

AMERICAN INSTITUT OF ARCWITECTE SEP 2 4 1959 LIBRARY the Wisconsin Architect

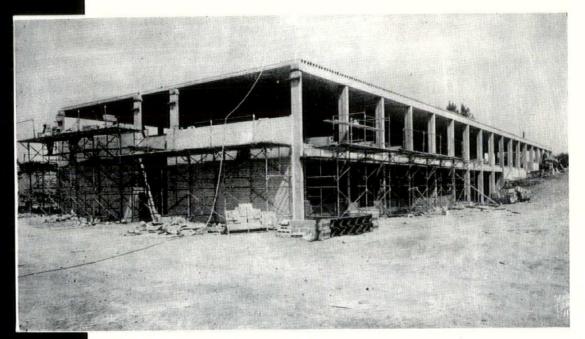
Color in Architecture





## MENOMONEE FALLS PRIMARY SCHOOL

MENOMONEE FALLS, WIS.



## Precast Reinforced Concrete Structural Frame Flexicore Floors & Roof

Architect KLOPPENBURG & KLOPPENBURG Milwaukee, Wis.

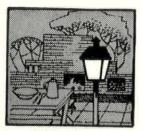
> General Contractor WM. SCHOBER & SON Thiensville, Wis.

## MID-STATES CONCRETE PRODUCTS CO.

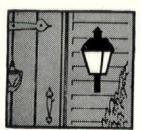
P.O. BOX 325

BELOIT, WISCONSIN

## for truly gracious grounds lighting NEW SOFT-AS-A-MOONBEAM



PATIO LIGHTING



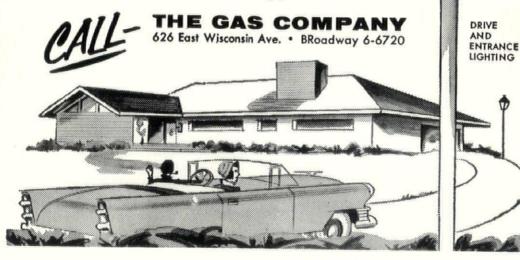
PORCH LIGHTING

Gaslite

Old-fashioned? Indeed it is—and charmingly so—in the same sense that a columned veranda or a genial fireplace are old-fashioned!

The restful rays of "Gaslite" provide a kindly complement —a soothing, unhurried glow of hospitality—to the outdoor enjoyment everyone loves today!

And whether your house and grounds be traditional or contemporary, the faultless, modern lines handcrafted into Gaslite's varied designs will comport perfectly. Let your driveway, patio, porch, doorway and garden paths speak a cheery, well-bred "welcome" without garish glare. The installed price of Gaslite is rewardingly low.



First National Bank Building, Minneapolis, Minnesota

Architects: Holabird & Root & Burgee, Chicago; Thorshov & Cerny, Incorporated, Minneapolis

General Contractor: Naugle-Leck, Incorporated

Plastering Contractor: Edwin Johnson & Sons, Incorporated



28 Story First National Bank Building

## Fireproofed Direct-to-Steel



## **Acoustical Plastic**

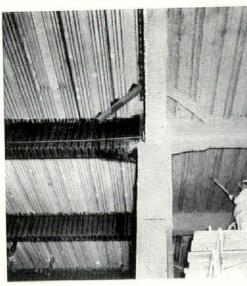
"Before and after" applying Zonolite Acoustical Plastic fireproofing. Painting or priming aren't necessary. . . Acoustical Plastic bonds directly to steel and other surfaces. Lathed beams and columns are sprayed with regular Zonolite plaster. Dead weight is reduced by 2/3, compared to suspended ceiling of lightweight plaster.



As machine-applied direct-to-steel fireproofing, Zonolite Acoustical Plastic achieves a 4-hour fire rating . . . PLUS sound conditioning, greatly reduced dead weight and structural material costs, gains in ceiling height per floor of from 7" to 24" and big savings in application time. Over 70 major buildings from coast to coast have been fireproofed in this way. On one building a savings of \$30,175 was effected simply by using Zonolite directto-steel fireproofing in lieu of another method.

For complete information about fireproofing all types of construction, write us today.





Fireproofing is completed. Zonolite Acoustical Plastic on underside of floors was sprayed on in two coats. With fireproofing above ceiling plane, fused protection is not needed for recessed lighting fixtures, air diffusers and return air grills. Partitions can be changed at any time without penetrating the fireproofing.

the Wisconsin Architect

## In this Issue

Chapter Notes	Page 6
North Central States Regional Conference	Page 8
Conference Speakers	Pages 9-11
A Note on Color, by Julia Feron	Page 12
The Unfolding Story of the Folded Plate, by W. D. Kimmel	Page 18
Welcome Aboard	Page 22
Regional Conference Exhibitors	Page 23
For Your Reading	Page 24

The Wisconsin Architect, Volume 27, Number 9, the official publication of the Wisconsin Chapter, American Institute of Architects, is published monthly with the assistance of the Chapter Office 4003 West Capitol Drive, Milwaukee 16, UPtown 1-9450. Edited and published by B. L. Russell, SP. 1-1507. Subscription rates are \$5.00 per year.

#### Wisconsin Chapter American Institute of Architects

4003 W. Capitol Drive, Milwaukee 16, Wisconsin Telephone UPtown 1-9450. Executive Secretary, Mrs. Ruth Hill.

#### Officers

President				Jose	ph H. Flad
		2525	Univers	sity Ave	e., Madison
Vice-President					John Brust
	135	West	Wells	Street,	Milwaukee
Secretary-Trea					

720 East Mason Street, Milwaukee

#### **Directors** at Large

- John Brust, 135 West Wells Street, Milwaukee Wallace R. Lee, Jr., 797 N. Jefferson, Milwaukee Mark Purcell, 1920 Monroe Street, Madison Arthur O. Reddemann, 13435 Watertown Plank Rd., Elm Grove
- Frank C. Shattuck, 174 E. North Water St., Neenah
- Fritz von Grossmann, 5455 W. Burleigh St., Milwaukee

#### **Division Directors**

- Milwaukee: John Jacoby, 1249 N. Franklin Place Frederick J. Schweitzer, 316 E. Silver Spring Dr.
- Madison: Joseph H. Flad, 2525 University Ave. Nathaniel W. Sample, 953 University Bay Dr.
- Northeast: Karel Yasko, 407 Scott St., Wausau Julius Sandstedt, 103 Otter St., Oshkosh

#### **Division Officers**

Milwaukee	President, Maynard W. Meyer 797 N. Jefferson
	Vice-Pres. Charles Haeuser 759 N. Milwaukee
	SecTreas. Abe Tannenbaum 2465 W. Capitol Dr _
Madison:	President, Franklin Mabbett 119 E. Washington Av
	Vice-Pres. Robert Torkelson 2020 University Ave.
	SecTreas. Harold Ames 2020 University Ave-
Northeast:	President, William Weeks 1518 Saemann, Sheboy
	Vice-Pres. Melvin Siewert

174 E. North Water, Ne 👄 💶 😋 h Sec.-Treas. Robert Sauter 125 W. College Ave. Appleton

## Chapter Notes

• AT THE MID-SUMMER MEETING of the Wisconsin Chapter, AIA, at the Milwaukee Inn July 29, a sliding scale of suggested minimum fees was outlined. Nearly fifty corporate members voted to include a specified fee scale for work over 3 million dollars in the revision of the booklet, "Why, Where, When, How . . . You Retain an Architect". The revised paragraph under Section B, Extra Services and Special Cases will read:

"Scope. In smaller projects of all classifications costing less than \$100,000, it is proper to increase the percentage of the Basic Rate because the amount of work involved is greater (in proportion to the compensation) than on larger projects. Likewise, in larger projects costing more than \$3,000,000, the percentage of the Basic Rate might be reduced as follows: 6% charged for the first 3 million; 5% for the next million, and 4% for every million thereafter."

In the present book, it is suggested that in projects costing more than \$3,000,000, "The percentage of the Basic Rate might be reduced."

This action came following the recommendation of the Fee Committee that a sliding scale be established for all work over one million dollars. The Fee Committee's study of the sliding scale was made at the request of the Board of Directors and prompted by certain civic bodies letting contracts on that basis. Robert Rasche, Milwaukee, cited the failure of architectural

Sister Thomasita O.S.F. shows her Honorary Membership Certificate to Vice President John Brust and President Joseph Flad following the presentation at the Mid-summer Meeting of the Wisconsin Chapter, AIA.



fees to keep pace with rising construction costs during the past several years. He pointed out that as a result, architects are now actually receiving a lesser percentage for the work performed. On motion of Maynard W. Meyer, seconded by Franklin Mabbett, the following paragraphs from the Fee Committee's recommendations were unanimously passed: "It is sometimes better to render services for revisions, special or alteration projects on a 'Cost-Plus' basis. 'Cost-Plus' shall mean the sum of the cost, plus overhead, plus fee computed as follows:

- (1) 'Cost' is drafting and other constructive time (principal's time and rate included) directly chargeable to the project using the standard hourly rate for each member of the architect's organization.
- (2) 'Overhead' shall be computed on the basis of 75% of the total 'cost' charges.
- (3) The 'Fee' necessary for rendering proper architectural services and for insuring adequate compensation shall be computed on the basis of 33 and 1/3 per cent of 'cost plus overhead'.

The matter of proper compensation for a principal's time shall be by agreement, but each principal shall have a standard rate which shall be treated as any other member of the organization's chargeable time."

After a short discussion the following substitute for the recommended minimum rate listing for residences was approved on motion of William Kaeser, Madison, and seconded by A. A. Tannenbaum, Milwaukee:

"Residences. Equitable minimum basic rate, 8%, provided the work is let out under one general contract."

A unanimous vote directed that in revising the fee booklet, a new format and cover be incorporated.

A question directed to the members by the Board was answered with a vote to continue efforts to allow architect identification with ads in dedicatory issues. The Board was further directed to poll all AIA Chapters to determine their opinions on the topic.

Also at the Mid-Summer Meeting, Sister M. Thomasita, O.S.F., was awarded an Honorary Membership in the Wisconsin Chapter, AIA. The nun was the first woman to receive this honor. The Wisconsin Chapter has one other living Honorary Member, Charles Whitney, 724 East Mason Street.

Sister Thomasita is one of America's foremost exponents of contemporary liturgical art. She received her M.F.A. in 1947 from the school of the Chicago Art Institute. Since that time she has had various exhibitions of her work in New York, Chicago, Seattle and Dayton. Her present studio, San Damiano, is located at Cardinal Stritch College in Milwaukee. Hubert Rapp, dean of the School of the Chicago Art Institute, said of her: "Religious art has received and will continue to receive a valuable contribution in the creative efforts of Sister Thomasita. All her work gives forth a truly religious emotion and possesses an honesty

Reimar Frank photo

(Continued on Page 20)

SEND FOR CATALOG M-59 SHOWING NEW POSTS, HANDRAILS AND GRILL-O-METRICS

LE BELLE E E LELE E C

ame

1111 Malli

460 MELWOOD STREET, PITTSBURGH 13, PENNSYLVANIA COPYRIGHT 1959 BY BLUMCRAFT OF PITTSBURGH, PITTSBURGH, PENNSYLVANIA

## NORTH CENTRAL STATES REGIONAL CONFERENCE, AIA

## "Color in Architecture"

#### MONDAY, SEPTEMBER 21

12 — 8 p.m. Exhibitors set up displays in Fern Room

8 p.m. Judging of Exhibits by: Clinton Mochon, AIA Julia Feron Austin Fraser, AIA

#### **TUESDAY, SEPTEMBER 22**

9 a.m. — 5 p.m. Registration

9 a.m. — 10 a.m. Viewing exhibits

10 a.m. Seminar I — Isay Balinkin "Color Fundamentals for Architects"

11:30 a.m. — 12:30 p.m. Viewing exhibits

12:30 p.m. Luncheon on your own

#### 2 p.m.

Viewing exhibits

1:30 p.m.

Seminar II — Howard Ketchum "Psychological Use of Color in Building Materials"

3 p.m. — 4:30 p.m. Viewing exhibits

7 p.m. — 12 midnight (Cocktails 7 - 8) Dinner dance Milano Room Milwaukee Athletic Club

The "Color in Architecture" theme of the Regional Conference is intended to be, in the words of Conference Chairman Karel Yasko, "a two-day color binge." Assisting Yasko in this color saturation experience are the members of his committee: E. Allan Kiely, Nobel E. Rose, Frederick J. Schweitzer, Robert N. Strass, and A.

#### WEDNESDAY, SEPTEMBER 23

7:30 a.m. Chapter Presidents and Secretaries Breakfast Meeting — Dutch Treat Green Room

9 a.m. — 6 p.m. Registration

9 a.m. — 10 a.m. Viewing exhibits

10 a.m. — 11:30 a.m. Seminar III — Walter Granville "Color and Design in Architecture"

12:30 p.m.

Luncheon — East Room John N. Richards, President, AIA Harold Spitznagel, Regional Director

2 p.m. — 2:30 p.m. Viewing exhibits

2:30 p.m. — 4 p.m. Seminar IV — "We Have Color — Now What?" Moderator: Walter Granville Panel members: Charles Bridgman, Julia Feron, Charles Haeuser, AIA, Leonard Payne, Richard A. Wodehouse, Jr.

4 p.m. Viewing exhibits

5 p.m. Drawing for door prizes

6 p.m. AIA Cocktail hour in Exhibit areas

7 p.m. Banquet — Crystal Room Julian Garnsey, ''Color as Selected''

A. Tannenbaum. Representing the Women's Architectural League on the Committee are Ruth (Mrs. Alvin E.) Grellinger and Lorraine (Mrs. Lester J.) Niehoff. Julia Feron, Color-consultant and Interior Designer will set the color theme at the Conference with dramatic use (Continued on Page 20)

## Color Conference Commenters . . .

#### JULIAN ELLSWORTH GARNSEY of Princeton,

New Jersey, is a color consultant for architecture and industry. He was educated at Harvard College and Ecole Julian, Paris. He was a Captain in the Field Artillery, First Division, AEF. Between 1942 and 1945 he was an Associate Professor at the School of Architecture, Princeton University. Garnsey describes his services to architects and industry as follows: "Under direction of the architect, to provide complete color studies and schedules for all exterior and interior surfaces of a building, based upon the architect's conception, functions of enclosed spaces and harmonious relationships. In addition to assist in the selection of materials to accomplish the results desired." For industry, "To guide research in consumer preferences, offerings by competitors and probable future color trends. To assist permanent staff in solution of color problems by supplying scientific technical information."

Garnsey has lectured extensively throughout the United States to architectural groups, museums, industrial groups, and universities. His articles on color have appeared in such periodicals as the Journal, American Institute of Architects, the Architectural Record, Illuminating Engineering, Retailing and General Electric Review. Main Speaker Banquet, September





10 a.m. Seminar September 22

**ISAY BALINKIN**, professor of exsics, Department of Physics, Universit was born in the Ukraine. As a youth, Turkey, where he enrolled at Robert C ican school, for the study of mechan After graduation he came to the Univernati where he received the degree of D phy, majoring in Physics.

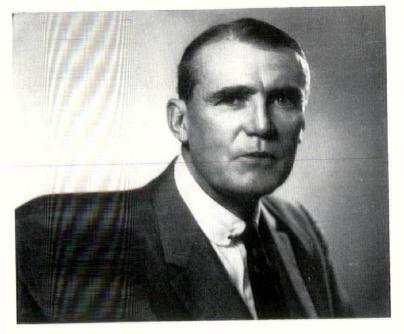
During the summer of 1929 he se secretary of the National Research Advisory Committee to the World's In 1930, on a leave of absence from he planned some of the physics exhibof Science. It was because of these Dr. Balinkin became interested in deve of teaching devices to illustrate and physical phenomena. Some of these we October 13, 1947 issue of LIFE Magaz

He is a Fellow of the American As-Advancement of Science, member of ciety of America, American Associa-Teachers, Sigma Xi, and past Chairma-Society Color Council. As a United tive on Technical Committee No. 7, the International Commission on Illutended a 1951 meeting in Stockholm 1955 meeting in Zurich, Switzerland. of Cincinnati, he migrated to llege, an Ameral engineering. rsity of Cincinctor of Philoso-

> ved as assistant Council Science air in Chicago. the University, ts for the Hall affiliations that oping a number explain various featured in the ne.

> ociation for the
> the Optical So ion of Physics
> in of the Inter tates representa Colorimetry, of
> ination, he at Sweden, and a

. And



1:30 Seminar September 22 **HOWARD KETCHAM** is a leading United States color engineering authority. He heads his own consulting firm in New York, advising on color, design and illumination engineering.

He has created color plans for the Boeing Jet 707 Aircraft, Kroger Company, American Telephone and Telegraph, Cities Service, Philip Carey Company and Celotex.

He is an editor of American Fabrics, Television and Fleet Owner magazines and author of "Color Planning for Business and Industry" (reviewed on page 24 of this issue of the Wisconsin Architect), and "How to Plan Color and Decorative Designs for the Home."

10 a.m. Seminar September 23



WALTER C. GRANVILLE started an independent practice as an industrial color consultant in 1957 in Libertyville, Illinois. From 1937 to 1945 he did research on the colorimetry of printing inks and paints at the Research Laboratories of Interchemical Corporation using a General Electric recording spectrophotometer. In 1945 he joined the Department of Design, Container Corporation of America, to develop a new edition of the Color Harmony Manual and assist with color and lighting plans for the company's offices and factories. He is currently president of the Inter-Society Color Council, is a fellow of the Optical Society of America, and a member of the Illuminating Engineering Society.

... And

at 2:30 p.m. September 23

## Panel Members

WALTER C. GRANVILLE, Moderator

CHARLES T. BRIDGMAN, a native of Iowa, was graduated from Iowa State University in Architectural Engineering. He was awarded a fellowship by the Clay Products Industry and obtained his Masters Degree. A registered architectural engineer, Bridgman is a member of the joint cooperative committee of the American Institute of Architects, Associated General Contractors and Iowa Engineering Society. He is chairman of the regional committee of the Structural Clay Products Institute on Architectural Relations.

Formerly director of Region Six, Bridgman went to Washington as assistant director of engineering and research for the Structural Clay Products Institute. He was later secretary of the War Construction committee for the Structural Clay Products Industry and a consultant to the construction division of the War Production Board. He is a member of the A.S.T.M. Committee C-15 on Manufactured Units.

Bridgman is now director of engineering and research for the Goodwin Companies, Des Moines, Iowa.

JULIA FERON, an interior designer for the past four years in the United States received her education in Leipzig, Graz, and Munich. Her studies included history of art, architecture, fine arts and stage scenery. In addition, she traveled for two years through Italy, Greece, Albania, Yugoslavia, Istanbul and Tripoli to study the color pallette of Byzantine and Classic Art.

Since opening her Milwaukee studio in 1958 she has been the color consultant for several architectural firms in the midwest, working on interiors for churches, hospitals, offices, banks, dormitories, student union buildings and homes. She also has lectured for adult education programs.

CHARLES HAEUSER, AIA, has his own architectural practice in Milwaukee. He attended the University of Illinois and Massachusetts Institute of Technology from which he received a Bachelor of Architecture Degree in 1951. In 1953 and 1954 he studied at Technische Hochsule, Aachen, Germany on a Fulbright Scholarship.

While at M.I.T., Haeuser won the Ware Prize for Design. His article on architecture of homes for the aging appeared in "Modern Hospital" magazine.

- LEONARD C. PAYNE of Sioux Falls, South Dakota, is employed by the architectural firm of Harold Spitznagel and Associates, also of Sioux Falls. He attended Augustana College in that city. Payne was recipient of First Prize in a design competition sponsored by the Rubber Manufacturers Association.
- RICHARD A. WODEHOUSE, JR. is Development Engineer for Aluminum Company of America, New Kensington, Pennsylvania. He was graduated from Wake Forest College with a Bachelor of Science Degree in Chemistry and joined Alcoa the same year. Wodehouse has worked as a chief chemist, a research chemist, and with the Finishes Section of Alcoa Process Development Laboratories. For a number of years Mr. Wodehouse has been extremely close to the architectural field working with both fabricators and architects and their related finished products.

## A NOTE ON COLOR

by Julia Feron



Julia Feron, Color Consultant and Interior Designer, is a member of the Regional Conference Seminar September 23 at 2:30. Her biography appears on page 11. Miss Feron was engaged to carry out the color theme at the Conference.

We have fundamental and strictly scientific dissertations on color, but no matter how complete they may be or how perfect they may appear, they need almost daily revision and extension. The world of color may never have a final critical system, because it renews its values with the changing periods. In spite of taking over traditional techniques and means of expression, color lives a new life from century to century and is adjusted to the cultural advancement of each period. We have only to recall how color has been expressed and understood in ancient civilizations and in the past epochs, for example in early Christian Art, in the Renaissance, or in the New Classicism to arrive at the conclusion that each moment of the evolution of art has taken its own attitude towards color according to the aesthetic, moral, and historical demand of the time. Thus, the manifold approach to color presents within its flexibility and versatility a great unit and therefore will have an unlimited future.

While in ancient times color played a vital part in religion, dominating the vast field of symbolism, and while the classic periods placed emphasis on the achievement of beauty, promoting the aesthetics of form and color, the modern Age applies color predominately with regard to its psychological and functional power. This scientific aspect may be justified, because color has proven its power upon the emotion of men. It is generally known today that response to color is either depressing or inspiring. However, it is disadvantageous to the aesthetics in architecture that the psychological aspect of color tends strongly to overrule the structural aspect of color.

Whereas the essence of structure is mainly dynamic and therefore it should be considered a masculine element, which points to solids and bodies, the essence of color is predominantly atmospheric and therefore it should be considered a feminine element, pointing to areas and surfaces. It is this combined effect of structure and color which presents the artistic feeling of the architect. The color applied on the interior and on the exterior of our buildings usually does not achieve this effect. In the first place, the color distribution is frequently too harsh and striking. Schemes developed for psychological effect, or the established scientific facts of harmony of colors, are rarely aesthetic demonstrations. In the second place, it is more and more evident that he who does not have special skill and experience in handling color compensates his lack of

(Continued on Page 17)

#### A Note

creativeness and skill by experimenting with color. This leads him to frequent helplessness and dependency upon fashionable novelties.

By forcing color to replace art objects and making its power domineering one changes the atmospheric quality of color, the very essence of it. A change unfortunate to both, structure and color. Color, perceivable as sound, movement, and vision is thus degraded to a lifeless object merely occupying space. However, color should be music to the eye. It has its own causality and should never become the target for the absurdity of men, resulting in pseudo emotional expression.

Who is at fault that structure and color are rarely combined successfully? At first one is inclined to say it is the architect's fault. But what in the large majority of cases has been the architect's position?

If we look back to the classic periods, we find that the architect of that time either combined his own talents as an architect, painter and sculptor and expressed perfectly his conception of the project he was to erect, or he was privileged to commission highly qualified artists to carry out his ideas. Promotors of art were easy to find, and the most important means, the financial support, was made available for the realization of creative ideas. Of decisive importance was the fact that the common man, without being highly educated, was extremely sensitive to aesthetic values.

What is our present day situation? We have a highly developed civilization, but a retarded sensibility to culture. The lethargic attitude toward aesthetics prevails with few exceptions.

Consideration of aesthetic values in reference to private or public edifices is looked upon as something unessential to the life of today. The dry, businessminded attitude of the public demands that today's architect be mainly concerned with the technical problems of function and engineering, which modern buildings with their complex heating and variety of components present. Being almost constantly forced to work with a rather inflexible budget, and the need to keep pace with the constantly changing materials and methods of construction, the architect too tends to develop a materialistic spirit. As a result, less and less time is dedicated to further development of aesthetic values. The few architects, who by the generosity of their clients, or through their own initiative, are able to combine art and architecture, are rare cases.

Since color is the most widely used ornamentation of present day architecture, it should be a *must* that the person who is to decide on the color layout of a project be a specialist who has gained complete mastery of color, practical and aesthetical. Moreover, he should be capable of seeing the potency of color in connection with structure.

It becomes simple to the color specialist to find adequate color for an expressive structure or to find expressive color for an adequate form. A color and material co-ordinator would therefore be of considerable importance to the architect's staff. The excellence of room finish schedules thus produced for the architect will far outweigh the fee to be paid to the colorand-material co-ordinator.

As to the present, consultants to the architect have been mainly members of his own firm, and free-lance interior decorators-designers.

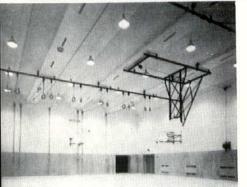
Many interior decorators-designers are well trained color consultants. However, they are not interested in developing the room finish schedule for a small- or for a very large project without being commissioned to purchase the furnishing too. Most of all, it presents a problem to them to spend more or less working days in the architect's office in order to get sufficiently informed on blueprints, specifications, and details of the project. Another problem is that in most cases their color distribution emphasizes the interior and tends to neglect aspects of structure. The interior is often overemphasized without accounting for art in architecture. Not only the fact that the essential building material then becomes unimportant and is confined to a dead mass, thus decreasing the values of co-ordination, but far more dangerous is that the interior is parted from the character of the structure and rivals with the building conception of the architect. It is rather difficult, then, to find the true and substantial part of the creative idea of the architect.

On the other hand, schemes developed by the member of the architect's staff mostly show a great preference for startling, sometimes even glaring effect of color. Numerous materials are used for purposes of ornamentation not because the structure asks for it, but because the material is fashionable. Moreover, the interior is often only an imitation of the structure, resulting in a rigid and monumental room decoration. Sign of joy, grace and beauty is hardly introduced.

Color and material coordination is needed and could be very well rendered by trained color and material co-ordinators. This approach of assisting the architects should include color development for room finish schedules, material co-ordination, preparation of interior bid specifications, total or part furnishing, sketchwork and renderings. This service should be offered to architects, creating thus a source from which the architect may request as much or as little assistance needed.

It shall not matter that our analytical age promotes the scientific aspects of color and influences the artist's palette to be used intellectually! Let it be that the architect promotes the aesthetics of form and color, and that he thus composes music to the eyes.





MENOMONEE FALLS HIGH SCHOOL, Menomonee Falls, Wisconsin, (above) swimming pool, under construction with adjoining gymnasium. The gymnasium has a folded plate which spans 104 feet (at present the longest folded plate span in Wisconsin) and the folded plate over the swimming pool spans 90 feet. (Left) shows how folds of a folded plate roof are used to carry heating ducts. Architects, Kloppenburg and Kloppenburg, Milwaukee.

JOHN MUIR JUNIOR HIGH SCHOOL, Milwaukee, incorporating two folded plate roofs. One spanning 75 feet is installed over the gymnasium and the other spanning up to 78 feet at the rear is installed over the auditorium. Architects, Eschweiler and Eschweiler, Milwaukee.



JOHN AUDUBON JUNIOR HIGH SCHOOL, Milwaukee, incorporating two folded plate roofs, each with 80 foot spans, covering the gymnasium and auditorium. Architects, Grassold-Johnson and Associates, Milwaukee.

FARMERS AND MERCHANTS BANK, Racine, has one folded plate with 34 foot span positioned in the center of the 62 foot by 100 foot roof. Architect, Hans M. Geyer, Racine.

All buildings pictured above are constructed throughout with reinforced concrete (floors, beams and columns).

## The Unfolding Story of the Folded Plate

by W. D. Kimmel, District Engineer Portland Cement Association

Interest in and employment of the folded plate type concrete roof construction has been increasing in Wisconsin at a rapid rate, since its introduction into the state in 1958. That year it was used on the gymnasiums and auditoriums of two junior high schools in Milwaukee and on a bank in Racine. The members of the Milwaukee School Board are to be congratulated for their contribution to pioneering the use of folded plate roofs in Wisconsin. This year folded plate concrete roofs are being constructed on the gymnasium and swimming pool additions to the high school in Menomonee Falls; they are included in the contracts for a new junior-senior high school in Milwaukee, and a Catholic elemen-tary school in Waukesha; and are being considered for a number of other structures in the state.

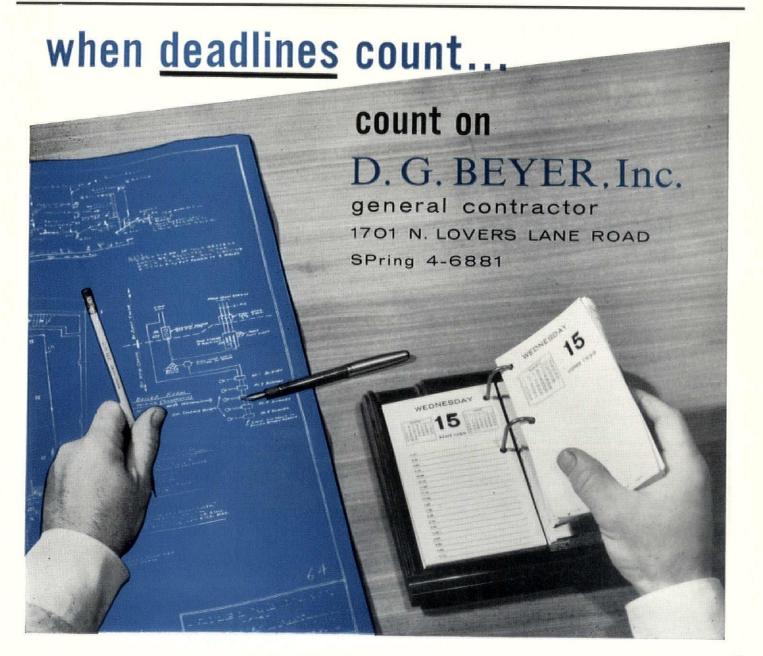
One of the basic requirements for auditoriums and the gymnasiums of three of these high schools and for those of the fourth high school was to achieve large unobstructed floor space with economy. The folded plate, usually easier to form than the thin shell and capable of supporting heavy concentrated loads, can be built to span large floor areas attractively and economically. Naturally, its economy is greatly enhanced when more than one folded plate is incorporated into the structure and the forms can be re-used. In addition, the folds of the folded plate can easily be utilized, from a practical standpoint, to hide other facilities, e.g., electrical wiring and heating conduits.

Folded plates can also be used to improve tremendously the appearance of a structure. The striking effect with which it can be employed is in visual evidence in its cantilevered construction over one wall of the swimming pool addition to the high school at Menomonee Falls. A folded plate was used in a section of the roof of the Racine bank, in such a manner that its architectural beauty greatly increases the overall attractiveness of the building, both inside and out.

Other Wisconsin buildings under or nearing construction using folded plate roofs are: St. William's school, Waukesha, Architects, Herbst, Jacoby and Herbst, Milwaukee, Design Associate, Heinz Brummel; John Marshall Junior and Senior High School, Milwaukee, Architects, Eschweiler and Eschweiler and Brust and Brust, Milwaukee; University of Wisconsin Extension Center, The Town of Menasha, Architects, Irion and Reinke, Oshkosh; Brebner Machinery Company Inc., Green Bay, Architect, John E. Somerville Associates, Inc., Green Bay.



and Dark Brown Face Brick BRICK, INC. 1935 W. Hampton Avenue Milwaukee 9, Wisconsin FRanklin 2-5050



of design which has its origin in basic aesthetic principles."

Sister Thomasita was cited by the Wisconsin Chapter, AIA, for "her enthusiastic interest and oustanding contribution to the enhancement of architecture through the use of contemporary art." She recently moderated a panel on "Art in Architecture" at the 1959 convention of the Wisconsin Chapter.

Also honored was R. R. Bedker, Milwaukee, who received a Certificate of Merit for "his contribution to Architecture through his Architectural Drawing courses at Wauwatosa High School, his guidance of students in selecting Architectural schools for further study, and his outstanding promotion of the profession of Architecture."

Bedker was born in Beaver Dam, Wisconsin, and was graduated from Beaver Dam High School, Oshkosh



Chapter

R. R. Bedker

Normal, Oshkosh State Teachers College and received a Master's Degree from the University of Wisconsin. Bedker remarked, "My special hobby is visiting houses, churches and public buildings to see and study architecture. Visits with architects in the field plus visits to architectural schools have always fascinated me. I never tire of studying architecture and feel a sense of pride to see my

(Continued on Page 26)

#### Conference

of colored forms, textures and light.

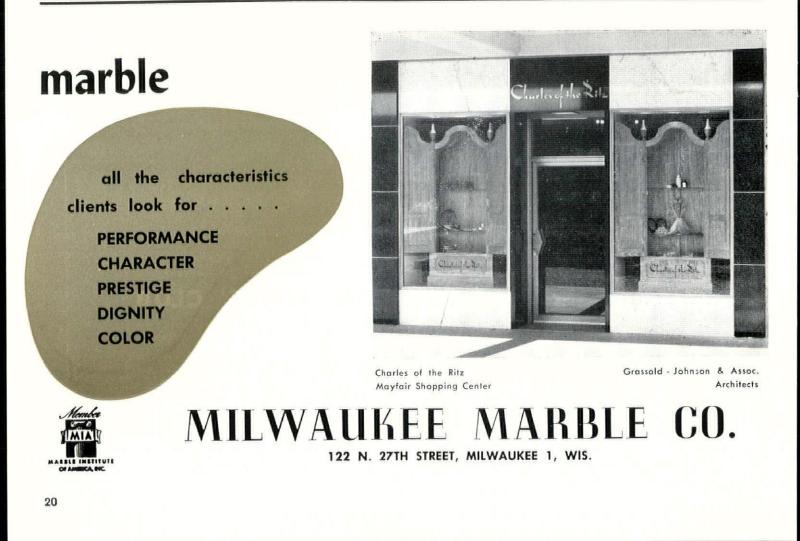
Members of the Milwaukee Division of the Wisconsin Chapter have arranged a tour of Milwaukee for visiting architects.

A coffee Hospitality Room staffed by members of the Women's Architectural League will be open all day during both days of the Conference. The Hospitality Room will be decorated by Forrest-Syvertsen Design Associates, Milwaukee.

As usual, the ladies are invited to all Conference functions. However, special plans also have been made for their entertainment. At 2 p.m. on Tuesday Electric Company home economists will give a presentation, "Party Foods with a Gourmet Flair." Following tea, there will be a tour of the Electric Company Employes' Club with special attention given to the unusual lighting treatment.

The ladies will have an opportunity to view the continuing art show in the Club. The water colors and oils on display are by Milwaukee artists Edward Boerner, Walter Haise, Richard Schwanke and Henry Koether. Architects for the Employes' Club were Grellinger-Rose and Associates, Inc., and the interior decorator was Jacobson Interiors.

At noon on Wednesday there will be a ladies luncheon in the Crystal Room at the Pfister. The speaker will be Dan Kalka, A.I.D., from Jefferson's Interiors. He will discuss "Color in Interior Design."





## **SHOW YOUR COLORS!**

A striking example of how to "show your colors" in the best light is to be found in Wisconsin Electric Power Company's beautiful and famous Employes' Club.

Wide varieties of unusual lighting arrangements are used singly and in combination to complement the colorful decorative arrangements of each area. Planned lighting multiplies the Club's beauty, comfort and utility. Shown above is a view of the general lounge area. One of the smaller special dining rooms is shown at the right.

It will be worth your while to see the colorful Employes' Club. Make up a party now for a guided tour and call for an appointment. Besides modern lighting, you will also enjoy seeing one of the finest commercial All-Electric kitchens to be seen anywhere.

Transportation from the Hotel will be provided by the CONVENTION COMMITTEE.



## You're invited to visit our EMPLOYES' CLUB

5th Floor — 231 West Michigan Street

Between

2:00 P.M.

and

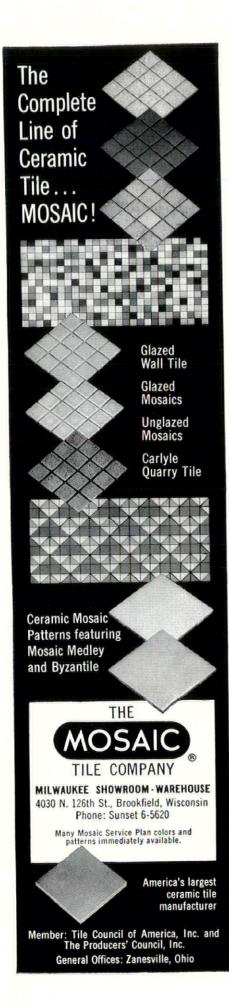
4:00 P.M.

GUIDED TOURS

September 22 September 23

Call for an appointment . . . Special Services Sales Division • BR. 3-1234

## WISCONSIN ELECTRIC POWER COMPANY



## Welcome Aboard . . .

The Wisconsin Chapter, AIA, welcomes the following who recently have been accepted or advanced in membership:

GEORGE E. DEININGER, new Corporate member, was born in May, 1923, in Wausau, Wisconsin. He re-



Wisconsin. He received a Bachelor of Architecture degree from the University of Nebraska in 1950. Before entering the Navy, he was a resident of Wausau. Deininger was employed by the firm of Durrant

and Bergquist, Boscobel, in 1949 and recently became a principal of that firm. He is registered to practice architecture in Wisconsin and Iowa.

DAVID H. LEHMAN, new Junior Associate member, was born in Feb-



was born in February, 1931, in Fort Atkinson, Wisconsin. He is a draftsman with Sheldon Segel, AIA, Milwaukee. His hobbies are hunting, fishing and woodworking. DONALD P. McGINN, new Corporate member was born in March, 1927, in Dubuque, Iowa. He is a graduate



of Loras Academy, attended Loras College and served in the Navy before receiving a Bachelor of Science degree in Architectural Engineering from Iowa State College in 1950. McGinn is

an architect registered in Iowa, Wisconsin and Illinois and a professional engineer registered in Iowa. He recently became a principal in the firm of Durrant and Bergquist, Boscobel, with whom he has been associated since 1950.

CHARLES SAZAMA, advanced from Junior Associate to Associate member was born May, 1934 in Mil-



waukee. He attended the University of Wisconsin - Milwaukee, and has been a draftsman with Grellinger — R os e Associates, I n c., Milwaukee, since 1956.



TABLES, FILES, STOOLS AND SUPPLIES OF ALL KINDS AND MAKES

A. I. A. FORMS

PHOTOCOPIES REPRODUCED TRACINGS

## SCHMITT BLUEPRINT CO.

BROADWAY 6-1761 628 N. BROADWAY MILWAUKEE



UNIT STRUCTURES, Inc. General Offices — Peshtigo, Wisconsin

#### SALES OFFICES

#### WISCONSIN

UNIT STRUCTURES, Inc. PESHTIGO, WISCONSIN TELEPHONE: LUDLOW 2-4545



## OSENGA & ASSOCIATES

MILWAUKEE 16, WISCONSIN TELEPHONE: HOPKINS 2-2770 EDMUND J. SCHRANG, new Corporate member was born in July, 1907, at Milwaukee. He is registered to prac-



tice architecture in Wisconsin, Florida and Indiana and has had his own office in Milwaukee since 1937. In 1947 he wrote a pamphlet entitled "Mechanization and Man La-

bor" and in 1948, at the request of the American Society of Mechanical Engineers, he wrote the portion on material handling for their publication, "Plant Layout Templates and Models." His hobbies are hunting, fishing and flower raising.

SHELDON SEGEL, Corporate member, was incorrectly listed as an Associate member in the June issue Welcome Aboard feature in the Wisconsin Architect. He was advanced from Junior Associate member.

# Exhibitors, North Central States Regional Conference, AIA

Aluminum Company of America American Olean Tile Company Arketex Ceramic Corporation Badger Lightweight Products Beckley-Cardy Company Boiardi Tile Manufacturing Corporation Bradley Washfountain Company Brosk Office and School Supply Charles Bruning Company, Inc. Chadwick Manufacturing Company Concrete Research, Inc. Ebenreiter Woodworking Company Elier Forest Products, Inc. Goodwin Companies Great Lakes Lift Slab, Inc. Inland Steel Products Company Kohler Company Lundia Division, Swain & Meyers, Inc. Mid-States Concrete Products Company Milwaukee Plywood Company, Inc. Benjamin Moore & Company Mosaic Tile Company Natco Corporation Nelson and Glass Owen Block & Supply Corporation Paramount Industries, Inc. W. J. Pipkorn Company Pittsburgh Plate Glass Company Plywood Parts, Inc. Portland Cement Association Pratt and Lambert, Inc. W. J. Riopelle & Associates, Inc. F. C Russell Company School Equipment Consultants, Inc. Spancrete Division of West Allis Concrete Products Co. Sparks Company Split Rock Products Streator Brick Company Superior Cast Stone Company U. S. Ceramic Tile Company U. S. Plywood Corporation Vander Heyden, Inc. Western Mineral Products Company Wisconsin Bridge & Iron Company

## DESIGNS UNLIMITED

## thanks to the Miracle of LAMINATION!!

A new era of freedom in architectural design is here! You are free, Mr. Architect, to dream of exciting new combinations of structure, space and mass . . . free to design in a boundless latitude that is yet within the realm of economic reality.

As pioneers of lamination in America, we offer the services of master craftsmen who can and will custom build laminated wood members to meet your most advanced design requirements. Our staff of experienced structural engineers, trained product consultants and efficient estimators can help you keep your projects "in the money". For complete details, write or call us. No obligation, of course.



PLANTS AT PESHTIGO, WISCONSIN AND MAGNOLIA, ARKANSAS CHARTER MEMBER OF AITC

185

UNIT STRUCTURES, INCORPORATED GENERAL OFFICES: PESHTIGO, WISCONSIN



23

## For Your Reading . . .

"Color Planning for Business and Industry" (Harper, \$5.95) is a timely book. Its author, Howard Ketcham, president of a color, design and illumination firm, will be one of the key speakers at the North Central States AIA Regional Conference at the Pfister hotel September 22 and 23.

Beyond this, "Color Planning" scratches lightly the surface of an almost virgin field which seems to have suddenly caught the attention of a sizable cross-section of the business world: The use of color on the basis of psychology rather than on the traditional basis of beauty and art.

Before taking up "Color Planning" itself, several general points should be made, perhaps. First, the book must be judged in the light of an abysmal lack of generally available material on color from any angle.

Furthermore, color itself is a fluid thing, about which it is difficult to speak or write in anything but generalities. (One man's green is another man's blue, for example).

And finally, mixing color with psychology — motivation research is the popular synonym in the advertising world today — brings in another subject wherein it is difficult, if not impossible, to be exact.

Nevertheless, books such as this should be welcomed. If nothing else, they call attention to a broad field in which good sound research findings rather than old wive's tales seemingly is long overdue.

(Presumably, the AIA color research subcommittee of which Karel Yasko is a member is busily engaged in making the above statement outdated, if not inaccurate).

As is to be expected, a considerable amount of material covered by Ketcham in "Color Planning" has little direct application to the practice of architecture. Other points, while directed primarily toward merchants, factory owners, etc., might well be taken into consideration by the thoughtful conscientious architect.

The theme of the entire book is established quickly in chapter I, entitled "How Color Sells."

Next comes a brief look at color from a historical standpoint — "Cotton blue, Turkey red, Bokhara blue, and Bokhara red were introduced in rugs of Turkey, India and Persia. These colors are highly prized to this day for decorative purposes."

Then there is a quick rundown on color (consumer and/or motivation) research. Why? Ketcham explains:

"The ultimate judge of color is the consumer. Product color has to meet the test of the marketplace, and if your colors don't meet that test you will see the result and see it fast in your sales graph. Although we may not like it, today's motto must be 'our consumer, right or wrong."

From here, Ketcham moves on to the setting up of a color survey, a sample set of questions asked and the vital matter of interpreting the results.

"It's an important truism that in color survys and selections, more mistakes are made from lack of facts than from faulty judgments or poor taste," Ketcham concludes, probably correctly.

Architects who depend upon their own facilities, rather than those of interior decorators or other outside consultants such as Ketcham probably will find the greatest amount of "meat" in about four chapters of the book.

These chapters are labeled "What You Can Learn About Color From Supermarkets," "Color and Light in the Factory," "Color and Light in the Modern Office" and "Color Sells Today's Homes." (Note to editor: The last chapter heading was added only after long and careful deliberation.)

Some of Ketcham's more interesting points in these particular pages include:

"The key to building a profit making store personality is color engineering . . .

"In preparing a color plan, three factors must be considered: 1. Suitability to the merchandise. 2. Harmony of colors. 3. Illumination suited both to the merchandise and background colors.

"The right colors and their arrangement can make a small store appear larger, a large store appear smaller, a narrow store seem wider, or a toodeep store seem better proportioned...

"Color planning and lighting go hand in hand . . . correct lighting shows phenomenal selling power . . .

"No matter where people work, whether in a large factory or a small area, color (and its constant companion, lighting) will affect their jobs. Over thirty years of sound and practical research have proved that skillfully selected colors create better and more comfortable working and seeing conditions, raise efficiency, cut fatigue and increase production . . .

"In any work area there are three general sources of reflected light which affect the eyes: (1) the ceiling and walls; (2) the eye level area comprising the dado, work benches, machines and the like; (3) the floor. Any violent contrast in brightness between these areas can be trying to a worker's eyes."

This should be sufficient to give one a good idea of what lies within the 260-odd pages of "Color Planning." As was mentioned earlier, there is a dearth of sound, comprehensive, informative books — textbooks, if you will — on color and its use.



Living concrete in integrally colored 2"-high split block



Coarse-textured units in stacked bond for design interest



Painted 4"-high units. Another of concrete masonry's many new forms



Raked horizontal joints add dramatic shadow lines to fireplace

# Masonry patterns that bring new charm for today's homes...

A whole new design opportunity is opened by today's modern forms of concrete masonry.

Here are new shapes, textures and colors that give fresh interest and charm to home exteriors interiors, too. Warm, friendly looking, created to the mood of modern living . . . this is new-type *living concrete!* 

The growing popularity of *living concrete* can be seen from California to New York, in outstanding homes of every architectural style. It wins a warm



and lasting welcome in any neighborhood. Living concrete can give greater breadth to your home designing. Write for free booklet "Concrete Masonry Homes for Better Living," distributed only in the United States and Canada.

WISCONSIN CONCRETE PRODUCTS ASSOCIATION 735 NORTH WATER STREET • MILWAUKEE 2, WISCONSIN

## BADGER METER MANUFACTURING COMPANY SELECTS PIPKORN FACE BRICK



#### Chapter

(From Page 20)

former pupils become successful architects."

• THE WTMJ-TV series "Architects at Home" on Woman's World has received scores of queries from the viewing public. Beulah Donohue, the show's moderator said, "The comments themselves have run into the hundreds, and I am especially interested in the fact that so many men seem to be making a special effort to tune in on Mondays to find out more about home building today."

• BRUST & BRUST, Architects, AIA, have moved their offices to 1212 West Wisconsin Avenue, Milwaukee 3, Wisconsin.

• WILLIAM MITTERHAUSEN, AIA, 2470 North 82nd Street, Milwaukee, has been elected to Emeritus Membership in the Wisconsin Chapter, AIA.

• THE BOARD OF DIRECTORS at its July 29th meeting directed the secretary to write Senator Dennis Chavez, Chairman of the United States Senate Public Works Committee, indorsing Bill S1847 which requires that the "Architect of the Capitol be a qualified architect."

• FRITZ VON GROSSMANN, AIA, has been named to the Committee on Professional Insurance of the American Institute of Architects. Von Grossmann recently attended a meeting of this committee at the Octagon.



### Stock Model Medicine Cabinet Ensembles for

#### CUSTOM STYLING and EXTRA CAPACITY

Here's a refreshingly new concept for home owners proud of their bathrooms — matched medicine cabinet ensembles in a wide range of sizes, twin or triple, available with or without independently mounted overhead fluorescent lights. Even the small bathroom can have that "Custom Look" with a Twin Cabinet Ensemble; and for the bathroom planned for a growing family the Triple Ensemble will keep right up with the family from cradle through college. No. 750 Overhead Light (listed below) is 31 ½" long; including one 25-watt Fluorescent Tube. No. 780 Overhead Light (listed below) is 39 ½" long; including one 30-watt Fluorescent Tube.



#### ENSEMBLE SPECIFICATIONS ON CABINET MODEL PICTURED

Cabinet Number	Ensemble	Total Mirror Area Wide High	Wall Opening 3½" Deep Wide High	Storage Cu. In.		Recommended Overhead Light Fixture
4133	Twin	32x22'' Plate Glass S.S. Frame	31 ½ '' 18 ½ ''	2064	1 ea. J-1	750
4133	Triple	48x22'' Plate Glass S.S. Frame	48 ⅔ '' 18 ½ ''	3096	2 ea. J-1	780

#### F. H. LAWSON CO., CINCINNATI, OHIO

#### NOVOTNY, INC.

L. J. A. L. J. G. 647 W. Virginia St. BR. 6-1899-BR. 2-4183 Milwaukee 4, Wis.



# when you specify paint SPECIFY TOLATONE

## ZOLATONE'S PERMANENT FINISH is insurance against costly repainting and provides...

- BEAUTY
- DISTINCTIVE APPEARANCE
- DURABILITY
- EASE OF MAINTENANCE YEAR AFTER YEAR AFTER YEAR

For complete information, samples and demonstration of Zolatone's outsanding advantages

> ARMSTRONG BUILDING SUPPLIES 3117 W. Mill Road • Milwaukee 9, Wis. • FLagstone 2-1910

Hunzinger Construction Company

> Milwaukee Phone: SUnset 1-9100

BLUE CROSS selects MODERNFOLD DOORS . . .



Arch., Eschweiler & Eschweiler. Gen. Contr. Selzer Ornst

"Modernfold" as movable partitions will quickly and easily solve your space problems as it did with the restaurant facilities in the new Blue Room building . . . especially when privacy is desired for meetings, parties, etc.

OFFICES • CONFERENCE ROOMS SHOWROOMS • WARDROBES MODERNFOLD DIVISION W. H. PIPKORN CO. 1548 W. BRUCE ST. • MILWAUKEE, WIS. (South end 16th St. Viaduct) MItchell 5-6800 The all-steel finer quality door—MODERNFOLD FOR SPEED IN CONSTRUCTION AND ECONOMY

John F. Bruecker, Architect Milwaukee, Wisconsin

Made Under Patent No. 2696729 Convent Building St. Peter's Congregation Slinger, Wisconsin

## DoxPlank FLOOR and ROOF SYSTEMS

mm

The DOX PLANK system was selected for use in this modern convent because it combines the high compressive strength of concrete and the high tensile strength of steel. DOX PLANK features make it the favorite of architects, engineers and contractors for use in schools, commercial buildings, factories, apartment houses and private homes. It offers the special advantages listed below.

Economical
Is Fire Resistant
Saves Time and Labor
Immediate Working Deck
Speeds Building Occupancy
Reduces Cold Weather Delays
Conforms With Standard Building Practices
Eliminates Hazards of Improper Field Construction



