growing eisure without facilities which could make wise use f leisure possible; prohibition against child labor ut no proper organization of youthful activities; nmense new knowledge of what to do about physial and social betterment, but very little present arnessing of that knowledge.

It is said that our shame is urban mediocrity vithout revolt; filth, slums, decay and traffic snarls ithout action; private preoccupation and lazy conentment without civic loyalties or civic dreams.

George Sessions Perry describes, "Our cities and those of almost all the rest of the world are unishing, ugly, spirit-quenching, monstrous hives which people live the lives of frustrated insects." It sees the end of big cities within a quarter of a entury—not because of the atom bomb, but as consequence of "the simple fact that people do not like to be miserable."

We must remind ourselves, however, that the great city creates and nourishes the arts and has been historically the champion of human freedom. The problem is not an escape to the edges but rather a remedy for the city's defects to preserve its population and maintain its civic function. Running away cannot be the solution to the problem. Whatever the compromise is, our cities must continue to be lived in and enjoyed. The answer seems to be in wise city planning, not the kind that concerns itself with monumental centers or grand schemes, nor the planning that concerns itself primarily with treating the city as a productive machine.

Significant city planning considers the home the center of all human endeavor. This does not mean "housing" in the limited sense of subsidized dwellings. The planner's material is the home, whether it be for rich or poor; the home and its environment. In the breadth of this definition, the environment is important and includes among other things the streets, shopping centers and recreational areas. Perhaps the key to all this planning lies in the rearing of children in an optimum environment. In other words, can we remake our cities so that they will be places in which responsible parents will desire to have children and will be enabled to rear them properly? Can we provide the equal opportunity necessary for productive activity, so as to

prevent constant ill-directed migration which is so destructive of family life? Our human resources are great but they are not fixed and imperishable.

The earliest concept of the New England plan evolved around the town green or common which served as a gathering place for community life. It was fringed with the principal town buildings of social, business and religious significance and residential areas grew naturally from this point into the fields and forest beyond. At the turn of the century we began to hear more and more about the subdivision, the mass operation consisting of the laying out of streets and lots in a pattern that was inspired by the egg crate.

At the turn of the century in the City of Norwalk, Connecticut, a cereal company was giving twenty foot lots away for coupons, which were contained in its box of cereal. The development was romantically called "Oak-Nuts Park." Fortunately for the tax payers this development has evaporated due to the fact that you cannot build a house on a twenty foot lot therefore it was necessary for you to *buy* another one. Life was leisurely in this decade and property was generally held in large acreage. What Mr. Jones did with his hundred acre piece was his own business, provided he didn't cause hazard to the adjoining lands.

At the present time however, we are in the throes of a population explosion and consequently we have the subdivision. The subdivision is legally defined as a division of a lot or tract of land into two or more plots for the purpose of sale.

The possibility of the recurrence of an Oak-Nuts Park has become minimized due to a public consciousness developed during the past four decades. In most communities appropriate legislation has been passed which gives them the authority to set up planning commissions or planning boards or combination planning and zoning commissions. It is principally through these local boards that planning is now coming of age and the machinery for doing the planning job has been generally well defined. What we lack is an excited citizens' response and a concerted program of citizen participation.

These planning commissions or boards are in a position to adopt subdivision regulations and master plans which will take into account the tremendous population increase which is now going on. It is important to keep in mind that in this planning process, as far as the ultimate plan is concerned, it physically makes little difference if this land development is publicly or privately sponsored. As soon as a subdivision is laid out on the land, it automatically becomes a segment of the total master plan, but to say that each subdivision will be in strict accordance with a preconceived master plan would be stretching the truth. For the master plan for any community is not necessarily something that is hung on a wall and is totally static and complete. Most of the master planning may be in the files of the office of a planning board and may never be completely assembled. For planning is essentially the profession of the opportunist and long range concepts must be continually altered to accommodate new ideas and formulas.

We may cite as an outstanding example of this opportunism the coming of the all-purpose expressway through Fairfield County, Connecticut.

The Norwalk plan of 1934, and I presume this was the case in other communities, indicated vaguely that such a route was a gleam in some one's eye but there was no way of pinning it down as to location or consequence. However, the Norwalk plan for 1957 must definitely take cognizance of a road already physically on the ground and causing a terrific impact even now on public facilities and town services.

Incidentally, it seems fair to say that this expressway will prove to be of great value in the relief of local traffic congestion and in providing more adequate circulation between and through communities. However, the point we make here is the fact that the master plan established for the community in 1934 and developed spasmodically through the years must now be drastically re-oriented to handle this new dynamic traffic corridor. Each town in Fairfield County during the years to come will be faced with the same problem, in fact the same opportunity, when such physical changes occur even though they are of lesser magnitude.

I am citing in this paper the experience of the City of Norwalk principally because of the fact that I have been a member of its planning commission for about 11 years.

I have said that the prime objective was one of providing homes for families, and it is significant to observe that while each subdivision whether big of small appears to be self-contained and isolated there is emerging in this conglomeration a series of neighborhoods which are going to require, in fac now require, many more facilities than just the plotting of lots and the building of houses. It ha been said that when the focus of planning is shifted from isolated building, in this case called subdivision to the integrated group, a change takes place which is not merely one of degree but it is one that pro duces an entirely new kind of problem, and this new kind of problem involving the community as a whole or sizeable sections of it, seems to remain almost completely beyond our grasp.

It seems to me that this neighborhood in the community must be of a size and character that will not dwarf its inhabitants into anonymity, but shall provide the intimate scale and ratio so that the citizen can play his civic role, not only as part of a neighborhood, but as a participator in the life of the whole municipality.

It is recognized that this neighborhood plan is an important segment of the master plan and the successful developer is not merely a subdivider of land or a builder of houses but he is a creator of complete communities. Once a new tract of land is subdivided, streets improved and houses built, the daily lives of all the families are cast into a permanent mould. There is no substitute for good initial planning.

The responsibility for this good design of subdivisions rests primarily with the subdivider or the developer, and the planning commission is basically a review authority which attempts to coordinate the design with the general development plan for the area. This does not mean that we minimize the importance of the planning commissions review, as many practical problems associated with design such as drainage, services and facilities are also the commission's prime concern.

While the planning commission is legally constituted to determine the suitability of the plan, if the zoning laws of the town are loosely woven and do not adequately protect the plan, crowded lots with resulting congestion and drainage problems will be the final result, no matter how good basically the plan.

The mistakes of the past can be traced to the fact that our zoning laws were never predicated on the community development plan, but came first before the plan and were vague and stereotyped adaptations of laws from other unrelated areas. This must be corrected and future zoning laws must be protective and provide the machinery for suitable land use and densities in conformity with the development plan for the community.

Good planning advances orderly development and good zoning protects the plan. We have stated that the planner's material is the home but in the breadth of this definition the environment is important and while each subdivision seems isolated, there emerges through this process a definite series of neighborhood units.

Consequently the planner then becomes concerned with environment, the planning of school sites, shopping centers, fire houses, utilities and all of the other components that tend to make up the neighborhood. The planner is also concerned with the recreational areas and neighborhood parks. In this regard, subdivision regulations must be amended to include the setting aside for park and recreational purposes certain areas within the subdivision for this purpose; the land so set aside to be of a character suitable for use as a park, playground or other recreational purpose as determined by the planning commission. The maintenance of these areas should be the responsibility of the subdivider and should be guaranteed by appropriate bonds satisfactory to the planning commission.

If the subdivider does not desire to retain title to the reserved area or if a neighborhood association cannot be set up to control and maintain the park, then the reserved area must be offered in dedication to the town or city. If the town or city does not accept the dedication within one year the subdivider can use the land for development, but it must be pointed out that this amendment should not intend to replace through these acquisitions a comprehensive park program by the city as contained in a master plan for parks but should merely supplement the program so that the city can concentrate on larger acquisitions, particularly in the older and more densely populated sections.

Experience has demonstrated that it is invariably preferable to prevent the reoccurrence of problems rather than to have to solve them. Prevention is still the best cure and it has been my impression over the years that the preservation of our natural amenities is as much a part of the planning process as new development whether good or bad and that where nature's amenities abound, we have a more acute responsibility in restraining ill-advised expansion to the detriment not only of the countryside but to the disadvantage and discomfort of the residents themselves.

A while ago I stated that planning is coming of age but its maturity is hampered, deflected and delayed principally because of a lack of clear vision of the ultimate goal.

On touring the West in the beautiful flat valley country outside of Salt Lake City surrounded by high mountains and western grandeur I noticed from the train window what looked to be an elevated parking lot with a gravel surface. In the twilight I looked again and discovered it was not a gravel parking lot but the tops of flat top houses which were so close together they appeared as one continuous surface with almost no open space at all visible from my foreshortened angle of sight. Here in majestic openness was placed this grid-iron subdivision with forty foot lots—shades of Oak-Nuts Park!

Maturity is slow in the planning process. Let's hope we can wait it out.



First Vice President John N. Richards' recent trip to Europe:



SKETCHES



Boat yord - Venice.







The Architect Today

BY AUGUST HECKSCHER

T IS A DRAMATIC and exciting thing when the leaders of a great profession pause at some historic mark, as you now pause on this hundredth anniversary of the founding of your Institute, to ask what is the meaning of your effortswhere you have done well, where fallen short, and where are the heights that still wait to be scaled. A Centennial should be, among other things, a time of self-criticism. Apparently your celebration will not lack in this quality. Indeed, judging by articles recently in the press, it looks as if you disagree upon many things. It seems that you actually disagree upon what century we are living in-with some being of the opinion that this is the twentieth century, while others are convinced we inhabit-or ought speedily to return to-the classical age of Greece! All that is to the good. It leaves an outsider like myself suitably mystified, and no doubt it gives to you who are insiders an agreeable sense of battle.

A hundred years! One looks back across that space of time, and everything seems changed beyond recognition—except, miraculously, this room where we meet. Here, a century ago, men dreamed of what America might become, organizing themselves to play a fit role and to make their profession capable of contributing to the general growth. Could any have dreamed boldly enough? Would it have been possible in 1857 to foresee the depth of the imprint which man's hand would make upon the continent? Tocqueville had already observed cannily that the Americans, while boasting of their individualism, actually excelled in the things which they did together. They were destined inevitably to be great builders. The lonely vigil of the frontiers man was bound to be overtaken by the common efforts that produced the canals and the roads, that cleared the forests and reared the towns and cities

The Civil War was still to be fought when Th American Institute of Architects was founded. unimaginable diversity of styles and techniques wa to unfold. The notched and fitted logs of the fores cabin gave way to the balloon framing that mad possible the overnight growth of the mid-wester cities; and in a single lifetime the balloon frame gav way to the steel skeleton. New wealth found its ex pression in elaborate homes and resorts, too ofte slavishly copied from the luxurious dwellings of th old world, yet showing here and there, as in th shingle style we have recently rediscovered, a fin native touch. The twentieth century brought it incongruities and ugliness, along with the miracle of the skyscraper and the gentler influences of brief classical revival; it brought also a brilliant ad vance toward fresh interpretations and the dazzlin opportunities which open before us today.

Architecture is a Means to Control Environment

THIS AGE, so rich in diversity and change, coul be characterized in many ways; but it would not b far wrong, and it would certainly be in keeping wit the spirit of the occasion, to characterize it as an Ag Mr. Heckscher was formerly chief editorial writer for the New York Herald Tribune and is now Director of the Twentieth Century Fund. He is the author of several books and magazine articles and frequently appears on radio and TV. This article is adapted from an address he delivered at the Centennial Dinner of the New York Chapter.

of Architecture. Man seeks an environment where he body and spirit can be at ease together. Thereore he goes to California or to Florida; failing this, he seeks to shape for himself a small universe where he can have a sense of spaciousness, a feeling of order, and a surrounding air of coolness or of varmth. He yearns to control his environment; and he means to that control is architecture.

Having created energy in unprecedented forms, nodern man sometimes gives the impression that he is interested only in motion. But that is an illusion. The trailer fashioned at great expense to ride the ighways gets quickly enough immobilized and conected with the earth. The car that carries the ower of three hundred horses under its hood spends nost of its life as a semi-stationary living room, from he window of which one can conduct one's banking ffairs or purchase a meal—within which (as I saw t put recently) a man has quite possibly been coneived and where he will not unlikely die. The helter is the thing, the enclosure of space to suit thanging whims or needs.

But I do not need to be whimsical in justifying ny claim that we live in an age of architecture. I an cite more prosaic evidence. The great task beore this generation, apart from such a cardinal mater as survival, is the rebuilding of our cities. It is perfectly plain that the city in the form it reached by the start of the second world war was obsolete. t didn't meet the requirements of the citizen or the hilosopher; and what really doomed it, it didn't meet the requirements of the businessman. The overcrowded center and the frazzled edges were alike testimony to a process of decline. Meanwhile, in communities carved out of the very midst of decay, in satellite towns and regional shopping centers, we see the beginning of a new life. Twentieth century man is an urban animal, and those who can help him to create an urban environment that feeds the senses and satisfies the soul are obviously on the side of the future.

There has seldom been a time, I think, when architecture by itself could so decisively affect the fortunes of men. It would be an exaggeration to say that if the United Nations buildings had looked like the buildings of the old League at Geneva, the vast enterprise would have failed before this. But it is surely not an exaggeration to say that the great and novel structures by the East River have been a strong contributing factor in its success. There is something here that lifts the spirit, reminding men and women of tasks still to be performed; the hundreds of thousands who come as tourists go away with some sense of a new order being created. Conversely, one looks in New York's Coliseum for some hint of the ephemeral and fanciful; not finding it in those solid walls and behind those official seals, some part of one's pleasure is fatally cut off. The flowers of the flower show still blossom for their day; the cars of the year spread their tail fins and show their chrome. But the zest of the occasion has somehow been lost; the architecture of the place carries no suggestion that the whole thing is a joke, a glorious joke celebrating man's innate exhibitionism, his love of show for its own sake. In these halls man is boasting of his difference from the Gods by emphasizing the transitory and impermanent nature of his works—something hardly less reverent than affirming (as he sometimes does) his singular likeness to the Gods. But where in the building's stone and steel is there an echo of that magnificent human boastfulness? You may tell me that three million people have visited the Coliseum in the past year. I would answer that six million would have visited it, had it been—or had it been allowed to be—more imaginatively conceived.

If anyone had a doubt about the power of the architect he would only have to look at what is happening to the commercial structures of this city. What is happening? They are all being torn down. A philosopher could have written volumes upon the desirability of removing the existing buildings from Park Avenue and putting in their place a dazzling new row. For his pains he would have been ignored as an impractical dreamer; or he would have been denounced for being a subversive. But the architect has only to hold up the image of what a new office building can be-a thing of light, an embodiment of clear space-and the wrecking crews are scarcely equal to the task that is imposed on them. The managers who take charge of the vast process of destruction and rebuilding are not mad. They know that good architecture is good business. They are even beginning to know that it may be good education, and the highest kind of service to a free state.

There are Many Serious Problems Ahead

THUS WE STAND at the threshold of what might seem a golden age for the architect. A great expansion in population, a deep series of changes in the ways of living and in the values of the people, combine with new techniques of construction to make the next chapter in our history one of splendid activity in the building field. It would be pleasant if I could congratulate you and so be finished. Unfortunately the matter is not that simple. In all honesty I think we must face the fact that at the very time when great opportunities reveal themselves, the profession of architecture faces many serious problems.

There is, to begin with, general public ignorance about your work. As a newspaper editor I have been conscious of the difficulty of making the average reader perceive that buildings don't just grow, that some creative gleam is behind even the simplest

structure which adequately fulfills its purpose. As a member of the board of trustees of more than one educational institution, I have realized how difficul it is to promote any real thinking about architectura possibilities. It usually happens that a proposed new building is either to be in the very center of the old grouping, and therefore it has for a first requirement that it look as much as possible like the others or else it is concealed in a wood, and everyone agrees that what it looks like doesn't matter. Meanwhile the informed public, which would be scandalized i one of its members was ignorant of who had written the latest play or composed the current best-seller takes it as a matter of course that the architect of a city's major structure is virtually unknown. The play passes from the stage, the book soon enough gathers dust on the library shelf; yet that gross palpable structure, for better or worse, stands immovable upon the landscape.

Sometimes, of course, it doesn't stand. The ignorance which attended its creation, the unawareness with which it is used by the public, makes if an easy prey for the devotees of progress. It may have been a building that perfectly embodied the ideals and the standards of craftsmanship of it period. It may have been flawed in the execution yet still contains the marks of an originating mind No matter, it must go. Our cities, as a result, lose that sense of time captured, of ideals caught ir flight, which should make them something more than agglomerations of stone.

Prove that George Washington slept here, and a thousand voices will be raised for the preservation of the sacred pile. But establish the fact that a grea architect, or some unknown architect in a happy moment of inspiration, put his very self into the structure; you speak into the void. I am all for his tory, I hope you will understand. But I would like a concept of history broad enough to include architecture. We shall not attain it until men and women of the present generation really care about architecture, really understand it, and in their own time and way really try to create buildings which ultimately will be worth fighting to preserve.

It has become fashionable, where educationa priorities are concerned, to take a very disdainfu attitude toward what is called "bricks and mortar." Once again I must protect myself from misunderstanding by saying that I am *not* in favor of low faculty salaries. But this disdain for buildings, is in not at bottom an indication of the inadequate appreciation of what architecture involves? "Bricks and mortar" signifies something dead. But architecture is alive; it is or it should be, a thing of spirit. I certainly do not see anything at odds with the ideals of a liberal education to ask sacrifice and effort of he living generation so that young men and women nay move in an atmosphere that bespeaks beauty ind excellence. Great schoolmasters have characeristically been great builders; and the greatest of hem have built in the spirit of their own day.

The Difficulties of m Architect's Expression

THE ARCHITECT HAS ALWAYS CONFRONTED difculties in making his case before the public. He is ke the playwright in having to achieve his aim hrough other men and other trades. His work omes alive only when it finds the client who is villing to pay for it, the artisans and builders who re capable of translating it into solid forms. This articular difficulty, it seems to me, has been inreased by present-day conditions. The costs of uilding have so drastically risen that even in a ime of unusual prosperity it becomes necessary to conomize rigidly. The outmoded organization of he building trades has seriously curtailed the spirit f adventure and liberality in design. Sometimes, dmittedly, a compulsion to economize can produce triking results; sometimes good architecture really oes cost less than bad architecture. But in the main his is not so. The tight budget curtails creativeess; and the budget is sometimes so very tight that eliminates any attempt to construct more than the ninimum shelter.

A second difficulty of the architect today deves, I would suggest, from the revolution in the chniques of construction. We are evidently on the erge of advances which will tend to make the engieer, rather than the architect, seem the key figure the public mind. The casting of concrete in orms that rival such masterpieces of nature as the gg or the seashell, the development of new mateals and their use in unprecedented spans, must ake the architect dependent upon a kind of calulation and vision of which he cannot pretend to e the master. Novel methods of heating and coolig and lighting, and all the immense emphasis on ternal gadgetry, makes the house into a machinenly a machine unlike all others (as Ralph Walker cently remarked) in that people are expected ctually to live inside it. It would not be a wonder in the midst of so much technical apparatus the gure of the architect should become even more urred than ever-a somewhat distraught figure oking for beauty, when everybody else seems to be oking for mechanical improvements.

These are handicaps, but by far the greatest andicap which rests upon the architect today is the hism between modern and traditional which has developed within the profession. Even among you members of the AIA, leading representatives and spokesmen in your field, there are differences of doctrine that touch the heart of everything you think and do. Is it any wonder if the lay public is confused and uncertain? You ask us to appreciate architecture, and vet you yourselves do not seem to be sure what architecture is. At other epochs there have been diversities of style, of course, but the present difference is deeper than style; it goes, or at least seems to go, to the essence of all you profess. Modern or traditional?-the individual who would build for himself or on behalf of an organization must first of all answer that question. He must choose an architect on the basis of the answer, and he must realize that whatever he does he is going to have a good portion of the public, and at least half of his friends, convinced that he was wrong.

"Modern vs. Traditional" Must be Reinterpreted

THE RECONCILIATION between modern and traditional architecture is hardly to be achieved by a mere compromise of the two styles. It must be at a deeper level, in a fresh interpretation of the principles which have underlain all the various architectural traditions, from the Classical to the Gothic, from the Baroque to the Contemporary. Until now the modernists have been so busy with their task of innovation, so concerned with establishing their identity and winning converts, that they have tended to ignore the deep sources of their inspiration. They have emphasized what made them different-with the result that they were too often deprived of the sane guidance which could save them from eccentricity, and that they were impotent to enlighten and influence those who advanced at a slower pace. A generation of younger modernists, coming on the scene when the battle is so largely won, can afford to take another look, seeing what it is that unites them with the great past, and with the colleagues who practice in sincerity the skills of a more traditional discipline.

You have already come a long way in this process of reinterpretation. It seems that the shibboleth of functionalism is dead. I recall the astonishment with which some years ago I discovered for myself that the best of the so-called functional buildings were not really functional at all, but that often they were (which no one has been claiming for them) breathtakingly beautiful. I recall finding to my surprise that the bareness which the modernist affects was not for the sake of economy (in fact, it was usually more expensive) but for the aesthetic delight of a clean surface and a dramatic juncture. By now most informed laymen are aware of these things; we have seen through the misleading justifications and the untenable arguments which the modernists themselves employed.

Once modern architecture is admitted by its proponents to be based on esthetic principles-to be characterized not by its lack of ornament, by its new materials, its utility or its economy, but by a particular kind of beauty-then it becomes possible to transcend many of the futile arguments between the schools. It can be admitted, if you will, that the false marble columns of the classicist are matched by the false steel columns that climb up the exterior of the Mies von der Rohe apartment building in Chicago; that the rigid classical symmetry is no more limiting than the kind of modern symmetry which eliminated windows from the end walls of the United Nations building; that the excessive glass which is the trademark of the one school has as many disadvantages as the excessive masonry of the other. These things are not the essence of the matter, the essence of the matter is the way space is bounded and enclosed; it is the feeling one gets as one moves around inside and passes from the interior to the exterior of a building. There is still room for argument, of course; but the argument is at last on meaningful grounds. It is whether the contemporary architect has captured a quality of space in which modern man instinctively feels at home.

I hesitate to go further along this line; my aim is not so much to define a solution to the schism which has divided the architects and confused the laymen; it has been simply to point up the problem. Rather, I speak of one further difficulty of today's architect which has impressed me. Besides soaring building costs, multifarious technical developments and disagreement about style, the architect in the present age has to do his work for a society that is uncertain about many of its basic values. He has to shape cities for men who are not sure in their own minds what the good city ought to be; he has to design public buildings for a public that has found the old standards obsolete and most of the old symbols drained of meaning; he has to create houses for people who question why they are alive. Does the architect have any choice but to accept the challenge, becoming in some sorts a teacher and philosopher as well as a builder?

The Artists of Settled Times had an Advantage

412

THE ARTISTS OF A SETTLED AGE have the wonderful advantage of working along lines that authority and tradition have laid down. The painter of the middle ages elaborated on the lives of the saints, devoting himself with serene mastery to a end that was never put in doubt. The modern artist, in contrast, elaborates an orange; more fre quently he explodes an orange or decomposes it into a mere abstraction. He may derive satisfaction in doing it, but he lacks the agreeable assurance o working God's will; he is not even sure that he i working his own. There is thus laid upon him, in addition to the search for beauty, a search for mean ing. At his highest level he must make prophecies and cannot be content merely with making pictures

Something of that same burden falls in an ag like ours upon the architect. His houses are no only houses; they are symbols as well. His greates buildings are the stuff of which myths are made. Ye more directly than the artist he is brought into th field of social reform. The design of homes an schools, of college campuses, of towns and citie and shopping centers, affect directly and drasticall the way the most basic activities of life are carrie Indeed many reformers have thought that i on. architecture they had got hold of the key to th most persistent social problems. During the nine teenth century, Jeremy Bentham had designed for him the Panopticon, a prison of unusual plan, whic he described characteristically as "a mill for grind ing rogues honest, and idle men industrious." architect of the French revolutionary period, Claude Nicholas Ledoux, designed what was known as House of Passion, in which the morals of yout were to be improved by a very curious architectur means. With the interior of his great building d vided into halls, galleries, a salon and a number cubicles, young men in "workshops of corruption were to behold vice naked, being led by their inna goodness to follow the path of virtue and arriv safely at the altar of Hymen.

I would not suggest that any of you go qui this far; moreover, it is a fallacy to suppose th external conditions can by themselves transfor the life within. Putting a horse in a good stable do not make it necessarily a better horse. Concei ably in time the automobiles made by Gener Motors will gain something of the purity and sin plicity of line which characterizes the architectu of its fine research center; conceivably, too, t packaging of Lever Brothers will be affected by t standards of elegance which guided the architects its building in New York. For the moment, how ever, there is more of contrast than there is co gruity between the product and the place where is produced. There are no mills, in Benthan phrase, "to grind rogues honest," nor are the factories to change automatically men's values an taste. What we can hope to do, it seems to me,

through architecture and design to cause men to think through the premises by which they live; to make articulate, and finally to make massive and visible, the underlying conscience of the age.

The architect in an era of change such as our own enters from the beginning into a unique relationship with his client. "You want a house, my friend? Very well then; tell me what you believe. I shall design you a house if you can state the first and last things of your life." Few men or women know what they believe, but the process of trying to sort out the relevant from the irrelevant can be a highly educative one, and can contribute mightily to a happy architectural result. When we go beyond the individual, into those areas where the architect touches the common life of the community, we see essentially the same questions being posed. What does the city hold dear? Such contrasting values as privacy and neighborliness, serenity and tension, spaciousness and bounded distances, are among those which the architect must bring into harmony and to which he must give a scope that accords with the community's deep sense of fitness and right.

The architect cannot dictate to his client; he certainly would be unwise to try to dictate to the community. This process of evoking buried strains of belief and value, of constantly reshaping the outward design so as to avoid doing violence to the inner life, is the essence of democracy. It is my own belief, indeed, that an age of great building can be an age of true freedom-that the next stage of liberalism in America will be the liberalism born of common efforts to manifest in architectural forms the quality of life which the people treasures for its The architect will have to be infinitely patient; own. he will have to listen for those signs and voices that are not yet in the fashion, heed those impulses which are just breaking into the light, all the while maintaining his convictions and his own clear sense of taste and style. We shall then have beauty, but not personal beauty merely, not beauty in the abstract: Beauty, rather, that springs from the strivings of a self-confident and diverse people, from their life together, their dreams and needs and hopes.

The Architect Must Keep in Touch With People

THE GRAVEST QUESTION, I suggest, is whether the architect will have the time to know what is happening around him; whether he will be able to exercise the imagination, the piercing kind of imagination, which sees what is really going on, instead of merely seeing the thing that everyone says is going on. You are busy people. Your working day is crowded with interruptions and bothersome details; you must co-ordinate a score of different trades, watch schedules and time-sheets, keep within the budget (above all, keep within the budget!) and in general run something closer to a circus than the calm atelier where hints of beauty could be expected to gleam. I promised at the beginning that I would not tell you how to manage your affairs. Yet I end by doing just that. Go out, I would urge you, and gain touch anew with the people whose interpreter and servant you are—with the American land, with the forces of change that run across the continent and are making us over in ways we only dimly apprehend. Stand where you can have perspective; test all your art against the needs of the new day that shines around us.

Just two years after the founding of this association, in the year 1859, there was published in England, "The Two Paths" by John Ruskin, containing the text of an address of his to the members of the British Architectural Association. He struck better than I could the note on which I would end. "You have not, like authors," he said, "to plead for a hearing, or to fear oblivion. Do but build large enough, and carve boldly enough, and all the world will hear you; they cannot choose but look."

"I do not mean," Ruskin continued, "to awe you by this thought; I do not mean that, because you will have so many witnesses and watchers, you are never to jest, or do anything gaily and lightly; on the contrary, I have pleaded, from the beginning, for this art of yours, especially because it has room for the whole of your character: If jest is in you, let the jest be jested . . . above all, see that your work is easily and happily done, else it will never make anyone else happy; but while you thus give rein to all your impulses, see that those impulses be heeded and centered by one noble impulse; and let that be Love—triple love—for the art which you practice, the creation in which you move, and the creatures to whom you minister."

HENRY HOPE REED, JR. is presently engaged in assembling material for a life of Charles Adams Platt, (1861-1933), etcher, painter, landscape architect, and architect. Any information which readers of the *Journal* might have as to papers or recollections concerning him will be most gratefully received by Mr. Reed at 238 East 24 Street, New York 10, New York. Administration Building and Link to Auditorium, Army Signal Corps School, Fort Monmouth, N.J.

> Kelly & Gruzen, Architects

B. SUMNER GRUZEN, FAIA

Photo by Ben Schnal

FAVORITE FEATURES OF RECENTLY ELECTED FELLOWS

WHITNEY R. SMITH, FAIA

CHILDREN'S CHAPEL NEIGHBORHOOD CHURCH PASADENA, CALIFORNIA

> Smith & Williams Architects

414



Photo by Julius Shulman



The Architect-in-Training Program Launched

A MAJOR EVENT in the story of the Institute and in e expansion of AIA services the profession is the inaugation of the Architect-inraining Program. An indirect escendant of the mentor sysm of the 1920's, the program ems directly from recomendation No. 30 of the Sur-

y Commission. The development of the program ad the procedures and documents has been a reonsibility of the Committee on Education, mes M. Hunter, FAIA, Chairman, and the submmittee chaired by Charles E. Firestone, FAIA, in Ilaboration with the Department of Education and esearch.

The program in its final form has benefited om the experience gained in a pilot run in four ates and is now available to graduate architects roughout the country.

Inasmuch as the architectural profession cant, by the nature of its operations, establish an ern program such as that operated by the medical ofession, the initiative and the continuity must be ovided largely by the candidate himself. The ocedures have been kept as simple as possible to oid excessive organizational and paper work at apter level. The candidate, a degree-holder who ends to seek registration, enrolls directly with the A and receives from the Octagon a Log Book luding sufficient recording forms for three years office experience, a Log Book supplement which ntains valuable references and material for conuing self-education, and a certificate of his enlment as an Architect-in-Training. All enrolled ndidates will receive from time to time additional terial for the Log Book supplement which indes references to all of the leading professional,



technical and scientific organizations and trade associations in the building industry. The program has been approved by the National Council of Architectural Registration Boards although there is no official relationship between the candidate's Log of experience and the registration board of the

state in which he seeks registration. The primary purpose of the program is not the achievement of registration but the enhancement of the candidate's continuing education in connection with his period of office experience.

The responsibilities and duties of the AIA chapter are to provide one or more advisers from among the chapter membership, assign candidates in the chapter area to an adviser, and arrange for at least one conference per year between adviser and candidate. Candidates, whether or not Junior or Associate members of the chapter, will be expected to participate in all educational and technical meetings conducted by the chapter. It is anticipated that in chapters where there may be a considerable number of candidates they may work with the chapter officers in the development of special courses for their benefit. Enrollments are accepted from all graduates of schools of architecture and architectural engineering and are not contingent upon affiliation with a student chapter or the senior AIA chapter. Initially the program is limited to degree-holders. Later enrollment will be available to non-degree men screened by chapter committees.

The employer architect has only one official responsibility: To initial the quarterly record sheets showing distribution of the candidate's time according to type of work, type and size of building. Employer's endorsements of the record sheets are for correctness of time records, not appraisal of the quality of work performed. *Unofficially* it is assumed that the employer, in the tradition of the profession, will be interested in the progress of the candidate and arrange for him to have the widest possible variety of experience.

Enrollment forms are available from the deans and directors of the collegiate schools or the chapter secretaries, who have sample copies of the Log Book and the Log Book supplement and descriptive literature on the program. Enrollment forms with registration fee are sent directly to the Octagon in care of the Department of Education and Research. The Octagon will notify chapter secretaries of enrolled candidates in the chapter area.

It is recognized by the professional schools and the registration laws that the school cannot produce the completely trained architect. Education for the profession is a life-long process and this particular phase between college and registration is a vital part of the young architect's continuing education, prepart ing him to take his place in the profession as a competent practitioner.

Although the operational machinery has been held to a simple minimum the program will not ru automatically. The assistance of the entire profession is required, including advice and encouragement by educators, chapter officers and members.



SOUTH ATLANTIC DISTRICT

At the september meeting of the Georgia Chapter, Cletus Bergen, of the South Carolina Chapter, answered questions about the proposed law for the registration of architects in Georgia. Objections were raised to some features, but Mr. Bergen has secured more promises of legislative support for a new law than has been secured previously. The Chapter voiced its confidence in the Committee and the Board, and left the debatable points to their descretion.

A CONTRIBUTION to the North Carolina State College Engineering Foundation by the Associated General Contractors Carolina Branch will make possible three "Talent for Service" scholarships of five hundred dollars a year each for four years, for study in one of three courses, one of which is architecture.

THE STATE LEGISLATURE has created a Department of Products Design in the School of Design at North Carolina State. Dean Henry Kamphoefner stresses that while North Carolina needs trained designers of furniture, textiles, and clay products, the new department will not concentrate too much on these fields, but will attempt to give a broad training in the design of industrial products.

ONE OF THE TEN TOPICS to be discussed at the Florida Association of Architects Convention at Clearwater in November, is the report of the Joint FAA-AGS-FES Committee on the need for a unified building code for the State of Florida and for a coordinating agency to administer it. Dade County now has a unified code, and the new Metropolitan Government will have a single examining board for building contractor engineering, marine and heavy construction contractor plumbing contractors, and electrical contractors, and this seems to be the next logical step. Perhaps, aft all, the "Strip Cities" being created by the automobi may provide the means for simplifying the code stru ture of the country. If so, the strip city may not prosuch an unmixed evil as some have thought.

GULF STATES DISTRICT

"ONE HUNDRED YEARS of Memphis Building a The Future of Architecture" was the theme of an arcl tectural exhibit presented by the Memphis Chapter September at Brooks Art Gallery in Memphis, in ce bration of the Institute's Centennial.

A. L. Aydelott, president of the Chapter sa "This was the most extensive exhibit of its kind to shown in the Mid-South, and one we feel sure was wide general interest."

Old Memphis buildings dating from the ear nineteenth century were represented in the exhibiti of more than 40 photographs. A complete modul structure designed by Francis P. Gassner was erect to house panels on which the photographs were place

The exhibition planning committee included W liam H. Norton, chairman; Wells Awsumb, Char Peete, Francis P. Gassner, Jack Bland, Roy Harrov D. T. McGown and Charles Ellis.

A special half hour program on KNO-TV, edutional television station, was devoted to the exhibit pr to its opening.

ARCHCROSTIC

	DEFINITIONS	÷ .				W	OR	05				1	DEFINITIONS	6				W	ORE	05			
A.	A row of six columns.	113	207	64	213	173	29	229	138	75		N.	Roman architect of 1st Cent. B.C., whose 10 books became standard	208	58	144	86	158	41	119	188	134	
	A slight swelling on the shaft of a column.	239	96	37	142	24	184	137					cribbing source of our Renaissance colleagues.										
	Grim London example of Geo. Dance the younger's Palladianism (2 words).	17	150	183	35	101	152	109	212	9	80	0.	A grade of a certain West Coast lumber, of particular interest to those	11			128	230	46	100	225	141	210
		200	49	179									in termite areas. (3 words)	15	124	228							
1.	That happy professional group whose ranks are	233	66	91	216	129	79	167	72	194				106	122	204	32	206	62	160	153		
	preferred by many to those of the worried architects.				2.10			101				Q.	Having an acutely point- ed arch. (2 words)	159	240	140	56	166	221	51	120	192	36
	Recordation: sometimes												-	14	108								
•	synonymous with licens- ing	125	_	177	93	161	189	43	201	116	85	R.	A permissive specifica- cation clause, conducive	235	6	136	65	202	155	38	77	227	94
		175	215										to ulcers. (3 words)	154	196	28	231	170					
	To ascertain or determine the personality, character of.	199	60	156	81	223	34	98	23			s.	En route (3 words).	95	47	162	71	209	88	22	44		
	The central stone of an											Τ.	Fresh or original concept. Extremely rare, (2 words)	00	170	40	234	- 21	107	107	121	007	41
	arch.	148	4	211	68	130	205	54	10			u.	Any of several Egyptian	07	1/2	40	234	31	10/	141	121	23/	01
1.	A standard biographical reference book. (2 words)	-	145	27	74	10	222	102					kings 1587-1328 B.C.	112	226	99	30	165	104	78	143		
	Jewish Territorial Organ-		140	4.1	14	17	266	105				V.	A wager offset by an- other. (2 words)	83	191	21	127	118	13	219	114	70	
	ization (Named from ini- tials).		12	123								w.	A case for carrying small articles (from the French).	149	203	181	126						
. 1	Wash basin		-									X.	A nautical hail.	25	193	121	02						
			/	1/1	53	236	8/	241				Y.	Such mortar or plaster		175	131	74	_			-		
	Architect of S. Maria della Salute, Venice		133	110	8	186	84	232	5				shall be removed from the site.	176	169	164	146	73	151	105	33	198	55
	One of the upper canine teeth commonly tendered in barter, (2 words)		147	63	190	18	224	97	57			z.	"Belzoni's Tomb," Thebes.	185	220	45	26	163	39	157	178	107	3
	Our interest in this sub-													139	168								
	ect seems unique among the professions. See AIA Doc. No. 177 for recom- mendations. (2 words)	102	180	52	214	50	217	115	174	40	67	ZZ	Term describing a rough stone finish. Derived from the manner of cut- ting.	69	117	135	82	182	20	90	42	132	

INSTRUCTIONS

																																			-			-
INSTRUCTIONS			1	н	2	E			3	Z	4	G	5	K	6	R			7	J			8	ĸ	9	c	10	c		0	12	1			13	v	14	a
o solve this puzzle you ust guess twenty-seven ords, the definitions of hich are given in the	15	0	16	K			17	c	18	L	19	н	20	27	21	v	22	s	23		24				25	×	26	z	27	н	28	R	29	^			30	U
lumn headed Defini- ms. Alongside each defi- tion there is a row of		т	32	P			23	Y	34	F	3.5	c	36	0	37	8			36	9	39	z			40	M	41	N	42	ZZ	43	E	44	5	I		45	z
shes—one for each let- r in the required word. Then you have guessed a	-	0	47	5			48	т	49	c	50	M	51	q	52	M			53	J	54		55	۲			56	a	57	L	58	N	59	0	60	F		
ord write it on the shes, and also write ch letter in the corre-	61	т	62	P			63	L	64	*	65	R	06	D	67	M	68	0	69	ZZ			70	v	71	s	72	D	73	Y	74	н	75	^	78	0	77	R
ondingly numbered ware in the puzzle dia- am. Black squares indi-	78	U	79	D			80	c	81	•			82	22	83	v	84		8.5		86	N			87	L	88	5	89	T			90	zz	91	D	92	x
tte ends of words; if ere is no black square the right side of the agram, the word carries			93	e			94	R	95	5	96	B	97	L			98	•	99	U	100	0			101	c			102	M	103	н	104	U	105	Y	801	P
ver to the next line.	107	z			108	Ø	109	c	110	ĸ	111	J			112	v	113	A	114	v	115				116	ε	117	22	118	v	119	N	120	a			121	т
	122	P	123	,	124	0			125		120	w	127	v	120	0	12	9 0			130	0 0	131	X			132	ZZ	133	K			134	N	135	ZZ		
a la diana and and di	136	R	137	8			138	*	139	z	140	a	141	0			14:	2 8	143	0			144	5 N	14.5	ы	140	Y	147	L			148	0	149	w	160	c
Solution next month	151	Y			152	c	153	P	154	R			151	R	150		157	7 2	150	N	15	• 9	160	P	161	E			162	1 5	163	Z			164	Y	163	U
riginated and submitted	160	a	167	D	168	z	169	۲	170	R	171	J	172	T	173	A 1			174	M	175	. 6	176	5 Y			177	E	178	z	179	c	180	м	181	w	18.2	22
VILLIAM DICKY MER-											-																					-						-
ILL, HONOLULU.			183	c	184	8	185	Z	186	K	187	т	188	N. N	185	E			190	L	191	v	192	. a	192	X	194	+ D	195	1	196	R	197	т	198	Y		
	199	P	200	c			201	8	202	2 9	20	5 W			20	4 P	20	5 0	Ē		20	6 P	207	7 .			20	8 N	209	3	210	0	211	G			212	c
-	213	A	214	M	215	E	210	1 0	217	7 M	21				210	• •	22	10 2	22	1 0	22	2 4			22	3 F	22	4 L			22	50	22	6 0	22	7 R		
	22	80	22	9 ^	23	0 0			23	R	23	2 14	23	3 0			23	4 1	23	5 8			23	6 J	23	7 T	23	8 L			23	9 8	240	0 9	24	1 1		
	L																	_						_				1				-		_				

417



THE 161 REPLIES to the letter sent to the Library Accession List recipients indicated a two-to-one preference for continuing the complete mimeographed accession list rather than having monthly selective lists in the *Journal*.

Accordingly the mimeographed list will be resumed, and any member, not previously getting it, who wishes it, may request it. Since an interest was indicated in subject lists, short lists will appear in the Library page in the Journal.

AUDITORIUMS

Some references on auditoriums are presented as the first of the short lists, in view of the numerous requests for such data received here. Members may borrow the books and pamphlets listed in Part I on the usual terms—\$.50 for the first volume, \$.25 for each additional. The periodical references in Part II cannot be lent, but it is hoped the listing may be of use.

I Books and Pamphlets BURRIS-MEYER, HAROLD and E. C. COLE. "Theatres & Auditoriums." N.Y., Reinhold 1949 228 p.

- AMERICAN SOCIETY OF PLANNING OFFICIALS. Planning Advisory Service. Information Report No. 7. "Municipal Auditoriums and the City Plan." October 1949. 21 p.
- SYMONS, FARRELL G. H. "Municipal Auditoriums." Chicago, Public Administration Service, 1950. 78 p.

418

- MEANS, ERNEST E. "Planning a Municipal Auditorium." Tallahassee, 1955. 29 p. (Florida State Univ., Bureau of Governmental Research and Service. Studies in Govt., no. 13.)
- WORTHINGTON, CLIFFORD. "The Influence of the Cinema on Contemporary Auditoria design." London, Pitman [1952] 123 p.

M Library Notes

- NATIONAL EDUCATION ASSOCIATION OF THE U.S., Dept. of Audio-Visual Instruction. "Planning Schools for use of Audio-visual Material." No. 2, Auditoriums. Washington, 1953, 36 p.
- WILLIAMS-ELLIS, CLOUGH. "Royal Festival Hall." London, Max Parrish, 1951, 96 p.
- DISTRICT OF COLUMBIA AUDITORIUM COMMISSION. Plans for a national civic auditorium and cultural center for the citizens of the United States. Washington, 1957, 95 p.
- LITTLE, ARTHUR D., INC., Cambridge, Mass. Report to the county of Los Angeles on a new auditorium and music center. Cambridge 1956, 96 p.
- NASHVILLE, CITY PLANNING COM-MISSION. Study and recommendation for the location of a municipal auditorium. Nashville, 1954, 23 p. SAN DIEGO, CITY PLANNING COM-MISSION. The civic auditorium for
- San Diego. A report. San Diego, 1953, 62 p.
- ARCHITECTURAL LEAGUE OF TULSA, INC. Civic center project, final report. Tulsa, Okla., City of Tulsa, 1955 p. 71-80, Auditorium. II Periodical References
- "Are You Planning a Municipal Auditorium?" T. J. MILLISACK. American City 70:108-110, April 1955, il.
- "How Not to Design an Auditorium." B. C. MOORE. American City 66:120-1 Sept. 1951, il.
- Albuquerque, N.M., FERGUSON, STEVENS AND ASSOCIATES, Arch. Concrete shell dome cast on earth mound. Arch Rec 120: 280 Sept. 1956, il. Civil Eng 25:831-2 Dec. 1955. Eng News Rec 157:36-8 Sept. 27, 1956.
- Anchorage, E. B. CRITTENDEN, Arch. American City 69:89 March 1954, il.
- Brownsville, Texas. WILTSHIRE AND FISHER, Arch. Civic center with aud. Arch Forum 101:144-9 Aug. 1954, il.
- Charlotte, N. C., A. G. ODELL, JR. AND ASSOC. ARCH. Arch. Rec 112: 121-5 Dec. 1952, il. Prog Arch 37:111-21 Sept. 1956, il.

- Corpus Christi, Texas. "Lamella Steel Vault Spans 224', Yet Only 2' Thick." Arch Forum 100:166-7 March 1954, il.
- Dallas, G. I. DAHL, Arch. Arch Rec 116:12 Dec 1954, il. "Cantilevers Support Dome of 204' Rad." Civil Eng 27:336-9 May 1957
- Hawaiian Village, Kaiser Aluminum Dome. Arch Forum 106:154-6 March 1957, il.
- Lincoln, Neb., Associated Auditorium Architects, American City 72:139-40 Aug. 1957, il.
- Lubbock, Texas, American City 70 124 Jan. 1955
- Syracuse, N.Y. Onondaga War Me morial, EDGARTON & EDGARTON Arch. "Cantilever Frames Support Thin-Shell Roof." Civil Eng 22:544-7 Aug. 1952
- Tallahassee, Fla. GROPIUS ANI OTHERS, Arch Forum 106:114-17 March 1957, il.
- Tulare, Calif. KENNY, MAAG ANI CULLIMORE, Arch., Arch & Eng 205:24-5 June 1956, il.
- Tulsa, Okla. Civic Center with Aud Arch Forum 104:120-6 Feb 1956, il.
- U.S. International Conference and Exposition Building, Berlin. H STUBBINS AND ASSOC. Arch. Arch Forum 103:154-7 Sept. 1955 Arch Rec 118:182-5 Sept. 1955 Prog. Arch 36:82-3 Sept. 1955
- Oberlin College Aud, HARRISON ANI ABRAMOVITZ AND E. SNYDER Arch. Arch Forum 100:124-9 Jan 1954, il.
- M.I.T. Auditorium, E. SAARINER AND Assoc. Arch Forum 103:128 9 July 1955. Arch Rec 118:131-July 1955. Prog Arch 35:120-5 130-1 June 1954
- "Acoustics of the Rochester Wa Memorial Auditorium," B. OLNE" & R. S. ANDERSON. Acoustical So Amer J 29: 94-8 Jan. 1957
- "Sound Systems for Large Auditor iums," L. L. BERANEK. Acoustica Soc. Amer. J. 26:661-75 Sept 1954
- "Acoustics of the Royal Festiva Hall, London," P. H. PARKIN AN OTHERS. Acoustical Soc. Amer. J 25:246-59 March 1953

BOOK REVIEWS

FORM AND FUNCTION—Remarks on Art, Design and Architecture. By Horatio Greenough. 148 pp. 4³/₈" x 7¹/₄". Berkeley: 1957: University of California Press. \$1.25

This paperback brings to the modern reader the selected essays of the nan who, in the mid-19th century, irst stated the principle that "form ollows function," that buildings deigned primarily for use "may be called machines." Furthermore, it vas Greenough, sculptor of marbles which have now lost their appeal, who first protested against meaningess ornamentation, and who first expressed the concept that the buildngs and art of a people express their norality. This is basic reading for he serious student of esthetics.

ANNUAL PUBLICATION OF THE NA-TONAL ASSOCIATION OF STUDENTS of ARCHITECTURE, 1956-1957. 128 pp. 8¹/₂" x 11". Available from the Editor, Donald Roark, 655 Quebec St., Denver. \$1.50

This handsomely gotten up yearook, well printed in offset, illusrates some of the best student work one in the architectural schools of he nation during the past year. Each f the schools represented was alotted two pages, and the selection of vork as well as the page layout hows great diversity and originality. t is to be hoped that the NASA, which is still in its infancy, will rosper and become a closely-knit rganization and continue to publish is best work.

ARCHITECTURE FOR ADULT EDUCA-ION. By Commission on Architecture: Adult Education Association of U.S.A., John W. Becker, AIA, Chairman-Editor. Chicago: 1957: AEA, 743 Wabash Avenue, Chicago 11, Illinois. \$2.00

This useful book outlines programning and planning principles for dult education in eleven types of uildings: Health centers, religious, ndustrial, elementary, high school nd college, "looking and listening," braries, recreational, community enters, and buildings specially for adult education. Most of the 69 examples are illustrated by the 92 plans and 68 photographs of completed buildings. It is accurately described as "a graphic guide for those who are planning physical facilities for adult education."

The concise text includes sections on each major building type and one on financing and management. So much useful data for the modest price would not have been possible without much volunteer labor by the Commission, and a foundation subsidy.

W.A.T.

WREN, and his Place in European Architecture. By Eduard F. Sekler. 302 pp. 61/8" x 97/8". New York: 1956: The Macmillan Company. \$12.00

A thorough study of Wren's work in its relationship to contemporary activity on the Continent and to Wren's own personality. It is lavishly illustrated with plans, photographs and reproductions of Wren's own drawings, and includes a bibliography and complete index.

THE GINGERBREAD AGE, A View of Victorian America. By John Maass, New York, Rinehart & Company, Inc., 1957, 212 p. illus., 8 x 11¹/₂", \$7.95.

An Austrian, who came to the country in 1941, Mr. Maass was impressed by the nineteenth century houses that he saw. After sketching and photographing many of them, he read about them in libraries, finding little and that mostly derogatory. As an antidote he offers here his own views, summarized in short chapters abundantly provided with illustrations.

This book treats of the period from 1837 to 1876 which the author notes was one of great development for the United States, marking the transition from an agricultural to an industrial economy. Mr. Maass feels this era produced "an enormously creative and progressive architecture." To the Victorians, buildings were symbols and they strove hard to make them "fitting." After commenting briefly on the Greek revival, the author discusses some of the numerous styles in which the architects worked. However he does not see them as mere imitators, for each new problem was attacked in a spirit of vigorous experimentation. The illustrations depict a variety of styles—castellated, Norman, Egyptian, Saracenic and the octagonal promoted by Fowler.

Then follows the American Gothic, in stone and wood, which houses were decorated with the gingerbread, that in the author's opinion has been so unfairly judged. He notes that the same scrolls and curlicues were a universal design element of the nineteenth century, appearing in needle-work, typography and penmanship.

Of the Italianate villa he writes that this flourished on the eve of the Civil War and that this period left us beautiful and distinctive buildings. With ground plans open and informal, roofs with wide overhangs, first floor rooms opening on to terraces and loggias for outdoor living, they offered many of the features so prominent today.

"The Mansardic Era" relates of the importation of the mansard roof from France in the eighteenth fifties and its Americanization and triumph until the seventies. One chapter touches on other building types, such as barns, depots, firehouses, stores.

Finally, Mr. Maass comments on the rediscovery of nineteenth century "primitive" American art and suggests that Victorian architecture deserves equal attention. His concluding illustrations are of modern artists' depiction of Victorian architecture.

Whether one agrees with Mr. Maass' thesis or not, one must recognize his affection for these houses of another generation. Although the book is not presented as a work of formal scholarship, a bibliography is included.

This is a thoroughly enjoyable expedition into a generally neglected field.

GEORGE E. PETTENGILL

Letters to the Editor.

EDITOR, Journal of the AIA:

Belated congratulations on the new format of the *Journal* and a few extra hurrahs and thanks for the June '57 or Convention issue. Have just now found time to really peruse it.

Mine being strictly a country and small town practice it is sometimes hard to justify the annual A.I.A. dues, but the activities and objectives indicated and proclaimed in this convention issue removes much doubt.

EMIEL J. CHRISTENSEN Columbus, Nebraska

EDITOR, Journal of the AIA:

Economical construction with the advancement of new design methods will be forever hampered by uninformed architects such as Leo F. Caproni (Too Much Glass, April *Journal*) and the publishing of such a letter which is neither informative, educational, nor intelligent. I refer particularly to the plastic theory in steel and prestressed concrete.

Only a small amount of information about these subjects would lead to such writing and publication. I apologize to the Structural Engineers for both of you.

> W. L. FORD Indianapolis, Ind.

EDITOR, Journal of the AIA:

I must tell you how much I have enjoyed the new AIA *Journal*. There is no doubt that the new letter-size publication is a distinct advantage on the two previous different size publications.

It is indeed befitting that we have a first-class magazine of our own devoted to the uplifting of our profession, a magazine by Architects and for Architects. Let it expose our thinking and help us to grow intellectually to meet the broadening aspects of our profession.

> J. ROY HAASE Baton Rouge, Louisiana

EDITOR, Journal of the AIA:

I cannot help but comment on the article "Save the Robie House" in the August *Journal*.

I, personally, appreciate Perrin's plea to save this monument, as I have been closely associated with this monument (behind the scenes). It is also of value to be informed of other architect's opinions of their value of Mr. Wright.

Having been a close student of F.L.W. for over 25 years and a personal friend nearly that long, I regret to see our *Journal* publish the translation of architect Volckers of Germany in a way that might be possibly detrimental to saving the Robie house.

Those of us who know and respect Mr. Wright not only for what he did for architecture in the 1910s and have taken the trouble to delve deeper into his philosophy of his architecture through to the present time and thus, I feel, are in a better position to understand what he is to American architecture, are somewhat miffed at "critics," domestic or foreign, who take it upon themselves to expound about a great Americancertainly our greatest architect (who else?), when it is so obvious that they do not know all about what they write. They fail to realize Wright has given us more than merely physical form or style, but a deep-rooted way to physically express a way of democratic architecture (American architecture, if you please) that we couldn't possibly expect our colleagues across the water to fully comprehend.

Again, I feel it is good to air everyone's opinion and I respect this attitude in our way of life. But it is truly appalling to read in our *Journal* the "expert" opinion, negative in character, such as found in the August issue under "Save the Robie House," if we really do want to save it. And we must!

> KARL KAMRATH, FAIA Houston, Texas

EDITOR, Journal of the AIA:

Recent practice of the Journal in publishing or quoting verse of one kind or another calls to mind a clever quatrain by Arthur Guiterman which may well have been published in "The Conning Tower" along with the "Monody of Remodelling" in your February issue. It went about as follows:

- "Man never knows exactly what is right,
- But torn between the shadows of a doubt,
- He puts in windows to let in the light,
- And then hangs curtains up to shut it out."

I have quoted or misquoted this many times during my years of practice in regard to the popular and not unpleasing "window-wall" in domestic or other architecture, at the same time pointing out that the expanse of glass is itself expensive, expensive to heat (or cool), and to all that must be added the cost of jalousies, interlined draperies or other protection for light or privacy.

In line with over-lighting from the exterior, usually unprotected by eaves or a hood, the intensity of interior lighting has been brought to a point where in public or semi-public buildings and in offices it is, to me, not only disagreeable but almost painful: Somewhat in line with the over-illumination of chicken-house to make the hens at night, who think it day, just lay and lay and lay and lay and lay. (There's another poen for you!) The English SPCA has condemned this practice-as the SPCA ("A" for adult book-keeper and draftsmen) might well do here

More seriously, I recall my father's remark—he was a famous eye-specialist—that whether for in door or outdoor light, too much of it was injurious not only to the eyes but to the human system in general He died in 1936, long before the prevalence of megahyaline struc tures, but after the introduction of hat he called too much glass in omestic work. I appreciated a little ecture he gave me, for it was the nly time he ever butted into my rchitectural fads, to the effect that fan's first instinct, expressed archicturally, was to seek shade for priacy and repose, and that the instinct ould still not be denied, even though was first shown by his building uts-with very small openingshen no handy cave was available. s he was no mere eye-specialist, e went on to the bad psychological nd neurological effects of too much ght and, especially in relation to the in's rays (the term cosmic had not een invented then), their relation cancer. This annoyed me because was an habitual sunbather. The ist of it all was, that Man's primal endency was to shut out the light nd the cold or the heat, and not let in except as need be. He did, owever, insist on enough light, and ven that happened to be more than like, though I do not care for ining in a room so dark that I can't nd the fishbones before I swallow nem. Neither did he.

I respect his professional opinon as it affects my own profession, nd am personally sure that it was ght.

> Edward Steese Scarsdale, N.Y.

DITOR, Journal of the AIA:

That's a magnificent photograph the August issue of the Journal

THE WINNERS of the Internaonal Solar House Architectural ompetition were announced reently by Jan Oostermeyer, President if the Association for Applied Solar nergy, which sponsored the const. Purpose of the competition was o obtain original designs for a resience especially adapted to "living ith the sun" on an irrigated desert te north of Scottsdale, Arizona.

First prize, \$2500, was awarded Peter R. Lee, a senior student in rchitecture at the University of linnesota. In the competition, Lee as affiliated with Robert Lewis liss, AIA, senior partner in the linneapolis architectural firm of liss and Campbell. —the bulldozer in action. I got dizzy just looking at it, teetering on the edge of that road-bed far up above terra firma!

I'm surprised that our fellow architects have not risen to the occasion—there must be scads of them who are exceptionally skilled with a camera.

I enclose seven of my own photographs for your consideration as material for the Journal. They are some of the best I have produced over a long photographic career. One of them has been published-"Concert Night at the Met. Museum of Art," and another has been exhibited at Photographic Salons all over the "Stadium and Canada: U.S.A. Stairs." However, this should not prevent their publication in our own Journal. The others have never been published or exhibited anywhere. (During my long photographic career, which ran parallel with my architectural endeavors, I have had some thirty one-man exhibitions of my photographs, including the National Museum in Washington, the Architectural League in N.Y.C., and the Knoxville Art Centre-the only photographic exhibition in their long history.)

Those articles by Alfred Bendiner are gems! (I happen to be one of the "Hungarian Architects" he insulted on the boat ride to Mount Vernon, during the Centennial Convention.) I enjoy them to the hilt—his sense of humor is price-

In commenting on the choice of Lee's design for the first prize, the chairman of the jury, Dean Pietro Belluschi, FAIA, of Massachusetts Institute of Technology, said: "Among the outstanding merits of the winning entry were its directness and sense of unity, and the logic of its solar equipment, which acts in the double capacity of shade louvers in the summer and heat collectors in the winter."

Second prize, \$1500, was awarded by the jury to Anna Campbell Bliss (Mrs. Robert Lewis Bliss), who is the junior partner in Bliss and Campbell and a registered archiless—and I shall write to him personally to tell him so. Please keep him writing "Through a Martini Glass" even if you have to pay him for his articles!

> ALOYSIUS SCHUSZLER Cleveland Heights, Ohio



EDITOR, Journal of the AIA:

Your vivid account in the September issue was so real I could almost smell "the hot biscuits in the oven!"

I wrote to Bendiner—and got his reply from Lisbon, Portugal. The enclosed cartoon of me is not *physically* realistic (especially the hair), but it *does* portray my nature! This is a gem.

> ALOYSIUS SCHUSZLER Cleveland Heights, Ohio

tect in the state of Minnesota. Of her design, Dean Belluschi said: "The main appeal of this design lies in the fact that the solar collectors themselves produce the architectural quality of the house. The disposition of these collectors keep the house from becoming too severe in appearance."

The winning designs were selected by a five-man jury consisting of Dean Belluschi; Carlos Contreras, Honorary Fellow from Mexico City; Thomas Creighton, Editor of *Pro*gressive Architecture, New York; Nathaniel Owings, FAIA, of Skidmore, Owings, & Merrill, San Francisco; and James Elmore, of Phoenix.

THE EDITOR'S ASIDES

WE PAID A VISIT to the Air Force Academy a couple of weeks ago, under the expert guidance of Nat Owings. What a project! What a site! Looking across at it from the main road, nestling against the base of the mountains, it made us think of Queen Hatshepsut's rock-cut temple at Der el-Bahri. But there the resemblance ceased. For this is a *city* that is being created on the edge of the parched wasteland, a great modern city. That seems to be the twentieth century touch—to create cities wherever we go.

The academic unit is the most advanced in construction, a huge sixstory building containing classrooms and laboratories, an auditorium seating a thousand, another seating about three hundred, and two more seating two hundred and fifty each. The frame and floor panels are complete, and ductwork is being installed. The dormitory unit is well along, but is so vast that while they are setting steel columns at one end, the glazed wall panels are being set at the other This unit will contain 1300 end. rooms for 2600 cadets. It is five stories high, the center, or third, story being open for circulation and recreation. The approach is from high ground to this level.

Housing for faculty and staff are yet to come. The parade ground is rough graded—it looks to awestruck eyes at least a half-mile long, and everywhere there are indications of immense earth-moving projects having been completed during the past two or three years. There are ramps and tunnels to underground service areas, retaining walls and bridges. What clean bridges! We saw pre-cast pre-stressed concrete girders 135 feet long being set for the highway approaches.

Yes, a new city is being built in Colorado, and a monument to twentieth century architectural skill and engineering techniques.

WE SPENT AN EVENING recently in the home of Jim Hunter, chairman of the AIA Committee on Education, in Boulder, Colorado. Carlos

Contreras and his vivacious wife were there, and under the benign influence of Mrs. Hunter's delicious mountain trout and excellent wine, the talk turned to serious things. We talked of how, "in the old days," the successful architects gave so much of themselves to the education and training of the younger generation-the essence of the atelier system, with its patron. Today the top men are too busy, or think they are -or is it that the feeling of responsibility for the younger generation is dead? "Why don't the schools turn out better-trained men?"

We talked of the decline in draftsmanship, which is as precise as ever, but free-hand draftsmanship. Possibly without the demand for luscious garlands and dimpled cupids, such as Ralph Calder used to turn out, there is no further need for the flowing line. But it was the mark of the artist and the man who loved his work. Who goes sketching nowadays, just for the love of it? My my, we're beginning to sound like Bendiner.

We talked about the submersion of the individual in the group effort, and the consequent loss to architecture of the expression of a single rich and rugged personality. Someone quoted President Griswold as saying that Shakespeare was not written by a committee.

Jim Hunter waxed quite vehement on the theme that the term "architect" is too exclusive. Many are part of the architectural team today, and should be recognized as such. There is a hangover from the old Beaux Arts days that casts an aura of glamour about the designer, that implies that only the designer can be an architect. But the specification-writer is an architect, the chief draftsman is an architect, the job captain is an architect, the production manager and office managers are architects-and today most of them are licensed architects. Even the mechanical and structural engineers are architects, in that they contribute to the design of a building.

So there should be "mechanical and chitects" and "production architects," and equally bearing the proud title "and chitect" and all sharing equally in producing the design of the building Thus Jim—and good thoughts, too.

WE'VE RECEIVED a communica tion from Ernest O. Brostrom, o Kansas City, asking what offices d with old drawings when an offic breaks up. Well, what do offices d with old drawings when they brea We've got three or four an up? swers from our own experience First of all, drawings of buildings o distinction-from offices of distinct tion, of course-should be presented to the local historical society o other proper archive or they should be presented to the AIA, which i building up an archive for just such a purpose. But that is only for top drawer offices and top-drawer build ings. The rest of us must face th Thirty years ago, when problem. we worked in Frederick L. Acker man's office in New York, he had vault in a storage warehouse (prob ably Manhattan) where he kept trac ings of old jobs. We would be will ing to bet that they're still there (Harold Sleeper, come forward and testify.) Personally, when we turne over our practice on Long Islan to our younger partner upon com ing to Washington, we carefull moved several rolls of old tracing from the attic of our home to th air conditioned basement of our new office building, there to remain ti they rot. Our father, (damn that editorial "we," that sounds positivel sacrilegious!) well, anyway, Da lived in a more practical age. H had a busy office in Cleveland fift years ago, and all final drawing were traced on linen then. In late years, cleaning up his practice, h washed and bleached the linen trac ings, and they came out snow whit linen. They made dandy handker chiefs, napkins, pillow cases an other things for the family. If any body has any better suggestions for Mr. Brostrom, please send them in AMERICAN ARCHITECTURAL FOUNDATION BT 1-30 AMERICAN INSTITUTE OF ARCHITECTS BT 1-30

SCHOOL PLANT STUDIES

ducational Theatre Architecture

Eric Pawley

- A MATTER OF DEFINITION
- THE ARCHITECTURAL PROGRAM
- THEATRE & LANGUAGE STUDY
- MULTI-PURPOSE COSTS
- SLOPING FLOORS THREE OR MORE
- DIMENSIONS THE LARGER TEACHING
- FACILITY
- SPECIAL FORMS THE ARCHITECT'S
- PROJECTION
- SIZE OF AUDIENCE
- THE LITTLE SCHOOL IDEA

OTE:

HIS IS TWENTY-NINTH OF A SERIES OF PAPERS PREPARED BY MEMBERS OF THE AIA COMMITTEE ON SCHOOL BUILDINGS, & BY SELECTED SPECIALISTS, D MAKE LAYMEN AWARE OF SCHOOL BUILDING PROBLEMS & TRENDS & D STIMULATE DISCUSSION. THEY ARE NOT INTENDED TO BE DEFINITIVE IST WORDS & CARRY ONLY THE AUTHORITY OF THEIR RESPECTIVE JTHORS. THE SERIES WILL BE EDITED BY THE COMMITTEE & ISSUED BY THE A DEPARTMENT OF EDUCATION & RESEARCH UNDER SPONSORSHIP OF THE AMERICAN ARCHITECTURAL FOUNDATION. MANY NEW SUBJECTS RE BEING WORKED ON & CONTRIBUTED ARTICLES ARE WELCOME. WIDE-READ DISTRIBUTION TO LAYMEN & EDUCATORS IS MADE OF THESE NON-ICHNICAL ARTICLES IN REPRINT FORM.

ne copy each issue free—additional copies 10¢ each)



EDUCATIONAL THEATRE ARCHITECTURE*

By Eric Pawley, Research Secretary, American Institute of Architects

A MATTER OF DEFINITION

LIKE THE ARMY CHIEF OF STAFF referred to in Giraudoux's play Siegfried we cannot afford to have a wrong definition. He was a failure because he had a wrong definition of war—a pretty basic defect in his profession.

What is the definition or purpose of the educational theatre?

Those who believe they perceive a high mission for it can answer this question in many ways. There are some who look on the theatre first as a synthesis of arts and techniques of expression and communication. Others, with a psychiatric orientation, can see great benefit to troubled individuals who go thru the experience of role-playing. Those with a traditional educational bent realize the theatre's mission of transmitting to our age the rich treasures of the humanities thru study, performance, hearing and seeing of works of the past. Some few, with torches flaring against a dark and troubled background, look for individual contemporary messages and interpretations of and for our own times. Still others think of the educational theatre as vocational schooling-training for performance, production or writing for radio, television, motion pictures or stage. Perhaps too few see a long-range purpose in the creation of intelligent, receptive audiences of the future-a cultural tradition possibly best illustrated in history by the significance of the Comedie Francaise to the French-again possibly to too few French, today.

The methods and purposes of the theatre are delightfully presented in Giraudoux's one-act play L'Impromptu de Paris which takes place in Louis Jouvet's theatre with his own acting company as the cast explains—to a government official who crashes a rehearsal with news of a national theatre subsidy—just what the theatre is all about.

424

Jouvet himself left a thick notebook of agonizing attempts to communicate his deepest thoughts about his *metier*—sentences and paragraphs often written in early morning hours after performances in his own theatre in Paris, or on tour with his players in the provinces or during the war, in South America.

Both these examples deal primarily with the task of the actor which others as well have tried to express and explain. We are concerned here specifically with the educational theatre—the purpose of which must be admitted to be bewilderingly protean. Like the sorcerer in many a folk and fairy tale —when grasped, it changes from repulsive old man to fluttering bird to squirming snake to flowing water to blazing fire to beautiful woman. The idea is to keep a firm hold—especially when it is a beautiful woman!

THE ARCHITECTURAL PROGRAM

A firm grasp on the idea of architecture for the theatre implies knowing the program for the building. These purposes, discussed above, are essentially program ideas and the first step toward a successful educational theatre facility-before any drawings are made-is a word-description of exactly what will be done in it-what your hopes are for your specific theatre in terms of staff and students, kinds of activities on stage and back-stage, seating capacity or demand, facilities for music, projection, lighting, scenery handling and/ or production, acoustic demands, control spaces required, costumes, library, rehearsals, recording-the endless number of disciplines that interweave to produce theatre and make it such a fascinating fabric.

Before preparing this word-picture of working areas there are larger basic decisions to be made and stated in your program or educational specifications. Is a traditional proscenium stage going to fill your future needs and keep the interested student population high—high in numbers as well as high in inspiration? Will there be any work in the round? Will you need radio, television and/ or motion picture studio facilities?

THEATRE & LANGUAGE STUDY

A most interesting possibilit lies in combination of theatre wit the language laboratory and the new approaches to high fidelity soun reproduction and visual analysis of speech and dialects—such as the research of the Haskins Laboratorie supported by the Carnegie Corpora ton of New York.

Visible speech analysis ha shown how we differentiate betwee and recognize words-how we te "bat" from "pat" and "mat." Pa terns on sound-track have been stud ied and "hand-written" copies of simplifications played back to giv speech and sounds without an aud ble human source. A report of th work notes that "By altering the pa tern in slight and subtle ways, quali and accent can be changed in pr dictable fashion. Thus, the wor Alabama can be given the chara teristic drawl of a Southerner, the (stressless) accent of a Frenc man. It is possible to work wi any language, analyzing its chara teristic modes of pronunciation an its dialects, and to compare with new order of precision the vario languages of the world." (1)

Equipment of laboratory quali for this research costs several tho sand dollars—but undoubtedly sin plified facilities of less precisio could be developed for student us

Such a combination of theat and language-study has tremendo educational value for today becau the first step in understanding oth people is understanding their lang age well enough to realize that tran lations are imperfect. The class example was the almost-fracas the United Nations when a mild n quest, phrased in convention French as "nous demandons" w clumsily interpreted as a most u diplomatic "we demand!"

*a paper presented before a so tional meeting of the Americ Educational Theatre Associati convention Boston 28 Augu 1957 (revised) Such rewarding study will require language-laboratory facilities, with tape-recorders, listening-recordng booths and library, perhaps storige for portable equipment for supplementary classroom use and by all neans mirrors for study of gesture he American's weakest expression.

MULTI-PURPOSE

The current fanaticism for low osts in school buildings—make 'em heap but our children are priceess—has loaded us with multi-purpose rooms. Some of these cafeoriums, gymnassemblies, auditerias nd audinasiums are the kind of legitimate offspring you might exect—others are adequate—but they re always design compromises. Our uestion should be: Can we afford hem?

This is by no means a new roblem as some younger teachers night believe if they are familiar nly with current publications. In 938 Alice Barrows of the US Ofce of Education wrote an article ntitled "The combined auditoriumymnasium: The Dr. Jekyll and Mr. lyde of the school building." (2) Vith the technical help of Lee Sinonson she also wrote a construcve and pioneering 50 page pampht on the subject—now out-of-print -with (in 1939) natural emphasis n proscenium theatre planning. (3)

Another, much neglected aspect pointed out by R. N. Lane, acouscal consultant, as follows:

". . . The cafetorium has recently come into general use in modern schools. From an architectural acoustics standpoint this is a very regrettable marriage between a cafeteria and an auditorium; experience has shown that the design of this particular type of room is usually based more upon cafeteria requirements than upon auditorium requirements and that, consequently, the rooms should be treated from the noise control rather than the architectural standpoint. It is recommended, therefore, that as much absorptive material be used in a cafetorium as possible so that the clatter of the dishes will be somewhat reduced and the conversation of 600 to 1000 students will not become

acoustically overpowering. Since cafetoriums invariably have low ceilings and improper layout for a good auditorium, it is impossible to treat them for excellent hearing. Therefore, the acoustical treatment affording the maximum noise control is recommended, along with a good public-address system to enable people to hear at meetings held there." (4)

Hardly good conditions for theatre use.

COSTS

Incidentally, on the matter of costs, it was illuminating to hear a school superintendent report recently that a 14-room elementary school cost about the same as *one-half-mile* of highway and that for the cost of 10 miles of road he could build his whole school system! Apparently all we need is the same pressure for adequate schools that we've had for roads . . . and we'd better generate it or there may be more stop-signs and they may read "NYET!"

SLOPING FLOORS

It may be doubted that our generation will see, in average secondary schools, general construction of sloping-floor theatres. 22 years ago I wrote a brief plea for them and for special visual education rooms for optimum projection quality—seating about 125. (5) The VE people now prefer to take it to the classroom and fuss about getting the room dark enough.

There are serious visual obstructions for an audience on a flat floor and considerable data has been published on this problem of vertical sight-lines and the correlative one of horizontal sight-lines. (6) I suppose we could theorize about comparative values of individual empathy at a performance contrasted with feeling the one-of-the-group insistence imposed by seeing everything with other heads in the way! You know togetherness!—let's leave it at that.

Perhaps we need to rethink the whole idea of theatre form and heating—the concept of the windowstage—and become multi-dimensional. There seems no reason why (except for basketball practice—if that has priority in your educational system) no reason why a gymnasium cannot be arranged for arena or multi-form staging. (7) (I know, I just blasted away at multi-purpose.) Is the proscenium stage obsolete with or without adequate wings and stage-tower? I should not be surprised if we soon find it so.

I should like to see some arenastage-lighting studies directed toward development of a simple, safe, frame which could be flown like a flat cloud in any space of adequate ceiling height and do the job of lighting an acting area.

What seems not to be generally recognized is that the proscenium automatically trails along with it a host of fire and building regulations embedded in hard-to-change codes, some of which go back to candlefootlights and explosive scenery.

There should also be study of movable seating and riser platforms to develop a non-creaking design.

THREE OR MORE DIMENSIONS

From an anthropological point of view it may be regression to go from the abstraction of two dimensions of the window-stage back to three—but moving on to four dimensions (or more) with space-time considerations and others, we enrich experience—but make completely satisfying esthetic results *very* difficult! It's a dilemma with really sharp horns but students and audiences composed of parents are possibly less critical of some of these values.

THE LARGER TEACHING FACILITY

Still another trend related to the multi-purpose idea (but an improvement) is the introduction of a larger unit in a teaching facility, variously called "Room A," "General Educa-Laboratory" or "Learnings tion Laboratory." (8) These are rooms perhaps three times the size of an ordinary classroom in which many individual and group projects go on simultaneously. Such rooms often include a platform for oral and dramatic presentation. One example of this type I have seen is part of a 5-year experiment in educational television-supported by the Fund for the Advancement of Education and by industry thru RETMA (Radio, Electronics and Television Manufacturers Association).

Elementary classrooms also

have made provision for oral and visual presentation by a low platform, as in Salem Avenue Elementary, Hagerstown, Md. (McLeod & Ferrara, AIA). Foster Senior High School in Seattle (Ralph Burkhard, AIA) has small curtains on diagonal ceiling tracks to create detached areas in the classroom.

SPECIAL FORMS

Architects and engineers have been designing roof shapes of multi-folded plate and curving shell construction which are of great formal and structural interest. The recent Danish competition-winner for an Australian opera house is a particularly exciting example. (9)

A logical development of these for warm climates or summer use is the play-shed. We have illustrated two Texas schools by Caudill, Rowlett & Scott Associates which suggest this type of structure. One problem of the school play-shed is that the central area should be used for focus or acting area in daytime rather than an open end to avoid working against the light.

THE ARCHITECT'S CONTRIBUTION

Years ago among the early productions of Bauhaus design pioneering in Germany the architect Walter Gropius proposed what he called a Totaltheater, an elaborately mechanized multi-form space which was never built. About 1900 several great German theatres were built to designs by the architect Max Littmann which technically have rarely been surpassed. (by technically I mean in adequacy of stage and production areas and in audience sightlines.) There are architects today who know this field and others who can do an excellent job of translating a good program into a specialized building without former experience with that particular building type. There are perhaps a few whose work has been a challenge and stimulus to the best thinking education has been able to muster. There is no question but that the best architects have always made major contributions to education in their work and a few educators are beginning to see the educational importance of architectural values.



WILSON JHS MECKLENBURG CITY NC - CAFETERIA A. G. ODELL JR, FAIA



SO HAGERSTOWN HS MD - GENERAL EDUCATION LAB MCLEOD & FERRARA, AIA



WHITE OAKS ELEMENTARY (#6) IDEAL INDOOR-OUTDOOR PRESENTATION SPACES



WHITE OAKS ELEMENTARY (#4) JOHN WARNECKE, AIA



SO SAN FRANCISCO HS — AUDITORIUM A SEPARATE STRUCTURE



O SAN FRANCISCO HS — AUDITORIUM OHN LYON REID PARTNERS, FAIA



YLER TEXAS JHS — GYM AUDILL ROWLETT SCOTT ASSOCIATES, AIA



OLLEGE STATION TEXAS — HS AUDITORIUM AUDILL ROWLETT SCOTT ASSOCIATES, AIA



TYLER TEXAS JHS - GYM HIGH END





FOSTER JHS CLASSROOM CURTAINS RALPH BURKHARD, AIA

Photos by Eric Pawley

427

More often the dramatics teacher concerned about a new school building project finds himself isolated from building program preparation and frustrated by indifference of administrators, school board, parents or legislators who view educational theatre as beyond the call of duty in education "in these times when schools cost so much . . ." Experience has proved otherwise and a good small theatre (not a cafetorium or a monster auditorium!) has been found one of the most useful and most-in-demand spaces in a school.

PROJECTION

Proper sight-lines for viewing screen projection have been an enormous influence on theatre shape. Persons interested in immediacy of dramatic effects and rapport between actor and viewer can talk all they want to about 180° or 200° seating surrounding the presentation area. For optimum projection-viewing, seats should never lie beyond diagonals drawn from opposite sides of screen at 50°. This results in approximately 80° seating and is, and should be, a major determinant of seating plan in any space for viewing projection. The question is whether a window is for both air and vision. Progressive architectural design often prefers a fixed window. Perhaps school people will some day realize that this multi-purpose combination is as wrong (for full audience) as the others.

SIZE OF AUDIENCE

428

The question of size is very important. It is commonly held that optimum audience for dramatic presentation is considerably less than 600. Literally, it's a far cry from the great-voice-tradition which is about to atrophy under electronic pampering anyway . . . But *must* the space be used for full student-body assemblies and a full graduation class on stage?

The use of the school theatre facility by the community is often advanced as justification but we find Frank Lopez, AIA, a former senior editor of the *Architectural Record*, distinguished for his thoughtful comment on school building problems, writing: "... another reason our school buildings lack the ultimate in stature may lie in our insistence on ... premises which time may prove false ... almost all our schools are so consciously oriented toward the community as a whole that the most important occupant, the child, finds his building compromised in some respect ...

". . . In tying the school to the community so closely what have we gained for what we've lost? For we have lost in the process; the gymnasium built primarily to satisfy a community's lust for basketball costs enough to raise more than a suspicion that something somewhere else in the school was sacrificed to make the gymn possible. An auditorium as a teaching instrument is one thing; as a 'little' theatre for adult use it is quite another, and apt to be just as expensive as the gymnasium, to raise just the same suspicion.

"Not that we advocate abolishing such school elements! However, when construction costs so much is it not wise to examine every item in the program with a jaundiced eye? Perhaps-and we know of several instances-the gym, the swimming pool, the community theater can be secured through the cooperation of another civic department, a private agency, a fund raised for the specific purpose. All these methods have been used. Sometimes the special-purpose structure is integrated with the school, sometimes the two are divorced." (10)

THE LITTLE SCHOOL IDEA

The General Education Laboratory idea mentioned has another corollary-rather poorly termed the "little school" concept-which should be of great importance to teachers of the educational theatre. This idea effectively breaks down the monster 2000-pupil school into 4 little schools of 500 each, sharing certain common facilities but with opportunities for 4 groups instead of one major team for sports and one cast for plays. Instead of a favored few being able to star in leading parts-four times as many can have this important achievement of a worthy objective. How much promising material has been rather blighted by the early discouraging experience of never getting a major part. Just think—four Juliets—four Mercutios! A dramatics teacher might prefer four different plays, of course, but the way statistics or juvenile delinquency are going, you'll probably end up with four squeaking Lady Macbeths!

References

- Carnegie Corporation of NY Quarterly report July 1954 The sight of sound
- (2) Barrows, Alice: The combined auditorium-gymnasium American School & University 1938: 291-295
- (3) Barrows, Alice: The schoo auditorium as a theater US Office of Education Bulletii 1939 No 4 50p (out of print)
- (4) Lane, R N: Noise control in schools Noise Control July 1957: 32-33
- (5) Pawley, F A: notes on schoo auditoriums & checklist Arch Forum Jan 1935: 83-84
- (6) Pawley, F A: auditorium seat ing & horizontal sightlines Amer. Arch. July 1937: 87-97 reprinted in Time-save Standards (Arch. Record bk) 1946 edit: 254-257 1950 edit: 343-346 1954 edit: 415-418 Pawley, F A: sightlines in theaters Pencil Points March
 - 1942: 177-182 (both articles pirated in 4th edit Architectural Graphic Standards, Ramsey & Sleeper & in Building, Planning & De sign Standards, Sleeper)
- (7) Miller, J H et al: Initial fac tors in theatre planning Edu Theatre Journal May 1956
- (8) Shaw, A B & John Lyon Reid FAIA: A new look at secondary education (The Random Fall idea) School Exec March 1950
- (9) Utzon: Australian opera house competition Progressive Archit tecture August 1957: 95-97
- (10) Lopez, F G: The importance of quality in school building design Architectural Record April 1957: 219-221

TECHNICAL NEWS

lew Members of Producers' ouncil:

wedish Crucible Steel Co. astic Division 801 Conant Avenue etroit 11, Michigan Oscar L. Olson, President National Representative astic Tile Corporation of America 9 Park Avenue ew York 16, N. Y. Carl Resnikoff National Representative olta Products Division eneral Tire & Rubber Co. 53 Fifth Avenue ew York 16, N. Y. Paul R. Hofmann, Sales Mgr.

National Representative

South LaSalle St. hicago 3, Illinois

Robert H. Morris, Genl. Mgr. National Representative

innesota Mining & Manufacturing Co. 10 Bush Avenue

Paul 6, Minnesota

G. J. Schulte, Product Mgr. Adhesives & Coatings Division National Representative

ommittee Appointments:

A representative on ASA A-10: andards for Safety in the Conuction Industry:

harles F. Murphy, Jr., AIA, of Chigo chapter succeeds Charles S. aines, AIA, as the Institute's reprentative.

SA Modular Awards

e American Standards Association s approved The Jury of Awards' ection of the following to receive 56 ASA Modular Awards:

R DESIGN:

John R. Magney, A.I.A. Minneapolis, Minnesota

For his outstanding contribution toward the advancement of Modular Measure as a means of benefiting the national economy through his early adoption, application, and promotion of its principles in the field of architectural design.

R EDUCATION:

William Demarest, Secretary, ASA A62

Washington, D. C.

For his outstanding contribution toward the advancement of Modular Measure as a means of benefiting the tational economy through his widesspread dissemination of knowledge concerning the constructional advantages & economies inherent in the application of its principles.

FOR PRODUCTION OF MODULAR PRODUCTS:

Neill Boldrick, Vice President Acme Brick Company Fort Worth, Texas

For his outstanding contribution toward the advancement of Modular Measure as a means of benefiting the national economy in leadership resulting in the widespread production of modular clay products.

FOR CONSTRUCTION PROCEDURES: Andrew Place, Builder South Bend, Indiana

For his outstanding contribution toward the adwancement of Modular Measure as a means of benefiting the national economy not only as an ardent adwocate of the adoption of its principles, but also in their application to techniques of construction.

FOR PROMOTIONAL ACTIVITIES: P. I. Prentice, Editor & Publisher "House & Home"

For his outstanding contribution toward the advancement of Modular Measure as a means of benefiting the national economy through nationwide publicity in a widely distributed architectural magazine S the media of Round Table Conferences.

The Jury for ASA Modular Awards is as follows:

A. Gordon Lorimer, AIA

Fred M. Hauserman, PC

Ralph J. Johnson, NAHB

James E. Coombs, AGC

Harry C. Plummer

The Joint Committee, AIA-PC Theodore Irving Coe, FAIA

The Joint Committee, AIA-PC Award Certificates & Modular Symbols will be awarded at the 8th ASA National Conference on Standards, in San Francisco, California, Wednesday, November 13, 1957.

Fire Hazard of Steel Deck Construction

Attention has been directed to the fire hazard of insulated Class II Steel Deck construction.

In one notable fire experience fire raced 1800' along the underside of a 35-acre roof deck causing the roof and walls to begin to collapse within 25 minutes. Class II Metal Roof Decks are defined as any insulated metal roof deck, with or without a vapor barrier, in which asphalt is used as an adhesive between the insulation and the deck, or a metal roof deck utilizing asphalt impregnated or asphalt-coated fiber board insulation, mechanically fastened or mopped to deck, and a metal roof deck on which roof covering is mopped directly to the deck without insulation.

Sprinkler protection is recommended.

Concrete Face Lifting

Form lines of rubber and plastic in a variety of patterns are now available to provide texture or a geometric pattern to concrete surfaces.

These can be applied to the face of concrete blocks or to monolithic concrete walls.

Long Lived Piles

Demolition of an old East River pier in New York City revealed that pressure-treated piles driven in 1889 are still, after 68 years, in perfect condition.

Meeting of the AIA Committee on Human Safety

A Meeting of the Committee on Human Safety was held at Institute Headquarters on September 19, 1957.

Also present at the meeting were representatives of the U.S. Air Force, the U.S. Department of Health, Education & Welfare, the AIA Committee on Hospitals & Health, Nolan D. Mitchell, formerly of the National Bureau of Standards and Robert C. Byrus, Director, Fire Extension Service, University of Maryland.

Items of the *Agenda* considered at the meeting included:

Increasing destruction of churches by fire which, it has been alleged, is partially due to failure of architects to observe adequate protection against rapid spread of fire in the planning of these structures. In residential open planning, attention was directed to rapid spread of smoke and lethal gases; and the trend toward windows in bedrooms too high and too small to serve as emergency means of egress.

It was pointed out many materials used for interior finish are subject to rapid flame spread and combustion, and give off noxious smoke and gases.

The Committee recognized problems confronting fire extinguishment forces in connection with fires in windowless buildings; also, where glass blocks serve as windows.

Attention was directed to the designing of air-conditioning and ventilating systems without effective smoke control dampers which, in case of fire, distribute smoke and gases throughout the building.

Need for grounding of metal structures was illustrated by destruction of a metal church spire before completion of the building.

Importance of adequate ventilation around built-in television sets was stressed. It was the opinion the number and arrangement of exits from supermarkets generally was inadequate to provide safe egress under emergency conditions.

Attention was directed to the importance of removing all charred wood when reconditioning subsequent to a fire.

The Committee learned the U.S. Air Force has adopted a policy of requiring collaboration of Fire Prevention Consultants in association with architectural services.

Modular Drafting Aids

Modular Scales have been used for over 10 years by those working in Modular Measure. Modular-Grid-Paper is a simplified method of making layouts which greatly reduces drafting time. Dimensions can be read at a glance. They are timesavers and eliminate the need for architects' scales.

Modular design paper is available in 32-inch-width, grid-ruled so that used at a scale of $\frac{1}{4}$ "=1'0", the distance between hairlines represents one Module (4"); between heavier lines, six Modules (2'-0"); and between heavy lines thirty Modules (10'-0"). This Grid can also be used at scales other than one-quarter inch to the foot: at one eighth-inch scale, the distance between hairlines represents two Modules; for details at a scale of $1\frac{1}{2}$ "= 1'-0" the heavier lines would be one Module apart, and so on.

Of the three grades of paper carrying this grid, one has a glazed, washable surface for long lasting use as an underlay. Heavy Modular Grid-Scale paper is designed to be laid on the drafting-board over which ordinary tracing paper is placed. The underlay paper, glazed or unglazed, is available in 5, 10, 20 and 50 yard rolls. Fifteen by twenty-inch underlays on heavy paper, acetate-faced for durability are also available.

An alternative is to use tracing paper carrying the same scale, rather than using an underlay. Working drawings can be made direct on this paper, which is available in rolls of from 5 yards to 50 yards. The printed Grid Lines do not appear on blue prints.

Another type of Modular working aid is the Modular Brick, Tile and Block Projection Scales, each about $2\frac{1}{2}$ by 13 inches, on acetat faced cardboard so that they car be handled as an architect's scal They make it possible to establis quickly both horizontal and vertic masonry bond and layout for different Modular size of Brick—Ti and Block are different scales, ($\frac{1}{8}$ $\frac{1}{4}$ ", $\frac{1}{2}$ ", $\frac{3}{4}$ " and 1"-1'-0").

The Palmer Manufacturing Co 3237 Arlington Blvd., Arlington Va. will send further details ar samples on request.

Acceptability of Products Federal Housing Administratic

(See previous lists in AIA Bulleti and September 1957 Journal)

"Thermo-Bloc" National Gypsum Co Buffalo, NY

Remington Studs Remington Arms Co, Inc Bridgeport 2, Conn General Electric Air-Wall Heating a Air Conditioning Systems General Electric Co Tyler, Texas

Shop Fabricated Wood Fran Unit Construction

Supplement to engineering buller no SE-197—dated 4 November 19. Scholz Homes, Inc 2001 North Westwood Toledo 6, Ohio supplement to engineering buller no SE-174—dated 2 June 1953 The Thyer Manufacturing Corportion 2857 Wayne Street Toledo 9, Ohio

supplement to engineering bullet no SE-205—dated 10 April 1956 National Homes Corporation Lafayette, Indiana

430

CALENDAR

November 7-9: Florida Association of Architects Regional Conference, Fort Harrison Hotel, Clearwater, Fla.

November 11-16: Board of Directors Meeting, Hotel Valley Ho, Phoenix, Arizona.

December 11-12: National Con-

struction Industry Conference, Congress Hotel, Chicago, Ill.

January 19-23: National Association of Home Builders Convention-Exposition, Chicago, Ill.

Jan. 30-Feb. 2: The Society of Architectural Historians Tenth Annual Meeting, Washington, D.C.



Cutaway section of Amarlite door stile discloses a precise assembly ordinarily concealed from view. Special metal alloys and nylon bearings are combined into a panic system that will work as smoothly after its first million children as it does today for this one.



hand on the heart of safety

So important is the panic device to school entrances that Amarlite designs and manufactures its own — as an integral part of the Amarlite Entrance. The result is an extraordinarily precise and durable assembly, as beautifully integrated as your hand and arm. From the inside, this Amarlite Entrance cannot lock — it will never prevent departure. From the outside, it is tamperproof — Amarlite's shielded latches bar unauthorized entry. Approved by Underwriters' Laboratories, this exclusive built-in panic device is another strong reason why Amarlite Entrances open to millions of school children — all over the nation.

AMERICAN ART METALS COMPANY

ATLANTA, GEORGIA DALLAS, TEXAS BROOKFIELD, ILLINOIS PARAMUS, NEW JERSEY AMARLITE

STORE FRONTS

BRIGGS BEAUTYWARE announces

featuring the SCULPTURED LOOK ...



B6782—SULTAN: Syphon jet wall hung bowl with top spud.



B4012—MERCURY drinking fountain with glass filler. Semi-recessed, wall hung.



B3461—MILTON: 24" x 20" lavator with back, 8" centers. For concealed carrie



B6960—SANITON: Syphon jet women's urinal with floor outlet, top spud.



B6706-CARLTON: Syphon jet floor outlet bowl with top spud.



B6911—LAWTON: Wall hung washo urinal with extended shields, top spu

A complete new line of vitreous china fixtures for commercial, industrial and school use

Briggs Beautyware—famous for quality plumbing fixtures for residential use—now moves into the industrial, commercial and school field with a complete new line of vitreous china plumbing fixtures. Designed by Harley Earl, Inc., they feature a *sculptured look* that's as contemporary as today's architecture! And, there's a size and type of fixtu to meet nearly every commercial and industri requirement—from lavatories to service sinks, fro men's and women's urinals to drinking fountain Shown above are representative models. Wri today for complete specifications on the entire lin



two new plumbingware advances

a dynamic new design concept



ing with automatic diverter valve in out. 8" centers, self-cleaning shower ad, shower arm with ball joint and flange.

E

lavatory fitting with spray spout and strainer waste.

tailpiece. (overflow plate and drain plate illustrated).

A R

E

colorful new line of Beautyware Brass fittings for both residential and commercial use!

A U T Y

riggs incorporates the "sculptured look" into its ew Beautyware line of brass fittings in truly citing fashion! This advanced styling by Harley arl, Inc., is the perfect compliment to Briggs sidential and commercial lines. In addition, new Beautyware brass fittings incorporate unique, interchangeable colored inserts to match each Briggs color as well as chrome and white. Write now to Briggs for a colorful brochure with complete details and specifications.

RIGGS MANUFACTURING COMPANY • WARREN, MICHIGAN

W

solve all opening problems easily with



the only folding doors with an air-vented, all-wood grid core and advanced-design hardware

/ Completely packaged-ready to install. For closets, room dividers, passageways. Standard two and fourdoor units available for openings from 2'-0" to 6'-0" wide and 6'-8" to 8'-0" high. Easy-to-follow installation instructions in each carton.

✓ REZO-FOLD hardwood panels are hand matched for both grain and color. Available in any commercial species of natural wood to complement any decorating motif. Door thickness - 1-3/8".

✓ REZO-FOLD Doors have air-vented, all-wood grid core construction for rigidity, strength, light weight, and dimensional stability.

No floor guide or track required.

/ Tongue and groove meeting stiles guarantee snug,

/ New type, advanced-design hardware and swivel hangers with 4-wheel nylon rollers assure smooth, easy, trouble-free operation.



million successful installations, REZO-FOLD Doors are made with all the precision, care and quality that has made the Paine REZO name famous the world over. For full information, write:



hy Blumeraft Failings?

Stock Blumcraft components, adjustable for pitch, height and post spacing, permit local ornamental iron shops to build quality aluminum railings The Architect is offered a wide choice of stock posts, balusters and handrails for immediate shipment. Competitive bidding among local ornamental iron shops is provided for public and private work. Low-Cost Tube-Line is comparable in price with aluminum pipe railing.

F P I T T S B U R G H Permanent Display, 101 Park Avenue, New York, N.Y.

Who said dirt cheap?



Hospitals have a special need for air that's cleaned electronically. In operating rooms, nurseries, emergency rooms—in fact, throughout the hospital—it cuts down on airborne germs, giving important help in lowering the infection rate.



Many manufacturers of precision products find electronica cleaned air a near-essential to efficient production. It also ea maintenance problems caused by airborne dirt; and it keeps n sance dirt off desks and files in office areas.

New Honeywell Electronic Air Cleaner removes 6 times more costly dirt than mechanical filters*

IN ADDITION to the cases shown above, most soiling of your client's work surfaces, walls, fixtures and merchandise is done by airborne particles less than 1/25,000 of an inch in size.

Particles much smaller than these—including the bacteria and viruses that cause many respiratory ills—can be removed by Honeywell's new Electronic Air Cleaner.

It is an impossible job for the mechanical type filter to remove oil smoke, fumes, tobacco smoke and much of the dust and fly ash that fall into this microscopic class of contaminants. And these are the ones with the greatest staining power.

The new Honeywell Air Cleaner's wide range of protection offers a scientific way to cut the high costs of cleaning, soiled merchandise, mechanical failures and absenteeism by trapping airborne dirt *before* it has a chance to steal your client's profits.

Your next job, whatever it is, can probably benefit from a Honeywell Electronic Air Cleaner. Specify it with confidence; the advantages more than pay for installation. For complete information, call your local Honeywell office or write Minneapolis-Honeywell, Dept. JA-11-244, Minneapolis 8, Minnesota.

*According to the National Bureau of Standards tests, electronic air cleaners remove at least 90% of the dirt particles causing the greatest staining, while ordinary mechanical filters remove only about 15%.



To aid in planning—Honeywell makes a complete range of Electronic Air Cleaners for any type of air conditioning or ventilating system. Number of cells is determined by amount of air handled by the system. Module construction makes installing and servicing easy. Sales and service aid available in 112 Honeywell offices across the nation.



what's the R.P.M. of a schoolboy?

The first and the first for

Industrialia

A child is a whirlwind on two feet moving in a manner that's incalculable ... and constant. It takes flooring with stamina . . . colors with staying power . . . to measure up to his activities. MATICO qualifies on every count . . . stands up to heaviest traffic year after year. MATICO colors are styled to camouflage soil, to stay bright and fresh, to clean easily and resist signs of wear. Hindsight proves your foresight, when you specify economical MATICO for important installations.

MASTIC TILE CORPORATION OF AMERICA Houston, Tex. * Joliet, Ill. * Long Beach, Calif. * Newburgh, N. Y.

Aristoflex • Confetti • Parquetry • Maticork • Asphalt Tile Rubber Tile • Vinyl Tile • Cork Tile • Plastic Wall Tile





City

MAIL MASTIC TILE CORP. OF AMERICA, Dept. 12-11, Box 986, Newburgh, New York OUPON Please send me free samples and full details about MATICO Tile Flooring. TODAY Name

Address

Zone State

Savings with Celluflor...



BAYSHORE CONSTRUCTION CO. Architects: Jee & Anderson Berkeley, Calif. Engineers:

J. Y. Long Co.

Oakland, Calif. General Contractors: Bayshore Construction Co.

Oakland, Calif.

Milcor Celluflor[®] saved <u>6 months</u> on this job!

Edward Martin, partner in Bayshore Construction Co., Oakland, Calif., is sold on Celluflor. Here's what he writes:

"The use of Milcor Celluflor permitted all trades to work simultaneously instead of one trade following another. We saved over six months on the job schedule for the El Dorado Building in downtown Oakland and permitted occupancy of 40,000 sq. feet of office space for our major tenant, The Pacific Telephone Co., six months after ground breaking."

Construction time savings are *dollar* savings in overhead, financing and insurance. Earlier occupancy means *faster investment returns*.

But the greatest saving from Celluflor accumulates over the years because of the electrical flexibility it provides. Service outlets can be installed anywhere on the floor. They may be re-located or new ones added to meet changing requirements without expensive alterations.

Write for Catalog 270, or refer to Sweet's — Section 2a/In.





The El Dorado Building is a new, 8-story, 90' x 100' structure connecting with an existing 90' x 125', 3-story building remodeled to 4 stories plus 3 partial floors.

000



INLAND STEEL PRODUCTS COMPANY

Dept. W 4127 W. Burnham St. . Milwaukee 1, Wis.

ATLANTA • BALTIMORE • BUFFALO • CHICAGO • CINCINNATI • CLEVELAND • DALLAS • DENVER • DETROIT KANSAS CITY • LOS ANGELES • MILWAUKEE • MINNEAPOLIS • NEW ORLEANS • NEW YORK • ST. LOUIS.



BEAUTIFUL INSTITUTIONAL BUILDINGS









FOR <u>ALL</u> TYPES OF BUILDINGS SPECIFY STRUCTURAL GLAZED FACING TILE

> Stark Ceramic Glazed Facing Tile makes the ideal wall in any building.

No other product offers so many advantages such as: (1) Easy to build wall-and-finish-in-one. (2) Beautiful permanent colors. (3) Adaptable to any architectural style. (4) Modular measures. (5) Minimum maintenance. (6) A high degree of quality backed by 47 years experience. In addition to these features, quick deliveries are now possible because of greatly increased production facilities.

It's no wonder that this modern ceramic unit is specified in building after building with the assurance that the first cost is the last cost.

Full information and samples are available from your local Stark distributor or write direct to ...



Cleveland's "Modern as Tomorrow" ILLUMINATING BUILDING uses Youngstown Steel Pipe

Building Owner: 55 Public Square, Inc., New York, N Y. (A Vincent Astor-Brooks, Harvey & Company enterprise) Rental and Managing Agents: Ostendorf-Morris Company, Cleveland, Ohio Architect: Carson & Lundin, New York, N. Y General Contractor: George A. Fuller Company, New York, N. Y. Structural & Mechanical Engineers: McGeorge Hargett & Associates Consulting Mechanical Engineers: Jaros, Baum & Bolles Heating & Air Conditioning Contractor: The Feldman Bros, Company, Cleveland, Ohio

Distributor: Grinnell Company, Cleveland



Cleveland's newest architectura beauty — this modernistic 22-stor. Illuminating Building — will pro vide much-needed air-conditioned office space for the "Best Location in the Nation". Owner of the new structure, 55 Public Square, Inc. and the architects, wisely chose Youngstown Steel Pipe to provide for a long-lived, dependable water supply system.

Youngstown Steel Pipe is the bes pipe obtainable—anywhere. That' because it's made from our highes quality steel by men who have de voted their lives to the pipemak ing business. Each and every stej in Youngstown's completely inte grated operations is closely qual ity-controlled by expert metallur gists to guarantee pipe that wil meet your most exacting specifi cations.

Your nearby Youngstown Pip Distributor has complete and am ple stocks in all sizes. Why not cal him today and discuss your re quirements?

Specify Youngstown and secure these 7 Points of uniform goodness uniform ductility uniform wall thickuniform lengths ness and size uniform threading uniform strength and uniform weldability toughness uniform roundness and straightness

THE YOUNGSTOWN SHEET AND TUBE COMPANY

Manufacturers of Carbon, Alloy and Yoloy Steel General Offices - Youngstown 1, O District Sales Offices in Principal Ci



• Once the large, vertical aluminum mulls are hung or supported at each story of the building . . . MARMET's lite sections and wall panels can be stacked one atop the other with a horizontal locking system that fits any condition. Units are small enough that two men can easily handle and install them . . . working from the inside in most cases . . . saving the time and cost of erecting scaffolding. This cost saving, mechanical stacking system of Series 1400 Curtain Wall has become attractive to an increasing number of architects.

tractive to an increasing number of architects. Expansion or contraction of sash members is engineered to coincide with vertical movement in the mulls . . . and double weather-stripping seals out water.

Sears out water. Put the MARMET engineering staff to work on your next curtain wall design . . . you will get comprehensive assistance in carrying it forward to execution. For detailed specifications on the complete line of MARMET products — consult Sweet's Catalog File No $\frac{3\alpha}{Mar}$. . . or write to MARMET for Catalog 58c.

MARMET

Series 1400 Curtain Wall

Corporation

First National Bank Bldg. Colorado Springs, Col. Associate architects: Edwin A. Francis Carlisle B. Guy

304M Bellis Street • Wausau, Wisconsin

Four years of intensive effort by a Committee of The Institute has resulted in the completion of a Cost Accounting System which is adapted to the special needs of architectural offices.

An Accounting System Designed for Your Office

Heart of the System is the Book of Instructions, available with each of the Offers; or sold separately at \$5.00 per copy. In it are all necessary instructions, along with samples of most of the Forms, filled out as examples.

The System can be purchased in three separate Offers. Each contains a year's supply of Forms. Full information on the contents of each Offer, and prices of individual Forms, may be obtained upon request.

OFFER NUMBER ONE

Includes Instructions, Accounting Forms, Owner-Contractor Forms, Binders, with names imprinted on Forms.

\$52.00

• OFFER NUMBER TWO Includes Instructions, Accounting Forms, Owner-Contractor Forms.

\$31.50

• OFFER NUMBER THREE Includes Instructions, Accounting Forms.

\$22.50

THE AMERICAN INSTITUTE OF ARCHITECTS 1735 New York Ave., N.W., Washington 6, D. C.

FROM INDIANA-"the strength of Gibraltar"

Like the famous landmark of their slogan, the crisp new Chicago office building of the Prudential Insurance Company of America will owe much of its durability to limestone — limestone from the quarries of Indiana.

And there's more than new buildings coming from the Hoosier state's bustling limestone pits. Watch the skyline for new developments, too. Like the new insulated curtain wall panels — all are now gaining popularity because of their relatively light weight, speed and simplicity of erection. Both the Indiana Limestone industry and members of the architectural profession are today discovering new potentials in this time proven, building material.

> Architects Naess & Murphy Chicago, Illinois

> > 1 447 187 783



UUD

WIII

um

Full specifications on all Indiana Limestone products available.

INDIANA LIMESTONE INSTITUTE

Founded 1932 as a service organization for the architect and contractor.

BEDFORD, INDIANA



Minneapolis where the significant word for elevators is OTIS

The economic capital of the dynamic upper midwest was quick to grasp the realty advantages of AUTOTRONIC[®] elevators. These completely automatic OTIS elevators keep existing buildings competitive. They assure an outstanding rental status for new buildings. This amazingly successful development is another OTIS first. As always, progress is expected of the leader. Outstanding value has made OTIS the accepted word for elevator quality in the cities of the world.



OTIS ELEVATOR COMPANY

260 11th Avenue, New York 1, N. Y Offices in 501 cities around the wo



Automatic Autotronic® or Attendant-Operated Passenger Elevators • Escalators • Trav-O-Lators Freight Elevators • Dumbwaiters • Elevator Modernization and Maintenance • Electronic Systems The Baker-Raulang Company, an Otis subsidiary, is the maker of Baker Gas and Electric Industrial Trucks*