Absorbs noise. Concrete masonry units, produced from USS GARYLITE Expanded Slag lightweight aggregates—with its cellular structure—have surface textures that absorb more noise than masonry units made with almost any other aggregate. Sound absorption values of slag units range from 20% for the very fine textured units to 70% for units with a coarse structure. The average commercial slag concrete block has sound absorption values between 40% and 70%. When lightweight aggregates are used, there is a greater sound absorption by concrete masonry unit walls in proportion to their weight than in those of other masonry materials. In addition, USS GARYLITE Slag masonry units offer high fire resistance, excellent thermal insulation and proven durability.

For more information on USS GARYLITE Slag—call or write United States Steel, Raw Materials Sales, at any of the following offices: 208 South LaSalle Street, Chicago, Illinois 60690 (Area Code 312) 236-9200; 209 Broadway Building, Lorain, Ohio 44052 (Area Code 216) 245-6897; 525 William Penn Place, Pittsburgh, Pa. 15230 (Area Code 412) 391-2345. USS and GARYLITE are registered trademarks of United States Steel.
PORTRAITS IN BLOCK BEAUTY

ALLIS-CHALMERS
Materials Handling Sales and Service
Architect-Engineers: Birch-Grisa-Phillips, Inc.

PETROFF'S BOWLING LANES, COFFEE SHOP,
AND CROSSBOW LOUNGE

Falls Block & Supply provides you with the newest in design block to create endless media of expressions to further your designs. Now . . . let your imagination soar.

CONSULT WITH US ON YOUR NEXT PROJECT

FALLS BLOCK & SUPPLY CO.
N91 W17174 APPLETON AVENUE
MENOMONEE FALLS, WISCONSIN
PHONE: 251-8330
MANUFACTURERS OF CONCRETE PRODUCTS
Precast and prestressed concrete are the only building materials which offer such a rare combination of all these natural advantages:
Load-bearing capability . . . fire resistance . . . form plasticity . . . prefabrication for quality and rapid installation . . . unsurpassed durability . . . controlled finishes.
This combination provides you with an unparalleled opportunity for intriguing architectural and construction possibilities. No wonder, then, that precast and prestressed concrete are today's leaders in design expression, structural advances and prefabricated building systems.
Find out how this unique combination of advantages can serve you. Contact any member of the Wisconsin Precast-Prestressed Concrete Association. These producers are committed to Quality and Responsibility — a hallmark you can depend on . . . any time, any place.

Wisconsin Precast-Prestressed Concrete Association

CONCRETE RESEARCH, INC.
P. O. Box 491
Waukesha 53186, Telephone 414-542-8061
DUWE PRECAST CONCRETE PRODUCTS, INC.
P. O. Box 1277
Oshkosh 54901, Telephone 414-231-3980
EAU CLAIRE PRESTRESS, INC.
1061 Menomonie St.
Eau Claire 54701, Telephone 715-835-5146
HUFSCHEIDT ENGINEERING CO.
P. O. Box 209
Sussex 53089, Telephone 414-781-9700
F. HURLBUT CO.
P. O. Box 9
Green Bay 54305, Telephone 414-432-7731
MID-STATES CONCRETE PRODUCTS CO.
Box 809
Beloit 53511, Telephone 608-859-2277
J. W. PETERS & SONS, INC.
P. O. Box 160
Burlington 53105, Telephone 414-763-2401
PRE-CAST CONCRETE PRODUCTS, INC.
Route 1, Box 192-A, Lien Road
Madison 53714, Telephone 608-249-0156
PRESTRESSED CONCRETE PRODUCTS CORP.
P. O. Box 7
Verona 53593, Telephone 608-845-6431
SPANCRETE INDUSTRIES, INC.
10919 W. Blue Mound Rd.
Milwaukee 53226, Telephone 414-258-4110
1120 N. Bluemound Drive
Appleton 54910, Telephone 414-734-5641
WISCONSIN VALLEY CONCRETE PRODUCTS CO.
P. O. Box 668
Wisconsin Rapids 54494, Telephone 715-423-7500
Pardon our pride in Duwe Channel Slabs. They are beautiful. If painting is desired you will still get a real smooth finish. Our manufacturing process produces a light reflecting glazed surface. As pictured above, these roof slabs provide a smooth, attractive appearance "as is," with no finishing necessary. No wonder so many architects and industries concerned with appearance as well as other advantages specify Duwe Channel Slabs. The advantages? Notably the resistance to moisture and fumes. Also, lightweight with structural strength, handling ease, low maintenance. Duwe Channel Slabs are precast with skill and are made from (rotary kiln) Haydite aggregate. It will be to your advantage to get full details. Write or phone today.

DUWE

PRECAST CONCRETE PRODUCTS, INC. • P. O. Box 1277 • Oshkosh, Wis. 54901
Notes From The Industrial Commission

By: Charles A. Hagberg, P.E.
Chief Engineer
Building Section

During the last year and particularly during the past few months there have been many requests by building designers to allow the use of decorative wood on the exterior of buildings that require incombustible or fire-resistive wall construction. The increased popularity of colonial construction and mansard roofs accounts for a large part of these requests, and wood is often an inexpensive cover for block or steel construction.

There have been three recent petitions for modification submitted to the Commission requesting the use of wood on the exterior of masonry walls. In denying these petitions, the commissioners said the code was quite clear in Ind. 50.001, Ind. 51.01 and Ind. 51.02. Each of these parts of the code call for either fire-resistive or incombustible construction.

A small amount of wood trim on the exterior of a fire-resistive or incombustible wall is not considered a hazard but we suggest it be kept to a minimum.

As noted in a previous column, a committee is being formed to study types of construction and make recommendations on code changes. This is a job that will take much time and thought. The people who serve on the various code committees volunteer their time and receive no pay or expenses for their work, except perhaps the satisfaction of service to the people of Wisconsin.

It may be of interest and use to outline the way we handle incoming plans, and why many of these are held up for processing. When a plan is received it goes first to a plan validator who checks to see that all required information is included. The required items are listed in Ind. 50.10 of the building code. If every plan received had all of this information, validation would not be necessary. Unfortunately, there are far too many instances where we have to hold up the plan and wait for the required items.

Continued on page 8
NOTES OF THE MONTH
Continued from page 7

Some of the items that are frequently missing include:
1. The plot plan.
2. Intended use and number of persons to be accommodated in each room.
3. Live loads and dead loads.
4. Unit stresses for materials used.
5. Typical calculations.

Some plans are submitted without the proper fee and at times the volume of the building has been figured incorrectly.

At the time of writing this article (June 27) we had a backlog of approximately one and one-half weeks because the commissioners approved overtime work for June in order to stay abreast of the spring rush. We will try our best to keep our plans backlog to not more than three weeks. You can help us in this effort by making sure that all necessary information comes along with your plans.

As a part of the state reorganization program which went into effect on August 1, 1967, the Industrial Commission was re-named the Department of Industry, Labor and Human Relations. Our stationery and much of our other printed material will carry the old name until our supply is gone. Your plans and other material are still to be mailed to the same address using the new name (or the old one if you forget - either will get to us).

At the time of writing this report to our clientele (August 3, 1967) we had 230 plans on hand waiting review; a volume representing between two and three weeks of work, depending on their complexity.

In an effort to be fair to all who want fast approval (and this seems to include everyone), the plans are lined up for review in order of the date received in our office. We are asked, not infrequently, to give special consideration to certain plans. Many of these requests are valid as in the examples of replacement structures for fire damaged or collapsed buildings where there is obviously a serious disruption of production, unemployment, and so on. But most of these requests simply arise out of the anxiousness of the architect, or engineer, or the owner to get the job started. Along with these requests, we have listened to, it seems, every possible reason that could be conceived. But objectivity suggests that when a plan takes several months from start to final drawings, the timetable could include, without undue hardship, a few weeks allowance for state approval.

Our Building Plans Section is anxious to be of help when there is a real need for fast approval, but we haven't quite yet figured out how to handle these requests and at the same time be fair to all concerned.

We have considered the idea of an "express lane" for smaller jobs such as additions and alterations. This service could also be supplied for repetitive jobs such as service stations.

Another idea we have given much thought to is the assignment of a part of our engineering staff to an over-the-counter plan review operation. There is no question that a face to face dialogue in clearing up questioned items is fast and would result in a higher production rate for the engineers. On the other hand, we still can't quite reconcile the equity of giving preferred service to those who come in, over those who mail in. The fact of geography alone would tend to put those who live in the Madison vicinity in a preferred position.

These briefly reviewed ideas and others are still in the hopper. We will appreciate comments on them - or on any other ideas - that readers may care to make. Please write.

Robert Potter, Julius S. Sandstedt and Chairman Thomas H. Flad, members of the Wisconsin Chapter, AIA Insurance Trust and Committee, announced in the April issue of WISCONSIN ARCHITECT, page 5 to all Chapter AIA Health and Medical Insurance policyholders that effective May 31, 1967, all policies would be terminated and that remaining administrative funds would be transferred to one or more accounts of the State Chapter. Chairman Flad now reports that the sum of $2724.12 has been turned over with the concurrence of the Executive Board of the Wisconsin Chapter, AIA, to the Wisconsin Architects Foundation with the stipulation that this sum be invested and that the income thereof benefit the Foundation.

The following statement was made by Mr. Richard H. Tatlow, III, Chairman of the Committee on Federal Procurement of A-E Services upon learning of the introduction of legislation (S. 2089) sponsored by Senator Proxmire (D-Wis.) on July 17, to repeal architect-engineer fee limitations. Members of the Committee are:

- American Institute of Architects
- American Institute of Consulting Engineers
- American Road Builders Association
- American Society of Civil Engineers
- Consulting Engineers Council
- National Society of Professional Engineers

"Legislation proposed this week by Senator Proxmire is not a completely satisfactory solution to problems recently raised in a report on A-E contracting procedures submitted by the Comptroller General to the Congress. Specifically, Senator Proxmire's proposal to repeal the 6% statutory maxima on architect-engineer fees fails to deal with the General Accounting Office contention that current laws require competitive negotiations for professional services.

"The engineering and architectural societies fully support repeal of the 6% limitations but we are disturbed by omission of any provision which would answer GAO's attempt to overturn the long-established Federal interpretation requiring 'professional negotiations' for A-E services.

"The Senator's proposal is the first bill to be introduced on this subject. We are hopeful that future measures introduced by other Senators or Congressmen will include clarification of the fact that architects and engineers cannot be expected to submit competitive price proposals on work which has not yet been designed and for which even feasibility may not yet be established.

"Statements made by Senator
Continued on page 24
Joan W. Saltzstein

Joan W. Saltzstein (Mrs. Irving D.), author of a series of articles on Dankmar Adler "The Man, The Architect and The Author," is the granddaughter of Dankmar Adler of the famous architectural firm of Adler and Sullivan. This accounts in great part for her interest in architecture, in the preservation of historic architectural landmarks and, of course, in the work of her grandfather. Joan Saltzstein attended Wellesley College and graduated from the University of Chicago.

She has been doing some freelance writing of articles, mostly on local architecture for Milwaukee Magazine, Exclusively Yours, The Milwaukee Journal and The Milwaukee Sentinel. Mrs. Saltzstein has given lectures on the Architecture of Adler and Sullivan at the Milwaukee Art Center and before audiences both here and in Chicago.

Mrs. Saltzstein is a member of Land Ethics, Inc., a local organization interested in the preservation of Milwaukee's architectural heritage. Her husband is the President of Siesel Construction Company and his advice and help are evident in the article presently appearing in this magazine.

Julius S. Sandstedt

Eugene Gjerstad, AIA, President of the Northern Section, Wisconsin Chapter, AIA, has resigned and Julius S. Sandstedt, FAIA, has been elected President of that Section.

The Executive Committee has also accepted Mr. Gjerstad's resignation as Director and has elected Julius S. Sandstedt as Northeast Section Director.
Dankmar Adler

Part Two — The Architect

by Joan W. Saltzstein

In considering the contribution of Dankmar Adler to the architectural profession it has always been a temptation to relegate his share of the partnership with Louis Sullivan to that of engineer and business man. Actually he was far more than that. Theirs was one of those partnerships that seems to have been divinely planned, for Adler's understanding of technology and spatial values and his intuitive approach to the science of acoustics matched Sullivan's artistic genius and intellectual perception. As Frank Lloyd Wright said, "Louis Sullivan went to school not to the Beaux Arts but to Dankmar Adler. Out of his association with Adler came Sullivan's whole sense of building as a functional experience." Review of Hugh Morrison's "Louis Sullivan" Sat. Review 12-14-35.

Working in most instances without any outside assistance, Adler was responsible for the foundations, the plumbing, the fireproofing, the ventilation and the overall mechanical aspects of the buildings. But, most important, were the innovations which he contributed out of his technical experience, developing the philosophy that a building should be erected on a democratic principle that its first obligation was to accommodate the people that it served: the shopper in the light and convenient store, the business man in his airy and sunny office and the music lover in the topmost seat in the gallery.

The outstanding building of Adler's early career was the Central Music Hall in Chicago built in 1879 before his partnership with Sullivan. Its dignified exterior held within its walls a remarkable complex of offices, stores and a theater — one of the first multipurpose buildings. The large number of openings in the masonry facade, particularly at the base of the building, pointed toward the open-wall construction that later became the distinguishing mark of the Chicago School of Architecture. But the acoustics of the theater were its main contribution, and they established Dankmar Adler as the foremost acoustical expert of the times. He had studied the famous Mormon Tabernacle in Salt Lake City and had put his knowledge to good use. The orchestra floor was constructed with an upward curve to the transverse beams projecting below the ceiling and to the lateral curve of the ceiling itself. This was the principle which he later employed with great success in the Chicago Auditorium. Writing in The Economist in 1916 Sullivan said, "He (Adler) had a grasp of the subject of acoustics which he could not have obtained from study, for it was not in books. He must have gotten it by feeling."

Adler was enormously proud of the Central Music Hall and considered it in many ways one of his finest buildings. It was torn down in 1901, the year after his death, and one of its pillars stands as a marker on his grave.

In his unpublished autobiography Adler discards his usual modesty to say that the Central Music Hall "has proved one of the most successful buildings ever erected in Chicago and is one which I shall always consider the foundation of whatever professional standing I may have acquired."

Exterior of the Chicago Auditorium with Tower.

The commission for the Chicago Auditorium in 1889 with its hotel, office building and vast theater was real plum for the firm of Adler and Sullivan, and so great were its problems that they must have oft wished that they had not been so fortunate. In fa
Adler wrote in The Architectural Record of April, 1892:

"After months of arduous toil the various problems have been harmonized and adjusted ... many thoughts have been crystallized into a complete and well-rounded design ... expressed in plans and diagrams. Presto! The conditions change! ! All must be retraversed and readjusted not once but a score of times ... after building operations had been fairly inaugurated and many conditions had become fixed and inflexible."

The commission itself was Adler's, for the building's promoter, Ferdinand W. Peck, had implicit faith in the firm's senior partner who had recently added to his reputation by turning Chicago's Old Exposition Building into an acoustically perfect concert hall. The construction of the Auditorium complex took three years. Two hundred men and thirty teams of horses often worked at night under flood lights. Even while the building was being erected the plans were changed, as we have seen. A banquet hall was added and, most dramatically, the height of the tower that dominated the heavy masonry structure was increased so that it put an additional weight on the foundations.

In order to avoid unequal settlement of the tower Adler loaded its floor artificially with pig iron and brick as the building was being constructed, so that the load per square foot on the foundations of the tower was equal to the foundations on either side. As the construction progressed he decreased the artificial load so that when the final capstone was in place workmen were wheeling out the last load of iron and brick.

The Auditorium's foundations were of the continuous abutment type and were made of concrete reinforced by huge timbers and a steel grillage. Because of their great load there was some settlement but the building stands solid today.

The foundations of the building were not the only problems that were greying Dankmar Adler's hair. The basement under the great stage of the Auditorium theater was seven feet below water level, so that waterproofing was necessary to protect the elaborate mechanical equipment that operated the curtains, and the traps and bridges of the stage floor. In order to meet this problem Adler designed a laminated floor built of several layers of concrete, asphalt and asphalt-saturated felt, counterweighted by concrete and steel rails to offset the upward pressure of the ground-water under the floor. This proved to be completely waterproof.

The heart of the Auditorium complex was its theater, the acoustics of which have been called the finest in the world. Following the principles which he had developed in the Central Music Hall, Dankmar Adler created within the hall a giant "trumpet" with a succession of elliptical arches carrying the waves of sound from the prosenium to the highest gallery.

Between these arches smooth ceiling panels acted...
as sound deflectors throwing the reflected waves back to the remotest part of the hall. The height of the arches determined the time of reverberation, eliminating annoying echoes. To quote Frank Lloyd Wright in Genius and the Mobocracy, "The Big Chief (Adler) had struck a principle that created a miracle in the projection and extension of sound. . . . Not only had a miracle of appropriate beauty arrived, but also a great triumph in acoustics."

The gold-leaf encrusted arches of the Auditorium theater served not only an architectural function but also carried ventilating ducts which served to distribute air throughout the hall. This air was cooled in summer by passing sprays of water over ice, making the Chicago Auditorium the first air-conditioned theater.

One of the many ingenious devices in the Auditorium was a hinged panel which could be lowered by windlasses to shut off the galleries and the rear third of the balcony when a hall for smaller audiences was desired.

As we learned in the previous article, Dankmar Adler traveled to Europe while the building was under construction and studied the latest in stage design. He found that most stage equipment was controlled by hydraulic apparatus and he employed a Viennese concern to design similar plans for his building. Even though it was necessary to redraw the specifications to fit American standards, the results made the Auditorium stage the most elaborate and up-to-date in the world at that time. Using hydraulic pressure, it was possible to raise and lower sections of the stage floor to make platforms for choral groups, steps, terraces, hills, pits and trap doors for opera performances or to create a dance floor for 8000 people. It even served as a baseball diamond at a benefit for newsboys! A panoramic horizon, an endless canvas roll, that was operated by a steel-linked belt and track, carried around three sides of the giant stage the sky of every season and in every weather condition. The rigging loft could hold eighty tons of stage equipment. Hydraulic hoisting apparatus lifted the 16-ton curtains. Around the sides of the proscenium and facing the audience was a "reducing curtain," exquisitely decorated by Sullivan that could be raised and lowered to determine the size of the stage opening.

There were no consulting engineers on the Auditorium. Except for details related to the hydraulic apparatus Adler worked alone. According to Carl Condit "he belongs on the merit of this building with the great engineers of the nineteenth-century world figures — Eiffel, Roebling, Eads, Paxton." The Rise of the Skyscraper, Carl Condit, p. 104.

Adler wrote at length about the Auditorium in the Architectural Record for April-June, 1892: "The success of the room is greatest when used as a hall for mass concerts. The chorus seems to blend with the audience and the house is so open that one can see at a glance almost the entire audience and the whole chorus. The sight of thousands of men and women in festive array is always pleasing, and when every one of these has ample space for sitting in comfort, has fresh air and can see and be seen and hear every modulation of sound in its full effect, the result is inspiring."

The Auditorium was the center of Chicago's cultural life for forty years. It held the finest in opera, concert and theater. Then Martin Insull built his Civic Opera House in 1929 and the great building gradually declined until it closed its doors in 1941. Five years later The Auditorium Building was bought by Roosevelt University and in 1960 the Auditorium Theater Council was formed to raise funds to restore the deserted theater. The necessary $2,250,000 has finally been raised; the architectural firm of Harry Weese and Associates is in charge of the reconstruction and the theater is scheduled to open this fall, restored with careful authenticity to its former glory.

Garrick (Schiller) Building showing ornamental cupola.

After the great success of the Auditorium, Adler and Sullivan's office was swamped with work. Many of their buildings were hotels and theaters. Probably the most significant of Adler's innovations during this period were in the Schiller Building erected in Chicago in 1892. It was the firm's second steel-framed skyscraper, the first being the Wainwright Building in St. Louis. The Schiller Building, later known as the Garrick, was once again a multipurpose building with a theater opening onto the street, and a tall central shaft containing offices and club rooms. The greatest innovation of the Schiller Building was its foundations. In an article in The Economist in June, 1891, Adler described
the type of footings that were used. He had already determined that pilings were the ultimate solution for city buildings and in consequence decided to drive piles fifty feet down and to load fifty-five tons per pile. Nearly 850 piles were used and on them were placed two layers of heavy oak timbers, forming a criss-cross grill which was bolted into the piles. A base was thus formed for a mattress foundation of concrete reinforced by steel I-beams and cantilevered out to the edges to support the walls. Early photographs show the steel frames of the Garrick to be as advanced as in any building of today.

When the Schiller building was torn down in 1961 to make way for a parking lot, the wrecker's ball dramatically revealed its structural features: the majestic and beautiful proscenium arch, the great trusses on which hung the steel frame of the upper floors and the revolutionary plan of the setbacks.

In The Prairie School Review for the second quarter of 1965 Professor Paul E. Sprague of Notre Dame attempts to evaluate Adler's role in the erection of the Schiller Building. He writes, 'It is not likely that Adler needed much of any advice from Sullivan. . . . Sullivan generally had to conform his design with Adler's structure rather than vice versa. . . . Adler evidently had a great deal to say about planning, circulation, structure and, most important, about the final form of the surface which it became Sullivan's task to decorate. In fact it was Adler, and not Sullivan, who was the dyed-in-the-wool functionalist and who generally believed in working from the plan through the structure to the final shape, letting the chips fall where they might.'

Sprague also gives Adler the credit for the setbacks which brought light and air into the tall shaft of the Schiller offices. In an article published in 1892 in the Engineering Magazine Adler himself tells how the basic forms of the Schiller were arrived at: "By narrowing the central part of the upper stories forming two external courts" Sprague concludes that the "primary masses of the Schiller Building are so obviously the result of a rational response to the requirements of light, structure and internal volume that Adler emerges as the person mainly responsible for establishing them."

That the Schiller Building is lost to us is a tragedy that is constantly being repeated in a civilization that places commercialization above aesthetic and historical values.

The largest of Adler and Sullivan's skyscrapers was the Chicago Stock Exchange Building built in 1894 and still standing and well-occupied at 30 North LaSalle St. The foundations of this building presented a new problem to Adler. It was impossible to use a pile foundation because the Chicago Herald newspaper plant was adjacent to the proposed construction and the vibration of the pile drivers might damage the delicate operation of its presses. Therefore, he devised,
with the assistance of William Sooey Smith a consultant engineer, the first caisson foundations ever used in Chicago or probably anywhere in the world. They consisted of deep wells sunk into the hard clay, the sides of the walls held in place by wood sheathing and steel rings until they were filled with concrete. This also served as protection against seepage of ground water.

This building proved to be the last large commission of the firm of Adler and Sullivan in Chicago. (Their last building was the Guarantee Bldg. in Buffalo aesthetically beautiful but with no important innovations.) Dankmar Adler left the partnership in 1895 for a short-lived career as chief of sales with the Crane Elevator Company. He returned to his profession six months later to go into partnership with his son, Abe. Many stories have been told of the bitterness generated by the severing of the partnership but they seem to be much exaggerated. Adler never ceased to praise Sullivan in the articles he wrote and the speeches he delivered at this time, and Sullivan remained a staunch admirer of Adler.

The most significant buildings of Adler’s last years were the Morgan Park Academy and the Isaiah Temple, both in Chicago. The Morgan Park Academy is today the property of the University of Chicago and the temple is the Ebenezer Baptist Church. The Morgan Park buildings are surprisingly modern and functional to have been designed in a time that looked to the flamboyant Gothic for its school construction.

The Economist for May 12, 1898, announced that “D. Adler has completed plans for a beautiful hotel to be erected at La Crosse. Citizens have agreed to purchase a site and give it to some one who will build a first class fireproof hotel, to cost in the neighborhood of $175,000.” However, the “some one” must not have appeared for the hotel was never built. Other building commissions were listed in The Economist as coming to Dankmar Adler at this time indicating that he continued to be sought after until his death in 1900.

Among the many eulogies and tributes at his passing was one from the Building Contractors Council of Chicago. “In his death the City of Chicago has lost one of its most respected citizens, one whose time was most generously at its command to agitate or advance any and all things that were for the best interest of the city he loved so well. The appreciation of his efforts is witnessed by the large number of handsome and well-designed buildings which he erected in this city and which stand as monuments of his genius and skill as an architect.”
WAL's new president, Shirley Kurtz (Mrs. James), looked pleased as she kept tabs on people's bids during the auction.

Treasurer Pat Casey (Mrs. John) and Lana Sielaff (Mrs. M. A.), auction committee member, savored the sweet smell of success as the money rolled in—$250.00 in all! (An all time high for this annual event.)

Graced with the only dry hours during a particularly rainy week, the annual WAL picnic auction drew over seventy participants.
Bonnie Inman (Mrs. Robert) seemed concerned that someone might out-bid her.

Sporting a paper dress which matched the picnic decor, hostess Kay Guerin (Mrs. Wm. L.) and son Scott showed their obvious delight at being top bidders.

Auctioneer — exceptionale is Ruth Grellinger (Mrs. Alvin) who it appears could sell ANYTHING! Here she was exhibiting a nose-warmer — after modelling same!

Marion Carter (Mrs. William) watched as the Junior Hostess brought items to the auction block — among which were baked goods and hand-made items — and some 2¢ first day of issue Frank Lloyd Wright commemorative postage stamps which went for $1.00 apiece!
Auctions — WAL style — will never go out of style if this year's event was any indication. Husbands were invited for the first time and (we suspect) it will not be the last!

Connie Frank (Mrs. Reimar) returned from Expo '67 too late to make or bake items for the auction table, but her ingenuity never fails—and neither did her flash bulbs. Practically everyone present "was caught in the act" — and bought the "evidence."

The picnic — more like a banquet at a very posh country club — followed the auction and lamps and candles transformed the Guerin's yard into a forest-fairy lane.
Kilbourntown Walking Tour

Photos by Mary Ellen Pagel and Isadore Knox

Mary Ellen Pagel and Virginia A. Palmer cooperated in preparing the second booklet in a series named "Guides to Historic Milwaukee," recently published by the University of Wisconsin Extension Division. Single copies of this guide may be obtained free of charge by sending a 4" x 10" self-addressed and stamped envelope to GUIDES, University Extension, 600 West Kilbourn Avenue, Milwaukee, Wisconsin 53203. For multiple copies for groups, classes or organizations, contact the ART Department at the same address. The first guidebook, the Juneau Town Walking Tour (see Dec. '65 WISCONSIN ARCHITECT), generated great interest, and the authors chose for their second venture the area west of the Milwaukee River, originally known as Kilbourntown, which was founded by Byron Kilbourn, land-speculator and chief engineer of the ill-fated Milwaukee and Rock River Canal Company. In their foreword the authors say: "We hope that as you stroll along, looking at buildings and reading about their part in Milwaukee’s growth, you will gain a greater appreciation of the men, the institutions, and events which helped to shape our city." The Kilbourntown Walking Tour guide was made possible through financial assistance of the Fred Pabst Foundation. We here reproduce but a small portion of this handy and informative booklet.


The Plankinton Arcade originally consisted of just two stories, the upper one with Gothic motifs framing the windows. The remaining stories are classical in decorative details. In the Arcade’s early days, Fred Smith’s Recreation Parlor occupied the lower level and boasted the world’s largest bowling alleys and a shooting gallery. The interior retains the original skylighted court surrounded by offices which open on almost two miles of corridors. Focal points of the court are the goldfish pond and life-size statue of John Plankinton, who had built the Plankinton House on this site in 1868. When he died in 1891, his son had the statue placed in the hotel to signify that his father’s generous business policies would continue for at least 100 years. As the Plankinton family still owns this land, it seems appropriate that the statue, saved from the razed hotel, stands in the lobby today.

PABST BREWING COMPANY, 917 West Juneau Avenue. 1880 and later.

One of Milwaukee’s oldest breweries, the Pabst firm began in 1844 when Jacob Best brewed lager beer in his basement. Twenty years later Best’s son Philip took on his
son-in-law, Captain Frederick Pabst, as a full partner in the company. After Philip Best's retirement in 1866, Pabst joined forces with Best's second son-in-law, Emil Schandein. The brewery was given its present name in 1889, and to remind the public that the Philip Best Brewing Company was now doing business as the Pabst Brewing Company, Captain Pabst coined the slogan, “He drinks BEST who drinks PABST.” There are forty-one structures in the brewery complex, constructed at different times and in different architectural styles. The photograph illustrates a castellated section built in the late 19th century.


In 1887 the seven sons of Adam Gimbel came to Milwaukee from Vincennes, Indiana, and opened Gimbel Brothers Palace of Trade, first in a chain of twenty-seven stores, in a small Grand Avenue building rented from John Plankinton. Their business prospered and spread into neighboring structures on Grand and West Water. Work on the present block-square store began in 1901-02 with the construction of the northwest section. It continued during the stewardship of J. Oscar Greenwald, Adam Gimbel's grandson, with the building of the southwest portion in 1914-15, 1919-20, the southeast section in 1919-20, and the colonnaded riverfront blocks in 1923-25. The last major work was carried out in 1941 when the four-story central block on Plankinton Avenue (a store said to predate the Civil War) was given a white plaster facing and renovated on the interior. Remodelling of entrances and display windows followed. A pioneer in features now common in department stores, Gimbel's was the first Milwaukee store with electric elevators, escalators, air conditioning, and charge accounts.

WISCONSIN CLUB, 900 West Wisconsin Avenue. Edward Townsend Mix, Milwaukee, architect. 1870 and later. Second Empire Style.

Although this building has served as a private club for many years, it was originally the residence of Alexander Mitchell, one of Milwaukee's leading financiers. The style of the home, with mansard roof and abundant ornamentation, is that which Mix also employed when he designed the Plankinton House (now destroyed) and the Mitchell Building at 207 East Michigan Street. It is said that much of the beauty and elegance which characterized the home's original furnishings could be attributed to the artistic sensitivity of Mitchell's wife, Martha Reed Mitchell. Fortunately, club members, who purchased the home from the Mitchell estate, have preserved a substantial portion of the residence as an example of sumptuous Victorian-era architecture and interior design. Mitchell's 500-foot greenhouse, one of the largest privately owned greenhouses in Wisconsin, was, however, razed to make way for the club.
Detail of the Gazebo

dining room on the west. On the grounds one still may see Mrs. Mitchell's octagonal, carved-walnut summerhouse. The diminutive and delightful gazebo, once called the Chinese Cottage, was built in 1871.

TRINITY LUTHERAN CHURCH, 1046 North Ninth Street. Frederick Velguth, Milwaukee, architect. 1878-80. Gothic Revival.

Trinity, mother of Missouri Synod Lutheran Churches in Wisconsin, was founded in 1847. When the congregation had grown to 1600, this picturesque church was built on land purchased by Trustee John Pritzlaff from Francis Lackner. Lackner's Terrace Gardens on this block were popular for their German band concerts and conviviality. Smoke from nearby industries has darkened the original Cream City brick of the church, but Velguth's striking and lively design has otherwise undergone little alteration through the years.


Half of the property upon which St. James' stands was acquired from James Kneeland, an early civic leader. The remainder, once a burial ground, was purchased from the Town of Milwaukee (the dead being reinterred at Forest Home Cemetery before construction could begin). Upon this site rose one of the finest Gothic Revival structures in Wisconsin, its simple, well-proportioned design supplied by E. T. Mix, popular 19th-century Milwaukee architect. Constructed of pale local limestone, St. James' may have been the community's first stone church. Fire destroyed the original interior in 1872 but spared the tower and
newly acquired bells. A restored St. James' reopened two years later. Among prominent church families were the Alexander Mitchells, whose former residence stands on the north side of Wisconsin Avenue (No. 30). When his niece was married in St. James', Mitchell had a rose-covered bridge constructed across the street so that guests need not trail their wedding finery in the mud.

BUILDINGS REVIEWED IN THE WALKING TOUR GUIDE AND COVERED IN THESE PAGES INCLUDE: United States Post Office, Nelson Wine Building, Milwaukee County Historical Society, Metropolitan Building, Wisconsin Tower Building and Monuments in the Court of Honor on West Wisconsin Avenue between Ninth and Tenth Streets.
C. T. Bridgman, Vice President, Engineering and Research, Goodwin Companies of Des Moines, Iowa, has interesting observations about architects in regard to the brick business. “Architects are fickle lovers. This is the claim made by some of my brick friends. Others claim they are very consistent, especially if you are the warm, earthy type.”

Mr. Bridgman reports that the “Heritage” line out of Des Moines Clay, a rougher textured brick, available in clear red, dark tones, Vandyke Brown, Antique White, Cinnamon Pink, Smoked Antique White, Smoked Cinnamon Pink, Velutone Tudor and black is doing well. The popularity of this line is attributed to the possibility of controlled selection by the architect who may wish to combine dark tones together or might prefer the lighter ranges of the mixture. Controlled mix seems to be the secret of this line’s success. Ottumwa’s browns and grays from the new tunnel kiln are expected to gain favor rapidly because of the tunnel kiln control which makes it possible to obtain a range from light browns toward the cocoa colors and on down through a deep rich sienna brown. The grays are available in light, medium and dark ranges or they can be combined. The tunnel kiln makes it possible to obtain clean, clear grays. A new entry into the field is now being produced at Ottumwa, the Cameo brick. The Cameo is a combination of Ivory brick with varying proportions from a creamy beige down to a tan beige.

Ebony, mahogany and walnut hues are being produced at the Fort Dodge Brick and Tile Company for those who may wish flat, dark walls or a dark wall with some warmth to this range which can be achieved by blending mahogany and walnut hues.

Oskaloosa Pavers have gained national recognition and are being shipped from coast to coast. These Pavers are available in a deep reddish brown and a rich buff tan color.

The Pavers are available in 4” x 8” face in the splits 1½” thick. They also come in solid brick 2¼” thick and in the double brick 4½” thick. The latter item is being used extensively in urban redevelopment areas and also on community improvement programs which involve reworking street and sidewalk areas. The double brick unit gives great stability when placed in heavy traffic areas. Oskaloosa is behind on shipments of these items but steps are being taken to speed up production.

What’s new in sizes? Basically the modular brick and Norman brick continue to dominate the market.

Great claims are being made for some larger units which include the king size, 2½” x 9½” in face size, 3” in thickness and the engineer king size, which is 2-13/16” x 9½” in face size and 3” thick.

Another newcomer with great potential is the Utility or economy Norman with a face size of 3½” x 11½” and 3½” thick. To accompany this unit is the Utility or Economy SCR unit which is 2½” x 11½” face size but 5½” thick. These are available in red, gray, brown, and several other colors. The basic advantage of these units is that by combinations all bearing structures can be developed and bond maintained on both the exterior and interior of the structure. It gives the flexibility of providing 4” or 6” exterior or interior wythe to a wall plus having 4” or 6” partition walls exposed.

The economy or utility units are frankly a larger clay unit and do not attempt to give the appearance of a brick but are large, nicely proportioned clay unit. When properly handled these units have tremendous potential for producing structures at a substantially lower cost. Cost comparisons are available for those interested in giving this further study.

Unglazed Facing Tile is experiencing a strong comeback after some refinement in production. According to Mr. Bridgman, perhaps the greatest single advance in the past two years has been the trend of custom blending brick according to architectural specification. He believes that the custom blending will become increasingly important as architects will be more and more involved in the field of color correlation.
Phase Ten

The Quest of a Dean

The University of Wisconsin-Milwaukee has appointed a Selection and Screening Committee to find a Dean for the School of Architecture. Dr. Joseph Mangiafico of the Department of Urban Affairs is heading the Committee. Among those being contacted for recommendations are the Deans of all accredited schools of architecture and prominent architects throughout the country. The Chairman of the Committee has met with the Ad Hoc Committee and the Chapter’s Southeast Section and has asked the individual architects to submit their recommendations for possible candidacy. The University expects to have a Dean on a full-time basis by July, 1968.

Contributions

The Directors of the Foundation are most appreciative of the consideration by the Trustees of the Insurance Fund in contributing the residue of the fund which resulted from the dissolution in June. In compliance with the stipulation of the Trustees, the contribution has been invested and the interest is to be used for the Foundation’s stated purpose of aid to architectural education.

At the recent Convention in Milwaukee, Architect Charles H. Harper designed the display booth for Best Block Company. In lieu of fee, Mr. Harper asked that contribution be made to Wisconsin Architects Foundation. The Directors offer their thanks for the $450 received and Mr. Harper’s thoughtful gesture.

Graduate

John H. Williams of Racine received his MFA degree from the School of Architecture at Princeton University last June. Having proved to be a student of particular excellence, he received Tuition Grants from Wisconsin Architects Foundation for his final two years of study. Work during vacations was provided for him by Miller & Waltz, Milwaukee architects.

Reproduced here are two drawings from a project completed last December by Mr. Williams, having to do with a proposed expansion of Plasma Physics at Forrestal Research Center in Princeton (right column), which was part of a larger proposed expansion scheme worked on by graduate students. Mr. Williams’ thesis comprised a prototypical station-connector for a high speed railroad (bottom), uniting a metropolitan airport, several major highways, two commuter railroads, and an urban center, symbolically serving as a gateway to the region.

Mr. Williams is currently employed by IBM and is involved in research concerning the possibility of the application of computer graphics to problems of architecture.
NOTES OF THE MONTH
Continued from page 8

Proxmire during introduction of his bill are of particular concern to our professions. The Senator suggests his bill "would replace the present rigid system of cost-plus contracts with a more flexible system of competitive or negotiated bidding. We fail to see how this bill eliminates cost-plus contracting and we are appalled at any suggestion that professionals be secured on the basis of competitive or negotiated bids. Furthermore, we believe competitive negotiation or bidding for A-E services would substantially increase the total cost of Federal construction projects."

Congress was asked by The American Institute of Architects to make "design concept teams" of specialists a required part of the Federal Government's interstate roads program.

AIA first vice president, George E. Kassabaum, of St. Louis, Mo., told the Senate Committee on Public Works that architects were "convinced that this approach will produce a highway that is a part of the community, rather than one that takes the community apart."

Design concept teams are panels of engineers, economists, sociologists, planners and architects who focus on the "complete social, economic and physical impact" that a given freeway or expressway corridor will have on a community.

The concept team, said Kassabaum, is being tested on a 20-mile segment of the Interstate Freeway System in central Maryland. He said that AIA strongly urges that such a team be required by the Federal Government for the design of all future segments of the Interstate System.

Kassabaum added that design opportunities in highway safety have not been fully exploited, nor are highway engineers making use of significant breakthroughs in lighting, breakaway light and sign structures, and similar innovations.

"The fact of the matter is that good design cannot be prescribed," said the AIA official. "The design opportunities which a highway represents do not derive from any text book or code. Of course, there are reasonable guidelines, but the greatest design success is the product of specialized skills.

"If the Federal and state highway departments would only utilize the design skills that are now available, we are convinced the highways would be safer and less disruptive," Kassabaum concluded.

The AIA testimony was delivered as part of hearings underway on the Highway Beautification Act of 1965. The AIA, which represents 22,000 of the nation's architects, reaffirmed its stand in support of the Beautification Act.

The Institute recommended that mandatory just compensation features of the beautification law be repealed and asked that the law be amended to permit states to provide effective billboard and junkyard control by either compensation or police power.

$6000 AWARD FOR ADVANCED RESEARCH ANNUAL BRUNNER GRANT BY NEW YORK CHAPTER, THE AMERICAN INSTITUTE OF ARCHITECTS.

The annual Competition for the Brunner Scholarship Grant, one of the nation's major architectural awards, was announced by the New York Chapter, The American Institute of Architects. Applications are available at the Chapter headquarters, 115 East 40th Street. Proposals will be reviewed until January 15, 1968.

The competition is open to any citizen of the United States engaged in the profession of architecture, and its related field, regardless of race, color, creed, marital status or place of residence, who has a professional background more advanced and broader in scope by actual experience than is generally implied by four or five years of architectural school training.

The Award is designed to further the development of architecture in the United States by granting one or more scholarships for advanced study in some special field of architectural investigation which will most effectively contribute to the practice, teaching or knowledge of the art and science of architecture.

The first Brunner award was made in 1940. Since then, more than 20 awards have been made to such distinguished architects and educators as Olindo Grossi, Esmond Shaw, Huson Jackson and Harry Anthony. For further information contact: H. Dickson McKenna, AIA Executive Director, New York Chapter, The American Institute of Architects, Telephone: (212) 689-7969.
Performance checks prove that properly planned office lighting increases productivity of office workers by as much as 8%. It's a sound investment in office economy.

A good building plan requires a careful study, with lighting engineered for each activity area. With today's wide choice of fixtures — and with incandescent, mercury or fluorescent lamps as light sources — opportunities in the field of good lighting for utility and economy are almost unlimited.

Please call on us for assistance in any of your lighting design problems. Just call our Sales Department. No obligation of any kind.
For economy-minded taxpayers, happiness is Bradley Washfountains in schools.

Why? Washfountains save money! They cost up to 80% less to install than ordinary lavatories because they serve as many as 8 students with one set of plumbing connections. They also average a 25% saving on floor and wall space. And they use less water—from 45% to 80% less!


Represented by: J. R. PETLEY CO., Milwaukee St., Milwaukee, Wis. 53202.
S. H. BARTLETT CO., 6524 N. Walker St., Minneapolis, Minn. 55426.

from Bradley!
ASSOCIATE

Kurt A. Dale
BORN: March 20, 1943
RESIDES: Menomonee Falls, Wisconsin
FIRM: Herbst, Jacoby & Herbst, Inc., Milwaukee

Leonard G. Hess
BORN: August 18, 1940
RESIDES: Menasha, Wisconsin
FIRM: George G. Narovec & Assoc., Inc., Appleton
DEGREE: University of Michigan — B. Arch.

William C. Herbert
BORN: June 8, 1940
RESIDES: Greenfield, Wisconsin
FIRM: Charles W. Lueptke, Mequon

Elfa Foldi
RESIDES: Milwaukee, Wisconsin
DEGREE: University of Illinois — B. Arch.

Neil B. Lang
BORN: April 21, 1939
RESIDES: Muskego, Wisconsin
FIRM: Schutte, Phillips & Mochon, Inc., Milwaukee
DEGREE: Rensselaer Polytechnic Institute — B. Arch.

Donald R. Smith
BORN: November 21, 1940
RESIDES: Hales Corners, Wisconsin
FIRM: Schutte, Phillips & Mochon, Inc., Milwaukee
DEGREE: Iowa State University — B. Arch.

Frederick E. Zimmermann
BORN: October 12, 1938
RESIDES: Madison, Wisconsin
FIRM: Cashin-Goodwin & Associates, Madison
DEGREE: University of Illinois — B. Arch., M. Arch.

Karl E. Hokanson
BORN: March 15, 1942
RESIDES: Milwaukee, Wisconsin
FIRM: Grassold, Johnson, Wagner & Isley, Inc.
DEGREE: Miami University — B. Arch.

---

When industrial firms employ yard areas for outside storage of valuable goods... it is vital to include in the plans, a discouraging barrier... to would-be vandals, trespassers and thieves. Century Chain-Link Fencing with an unclimbable RAMPART style top serves as a silent watchman night or day. A matching assortment of gates to fit every purpose are standard options. All chain link fabric, posts and fittings are hot dipped galvanized to withstand the ravages of the elements... stay good looking for years. Materials can be purchased separately or completely installed by Century erection crews from your nearby Century office.

Phone for FREE estimate — no obligation.

Century Fence Company
1331 LINCOLN AVE., WAUKESHA, WIS. 53186

M-8342

wisconsin architect/september, 1967
NOW AVAILABLE IN WISCONSIN — a new, distinctively different four-faced building block for walls of enduring beauty... inside, outside, all around the house... 8" and 12" walls for ornamental and structural use... 4" ornamental units for veneered walls.

ADOBE BLOCK provides a happy combination of practical structural features architects and builders look for with the esthetic beauty and easy-to-care-for qualities that please people. It's warm, natural charm 'n' beauty requires no finish and "weathers" beautifully. On the other hand, if accent colors are called for... use of colored mortar achieves distinctive effects... and, application of other standard finishes presents no problem.

We invite you to find out about new ADOBE BLOCK... write or call today!
Years of Progress at D. G. Beyer, Inc.

As you can see, we can do the small jobs as well as the big ones. Though we are proud of our 3rd new crane, we are also proud of the old 1927 Ford that helped start the trend to modern methods in construction.

A well equipped general contractor is a good contractor with whom to do business. Call us for your next job!
Quality built of fire-safe concrete ... and designed for the future

The Brownsville Road Elementary School in Memphis, Tennessee, demonstrates again the additional advantages afforded by concrete in meeting the basic criteria for modern school construction.

The design of the building allows versatility in classroom layout and, even more important, provides for future enrollment needs. It can be expanded from any of its entries, thus permitting the addition of as many as four wings.

Among the concrete uses in the building are reinforced frame, floor, and roof, plus concrete masonry for partitions and backup walls.

Here again, concrete provides high esthetic values, durability, maximum fire safety, and low cost. The $10.54 per-square-foot cost of the Brownsville Road School even includes air conditioning.

Communities everywhere are finding that versatile concrete is the one construction material that can provide the complete instructional vehicle necessary to meet modern educational standards.

PORTLAND CEMENT ASSOCIATION 735 North Water St., Milwaukee, Wisc. 53202

An organization of cement manufacturers to improve and extend the uses of portland cement and concrete
Here is where MARATHON makes a better casement window and delivers it at a better price

- No nail holes at all on frame. Carefully blind nailed from the back.
- Stop glazed for easy glass replacement.
- Window unit comes completely set up, ready to install in the wall.
- Windows open to a full 90°.
- Air tight weatherstrip seals in heat, seals out cold.
- Color coordinated hardware and screen that blends with the wood finish.
- Roto-operator worm and gear components guaranteed for life.

At all of these points Marathon casements offer you superiority. At all of these points Marathon adds value above and beyond the generally accepted norm. Why then accept less and pay more?

We have a very factual film well worth five minutes of your time that brings these plus features into focus. You are invited to view it — at your office, at your convenience. To learn in full just how much Marathon casements can do for you, save for you, ask the man from Marathon. There is no obligation. Call or write.
Belden provides that extra margin for freedom of design

It's a fact that Belden provides over 200 variations in color, texture and size of brick—the largest selection in the industry to FREE the imagination of the creative architect for limitless scope of design. For 82 years, the ability to produce and deliver the largest selection of quality brick has been the prime consideration at Belden.

Your nearest Belden Dealer will gladly provide samples and our new full color brochure.
There’s a Difference...

between the Herman Andrae Electric Company and the first telephone

About six years, to be precise.

That’s right, Andrae Electric came into being just six years after the telephone was invented. The firm currently is celebrating its 85th year of continuous operation. This makes Andrae the oldest electrical contractor in the country . . . perhaps the world.

There’s a difference...

Between electrical contractors too. Every architect is aware of this . . . and every responsible architect wants to have specific questions answered before requesting an electrical contractor to bid on a job. Based on our experience, these are the questions:

• Is the contractor financially responsible?
• What is the contractor’s current work load and manpower situation?
• What is the contractor’s “track record” on completion dates?
• What is the calibre of the contractor’s work?
• Does the contractor offer a fair and equitable price . . . and stick to it?

Here are Andrae’s answers...

• Andrae Electric has open lines of credit at major financial institutions in the area; Andrae can obtain a performance bond of any size.
• Andrae maintains a work force of over 100 people.
• Andrae has never missed a completion date on an assignment.
• Andrae adheres to quality standards that have survived the abrasiveness of time, the impatience of people and the test of continued performance.
• Andrae’s price is based on fact . . . experience . . . and knowledge of the business. Andrae “installs” a job . . . it does not “throw one in.” As an architect, you know the difference.

Is there a difference? You bet...

and between us, as the saying goes...

"Viva La Difference!"
White Georgia marble dust and chips... white silica sand... and Medusa White make striking precast units for this handsome 21-story Buffalo “original” by Minoru Yamasaki. Honed finish and low water absorption rate keep them clean.

Medusa White is ideal for meeting color specifications whether as natural white or as a tinted matrix with colored aggregates. And Medusa White is strong. Use it with confidence. Write P.O. Box 5668, Cleveland, Ohio 44101.

MEDUSA
PORTLAND CEMENT COMPANY
White & Gray Portland Cements • White, Gray & Custom Color Masonry Cements • ChemComp Shrinkage-Compensating Cement
The New Ottumwa TUNNEL KILN
...Now Operational

Increases Total Plant Capacity to over 2,000,000 brick per month!

Size control . . . color control . . . and uniform high quality are the production features of the new 258 foot long tunnel kiln at Ottumwa Brick and Tile Company. Continuous firing will produce 30,000 units per day, seven days per week . . . of superior quality and uniformly dependable Gray, Buff, Brown and Flashed brick.
ALUMINUM-STEEL CUSTOM FABRICATED IN CONTEMPORARY FINISHES

ROL-LOK FLUSH PANEL
Walcon Rol-Lok (patent #3267626) panels bring new simplification and broad flexibility to metal building panel design. Rol-Lok is a natural combination of the industry's proven test features all brought together in one attractive, lightweight, rugged, economical wall system. Rol-Lok is a factory assembled unit of cellular type construction incorporating a new variation of the time tested tongue and groove type of interlocking joint. Rapid, low cost erection is assured with span capabilities that are certain to eliminate many intermediate supports. Clear spans up to 16'-0, U factor to .15 and 12 in. panel widths for modular constructions are now attainable with this simple, clean, attractive wall panel system.

Rol-Lok flush panels are constructed of flush faced, perforated or un-perforated metal units that are insulated or uninsulated. Units are available in various combinations and gages of aluminum and steel. They are available in plain mill finished metal, prime coated or in a baked enamel finish color coating.

ROL-LOK FLUTED PANEL
Similar in construction to the Rol-Lok flush panels, the Rol-Lok fluted panels offer the same full line of choices; perforated surfaces, insulation, type of metal, gage of metal, color finishing to meet the individual job requirements and give a bold shadow line to accent the building lines. The Rol-Lok fluted panels, like the Rol-Lok flush panels, are extensively used in all types of building construction from large industrial, commercial and institutional to small roadside bill boards.

S PANEL
S PANEL—This is the completely proven Walcon field assembled insulated wall construction. S Panel walls in some configuration are gracing expansive facades of some of the most important industrial buildings in the country and have been so proving their worth for over a decade. Low cost, outstanding attractiveness, concealed fasteners, rapid close-to-the-weather erectability, time tested reliability—all of these are reasons why so many hundreds of thousands of square feet of S Panel walls have been specified by architects everywhere. Available up to 60 feet in length in most of the common metal-gage combinations and in beautiful baked enamel color coatings to delight the eye. The panel has excellent thermal properties with U factor up to .125.

U PANEL
U PANEL—This is the original economy-type flush faced insulated wall unit. Walcon's U Panel—12 inches wide—is pre-fabricated and shop assembled to meet specific design and on-the-job requirements. It has been widely used through the years as a pre-fab component of wall systems in all kinds of buildings. It finds many applications in interior partitions. The U Panel is packed with glass-fiber material providing an overall U factor of .28. It's available in a variety of metals and gages, with or without embossed surfaces and baked enamel color coatings as may be desired.

WISCONSIN BRIDGE & IRON CO.
5023 N. 35th St., Milwaukee, Wis 53209 • (414) 466-2100
### ROL-LOK SIDING

**INTERLOCKING JOINT BETWEEN WALL PANELS**

This is Rol-Lok's exclusive design feature. The tubular vinyl gasket seals are integrally locked at the factory, into the formed tongue and groove along each panel edge. Thru-metal thermal shorts are completely eliminated—in fact, the inside and outside metal faces are even electrically insulated from one another. Engagement of the gasket sealing tube is positive and panel joints are automatically sealed as the units are erected on the building. Joint caulking is unnecessary.

![Diagram of ROL-LOK SIDING](image)

**INTERLOCKING JOINT BETWEEN DECK PANELS**

When Rol-Lok elements are assembled in the uninsulated deck configuration the interlocking tongue along each panel edge is continuously staked at 2 in. centers thus securing the two elements into one rigid tongue and groove cellular metal plank. Engagement of successive panels during installation is simple, easy and as rapid as ordinary roof deck erection.

### S' PANEL LOAD TABLE

<table>
<thead>
<tr>
<th>INTERIOR FACE</th>
<th>EXTERIOR FACE</th>
<th>SINGLE SPAN</th>
<th>DOUBLE SPAN</th>
<th>TRIPLE SPAN</th>
</tr>
</thead>
<tbody>
<tr>
<td>16G. AL.</td>
<td>16G. AL.</td>
<td>12'9&quot;</td>
<td>14'6&quot;</td>
<td>13'3&quot;</td>
</tr>
<tr>
<td>16G. AL.</td>
<td>16G. AL.</td>
<td>12'3&quot;</td>
<td>12'6&quot;</td>
<td>12'10&quot;</td>
</tr>
<tr>
<td>16G. ST.</td>
<td>16G. ST.</td>
<td>15'0&quot;</td>
<td>17'6&quot;</td>
<td>15'6&quot;</td>
</tr>
<tr>
<td>20G. ST.</td>
<td>20G. ST.</td>
<td>14'9&quot;</td>
<td>15'0&quot;</td>
<td>15'0&quot;</td>
</tr>
<tr>
<td>22G. ST.</td>
<td>22G. ST.</td>
<td>13'6&quot;</td>
<td>14'0&quot;</td>
<td>14'6&quot;</td>
</tr>
</tbody>
</table>

**ABOVE VALUES BASED ON 20PSF, WIND LOAD AND MAX. DEFL. OF 1/180 SPAN**

### U' PANEL LOAD TABLE

<table>
<thead>
<tr>
<th>INTERIOR FACE</th>
<th>EXTERIOR FACE</th>
<th>SINGLE SPAN</th>
<th>DOUBLE SPAN</th>
<th>TRIPLE SPAN</th>
</tr>
</thead>
<tbody>
<tr>
<td>16G. AL.</td>
<td>16G. AL.</td>
<td>14'0&quot;</td>
<td>14'6&quot;</td>
<td>14'6&quot;</td>
</tr>
<tr>
<td>16G. AL.</td>
<td>16G. AL.</td>
<td>13'6&quot;</td>
<td>13'6&quot;</td>
<td>15'0&quot;</td>
</tr>
<tr>
<td>18G. AL.</td>
<td>18G. AL.</td>
<td>16'6&quot;</td>
<td>15'6&quot;</td>
<td>17'6&quot;</td>
</tr>
<tr>
<td>20G. ST.</td>
<td>20G. ST.</td>
<td>16'0&quot;</td>
<td>14'0&quot;</td>
<td>16'0&quot;</td>
</tr>
<tr>
<td>22G. ST.</td>
<td>22G. ST.</td>
<td>15'6&quot;</td>
<td>13'0&quot;</td>
<td>14'6&quot;</td>
</tr>
</tbody>
</table>

**ABOVE VALUES BASED ON 20PSF, WIND LOAD AND MAX. DEFL. OF 1/180 SPAN**
Menomonee Falls Municipal Building and Library
Architect: Herbst, Jacoby & Herbst, Inc.
General Contractor: Oliver Construction Co.

Desert Blend Stone used on the striking exterior of this project. This versatile stone stands out boldly in relief of the flat surfaces without disrupting the line of design. Desert Blend is true to its name and blends in to enhance both exterior and interior.

For further information on Buckingham-Virginia Slate products call Halquist Stone, your state distributor.

HALQUIST STONE COMPANY
SUSSEX, WISCONSIN
Phone: (414) 246-3561
RADIANT CEILINGS

HEAT COOL

CALL WISCONSIN'S PIONEER IN RADIANT CEILINGS

Since 1946 . . .

DeGELLEKE Company, Inc.
4040 N. 126TH STREET
BROOKFIELD, WIS. 53005
(414) 781-5300

Distributors-Installers

Distinctive
METAL PAN CEILINGS
GYMNASIUM CEILINGS

quality church furniture

PEWS AND CHANCEL FURNITURE

For over 75 years we have been a leader in the engineering and manufacture of church furniture. Functional designs that enhance the beauty of your church. Craftsmanship to last a lifetime. Layout service available.

FREE ESTIMATES — WRITE FOR BROCHURE

WISLANCO STONE CO., INC.
LANNON, WIS.

Fabricators of . . .

LANNON STONE PRODUCTS
INDIANA LIMESTONE PRODUCTS

BUILDING VENEER OF ALL TYPES

STONE CARVING AVAILABLE

Phone 414-251-7020
A first class job deserves a first class product.
Specify plaster!

More and more builders are realizing that today's quality is directly related to tomorrow's new job. Maybe that's why more and more builders are suddenly becoming quality conscious.

When specifying plaster you know you're going first class. Look at the record: Plaster is fireproof. Plaster sounds better — eliminates more between room noises than any look alike substitute material. Plaster maintains and decorates easier and better. In fact, plaster is about the most versatile building material around.

And here's the clincher — You'll find that genuine plaster actually costs no more!

When is the last time you got a quality plaster bid? Isn’t it about time you did?

It might be good for your quality image.

Specify genuine lath and

PLASTER

it lasts

MILWAUKEE AREA BUREAU FOR LATHING AND PLASTERING
3274 N. 77th Street, Milwaukee, Wisconsin 53222 • Call A. T. Krueger at 442-4650